四大系列减速机

精密行星减速机

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XINYUE

驱动每一转 · 信赖每一齿

小金刚减速机

蜗轮蜗杆减速机

台州鑫钺传动有限公司

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Innovation, efficiency, integrity and win-win

台州鑫钺传动有限公司

TAIZHOU XINYUE TRANSMISSION CO., LTD.

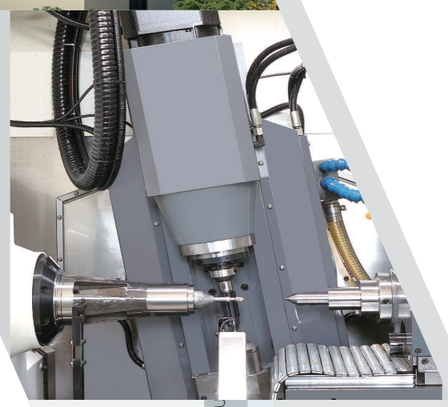
COMPANY PROFILE

公司简介 |

台州鑫钺传动有限公司是一家集研发、制造、销售于一体的专业齿轮及齿轮箱生产企业，专注于为工业领域提供高性能传动系统解决方案。公司位于中国东部沿海制造业基地——浙江台州，拥有成熟的产业链配套资源及强大的机械制造基础。

Taizhou Xinyue Transmission Co., Ltd. is a specialized manufacturer integrating R&D, production, and sales of gears and gearboxes, committed to providing high-performance transmission solutions for the industrial sector. Located in Taizhou, Zhejiang—an advanced manufacturing hub in eastern China—the company benefits from a well-established industrial ecosystem and strong machining capabilities.







核心产品 | Core Products

- R系列 斜齿轮硬齿面减速机
  R Series Helical Gear Reducers
- S系列 蜗轮蜗杆减速机
  S Series Worm Gear Reducers
- K系列 斜齿伞齿轮减速机
  K Series Helical-Bevel Gear Reducers
- F系列 平行轴斜齿轮减速机
  F Series Parallel Shaft Helical Gear Reducers

产品广泛应用于自动化设备、物流输送、食品包装、冶金矿产、环保工程、农业装备等多个领域。

Our products are widely applied in automation equipment, logistics and conveying systems, foodpackaging, metallurgy and mining, environmental engineering, and agricultural machinery.

技术与服务 | Technology & Services

公司配备数控加工中心、热处理设备、齿轮检测仪器等多套专业装备，全面实施ISO质量管理体系。支持标准化批量生产与非标定制服务，实现快速响应、灵活交付，致力于为客户创造更高价值。

Equipped with CNC machining centers, heat treatment systems, and gear measuring instruments, Xinyue implements a strict ISO-based quality management system. We provide both standardized production and customized non-standard solutions with rapid response and flexible delivery, aiming to maximize customer value.

企业愿景 | Vision

坚持“精于齿轮 · 智于传动”的品牌理念，台州鑫钺传动将持续深耕工业传动技术，打造国内外客户信赖的齿轮箱专业品牌。

Adhering to the brand philosophy of "Precision in Gears, Intelligence in Transmission", Xinyue Transmission will continue to innovate in industrial transmission technology and strive to become a trusted gearbox brand both at home and abroad.

Measuring equipment
计量设备





海克斯康三坐标测量机/hexagon three coordinate measuring machine



MAZAK 卧式加工中心/ MAZAK Horizontal Machining Center



计量中心/measuring center

To pursue the perfection and nature,to show the incomparable brilliant

WENLING MINGHUA GEAR CO., LTD

Measuring equipment
计量设备



光谱分析仪/spectrum analyzer



金相实验室/metall ographic laboratory



金相实验室/metall ographic laboratory

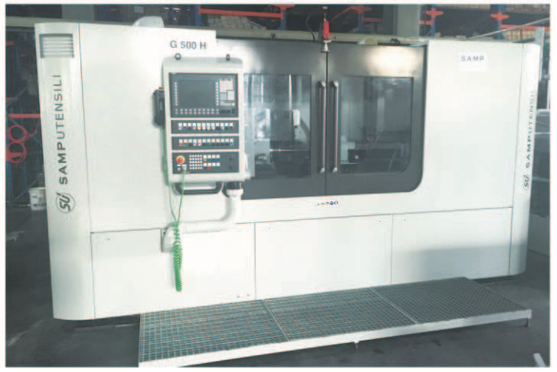
Production equipment
生产设备



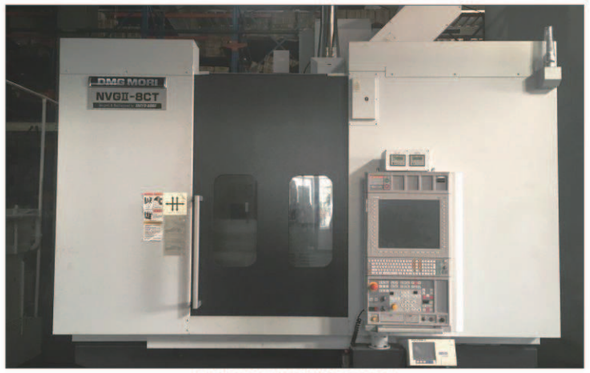
德国利勃海尔数控磨齿机/Liebherr gear grinding machine



易普森多用炉/Ipsen furnace



意大利成型磨齿机/samputensili



日本太阳工机数控立式磨床/
Japan Taiyo Koki vertical grinding machine CNC machine



日本津上数控磨床/TSUGAMI CNC grinder

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WENLING MINGHUA GEAR CO., LTD

Production equipment
生产设备



立式数控车床/Vertical CNC lathe



齿形加工车间/Gear producing workshop



加工中心车间/Machining center workshop



修磨中心/Gear Cutter Resharpening Center



修磨中心
Gear Cutter Resharpening Center

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WENLING MINGHUA GEAR CO., LTD

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1. 产品说明 / Product Description

1.1 性能特点

1. 采用了系列化、模块化的设计，传动比覆盖范围广、分级精细；
2. 传动效率高，耗能低、性能优越；
3. 齿轮经高精度磨齿机磨削加工，传动平稳、噪音低，承载能力大、寿命长；
4. 设计精巧：体积小，安装简便，用途广泛；
5. 安装方式多样，适合全方位的万能安装配置；
6. 可实现MR、MF、MK、MS 系列与MRF系列双联体组合，适用于特殊低速的应用。

1.2 主要材料

1. 箱体：全系列采用HT250高强度铸铁；并使用消失模具制造而成，提高了箱体的铸造精度。
2. 齿轮及输出轴：全部采用优质合金钢锻造毛坯并经渗碳淬火处理，延长了齿轮及输出轴的有效寿命。
3. 平键：45钢，表面硬度HRC50。

1.3 减速器效率

1. 由于采用了高精度齿轮、油封、轴承，有效降低了摩擦，齿轮传动的级间效率可达97%；
2. 在某些安装方式时，输入级齿轮完全浸在润滑油中，对于大机座号和高输入转速的情况，须考虑搅油损失。

1.4 使用条件

1. 环境温度-40 ～50 ℃(0℃以下启动时润滑油需加热到0℃以上或采用防冻润滑油）；
2. 输入转速不大于2800转/分；
3. 可用于正反转；
4. 无行业限制；

1.1 Performance Characteristics

1. Systematic and modular design;Transmission ratio with fine stage covers a wide range.
2. High efficiency; Low energy consumption; Superior performance.
3. High Precision gear with teeth grinding;Stable transmission; Low noise; Strong bearing capacity; Long Service life.
4. Deft design: Small volume; Simple Installation; Wide usage.
5. Suitable for all kinds of mounting positions
6. MR..,MF..,MK..,MS.. and MRF.. conjoined combination for special low speed.

1.2 Material

1. Housing: Full range series using HT250 high strength cast iron, and made by lost-foam casting, so it improved the casting precision.
2. Gears and output shaft: All using high-quality alloy steel forging blank,and osmotic quenching treatment, so it extended gears and output shaft's effective life.
3. Flat keys: C45, Surface hardness: HRC 50.

1.3 Gear Unit Efficiency

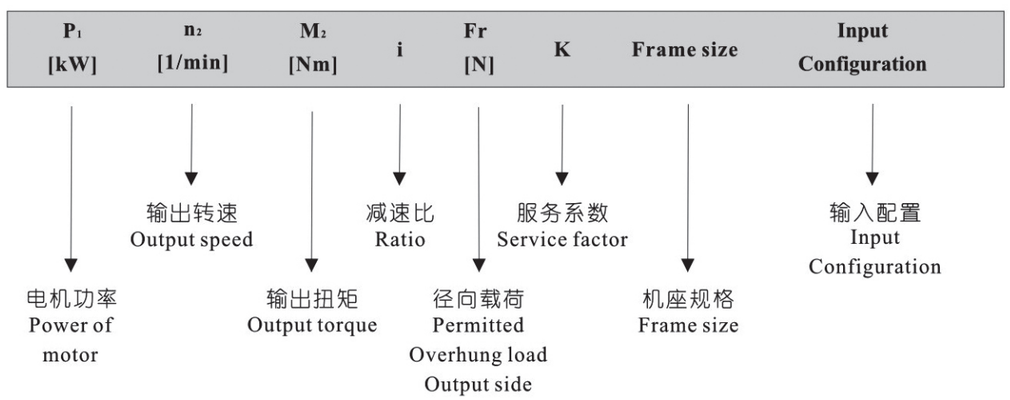
1. High precision gear; seals; bearings;Effectively reduces friction; Stage efficiency of gear drive reaches 97%.
2. For some ways of mounting, the input gear is completely immersed in the lubricant, please consider the churning loss when it comes to big frame size and high input speed .

1.4 Working Condition

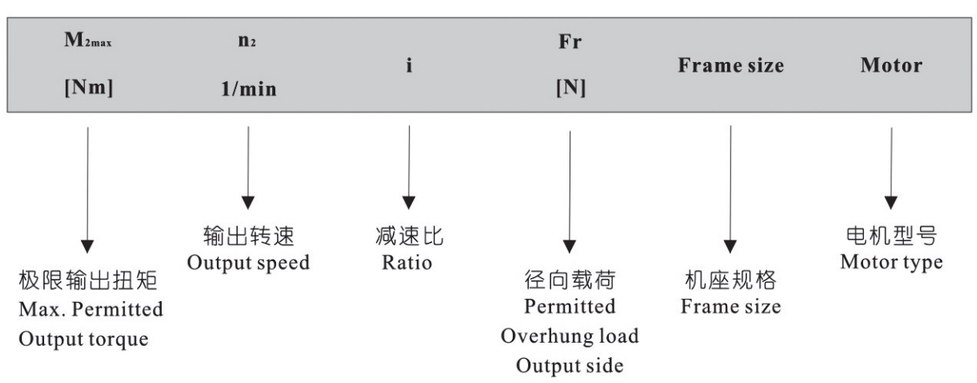
1. Ambient temperature -40～ 50℃ (if lower than 0℃, need to heat the lubrication higher than 0℃ or use anti freezing lubricant).
2. Input rotation speed ≤ 2800r/min.
3. Both Rotation Direction.
4. No industry limit.

1.5 选型表注释 / Selection Table Explanation

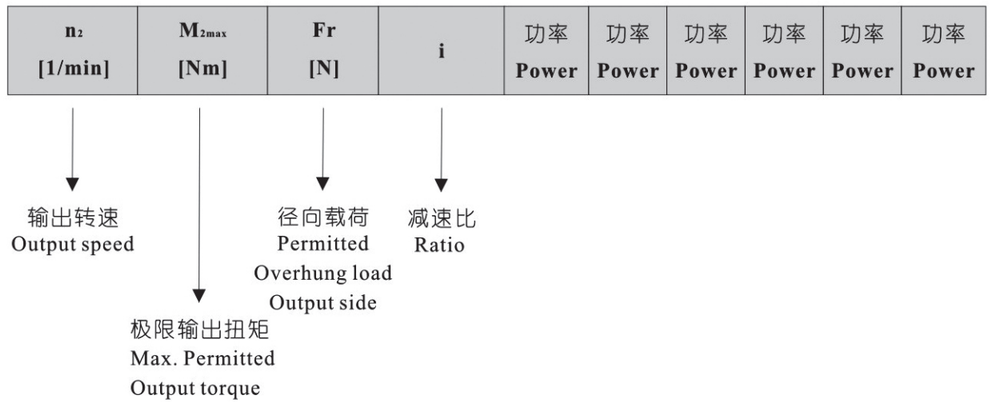
性能参数表结构说明 /Performance Parameter Table Structure



性能参数表结构说明 / Performance Parameter Table Structure



功率配置表结构说明 /Power Combination



1.6. 润滑油 / Lubrication

1.6.1 润滑油类型 / Types of Lubrication

	环境温度(℃) Ambient Temperature(℃)	ISO粘度 ISO Viscosity Class	SHELL	Mobil MOBIL	bp BP	润滑油类型 Lubrication Type
MR MF MK MS	-10 ~ +40	VG 220	Omala S2 G220	Mobilgear 630	BP Energol GR-XP 220	矿物油 Mineral Oil
	-20 ~ +25	VG 150 VG 100	Omala S2 G100	Mobilgear 627	BP Energol GR-XP 100	
	-30 ~ +10	VG68-46 VG 32	Tellus S2 V32	Mobil D.T.E 13M		
	-40 ~ -20	VG 22 VG 15	Tellus S2 V15	Mobil D.T.E 11M	BP Energol HLP-HM 15	
	-40 ~ +80	VG 220	Omala S4 GX220	Mobil SHC 630		合成油 Synthetic Oil
	-40 ~ +10	VG 32	Spirax S4 ATF HDX	Mobil SHC 624		

1.6.2 润滑油量表

规定的加注量为参考值。精确值的变化与级数和传动比有关。请您在加注润滑油时一定要注意油位螺栓所指示的精确油量。后期调整安装方式时，您必须根据改变后的安装方式相应调整加注润滑剂。下表中列出了安装方式M1-M6的减速器相应的标准参考润滑油注入量值。

1.6.2 Lubricant Fill Quantity

The specified fill quantities are recommended values. The precise value varies depending on the number of stages and gear ratio. When filling, it is essential to check the oil level plug since it indicates the precise oil capacity. The following tables show guide values For lubricant fill quantities in relation to the mounting position M1 -M6.

MRX..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MRX57	0.60	0.80	1.30	1.30	0.90	0.90
MRX67	0.80	0.80	1.70	1.90	1.10	1.10
MRX77	1.10	1.50	2.60	2.70	1.60	1.60
MRX87	1.70	2.50	4.80	4.80	2.90	2.90
MRX97	2.10	3.40	7.40	7.00	4.80	4.80
MRX107	3.90	5.60	11.6	11.9	7.70	7.70

MRXF..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MRXF57	0.50	0.80	1.10	1.10	0.70	0.70
MRXF67	0.70	0.80	1.50	1.40	1.00	1.00
MRXF77	0.90	1.30	2.40	2.00	1.60	1.60
MRXF87	1.60	1.95	4.90	3.95	2.90	2.90
MRXF97	2.10	3.70	7.10	6.30	4.80	4.80
MRXF107	3.10	5.70	11.2	9.30	7.20	7.20

MR../MR..F

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1①	M2①	M3	M4	M5	M6
MR..07	0.12	0.20	0.20	0.20	0.20	0.20
MR..17	0.25	0.55	0.35	0.55	0.35	0.40
MR..27	0.25/0.40	0.70	0.50	0.70	0.50	0.50
MR..37	0.30/0.95	0.85	0.95	1.05	0.75	0.95
MR..47	0.70/1.50	1.60	1.50	1.65	1.50	1.50
MR..57	0.80/1.70	1.90	1.70	2.10	1.70	1.70
MR..67	1.10/2.30	2.40/3.20	2.80	2.90	1.80	2.00
MR..77	1.20/3.00	3.30/4.20	3.60	3.80	2.50	3.40
MR..87	2.30/6.00	6.40/8.10	7.20	7.20	6.30	6.50
MR..97	4.60/9.80	11.7/14.0	11.7	13.4	11.3	11.7
MR..107	6.00/13.7	16.3	16.9	19.2	13.2	15.9
MR..137	10.0/25.0	28.0	29.5	31.5	25.0	25.0
MR..147	15.4/40.0	46.5	48.0	52.0	39.5	41.0
MR..167	27.0/70.0	82.0	78.0	88.0	66.0	69.0

MRF..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1①	M2①	M3	M4	M5	M6
MRF07	0.12	0.20	0.20	0.20	0.20	0.20
MRF17	0.25	0.55	0.35	0.55	0.35	0.40
MRF27	0.25/0.40	0.70	0.50	0.70	0.50	0.50
MRF37	0.35/0.95	0.90	0.95	1.05	0.75	0.95
MRF47	0.65/1.50	1.60	1.50	1.65	1.50	1.50
MRF57	0.80/1.70	1.80	1.70	2.00	1.70	1.70
MRF67	1.20/2.50	2.50/3.20	2.70	2.80	1.90	2.10
MRF77	1.20/2.60	3.10/4.10	3.30	3.60	2.40	3.00
MRF87	2.40/6.00	6.40/8.20	7.10	7.20	6.30	6.40
MRF97	5.10/10.2	11.9/14.0	11.2	14.0	11.2	11.8
MRF107	6.30/14.9	15.9	17.0	19.2	13.1	15.9
MRF137	9.50/25.0	27.0	29.0	32.5	25.0	25.0
MRF147	16.4/42.0	47.0	48.0	52.0	42.0	42.0
MRF167	26.0/70.0	82.0	78.0	88.0	65.0	71.0

① The larger gear unit of multi-stage gear units must be filled with the larger oil volume

MF..,MFA..B,MFH..B,MFV..B

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MF..27	0.60	0.80	0.65	0.70	0.60	0.60
MF..37	0.95	1.25	0.70	1.25	1.00	1.10
MF..47	1.50	1.80	1.10	1.90	1.50	1.70
MF..57	2.60	3.50	2.10	3.50	2.80	2.90
MF..67	2.70	3.80	1.90	3.80	2.90	3.20
MF..77	5.90	7.30	4.30	8.00	6.00	6.30
MF..87	10.8	13.0	7.70	13.8	10.8	11.0
MF..97	18.5	22.5	12.6	25.2	18.5	20.0
MF..107	24.5	32.0	19.5	37.5	27.0	27.0
MF..127	40.5	55.0	34.0	61.0	46.3	47.0
MF..157	69.0	104	63.0	105	86.0	78.0

MFF..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MFF27	0.60	0.80	0.65	0.70	0.60	0.60
MFF37	1.00	1.25	0.70	1.30	1.00	1.10
MFF47	1.60	1.85	1.10	1.90	1.50	1.70
MFF57	2.80	3.50	2.10	3.70	2.90	3.00
MFF67	2.70	3.80	1.90	3.80	2.90	3.20
MFF77	5.90	7.30	4.30	8.10	6.00	6.30
MFF87	10.8	13.2	7.80	14.1	11.0	11.2
MFF97	19.0	22.5	12.6	25.5	18.9	20.5
MFF107	25.5	32.0	19.5	38.5	27.5	28.0
MFF127	41.5	55.5	34.0	63.0	46.5	49.0
MFF157	72.0	105	64.0	106	87.0	79.0

MFA..,MFH..,MFV..,MFAF..,MFHF..,MFVF..,MFAZ..,MFHZ..,MFVZ..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MF..27	0.60	0.80	0.65	0.70	0.60	0.60
MF..37	0.95	1.25	0.70	1.25	1.00	1.10
MF..47	1.50	1.80	1.10	1.90	1.50	1.70
MF..57	2.70	3.50	2.10	3.40	2.90	3.00
MF..67	2.70	3.80	1.90	3.80	2.90	3.20
MF..77	5.90	7.30	4.30	8.00	6.00	6.30
MF..87	10.8	13.0	7.70	13.8	10.8	11.0
MF..97	18.5	22.5	12.6	25.2	18.5	20.0
MF..107	24.5	32.0	19.5	37.5	27.0	27.0
MF..127	39.0	54.5	34.0	61.0	45.0	46.5
MF..157	68.0	103	62.0	104	85.0	79.5

MK..,MKA..B,MKH..B,MKV..B

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MK..37	0.50	1.00	1.00	1.25	0.95	0.95
MK..47	0.80	1.30	1.50	2.00	1.60	1.60
MK..57	1.10	2.20	2.20	2.80	2.30	2.10
MK..67	1.10	2.40	2.60	3.45	2.60	2.60
MK..77	2.20	4.10	4.40	5.80	4.20	4.40
MK..87	3.70	8.00	8.70	10.9	8.00	8.00
MK..97	7.00	14.0	15.7	20.0	15.7	15.5
MK..107	10.0	21.0	25.5	33.5	24.0	24.0
MK..127	21.0	41.5	44.0	54.0	40.0	41.0
MK..157	31.0	62.0	65.0	90.0	58.0	62.0
MK..167	33.0	95.0	105.0	123.0	85.0	84.0
MK..187	53.0	152.0	167.0	200.0	143.0	143.0

MKF..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MKF37	0.50	1.10	1.10	1.50	1.00	1.00
MKF47	0.80	1.30	1.70	2.20	1.60	1.60
MKF57	1.20	2.20	2.40	3.15	2.50	2.30
MKF67	1.10	2.40	2.80	3.70	2.70	2.70
MKF77	2.10	4.10	4.40	5.90	4.50	4.50
MKF87	3.70	8.20	9.00	11.9	8.40	8.40
MKF97	7.00	14.7	17.3	21.5	15.7	16.5
MKF107	10.0	21.8	25.8	35.1	25.2	25.2
MKF127	21.0	41.5	46.0	55.0	41.0	41.0
MKF157	31.0	66.0	69.0	92.0	62.0	62.0

MKA..,MKH..,MKV..,MKAF..,MKHF..,MKVF..,MKAZ..,MKHZ..,MKVZ..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MK..37	0.50	1.00	1.00	1.40	1.00	1.00
MK..47	0.80	1.30	1.60	2.10	1.60	1.60
MK..57	1.30	2.30	2.70	3.20	2.90	2.70
MK..67	1.10	2.40	2.70	3.60	2.60	2.60
MK..77	2.10	4.10	4.60	6.00	4.40	4.40
MK..87	3.70	8.20	8.80	11.1	8.00	8.00
MK..97	7.00	14.7	15.7	20.0	15.7	15.7
MK..107	10.0	20.5	24.0	32.0	24.0	24.0
MK..127	21.0	41.5	43.0	52.0	40.0	40.0
MK..157	31.0	66.0	67.0	87.0	62.0	62.0
MK..167	33.0	95.0	105.0	123.0	85.0	84.0
MK..187	53.0	152.0	167.0	200.0	143.0	143.0

MS..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MS37	0.25	0.40	0.50	0.55	0.40	0.40
MS47	0.35	0.80	0.70/0.90	1.00	0.80	0.80
MS57	0.50	1.20	1.00/1.20	1.45	1.30	1.30
MS67	1.00	2.00	2.20/3.10	3.10	2.60	2.60
MS77	1.90	4.20	3.70/5.40	5.90	4.40	4.40
MS87	3.30	8.10	6.90/10.4	11.3	8.40	8.40
MS97	6.80	15.0	13.4/18.0	21.8	17.0	17.0

MSF..

减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MSF37	0.25	0.40	0.50	0.55	0.40	0.40
MSF47	0.40	0.90	0.90/1.05	1.05	1.00	1.00
MSF57	0.50	1.20	1.00/1.50	1.55	1.40	1.40
MSF67	1.00	2.20	2.30/3.00	3.20	2.70	2.70
MSF77	1.90	4.10	3.90/5.80	6.50	4.90	4.90
MSF87	3.80	8.00	7.10/10.1	12.0	9.10	9.10
MSF97	7.40	15.0	13.8/18.8	22.6	18.0	18.0

MSA..,MSH.., MSAF..,MSHF.., MSAZ..,MSHZ..

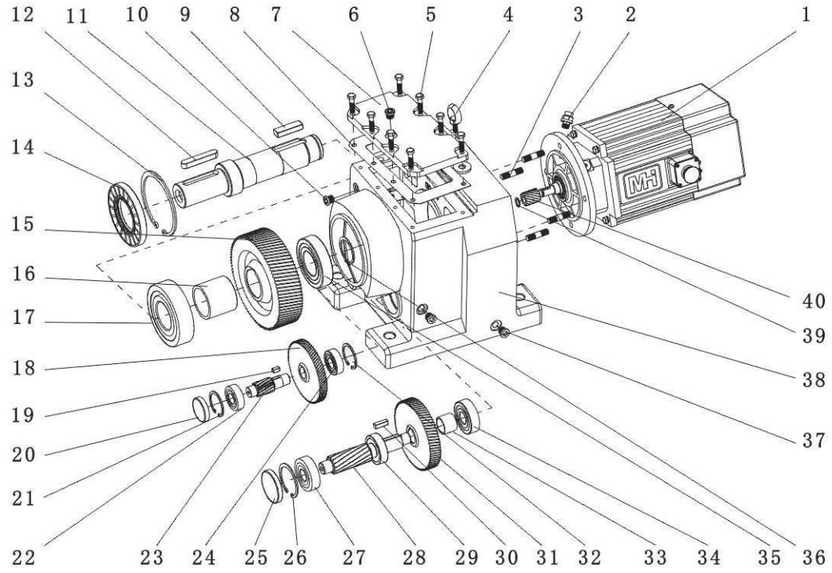
减速器型号 Gear units	加注量 Fill quantity in liters 单位:升(L) Unit: L					
	M1	M2	M3	M4	M5	M6
MS..37	0.25	0.40	0.50	0.50	0.40	0.40
MS..47	0.40	0.80	0.70/0.90	1.00	0.80	0.80
MS..57	0.50	1.10	1.00/1.50	1.50	1.20	1.20
MS..67	1.00	2.00	1.80/2.60	2.90	2.50	2.50
MS..77	1.80	3.90	3.60/5.00	5.80	4.50	4.50
MS..87	3.80	7.40	6.00/8.70	10.8	8.00	8.00
MS..97	7.00	14.0	11.4/16.0	20.5	15.7	15.7



MR

MR系列斜齿轮减速电机
MR SERIES HELICAL
GEARED MOTORS

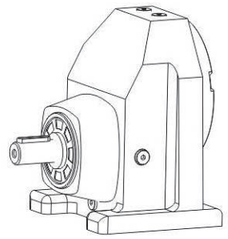
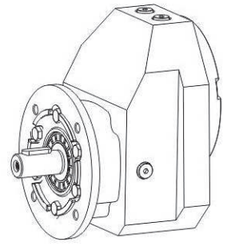
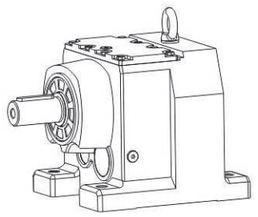
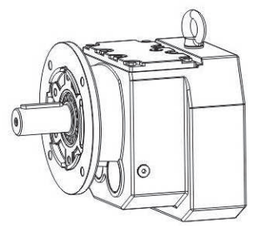
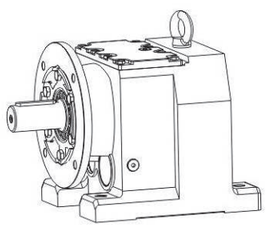
2.1 部件分解图 / Spare Parts List

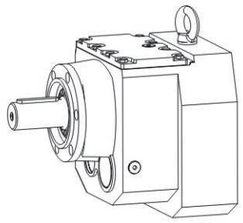
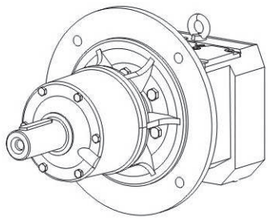


1 电机/motor
2 透气阀/breather valve
3 双头螺栓/stud
4 吊环/lifting eye bolt
5 外六角螺钉/six angle screw
6 油塞/oil level plug
7 盖板/cover plate
8 纸垫/gasket
9 平键/flat key
10 油塞/oil level plug
11 输出轴/output shaft
12 平键/flat key
13 孔用挡圈/retaining rings for bores
14 骨架油封/skeleton oil seal
15 齿轮/gear
16 轴套/spacer tube
17 轴承/bearing
18 齿轮/gear
19 平键/flat key
20 平面油封/plane seal
21 孔用挡圈/retaining rings for bores
22 轴承/bearing
23 齿轮轴/gear shaft
24 轴承/bearing
25 平面油封/plane seal
26 孔用挡圈/retaining rings for bores
27 轴承/bearing
28 齿轮轴/gear shaft
29 轴承/bearing
30 平键/flat key
31 齿轮/gear
32 孔用挡圈/retaining rings for bores
33 轴套/spacer tube
34 轴承/bearing
35 轴承/bearing
36 孔用挡圈/retaining rings for bores
37 油塞/oil level plug
38 箱体/housing
39 轴用挡圈/retaining rings for shaft
40 齿轮/gear

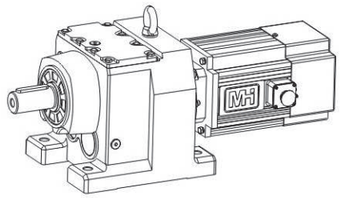
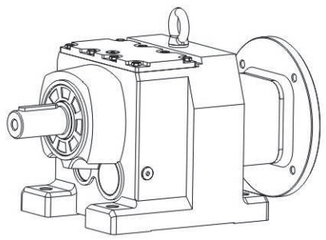
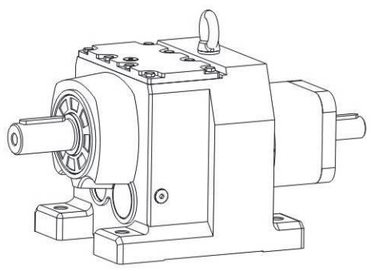
2.2 机型版本 / Versions

2.2.1 基本型式 / Basic Versions

	**MRX..** 底脚安装单级斜齿轮减速机 Single-stage foot-mounted helical geared unit.
	**MRXF..** 法兰安装单级斜齿轮减速机 Single-stage flange-mounted helical geared unit.
	**MR..** 底脚安装斜齿轮减速机 Foot-mounted helical geared unit.
	**MRF..** 法兰安装斜齿轮减速机 Flange-mounted helical geared unit.
	**MR..F** 底脚法兰安装斜齿轮减速机 Foot and Flange-mounted helical geared unit.

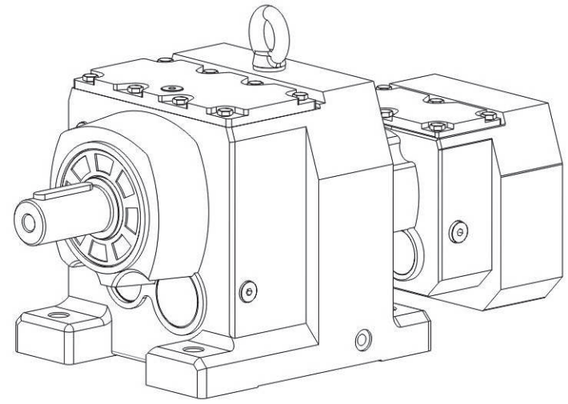
	**MRZ..** B14法兰安装斜齿轮减速机 B14 flange-mounted helical geared unit.
	**MRM..** B5法兰带有加长轴承箱的法兰安装斜齿轮减速机 B5 flange-mounted helical geared motor with extended bearing housing.

2.2.2 **输入型式** / Input Versions

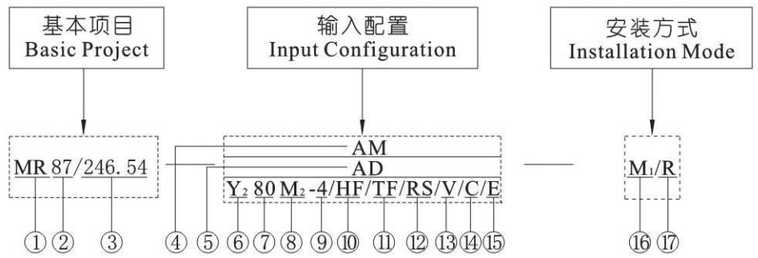
	**MR.. Y..** 直联电机输入 Input with geared motors.
	**MR.. AM..** AM(IEC)法兰输入 Input with AM adapters for mounting IEC motors.
	**MR.. AD..** AD轴输入 Input with AD shaft assembly.

2.2.3 **MR..与MRF..组合** /MR..and MRF.. Combination

当需要特别低速输出时，可选择MRF齿轮箱作为MR齿轮箱的输入。
If special low speed is needed, MRF.. gearbox can be the input of MR.. gearbox.



2.3 **产品标注** / Product Code



	标号 NO.	含义 Meaning	说明 Explanation
基本项目 Basic Project	①	系列代号 Series Code	MR、MRF、MRX...(详见2.2.1) MR,MRF,MRX...(see 2.2.1).
	②	机座号 Frame Size	机座号: 37、47、57... Frame Size: 37, 47, 57...
	③	传动比 Transmission Ratio.	传动比 i Transmission Ratio i.
输入配置 Input Configuration	④	法兰输入代号 Flange Input Code.	AM(IEC): 63、71、80...
	⑤	轴输入代号 Shaft Input Code.	AD: 1、2、3...

	标号 NO.	含义 Meaning	说明 Explanation
输入配置 Input Configuration	⑥	电机代号 Motor Code	Y_2: 三相异步电动机 Y_2: Three Phase Asynchronous Motor. YD: 变极多速三相异步电动机 YD: Variable-pole Multi-speed Three Phase Asynchronous Motor. YS: 小功率三相异步电动机 YS: Small Power Three Phase Asynchronous Motor. YVF_2: 变频调速三相异步电动机 YVF_2: Variable Frequency Speed Control Three Phase Asynchronous Motor. Y_2EJ: 电磁制动三相异步电动机 Y_2EJ: Electromagnetic Brake Three Phase Asynchronous Motor. YB2: 隔爆三相异步电动机 YB2: Flame Proof Three Phase Asynchronous Motor.
	⑦	电机机座号 Motor Frame Size.	63、71、80. . .
	⑧	电机定子铁芯长度代号 Length Code of Stator Core.	M、M_1、M_2、S、S_1、S_2、L、L_1、L_2
	⑨	电机极数 Pole Number of Motor.	2、4、6、8
	⑩	手动释放装置 Manual Release Device.	无 代 码: 无手动释放装置 No Code: No manual release device. H F: 手动释放装置带自锁功能 H F: Manual release device with self-locking Function. H R: 手动释放装置不带自锁功能 H R: Manual release device without self-Locking function.
	⑪	电机热保护装置 Motor Heat-protection Device.	无 代 码: 无电机热保护装置 No Code: No motor heat-protection device. T F: 电机热保护装置 T F: Motor heat-protection device.
	⑫	逆止器 Backstop	无 代 码: 无逆止器 No Code: No backstop. R S: 逆止器 R S: Backstop.
	⑬	强制冷却风扇 Forced Cooling Fan.	无 代 码: 无强制冷却风扇 No Code: no forced cooling fan. V: 强制冷却风扇 V: Forced cooling fan.

	标号 NO.	含义 Meaning	说明 Explanation
输入配置 Input Configuration	⑭	防雨罩 Cover	无 代 码: 无风扇防护罩 No Code: No fan cover. C: 防雨罩 C: cover.
	⑮	编码器 Encoder	无 代 码: 无编码器 No Code: No encoder. E: 编码器 E: Encoder.
安装方式 Mounting Positions	⑯	安装方位 Mounting Position.	M1、M2、M3、M4、M5、M6
	⑰	电机接线盒方位 Position for motor terminal box.	R、B、L、T

说明:

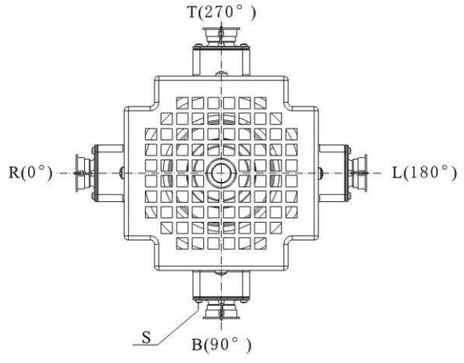
1. 基本项目不可省略;
2. 输入配置中，只能在 AM、AD 和电机之间选择一种;
3. 安装方式参数若省略，默认按 M1 安装方位，R 接线盒方位提供。

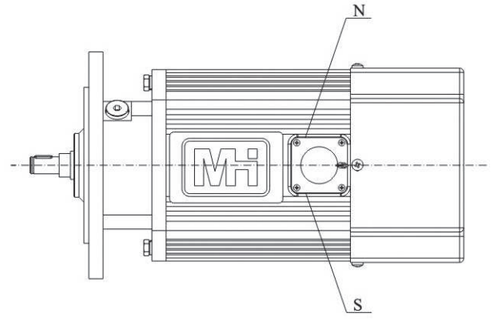
Notes:

1. Basic project can not be omitted.
2. Input configuration can only be one of AM, AD and motor.
3. If not mounting position, default mounting position will be M1, default position for motor terminal will be R.

2.4 安装方位 / Mounting Positions

2.4.1 电机接线盒方位 / Position of Motor Terminal Box





R(0°): 默认接线盒方位
R(0°): Default Position for Motor Terminal Box

S: 默认进线方位
S: Default Line Position

注: 图为M1安装方位。
Mark: This picture is the installation position of M1

说明:

上图的视图方向为：从电机尾部的风罩向前看。

可提供R（0°）、B（90°）、L（180° ）、T（270°）四种电机接线盒方位。其中 R（0°）位置是默认方位，如无特别说明，将按默认方位提供。

可提供 S 和 N 两种进线方位，其中 S 位置是默认方位。如无特别说明，将按默认方位提供。

Notes:

The view direction of above figure: from the fan cover in the end of the motor to look forward.

There will be four position for motor terminal box: R(0°)、B(90°)、L(180°)、T(270°). And default position is R(0°).

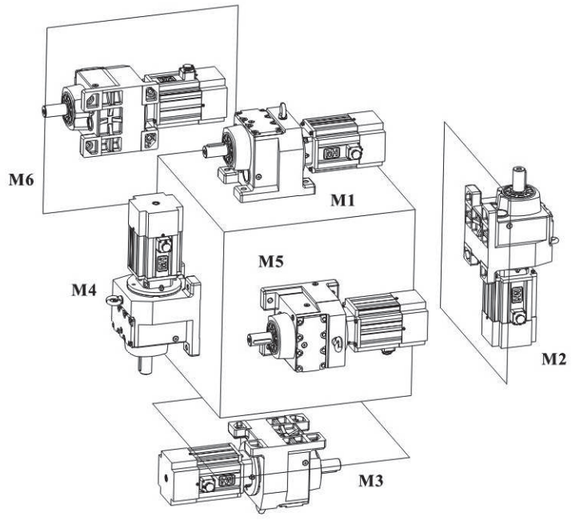
There will be two line position: S and N. Default position is S.

2.4.2 **油位符号说明** / Oil Level Symbol Explanation

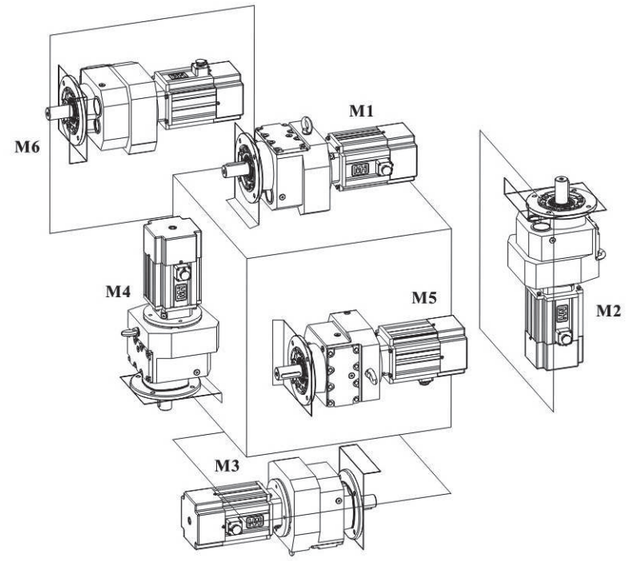
符号 Symbol	含义	Meaning
	通气帽	BREATHER VALVE
	油标	OIL LEVEL PLUG
	排油塞	OIL DRAIN PLUG

2.4.3 **安装位置示意** / Mounting Position Designation

MR..安装位置示意图 / MR.. Mounting Position Designation



MRF..安装位置示意图 / MRF.. Mounting Position Designation



2.4.4 **安装方位** / Mounting Positions

***→提示:**

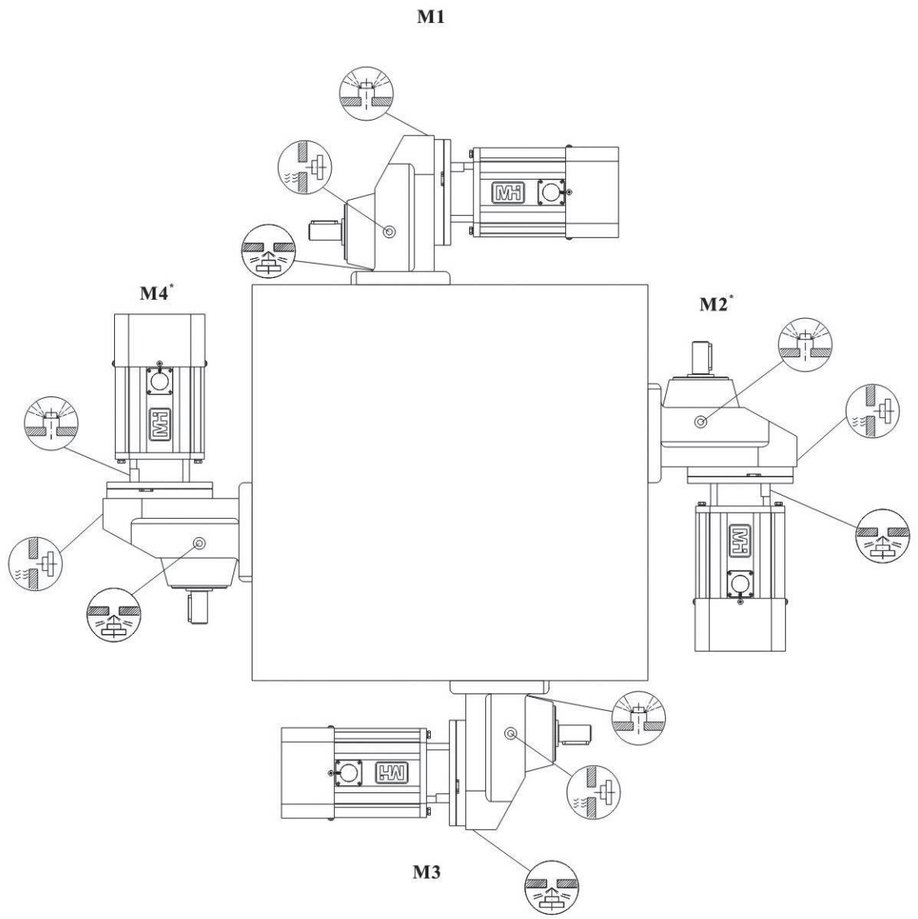
当采用下表列出的安装方式及输入转速时，齿轮箱会产生不可忽视的搅油损失。请联系本公司。

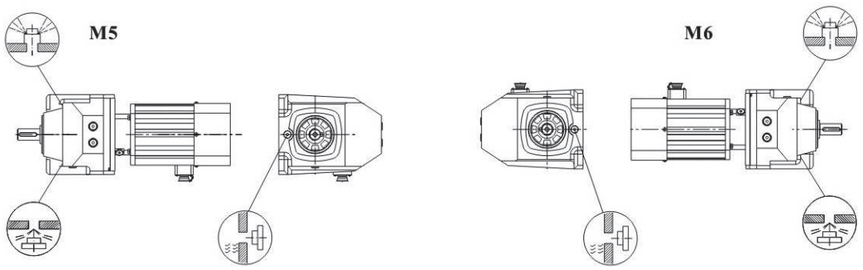
***→Reminder:**

Increased churning losses may arise in the following mounting positions. Contact Greatwall Machinery.

安装方式 Mounting Position	齿轮箱规格 Gear Unit Size	输入转速 Input Speed（r/min）
M2，M4	97,107	>2500
	>107	>1500

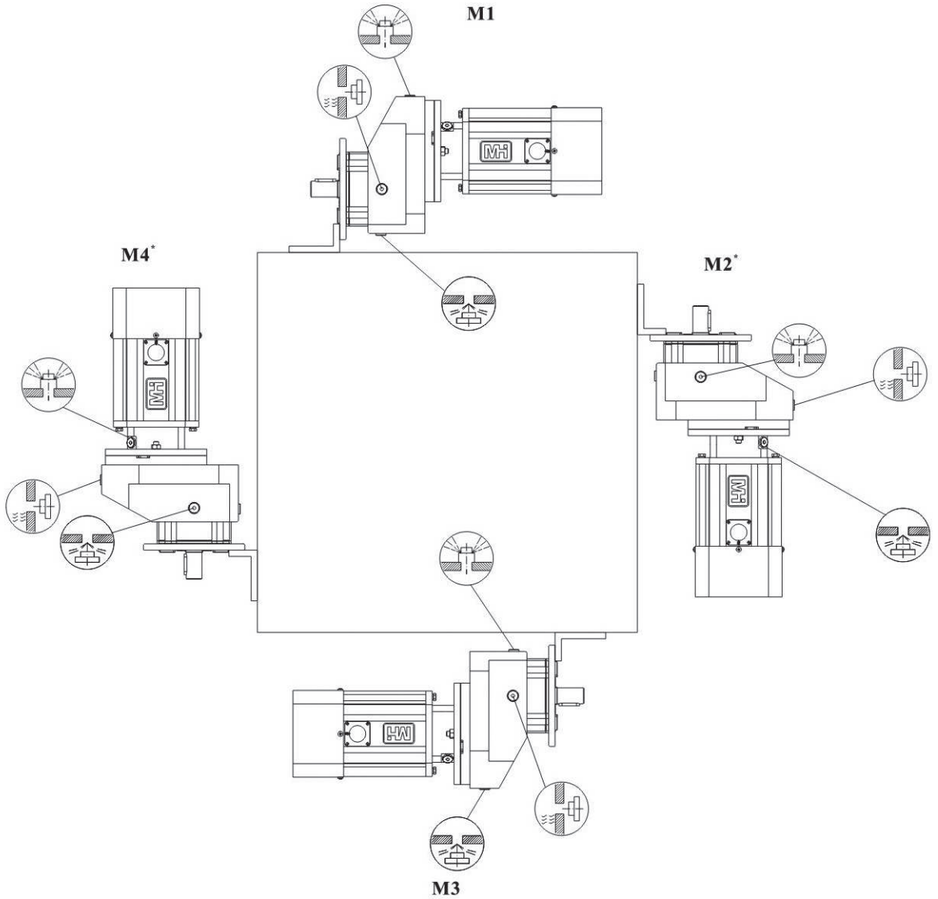
MRX57-MRX107

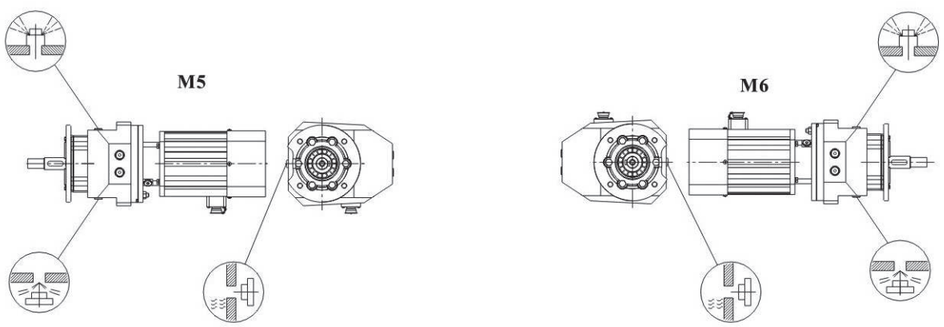




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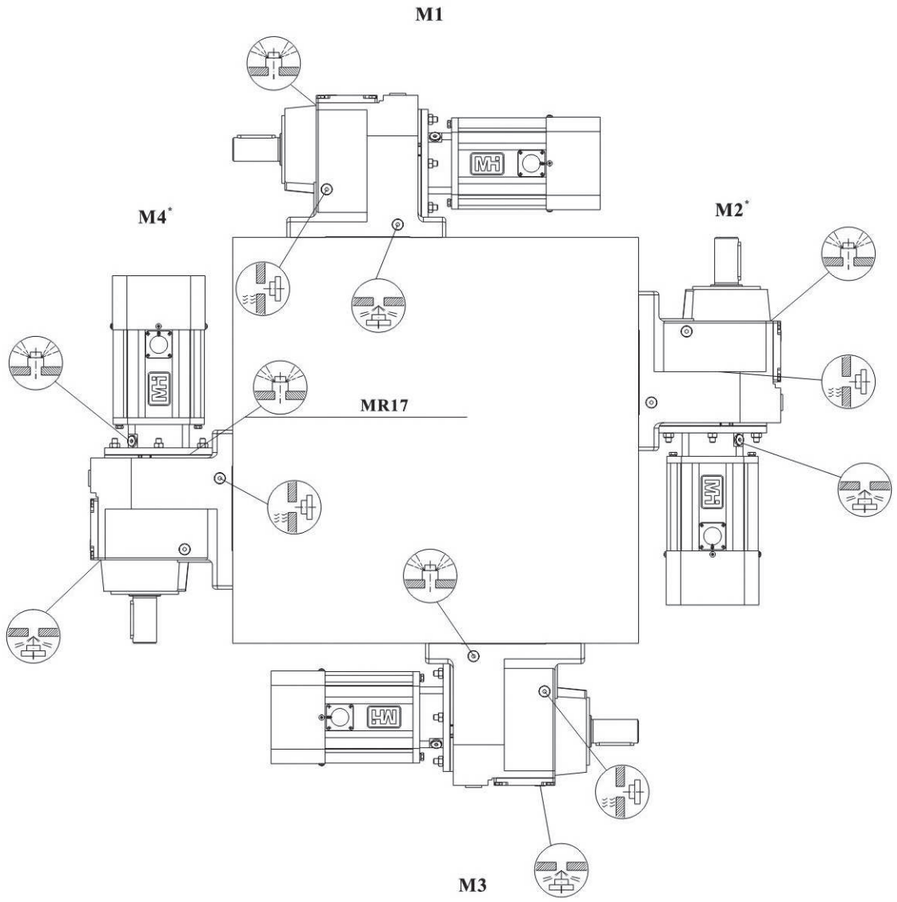
MRXF57-MRXF107

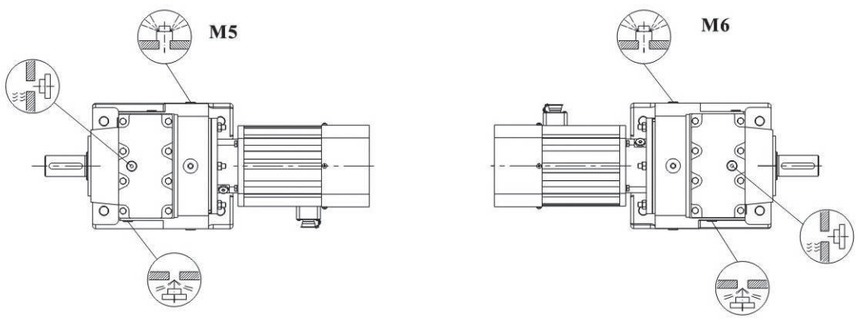




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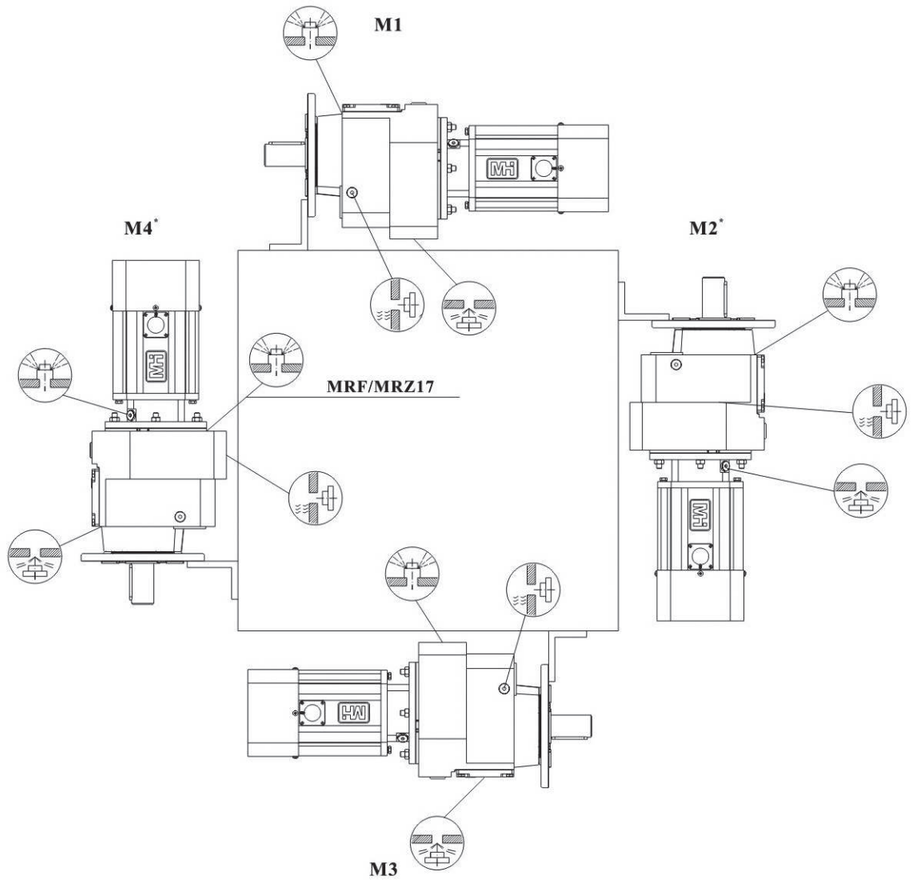
MR17-MR167

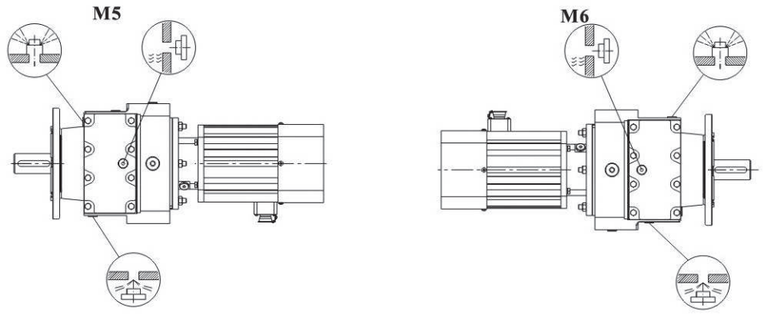




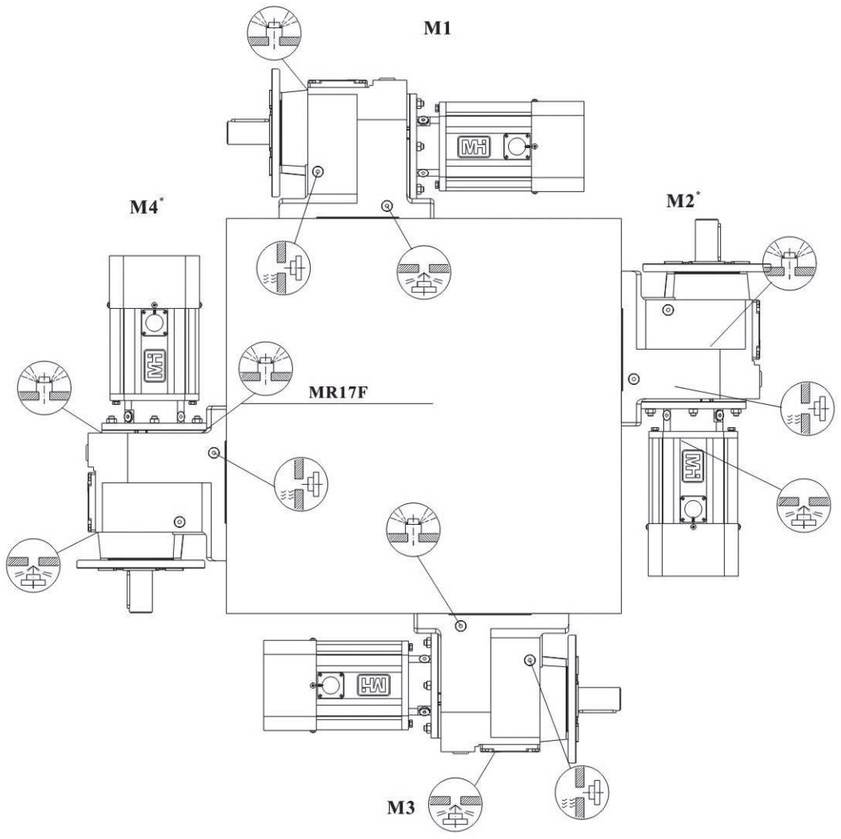
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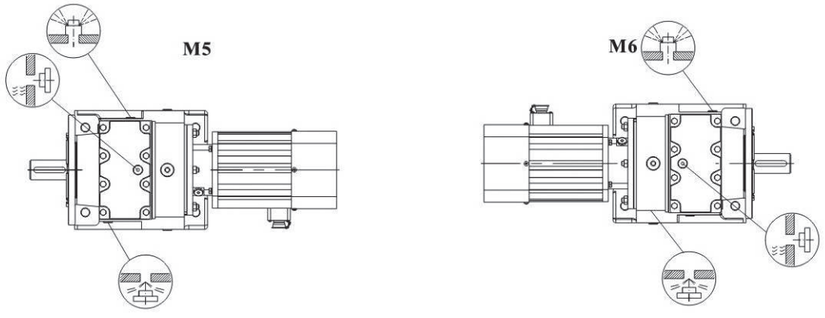
MRF17-MRF167，MRZ17-MRZ87





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2.5 减速器组合表 / Gear Unit Combination Table

为得到特别低的输出转速，可通过 MRF 齿轮箱与 MR 齿轮箱相连的方式实现。

当采用这种传动方案时，可配置电动机的功率依赖于减速机的极限输出扭矩，而不能通过电动机的额定功率和减速机的总传动比计算得出减速机的输出扭矩。

MR series of gear units and MRF series of gear units can be connected together to get special output speed.

For this transmission scheme, the power of the motor depends on the limit output torque of the gear-box, instead of the output torque calculated based on rated power of the motor and the transmission ratio of the gear unit.

MR..与MRF..齿轮箱可能的组合 / Possible Combination of MR.. and MRF..

	MRF17	MRF27	MRF37	MRF47	MRF57	MRF67	MRF77	MRF87	MRF97	MRF107
MR..27	■									
MR..37	■									
MR..47			■							
MR..57			■							
MR..67			■							
MR..77			■							
MR..87					■					
MR..97					■					
MR..107							■			
MR..137							■			
MR..147							■	■		
MR..167									■	■

说明：

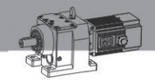
■ ：表示可能的组合。

□ ：表示不允许的组合。

Notes:

■ : Possible Combination.

□ : Impossible Combination.



2．6 MR..功率配置 / MR..Power Configuration

MRX57 n_1=1400 1/min — 69Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
255	39	3100	5.50						
276	36	3030	5.07						
322	68	2640	4.35						
369	69	2480	3.79						
394	69	2420	3.55						
446	65	2320	3.14						
481	67	2170	2.91						
530	69	1810	2.64						
591	69	1500	2.37						
686	69	1070	2.04						
729	69	880	1.92						
848	69	430	1.65						
946	68	112	1.48						
1075	63	132	1.30						

MRX67 n_1=1400 1/min — 134Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
231	43	4000	6.07						
270	75	3580	5.18						
309	82	3350	4.53						
326	80	3300	4.30						
371	87	3090	3.77						
438	100	2800	3.20						
484	106	2640	2.89						
551	118	2000	2.54						
583	123	1530	2.40						
686	134	230	2.04						
753	126	225	1.86						
870	114	245	1.61						
1000	104	205	1.40						

MRX77 n_1=1400 1/min — 215Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.10	1.50	2.20 3.00	4.00	5.50 7.50	11.0
175	57	6330	8.00						
187	53	6200	7.47						
218	103	5600	6.41						
249	110	5300	5.63						
262	103	5240	5.35						
296	123	4900	4.73						
347	143	4500	4.04						
378	153	4290	3.70						

MRX77 n_1=1400 1/min — 215Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.10	1.50	2.20 3.00	4.00	5.50 7.50	11.0
431	182	3200	3.25						
455	193	2560	3.08						
519	215	1110	2.70						
576	215	510	2.43						
657	200	435	2.13						
745	187	335	1.88						
838	173	315	1.67						
986	155	315	1.42						

MRX87 n_1=1400 1/min — 405Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	3.00	4.00	5.5 7.5	11.0 15.0	18.5 22.0	
162	139	7890	8.65						
183	149	7490	7.63						
194	140	7380	7.20						
217	192	6850	6.45						
252	225	6320	5.56						
276	250	5980	5.07						
311	290	5500	4.50						
370	305	5030	3.78						
402	405	2730	3.48						
453	405	1950	3.09						
507	405	1200	2.76						
565	405	470	2.48						
651	385	42	2.15						
725	355	185	1.93						
875	315	74	1.60						
1005	290	74	1.39						

MRX97 n_1=1400 1/min — 595Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0		
170	225	9560	8.23						
196	260	8950	7.16						
213	300	8500	6.56						
242	420	7630	5.79						
285	395	7220	4.91						
310	595	6180	4.52						
347	595	5380	4.04						
385	595	4530	3.64						
424	595	3730	3.30						
479	595	2810	2.92						
530	595	1980	2.64						
625	595	495	2.24						

MRX97 n_1=1400 1/min — 595Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0		
714	570	19	1.96						
854	505	51	1.64						
986	455	132	1.42						

MRX107 n_1=1400 1/min — 830Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0		
211	460	9700	6.63						
250	455	9080	5.61						
270	695	7850	5.19						
301	695	7450	4.65						
333	830	6420	4.20						
367	830	5550	3.81						
414	830	4490	3.38						
456	830	3600	3.07						
530	830	2160	2.64						
609	830	900	2.30						
718	765	555	1.95						
819	705	480	1.71						
972	645	315	1.44						

MR17 n_1=1400 1/min — 85Nm

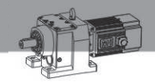
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75				
3									
17	85	1770	81.64						
20	85	1770	70.39						
21	85	1770	65.61						
24	85	1770	57.35						
26	85	1770	53.76						
30	85	1770	47.44						
32	85	1770	44.18						
36	85	1770	38.61						
39	85	1770	36.20						
44	85	1770	31.94						
49	85	1770	28.32						
58	85	1650	24.07						
2									
55	85	1680	25.23						
60	85	1620	23.15						
71	85	1500	19.71						
82	85	1400	16.99						
88	85	1350	15.84						
101	85	1270	13.84						
108	85	1230	12.98						
122	81	1180	11.45						

MR17 n_1=1400 1/min — 85Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75				
2									
138	77	1140	10.15						
162	72	1090	8.63						
185	56	1040	7.55						
199	55	1010	7.04						
228	54	950	6.15						
243	53	930	5.76						
275	51	890	5.09						
310	48	870	4.51						
366	45	820	3.83						

MR27 n_1=1400 1/min — 130Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
3									
10	130	4230	135.09						
11	130	4230	123.91						
13	130	4230	105.49						
15	130	4230	90.96						
17	130	4230	84.78						
19	130	4230	74.11						
20	130	4180	69.47						
23	130	3980	61.30						
25	130	3840	55.87						
29	130	3630	48.17						
31	130	3530	44.90						
36	130	3350	39.25						
38	130	3260	36.79						
43	130	3100	32.47						
49	130	2950	28.78						
57	130	2760	24.47						
2									
49	130	2940	28.37						
54	130	2840	26.09						
63	130	2660	22.32						
72	130	2510	19.35						
77	130	2440	18.08						
90	130	2290	15.63						
105	130	2140	13.28						
118	129	1980	11.86						
138	122	1890	10.13						
149	122	900	9.41						
172	116	870	8.16						
183	112	900	7.63						
212	106	880	6.59						



MR

MR27 n_1=1400 1/min — 130Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
2									
250	99	880	5.60						
280	95	860	5.00						
328	87	920	4.27						
350	85	900	4.00						
415	79	900	3.37						

MR37 n_1=1400 1/min — 200Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
3									
10.0	200	4940	134.82						
11.0	200	4940	123.66						
13.0	200	4940	105.28						
15.0	200	4940	90.77						
17.0	200	4940	84.61						
19.0	200	4940	73.96						
20.0	200	4940	69.33						
23.0	200	4940	61.18						
25.0	200	4940	55.76						
29.0	200	4940	48.08						
31.0	200	4940	44.81						
36.0	200	4760	39.17						
38.0	200	4540	36.72						
43.0	200	4120	32.40						
49.0	200	3740	28.73						
57.0	200	3240	24.42						
2									
49.0	200	3690	28.32						
54.0	185	3860	26.03						
63.0	200	2970	22.27						
73.0	200	2570	19.31						
78.0	200	2390	18.05						
90.0	200	2010	15.60						
106	190	1880	13.25						
118	183	1810	11.83						
138	170	1820	10.11						
148	167	1760	9.47						
176	156	1720	7.97						
210	144	1000	6.67						
247	142	760	5.67						
277	135	790	5.06						
324	126	820	4.32						
346	122	840	4.05						
411	112	900	3.41						

MR47 n_1=1400 1/min — 300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50
3									
7.90	300	5420	176.88						
8.60	300	5420	162.94						
10.0	300	5420	139.99						
11.0	300	5420	121.87						
12.0	300	5420	114.17						
14.0	300	5420	100.86						
15.0	300	5420	93.68						
16.0	300	5420	84.90						
18.0	300	5420	76.23						
20.0	300	5420	68.54						
22.0	300	5420	64.21						
25.0	300	5420	56.73						
27.0	300	5350	52.69						
29.0	300	5140	47.75						
33.0	300	4930	42.87						
38.0	300	4630	36.93						
40.0	300	4520	34.73						
47.0	300	4240	29.88						
52.0	300	4050	26.70						
59.0	300	3840	23.59						
2									
41.0	240	4680	33.79						
45.0	220	4610	31.12						
52.0	300	4050	26.74						
60.0	300	3820	23.28						
64.0	300	3710	21.81						
73.0	295	3530	19.27						
78.0	290	3390	17.89						
86.0	275	3350	16.22						
96.0	265	3230	14.56						
112	250	3080	12.54						
119	245	3020	11.79						
138	230	2880	10.15						
154	220	2780	9.07						
175	205	2690	8.01						
180	163	2720	7.76						
201	159	2620	6.96						
233	156	2470	6.00						
248	155	2410	5.64						
289	150	2280	4.85						
323	146	2190	4.34						
366	144	2080	3.83						

MR57 n_1=1400 1/min — 450Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
7.50	450	7100	186.89						
8.10	450	7100	172.17						
9.50	450	7100	147.92						
11.0	450	7100	128.77						
12.0	450	7100	120.63						
13.0	450	7100	106.58						
14.0	450	7100	98.99						
16.0	450	7100	89.71						
17.0	450	7100	80.55						
20.0	450	7100	69.23						
22.0	450	6980	64.85						
24.0	450	6630	57.29						
26.0	450	6430	53.22						
29.0	450	6170	48.23						
32.0	450	5900	43.30						
38.0	450	5530	37.30						
40.0	450	5390	35.07						
46.0	450	5040	30.18						
52.0	450	4800	26.97						
2									
53.0	450	4750	26.31						
56.0	450	4640	24.99						
64.0	450	4370	21.93						
75.0	450	4050	18.60						
83.0	450	3860	16.79						
95.0	435	3690	14.77						
100	430	3610	13.95						
118	405	3430	11.88						
130	390	3330	10.79						
150	370	3180	9.35						
155	375	2010	9.06						
176	355	2020	7.97						
186	350	1950	7.53						
218	335	1770	6.41						
241	320	1820	5.82						
277	305	1730	5.05						
319	280	1900	4.39						

MR67 n_1=1400 1/min — 600Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
7.00	600	7560	199.81						
7.60	600	7560	184.07						
8.90	600	7560	158.14						

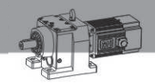
MR67 n_1=1400 1/min — 600Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
10.0	600	7560	137.67						
11.0	600	7560	128.97						
12.0	600	7560	113.94						
13.0	600	7560	105.83						
15.0	600	7560	95.91						
16.0	600	7560	86.11						
19.0	600	7560	74.17						
20.0	600	7560	69.75						
23.0	600	7560	61.26						
25.0	600	7560	56.89						
27.0	600	7560	51.56						
30.0	600	7560	46.29						
35.0	580	7790	39.88						
37.0	570	7900	37.50						
43.0	540	8210	32.27						
49.0	520	8400	28.83						
2									
50.0	540	8210	28.13						
52.0	540	8210	26.72						
60.0	560	8010	23.44						
70.0	600	7560	19.89						
78.0	590	7330	17.95						
89.0	560	7130	15.79						
94.0	550	6980	14.91						
110	520	6640	12.70						
121	500	6500	11.54						
140	470	6220	10.00						
161	440	5960	8.70						
180	380	5830	7.79						
190	370	5790	7.36						
223	330	5590	6.27						
246	310	5450	5.70						
284	290	5210	4.93						
326	270	5000	4.29						

MR77 n_1=1400 1/min — 820Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.18 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
7.20	820	9920	195.24						
8.40	820	9920	166.59						
9.60	820	9920	145.67						
10.0	820	9920	138.39						
12.0	820	9920	121.42						

MR



MR

MR77 n_1=1400 1/min									820Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.18 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
14.0	820	9920	102.99						
15.0	820	9920	92.97						
17.0	820	9920	81.80						
18.0	820	9920	77.24						
21.0	820	9920	65.77						
24.0	820	9920	57.68						
27.0	820	9920	52.07						
31.0	820	9920	45.81						
32.0	820	9920	43.26						
38.0	820	9920	36.83						
42.0	820	9920	33.47						
48.0	820	9920	29.00						
55.0	780	10100	25.23						
2									
60.0	820	8870	23.37						
65.0	820	8250	21.43						
74.0	780	7980	18.80						
79.0	780	7620	17.82						
90.0	740	7390	15.60						
100	720	7050	14.05						
114	690	6740	12.33						
129	660	6490	10.88						
145	630	6300	9.64						
163	630	4110	8.59						
181	610	3940	7.74						
206	580	3850	6.79						
234	540	3990	5.99						
264	510	3990	5.31						

MR77 n_1=1400 1/min									820Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0					
3									
14.0	820	9920	102.99						
15.0	820	9920	92.97						
17.0	820	9920	81.80						
18.0	820	9920	77.24						
21.0	820	9920	65.77						
24.0	820	9920	57.68						
27.0	820	9920	52.07						
31.0	820	9920	45.81						
32.0	820	9920	43.26						
38.0	820	9920	36.83						
42.0	820	9920	33.47						

MR77 n_1=1400 1/min									820Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0					
3									
48.0	820	9920	29.00						
55.0	780	10100	25.23						
2									
60.0	820	8870	23.37						
65.0	820	8250	21.43						
74.0	780	7980	18.80						
79.0	780	7620	17.82						
90.0	740	7390	15.60						
100	720	7050	14.05						
114	690	6740	12.33						
129	660	6490	10.88						
145	630	6300	9.64						
163	630	4110	8.59						
181	610	3940	7.74						
206	580	3850	6.79						
234	540	3990	5.99						
264	510	3990	5.31						

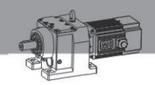
MR87 n_1=1400 1/min									1550Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
5.70	1550	16900	246.54						
6.50	1550	16900	216.54						
6.80	1550	16900	205.71						
7.70	1550	16900	181.77						
9.00	1550	16900	155.34						
9.80	1550	16900	142.41						
11.0	1550	16900	124.97						
12.0	1550	16900	118.43						
14.0	1550	16900	103.65						
15.0	1550	16900	93.38						
17.0	1550	16900	81.92						
19.0	1550	16900	72.57						
22.0	1550	15800	63.68						
23.0	1550	15200	60.35						
27.0	1550	13500	52.82						
29.0	1550	16900	47.58						
34.0	1550	16900	41.74						
38.0	1550	16800	36.84						
43.0	1550	16000	32.66						
50.0	1500	15100	27.88						
2									
41.0	1500	9480	34.40						

MR87 n_1=1400 1/min									1550Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
2									
45.0	1550	7820	31.40						
50.0	1550	15000	27.84						
60.0	1550	13900	23.40						
65.0	1500	13600	21.51						
73.0	1440	13000	19.10						
82.0	1390	12600	17.08						
91.0	1340	12100	15.35						
105	1280	11600	13.33						
117	1230	11200	11.93						
141	1180	10400	9.90						
153	1210	10500	9.14						
170	1160	10200	8.22						
196	1070	9780	7.13						
219	1020	9450	6.39						
264	910	8980	5.30						

MR87 n_1=1400 1/min									1550Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0				
3									
5.70	1550	16900	246.54						
6.50	1550	16900	216.54						
6.80	1550	16900	205.71						
7.70	1550	16900	181.77						
9.00	1550	16900	155.34						
9.80	1550	16900	142.41						
11.0	1550	16900	124.97						
12.0	1550	16900	118.43						
14.0	1550	16900	103.65						
15.0	1550	16900	93.38						
17.0	1550	16900	81.92						
19.0	1550	16900	72.57						
22.0	1550	15800	63.68						
23.0	1550	15200	60.35						
27.0	1550	13500	52.82						
29.0	1550	16900	47.58						
34.0	1550	16900	41.74						
38.0	1550	16800	36.84						
43.0	1550	16000	32.66						
50.0	1550	15100	27.88						
2									
41.0	1550	9480	34.40						
45.0	1550	7820	31.40						
50.0	1550	15000	27.84						

MR87 n_1=1400 1/min									1550Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0				
2									
60.0	1550	13900	23.40						
65.0	1500	13600	21.51						
73.0	1440	13000	19.10						
82.0	1390	12600	17.08						
91.0	1340	12100	15.35						
105	1280	11600	13.33						
117	1230	11200	11.93						
141	1180	10400	9.90						
153	1210	10500	9.14						
170	1160	10200	8.22						
196	1070	9780	7.13						
219	1020	9450	6.39						
264	910	8980	5.30						

MR97 n_1=1400 1/min									3000Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
4.80	3000	19800	289.74						
5.50	3000	19800	255.71						
5.80	3000	19800	241.25						
6.50	3000	19800	216.28						
7.50	3000	19800	186.30						
8.20	3000	19800	170.02						
9.30	3000	19800	150.78						
11.0	3000	19800	126.75						
12.0	3000	19800	116.48						
14.0	3000	19800	103.44						
15.0	3000	19800	92.48						
17.0	3000	19800	83.15						
19.0	3000	18000	72.17						
21.0	3000	19800	65.21						
23.0	3000	19800	59.92						
26.0	3000	19800	53.21						
29.0	3000	19800	47.58						
33.0	3000	19800	42.78						
38.0	3000	18600	37.13						
42.0	2890	17900	33.25						
51.0	2670	16900	27.58						
2									
44.0	2560	10600	32.05						
51.0	2560	8380	27.19						
56.0	2830	15900	25.03						
63.0	2720	15300	22.37						



MR97 n_1=1400 1/min — 3000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
2									
70.0	2610	14800	20.14						
77.0	2500	14400	18.24						
87.0	2400	13800	16.17						
96.0	2300	13400	14.62						
113	2190	12700	12.39						
129	2090	12100	10.83						
151	2030	12200	9.29						
167	2030	11700	8.39						
197	2000	10900	7.12						
225	1890	10500	6.21						
269	1780	9850	5.20						
311	1630	9500	4.50						

MR97 n_1=1400 1/min — 3000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 37.0
3						
4.80	3000	19800	289.74			
5.50	3000	19800	255.71			
5.80	3000	19800	241.25			
6.50	3000	19800	216.28			
7.50	3000	19800	186.30			
8.20	3000	19800	170.02			
9.30	3000	19800	150.78			
11.0	3000	19800	126.75			
12.0	3000	19800	116.48			
14.0	3000	19800	103.44			
15.0	3000	19800	92.48			
17.0	3000	19800	83.15			
19.0	3000	18000	72.17			
21.0	3000	19800	65.21			
23.0	3000	19800	59.92			
26.0	3000	19800	53.21			
29.0	3000	19800	47.58			
33.0	3000	19800	42.78			
38.0	3000	18600	37.13			
42.0	2890	17900	33.25			
51.0	2670	16900	27.58			
2						
44.0	2560	10600	32.05			
51.0	2560	8380	27.19			
56.0	2830	15900	25.03			

MR97 n_1=1400 1/min — 3000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 37.0
2						
63.0	2720	15300	22.37			
70.0	2610	14800	20.14			
77.0	2500	14400	18.24			
87.0	2400	13800	16.17			
96.0	2300	13400	14.62			
113	2190	12700	12.39			
129	2090	12100	10.83			
151	2030	12200	9.29			
167	2030	11700	8.39			
197	2000	10900	7.12			
225	1890	10500	6.21			
269	1780	9850	5.20			
311	1630	9500	4.50			

MR107 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.50 ~3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0
3									
5.60	4300	29500	251.15						
6.10	4300	29500	229.95						
6.90	4300	29500	203.16						
8.10	4300	29500	172.34						
8.80	4300	29500	158.68						
9.90	4300	29500	141.83						
11.0	4300	29500	127.68						
12.0	4300	29500	115.63						
14.0	4300	29500	102.53						
15.0	4300	29500	92.70						
18.0	4300	29500	78.57						
19.0	4300	29500	72.88						
21.0	4300	29200	65.60						
24.0	4300	28000	59.41						
27.0	4300	26600	52.68						
29.0	4300	25500	47.63						
35.0	4300	23800	40.37						
40.0	4300	22400	35.26						
47.0	4300	20700	29.49						
2									
45.0	4300	21100	30.77						
51.0	4300	20100	27.58						
56.0	4300	19200	24.90						
62.0	4300	18300	22.62						
70.0	4300	17300	20.07						
77.0	4300	16600	18.21						
89.0	4300	15400	15.65						
102	4300	14400	13.66						
121	4300	13300	11.59						
138	4300	12400	10.13						
164	4300	11300	8.56						
178	2970	13800	7.86						

MR107 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.50 ~3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0
210	2970	12800	6.66						
241	2970	12100	5.82						
285	2900	11300	4.92						

MR137 n_1=1400 1/min — 8000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0
3								
6.30	8000	53400	222.60					
7.40	8000	53400	188.45					
8.00	8000	53400	174.40					
9.00	8000	53400	156.31					
9.90	8000	53400	141.12					
11.0	8000	53400	128.18					
12.0	8000	53400	113.72					
14.0	8000	53400	103.20					
16.0	8000	53400	88.70					
17.0	8000	53400	80.91					
19.0	8000	53400	73.49					
21.0	8000	53400	65.20					
24.0	8000	53400	59.17					
28.0	8000	53400	50.86					
32.0	8000	53400	44.39					
37.0	8000	53400	37.65					
43.0	8000	53400	32.91					
50.0	7680	54100	27.83					
2								
47.0	7780	53900	29.57					
58.0	8000	49400	24.12					
64.0	8000	47100	22.00					
74.0	8000	43500	19.04					
83.0	8000	40600	16.80					
96.0	8000	37300	14.51					
109	8000	34700	12.83					
130	8000	31100	10.79					
161	7840	27600	8.71					
184	5110	39000	7.59					
219	5110	35900	6.38					
272	4600	34500	5.15					

MR147 n_1=1400 1/min — 13000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	5.50 ~15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0
3							
8.60	13000	62700	163.31				
9.50	13000	62700	146.91				
12.0	13000	62700	119.86				
13.0	13000	62700	109.31				
15.0	13000	62700	94.60				

MR147 n_1=1400 1/min — 13000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	5.50 ~15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	110 132
3								
17.0	13000	62700	83.47					
19.0	13000	62700	72.09					
21.0	13000	62700	66.99					
23.0	13000	62700	61.09					
26.0	13000	62700	52.87					
30.0	13000	62700	46.65					
35.0	13000	62700	40.29					
39.0	13000	62700	35.64					
47.0	13000	62700	29.95					
58.0	11900	64700	24.19					
2								
68.0	12000	64600	20.44					
78.0	10500	67000	18.04					
90.0	13000	62700	15.64					
101	12600	63400	13.91					
117	13000	60400	11.99					
144	13000	54400	9.74					
169	13000	49900	8.26					
193	8670	58400	7.25					
238	8670	53200	5.89					
280	8670	49300	5.00					

MR167 n_1=1400 1/min — 18000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	110 132
3								
6.10	18000	120000	229.71					
7.50	18000	120000	186.93					
9.10	18000	120000	153.07					
10.0	18000	120000	139.98					
11.0	18000	120000	121.81					
13.0	18000	120000	107.49					
15.0	18000	120000	93.19					
17.0	18000	120000	82.91					
19.0	18000	120000	73.70					
21.0	18000	120000	67.40					
24.0	18000	120000	58.65					
27.0	18000	120000	51.76					
31.0	18000	120000	44.87					
35.0	18000	120000	39.92					
41.0	18000	120000	34.41					
50.0	18000	120000	27.96					
59.0	18000	116500	23.71					
2								
30.0	7000	120000	46.00					
37.0	9000	120000	37.74					
46.0	10000	120000	30.71					
57.0	14000	120000	24.57					
64.0	13000	120000	21.85					
74.0	16000	111400	19.03					
82.0	15000	108900	16.98					
97.0	18000	93800	14.48					
117	17000	88700	11.99					
137	17000	82500	10.24					

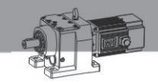
2.7 MR..性能参数 / MR.. Performance Parameters

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
0.06	13300	21342	62000	1.00	MR 147 MRF77 MRF 147 MRF77	Y..63M_1-4 AM63 AD2
0.08	11300	18210	65700	1.15		
0.09	9920	15923	67900	1.30		
0.10	8770	14075	69400	1.50		
0.11	7640	12344	70700	1.70	MR 147MRF77 MRF 147 MRF77	Y..63M_1-4 AM63 AD2
0.12	6730	11143	71600	1.95		
0.14	6030	9743	72200	2.20		
0.16	4830	8443	73100	2.70		
0.19	4180	7307	73400	3.10		
0.21	3690	6447	73700	3.50		
0.25	3180	5568	73900	4.10		
0.11	8050	12921	53300	1.00	MR 137 MRF77 MRF 137 MRF77	Y..63M_1-4 AM63 AD2
0.12	7250	11712	54900	1.10		
0.13	6390	10573	56400	1.25		
0.16	5020	8784	58400	1.60		
0.18	4090	7479	59400	1.95		
0.21	4060	6559	59400	1.95		
0.24	3190	5834	60200	2.50		
0.27	3160	5116	60200	2.50		
0.18	4410	7583	28800	0.95	MR 107 MRF77 MRF 107 MRF77	Y..63M_1-4 AM63 AD2
0.20	3690	6743	32400	1.15		
0.23	3660	5914	32500	1.15		
0.27	2820	5168	35500	1.50		
0.31	2530	4435	36100	1.70		
0.35	2260	3896	36500	1.90		
0.45	1880	3039	36900	2.30		
0.35	2470	3918	36200	1.75	MR 107 MRF77 MRF 107 MRF77	Y..63M_1-4 AM63 AD2
0.41	2100	3343	36700	2.00		
0.45	1910	3034	36900	2.20		
0.52	1670	2653	37100	2.60		
0.61	1430	2280	37300	3.00		
0.67	1290	2067	37400	3.30		
0.30	3050	4559	17700	1.00	MR 97 MRF57 MRF 97 MRF57	Y..63M_1-4 AM63 AD2
0.34	2560	4004	23700	1.15		
0.40	2270	3481	25200	1.30		
0.29	3230	4678	4840	0.95	MR 97 MRF57 MRF 97 MRF57	Y..63M_1-4 AM63 AD2
0.32	2980	4309	20400	1.00		
0.37	2560	3702	23700	1.15		
0.46	2080	3019	26100	1.45		
0.52	1800	2668	27100	1.65		
0.61	1480	2245	27700	2.00		
0.68	1300	2016	27900	2.30		
0.80	1190	1733	28000	2.50		
0.45	2120	3065	25900	1.40	MR 97 MRF57 MRF 97 MRF57	Y..63M_1-4 AM63 AD2
0.51	1880	2722	26800	1.60		
0.60	1590	2311	27500	1.90		
0.66	1430	2078	27700	2.10		
0.76	1230	1823	28000	2.40		
0.87	1070	1583	28200	2.80		
0.99	900	1396	28300	3.30		
1.10	770	1228	28400	3.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
0.48	1760	2873	15200	0.90	MR 87 MRF57 MRF 87 MRF57	Y..63M_1-4 AM63 AD2
0.70	1300	1961	18500	1.20		
0.53	1780	2595	15000	0.85	MR 87 MRF57 MRF 87 MRF57	Y..63M_1-4 AM63 AD2
0.65	1430	2129	17700	1.10		
0.72	1270	1930	18600	1.20		
0.80	1120	1733	19300	1.40		
0.79	1140	1737	19200	1.35	MR 87 MRF57 MRF 87 MRF57	Y..63M_1-4 AM63 AD2
0.91	1000	1524	19800	1.55		
1.60	580	885	20000	2.60		
1.80	510	776	20000	3.00		
2.00	450	685	20000	3.40		
1.10	810	1303	20000	1.90	MR 87 MRF57 MRF 87 MRF57	Y..63M_1-4 AM63 AD3
1.20	710	1143	20000	2.20		
2.30	360	599	20000	4.30		
1.10	930	1303	8660	0.85	MR 77 MRF37 MRF 77 MRF37	Y..63M_1-4 AM63 AD1
1.20	795	1124	10100	1.05	MR 77 MRF37 MRF 77 MRF37	Y..63M_1-4 AM63 AD2
1.30	740	1047	10600	1.10		
1.50	635	915	11300	1.30		
1.10	820	1218	9910	1.00	MR 77 MRF37 MRF 77 MRF37	Y..63M_1-4 AM63 AD2
1.30	740	1084	10600	1.10		
1.50	660	940	11200	1.25	MR 77 MRF37 MRF 77 MRF37	Y..63M_1-4 AM63 AD2
1.70	520	821	12000	1.55		
1.90	475	731	12200	1.70		
2.10	455	646	12300	1.80		
2.60	375	520	12600	2.20	MR 77 MRF37 MRF 77 MRF37	Y..63M_1-4 AM63 AD2
3.10	320	451	12700	2.50		
3.30	300	422	12800	2.70		
3.80	255	365	12900	3.20		
1.60	625	891	7190	0.95	MR 67 MRF37 MRF 67 MRF37	Y..63M_1-4 AM63 AD2
1.90	505	730	8530	1.20		
2.10	440	644	9060	1.35		
2.40	385	571	9430	1.55		
2.80	320	486	9790	1.85		
1.60	590	836	7670	1.00	MR 67 MRF37 MRF 67 MRF37	Y..63M_1-4 AM63 AD2
1.80	490	750	8630	1.20		
2.10	440	646	9050	1.35		
2.40	400	574	9330	1.50		
2.80	345	495	9660	1.75		
3.20	285	438	9940	2.10		
1.80	550	782	4650	0.80	MR 57 MRF37 MRF 57 MRF37	Y..63M_1-4 AM63 AD2
2.00	455	678	7070	1.00		
2.30	410	604	7260	1.10		
2.60	370	537	7400	1.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
2.90	325	471	7550	1.35	MR 57 MRF37 MRF 57 MRF37	Y..63M_1-4 AM63 AD2
3.90	240	357	7760	1.85		
4.30	215	319	7820	2.10		
3.80	255	359	7730	1.75	MR 57 MRF37 MRF 57 MRF37	Y..63M_1-4 AM63 AD2
4.30	230	324	7790	1.95		
4.80	200	290	7840	2.20		
5.30	185	262	7880	2.40		
5.60	170	246	7900	2.60		
6.30	150	220	7930	3.00		
2.70	340	510	4360	0.85	MR 47 MRF37 MRF 47 MRF37	Y..63M_1-4 AM63 AD2
3.20	285	436	5480	1.05		
3.40	265	408	5590	1.10		
4.00	215	344	5780	1.35		
2.80	365	502	3020	0.80	MR 47 MRF37 MRF 47 MRF37	Y..63M_1-4 AM63 AD2
3.20	310	429	5350	0.95		
3.70	265	372	5580	1.10		
4.00	245	348	5670	1.20		
4.60	210	301	5810	1.40		
5.40	177	255	5920	1.70		
6.00	156	228	5980	1.95		
7.10	130	195	6040	2.30		
6.90	166	199.81	10300	3.60	MR 67 MRF 67	Y..63M_1-4 AM63 AD2
7.50	153	184.07	10400	3.90		
7.40	155	186.89	7920	2.90	MR 57 MRF 57	Y..63M_1-4 AM63 AD2
8.00	143	172.17	7940	3.20		
9.30	123	147.92	7960	3.70		
11.0	107	128.77	7980	4.20		
7.80	147	176.88	6000	2.00	MR 47 MRF 47	Y..63M_1-4 AM63 AD2
8.50	135	162.94	6030	2.20		
9.90	116	139.99	6070	2.60		
11.0	101	121.87	6100	3.00		
12.0	95	114.17	6100	3.20		
14.0	84	100.86	6120	3.60		
15.0	78	93.68	6130	3.90		
10.0	112	134.82	5750	1.80	MR 37 MRF 37	Y..63M_1-4 AM63 AD1
11.0	103	123.66	5800	1.95		
13.0	87	105.28	5880	2.30		
15.0	75	90.77	5930	2.60		
16.0	70	84.61	5950	2.80		
19.0	61	73.96	5980	3.30		
10.0	112	135.09	4310	1.15	MR 27 MRF 27	Y..63M_1-4 AM63 AD1
11.0	103	123.91	4340	1.25		
13.0	88	105.49	4390	1.50		
15.0	76	90.96	4420	1.70		
16.0	70	84.78	4440	1.85		
19.0	62	74.11	4460	2.10		
20.0	58	69.47	4460	2.20		
23.0	51	61.30	4400	2.60		
25.0	46	55.87	4280	2.80		
29.0	40	48.17	4090	3.20		
31.0	37	44.90	4000	3.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
17.0	68	81.64	2500	1.25	MR 17 MRF 17	Y..63M_1-4 AM63 -
20.0	58	70.39	2500	1.45		
21.0	54	65.61	2500	1.55		
24.0	48	57.35	2500	1.80		
26.0	45	53.76	2500	1.90		
29.0	39	47.44	2500	2.20		
31.0	37	44.18	2500	2.30		
36.0	32	38.61	2430	2.60		
38.0	30	36.20	2390	2.80		
43.0	26	31.94	2310	3.20		
49.0	24	28.32	2230	3.60		
57.0	20	24.07	2130	4.20		
227	5	6.07	4260	8.60	MRX 67 MRXF 67	Y..63M_1-4 AM63 AD2
267	4.3	5.18	4050	17.0		
305	3.8	4.53	3870	22.0		
321	3.6	4.30	3810	22.0		
251	4.6	5.50	3360	8.50	MRX 57 MRXF 57	Y..63M_1-4 AM63 AD2
272	4.2	5.07	3270	8.60		
317	3.6	4.35	3120	19.0		
364	3.1	3.79	2980	22.0		
389	2.9	3.55	2910	24.0	MRX 57 MRXF 57	Y..63M_1-4 AM63 AD2
440	2.6	3.14	2800	25.0		
474	2.4	2.91	2730	28.0		
523	2.2	2.64	2640	31.0		
582	2	2.37	2550	34.0	MRX 57 MRXF 57	Y..63M_1-4 AM63 AD3
676	1.7	2.04	2430	41.0		
719	1.6	1.92	2380	43.0		
835	1.4	1.65	2260	49.0		
P_1=0.18kw						
0.09	14900	14075	50900	0.85	MR 147 MRF77 MRF 147 MRF77	Y..63M_2-4 AM63 AD2
0.11	13000	12344	62500	1.00		
0.12	11600	11143	65200	1.10		
0.14	10300	9743	67300	1.25		
0.16	8550	8443	69700	1.50	MR 147 MRF77 MRF 147 MRF77	Y..63M_2-4 AM63 AD2
0.18	7400	7307	70900	1.75		
0.20	6530	6447	71800	2.00		
0.24	5640	5568	72500	2.30		
0.27	5140	4926	72800	2.50		
0.31	4420	4325	73300	2.90		
0.35	3920	3754	73600	3.30	MR 147 MRF77 MRF 147 MRF77	Y..63M_2-4 AM63 AD2
0.40	3370	3302	73800	3.80		
0.28	5060	4709	58300	1.60	MR 137 MRF77 MRF 137 MRF77	Y..63M_2-4 AM63 AD2
0.33	4320	4018	59200	1.85		
0.38	3770	3514	59700	2.10		
0.40	3580	3338	59900	2.20		
0.45	3140	2929	60200	2.50		
0.15	8900	8784	50100	0.90	MR 137 MRF77 MRF 137 MRF77	Y..63M_2-4 AM63 AD2
0.18	7390	7479	54600	1.10		
0.20	6950	6559	55500	1.15		



MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size		Input Configuration
P_1=0.18kw							
0.23	5760	5834	57400	1.40	**MR**	**137 MRF77**	**Y..63M_2-4 AM63 AD2**
0.26	5420	5116	57900	1.50	**MRF**	**137 MRF77**	
0.30	4520	4464	59000	1.75	**MR**	**137 MRF77**	**Y..63M_2-4 AM63 AD2**
0.34	3980	3928	59500	2.00	**MRF**	**137 MRF77**	
0.30	4490	4435	28400	0.95	**MR**	**107 MRF77**	**Y..63M_2-4 AM63 AD2**
0.34	3980	3896	31100	1.10	**MRF**	**107 MRF77**	
0.43	3220	3039	34200	1.35			
0.34	4210	3918	29900	1.00	**MR**	**107 MRF77**	**Y..63M_2-4 AM63 AD2**
0.39	3590	3343	32800	1.20	**MRF**	**107 MRF77**	
0.44	3260	3034	34100	1.30	**MR**	**107 MRF77**	**Y..63M_2-4 AM63 AD2**
0.50	2850	2653	35400	1.50	**MRF**	**107 MRF77**	
0.58	2450	2280	36200	1.75			
0.64	2210	2067	36500	1.95			
0.66	2100	1987	36700	2.00	**MR**	**107 MRF77**	**Y..63M_2-4 AM63 AD3**
0.72	1870	1827	36900	2.30	**MRF**	**107 MRF77**	
0.83	1590	1599	37200	2.70			
0.94	1430	1400	37300	3.00			
1.10	1220	1226	37400	3.50			
0.49	2990	2668	20000	1.00	**MR**	**97 MRF57**	**Y..63M_2-4 AM63 AD2**
0.59	2480	2245	24200	1.20	**MRF**	**97 MRF57**	
0.65	2200	2016	25500	1.35			
0.76	1960	1733	26500	1.50			
0.81	1840	1623	27000	1.65			
0.92	1610	1434	27500	1.85			
1.10	1330	1207	27900	2.20			
1.20	1180	1084	28000	2.50			
1.40	1000	934	28200	3.00	**MR**	**97 MRF57**	**Y..63M_2-4 AM63 AD2**
1.50	930	878	28300	3.20	**MRF**	**97 MRF57**	
1.80	790	755	28400	3.80			
0.49	3090	2722	15900	0.95	**MR**	**97 MRF57**	**Y..63M_2-4 AM63 AD2**
0.57	2620	2311	23400	1.15	**MRF**	**97 MRF57**	
0.64	2350	2078	24800	1.25			
0.89	1690	1489	15900	0.90	**MR**	**87 MRF57**	**Y..63M_2-4 AM63 AD2**
0.95	1580	1395	16700	1.00	**MRF**	**87 MRF57**	
1.10	1380	1232	18000	1.10			
1.20	1270	1145	18600	1.20			
1.30	1140	1037	19200	1.35			
1.40	1010	931	19800	1.50			
1.60	860	802	20000	1.80			
0.87	1680	1524	15900	0.90	**MR**	**87 MRF57**	**Y..63M_2-4 AM63 AD2**
					MRF	**87 MRF57**	
1.00	1390	1303	17900	1.10	**MR**	**87 MRF57**	**Y..63M_2-4 AM63 AD3**
1.20	1220	1143	18900	1.25	**MRF**	**87 MRF57**	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size		Input Configuration
P_1=0.18kw							
1.50	970	885	19900	1.60	**MR**	**87 MRF57**	**Y..63M_2-4 AM63 AD2**
1.70	850	776	20000	1.80	**MRF**	**87 MRF57**	
1.50	970	858	5830	0.85	**MR**	**77 MRF37**	**Y..63M_2-4 AM63 AD2**
1.70	850	757	9590	0.95	**MRF**	**77 MRF37**	
2.00	750	671	10500	1.10			
2.30	630	571	11400	1.30			
1.60	880	821	9230	0.90	**MR**	**77 MRF37**	**Y..63M_2-4 AM63 AD2**
1.80	800	731	10100	1.00	**MRF**	**77 MRF37**	
2.00	745	646	10500	1.10			
2.40	645	560	11300	1.25			
2.70	550	488	11800	1.50			
3.00	485	436	12100	1.70			
3.50	420	373	12400	1.95			
4.00	365	327	12600	2.20			
4.60	325	289	12700	2.50			
2.30	635	571	7060	0.95	**MR**	**67 MRF37**	**Y..63M_2-4 AM63 AD2**
2.70	535	486	8250	1.10	**MRF**	**67 MRF37**	
2.30	655	574	5820	0.90	**MR**	**67 MRF37**	**Y..63M_2-4 AM63 AD2**
2.70	565	495	7950	1.05	**MRF**	**67 MRF37**	
3.00	480	438	8740	1.25			
3.40	425	388	9160	1.40			
3.80	390	344	9380	1.55	**MR**	**67 MRF37**	**Y..63M_2-4 AM63 AD2**
4.50	315	294	9800	1.90	**MRF**	**67 MRF37**	
5.10	290	261	9920	2.10			
2.90	500	454	6650	0.90	**MR**	**57 MRF37**	**Y..63M_2-4 AM63 AD2**
3.20	450	410	7090	1.00	**MRF**	**57 MRF37**	
2.80	535	471	5250	0.85	**MR**	**57 MRF37**	**Y..63M_2-4 AM63 AD2**
3.70	400	357	7300	1.10	**MRF**	**57 MRF37**	
4.10	355	319	7460	1.25			
4.80	300	273	7630	1.50			
5.50	260	241	7730	1.75			
6.10	230	215	7790	1.95			
3.70	420	359	7230	1.05	**MR**	**57 MRF37**	**Y..63M_2-4 AM63 AD2**
4.10	375	324	7380	1.20	**MRF**	**57 MRF37**	
4.60	335	290	7530	1.35			
5.00	300	262	7620	1.50			
5.40	280	246	7680	1.60	**MR**	**57 MRF37**	**Y..63M_2-4 AM63 AD2**
6.00	245	220	7750	1.80	**MRF**	**57 MRF37**	
7.00	210	188	7830	2.10			
8.30	177	159	7890	2.60			
4.40	345	301	4150	0.85	**MR**	**47 MRF37**	**Y..63M_2-4 AM63 AD2**
5.20	290	255	5460	1.05	**MRF**	**47 MRF37**	
5.80	255	228	5620	1.15			
6.80	215	195	5790	1.40			
4.50	385	195.24	12500	2.10	**MR**	**77**	**Y..71M_1-6 AM71 AD2**
5.20	325	166.59	12700	2.50	**MRF**	**77**	

MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size		Input Configuration
P_1=0.18kw							
6.00	285	145.67	12800	2.80	**MR**	**77**	**Y..71M_1-6 AM71 AD2**
6.30	270	138.39	12900	3.00	**MRF**	**77**	
7.20	235	121.42	12900	3.40			
6.80	250	195.24	12900	3.20	**MR**	**77**	**Y..63M_2-4 AM63 AD2**
7.90	215	166.59	13000	3.80	**MRF**	**77**	
9.10	190	145.67	13000	4.30			
9.50	180	138.39	13000	4.60			
4.40	390	199.81	9370	1.50	**MR**	**67**	**Y..71M_1-6 AM71 AD2**
4.70	360	184.07	9560	1.65	**MRF**	**67**	
5.50	310	158.14	9830	1.90			
6.30	270	137.67	10000	2.20	**MR**	**67**	**Y..71M_1-6 AM71 AD2**
6.80	250	128.97	10100	2.40	**MRF**	**67**	
7.60	225	113.94	10200	2.70			
8.20	205	105.83	10200	2.90			
9.10	190	95.91	10300	3.20			
10.0	170	86.11	10300	3.50			
12.0	146	74.17	10400	4.10			
12.0	138	69.75	10400	4.40			
6.60	260	199.81	10100	2.30	**MR**	**67**	**Y..63M_2-4 AM63 AD2**
7.20	235	184.07	10100	2.50	**MRF**	**67**	
8.40	205	158.14	10200	2.90			
9.60	179	137.67	10300	3.40			
10.0	168	128.97	10300	3.60			
12.0	148	113.94	10400	4.00			
12.0	138	105.83	10400	4.40			
4.70	365	186.89	7420	1.20	**MR**	**57**	**Y..71M_1-6 AM71 AD2**
5.00	340	172.17	7510	1.30	**MRF**	**57**	
5.90	290	147.92	7650	1.55			
6.80	250	128.77	7740	1.75	**MR**	**57**	**Y..71M_1-6 AM71 AD2**
7.20	235	120.63	7780	1.90	**MRF**	**57**	
7.10	240	186.89	7770	1.85	**MR**	**57**	**Y..63M_2-4 AM63 AD2**
7.70	220	172.17	7810	2.00	**MRF**	**57**	
8.90	193	147.92	7860	2.30			
10.0	168	128.77	7900	2.70			
11.0	157	120.63	7920	2.90			
12.0	139	106.58	7940	3.20			
13.0	129	98.99	7950	3.50			
15.0	117	89.71	7970	3.80			
7.50	230	176.88	5740	1.30	**MR**	**47**	**Y..63M_2-4 AM63 AD2**
8.10	210	162.94	5810	1.40	**MRF**	**47**	
9.40	182	139.99	5910	1.65			
11.0	159	121.87	5980	1.90			
12.0	149	114.17	6000	2.00			
13.0	131	100.86	6040	2.30			
14.0	122	93.68	6060	2.50			
16.0	111	84.9	6080	2.70			
17.0	99	76.23	6100	3.00			
7.00	240	123.66	3060	0.80	**MR**	**37**	**Y..71M_1-6 AM71 AD1**
8.30	205	105.28	4840	0.95	**MRF**	**37**	
9.60	179	90.77	5190	1.10			

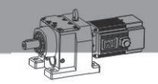
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size		Input Configuration
P_1=0.18kw							
10.0	167	84.61	5310	1.20	**MR**	**37**	**Y..71M_1-6 AM71 AD1**
					MRF	**37**	
9.80	176	134.82	5230	1.15	**MR**	**37**	**Y..63M_2-4 AM63 AD1**
11.0	161	123.66	5370	1.25	**MRF**	**37**	
13.0	137	105.28	5580	1.45			
15.0	118	90.77	5710	1.70			
16.0	110	84.61	5760	1.80			
18.0	96	73.96	5840	2.10			
19.0	90	69.33	5870	2.20			
22.0	80	61.18	5920	2.50			
24.0	73	55.76	5940	2.80			
27.0	63	48.08	5960	3.20	**MR**	**37**	**Y..63M_2-4 AM63 AD2**
					MRF	**37**	
11.0	161	123.91	4070	0.80	**MR**	**27**	**Y..63M_2-4 AM63 AD1**
13.0	137	105.49	4200	0.95	**MRF**	**27**	
15.0	118	90.96	4280	1.10			
16.0	110	84.78	4320	1.20			
18.0	96	74.11	4360	1.35			
19.0	90	69.47	4380	1.45			
22.0	80	61.30	4320	1.65			
24.0	73	55.87	4210	1.80			
27.0	63	48.17	4040	2.10			
29.0	58	44.90	3960	2.20			
34.0	51	39.25	3810	2.50			
36.0	48	36.79	3740	2.70			
41.0	42	32.47	3610	3.10			
46.0	38	28.78	3480	3.50			
54.0	32	24.47	3310	4.10			
47.0	37	28.37	3460	3.50	**MR**	**27**	**Y..63M_2-4 AM63 AD2**
51.0	34	26.09	3380	3.80	**MRF**	**27**	
59.0	29	22.32	3220	4.50			
68.0	25	19.35	3090	5.20			
73.0	24	18.08	3020	5.50			
84.0	20	15.63	2890	6.40			
99.0	17	13.28	2750	7.50			
16.0	106	81.64	47	0.80	**MR**	**17**	**Y..63M_2-4 AM63 -**
19.0	92	70.39	1330	0.95	**MRF**	**17**	
20.0	85	65.61	1740	1.00	**MR**	**17**	**Y..63M_2-4 AM63 -**
23.0	75	57.35	2350	1.15	**MRF**	**17**	
25.0	70	53.76	2500	1.20	**MR**	**17**	**Y..63M_2-4 AM63 -**
28.0	62	47.44	2450	1.40	**MRF**	**17**	
30.0	58	44.18	2410	1.50			
34.0	50	38.61	2340	1.70			
36.0	47	36.20	2300	1.80			
41.0	42	31.94	2240	2.00			
47.0	37	28.32	2170	2.30			
55.0	31	24.07	2080	2.70			

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
52.0	33	25.23	2110	2.60	**MR 17** **MRF 17**	**Y..63M_2-4** **AM63** **-**
57.0	30	23.15	2060	2.80		
67.0	26	19.71	1970	3.30		
78.0	22	16.99	1890	3.80		
143	12	6.07	4940	3.60	**MRX 67** **MRXF 67**	**Y..71M_1-6** **AM71** **AD2**
168	10	5.18	4690	7.40		
192	8.9	4.53	4490	9.20		
202	8.5	4.30	4410	9.40		
218	7.9	6.07	4310	5.40	**MRX 67** **MRXF 67**	**Y..63M_2-4** **AM63** **AD2**
255	6.7	5.18	4090	11.0		
292	5.9	4.53	3920	14.0		
307	5.6	4.30	3850	14.0		
350	4.9	3.77	3690	18.0		
412	4.2	3.20	3500	24.0	**MRX 67** **MRXF 67**	**Y..63M_2-4** **AM63** **AD3**
457	3.8	2.89	3380	28.0		
519	3.3	2.54	3240	36.0		
550	3.1	2.40	3180	40.0		
646	2.7	2.04	3020	50.0		
158	11	5.50	3880	3.60	**MRX 57** **MRXF 57**	**Y..71M_1-6** **AM71** **AD2**
172	10	5.07	3780	3.60		
200	8.6	4.35	3600	7.90		
230	7.5	3.79	3440	9.20		
240	7.2	5.50	3400	5.40	**MRX 57** **MRXF 57**	**Y..63M_2-4** **AM63** **AD2**
261	6.6	5.07	3310	5.40		
303	5.7	4.35	3150	12.0	**MRX 57** **MRXF 57**	**Y..63M_2-4** **AM63** **AD2**
348	4.9	3.79	3010	14.0		
372	4.6	3.55	2940	15.0		
421	4.1	3.14	2830	16.0		
453	3.8	2.91	2760	18.0		
500	3.4	2.64	2670	20.0		
557	3.1	2.37	2580	22.0	**MRX 57** **MRXF 57**	**Y..63M_2-4** **AM63** **AD3**
647	2.7	2.04	2460	26.0		
688	2.5	1.92	2410	28.0		
799	2.2	1.65	2290	31.0		
P_1=0.25kw						
0.13	15100	9743	48200	0.85	**MR 147 MRF77** **MRF 147 MRF77**	**Y..71M_1-4** **AM71** **AD2**
0.15	12700	8443	63100	1.00		
0.18	11000	7307	66200	1.20		
0.20	9740	6447	68100	1.35		
0.23	8410	5568	69800	1.55		
0.26	7590	4926	70700	1.70		
0.30	6570	4325	71700	2.00		
0.35	5790	3754	72400	2.20		
0.39	5020	3302	72900	2.60		
0.45	4370	2898	73300	3.00		
0.22	8660	5834	51100	0.90	**MR 137 MRF77** **MRF 137 MRF77**	**Y..71M_1-4** **AM71** **AD2**
0.25	7960	5116	53500	1.00		
0.29	6740	4464	55800	1.20		
0.33	5930	3928	57100	1.35		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
0.28	7430	4709	54600	1.10	**MR 137 MRF77** **MRF 137 MRF77**	**Y..71M_1-4** **AM71** **AD2**
0.32	6340	4018	56500	1.25		
0.37	5540	3514	57700	1.45		
0.39	5260	3338	58100	1.50		
0.44	4620	2929	58900	1.75		
0.49	4180	2658	59300	1.90	**MR 137 MRF77** **MRF 137 MRF77**	**Y..71M_1-4** **AM71** **AD3**
0.54	3800	2412	59700	2.10		
0.63	3260	2073	60100	2.40	**MR 137 MRF77** **MRF 137 MRF77**	**Y..71M_1-4** **AM71** **AD3**
0.71	2810	1839	60500	2.80		
0.93	2180	1397	60800	3.70		
1.10	1880	1226	61000	4.20		
0.43	4730	3039	25600	0.90	**MR 107 MRF77** **MRF 107 MRF77**	**Y..71M_1-4** **AM71** **AD2**
0.43	4780	3034	23600	0.90	**MR 107 MRF77** **MRF 107 MRF77**	**Y..71M_1-4** **AM71** **AD2**
0.65	3100	1987	34600	1.40	**MR 107 MRF77** **MRF 107 MRF77**	**Y..71M_1-4** **AM71** **AD3**
0.71	2790	1827	35600	1.55		
0.81	2400	1599	36300	1.80		
0.93	2140	1400	36600	2.00		
1.10	1840	1226	36900	2.30		
1.40	1430	939	37300	3.00		
1.60	1230	822	37400	3.50		
0.75	2840	1733	22000	1.05	**MR 97 MRF57** **MRF 97 MRF57**	**Y..71M_1-4** **AM71** **AD2**
0.80	2650	1623	23200	1.15		
0.71	2960	1823	21100	1.00	**MR 97 MRF57** **MRF 97 MRF57**	**Y..71M_1-4** **AM71** **AD2**
0.82	2570	1583	23700	1.15		
0.93	2230	1396	25400	1.35		
1.10	1940	1228	26600	1.55		
1.20	1750	1069	27300	1.70		
1.40	1520	938	27600	1.95		
2.10	990	632	28200	3.00		
1.60	1300	824	27900	2.30	**MR 97 MRF57** **MRF 97 MRF57**	**Y..71M_1-4** **AM71** **AD3**
1.80	1160	737	28100	2.60		
1.10	1850	1145	10700	0.85	**MR 87 MRF57** **MRF 87 MRF57**	**Y..71M_1-4** **AM71** **AD2**
1.20	1660	1037	16000	0.95		
1.40	1480	931	17400	1.05		
1.60	1260	802	18600	1.20		
1.10	1790	1143	14700	0.85	**MR 87 MRF57** **MRF 87 MRF57**	**Y..71M_1-4** **AM71** **AD3**
1.50	1420	885	17800	1.10		
1.70	1240	776	18700	1.25		
1.90	1100	685	19400	1.40		
2.20	920	599	20000	1.65		
2.50	810	525	20000	1.90		
2.80	715	456	20000	2.20		
4.90	415	268	20000	3.70		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
2.30	910	571	8910	0.90	**MR 77 MRF37** **MRF 77 MRF37**	**Y..71M_1-4** **AM71** **AD2**
2.30	920	560	8780	0.90	**MR 77 MRF37** **MRF 77 MRF37**	**Y..71M_1-4** **AM71** **AD2**
2.70	795	488	10100	1.05		
3.00	705	436	10900	1.15		
3.50	605	373	11500	1.35	**MR 77 MRF37** **MRF 77 MRF37**	**Y..71M_1-4** **AM71** **AD2**
4.00	530	327	11900	1.55	**MR 77 MRF37** **MRF 77 MRF37**	**Y..71M_1-4** **AM71** **AD2**
4.50	470	289	12200	1.75		
5.00	420	260	12400	1.95		
5.80	355	224	12600	2.30		
3.40	620	388	7290	0.95	**MR 67 MRF37** **MRF 67 MRF37**	**Y..71M_1-4** **AM71** **AD2**
3.80	565	344	7950	1.05		
4.40	465	294	8870	1.30		
5.00	420	261	9180	1.40		
5.60	380	234	9460	1.60		
6.50	320	200	9780	1.85		
7.40	275	176	9980	2.20		
8.20	250	158	10100	2.40		
3.40	640	384	6960	0.95	**MR 67 MRF37** **MRF 67 MRF37**	**Y..71M_1-4** **AM71** **AD2**
3.60	600	359	7550	1.00		
4.20	515	310	8430	1.15		
4.90	435	264	9100	1.40		
5.50	385	235	9420	1.55		
6.50	325	201	9750	1.85		
7.20	295	181	9900	2.00		
4.10	515	319	6050	0.85	**MR 57 MRF37** **MRF 57 MRF37**	**Y..71M_1-4** **AM71** **AD2**
4.80	435	273	7160	1.05		
5.40	380	241	7380	1.20		
6.00	340	215	7510	1.30		
7.00	300	187	7630	1.50		
7.90	260	164	7730	1.75		
9.20	225	142	7800	2.00		
4.00	540	324	4980	0.85	**MR 57 MRF37** **MRF 57 MRF37**	**Y..71M_1-4** **AM71** **AD2**
4.50	480	290	6950	0.95		
5.00	435	262	7160	1.05		
5.30	405	246	7280	1.10		
5.90	360	220	7440	1.25		
5.70	370	228	2440	0.80	**MR 47 MRF37** **MRF 47 MRF37**	**Y..71M_1-4** **AM71** **AD2**
6.70	315	195	5320	0.95		
7.10	295	182	5440	1.00		
8.50	245	154	5680	1.20		
4.60	520	195.24	12000	1.55	**MR 77** **MRF 77**	**Y..71M_2-6** **AM71** **AD2**
5.40	440	166.59	12300	1.85		
6.10	385	145.67	12500	2.10		
6.70	355	195.24	12600	2.30	**MR 77** **MRF 77**	**Y..71M_1-4** **AM71** **AD2**
7.80	305	166.59	12800	2.70		
8.90	265	145.67	12900	3.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
9.40	250	138.39	12900	3.20	**MR 77** **MRF 77**	**Y..71M_1-4** **AM71** **AD2**
11.0	220	121.42	13000	3.70		
4.50	530	199.81	8280	1.15	**MR 67** **MRF 67**	**Y..71M_2-6** **AM71** **AD2**
4.90	490	184.07	8660	1.20		
5.70	420	158.14	9190	1.40		
6.50	365	137.67	9540	1.65		
6.90	340	128.97	9670	1.75		
7.80	300	113.94	9870	1.95		
8.50	280	105.83	9960	2.10		
6.50	365	199.81	9540	1.65	**MR 67** **MRF 67**	**Y..71M_1-4** **AM71** **AD2**
7.10	335	184.07	9700	1.80		
8.20	290	158.14	9930	2.10		
9.40	250	137.67	10100	2.40		
10.0	235	128.97	10100	2.50		
11.0	205	113.94	10200	2.90		
12.0	194	105.83	10300	3.10		
14.0	176	95.91	10300	3.40		
15.0	158	86.11	10400	3.80		
4.80	495	186.89	6760	0.90	**MR 57** **MRF 57**	**Y..71M_2-6** **AM71** **AD2**
5.20	455	172.17	7060	1.00		
6.00	390	147.92	7330	1.15		
7.00	340	128.77	7500	1.30		
7.40	320	120.63	7570	1.40		
8.40	280	106.58	7670	1.60		
9.00	260	98.99	7720	1.70		
7.00	340	186.89	7500	1.30	**MR 57** **MRF 57**	**Y..71M_1-4** **AM71** **AD2**
7.60	315	172.17	7580	1.40		
8.80	270	147.92	7700	1.65	**MR 57** **MRF 57**	**Y..71M_1-4** **AM71** **AD2**
10.0	235	128.77	7780	1.90		
11.0	220	120.63	7810	2.00		
12.0	196	106.58	7860	2.30		
13.0	182	98.99	7880	2.50		
14.0	165	89.71	7910	2.70	**MR 57** **MRF 57**	**Y..71M_1-4** **AM71** **AD2**
16.0	148	80.55	7930	3.00		
19.0	127	69.23	7960	3.50		
7.40	320	176.88	5280	0.90	**MR 47** **MRF 47**	**Y..71M_1-4** **AM71** **AD2**
8.00	295	162.94	5420	1.00		
9.30	255	139.99	5630	1.15		
11.0	220	121.87	5770	1.35		
11.0	205	114.17	5820	1.45		
13.0	185	100.86	5900	1.60		
14.0	172	93.68	5940	1.75		
15.0	156	84.9	5980	1.90		
17.0	140	76.23	6020	2.10		
19.0	126	68.54	6050	2.40		
20.0	118	64.21	6070	2.50		
23.0	104	56.73	6090	2.90		
25.0	97	52.69	6100	3.10		
27.0	88	47.75	6080	3.40		



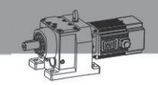
MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
9.60	245	134.82	2630	0.80		
11.0	225	123.66	4560	0.90		
12.0	193	105.28	5030	1.05		
14.0	167	90.77	5320	1.20		
15.0	155	84.61	5420	1.30	MR 37	Y..71M_1-4
18.0	136	73.96	5580	1.45	MRF 37	AM71
19.0	127	69.33	5650	1.55		AD1
21.0	112	61.18	5750	1.80		
23.0	102	55.76	5800	1.95		
27.0	88	48.08	5870	2.30		
29.0	82	44.81	5760	2.40		
33.0	72	39.17	5540	2.80	MR 37	Y..71M_1-4
35.0	67	36.72	5430	3.00	MRF 37	AM71
40.0	60	32.4	5230	3.40		AD2
15.0	156	84.78	4100	0.85		
18.0	136	74.11	4210	0.95		
19.0	128	69.47	4240	1.00		
21.0	113	61.30	4180	1.15		
23.0	103	55.87	4090	1.25	MR 27	Y..71M_1-4
27.0	88	48.17	3940	1.45	MRF 27	AM71
29.0	82	44.90	3870	1.60		AD1
33.0	72	39.25	3730	1.80		
35.0	68	36.79	3660	1.90		
40.0	60	32.47	3540	2.20	MR 27	Y..71M_1-4
45.0	53	28.78	3420	2.50	MRF 27	AM71
						AD1
53.0	45	24.47	3270	2.90	MR 27	Y..71M_1-4
					MRF 27	AM71
						AD1
46.0	52	28.37	3410	2.50		
50.0	48	26.09	3330	2.70		
58.0	41	22.32	3180	3.20		
67.0	36	19.35	3050	3.70		
72.0	33	18.08	2990	3.90		
83.0	29	15.63	2860	4.50		
98.0	24	13.28	2730	5.30		
110	22	11.86	2630	5.90		
128	19	10.13	2510	6.60	MR 27	Y..71M_1-4
138	17	9.41	2440	7.00	MRF 27	AM71
159	15	8.16	2330	7.70		AD2
170	14	7.63	2280	8.00		
197	12	6.59	2180	8.80		
232	10	5.60	2080	9.60		
260	9.2	5.00	2000	10.0		
304	7.8	4.27	1900	11.0		
325	7.3	4.00	1870	12.0		
386	6.2	3.37	1770	13.0		
23.0	105	57.35	156	0.80		
24.0	99	53.76	785	0.85		
27.0	87	47.44	1630	1.00	MR 17	Y..71M_1-4
29.0	81	44.18	2000	1.05	MRF 17	AM71
34.0	71	38.61	2200	1.20		-
36.0	66	36.20	2180	1.30		
41.0	59	31.94	2120	1.45		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
46.0	52	28.32	2070	1.65	MR 17	Y..71M_1-4
54.0	44	24.07	2000	1.90	MRF 17	AM71
						-
52.0	46	25.23	2020	1.85		
56.0	42	23.15	1980	2.00		
66.0	36	19.71	1910	2.40		
77.0	31	16.99	1840	2.70	MR 17	Y..71M_1-4
82.0	29	15.84	1810	2.90	MRF 17	AM71
94.0	25	13.84	1740	3.40		-
100	24	12.98	1720	3.60		
114	21	11.45	1660	3.90		
148	16	6.07	4860	2.60		
173	14	5.18	4620	5.40	MRX 67	Y..71M_2-6
198	12	4.53	4420	6.80	MRXF 67	AM71
208	12	4.30	4350	7.00		AD2
214	11	6.07	4310	3.90		
251	9.5	5.18	4100	7.90	MRX 67	Y..71M_1-4
287	8.3	4.53	3920	9.90	MRXF 67	AM71
302	7.9	4.30	3860	10.0		AD2
345	6.9	3.77	3700	13.0		
406	5.9	3.20	3500	17.0		
450	5.3	2.89	3390	20.0	MRX 67	Y..71M_1-4
511	4.7	2.54	3250	25.0	MRXF 67	AM71
542	4.4	2.40	3190	28.0		AD3
636	3.8	2.04	3020	35.0		
163	15	5.50	3820	2.60		
177	14	5.07	3720	2.70	MRX 57	Y..71M_2-6
206	12	4.35	3540	5.90	MRXF 57	AM71
236	10	3.79	3390	6.80		AD2
236	10	5.50	3390	3.90		
257	9.3	5.07	3300	3.90		
299	8	4.35	3150	8.50		
343	7	3.79	3010	9.90	MRX 57	Y..71M_1-4
366	6.5	3.55	2950	11.0	MRXF 57	AM71
414	5.8	3.14	2830	11.0		AD2
446	5.3	2.91	2760	13.0		
492	4.8	2.64	2680	14.0		
548	4.4	2.37	2580	16.0		
637	3.7	2.04	2460	19.0	MRX 57	Y..71M_1-4
677	3.5	1.92	2410	20.0	MRXF 57	AM71
787	3	1.65	2300	23.0		AD3
P_1=0.37kw						
0.19	15900	7307	37500	0.80		
0.21	14000	6447	60400	0.90	MR 147 MRF77	Y..71M_2-4
0.25	12100	5568	64300	1.05	MRF 147 MRF77	AM71
0.28	10900	4926	66400	1.20		AD2
0.32	9470	4325	68500	1.35	MR 147 MRF77	Y..71M_2-4
0.37	8310	3754	70000	1.55	MRF 147 MRF77	AM71
0.42	7230	3302	71100	1.80		AD2

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
0.48	6320	2898	71900	2.10	MR 147 MRF77	Y..71M_2-4
					MRF 147 MRF77	AM71
						AD2
0.31	9730	4464	36000	0.80	MR 137 MRF77	Y..71M_2-4
0.35	8570	3928	51500	0.95	MRF 137 MRF77	AM71
						AD2
0.34	9080	4018	48100	0.90		
0.39	7940	3514	53500	1.00		
0.41	7540	3338	54300	1.05	MR 137 MRF77	Y..71M_2-4
0.47	6610	2929	56000	1.20	MRF 137 MRF77	AM71
0.56	5600	2484	57600	1.45		AD2
0.62	5020	2242	58400	1.60		
0.52	5990	2658	57000	1.35		
0.57	5440	2412	57800	1.45		
0.67	4670	2073	58800	1.70		
0.75	4060	1839	59400	1.95	MR 137 MRF77	Y..71M_2-4
0.99	3130	1397	60200	2.60	MRF 137 MRF77	AM71
1.10	2710	1226	60500	2.90		AD3
1.30	2440	1090	60700	3.30		
1.40	2130	951	60900	3.80		
0.67	4660	2067	27300	0.90	MR 107 MRF77	Y..71M_2-4
0.82	3790	1693	31900	1.15	MRF 107 MRF77	AM71
						AD2
0.89	3420	1550	33500	1.25		
0.98	3100	1407	34600	1.40	MR 107 MRF77	Y..71M_2-4
1.10	2660	1209	35900	1.60	MRF 107 MRF77	AM71
1.30	2330	1055	36400	1.85		AD2
0.69	4450	1987	28600	0.95		
0.76	4030	1827	30800	1.05		
0.86	3490	1599	33200	1.25	MR 107 MRF77	Y..71M_2-4
0.99	3090	1400	34600	1.40	MRF 107 MRF77	AM71
1.10	2670	1226	35900	1.60		AD3
1.50	2070	939	36700	2.10		
1.70	1790	822	37000	2.40		
1.10	2760	1207	22500	1.10	MR 97 MRF57	Y..71M_2-4
1.30	2460	1084	24300	1.20	MRF 97 MRF57	AM71
						AD2
0.99	3170	1396	10800	0.95	MR 97 MRF57	Y..71M_2-4
1.10	2770	1228	22500	1.10	MRF 97 MRF57	AM71
1.30	2470	1069	24200	1.20		AD2
1.50	2160	938	25700	1.40	MR 97 MRF57	Y..71M_2-4
2.20	1420	632	27700	2.10	MRF 97 MRF57	AM71
						AD2
1.70	1860	824	26900	1.60		
1.90	1660	737	27400	1.80	MR 97 MRF57	Y..71M_2-4
3.20	980	431	28200	3.10	MRF 97 MRF57	AM71
3.60	850	379	28300	3.50		AD3
4.10	765	336	28400	3.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
1.70	1810	802	13800	0.85	MR 87 MRF57	Y..71M_2-4
1.80	1690	754	15800	0.90	MRF 87 MRF57	AM71
2.10	1440	649	17600	1.05		AD2
1.80	1770	776	15100	0.85	MR 87 MRF57	Y..71M_2-4
2.00	1560	685	16800	1.00	MRF 87 MRF57	AM71
						AD2
2.30	1330	599	18300	1.15		
2.60	1170	525	19100	1.30	MR 87 MRF57	Y..71M_2-4
3.00	1020	456	19700	1.50	MRF 87 MRF57	AM71
5.20	595	268	20000	2.60		AD3
5.80	525	236	20000	2.90		
2.60	1260	538	18700	1.25		
2.90	1100	472	19400	1.40	MR 87 MRF57	Y..71M_2-4
3.40	920	400	20000	1.65	MRF 87 MRF57	AM71
3.80	830	361	20000	1.85		AD2
3.70	860	373	9520	0.95		
4.20	755	327	10500	1.10		
4.80	670	289	11100	1.20		
5.30	600	260	11600	1.35	MR 77 MRF37	Y..71M_2-4
6.20	505	224	12000	1.60	MRF 77 MRF37	AM71
7.00	445	197	12300	1.85		AD2
8.20	385	169	12500	2.10		
9.30	340	149	12700	2.40		
4.70	665	294	4670	0.90		
5.30	600	261	7550	1.00	MR 67 MRF37	Y..71M_2-4
5.90	535	234	8220	1.10	MRF 67 MRF37	AM71
6.90	455	200	8930	1.30		AD2
3.70	960	246.54	20000	1.60	MR 87	Y..80M_1-6
4.20	840	216.54	20000	1.85	MRF 87	AM80
4.40	800	205.71	20000	1.95		AD2
5.00	705	181.77	20000	2.20	MR 87	Y..80M_1-6
5.80	605	155.34	20000	2.60	MRF 87	AM80
6.40	555	142.41	20000	2.80		AD2
5.40	650	166.59	11200	1.25	MR 77	Y..80M_1-6
6.20	565	145.67	11700	1.45	MRF 77	AM80
6.50	540	138.39	11900	1.50		AD2
7.10	495	195.24	12100	1.65		
8.30	425	166.59	12400	1.90		
9.50	370	145.67	12600	2.20	MR 77	Y..71M_2-4
10.0	350	138.39	12600	2.30	MRF 77	AM71
11.0	310	121.42	12800	2.60		AD2
13.0	260	102.99	12900	3.10		
15.0	235	92.97	12900	3.40		
5.70	615	158.14	7350	0.95		
6.60	535	137.67	8240	1.10	MR 67	Y..80M_1-6
7.00	500	128.97	8550	1.20	MRF 67	AM80
7.90	440	113.94	9030	1.35		AD2



MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
6.90	510	199.81	8480	1.15	**MR 67** **MRF 67**	**Y..71M$_2$-4** **AM71** **AD2**
7.50	470	184.07	8820	1.25		
8.70	400	158.14	9300	1.50		
10.0	350	137.67	9620	1.70		
11.0	330	128.97	9740	1.80		
12.0	290	113.94	9920	2.10		
13.0	270	105.83	10000	2.20		
14.0	245	95.91	10100	2.40	**MR 67** **MRF 67**	**Y..71M$_2$-4** **AM71** **AD2**
16.0	220	86.11	10200	2.70		
19.0	190	74.17	10300	3.20		
20.0	179	69.75	10300	3.40		
23.0	157	61.26	10400	3.80		
24.0	146	56.89	10400	4.10		
7.00	500	128.77	6610	0.90	**MR 57** **MRF 57**	**Y..80M$_1$-6** **AM80** **AD2**
7.50	470	120.63	7010	0.95		
8.50	415	106.58	7250	1.10		
9.10	385	98.99	7360	1.15		
7.40	475	186.89	6980	0.95	**MR 57** **MRF 57**	**Y..71M$_2$-4** **AM71** **AD2**
8.00	440	172.17	7140	1.00		
9.30	375	147.92	7380	1.20		
11.0	325	128.77	7540	1.35	**MR 57** **MRF 57**	**Y..71M$_2$-4** **AM71** **AD2**
11.0	305	120.63	7610	1.45		
13.0	270	106.58	7700	1.65		
14.0	250	98.99	7740	1.80	**MR 57** **MRF 57**	**Y..71M$_2$-4** **AM71** **AD2**
15.0	225	89.71	7800	1.95		
17.0	205	80.55	7840	2.20		
20.0	177	69.23	7890	2.50		
21.0	166	64.85	7910	2.70		
24.0	147	57.29	7760	3.10		
26.0	136	53.22	7600	3.30		
29.0	124	48.23	7380	3.60		
9.90	355	139.99	3490	0.85	**MR 47** **MRF 47**	**Y..71M$_2$-4** **AM71** **AD2**
11.0	310	121.87	5350	0.95		
12.0	290	114.17	5460	1.05		
14.0	255	100.86	5620	1.15		
15.0	235	93.68	5700	1.25		
16.0	215	84.9	5790	1.40		
18.0	195	76.23	5870	1.55		
20.0	176	68.54	5930	1.70		
21.0	164	64.21	5960	1.80		
24.0	145	56.73	6010	2.10		
26.0	135	52.69	5990	2.20		
29.0	122	47.75	5820	2.40		
32.0	110	42.87	5650	2.70		
37.0	94	36.93	5410	3.20		
40.0	89	34.73	5310	3.40	**MR 47** **MRF 47**	**Y..71M$_2$-4** **AM71** **AD2**
41.0	86	33.79	5270	2.80	**MR 47** **MRF 47**	**Y..71M$_2$-4** **AM71** **AD2**
44.0	80	31.12	5140	2.80		
52.0	68	26.74	4920	4.40		
59.0	60	23.28	4720	5.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
63.0	56	21.81	4620	5.40	**MR 47** **MRF 47**	**Y..71M$_2$-4** **AM71** **AD2**
15.0	230	90.77	4250	0.85	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD1**
16.0	215	84.61	4720	0.90		
19.0	189	73.96	5070	1.05		
20.0	178	69.33	5210	1.15	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD1**
23.0	157	61.18	5410	1.30		
25.0	143	55.76	5530	1.40	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD1**
29.0	123	48.08	5580	1.60	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD2**
31.0	115	44.81	5480	1.75		
35.0	100	39.17	5280	2.00	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD2**
38.0	94	36.72	5190	2.10		
43.0	83	32.40	5010	2.40		
48.0	74	28.73	4850	2.70		
57.0	62	24.42	4620	3.20		
49.0	72	28.32	4830	2.80	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD2**
53.0	67	26.03	4710	2.80		
62.0	57	22.27	4500	3.50		
71.0	49	19.31	4320	4.00		
76.0	46	18.05	4230	4.30		
88.0	40	15.60	4050	5.00	**MR 37** **MRF 37**	**Y..71M$_2$-4** **AM71** **AD2**
104	34	13.25	3850	5.60		
117	30	11.83	3720	6.00		
23.0	157	61.30	3870	0.85	**MR 27** **MRF 27**	**Y..71M$_2$-4** **AM71** **AD1**
25.0	143	55.87	3800	0.90		
29.0	123	48.17	3680	1.05		
31.0	115	44.90	3620	1.15		
35.0	100	39.25	3510	1.30		
38.0	94	36.79	3460	1.40		
42.0	83	32.47	3350	1.55		
48.0	74	28.78	3250	1.75		
56.0	63	24.47	3110	2.10		
49.0	73	28.37	3240	1.80	**MR 27** **MRF 27**	**Y..71M$_2$-4** **AM71** **AD2**
53.0	67	26.09	3170	1.95		
62.0	57	22.32	3040	2.30		
71.0	50	19.35	2920	2.60		
76.0	46	18.08	2860	2.80		
88.0	40	15.63	2750	3.20		
104	34	13.28	2620	3.80		
36.0	99	38.61	770	0.85	**MR 17** **MRF 17**	**Y..71M$_2$-4** **AM71** **-**
38.0	93	36.20	1260	0.90		
43.0	82	31.94	1910	1.05		
49.0	72	28.32	1880	1.15		

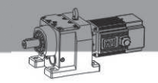
MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
57.0	62	24.07	1830	1.40	**MR 17** **MRF 17**	**Y..71M$_2$-4** **AM71** **-**
55.0	65	25.23	1840	1.30	**MR 17** **MRF 17**	**Y..71M$_2$-4** **AM71** **-**
60.0	59	23.15	1820	1.45		
70.0	50	19.71	1760	1.70		
81.0	44	16.99	1710	1.95		
87.0	40	15.84	1680	2.10		
100	35	13.84	1630	2.40		
106	33	12.98	1610	2.60		
121	29	11.45	1560	2.80	**MR 17** **MRF 17**	**Y..71M$_2$-4** **AM71** **-**
136	26	10.15	1520	3.00		
160	22	8.63	1460	3.30		
183	19	7.55	1370	2.90		
196	18	7.04	1350	3.10		
224	16	6.15	1300	3.40		
239	15	5.76	1280	3.60		
271	13	5.09	1240	3.90		
306	12	4.51	1200	4.20		
360	9.8	3.83	1140	4.60		
175	175	5.18	4560	3.70	**MRX 67** **MRXF 67**	**Y..80M$_1$-6** **AM80** **AD2**
200	200	4.53	4370	4.60		
210	210	4.30	4300	4.80		
240	240	3.77	4130	5.90		
227	227	6.07	4200	2.80	**MRX 67** **MRXF 67**	**Y..71M$_2$-4** **AM71** **AD2**
267	267	5.18	3990	5.60		
305	305	4.53	3820	7.10		
321	321	4.30	3760	7.30		
366	366	3.77	3600	9.00		
431	431	3.20	3420	12.0	**MRX 67** **MRXF 67**	**Y..71M$_2$-4** **AM71** **AD3**
478	478	2.89	3310	14.0		
543	543	2.54	3170	18.0		
575	575	2.40	3110	20.0		
675	675	2.04	2950	26.0		
208	208	4.35	3490	4.00	**MRX 57** **MRXF 57**	**Y..80M$_1$-6** **AM80** **AD2**
239	239	3.79	3340	4.70		
255	255	3.55	3280	5.00		
251	251	5.50	3300	2.80	**MRX 57** **MRXF 57**	**Y..71M$_2$-4** **AM71** **AD2**
272	272	5.07	3210	2.80		
317	317	4.35	3060	6.10		
364	364	3.79	2930	7.10		
389	389	3.55	2870	7.60		
440	440	3.14	2760	8.10		
474	474	2.91	2690	8.90		
523	523	2.64	2610	10.0		
582	582	2.37	2520	11.0	**MRX 57** **MRXF 57**	**Y..71M$_2$-4** **AM71** **AD3**
676	676	2.04	2400	13.0		
719	719	1.92	2350	14.0		
835	835	1.65	2240	16.0		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
0.23	0.23	6077	120000	0.90	**MR 167 MRF97** **MRF 167 MRF97**	**Y..80M$_1$-4** **AM80** **AD3**
0.26	0.26	5407	120000	1.05		
0.30	14700	4650	120000	1.20		
0.33	12800	4129	120000	1.40		
0.28	16600	4926	26700	0.80	**MR 147 MRF77** **MRF 147 MRF77**	**Y..80M$_1$-4** **AM80** **AD2**
0.32	14400	4325	56500	0.90		
0.37	12600	3754	63300	1.05		
0.42	11000	3302	66200	1.20	**MR 147 MRF77** **MRF 147 MRF77**	**Y..80M$_1$-4** **AM80** **AD2**
0.48	9670	2898	68200	1.35		
0.54	8750	2555	69400	1.50	**MR 147 MRF77** **MRF 147 MRF77**	**Y..80M$_1$-4** **AM80** **AD3**
0.62	7580	2211	70800	1.70		
0.71	6680	1951	71600	1.95		
0.81	5720	1705	72400	2.30		
0.90	5120	1536	72900	2.50		
1.00	4430	1329	73300	2.90		
1.20	3850	1166	73600	3.40		
0.56	8510	2484	51800	0.95	**MR 137 MRF77** **MRF 137 MRF77**	**Y..80M$_1$-4** **AM80** **AD2**
0.52	9110	2658	47600	0.90	**MR 137 MRF77** **MRF 137 MRF77**	**Y..80M$_1$-4** **AM80** **AD3**
0.57	8260	2412	52800	0.95		
0.67	7100	2073	55200	1.15		
0.75	6210	1839	56700	1.30		
0.86	5330	1598	58000	1.50		
0.99	4760	1397	58700	1.70		
1.10	4150	1226	59300	1.90		
1.30	3710	1090	59800	2.20	**MR 137 MRF77** **MRF 137 MRF77**	**Y..80M$_1$-4** **AM80** **AD3**
1.40	3240	951	60200	2.50		
1.70	2770	831	60500	2.90		
0.98	4750	1407	24800	0.90	**MR 107 MRF77** **MRF 107 MRF77**	**Y..80M$_1$-4** **AM80** **AD2**
1.10	4080	1209	30600	1.05		
1.30	3560	1055	32900	1.20		
1.50	3110	919	34600	1.40		
1.70	2780	815	35600	1.55		
1.90	2430	717	36300	1.75		
2.20	2120	626	36600	2.00		
0.99	4730	1400	25600	0.90	**MR 107 MRF77** **MRF 107 MRF77**	**Y..80M$_1$-4** **AM80** **AD3**
1.10	4110	1226	30400	1.05		
1.20	3680	1104	32400	1.15		
1.50	3170	939	34400	1.35		
1.70	2750	822	35700	1.55		
1.70	2820	824	22100	1.05	**MR 97 MRF57** **MRF 97 MRF57**	**Y..80M$_1$-4** **AM80** **AD3**
1.90	2530	737	23900	1.20		
2.50	1880	560	26800	1.60		
2.80	1640	484	27400	1.85		
2.20	2160	632	25700	1.40	**MR 97 MRF57** **MRF 97 MRF57**	**Y..80M$_1$-4** **AM80** **AD2**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
3.20	1480	431	27700	2.00	MR 97 MRF57 MRF 97 MRF57	Y..80M$_1$-4 AM80 AD3
3.60	1300	379	27900	2.30		
4.10	1160	336	28100	2.60		
4.70	1010	296	28200	3.00		
5.50	840	249	28400	3.60		
2.60	1780	525	15000	0.85	MR 87 MRF57 MRF 87 MRF57	Y..80M$_1$-4 AM80 AD3
3.00	1550	456	16900	1.00		
3.50	1340	398	18200	1.15		
3.90	1190	352	19000	1.30		
4.50	1020	305	19700	1.50		
2.90	1660	472	16100	0.95	MR 87 MRF57 MRF 87 MRF57	Y..80M$_1$-4 AM80 AD2
3.40	1400	400	17900	1.10		
3.80	1260	361	18700	1.25		
5.00	970	276	6200	0.85	MR 77 MRF37 MRF 77 MRF37	Y..80M$_1$-4 AM80 AD2
5.80	820	236	9850	1.00		
6.20	770	221	10300	1.05	MR 77 MRF37 MRF 77 MRF37	Y..80M$_1$-4 AM80 AD2
7.40	645	186	11300	1.25		
3.20	1660	289.74	27400	1.80	MR 97 MRF 97	Y..80M$_2$-6 AM80 AD3
3.60	1460	255.71	27700	2.00		
3.80	1380	241.25	27800	2.20		
4.20	1240	216.28	28000	2.40		
4.80	1100	289.74	28100	2.70	MR 97 MRF 97	Y..80M$_1$-4 AM80 AD3
5.40	970	255.71	28200	3.10		
5.70	910	241.25	28300	3.30		
6.40	820	216.28	28400	3.60		
3.70	1410	246.54	17800	1.10	MR 87 MRF 87	Y..80M$_2$-6 AM80 AD2
4.20	1240	216.54	18800	1.25		
4.40	1180	205.71	19100	1.30		
5.00	1040	181.77	19700	1.50	MR 87 MRF 87	Y..80M$_2$-6 AM80 AD2
5.90	890	155.34	20000	1.75		
5.60	930	246.54	20000	1.65	MR 87 MRF 87	Y..80M$_1$-4 AM80 AD2
6.40	820	216.54	20000	1.90		
6.70	780	205.71	20000	2.00		
7.60	690	181.77	20000	2.20		
8.90	590	155.34	20000	2.60		
9.70	540	142.41	20000	2.90		
11.0	475	124.97	20000	3.30	MR 87 MRF 87	Y..80M$_1$-4 AM80 AD2
12.0	450	118.43	20000	3.40		
13.0	390	103.65	20000	3.90		
8.30	630	166.59	11400	1.30	MR 77 MRF 77	Y..80M$_1$-4 AM80 AD2
9.50	550	145.67	11800	1.50		
10.0	525	138.39	12000	1.55		
11.0	460	121.42	12200	1.75		
13.0	390	102.99	12500	2.10		
15.0	350	92.97	12600	2.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
17.0	310	81.8	12800	2.60	MR 77 MRF 77	Y..80M$_1$-4 AM80 AD2
18.0	290	77.24	12800	2.80		
21.0	250	65.77	12900	3.30		
8.70	600	158.14	7540	1.00	MR 67 MRF 67	Y..80M$_1$-4 AM80 AD2
10.0	520	137.67	8360	1.15		
11.0	490	128.97	8660	1.20	MR 67 MRF 67	Y..80M$_1$-4 AM80 AD2
12.0	430	113.94	9110	1.40		
13.0	400	105.83	9320	1.50		
14.0	365	95.91	9550	1.65		
16.0	325	86.11	9750	1.85		
19.0	280	74.17	9960	2.10		
20.0	265	69.75	10000	2.30		
23.0	230	61.26	10200	2.60		
24.0	215	56.89	10200	2.80		
11.0	455	120.63	7060	1.00	MR 57 MRF 57	Y..80M$_1$-4 AM80 AD2
13.0	405	106.58	7290	1.10		
14.0	375	98.99	7390	1.20		
15.0	340	89.71	7510	1.30		
17.0	305	80.55	7610	1.45		
20.0	260	69.23	7720	1.70		
21.0	245	64.85	7750	1.80	MR 57 MRF 57	Y..80M$_1$-4 AM80 AD2
24.0	215	57.29	7500	2.10		
26.0	200	53.22	7360	2.20		
29.0	184	48.23	7160	2.40		
32.0	165	43.3	6960	2.70		
37.0	142	37.30	6670	3.20		
39.0	134	35.07	6560	3.40		
52.0	100	26.31	6030	4.50	MR 57 MRF 57	Y..80M$_1$-4 AM80 AD2
55.0	95	24.99	5940	4.70		
63.0	84	21.93	5720	5.40		
74.0	71	18.60	5440	6.40		
15.0	355	93.68	3610	0.85	MR 47 MRF 47	Y..80M$_1$-4 AM80 AD2
16.0	320	84.9	5290	0.95		
18.0	290	76.23	5470	1.05		
20.0	260	68.54	5610	1.15		
21.0	240	64.21	5690	1.25		
24.0	215	56.73	5800	1.40		
26.0	200	52.69	5750	1.50		
29.0	182	47.75	5610	1.65	MR 47 MRF 47	Y..80M$_1$-4 AM80 AD2
32.0	163	42.87	5450	1.85		
37.0	140	36.93	5240	2.10		
40.0	132	34.73	5160	2.30		
46.0	114	29.88	4950	2.60		
52.0	102	26.74	4800	3.00	MR 47 MRF 47	Y..80M$_1$-4 AM80 AD2
59.0	89	23.28	4610	3.40		
63.0	83	21.81	4520	3.60		
23.0	230	61.18	4210	0.85	MR 37 MRF 37	Y..80M$_1$-4 AM80 AD1
25.0	210	55.76	4780	0.95		

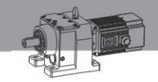


n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
29.0	183	48.08	5150	1.10	MR 37 MRF 37	Y..80M$_1$-4 AM80 AD2
31.0	171	44.81	5220	1.15		
35.0	149	39.17	5050	1.35		
38.0	140	36.72	4980	1.45		
43.0	123	32.4	4820	1.60		
48.0	109	28.73	4680	1.85		
57.0	93	24.42	4480	2.20		
62.0	85	22.27	4370	2.40	MR 37 MRF 37	Y..80M$_1$-4 AM80 AD2
71.0	74	19.31	4200	2.70		
76.0	69	18.05	4120	2.90	MR 37 MRF 37	Y..80M$_1$-4 AM80 AD2
88.0	59	15.6	3960	3.40		
104	50	13.25	3780	3.80		
117	45	11.83	3650	4.10		
35.0	149	39.25	3270	0.85	MR 27 MRF 27	Y..80M$_1$-4 AM80 AD1
38.0	140	36.79	3230	0.95		
42.0	124	32.47	3150	1.05		
48.0	110	28.78	3070	1.20		
56.0	93	24.47	2960	1.40		
62.0	85	22.32	2900	1.55	MR 27 MRF 27	Y..80M$_1$-4 AM80 AD2
71.0	74	19.35	2800	1.75		
76.0	69	18.08	2750	1.90		
88.0	60	15.63	2650	2.20		
104	50	13.28	2540	2.60		
116	45	11.86	2460	2.90		
136	38	10.13	2360	3.20		
147	36	9.41	2280	3.40		
169	31	8.16	2190	3.70		
181	29	7.63	2150	3.90		
209	25	6.59	2070	4.20		
246	21	5.60	1970	4.60		
276	19	5.00	1910	5.00		
323	16	4.27	1820	5.30		
345	15	4.00	1780	5.60		
410	13	3.37	1690	6.20	MR 27 MRF 27	Y..80M$_1$-4 AM80 AD2
52.0	100	53.76	630	0.85	MR 17 MRF 17	Y..71M$_2$-2 AM71 -
59.0	89	47.44	1530	0.95		
64.0	83	44.18	1600	1.05		
73.0	72	38.61	1580	1.20		
70.0	75	19.71	1580	1.15	MR 17 MRF 17	Y..80M$_1$-4 AM80 -
81.0	65	16.99	1560	1.30		
87.0	60	15.84	1540	1.40		
100	53	13.84	1510	1.60		
106	49	12.98	1490	1.70		
121	44	11.45	1460	1.85		
136	39	10.15	1430	2.00		
160	33	8.63	1380	2.20		
183	29	7.55	1290	1.95		
196	27	7.04	1270	2.00		
224	23	6.15	1230	2.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
239	22	5.76	1220	2.40	MR 17 MRF 17	Y..80M$_1$-4 AM80 -
271	19	5.09	1180	2.60		
306	17	4.51	1150	2.80		
360	15	3.83	1100	3.10		
326	16	8.63	1160	4.50	MR 17 MRF 17	Y..71M$_2$-2 AM71 -
372	14	7.55	1090	4.00		
399	13	7.04	1070	4.20		
457	12	6.15	1040	4.70		
177	30	5.18	4480	2.50	MRX 67 MRXF 67	Y..80M$_2$-6 AM80 AD2
202	26	4.53	4300	3.20		
213	25	4.30	4230	3.20		
243	22	3.77	4060	4.00		
267	20	5.18	3950	3.80	MRX 67 MRXF 67	Y..80M$_1$-4 AM80 AD2
305	17	4.53	3790	4.80		
321	16	4.30	3720	4.90		
366	14	3.77	3570	6.00		
431	12	3.20	3390	8.20	MRX 67 MRXF 67	Y..80M$_1$-4 AM80 AD3
478	11	2.89	3280	9.60		
543	9.7	2.54	3150	12.0		
575	9.1	2.40	3090	14.0	MRX 67 MRXF 67	Y..80M$_1$-4 AM80 AD3
675	7.8	2.04	2940	17.0		
743	7.1	1.86	2850	18.0		
858	6.1	1.61	2720	19.0		
210	25	4.35	3420	2.70	MRX 57 MRXF 57	Y..80M$_2$-6 AM80 AD2
241	22	3.79	3280	3.20		
258	20	3.55	3220	3.40		
292	18	3.14	3100	3.60		
314	17	2.91	3030	4.00		
317	17	4.35	3020	4.10	MRX 57 MRXF 57	Y..80M$_1$-4 AM80 AD2
364	14	3.79	2890	4.80		
389	14	3.55	2840	5.10		
440	12	3.14	2730	5.50		
474	11	2.91	2660	6.00		
523	10	2.64	2580	6.90		
582	9	2.37	2500	7.70	MRX 57 MRXF 57	Y..80M$_1$-4 AM80 AD3
676	7.8	2.04	2380	8.80		
719	7.3	1.92	2330	9.40		
835	6.3	1.65	2220	11.0		
935	5.6	1.48	2140	12.0		
1060	5	1.30	2060	13.0		
P_1=0.75kw						
0.31	19800	4650	120000	0.90	MR 167 MRF97 MRF 167 MRF97	Y..80M$_2$-4 AM80 AD3
0.35	17300	4129	120000	1.05		
0.54	11600	2657	120000	1.55	MR 167 MRF97 MRF 167 MRF97	Y..80M$_2$-4 AM80 AD4
1.00	6280	1438	120000	2.90		

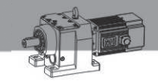
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
0.62	10000	2333	120000	1.80	MR 167 MRF97	Y..80M_2-4 AM80 AD5
0.69	8880	2085	120000	2.00	MRF 167 MRF97	
0.43	14600	3302	54100	0.90	MR 147 MRF77	Y..80M_2-4 AM80 AD2
0.50	12800	2898	62900	1.00	MRF 147 MRF77	
0.56	11600	2555	65300	1.10	MR 147 MRF77	Y..80M_2-4 AM80 AD3
0.65	10000	2211	67700	1.30	MRF 147 MRF77	
0.74	8860	1951	69300	1.45		
0.84	7610	1705	70700	1.70		
0.93	6830	1536	71500	1.90		
1.10	5910	1329	72300	2.20		
1.20	5150	1166	72800	2.50		
0.77	8370	1863	52400	0.95	MR 137 MRF77	Y..80M_2-4 AM80 AD2
0.90	7090	1586	55200	1.15	MRF 137 MRF77	
1.00	6320	1391	56500	1.25		
1.10	5680	1256	57500	1.40		
0.69	9410	2073	42400	0.85	MR 137 MRF77	Y..80M_2-4 AM80 AD3
0.78	8260	1839	52800	0.95	MRF 137 MRF77	
0.90	7110	1598	55200	1.10		
1.00	6320	1397	56500	1.25		
1.20	5520	1226	57700	1.45		
1.30	4930	1090	58500	1.60		
1.50	4300	951	59200	1.85		
1.70	3700	831	59800	2.20		
2.00	3220	730	60200	2.50		
1.40	4740	1055	25200	0.90	MR 107 MRF77	Y..80M_2-4 AM80 AD2
1.60	4140	919	30300	1.05	MRF 107 MRF77	
1.80	3690	815	32400	1.15		
1.50	4210	939	29900	1.00	MR 107 MRF77	Y..80M_2-4 AM80 AD3
1.80	3670	822	32500	1.15	MRF 107 MRF77	
3.90	1640	369	37100	2.60	MR 107 MRF77	Y..80M_2-4 AM80 AD4
4.40	1430	323	37300	3.00	MRF 107 MRF77	
2.30	2870	632	21800	1.05	MR 97 MRF57	Y..80M_2-4 AM80 AD2
					MRF 97 MRF57	
2.60	2510	560	24000	1.20	MR 97 MRF57	Y..80M_2-4 AM80 AD3
3.00	2180	484	25600	1.40	MRF 97 MRF57	
3.30	1960	431	26500	1.50		
3.80	1720	379	27300	1.75		
4.30	1530	336	27600	1.95		
4.80	1340	296	27900	2.20		
5.80	1120	249	28100	2.70		
3.60	1790	398	15000	0.85	MR 87 MRF57	Y..80M_2-4 AM80 AD3
4.10	1580	352	16700	1.00	MRF 87 MRF57	
4.70	1360	305	18100	1.15		
5.40	1200	268	18900	1.30		
6.10	1060	236	19600	1.45		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
4.00	1660	361	16000	0.95	MR 87 MRF57	Y..80M_2-4 AM80 AD2
					MRF 87 MRF57	
4.80	1370	300	18000	1.10	MR 87 MRF57	Y..80M_2-4 AM80 AD3
5.60	1160	256	19100	1.35	MRF 87 MRF57	
3.70	1940	255.71	26600	1.55	MR 97	Y..90S-6 AM90 AD3
3.90	1830	241.25	27000	1.65	MRF 97	
4.40	1640	216.28	27400	1.80		
5.00	1440	289.74	27700	2.10	MR 97	Y..80M_2-4 AM80 AD3
5.60	1270	255.71	27900	2.40	MRF 97	
6.00	1200	241.25	28000	2.50		
6.60	1070	216.28	28100	2.80		
7.70	920	186.30	28300	3.20		
8.40	840	170.02	28400	3.50		
4.30	1640	216.54	16200	0.95	MR 87	Y..90S-6 AM90 AD2
4.60	1560	205.71	16800	1.00	MRF 87	
5.20	1380	181.77	18000	1.10		
6.00	1180	155.34	19000	1.30	MR 87	Y..90S-6 AM90 AD2
6.60	1080	142.41	19500	1.45	MRF 87	
5.80	1230	246.54	18800	1.25	MR 87	Y..80M_2-4 AM80 AD2
6.60	1080	216.54	19500	1.45	MRF 87	
7.00	1020	205.71	19700	1.50		
7.90	900	181.77	20000	1.70	MR 87	Y..80M_2-4 AM80 AD2
9.20	775	155.34	20000	2.00	MRF 87	
10.0	710	142.41	20000	2.20		
11.0	620	124.97	20000	2.50		
12.0	590	118.43	20000	2.60		
14.0	515	103.65	20000	3.00		
15.0	465	93.38	20000	3.30		
8.60	830	166.59	9810	1.00	MR 77	Y..80M_2-4 AM80 AD2
9.80	725	145.67	10700	1.15	MRF 77	
10.0	690	138.39	11000	1.20		
12.0	605	121.42	11500	1.35	MR 77	Y..80M_2-4 AM80 AD2
14.0	510	102.99	12000	1.60	MRF 77	
15.0	460	92.97	12200	1.75		
18.0	405	81.8	12500	2.00		
19.0	385	77.24	12500	2.10		
22.0	325	65.77	12700	2.50		
25.0	285	57.68	12800	2.80		
28.0	255	52.07	12900	3.20	MR 77	Y..80M_2-4 AM80 AD2
31.0	225	45.81	13000	3.60	MRF 77	
33.0	215	43.26	13000	3.80		
11.0	640	128.97	7000	0.95	MR 67	Y..80M_2-4 AM80 AD2
13.0	565	113.94	7920	1.05	MRF 67	
14.0	525	105.83	8320	1.15		
15.0	475	95.91	8760	1.25		
17.0	425	86.11	9140	1.40		



n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
19.0	370	74.17	9520	1.60	MR 67	Y..80M_2-4 AM80 AD2
21.0	345	69.75	9640	1.70	MRF 67	
23.0	305	61.26	9860	1.95		
25.0	280	56.89	9960	2.10		
28.0	255	51.56	10100	2.30		
31.0	230	46.29	10200	2.60		
13.0	530	106.58	5490	0.85	MR 57	Y..80M_2-4 AM80 AD2
14.0	490	98.99	6900	0.90	MRF 57	
16.0	445	89.71	7120	1.00		
18.0	400	80.55	7300	1.10		
21.0	345	69.23	7470	1.30		
22.0	320	64.85	7360	1.40		
25.0	285	57.29	7150	1.55		
27.0	265	53.22	7030	1.70	MR 57	Y..80M_2-4 AM80 AD2
30.0	240	48.23	6860	1.85	MRF 57	
33.0	215	43.3	6670	2.10		
38.0	186	37.30	6420	2.40		
41.0	175	35.07	6320	2.60		
48.0	151	30.18	6060	3.00		
53.0	135	26.97	5880	3.30		
55.0	131	26.31	5840	3.40	MR 57	Y..80M_2-4 AM80 AD2
57.0	125	24.99	5760	3.60	MRF 57	
65.0	109	21.93	5540	4.10		
77.0	93	18.60	5290	4.80		
21.0	340	68.54	4460	0.90	MR 47	Y..80M_2-4 AM80 AD2
22.0	320	64.21	5300	0.95	MRF 47	
25.0	280	56.73	5510	1.05		
27.0	260	52.69	5440	1.15	MR 47	Y..80M_2-4 AM80 AD2
30.0	235	47.75	5320	1.25	MRF 47	
33.0	210	42.87	5190	1.40		
39.0	184	36.93	5010	1.65	MR 47	Y..80M_2-4 AM80 AD2
41.0	173	34.73	4930	1.75	MRF 47	
48.0	149	29.88	4750	2.00		
54.0	133	26.7	4610	2.20		
61.0	118	23.59	4460	2.60	MR 47	Y..80M_2-4 AM80 AD2
					MRF 47	
54.0	134	26.74	4610	2.20	MR 47	Y..80M_2-4 AM80 AD2
62.0	116	23.28	4450	2.60	MRF 47	
66.0	109	21.81	4370	2.80		
74.0	96	19.27	4220	3.10		
80.0	89	17.89	4140	3.20		
88.0	81	16.22	4020	3.40		
30.0	240	48.08	3550	0.85	MR 37	Y..80M_2-4 AM80 AD2
32.0	220	44.81	4480	0.90	MRF 37	
37.0	196	39.17	4760	1.00		
39.0	183	36.72	4700	1.10	MR 37	Y..80M_2-4 AM80 AD2
44.0	162	32.4	4570	1.25	MRF 37	
50.0	143	28.73	4450	1.40		
59.0	122	24.42	4280	1.65		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
64.0	111	22.27	4180	1.80	MR 37	Y..80M_2-4 AM80 AD2
74.0	96	19.31	4040	2.10	MRF 37	
80.0	90	18.05	3960	2.20		
92.0	78	15.6	3810	2.60	MR 37	Y..80M_2-4 AM80 AD2
108	66	13.25	3650	2.90	MRF 37	
121	59	11.83	3540	3.10		
142	50	10.11	3380	3.40		
152	47	9.47	3320	3.50		
50.0	144	28.78	2860	0.90	MR 27	Y..80M_2-4 AM80 AD1
59.0	122	24.47	2780	1.05	MRF 27	
64.0	111	22.32	2730	1.15	MR 27	Y..80M_2-4 AM80 AD2
74.0	97	19.35	2650	1.35	MRF 27	
79.0	90	18.08	2610	1.45		
92.0	78	15.63	2520	1.65		
108	66	13.28	2430	1.95		
121	59	11.86	2360	2.20		
142	50	10.13	2270	2.40		
152	47	9.41	2190	2.60	MR 27	Y..80M_2-4 AM80 AD2
176	41	8.16	2110	2.80	MRF 27	
188	38	7.63	2070	2.90		
218	33	6.59	1990	3.20		
256	28	5.60	1900	3.60		
287	25	5.00	1850	3.80		
73.0	98	19.71	820	0.85	MR 17	Y..80M_2-4 AM80 -
84.0	85	16.99	1390	1.00	MRF 17	
91.0	79	15.84	1380	1.10		
104	69	13.84	1370	1.25		
111	65	12.98	1360	1.30		
125	57	11.45	1340	1.40		
141	51	10.15	1320	1.50		
166	43	8.63	1280	1.65		
190	38	7.55	1190	1.50		
204	35	7.04	1180	1.55		
233	31	6.15	1150	1.75		
249	29	5.76	1140	1.85		
282	25	5.09	1110	2.00		
318	22	4.51	1080	2.10		
374	19	3.83	1040	2.40		
252	28	11.45	1180	2.80	MR 17	Y..80M_1-2 AM80 -
285	25	10.15	1150	3.10	MRF 17	
335	21	8.63	1110	3.40		
383	19	7.55	1040	3.00		
411	17	7.04	1020	3.20		
470	15	6.15	990	3.60		
501	14	5.76	980	3.70		
568	13	5.09	950	4.00		
641	11	4.51	920	4.30		
754	9.5	3.83	880	4.70		
208	34	4.53	4210	2.40	MRX 67	Y..90S-6 AM90 AD2
219	33	4.30	4140	2.40	MRXF 67	
249	29	3.77	3980	3.00		



MR

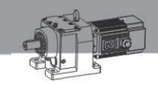
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
294	24	3.20	3780	4.10	**MRX 67 MRXF 67**	**Y..90S-6 AM90 AD3**
277 **317** **334**	26 23 22	5.18 4.53 4.30	3860 3700 3640	2.90 3.60 3.70	**MRX 67 MRXF 67**	**Y..80M$_2$-4 AM80 AD2**
380	19	3.77	3500	4.60	**MRX 67 MRXF 67**	**Y..80M$_2$-4 AM80 AD2**
448 **497** **565** **598** **702** **773** **892**	16 14 13 12 10 9.3 8	3.20 2.89 2.54 2.40 2.04 1.86 1.61	3320 3220 3090 3030 2880 2790 2670	6.20 7.40 9.30 10.0 13.0 14.0 14.0	**MRX 67 MRXF 67**	**Y..80M$_2$-4 AM80 AD3**
248 **265** **300**	29 27 24	3.79 3.55 3.14	3200 3140 3020	2.40 2.60 2.70	**MRX 57 MRXF 57**	**Y..90S-6 AM90 AD2**
323 **356**	22 20	2.91 2.64	2960 2870	3.00 3.40	**MRX 57 MRXF 57**	**Y..90S-6 AM90 AD2**
330 **379** **404** **458** **493** **544**	22 19 18 16 14 13	4.35 3.79 3.55 3.14 2.91 2.64	2940 2820 2770 2660 2600 2520	3.10 3.60 3.90 4.10 4.60 5.20	**MRX 57 MRXF 57**	**Y..80M$_2$-4 AM80 AD2**
605 **703** **747** **869** **972** **1100**	12 10 9.6 8.2 7.4 6.5	2.37 2.04 1.92 1.65 1.48 1.3	2440 2330 2280 2180 2100 2020	5.80 6.80 7.20 8.40 9.20 9.70	**MRX 57 MRXF 57**	**Y..80M$_2$-4 AM80 AD3**
P_1=1.10kw						
0.53 **0.99** **1.10**	17600 9540 8480	2657 1438 1279	120000 120000 120000	1.00 1.90 2.10	**MR 167 MRF97 MRF 167 MRF97**	**Y..90S-4 AM90 AD4**
0.61 **0.68** **0.76** **0.85** **1.30**	15300 13600 12100 10800 7390	2333 2085 1877 1670 1123	120000 120000 120000 120000 120000	1.15 1.30 1.50 1.65 2.40	**MR 167 MRF97 MRF 167 MRF97**	**Y..90S-4 AM90 AD5**
0.64 **0.73**	15000 13200	2211 1951	49600 62100	0.85 1.00	**MR 147 MRF77 MRF 147 MRF77**	**Y..90S-4 AM90 AD3**
0.83 **0.92** **1.10**	11400 10300 8920	1705 1536 1329	65500 67300 69200	1.15 1.25 1.45	**MR 147 MRF77 MRF 147 MRF77**	**Y..90S-4 AM90 AD3**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
1.20 **1.40** **1.60** **1.80** **2.00**	7790 6850 5940 5220 4600	1166 1029 889 784 695	70500 71500 72300 72800 73200	1.65 1.90 2.20 2.50 2.80	**MR 147 MRF77 MRF 147 MRF77**	**Y..90S-4 AM90 AD3**
1.00 **1.10** **1.30** **1.40** **1.60**	9470 8530 7480 7050 5980	1391 1256 1105 1043 888	41400 51700 54500 55300 57100	0.85 0.95 1.05 1.15 1.35	**MR 137 MRF77 MRF 137 MRF77**	**Y..90S-4 AM90 AD2**
1.00 **1.20**	9490 8300	1397 1226	41100 52700	0.85 0.95	**MR 137 MRF77 MRF 137 MRF77**	**Y..90S-4 AM90 AD3**
1.30 **1.50** **1.70** **2.00** **2.30** **2.90**	7400 6460 5580 4870 4160 3250	1090 951 831 730 629 490	54600 56300 57600 58600 59300 60200	1.10 1.25 1.45 1.65 1.90 2.50	**MR 137 MRF77 MRF 137 MRF77**	**Y..90S-4 AM90 AD3**
2.50	3770	560	59700	2.10	**MR 137 MRF77 MRF 137 MRF77**	**Y..90S-4 AM90 AD4**
2.00	4850	717	20800	0.90	**MR 107 MRF77 MRF 107 MRF77**	**Y..90S-4 AM90 AD2**
2.30 **2.60** **2.90**	4090 3610 3260	614 544 492	30500 32700 34000	1.05 1.20 1.30	**MR 107 MRF77 MRF 107 MRF77**	**Y..90S-4 AM90 AD4**
3.40 **3.80** **4.40** **5.00** **5.60**	2760 2470 2160 1900 1670	417 369 323 285 253	35600 36200 36600 36900 37100	1.55 1.75 2.00 2.30 2.60	**MR 107 MRF77 MRF 107 MRF77**	**Y..90S-4 AM90 AD4**
3.30 **3.70**	2940 2580	431 379	21300 23600	1.00 1.15	**MR 97 MRF57 MRF 97 MRF57**	**Y..90S-4 AM90 AD3**
4.20 **4.80** **5.70** **6.10** **6.80**	2290 2010 1680 1570 1400	336 296 249 234 209	25100 26300 27400 27500 27800	1.30 1.50 1.80 1.90 2.10	**MR 97 MRF57 MRF 97 MRF57**	**Y..90S-4 AM90 AD3**
5.30 **6.00** **6.80**	1810 1600 1400	268 236 209	13600 16600 17900	0.85 0.95 1.10	**MR 87 MRF57 MRF 87 MRF57**	**Y..90S-4 AM90 AD3**
5.60 **6.10** **7.30**	1750 1590 1340	256 232 195	15300 16600 18200	0.90 0.95 1.15	**MR 87 MRF57 MRF 87 MRF57**	**Y..90S-4 AM90 AD3**

MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
4.40 **5.00**	2410 2080	216.28 186.30	24500 26100	1.25 1.45	**MR 97 MRF 97**	**Y..90L-6 AM90 AD3**
5.60 **5.90** **6.60** **7.60** **8.40** **9.40**	1890 1780 1590 1370 1250 1110	255.71 241.25 216.28 186.30 170.02 150.78	26800 27200 27500 27800 28000 28100	1.60 1.70 1.90 2.20 2.40 2.70	**MR 97 MRF 97**	**Y..90S-4 AM90 AD3**
11.0 **12.0**	930 860	126.75 116.48	28300 28300	3.20 3.50	**MR 97 MRF 97**	**Y..90S-4 AM90 AD3**
6.60 **6.90** **7.80**	1600 1520 1340	216.54 205.71 181.77	16600 17100 18200	0.95 1.00 1.15	**MR 87 MRF 87**	**Y..90S-4 AM90 AD2**
9.10 **10.0** **11.0** **12.0** **14.0** **15.0** **17.0**	1140 1050 920 870 765 690 605	155.34 142.41 124.97 118.43 103.65 93.38 81.92	19200 19600 20000 20000 20000 20000 20000	1.35 1.45 1.70 1.75 2.00 2.20 2.60	**MR 87 MRF 87**	**Y..90S-4 AM90 AD2**
20.0 **22.0** **24.0** **27.0**	535 470 445 390	72.57 63.68 60.35 52.82	20000 20000 20000 20000	2.90 3.30 3.50 4.00	**MR 87 MRF 87**	**Y..90S-4 AM90 AD2**
12.0 **14.0** **15.0**	890 760 685	121.42 102.99 92.97	9130 10400 11000	0.90 1.10 1.20	**MR 77 MRF 77**	**Y..90S-4 AM90 AD2**
17.0 **18.0** **22.0** **25.0** **27.0** **31.0** **33.0** **39.0** **42.0**	605 570 485 425 385 335 320 270 245	81.8 77.24 65.77 57.68 52.07 45.81 43.26 36.83 33.47	11500 11700 12100 12400 12500 12700 12700 12900 12900	1.35 1.45 1.70 1.90 2.10 2.40 2.60 3.00 3.30	**MR 77 MRF 77**	**Y..90S-4 AM90 AD2**
16.0 **19.0** **20.0** **23.0** **25.0** **28.0** **31.0**	635 545 515 450 420 380 340	86.11 74.17 69.75 61.26 56.89 51.56 46.29	7090 8120 8440 8960 9200 9450 9670	0.95 1.10 1.15 1.30 1.45 1.55 1.75	**MR 67 MRF 67**	**Y..90S-4 AM90 AD2**
36.0 **38.0** **44.0** **49.0**	295 275 235 210	39.88 37.5 32.27 28.83	9910 9980 10100 10200	1.95 2.00 2.30 2.40	**MR 67 MRF 67**	**Y..90S-4 AM90 AD2**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
50.0 **53.0** **61.0**	205 198 173	28.13 26.72 23.44	10200 10100 9690	2.60 2.70 3.20	**MR 67 MRF 67**	**Y..90S-4 AM90 AD2**
71.0	147	19.89	9230	4.10	**MR 67 MRF 67**	**Y..90S-4 AM90 AD3**
21.0 **22.0** **25.0**	510 475 420	69.23 64.85 57.29	6260 6830 6690	0.90 0.95 1.05	**MR 57 MRF 57**	**Y..90S-4 AM90 AD2**
27.0 **29.0** **33.0**	390 355 320	53.22 48.23 43.30	6600 6470 6330	1.15 1.25 1.40	**MR 57 MRF 57**	**Y..90S-4 AM90 AD2**
38.0 **40.0**	275 255	37.30 35.07	6120 6040	1.65 1.75	**MR 57 MRF 57**	**Y..90S-4 AM90 AD2**
47.0 **53.0**	220 200	30.18 26.97	5830 5670	2.00 2.30	**MR 57 MRF 57**	**Y..90S-4 AM90 AD2**
54.0 **57.0** **65.0** **76.0** **85.0**	195 185 162 138 124	26.31 24.99 21.93 18.60 16.79	5630 5560 5380 5150 5000	2.30 2.40 2.80 3.30 3.60	**MR 57 MRF 57**	**Y..90S-4 AM90 AD2**
30.0 **33.0** **38.0** **41.0** **48.0** **53.0** **60.0**	350 315 270 255 220 198 174	47.75 42.87 36.93 34.73 29.88 26.7 23.59	3810 4840 4700 4650 4510 4400 4270	0.85 0.95 1.10 1.15 1.35 1.50 1.70	**MR 47 MRF 47**	**Y..90S-4 AM90 AD2**
61.0 **65.0** **74.0** **79.0** **88.0** **98.0** **113**	172 161 142 132 120 108 93	23.28 21.81 19.27 17.89 16.22 14.56 12.54	4260 4190 4070 4000 3900 3790 3640	1.75 1.85 2.10 2.20 2.30 2.50 2.70	**MR 47 MRF 47**	**Y..90S-4 AM90 AD2**
120 **140** **157**	87 75 67	11.79 10.15 9.07	3580 3430 3320	2.80 3.10 3.30	**MR 47 MRF 47**	**Y..90S-4 AM90 AD2**
44.0 **49.0** **58.0**	235 210 181	32.40 28.73 24.42	2950 3340 3750	0.85 0.95 1.10	**MR 37 MRF 37**	**Y..90S-4 AM90 AD2**
74.0 **79.0** **91.0**	143 134 115	19.31 18.05 15.60	3830 3780 3650	1.40 1.50 1.75	**MR 37 MRF 37**	**Y..90S-4 AM90 AD2**



MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
107	98	13.25	3510	1.95	**MR 37** **MRF 37**	**Y..90S-4** **AM90** **AD2**
120	88	11.83	3410	2.10		
140	75	10.11	3280	2.30		
150	70	9.47	3220	2.40		
178	59	7.97	3080	2.60		
213	49	6.67	2910	2.90		
251	42	5.67	2780	3.40		
281	37	5.06	2690	3.60	**MR 37** **MRF 37**	**Y..90S-4** **AM90** **AD2**
73.0	143	19.35	2430	0.90	**MR 27** **MRF 27**	**Y..90S-4** **AM90** **AD2**
79.0	134	18.08	2410	0.95		
91.0	116	15.63	2350	1.10		
107	98	13.28	2280	1.30		
120	88	11.86	2230	1.45	**MR 27** **MRF 27**	**Y..90S-4** **AM90** **AD2**
140	75	10.13	2160	1.65		
151	70	9.41	2070	1.75		
174	60	8.16	2000	1.90		
186	56	7.63	1980	2.00		
215	49	6.59	1910	2.20		
254	41	5.60	1840	2.40		
284	37	5.00	1780	2.60		
332	32	4.27	1710	2.80		
355	30	4.00	1680	2.90		
421	25	3.37	1610	3.20		
216	49	13.28	1950	2.70	**MR 27** **MRF 27**	**Y..80M_2-2** **AM80** **AD2**
242	43	11.86	1890	3.00		
283	37	10.13	1820	3.30		
305	34	9.41	1750	3.60		
352	30	8.16	1690	3.90		
376	28	7.63	1660	4.00		
435	24	6.59	1590	4.40		
512	20	5.60	1520	4.80		
574	18	5.00	1470	5.20		
672	16	4.27	1410	5.60		
718	15	4.00	1380	5.80		
852	12	3.37	1310	6.40		
252	42	5.63	5650	2.60	**MRX 77** **MRXF 77**	**Y..90S-4** **AM90** **AD2**
265	40	5.35	5560	2.60		
300	35	4.73	5360	3.50	**MRX 77** **MRXF 77**	**Y..90S-4** **AM90** **AD3**
249	42	3.77	3900	2.10	**MRX 67** **MRXF 67**	**Y..90L-6** **AM90** **AD2**
314	34	4.53	3640	2.40	**MRX 67** **MRXF 67**	**Y..90S-4** **AM90** **AD2**
330	32	4.30	3590	2.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
376	28	3.77	3450	3.10	**MRX 67** **MRXF 67**	**Y..90S-4** **AM90** **AD2**
444	24	3.20	3280	4.20	**MRX 67** **MRXF 67**	**Y..90S-4** **AM90** **AD3**
492	21	2.89	3180	5.00		
559	19	2.54	3060	6.30		
592	18	2.40	3000	6.90		
695	15	2.04	2860	8.90		
765	14	1.86	2770	9.20		
883	12	1.61	2650	9.60		
1015	10	1.40	2530	10.0		
300	35	3.14	2940	1.85	**MRX 57** **MRXF 57**	**Y..90L-6** **AM90** **AD2**
356	30	2.64	2800	2.30		
375	28	3.79	2770	2.50	**MRX 57** **MRXF 57**	**Y..90S-4** **AM90** **AD2**
400	26	3.55	2720	2.60		
453	23	3.14	2620	2.80		
487	22	2.91	2560	3.10		
538	20	2.64	2490	3.50		
599	18	2.37	2410	3.90	**MRX 57** **MRXF 57**	**Y..90S-4** **AM90** **AD3**
696	15	2.04	2300	4.60		
740	14	1.92	2260	4.90		
859	12	1.65	2160	5.70		
962	11	1.48	2080	6.20		
1090	9.6	1.30	2000	6.60		
P_1=1.50kw						
0.99	13000	1438	120000	1.40	**MR 167 MRF97** **MRF 167 MRF97**	**Y..90L-4** **AM90** **AD4**
1.10	11600	1279	120000	1.55		
0.61	21100	2333	120000	0.85	**MR 167 MRF97** **MRF 167 MRF97**	**Y..90L-4** **AM90** **AD5**
0.69	18700	2085	120000	0.95		
0.76	16700	1877	120000	1.05		
0.86	14900	1670	120000	1.20		
1.30	10100	1123	120000	1.75		
1.40	9040	999	120000	2.00		
3.40	3850	426	73600	3.40	**MR 147 MRF87** **MRF 147 MRF87**	**Y..90L-4** **AM90** **AD5**
3.90	3330	368	73900	3.90		
0.84	15600	1705	41200	0.85	**MR 147 MRF77** **MRF 147 MRF77**	**Y..90L-4** **AM90** **AD3**
0.93	14100	1536	60300	0.90		
1.10	12200	1329	64200	1.05	**MR 147 MRF77** **MRF 147 MRF77**	**Y..90L-4** **AM90** **AD3**
1.20	10600	1166	66800	1.20		
1.40	9380	1029	68600	1.40		
1.60	8130	889	70200	1.60		
1.80	7150	784	71200	1.80		
2.10	6320	695	71900	2.10		
2.30	5690	619	72400	2.30	**MR 147 MRF77** **MRF 147 MRF77**	**Y..90L-4** **AM90** **AD4**
2.60	5120	558	72900	2.50		

MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
1.40	9620	1043	38400	0.85	**MR 137 MRF77** **MRF 137 MRF77**	**Y..90L-4** **AM90** **AD2**
1.60	8170	888	53000	1.00		
2.00	6400	699	56400	1.25		
2.40	5550	609	57700	1.45		
1.30	10000	1090	27000	0.80	**MR 137 MRF77** **MRF 137 MRF77**	**Y..90L-4** **AM90** **AD3**
1.50	8800	951	50500	0.90		
1.70	7630	831	54200	1.05		
2.00	6670	730	55900	1.20		
2.30	5710	629	57400	1.40		
2.90	4460	490	59000	1.80		
3.30	3890	428	59600	2.00		
2.60	5150	560	58200	1.55	**MR 137 MRF77** **MRF 137 MRF77**	**Y..90L-4** **AM90** **AD4**
3.80	3500	381	59900	2.30		
4.40	2970	323	60400	2.70		
2.70	4830	528	21700	0.90	**MR 107 MRF77** **MRF 107 MRF77**	**Y..90L-4** **AM90** **AD2**
2.60	4950	544	15700	0.85	**MR 107 MRF77** **MRF 107 MRF77**	**Y..90L-4** **AM90** **AD4**
2.90	4470	492	28500	0.95		
3.40	3790	417	31900	1.15		
3.90	3380	369	33600	1.25		
4.40	2960	323	35100	1.45		
3.00	4400	469	28900	1.00	**MR 107 MRF77** **MRF 107 MRF77**	**Y..90L-4** **AM90** **AD3**
4.20	3120	336	14100	0.95	**MR 97 MRF57** **MRF 97 MRF57**	**Y..90L-4** **AM90** **AD3**
4.80	2740	296	22700	1.10		
5.70	2300	249	25100	1.30		
6.10	2140	234	25800	1.40		
6.80	1920	209	26700	1.55		
3.70	3820	251.15	31800	1.10	**MR 107** **MRF 107**	**Y..100L-6** **AM100** **AD3**
4.10	3500	229.95	33200	1.25		
4.60	3090	203.16	34600	1.40		
5.40	2620	172.34	36000	1.65		
5.90	2410	158.68	36300	1.80		
6.60	2160	141.83	36600	2.00		
6.60	2160	216.28	25700	1.40	**MR 97** **MRF 97**	**Y..90L-4** **AM90** **AD3**
7.70	1860	186.30	26900	1.60		
8.40	1700	170.02	27300	1.75		
9.50	1510	150.78	27600	2.00		
11.0	1260	126.75	27900	2.40		
12.0	1160	116.48	28100	2.60		
14.0	1030	103.44	28200	2.90		
15.0	920	92.48	28300	3.20		
7.90	1820	181.77	13200	0.85	**MR 87** **MRF 87**	**Y..90L-4** **AM90** **AD2**
9.20	1550	155.34	16900	1.00		
10.0	1420	142.41	17700	1.10		
11.0	1250	124.97	18700	1.25		
12.0	1180	118.43	19000	1.30		
14.0	1030	103.65	19700	1.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
15.0	930	93.38	20000	1.65	**MR 87** **MRF 87**	**Y..90L-4** **AM90** **AD2**
17.0	820	81.92	20000	1.90		
20.0	725	72.57	20000	2.10		
22.0	635	63.68	20000	2.40		
24.0	600	60.35	20000	2.60		
27.0	525	52.82	20000	2.90		
30.0	475	47.58	20000	3.20		
34.0	415	41.74	20000	3.70	**MR 87** **MRF 87**	**Y..90L-4** **AM90** **AD3**
39.0	365	36.84	19500	4.20		
15.0	930	92.97	8750	0.90	**MR 77** **MRF 77**	**Y..90L-4** **AM90** **AD2**
17.0	810	81.80	9930	1.00		
19.0	770	77.24	10300	1.05		
22.0	655	65.77	11200	1.25		
25.0	575	57.68	11700	1.40	**MR 77** **MRF 77**	**Y..90L-4** **AM90** **AD2**
27.0	520	52.07	12000	1.55		
31.0	455	45.81	12300	1.80		
33.0	430	43.26	12400	1.90		
39.0	365	36.83	12600	2.20		
43.0	335	33.47	12700	2.40	**MR 77** **MRF 77**	**Y..90L-4** **AM90** **AD2**
49.0	290	29.00	12500	2.80		
57.0	250	25.23	12000	3.10		
61.0	230	23.37	11700	3.50	**MR 77** **MRF 77**	**Y..90L-4** **AM90** **AD3**
67.0	210	21.43	11400	3.80		
76.0	188	18.80	11000	4.10		
23.0	610	61.26	7390	1.00	**MR 67** **MRF 67**	**Y..90L-4** **AM90** **AD2**
25.0	565	56.89	7900	1.05		
28.0	515	51.56	8440	1.15		
31.0	460	46.29	8880	1.30	**MR 67** **MRF 67**	**Y..90L-4** **AM90** **AD2**
36.0	395	39.88	9340	1.45		
38.0	375	37.5	9490	1.50		
44.0	320	32.27	9770	1.65		
50.0	285	28.83	9930	1.80		
51.0	280	28.13	9950	1.90	**MR 67** **MRF 67**	**Y..90L-4** **AM90** **AD2**
54.0	265	26.72	9810	2.00		
61.0	230	23.44	9460	2.40		
72.0	199	19.89	9030	3.00	**MR 67** **MRF 67**	**Y..90L-4** **AM90** **AD3**
80.0	180	17.95	8770	3.30		
27.0	530	53.22	5450	0.85	**MR 57** **MRF 57**	**Y..90L-4** **AM90** **AD2**
30.0	480	48.23	6000	0.95		
33.0	430	43.30	5900	1.05		
38.0	370	37.30	5760	1.20	**MR 57** **MRF 57**	**Y..90L-4** **AM90** **AD2**
41.0	350	35.07	5690	1.30		
47.0	300	30.18	5530	1.50		
53.0	270	26.97	5400	1.65		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
54.0	260	26.31	5370	1.70		
57.0	250	24.99	5310	1.80		
65.0	215	21.93	5160	2.00	**MR 57**	**Y..90L-4**
77.0	186	18.60	4960	2.40	**MRF 57**	**AM90**
85.0	168	16.79	4840	2.70		**AD2**
97.0	148	14.77	4680	2.90		
103	140	13.95	4610	3.10	**MR 57**	**Y..90L-4**
120	119	11.88	4420	3.40	**MRF 57**	**AM90** **AD3**
39.0	365	36.93	2750	0.80		
41.0	345	34.73	4130	0.85	**MR 47**	**Y..90L-4**
48.0	295	29.88	4210	1.00	**MRF 47**	**AM90**
54.0	265	26.70	4130	1.10		**AD2**
61.0	235	23.59	4040	1.25		
61.0	230	23.28	4030	1.30		
66.0	215	21.81	3980	1.35		
74.0	193	19.27	3870	1.55		
80.0	179	17.89	3810	1.60	**MR 47**	**Y..90L-4**
88.0	162	16.22	3730	1.70	**MRF 47**	**AM90**
98.0	146	14.56	3640	1.80		**AD2**
114	126	12.54	3510	2.00		
121	118	11.79	3460	2.10		
141	102	10.15	3330	2.30		
158	91	9.07	3230	2.40		
178	80	8.01	3120	2.60		
184	78	7.76	3050	2.10	**MR 47**	**Y..90L-4**
205	70	6.96	2970	2.30	**MRF 47**	**AM90**
238	60	6	2850	2.60		**AD2**
254	56	5.64	2800	2.70		
295	49	4.85	2690	3.10		
330	43	4.34	2600	3.40		
373	38	3.83	2510	3.80	**MR 47** **MRF 47**	**Y..90L-4** **AM90** **AD3**
74.0	193	19.31	2700	1.05	**MR 37**	**Y..90L-4**
79.0	181	18.05	2880	1.10	**MRF 37**	**AM90**
92.0	156	15.60	3190	1.30		**AD2**
108	133	13.25	3340	1.45		
121	118	11.83	3260	1.55		
141	101	10.11	3140	1.70	**MR 37**	**Y..90L-4**
151	95	9.47	3100	1.75	**MRF 37**	**AM90**
179	80	7.97	2970	1.95		**AD2**
214	67	6.67	2810	2.20		
252	57	5.67	2700	2.50		
283	51	5.06	2620	2.70	**MR 37**	**Y..90L-4**
331	43	4.32	2510	2.90	**MRF 37**	**AM90**
353	40	4.05	2460	3.00		**AD2**
419	34	3.41	2350	3.30		
214	67	13.25	2840	2.80	**MR 37**	**Y..90S-2**
239	60	11.83	2760	3.10	**MRF 37**	**AM90**
280	51	10.11	2640	3.30		**AD2**

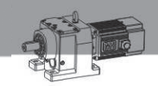
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
299	48	9.47	2600	3.50	**MR 37**	**Y..90S-2**
355	40	7.97	2480	3.90	**MRF 37**	**AM90** **AD2**
91.0	157	15.63	1740	0.85		
108	133	13.28	2050	1.00		
121	119	11.86	2070	1.10	**MR 27**	**Y..90L-4**
141	101	10.13	2020	1.20	**MRF 27**	**AM90**
175	82	8.16	1880	1.40		**AD2**
188	76	7.63	1860	1.45		
217	66	6.59	1810	1.60		
255	56	5.60	1750	1.75		
286	50	5.00	1700	1.90	**MR 27**	**Y..90L-4**
335	43	4.27	1640	2.00	**MRF 27**	**AM90**
358	40	4.00	1620	2.10		**AD2**
424	34	3.37	1550	2.30		
239	60	11.86	1820	2.20		
279	51	10.13	1750	2.40		
347	41	8.16	1630	2.80		
371	39	7.63	1600	2.90		
429	33	6.59	1550	3.20	**MR 27**	**Y..90S-2**
505	28	5.60	1480	3.50	**MRF 27**	**AM90**
566	25	5.00	1440	3.80		**AD2**
663	22	4.27	1380	4.00		
708	20	4.00	1360	4.20		
840	17	3.37	1290	4.60		
254	56	5.63	5560	1.95	**MRX 77**	**Y..90L-4**
267	54	5.35	5470	1.90	**MRXF 77**	**AM90** **AD2**
302	47	4.73	5270	2.60	**MRX 77**	**Y..90L-4**
354	40	4.04	5030	3.50	**MRXF 77**	**AM90**
386	37	3.7	4900	4.10		**AD3**
440	33	3.25	4700	5.60	**MRX 77**	**Y..90L-4**
464	31	3.08	4620	6.20	**MRXF 77**	**AM90**
530	27	2.7	4430	8.00		**AD4**
589	24	2.43	4290	8.80		
316	45	4.53	3560	1.80	**MRX 67**	**Y..90L-4**
333	43	4.30	3510	1.85	**MRXF 67**	**AM90**
379	38	3.77	3380	2.30		**AD2**
447	32	3.20	3220	3.10	**MRX 67**	**Y..90L-4**
495	29	2.89	3120	3.70	**MRXF 67**	**AM90**
563	26	2.54	3010	4.60		**AD3**
596	24	2.40	2950	5.10		
700	20	2.04	2810	6.50	**MRX 67**	**Y..90L-4**
770	19	1.86	2730	6.80	**MRXF 67**	**AM90**
889	16	1.61	2610	7.10		**AD3**
1020	14	1.40	2500	7.40		
377	38	3.79	2690	1.80		
403	36	3.55	2640	1.95	**MRX 57**	**Y..90L-4**
456	31	3.14	2550	2.10	**MRXF 57**	**AM90**
491	29	2.91	2500	2.30		**AD2**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
542	26	2.64	2430	2.60	**MRX 57** **MRXF 57**	**Y..90L-4** **AM90** **AD2**
603	24	2.37	2350	2.90		
700	20	2.04	2250	3.40		
745	19	1.92	2210	3.60	**MRX 57**	**Y..90L-4**
866	16	1.65	2120	4.20	**MRXF 57**	**AM90**
969	15	1.48	2040	4.60		**AD3**
1095	13	1.30	1970	4.80		
P_1=2.20kw						
0.85	22300	1670	120000	0.80		
1.30	15100	1123	120000	1.20		
1.40	13400	999	120000	1.35	**MR 167 MRF97**	**Y..100L_1-4**
1.60	11600	861	120000	1.55	**MRF 167 MRF97**	**AM100**
2.20	8620	656	120000	2.10		**AD5**
0.99	19400	1438	120000	0.90		
1.10	17300	1279	120000	1.05	**MR 167 MRF97**	**Y..100L_1-4**
1.90	10200	760	120000	1.75	**MRF 167 MRF97**	**AM100** **AD4**
3.10	6120	462	72100	2.10	**MR 147 MRF87** **MRF 147 MRF87**	**Y..100L_1-4** **AM100** **AD4**
2.70	7110	533	71200	1.85		
3.30	5750	426	72400	2.30	**MR 147 MRF87**	**Y..100L_1-4**
3.90	4970	368	73000	2.60	**MRF 147 MRF87**	**AM100**
4.40	4390	326	73300	3.00		**AD5**
1.20	15800	1166	38600	0.80		
1.40	13900	1029	60600	0.95	**MR 147 MRF77**	**Y..100L_1-4**
1.60	12000	889	64400	1.10	**MRF 147 MRF77**	**AM100**
1.80	10600	784	66800	1.20		**AD3**
2.00	9410	695	68600	1.40		
2.30	8450	619	69800	1.55	**MR 147 MRF77**	**Y..100L_1-4**
2.60	7600	558	70700	1.70	**MRF 147 MRF77**	**AM100**
2.90	6650	489	71600	1.95		**AD4**
2.00	9510	699	40600	0.85	**MR 137 MRF77**	**Y..100L_1-4**
2.30	8260	609	52800	0.95	**MRF 137 MRF77**	**AM100** **AD2**
2.00	9920	730	31700	0.80		
2.30	8510	629	51800	0.95	**MR 137 MRF77**	**Y..100L_1-4**
2.90	6640	490	56000	1.20	**MRF 137 MRF77**	**AM100**
3.30	5790	428	57300	1.40		**AD3**
2.50	7640	560	54100	1.05	**MR 137 MRF77**	**Y..100L_1-4**
3.70	5200	381	58100	1.55	**MRF 137 MRF77**	**AM100** **AD4**
4.40	4410	323	59100	1.80		
4.90	3970	291	59500	2.00	**MR 137 MRF77**	**Y..100L_1-4**
5.60	3470	255	60000	2.30	**MRF 137 MRF77**	**AM100**
6.40	3040	223	60300	2.60		**AD4**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
4.40	4400	323	28900	1.00		
5.00	3870	285	31600	1.10	**MR 107 MRF77**	**Y..100L_1-4**
5.60	3420	253	33400	1.25	**MRF 107 MRF77**	**AM100**
6.60	2900	214	35200	1.50		**AD4**
4.40	4490	325	28400	0.95	**MR 107 MRF77** **MRF 107 MRF77**	**Y..100L_1-4** **AM100** **AD3**
6.80	2840	209	22000	1.05	**MR 97 MRF57** **MRF 97 MRF57**	**Y..100L_1-4** **AM100** **AD3**
4.70	4460	203.16	28500	0.95		
5.50	3790	172.34	32000	1.15	**MR 107**	**Y..112M-6**
6.00	3490	158.68	33200	1.25	**MRF 107**	**AM112**
6.70	3120	141.83	34600	1.40		**AD3**
5.70	3700	251.15	32300	1.15	**MR 107**	**Y..100L_1-4**
6.20	3390	229.95	33600	1.25	**MRF 107**	**AM100**
7.00	2990	203.16	35000	1.45		**AD3**
8.30	2540	172.34	36100	1.70		
9.00	2330	158.68	36400	1.85		
10.0	2090	141.83	36700	2.10	**MR 107**	**Y..100L_1-4**
11.0	1880	127.68	36900	2.30	**MRF 107**	**AM100**
12.0	1700	115.63	37100	2.50		**AD3**
14.0	1510	102.53	37200	2.80		
15.0	1360	92.7	37300	3.20		
6.60	3180	216.28	10200	0.95	**MR 97**	**Y..100L_1-4**
7.60	2740	186.30	22700	1.10	**MRF 97**	**AM100**
8.40	2500	170.02	24000	1.20		**AD3**
9.40	2220	150.78	25400	1.35		
11.0	1860	126.75	26900	1.60		
12.0	1710	116.48	27300	1.75		
14.0	1520	103.44	27600	1.95	**MR 97**	**Y..100L_1-4**
15.0	1360	92.48	27800	2.20	**MRF 97**	**AM100**
17.0	1220	83.15	28000	2.40		**AD3**
20.0	1060	72.17	28200	2.80		
22.0	960	65.21	27600	3.10		
24.0	880	59.92	26900	3.40		
27.0	780	53.21	26000	3.80	**MR 97** **MRF 97**	**Y..100L_1-4** **AM100** **AD3**
30.0	700	47.58	25200	4.30	**MR 97** **MRF 97**	**Y..100L_1-4** **AM100** **AD4**
11.0	1840	124.97	11700	0.85		
12.0	1740	118.43	15400	0.90		
14.0	1520	103.65	17100	1.00		
15.0	1370	93.38	18000	1.15	**MR 87**	**Y..100L_1-4**
17.0	1200	81.92	18900	1.30	**MRF 87**	**AM100**
20.0	1060	72.57	19600	1.45		**AD2**
22.0	930	63.68	20000	1.65		
24.0	880	60.35	20000	1.75		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
27.0	775	52.82	20000	2.00	**MR 87**	**Y..100L$_1$-4**
30.0	700	47.58	20000	2.20	**MRF 87**	**AM100**
						AD2
34.0	615	41.74	19800	2.50	**MR 87**	**Y..100L$_1$-4**
39.0	540	36.84	19100	2.80	**MRF 87**	**AM100**
44.0	480	32.66	18500	3.20		**AD3**
41.0	505	34.40	18800	3.00	**MR 87**	**Y..100L$_1$-4**
45.0	460	31.40	18300	3.40	**MRF 87**	**AM100**
						AD3
51.0	410	27.84	17600	3.80	**MR 87**	**Y..100L$_1$-4**
61.0	345	23.40	16700	4.50	**MRF 87**	**AM100**
66.0	315	21.51	16300	4.70		**AD4**
22.0	960	65.77	6520	0.85		
25.0	850	57.68	9630	0.95		
27.0	765	52.07	10400	1.05	**MR 77**	**Y..100L$_1$-4**
31.0	675	45.81	11100	1.20	**MRF 77**	**AM100**
33.0	635	43.26	11300	1.30		**AD2**
39.0	540	36.83	11900	1.50		
43.0	490	33.47	12100	1.65	**MR 77**	**Y..100L$_1$-4**
49.0	425	29.00	12100	1.90	**MRF 77**	**AM100**
56.0	370	25.23	11600	2.10		**AD2**
61.0	340	23.37	11400	2.40		
66.0	315	21.43	11100	2.60		
76.0	275	18.80	10700	2.80	**MR 77**	**Y..100L$_1$-4**
80.0	260	17.82	10600	3.00	**MRF 77**	**AM100**
91.0	225	15.60	10200	3.20		**AD3**
101	205	14.05	9880	3.50		
36.0	585	39.88	7700	1.00		
38.0	550	37.50	8080	1.05	**MR 67**	**Y..100L$_1$-4**
44.0	475	32.27	8790	1.15	**MRF 67**	**AM100**
49.0	425	28.83	9170	1.20		**AD2**
61.0	345	23.44	9110	1.60	**MR 67**	**Y..100L$_1$-4**
					MRF 67	**AM100**
						AD2
72.0	290	19.89	8740	2.00		
79.0	260	17.95	8510	2.20		
90.0	230	15.79	8220	2.40		
96.0	215	14.91	8090	2.50	**MR 67**	**Y..100L$_1$-4**
112	187	12.70	7740	2.80	**MRF 67**	**AM100**
123	170	11.54	7530	2.90		**AD3**
143	147	10.00	7230	3.20		
164	128	8.70	6940	3.40		
183	115	7.79	6730	3.30		
38.0	545	37.30	4750	0.80		
41.0	515	35.07	5100	0.85	**MR 57**	**Y..100L$_1$-4**
47.0	445	30.18	5020	1.00	**MRF 57**	**AM100**
53.0	395	26.97	4950	1.15		**AD2**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
65.0	320	21.93	4790	1.40		
77.0	270	18.60	4650	1.65	**MR 57**	**Y..100L$_1$-4**
85.0	245	16.79	4560	1.80	**MRF 57**	**AM100**
96.0	215	14.77	4440	2.00		**AD2**
102	205	13.95	4380	2.10		
120	175	11.88	4220	2.30		
132	159	10.79	4130	2.40	**MR 57**	**Y..100L$_1$-4**
152	138	9.35	3980	2.70	**MRF 57**	**AM100**
157	134	9.06	3970	2.80		**AD3**
179	118	7.97	3840	3.00		
131	160	21.93	4130	2.80		
155	136	18.60	3970	3.30	**MR 57**	**Y..90L-2**
172	122	16.79	3870	3.70	**MRF 57**	**AM90**
195	108	14.77	3740	4.00		**AD2**
206	102	13.95	3680	4.20	**MR 57**	**Y..90L-2**
					MRF 57	**AM90**
						AD3
74.0	280	19.27	3550	1.05		
88.0	235	16.22	3460	1.15	**MR 47**	**Y..100L$_1$-4**
98.0	210	14.56	3390	1.25	**MRF 47**	**AM100**
114	185	12.54	3300	1.35		**AD2**
121	174	11.79	3260	1.40		
140	150	10.15	3160	1.55		
157	134	9.07	3080	1.65		
178	118	8.01	2990	1.75	**MR 47**	**Y..100L$_1$-4**
184	114	7.76	2900	1.45	**MRF 47**	**AM100**
205	103	6.96	2830	1.55		**AD2**
238	88	6.00	2730	1.75		
253	83	5.64	2690	1.85		
294	72	4.85	2590	2.10		
329	64	4.34	2520	2.30		
372	56	3.83	2440	2.60	**MR 47**	**Y..100L$_1$-4**
					MRF 47	**AM100**
						AD3
149	140	19.27	3110	2.10		
178	118	16.22	2990	2.30		
198	106	14.56	2920	2.50		
230	92	12.54	2810	2.70	**MR 47**	**Y..90L-2**
244	86	11.79	2760	2.80	**MRF 47**	**AM90**
284	74	10.15	2660	3.10		**AD2**
318	66	9.07	2580	3.30		
359	58	8.01	2490	3.50		
91.0	230	15.60	1110	0.85	**MR 37**	**Y..100L$_1$-4**
108	195	13.25	1690	0.95	**MRF 37**	**AM100**
120	174	11.83	2010	1.05		**AD2**
141	149	10.11	2380	1.15		
151	140	9.47	2500	1.20		
179	118	7.97	2760	1.35	**MR 37**	**Y..100L$_1$-4**
214	98	6.67	2480	1.45	**MRF 37**	**AM100**
252	84	5.67	2560	1.70		**AD2**
282	75	5.06	2500	1.80		

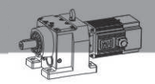


n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
330	64	4.32	2400	2.00	**MR 37**	**Y..100L$_1$-4**
352	60	4.05	2370	2.00	**MRF 37**	**AM100**
418	50	3.41	2270	2.20		**AD2**
185	114	15.6	2780	1.75	**MR 37**	**Y..90L-2**
217	97	13.25	2680	1.95	**MRF 37**	**AM90**
243	86	11.83	2620	2.10		**AD2**
285	74	10.11	2520	2.30	**MR 37**	**Y..90L-2**
304	69	9.47	2480	2.40	**MRF 37**	**AM90**
361	58	7.97	2380	2.70		**AD2**
432	49	6.67	2250	3.00		
508	41	5.67	2150	3.40		
569	37	5.06	2090	3.70	**MR 37**	**Y..90L-2**
666	32	4.32	2000	4.00	**MRF 37**	**AM90**
712	30	4.05	1960	4.10		**AD2**
845	25	3.41	1870	4.50		
141	149	10.13	1140	0.80		
216	97	6.59	1150	1.10		
254	83	5.60	1410	1.20	**MR 27**	**Y..100L$_1$-4**
285	74	5.00	1550	1.30	**MRF 27**	**AM100**
334	63	4.27	1530	1.40		**AD2**
356	59	4.00	1510	1.45		
423	50	3.37	1460	1.6		
217	97	13.28	1710	1.35		
243	86	11.86	1680	1.50		
284	74	10.13	1630	1.65		
437	48	6.59	1450	2.20	**MR 27**	**Y..90L-2**
514	41	5.60	1400	2.40	**MRF 27**	**AM90**
576	36	5.00	1370	2.60		**AD2**
674	31	4.27	1320	2.80		
720	29	4.00	1300	2.90		
855	25	3.37	1240	3.20		
301	70	4.73	5160	1.75	**MRX 77**	**Y..100L$_1$-4**
353	60	4.04	4930	2.40	**MRXF 77**	**AM100**
385	55	3.70	4810	2.80		**AD3**
438	48	3.25	4620	3.80		
463	45	3.08	4550	4.20		
529	40	2.70	4370	5.40		
587	36	2.43	4230	6.00	**MRX 77**	**Y..100L$_1$-4**
669	31	2.13	4060	6.40	**MRXF 77**	**AM100**
758	28	1.88	3910	6.80		**AD4**
855	25	1.67	3760	7.00		
1000	21	1.42	3580	7.40		
378	56	3.77	3270	1.55	**MRX 67**	**Y..100L$_1$-4**
					MRXF 67	**AM100**
						AD2
445	47	3.20	3120	2.10		
493	43	2.89	3040	2.50		
561	38	2.54	2930	3.20	**MRX 67**	**Y..100L$_1$-4**
594	35	2.40	2880	3.50	**MRXF 67**	**AM100**
697	30	2.04	2750	4.40		**AD3**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
767	27	1.86	2670	4.60	**MRX 67**	**Y..100L$_1$-4**
886	24	1.61	2560	4.80	**MRXF 67**	**AM100**
1020	21	1.40	2450	5.00		**AD3**
454	46	3.14	2440	1.40	**MRX 57**	**Y..100L$_1$-4**
540	39	2.64	2340	1.75	**MRXF 57**	**AM100**
						AD2
601	35	2.37	2270	2.00		
698	30	2.04	2180	2.30		
742	28	1.92	2140	2.40	**MRX 57**	**Y..100L$_1$-4**
862	24	1.65	2060	2.80	**MRXF 57**	**AM100**
965	22	1.48	1990	3.10		**AD3**
1090	19	1.30	1920	3.30		
P_1=3.00kw						
1.90	13800	760	120000	1.30	**MR 167 MRF97**	**Y..100L$_2$-4**
					MRF 167 MRF97	**AM100**
						AD4
1.30	20300	1123	120000	0.90		
1.50	18100	999	120000	1.00		
1.70	15600	861	120000	1.15	**MR 167 MRF97**	**Y..100L$_2$-4**
2.20	11600	656	120000	1.55	**MRF 167 MRF97**	**AM100**
2.90	8950	503	120000	2.00		**AD5**
3.20	8270	462	70000	1.55	**MR 147 MRF87**	**Y..100L$_2$-4**
					MRF 147 MRF87	**AM100**
						AD4
2.70	9590	533	68300	1.35		
3.40	7740	426	70600	1.70		
4.00	6680	368	71600	1.95	**MR 147 MRF87**	**Y..100L$_2$-4**
4.50	5910	326	72300	2.20	**MRF 147 MRF87**	**AM100**
5.20	5010	280	72900	2.60		**AD5**
1.60	16200	889	33100	0.80		
1.90	14200	784	58800	0.90	**MR 147 MRF77**	**Y..100L$_2$-4**
2.10	12600	695	63300	1.05	**MRF 147 MRF77**	**AM100**
						AD3
2.40	11300	619	65700	1.15	**MR 147 MRF77**	**Y..100L$_2$-4**
2.60	10200	558	67500	1.25	**MRF 147 MRF77**	**AM100**
						AD4
3.00	8920	490	50000	0.90	**MR 137 MRF77**	**Y..100L$_2$-4**
3.40	7790	428	53800	1.05	**MRF 137 MRF77**	**AM100**
						AD3
3.80	6980	381	55400	1.15		
4.50	5920	323	57200	1.35		
5.00	5330	291	58000	1.50	**MR 137 MRF77**	**Y..100L$_2$-4**
5.70	4650	255	58800	1.70	**MRF 137 MRF77**	**AM100**
6.50	4080	223	59400	1.95		**AD4**
2.80	9600	517	38800	0.85	**MR 137 MRF77**	**Y..100L$_2$-4**
3.20	8420	453	52200	0.95	**MRF 137 MRF77**	**AM100**
						AD3

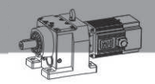
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
5.80	4600	253	27700	0.95	**MR 107 MRF77**	**Y..100L$_2$-4 AM100 AD4**
6.80	3900	214	31500	1.10	**MRF 107 MRF77**	
7.80	3400	187	33500	1.25		
5.70	4730	256	25500	0.90	**MR 107 MRF77** **MRF 107 MRF77**	**Y..100L$_2$-4 AM100 AD3**
6.00	4760	158.68	24600	0.90	**MR 107** **MRF 107**	**Y..132S-6 AM132 AD3**
6.70	4250	141.83	29700	1.00		
7.50	3830	127.68	31800	1.10		
6.30	4520	229.95	28200	0.95	**MR 107** **MRF 107**	**Y..100L$_2$-4 AM100 AD3**
7.20	4000	203.16	31000	1.10		
8.40	3390	172.34	33600	1.25		
9.20	3120	158.68	34500	1.40	**MR 107** **MRF 107**	**Y..100L$_2$-4 AM100 AD3**
10.0	2790	141.83	35600	1.55		
11.0	2510	127.68	36200	1.70		
13.0	2270	115.63	36500	1.90		
14.0	2010	102.53	36800	2.10		
16.0	1820	92.70	37000	2.40		
19.0	1540	78.57	35500	2.80		
20.0	1430	72.88	34800	3.00		
9.60	2960	150.78	20900	1.00	**MR 97** **MRF 97**	**Y..100L$_2$-4 AM100 AD3**
11.0	2490	126.75	24100	1.20		
12.0	2290	116.48	25100	1.30		
14.0	2030	103.44	26200	1.45		
16.0	1820	92.48	27000	1.65		
18.0	1630	83.15	27400	1.85		
20.0	1420	72.17	27500	2.10		
22.0	1280	65.21	26700	2.30		
24.0	1170	59.92	26100	2.50		
27.0	1040	53.21	25300	2.90		
31.0	930	47.58	24500	3.20	**MR 97** **MRF 97**	**Y..100L$_2$-4 AM100 AD4**
34.0	840	42.78	23800	3.60		
39.0	730	37.13	22800	4.10		
44.0	650	33.25	22100	4.40		
16.0	1830	93.38	12000	0.85	**MR 87** **MRF 87**	**Y..100L$_2$-4 AM100 AD2**
18.0	1610	81.92	16500	0.95		
20.0	1420	72.57	17700	1.10		
23.0	1250	63.68	18700	1.25		
24.0	1180	60.35	19000	1.30	**MR 87** **MRF 87**	**Y..100L$_2$-4 AM100 AD2**
28.0	1030	52.82	19700	1.50		
31.0	930	47.58	19800	1.65		
35.0	820	41.74	19200	1.90	**MR 87** **MRF 87**	**Y..100L$_2$-4 AM100 AD3**
40.0	725	36.84	18500	2.10		
45.0	640	32.66	17900	2.40		
52.0	545	27.88	17200	2.70		
42.0	675	34.40	18200	2.20	**MR 87** **MRF 87**	**Y..100L$_2$-4 AM100 AD3**
46.0	615	31.40	17800	2.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
52.0	545	27.84	17200	2.80	**MR 87** **MRF 87**	**Y..100L$_2$-4 AM100 AD4**
62.0	460	23.40	16300	3.40		
68.0	420	21.51	15900	3.50		
76.0	375	19.10	15400	3.80		
85.0	335	17.08	14900	4.10		
95.0	300	15.35	14400	4.40		
32.0	900	45.81	9090	0.90	**MR 77** **MRF 77**	**Y..100L$_2$-4 AM100 AD2**
34.0	850	43.26	9620	0.95		
40.0	725	36.83	10700	1.15		
43.0	655	33.47	11200	1.25		
50.0	570	29.00	11600	1.45	**MR 77** **MRF 77**	**Y..100L$_2$-4 AM100 AD2**
58.0	495	25.23	11200	1.55		
62.0	460	23.37	11000	1.80	**MR 77** **MRF 77**	**Y..100L$_2$-4 AM100 AD3**
68.0	420	21.43	10700	1.95		
77.0	370	18.80	10400	2.10		
82.0	350	17.82	10200	2.20		
93.0	305	15.60	9880	2.40		
104	275	14.05	9600	2.60		
118	240	12.33	9250	2.80		
134	210	10.88	8930	3.10		
151	190	9.64	8630	3.30		
169	169	8.59	8400	3.70	**MR 77** **MRF 77**	**Y..100L$_2$-4 AM100 AD4**
188	152	7.74	8150	4.00		
214	134	6.79	7830	4.30		
73.0	390	19.89	8350	1.55	**MR 67** **MRF 67**	**Y..100L$_2$-4 AM100 AD3**
81.0	350	17.95	8150	1.65		
92.0	310	15.79	7900	1.80		
98.0	290	14.91	7790	1.85		
62.0	460	23.44	8660	1.20	**MR 67** **MRF 67**	**Y..100L$_2$-4 AM100 AD2**
115	250	12.70	7470	2.10	**MR 67** **MRF 67**	**Y..100L$_2$-4 AM100 AD3**
126	225	11.54	7290	2.20		
146	197	10.00	7010	2.40		
54.0	530	26.97	4430	0.85	**MR 57** **MRF 57**	**Y..100L$_2$-4 AM100 AD2**
66.0	430	21.93	4360	1.05	**MR 57** **MRF 57**	**Y..100L$_2$-4 AM100 AD2**
78.0	365	18.60	4280	1.25		
87.0	330	16.79	4220	1.35		
98.0	290	14.77	4140	1.50	**MR 57** **MRF 57**	**Y..100L$_2$-4 AM100 AD2**
104	270	13.95	4100	1.55	**MR 57** **MRF 57**	**Y..100L$_2$-4 AM100 AD3**
122	230	11.88	3980	1.75		
135	210	10.79	3900	1.85		
156	184	9.35	3790	2.00		
161	178	9.06	3780	2.10		



n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
183	157	7.97	3670	2.30	**MR 57** **MRF 57**	**Y..100L$_2$-4 AM100 AD3**
193	148	7.53	3620	2.40		
227	126	6.41	3480	2.60		
250	115	5.82	3400	2.80		
288	99	5.05	3280	3.10		
331	86	4.39	3160	3.20		
130	220	21.93	3930	2.00	**MR 57** **MRF 57**	**Y..100L-2 AM100 AD2**
153	187	18.60	3800	2.40		
170	169	16.79	3720	2.70		
193	148	14.77	3610	2.90	**MR 57** **MRF 57**	**Y..100L-2 AM100 AD2**
204	140	13.95	3560	3.10	**MR 57** **MRF 57**	**Y..100L-2 AM100 AD3**
240	119	11.88	3420	3.40		
264	108	10.79	3340	3.60		
90.0	315	16.22	2200	0.85	**MR 47** **MRF 47**	**Y..100L$_2$-4 AM100 AD2**
100	285	14.56	2650	0.90		
116	245	12.54	3040	1.00		
123	230	11.79	3020	1.05	**MR 47** **MRF 47**	**Y..100L$_2$-4 AM100 AD2**
143	200	10.15	2950	1.15		
160	178	9.07	2890	1.25		
182	158	8.01	2820	1.30		
188	153	7.76	2720	1.05		
209	137	6.96	2660	1.15	**MR 47** **MRF 47**	**Y..100L$_2$-4 AM100 AD2**
243	118	6.00	2590	1.30		
258	111	5.64	2560	1.40		
300	96	4.85	2470	1.55		
336	85	4.34	2410	1.70		
380	75	3.83	2340	1.90	**MR 47** **MRF 47**	**Y..100L$_2$-4 AM100 AD3**
242	119	11.79	2660	2.10	**MR 47** **MRF 47**	**Y..100L-2 AM100 AD2**
281	102	10.15	2570	2.20		
314	91	9.07	2500	2.40		
356	80	8.01	2420	2.60		
368	78	7.76	2360	2.10		
409	70	6.96	2300	2.30		
475	60	6.00	2210	2.60		
505	57	5.64	2180	2.70	**MR 47** **MRF 47**	**Y..100L-2 AM100 AD2**
587	49	4.85	2090	3.10		
657	44	4.34	2030	3.40		
744	38	3.83	1960	3.70	**MR 47** **MRF 47**	**Y..100L-2 AM100 AD3**
144	199	10.11	920	0.85	**MR 37** **MRF 37**	**Y..100L$_2$-4 AM100 AD2**
154	186	9.47	1130	0.90		
182	157	7.97	1610	1.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
218	131	6.67	1350	1.10	**MR 37** **MRF 37**	**Y..100L$_2$-4 AM100 AD2**
257	112	5.67	1700	1.25		
288	100	5.06	1900	1.35		
337	85	4.32	2110	1.50		
360	80	4.05	2180	1.55		
427	67	3.41	2160	1.65		
282	102	10.11	2360	1.65	**MR 37** **MRF 37**	**Y..100L-2 AM100 AD2**
301	95	9.47	2370	1.75		
357	80	7.97	2280	1.95		
427	67	6.67	2160	2.20	**MR 37** **MRF 37**	**Y..100L-2 AM100 AD2**
503	57	5.67	2080	2.50		
563	51	5.06	2020	2.60		
660	43	4.32	1950	2.90		
704	41	4.05	1910	3.00		
836	34	3.41	1830	3.30		
260	110	5.60	450	0.90	**MR 27** **MRF 27**	**Y..100L$_2$-4 AM100 AD2**
291	98	5.00	695	0.95		
341	84	4.27	970	1.05		
364	79	4.00	1070	1.10		
432	66	3.37	1280	1.20		
432	66	6.59	1280	1.60	**MR 27** **MRF 27**	**Y..100L-2 AM100 AD2**
509	56	5.60	1320	1.75		
570	50	5.00	1300	1.90		
667	43	4.27	1260	2.00	**MR 27** **MRF 27**	**Y..100L-2 AM100 AD2**
712	40	4.00	1240	2.10		
846	34	3.37	1190	2.30		
225	127	6.45	7050	1.50	**MRX 87** **MRXF 87**	**Y..100L$_2$-4 AM100 AD3**
262	110	5.56	6760	2.00		
287	100	5.07	6580	2.50		
323	89	4.50	6350	3.30	**MRX 87** **MRXF 87**	**Y..100L$_2$-4 AM100 AD4**
385	74	3.78	6040	4.10		
308	93	4.73	5000	1.30	**MRX 77** **MRXF 77**	**Y..100L$_2$-4 AM100 AD3**
360	80	4.04	4780	1.80		
393	73	3.70	4670	2.10		
448	64	3.25	4500	2.80	**MRX 77** **MRXF 77**	**Y..100L$_2$-4 AM100 AD4**
472	61	3.08	4430	3.20		
386	74	3.77	3120	1.50	**MRX 67** **MRXF 67**	**Y..100L$_2$-4 AM100 AD2**
455	63	3.20	3000	1.60	**MRX 67** **MRXF 67**	**Y..100L$_2$-4 AM100 AD3**
504	57	2.89	2920	1.85		
572	50	2.54	2820	2.40		
606	47	2.40	2780	2.60		
712	40	2.04	2660	3.30		
783	37	1.86	2590	3.40		
904	32	1.61	2480	3.60		

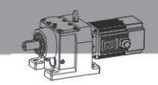


n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
1040	28	1.40	2380	3.80	**MRX 67 MRXF 67**	**Y..100L$_2$-4 AM100 AD3**
464	62	3.14	2310	1.05	**MRX 57 MRXF 57**	**Y..100L$_2$-4 AM100 AD2**
551	52	2.64	2220	1.35		
614	47	2.37	2160	1.50	**MRX 57 MRXF 57**	**Y..100L$_2$-4 AM100 AD3**
713	40	2.04	2080	1.70		
758	38	1.92	2050	1.85		
881	32	1.65	1970	2.10		
986	29	1.48	1910	2.30		
1115	26	1.30	1850	2.40		
P_1=4.00kw						
1.90	18400	760	120000	1.00	**MR 167 MRF97 MRF 167 MRF97**	**Y..112M-4 AM112 AD4**
1.70	20800	861	120000	0.85	**MR 167 MRF97 MRF 167 MRF97**	**Y..112M-4 AM112 AD5**
2.20	15600	656	120000	1.15		
2.90	12000	503	120000	1.50		
3.90	8990	376	120000	2.00	**MR 167 MRF97 MRF 167 MRF97**	**Y..112M-4 AM112 AD5**
4.40	8000	335	120000	2.20		
3.20	11000	462	66100	1.15	**MR 147 MRF87 MRF 147 MRF87**	**Y..112M-4 AM112 AD4**
2.70	12800	533	63000	1.00	**MR 147 MRF87 MRF 147 MRF87**	**Y..112M-4 AM112 AD5**
3.40	10300	426	67300	1.25		
4.00	8930	368	69200	1.45		
4.50	7890	326	70400	1.65		
5.20	6720	280	71600	1.95		
5.90	5930	247	72300	2.20		
6.80	5120	214	72900	2.50		
7.70	4530	189	73200	2.90		
9.20	3810	159	73600	3.40		
2.40	15100	619	48900	0.85	**MR 147 MRF77 MRF 147 MRF77**	**Y..112M-4 AM112 AD4**
2.60	13600	558	61400	0.95		
3.00	11900	489	64700	1.10		
3.50	10100	415	67600	1.30		
3.80	9300	381	44400	0.85	**MR 137 MRF77 MRF 137 MRF77**	**Y..112M-4 AM112 AD4**
4.50	7890	323	53600	1.00		
5.00	7100	291	55200	1.15		
5.70	6210	255	56700	1.30		
6.50	5440	223	57800	1.45		
3.90	9290	376	44600	0.85	**MR 137 MRF77 MRF 137 MRF77**	**Y..112M-4 AM112 AD3**
4.30	8360	339	52400	0.95		
4.90	7320	297	54800	1.10		
7.80	4550	187	28000	0.95	**MR 107 MRF77 MRF 107 MRF77**	**Y..112M-4 AM112 AD4**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
7.60	4750	193	24700	0.90	**MR 107 MRF77 MRF 107 MRF77**	**Y..112M-4 AM112 AD3**
8.50	4250	172	29700	1.00	**MR 107 MRF77 MRF 107 MRF77**	**Y..112M-4 AM112 AD4**
4.30	8850	222.60	50300	0.90	**MR 137 MRF 137**	**Y..132M$_1$-6 AM132 AD4**
5.10	7490	188.45	54400	1.05		
5.50	6930	174.40	55500	1.15		
6.10	6210	156.31	56700	1.30		
6.80	5610	141.12	57600	1.40	**MR 137 MRF 137**	**Y..132M$_1$-6 AM132 AD4**
7.50	5100	128.18	58300	1.55	**MR 137 MRF 137**	**Y..132M$_1$-6 AM132 AD4**
8.40	4520	113.72	59000	1.75		
9.30	4100	103.20	59400	1.95		
11.0	3520	88.70	59900	2.30		
8.50	4500	172.34	28300	0.95	**MR 107 MRF 107**	**Y..112M-4 AM112 AD3**
9.20	4150	158.68	30200	1.05		
10.0	3710	141.83	32300	1.15		
11.0	3340	127.68	33800	1.30		
13.0	3020	115.63	34900	1.40		
14.0	2680	102.53	35900	1.60		
16.0	2420	92.70	36200	1.75		
19.0	2050	78.57	34600	2.10		
20.0	1900	72.88	34000	2.30		
22.0	1710	65.60	33000	2.50	**MR 107 MRF 107**	**Y..112M-4 AM112 AD4**
25.0	1550	59.41	32100	2.80		
28.0	1370	52.68	31000	3.10	**MR 107 MRF 107**	**Y..112M-4 AM112 AD4**
13.0	3040	116.48	17900	1.00	**MR 97 MRF 97**	**Y..112M-4 AM112 AD3**
14.0	2700	103.44	22900	1.10		
16.0	2410	92.48	24500	1.25		
18.0	2170	83.15	25700	1.40		
20.0	1880	72.17	26500	1.60		
22.0	1700	65.21	25900	1.75		
24.0	1560	59.92	25300	1.90		
27.0	1390	53.21	24600	2.20		
31.0	1240	47.58	23900	2.40	**MR 97 MRF 97**	**Y..112M-4 AM112 AD4**
34.0	1110	42.78	23200	2.70		
39.0	970	37.13	22300	3.10		
44.0	860	33.25	21600	3.30		
46.0	830	32.05	21400	3.00	**MR 97 MRF 97**	**Y..112M-4 AM112 AD4**
54.0	710	27.19	20500	3.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
58.0	650	25.03	20000	4.30	**MR 97 MRF 97**	**Y..112M-4 AM112 AD5**
65.0	585	22.37	19300	4.60		
72.0	525	20.14	18700	5.00		
23.0	1660	63.68	13600	0.95	**MR 87 MRF 87**	**Y..112M-4 AM112 AD2**
24.0	1570	60.35	14200	1.00		
28.0	1380	52.82	15500	1.10		
31.0	1240	47.58	16200	1.25	**MR 87 MRF 87**	**Y..112M-4 AM112 AD2**
35.0	1090	41.74	17000	1.40	**MR 87 MRF 87**	**Y..112M-4 AM112 AD3**
40.0	960	36.84	17500	1.60		
45.0	850	32.66	17400	1.80		
52.0	725	27.88	16700	2.10		
42.0	900	34.40	17600	1.65	**MR 87 MRF 87**	**Y..112M-4 AM112 AD3**
46.0	820	31.40	17200	1.90		
52.0	725	27.84	16700	2.10	**MR 87 MRF 87**	**Y..112M-4 AM112 AD4**
62.0	610	23.40	16000	2.50		
68.0	560	21.51	15600	2.70		
76.0	495	19.10	15100	2.90		
85.0	445	17.08	14600	3.10		
95.0	400	15.35	14200	3.30		
110	345	13.33	13600	3.70		
122	310	11.93	13200	3.90		
40.0	960	36.83	7040	0.85	**MR 77 MRF 77**	**Y..112M-4 AM112 AD2**
44.0	870	33.47	9370	0.95		
50.0	755	29.00	10500	1.10		
58.0	660	25.23	10700	1.20		
62.0	610	23.37	10500	1.35	**MR 77 MRF 77**	**Y..112M-4 AM112 AD3**
68.0	560	21.43	10300	1.45		
78.0	490	18.80	10000	1.60		
82.0	465	17.82	9880	1.65		
94.0	405	15.60	9560	1.80		
104	365	14.05	9320	1.95		
118	320	12.33	9010	2.10		
134	280	10.88	8710	2.30		
151	250	9.64	8430	2.50		
170	220	8.59	8250	2.80	**MR 77 MRF 77**	**Y..112M-4 AM112 AD4**
189	200	7.74	8010	3.00		
215	178	6.79	7710	3.30		
244	157	5.99	7430	3.40		
275	139	5.31	7160	3.70		
73.0	520	19.89	7920	1.15	**MR 67 MRF 67**	**Y..112M-4 AM112 AD3**
81.0	465	17.95	7760	1.25		
92.0	410	15.79	7560	1.35		
98.0	390	14.91	7460	1.40		
115	330	12.70	7200	1.55		
127	300	11.54	7040	1.65		
146	260	10.00	6790	1.80		
168	225	8.70	6560	1.95		
187	200	7.79	6390	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
198	193	7.36	6300	1.90	**MR 67 MRF 67**	**Y..112M-4 AM112 AD3**
233	164	6.27	6030	2.00		
256	149	5.70	5870	2.10		
296	129	4.93	5640	2.20		
340	112	4.29	5420	2.40		
78.0	485	18.60	3660	0.90	**MR 57 MRF 57**	**Y..112M-4 AM112 AD2**
87.0	435	16.79	3820	1.00		
99.0	385	14.77	3790	1.15		
105	365	13.95	3770	1.20	**MR 57 MRF 57**	**Y..112M-4 AM112 AD3**
123	310	11.88	3700	1.30		
135	280	10.79	3650	1.40		
156	240	9.35	3570	1.50		
161	235	9.06	3570	1.60		
183	205	7.97	3490	1.70		
194	197	7.53	3450	1.80		
228	168	6.41	3330	2.00		
251	152	5.82	3260	2.10		
289	132	5.05	3160	2.30		
333	115	4.39	3050	2.40		
144	265	10.15	2060	0.85	**MR 47 MRF 47**	**Y..112M-4 AM112 AD2**
161	235	9.07	2440	0.95		
182	205	8.01	2630	1.00		
210	182	6.96	2470	0.85		
243	157	6.00	2420	1.00		
259	148	5.64	2400	1.05		
301	127	4.85	2340	1.20		
337	113	4.34	2290	1.30		
381	100	3.83	2230	1.45	**MR 47 MRF 47**	**Y..112M-4 AM112 AD3**
179	210	16.22	2640	1.30	**MR 47 MRF 47**	**Y..112M-2 AM112 AD2**
199	192	14.56	2600	1.40		
231	165	12.54	2530	1.50		
246	155	11.79	2500	1.60		
286	134	10.15	2430	1.70		
320	119	9.07	2380	1.85		
362	106	8.01	2320	1.95		
374	102	7.76	2240	1.60		
416	92	6.96	2190	1.75		
484	79	6.00	2120	1.95		
514	74	5.64	2090	2.10		
598	64	4.85	2020	2.40		
669	57	4.34	1960	2.60		
757	50	3.83	1900	2.80	**MR 47 MRF 47**	**Y..112M-2 AM112 AD3**
263	146	5.56	6580	1.55	**MRX 87 MRXF 87**	**Y..112M-4 AM112 AD3**
288	133	5.07	6420	1.90		
324	118	4.50	6210	2.50	**MRX 87 MRXF 87**	**Y..112M-4 AM112 AD4**
386	99	3.78	5910	3.10		

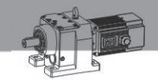


n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
361	106	4.04	4630	1.35	MRX 77	Y..112M-4
394	97	3.70	4530	1.60	MRXF 77	AM112
						AD3
449	85	3.25	4380	2.10		
474	81	3.08	4310	2.40		
542	70	2.70	4160	3.00		
601	64	2.43	4040	3.40	MRX 77	Y..112M-4
685	56	2.13	3890	3.60	MRXF 77	AM112
777	49	1.88	3750	3.80		AD4
876	44	1.67	3620	4.00		
1025	37	1.42	3450	4.20		
456	84	3.20	2860	1.20		
505	76	2.89	2790	1.40		
574	66	2.54	2710	1.75		
608	63	2.40	2670	1.95	MRX 67	Y..112M-4
714	54	2.04	2560	2.50	MRXF 67	AM112
786	49	1.86	2500	2.60		AD3
908	42	1.61	2400	2.70		
1045	37	1.40	2310	2.80		
553	69	2.64	1730	1.00	MRX 57	Y..112M-4
					MRXF 57	AM112
						AD2
616	62	2.37	1840	1.10		
715	53	2.04	1950	1.30		Y..112M-4
760	50	1.92	1950	1.35	MRX 57	AM112
884	43	1.65	1880	1.60	MRXF 57	AD3
989	39	1.48	1830	1.75		
1120	34	1.30	1780	1.85		
P_1=5.50kw						
2.20	21800	656	120000	0.85		
2.50	19000	579	120000	0.95		
2.90	16700	503	120000	1.10		
3.40	14200	432	120000	1.25	MR 167 MRF97	Y..132S-4
3.90	12500	376	120000	1.45	MRF 167 MRF97	AM132
4.30	11100	335	120000	1.60		AD5
4.80	9970	303	120000	1.80		
5.20	9190	279	120000	1.95		
3.20	15400	462	45000	0.85	MR 147 MRF87	Y..132S-4
					MRF 147 MRF87	AM132
						AD4
3.40	14300	426	58400	0.90		
4.00	12300	368	63900	1.05		
4.50	10900	326	66400	1.20		
5.20	9340	280	68700	1.40	MR 147 MRF87	Y..132S-4
5.90	8240	247	70000	1.60	MRF 147 MRF87	AM132
6.80	7120	214	71200	1.80		AD5
7.70	6300	189	72000	2.10		
5.90	8880	163.31	69300	1.45		
6.60	7990	146.91	70300	1.65	MR 147	Y..132M_2-6
8.00	6520	119.86	71800	2.00	MRF 147	AM132
						AD4

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
8.80	5940	109.31	72300	2.20	MR 147	Y..132M_2-6
10.0	5140	94.60	72800	2.50	MRF 147	AM132
12.0	4540	83.47	73200	2.90		AD4
5.50	9490	174.40	41100	0.85		
6.20	8500	156.31	51800	0.95		
6.80	7680	141.12	54100	1.05	MR 137	Y..132M_2-6
7.50	6970	128.18	55400	1.15	MRF 137	AM132
8.50	6180	113.72	56700	1.30		AD4
9.40	5610	103.20	57600	1.40	MR 137	Y..132M_2-6
					MRF 137	AM132
						AD4
6.50	8030	222.60	53300	1.00		
7.70	6800	188.45	55700	1.20		
8.30	6290	174.40	56600	1.25	MR 137	Y..132S-4
9.30	5640	156.31	57600	1.40	MRF 137	AM132
10.0	5090	141.12	58300	1.55		AD4
11.0	4620	128.18	58800	1.75		
13.0	4100	113.72	59400	1.95		
14.0	3720	103.20	59800	2.20		
16.0	3200	88.70	60200	2.50	MR 137	Y..132S-4
18.0	2920	80.91	60400	2.70	MRF 137	AM132
20.0	2650	73.49	60600	3.00		AD4
22.0	2350	65.20	60800	3.40		
25.0	2130	59.17	60900	3.80		
29.0	1830	50.86	61000	4.40	MR 137	Y..132S-4
					MRF 137	AM132
						AD5
11.0	4600	127.68	27700	0.95		
13.0	4170	115.63	30100	1.05		
14.0	3700	102.53	32300	1.15	MR 107	Y..132S-4
16.0	3340	92.7	33800	1.30	MRF 107	AM132
19.0	2830	78.57	33400	1.50		AD3
20.0	2630	72.88	32800	1.65		
22.0	2360	65.60	31900	1.80		
24.0	2140	59.41	31200	2.00		
28.0	1900	52.68	30200	2.30	MR 107	Y..132S-4
31.0	1710	47.63	29400	2.50	MRF 107	AM132
36.0	1450	40.37	28100	3.00		AD4
18.0	3000	83.15	19700	1.00		
20.0	2600	72.17	22000	1.15		
22.0	2350	65.21	24600	1.25	MR 97	Y..132S-4
24.0	2160	59.92	24200	1.40	MRF 97	AM132
27.0	1920	53.21	23500	1.55		AD3
31.0	1710	47.58	22900	1.75	MR 97	Y..132S-4
34.0	1540	42.78	22400	1.95	MRF 97	AM132
39.0	1340	37.13	21600	2.20		AD4
44.0	1200	33.25	21000	2.40	MR 97	Y..132S-4
53.0	990	27.58	20000	2.70	MRF 97	AM132
						AD4

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
45.0	1150	32.05	20800	2.20	MR 97	Y..132S-4
54.0	980	27.19	19900	2.60	MRF 97	AM132
						AD4
58.0	900	25.03	19500	3.10		
65.0	800	22.37	18900	3.40		
72.0	725	20.14	18400	3.60	MR 97	Y..132S-4
80.0	655	18.24	17900	3.80	MRF 97	AM132
90.0	580	16.17	17300	4.10		AD5
31.0	1710	47.58	15700	0.90	MR 87	Y..132S-4
					MRF 87	AM132
						AD2
35.0	1500	41.74	17200	1.05		
40.0	1320	36.84	17100	1.15	MR 87	Y..132S-4
45.0	1170	32.66	16700	1.30	MRF 87	AM132
52.0	1000	27.88	16100	1.50		AD3
52.0	1000	27.84	16100	1.55		
62.0	840	23.40	15400	1.85		
68.0	775	21.51	15100	1.95		
76.0	685	19.10	14600	2.10	MR 87	Y..132S-4
85.0	615	17.08	14200	2.30	MRF 87	AM132
95.0	550	15.35	13800	2.40		AD4
109	480	13.33	13300	2.70		
122	430	11.93	12900	2.90		
147	355	9.90	12200	3.30		
159	330	9.14	12100	3.70	MR 87	Y..132S-4
177	295	8.22	11700	3.90	MRF 87	AM132
204	255	7.13	11200	4.20		AD5
77.0	675	18.80	9300	1.15	MR 77	Y..132S-4
82.0	640	17.82	9370	1.20	MRF 77	AM132
93.0	560	15.60	9120	1.30		AD3
104	505	14.05	8920	1.40		
118	440	12.33	8650	1.55	MR 77	Y..132S-4
134	390	10.88	8400	1.70	MRF 77	AM132
151	345	9.64	8160	1.80		AD3
169	310	8.59	8040	2.00		
188	275	7.74	7820	2.20	MR 77	Y..132S-4
214	245	6.79	7540	2.40	MRF 77	AM132
243	215	5.99	7280	2.50		AD4
274	192	5.31	7040	2.70		
92.0	570	15.79	6700	1.00		
98.0	535	14.91	6990	1.00		
115	455	12.70	6790	1.15		
126	415	11.54	6670	1.20		
146	360	10.00	6480	1.30		
167	310	8.70	6280	1.40	MR 67	Y..132S-4
187	280	7.79	6160	1.35	MRF 67	AM132
198	265	7.36	6070	1.40		AD3
232	225	6.27	5840	1.45		
255	205	5.70	5700	1.50		
295	178	4.93	5490	1.65		
339	155	4.29	5290	1.75		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
332	158	8.70	5300	2.80		
371	142	7.79	5160	2.70		
393	134	7.36	5080	2.80	MR 67	Y..132S_1-2
461	114	6.27	4850	2.90	MRF 67	AM132
507	104	5.70	4720	3.00		AD3
586	90	4.93	4530	3.20		
673	78	4.29	4350	3.50		
98.0	530	14.77	1840	0.80	MR 57	Y..132S-4
					MRF 57	AM132
						AD2
104	500	13.95	2170	0.85	MR 57	Y..132S-4
122	425	11.88	2980	0.95	MRF 57	AM132
135	385	10.79	3270	1.00		AD3
156	335	9.35	3240	1.10		
183	285	7.97	3220	1.25		
193	270	7.53	3190	1.30	MR 57	Y..132S-4
227	230	6.41	3120	1.45	MRF 57	AM132
250	210	5.82	3070	1.50		AD3
288	182	5.05	2990	1.65		
331	158	4.39	2900	1.75		
309	170	9.35	2930	2.20	MR 57	Y..132S_1-2
363	145	7.97	2850	2.40	MRF 57	AM132
						AD3
384	137	7.53	2820	2.60		
451	116	6.41	2710	2.90	MR 57	Y..132S_1-2
496	106	5.82	2650	3.00	MRF 57	AM132
573	92	5.05	2560	3.30		AD3
658	80	4.39	2470	3.50		
300	175	4.85	1910	0.85	MR 47	Y..132S-4
336	156	4.34	2110	0.95	MRF 47	AM132
						AD2
380	138	3.83	2070	1.05	MR 47	Y..132S-4
					MRF 47	AM132
						AD3
230	225	12.54	1740	1.10		
245	210	11.79	1920	1.15		
285	184	10.15	2250	1.25		
319	165	9.07	2220	1.35	MR 47	Y..132S_1-2
361	146	8.01	2170	1.40	MRF 47	AM132
482	109	6.00	2000	1.45		AD2
512	102	5.64	1970	1.50		
595	88	4.85	1920	1.70		
666	79	4.34	1870	1.85		
754	70	3.83	1820	2.10	MR 47	Y..132S_1-2
					MRF 47	AM132
						AD3
220	235	6.63	10400	1.90	MRX 107	Y..132S-4
259	200	5.61	9930	2.20	MRXF 107	AM132
						AD4

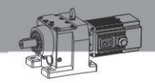


n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
280	187	5.19	9710	3.70	**MRX 107**	**Y..132S-4**
313	168	4.65	9410	4.10	**MRXF 107**	**AM132**
						AD5
251	205	5.79	8340	2.00	**MRX 97**	**Y..132S-4**
296	177	4.91	7970	2.20	**MRXF 97**	**AM132**
						AD4
322	163	4.52	7790	3.60	**MRX 97**	**Y..132S-4**
360	146	4.04	7540	4.10	**MRXF 97**	**AM132**
400	131	3.64	7320	4.50		**AD5**
441	119	3.30	7110	5.00		
498	106	2.92	6860	5.60		
551	95	2.64	6660	6.20		
650	81	2.24	6330	7.40		
744	71	1.96	6080	8.10		
889	59	1.64	5750	8.50		
1025	51	1.42	5500	8.90	**MRX 97**	**Y..132S-4**
					MRXF 97	**AM132**
						AD6
323	162	4.50	6010	1.80	**MRX 87**	**Y..132S-4**
385	136	3.78	5740	2.20	**MRXF 87**	**AM132**
						AD4
419	126	3.48	5610	3.20	**MRX 87**	**Y..132S-4**
471	111	3.09	5430	3.60	**MRXF 87**	**AM132**
527	100	2.76	5260	4.10		**AD5**
586	90	2.48	5110	4.50		
676	78	2.15	4900	5.00		
448	117	3.25	4200	1.55	**MRX 77**	**Y..132S-4**
472	111	3.08	4150	1.75	**MRXF 77**	**AM132**
540	97	2.70	4010	2.20		**AD4**
599	88	2.43	3900	2.40		
683	77	2.13	3770	2.60		
774	68	1.88	3640	2.80		
873	60	1.67	3520	2.90		
1020	51	1.42	3370	3.00		
572	92	2.54	2540	1.30	**MRX 67**	**Y..132S-4**
606	87	2.40	2520	1.40	**MRXF 67**	**AM132**
712	74	2.04	2420	1.80		**AD3**
783	67	1.86	2370	1.90		
904	58	1.61	2290	1.95	**MRX 67**	**Y..132S-4**
1040	50	1.40	2210	2.10	**MRXF 67**	**AM132**
						AD3
713	74	2.04	715	0.95	**MRX 57**	**Y..132S-4**
758	69	1.92	800	1.00	**MRXF 57**	**AM132**
881	60	1.65	980	1.15		**AD3**
986	53	1.48	1060	1.30		
1115	47	1.30	1190	1.35		
P_1=7.50kw						
2.90	22700	503	120000	0.80	**MR 167 MRF97**	**Y..132M-4**
3.40	19300	432	120000	0.95	**MRF 167 MRF97**	**AM132**
3.90	16900	376	120000	1.05		**AD5**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.50kw						
4.40	15100	335	120000	1.20	**MR 167 MRF97**	**Y..132M-4**
4.90	13500	303	120000	1.35	**MRF 167 MRF97**	**AM132**
5.30	12500	279	120000	1.45		**AD5**
4.50	14800	326	52600	0.90	**MR 147 MRF87**	**Y..132M-4**
5.20	12600	280	63300	1.05	**MRF 147 MRF87**	**AM132**
6.00	11100	247	66000	1.15		**AD5**
6.90	9660	214	68300	1.35		
7.80	8540	189	69700	1.50		
9.30	7180	159	71200	1.80		
7.80	9180	188.45	46500	0.85	**MR 137**	**Y..132M-4**
8.40	8490	174.40	51900	0.95	**MRF 137**	**AM132**
9.40	7610	156.31	54200	1.05		**AD4**
10.0	6870	141.12	55600	1.15		
11.0	6240	128.18	56700	1.30	**MR 137**	**Y..132M-4**
13.0	5540	113.72	57700	1.45	**MRF 137**	**AM132**
14.0	5020	103.20	58400	1.60		**AD4**
17.0	4320	88.70	59200	1.85		
18.0	3940	80.91	59600	2.00		
20.0	3580	73.49	59900	2.20		
23.0	3170	65.20	60200	2.50		
25.0	2880	59.17	60400	2.80		
29.0	2470	50.86	60700	3.20	**MR 137**	**Y..132M-4**
					MRF 137	**AM132**
						AD5
16.0	4510	92.70	28200	0.95	**MR 107**	**Y..132M-4**
19.0	3820	78.57	31600	1.10	**MRF 107**	**AM132**
20.0	3550	72.88	31100	1.20		**AD3**
22.0	3190	65.60	30400	1.35	**MR 107**	**Y..132M-4**
25.0	2890	59.41	29800	1.50	**MRF 107**	**AM132**
						AD4
28.0	2560	52.68	29000	1.70	**MR 107**	**Y..132M-4**
31.0	2320	47.63	28300	1.85	**MRF 107**	**AM132**
36.0	1960	40.37	27100	2.20		**AD4**
42.0	1710	35.26	26200	2.50		
50.0	1430	29.49	25000	3.00		
48.0	1490	30.77	25300	2.90	**MR 107**	**Y..132M-4**
53.0	1340	27.58	24600	3.20	**MRF 107**	**AM132**
59.0	1210	24.90	23900	3.50		**AD5**
65.0	1100	22.62	23200	3.90		
25.0	2910	59.92	21500	1.05	**MR 97**	**Y..132M-4**
28.0	2590	53.21	22100	1.15	**MRF 97**	**AM132**
						AD3
31.0	2310	47.58	21600	1.30	**MR 97**	**Y..132M-4**
34.0	2080	42.78	21200	1.45	**MRF 97**	**AM132**
40.0	1800	37.13	20600	1.65		**AD4**
44.0	1610	33.25	20100	1.80	**MR 97**	**Y..132M-4**
53.0	1340	27.58	19200	2.00	**MRF 97**	**AM132**
						AD4

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.50kw						
46.0	1560	32.05	19900	1.65	**MR 97**	**Y..132M-4**
54.0	1320	27.19	19200	1.95	**MRF 97**	**AM132**
						AD4
59.0	1210	25.03	18800	2.30	**MR 97**	**Y..132M-4**
66.0	1090	22.37	18300	2.50	**MRF 97**	**AM132**
73.0	980	20.14	17800	2.70		**AD5**
81.0	880	18.24	17300	2.80		
40.0	1790	36.84	14800	0.85	**MR 87**	**Y..132M-4**
45.0	1590	32.66	15600	0.95	**MRF 87**	**AM132**
53.0	1350	27.88	15200	1.10		**AD3**
53.0	1350	27.84	15200	1.15	**MR 87**	**Y..132M-4**
63.0	1140	23.40	14600	1.35	**MRF 87**	**AM132**
68.0	1040	21.51	14400	1.45		**AD4**
77.0	930	19.10	14000	1.55		
86.0	830	17.08	13600	1.65		
96.0	745	15.35	12600	1.80		
110	645	13.33	12800	1.95		
123	580	11.93	12500	2.10		
148	480	9.90	11900	2.40		
161	445	9.14	11800	2.70	**MR 87**	**Y..132M-4**
179	400	8.22	11500	2.90	**MRF 87**	**AM132**
206	345	7.13	11000	3.10		**AD5**
230	310	6.39	10700	3.30		
277	255	5.30	10100	3.50	**MR 87**	**Y..132M-4**
					MRF 87	**AM132**
						AD5
78.0	910	18.80	5530	0.85	**MR 77**	**Y..132M-4**
82.0	860	17.82	5920	0.90	**MRF 77**	**AM132**
94.0	755	15.60	6770	0.95		**AD3**
105	680	14.05	7310	1.05		
119	600	12.33	7850	1.15		
135	525	10.88	7960	1.25		
152	465	9.64	7770	1.35		
171	415	8.59	7690	1.50	**MR 77**	**Y..132M-4**
190	375	7.74	7540	1.60	**MRF 77**	**AM132**
216	330	6.79	7290	1.75		**AD4**
245	290	5.99	7060	1.85		
277	255	5.31	6840	1.95		
116	615	12.70	4420	0.85	**MR 67**	**Y..132M-4**
127	560	11.54	5020	0.90	**MRF 67**	**AM132**
147	485	10.00	5750	0.95		**AD3**
169	420	8.70	5900	1.05		
189	375	7.79	5610	1.00		
200	355	7.36	5760	1.05		
235	305	6.27	5560	1.10		
258	275	5.70	5450	1.10		
298	240	4.93	5270	1.20		
342	205	4.29	5100	1.30		
184	385	7.97	1130	0.90	**MR 57**	**Y..132M-4**
195	365	7.53	1420	0.95	**MRF 57**	**AM132**
229	310	6.41	2130	1.05		**AD3**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.50kw						
252	280	5.82	2470	1.15	**MR 57**	**Y..132M-4**
291	245	5.05	2750	1.25	**MRF 57**	**AM132**
335	210	4.39	2700	1.30		**AD3**
197	360	14.77	2590	1.20	**MR 57**	**Y..132S_2-2**
					MRF 57	**AM132**
						AD2
209	340	13.95	2800	1.25	**MR 57**	**Y..132S_2-2**
245	290	11.88	2780	1.40	**MRF 57**	**AM132**
270	265	10.79	2750	1.45		**AD3**
311	230	9.35	2700	1.60		
365	196	7.97	2660	1.80		
387	185	7.53	2640	1.90		
454	158	6.41	2560	2.10	**MR 57**	**Y..132S_2-2**
500	143	5.82	2520	2.20	**MRF 57**	**AM132**
						AD3
577	124	5.05	2440	2.50	**MR 57**	**Y..132S_2-2**
663	108	4.39	2370	2.60	**MRF 57**	**AM132**
						AD3
222	320	6.63	10000	1.45	**MRX 107**	**Y..132M-4**
262	270	5.61	9620	1.65	**MRXF 107**	**AM132**
						AD4
283	250	5.19	9420	2.80	**MRX 107**	**Y..132M-4**
316	225	4.65	9140	3.10	**MRXF 107**	**AM132**
350	200	4.20	8890	4.10		**AD5**
254	280	5.79	8020	1.50	**MRX 97**	**Y..132M-4**
299	235	4.91	7700	1.65	**MRXF 97**	**AM132**
						AD4
325	220	4.52	7530	2.70	**MRX 97**	**Y..132M-4**
364	197	4.04	7310	3.00	**MRXF 97**	**AM132**
404	177	3.64	7100	3.40		**AD5**
446	161	3.30	6910	3.70		
503	142	2.92	6680	4.20		
327	215	4.50	5720	1.30	**MRX 87**	**Y..132M-4**
389	184	3.78	5500	1.65	**MRXF 87**	**AM132**
						AD4
423	169	3.48	5380	2.40	**MRX 87**	**Y..132M-4**
476	150	3.09	5220	2.70	**MRXF 87**	**AM132**
533	134	2.76	5080	3.00		**AD5**
592	121	2.48	4940	3.40		
682	105	2.15	4750	3.70		
762	94	1.93	4610	3.80		
919	78	1.60	4370	4.00		
1055	68	1.39	4200	4.30		
452	158	3.25	3890	1.15	**MRX 77**	**Y..132M-4**
477	150	3.08	3910	1.30	**MRXF 77**	**AM132**
545	131	2.70	3800	1.65		**AD4**
605	118	2.43	3710	1.80		
690	104	2.13	3600	1.95		
782	92	1.88	3480	2.00		



MR

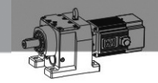
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.50kw						
882	81	1.67	3380	2.10	MRX 77	Y..132M-4
1035	69	1.42	3240	2.20	MRXF 77	AM132 AD4
578	124	2.54	1600	0.95	MRX 67	Y..132M-4
612	117	2.40	1700	1.05	MRXF 67	AM132
719	100	2.04	1890	1.35		AD3
792	90	1.86	2000	1.40		
914	78	1.61	2120	1.45	MRX 67	Y..132M-4
1050	68	1.40	2070	1.50	MRXF 67	AM132 AD3
P_1=11.0kw						
5.00	19100	295	120000	0.95	MR 167MRF107	Y..160M-4
5.50	17700	270	120000	1.00	MRF 167MRF107	AM160 AD6
6.40	15000	229	120000	1.20	MR 167MRF107	Y..160M-4
7.40	13000	200	120000	1.40	MRF 167MRF107	AM160
8.70	10900	169	120000	1.65		AD6
5.10	19400	291	120000	0.90	MR 167MRF107	Y..160M-4
					MRF 167MRF107	AM160 AD5
4.40	22200	335	120000	0.80	MR 167 MRF97	Y..160M-4
4.90	19900	303	120000	0.90	MRF 167 MRF97	AM160
5.30	18400	279	120000	1.00		AD5
6.00	16400	247	29900	0.80		
6.90	14100	214	60000	0.90	MR 147 MRF87	Y..160M-4
7.80	12500	189	63600	1.05	MRF 147 MRF87	AM160
9.30	10500	159	67000	1.25		AD5
6.40	16300	229.71	120000	1.10	MR 167	Y..160M-4
7.90	13300	186.93	120000	1.35	MRF 167	AM160 AD5
9.60	10900	153.07	120000	1.65		
11.0	9960	139.98	120000	1.80		
12.0	8670	121.81	120000	2.10	MR 167	Y..160M-4
14.0	7650	107.49	120000	2.40	MRF 167	AM160
16.0	6630	93.19	120000	2.70		AD5
18.0	5900	82.91	120000	3.00		
9.00	11600	163.31	65200	1.10		
10.0	10400	146.91	67100	1.25	MR 147	Y..160M-4
12.0	8530	119.86	69700	1.50	MRF 147	AM160 AD4
13.0	7780	109.31	70500	1.65		
16.0	6730	94.60	71600	1.95	MR 147	Y..160M-4
18.0	5940	83.47	72300	2.20	MRF 147	AM160 AD4
20.0	5130	72.09	72900	2.50		
22.0	4770	66.99	73100	2.70	MR 147	Y..160M-4
24.0	4350	61.09	73300	3.00	MRF 147	AM160
28.0	3760	52.87	73700	3.40		AD5

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
10.0	10000	141.12	28200	0.80		
12.0	9120	128.18	47300	0.90	MR 137	Y..160M-4
13.0	8090	113.72	53200	1.00	MRF 137	AM160
14.0	7340	103.20	54700	1.10		AD4
17.0	6310	88.70	56500	1.25		
18.0	5760	80.91	57400	1.40	MR 137	Y..160M-4
20.0	5230	73.49	58100	1.55	MRF 137	AM160
23.0	4640	65.20	58800	1.70		AD4
25.0	4210	59.17	59300	1.90		
29.0	3620	50.86	59900	2.20		
33.0	3160	44.39	60200	2.50	MR 137	Y..160M-4
39.0	2680	37.65	60600	3.00	MRF 137	AM160
45.0	2340	32.91	60800	3.40		AD5
22.0	4670	65.60	27300	0.90		
25.0	4230	59.41	27500	1.00		
28.0	3750	52.68	27000	1.15	MR 107	Y..160M-4
31.0	3390	47.63	26500	1.25	MRF 107	AM160
37.0	2870	40.37	25600	1.50		AD4
42.0	2510	35.26	24900	1.70		
50.0	2100	29.49	23900	2.00		
48.0	2190	30.77	24100	1.95		
53.0	1960	27.58	23500	2.20		
59.0	1770	24.90	22900	2.40	MR 107	Y..160M-4
65.0	1610	22.62	22400	2.70	MRF 107	AM160
74.0	1420	20.07	21700	3.00		AD5
81.0	1290	18.21	21100	3.30		
34.0	3040	42.78	18000	1.00		
40.0	2640	37.13	18900	1.15	MR 97	Y..160M-4
44.0	2360	33.25	18600	1.20	MRF 97	AM160
53.0	1960	27.58	18000	1.35		AD4
59.0	1780	25.03	17600	1.60	MR 97	Y..160M-4
66.0	1590	22.37	17200	1.70	MRF 97	AM160
73.0	1430	20.14	16800	1.80		AD5
81.0	1290	18.24	16500	1.90		
91.0	1150	16.17	16000	2.10		
101	1040	14.62	15600	2.20	MR 97	Y..160M-4
119	880	12.39	15000	2.50	MRF 97	AM160
136	770	10.83	14500	2.70		AD5
159	660	9.29	14200	3.10		
176	595	8.39	13800	3.40		
207	505	7.12	13100	4.00		
237	440	6.21	12600	4.30		
69.0	1530	21.51	13200	1.00	MR 87	Y..160M-4
77.0	1360	19.10	12900	1.05	MRF 87	AM160
86.0	1210	17.08	12700	1.15		AD4
96.0	1090	15.35	12500	1.25		
111	940	13.33	12100	1.35	MR 87	Y..160M-4
124	840	11.93	11800	1.45	MRF 87	AM160
149	705	9.90	11300	1.65		AD4

MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
161	650	9.14	11400	1.85		
179	585	8.22	11100	2.00		
207	505	7.13	10700	2.10	MR 87	Y..160M-4
231	455	6.39	10400	2.20	MRF 87	AM160
278	375	5.30	9840	2.40		AD5
136	770	10.88	4410	0.85	MR 77	Y..160M-4
153	685	9.64	5130	0.90	MRF 77	AM160
						AD3
191	550	7.74	4750	1.10		
217	480	6.79	5350	1.20	MR 77	Y..160M-4
246	425	5.99	5800	1.25	MRF 77	AM160
278	375	5.31	6150	1.35		AD4
284	365	5.19	8950	1.90		
317	330	4.65	8720	2.10	MRX 107	Y..160M-4
351	295	4.20	8510	2.80	MRXF 107	AM160
387	270	3.81	8300	3.00		AD5
436	240	3.38	8050	3.40		
480	215	3.07	7840	3.80	MRX 107	Y..160M-4
559	188	2.64	7520	4.40	MRXF 107	AM160 AD6
326	320	4.52	7120	1.85		
365	285	4.04	6940	2.10		
405	255	3.64	6760	2.30		
447	230	3.30	6600	2.50	MRX 97	Y..160M-4
505	205	2.92	6400	2.90	MRXF 97	AM160
558	188	2.64	6240	3.20		AD5
658	160	2.24	5970	3.70		
754	139	1.96	5750	4.10		
901	116	1.64	5470	4.30		
1040	101	1.42	5240	4.50	MRX 97	Y..160M-4
					MRXF 97	AM160 AD6
424	245	3.48	5000	1.65		
478	215	3.09	4880	1.85	MRX 87	Y..160M-4
534	197	2.76	4770	2.10	MRXF 87	AM160
594	177	2.48	4660	2.30		AD5
685	153	2.15	4500	2.50		
765	137	1.93	4380	2.60	MRX 87	Y..160M-4
922	114	1.60	4170	2.80	MRXF 87	AM160
1060	99	1.39	4020	2.90		AD5
607	173	2.43	1980	1.25		
692	152	2.13	2220	1.30	MRX 77	Y..160M-4
785	134	1.88	2400	1.40	MRXF 77	AM160
885	119	1.67	2530	1.45		AD4
1035	101	1.42	2630	1.55		
P_1=15.0kw						
6.40	20700	229	120000	0.85	MR 167MRF107	Y..160L-4
7.30	18000	200	120000	1.00	MRF 167MRF107	AM160
8.60	15200	169	120000	1.20		AD6

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
6.50	20800	227	120000	0.85	MR 167MRF107	Y..160L-4
					MRF 167MRF107	AM160 AD5
7.40	18100	198	120000	1.00	MR 167MRF107	Y..160L-4
					MRF 167MRF107	AM160 AD6
6.40	22400	229.71	120000	0.80	MR 167	Y..160L-4
7.80	18200	186.93	120000	1.00	MRF 167	AM160 AD5
9.60	14900	153.07	120000	1.20		
10.0	13600	139.98	120000	1.30		
12.0	11900	121.81	120000	1.50	MR 167	Y..160L-4
14.0	10500	107.49	120000	1.70	MRF 167	AM160
16.0	9110	93.19	120000	2.00		AD5
18.0	8100	82.91	120000	2.20		
20.0	7200	73.70	120000	2.50		
22.0	6580	67.40	120000	2.70	MR 167	Y..160L-4
					MRF 167	AM160 AD6
9.00	15900	163.31	37100	0.80		
10.0	14300	146.91	58000	0.90	MR 147	Y..160L-4
12.0	11700	119.86	65100	1.10	MRF 147	AM160
13.0	10600	109.31	66800	1.20		AD4
15.0	9240	94.60	68800	1.40	MR 147	Y..160L-4
18.0	8160	83.47	70100	1.60	MRF 147	AM160 AD4
20.0	7040	72.09	71300	1.85	MR 147	Y..160L-4
22.0	6540	66.99	71700	2.00	MRF 147	AM160 AD5
24.0	5970	61.09	72200	2.20		
28.0	5160	52.87	72800	2.50	MR 147	Y..160L-4
31.0	4560	46.65	73200	2.80	MRF 147	AM160 AD5
14.0	10000	103.20	27000	0.80		
17.0	8670	88.70	51100	0.90	MR 137	Y..160L-4
18.0	7910	80.91	53600	1.00	MRF 137	AM160
20.0	7180	73.49	55000	1.10		AD4
22.0	6370	65.20	56400	1.25	MR 137	Y..160L-4
25.0	5780	59.17	57400	1.40	MRF 137	AM160 AD4
29.0	4970	50.86	58400	1.60		
33.0	4340	44.39	59200	1.85	MR 137	Y..160L-4
39.0	3680	37.65	59800	2.20	MRF 137	AM160
45.0	3210	32.91	60200	2.50		AD5
53.0	2720	27.83	60500	2.80		
31.0	4650	47.63	24400	0.90		
36.0	3940	40.37	23900	1.10	MR 107	Y..160L-4
42.0	3440	35.26	23400	1.25	MRF 107	AM160
50.0	2880	29.49	22600	1.50		AD4



MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
48.0	3000	30.77	22800	1.45	**MR 107** **MRF 107**	**Y..160L-4** **AM160** **AD5**
53.0	2690	27.58	22300	1.60		
59.0	2430	24.90	21900	1.75		
65.0	2210	22.62	21400	1.95		
73.0	1960	20.07	20900	2.20		
80.0	1780	18.21	20400	2.40		
94.0	1530	15.65	19700	2.80		
107	1330	13.66	19000	3.20	**MR 107** **MRF 107**	**Y..160L-4** **AM160** **AD6**
53.0	2690	27.58	16500	1.00	**MR 97** **MRF 97**	**Y..160L-4** **AM160** **AD4**
59.0	2440	25.03	16300	1.15	**MR 97** **MRF 97**	**Y..160L-4** **AM160** **AD5**
65.0	2180	22.37	16100	1.25		
73.0	1960	20.14	15800	1.35		
80.0	1780	18.24	15500	1.40		
91.0	1580	16.17	15200	1.50		
100	1420	14.62	14900	1.60		
118	1210	12.39	14400	1.80		
135	1050	10.83	14000	1.95		
158	900	9.29	13800	2.20		
175	820	8.39	13400	2.50	**MR 97** **MRF 97**	**Y..160L-4** **AM160** **AD5**
206	695	7.12	12800	2.90		
236	605	6.21	12400	3.10		
86.0	1660	17.08	11600	0.85	**MR 87** **MRF 87**	**Y..160L-4** **AM160** **AD4**
95.0	1500	15.35	11500	0.90		
110	1300	13.33	11300	1.00		
123	1160	11.93	11100	1.05		
148	960	9.90	10700	1.20	**MR 87** **MRF 87**	**Y..160L-4** **AM160** **AD4**
160	890	9.14	11000	1.35	**MR 87** **MRF 87**	**Y..160L-4** **AM160** **AD5**
178	800	8.22	10700	1.45		
205	695	7.13	10300	1.55		
229	620	6.39	10100	1.65		
276	515	5.30	9590	1.75		
282	505	5.19	8430	1.35	**MRX 107** **MRXF 107**	**Y..160L-4** **AM160** **AD5**
315	450	4.65	8250	1.55		
349	410	4.20	8080	2.00		
384	370	3.81	7920	2.20		
433	330	3.38	7700	2.50	**MRX 107** **MRXF 107**	**Y..160L-4** **AM160** **AD5**
477	300	3.07	7530	2.80	**MRX 107** **MRXF 107**	**Y..160L-4** **AM160** **AD6**
555	255	2.64	7250	3.20		
636	225	2.30	7000	3.70		
750	191	1.95	6700	4.00		
858	167	1.71	6460	4.20		
1015	141	1.44	6160	4.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
324	440	4.52	6660	1.35	**MRX 97** **MRXF 97**	**Y..160L-4** **AM160** **AD5**
362	395	4.04	6520	1.50		
402	355	3.64	6390	1.65		
444	320	3.30	6260	1.85		
501	285	2.92	6100	2.10		
554	255	2.64	5960	2.30		
654	215	2.24	5730	2.70		
749	191	1.96	5540	3.00	**MRX 97** **MRXF 97**	**Y..160L-4** **AM160** **AD5**
895	160	1.64	5290	3.20		
1035	138	1.42	5080	3.30	**MRX 97** **MRXF 97**	**Y..160L-4** **AM160** **AD6**
421	335	3.48	4280	1.20	**MRX 87** **MRXF 87**	**Y..160L-4** **AM160** **AD5**
475	300	3.09	4500	1.35		
531	265	2.76	4420	1.50		
590	240	2.48	4340	1.65		
680	210	2.15	4230	1.85		
760	189	1.93	4130	1.90	**MRX 87** **MRXF 87**	**Y..160L-4** **AM160** **AD5**
916	156	1.60	3960	2.00		
1055	136	1.39	3840	2.10		
P_1=18.5kw						
7.80	22500	186.93	120000	0.80	**MR 167** **MRF 167**	**Y..180M-4** **AM180** **AD5**
9.60	18400	153.07	120000	1.00		
10.0	16800	139.98	120000	1.05		
12.0	14600	121.81	120000	1.25		
14.0	12900	107.49	120000	1.40	**MR 167** **MRF 167**	**Y..180M-4** **AM180** **AD5**
16.0	11200	93.19	120000	1.60		
18.0	9990	82.91	120000	1.80		
20.0	8880	73.70	120000	2.00		
22.0	8120	67.40	120000	2.20	**MR 167** **MRF 167**	**Y..180M-4** **AM180** **AD6**
25.0	7070	58.65	120000	2.60		
12.0	14400	119.86	57000	0.90	**MR 147** **MRF 147**	**Y..180M-4** **AM180** **AD4**
13.0	13100	109.31	62300	1.00		
15.0	11400	94.60	65600	1.15		
18.0	10000	83.47	67700	1.30	**MR 147** **MRF 147**	**Y..180M-4** **AM180** **AD4**
20.0	8690	72.09	69500	1.50	**MR 147** **MRF 147**	**Y..180M-4** **AM180** **AD5**
22.0	8070	66.99	70200	1.60		
24.0	7360	61.09	71000	1.75		
28.0	6370	52.87	71900	2.00		
31.0	5620	46.65	72500	2.30		
36.0	4850	40.29	73000	2.70	**MR 147** **MRF 147**	**Y..180M-4** **AM180** **AD6**

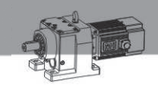
MR

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=18.5kw						
18.0	9750	80.91	35600	0.80	**MR 137** **MRF 137**	**Y..180M-4** **AM180** **AD4**
20.0	8860	73.49	50200	0.90		
22.0	7860	65.20	53700	1.00		
25.0	7130	59.17	55100	1.10		
29.0	6130	50.86	56800	1.30	**MR 137** **MRF 137**	**Y..180M-4** **AM180** **AD5**
33.0	5350	44.39	58000	1.50		
39.0	4540	37.65	58900	1.75		
45.0	3960	32.91	59500	2.00		
53.0	3350	27.83	60100	2.30		
50.0	3560	29.57	59900	2.20	**MR 137** **MRF 137**	**Y..180M-4** **AM180** **AD6**
61.0	2900	24.12	60400	2.80		
67.0	2650	22.00	60600	3.00	**MR 137** **MRF 137**	**Y..180M-4** **AM180** **AD7**
77.0	2290	19.04	60800	3.50		
87.0	2020	16.80	60900	4.00		
36.0	4860	40.37	20200	0.90	**MR 107** **MRF 107**	**Y..180M-4** **AM180** **AD4**
42.0	4250	35.26	22000	1.00		
50.0	3550	29.49	21500	1.20		
59.0	3000	24.90	20900	1.45	**MR 107** **MRF 107**	**Y..180M-4** **AM180** **AD5**
65.0	2720	22.62	20600	1.60		
73.0	2410	20.07	20100	1.80		
80.0	2190	18.21	19700	1.95		
94.0	1880	15.65	19100	2.30		
107	1640	13.66	18500	2.60	**MR 107** **MRF 107**	**Y..180M-4** **AM180** **AD6**
126	1390	11.59	17800	3.10		
145	1220	10.13	17200	3.50		
186	940	7.86	16300	3.10		
220	800	6.66	15600	3.70		
73.0	2420	20.14	14900	1.05	**MR 97** **MRF 97**	**Y..180M-4** **AM180** **AD5**
80.0	2190	18.24	14700	1.15		
91.0	1950	16.17	14500	1.25		
100	1760	14.62	14200	1.30		
118	1490	12.39	13800	1.45		
135	1300	10.83	13500	1.60		
158	1110	9.29	13400	1.80		
175	1010	8.39	13100	2.00		
206	850	7.12	12600	2.30		
236	745	6.21	12100	2.50		
282	625	5.20	11600	2.80	**MR 97** **MRF 97**	**Y..180M-4** **AM180** **AD6**
326	540	4.50	11100	3.00		
110	1600	13.33	10600	0.80	**MR 87** **MRF 87**	**Y..180M-4** **AM180** **AD4**
123	1430	11.93	10400	0.85		
148	1190	9.90	10200	1.00		
160	1100	9.14	10600	1.10	**MR 87** **MRF 87**	**Y..180M-4** **AM180** **AD5**
178	990	8.22	10300	1.15		
205	860	7.13	10000	1.25		
229	770	6.39	9770	1.30		
276	635	5.30	9350	1.40		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=18.5kw						
349	505	4.20	7710	1.65	**MRX 107** **MRXF 107**	**Y..180M-4** **AM180** **AD5**
384	460	3.81	7580	1.80		
433	405	3.38	7400	2.00		
477	370	3.07	7250	2.20	**MRX 107** **MRXF 107**	**Y..180M-4** **AM180** **AD6**
555	315	2.64	7000	2.60		
636	275	2.30	6780	3.00		
750	235	1.95	6510	3.20		
858	205	1.71	6290	3.40		
1015	174	1.44	6020	3.70		
402	435	3.64	6060	1.35	**MRX 97** **MRXF 97**	**Y..180M-4** **AM180** **AD5**
444	395	3.30	5960	1.50		
501	350	2.92	5830	1.70		
554	315	2.64	5710	1.85		
654	270	2.24	5510	2.20		
749	235	1.96	5350	2.40		
895	197	1.64	5120	2.60		
1035	171	1.42	4940	2.70	**MRX 97** **MRXF 97**	**Y..180M-4** **AM180** **AD6**
531	330	2.76	3040	1.20	**MRX 87** **MRXF 87**	**Y..180M-4** **AM180** **AD5**
590	295	2.48	3340	1.35		
680	255	2.15	3630	1.50		
760	230	1.93	3820	1.55		
916	193	1.60	3770	1.65		
1055	168	1.39	3660	1.75		
P_1=22.0kw						
9.60	21800	153.07	120000	0.85	**MR 167** **MRF 167**	**Y..180L-4** **AM180** **AD5**
11.0	19900	139.98	120000	0.90		
12.0	17300	121.81	120000	1.05		
14.0	15300	107.49	120000	1.20	**MR 167** **MRF 167**	**Y..180L-4** **AM180** **AD5**
16.0	13200	93.19	120000	1.35		
18.0	11800	82.91	120000	1.50		
20.0	10400	73.70	120000	1.70		
22.0	9590	67.40	120000	1.90	**MR 167** **MRF 167**	**Y..180L-4** **AM180** **AD6**
25.0	8350	58.65	120000	2.20		
28.0	7370	51.76	120000	2.40		
33.0	6390	44.87	120000	2.80	**MR 167** **MRF 167**	**Y..180L-4** **AM180** **AD7**
13.0	15500	109.31	42800	0.85	**MR 147** **MRF 147**	**Y..180L-4** **AM180** **AD4**
16.0	13400	94.60	61700	0.95		
18.0	11800	83.47	64800	1.10		
20.0	10200	72.09	67400	1.25	**MR 147** **MRF 147**	**Y..180L-4** **AM180** **AD5**
22.0	9540	66.99	68400	1.35	**MR 147** **MRF 147**	**Y..180L-4** **AM180** **AD5**
24.0	8700	61.09	69500	1.50		
28.0	7530	52.87	70800	1.75		
32.0	6640	46.65	71700	1.95		

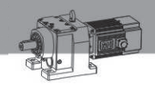
n₂ [1/min]	M₂ [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P₁=22.0kw						
37.0	5730	40.29	72400	2.30	**MR 147 MRF 147**	**Y..180L-4 AM180 AD6**
41.0	5070	35.64	72900	2.60	**MR 147 MRF 147**	**Y..180L-4 AM180 AD7**
49.0	4260	29.95	73400	3.00		
23.0	9280	65.20	44700	0.85	**MR 137 MRF 137**	**Y..180L-4 AM180 AD4**
25.0	8420	59.17	52200	0.95		
29.0	7240	50.86	54900	1.10	**MR 137 MRF 137**	**Y..180L-4 AM180 AD5**
33.0	6320	44.39	56500	1.25		
39.0	5360	37.65	57900	1.50	**MR 137 MRF 137**	**Y..180L-4 AM180 AD5**
45.0	4680	32.91	58800	1.70		
53.0	3960	27.83	59500	1.95		
50.0	4210	29.57	59300	1.85	**MR 137 MRF 137**	**Y..180L-4 AM180 AD6**
61.0	3430	24.12	60000	2.30		
67.0	3130	22.00	60200	2.60	**MR 137 MRF 137**	**Y..180L-4 AM180 AD7**
77.0	2710	19.04	60500	3.00		
88.0	2390	16.80	60700	3.30	**MR 137 MRF 137**	**Y..180L-4 AM180 AD7**
102	2060	14.51	60900	3.90		
115	1820	12.83	61000	4.40		
42.0	5020	35.26	10900	0.85	**MR 107 MRF 107**	**Y..180L-4 AM180 AD4**
50.0	4200	29.49	20400	1.00		
59.0	3540	24.90	20000	1.20	**MR 107 MRF 107**	**Y..180L-4 AM180 AD5**
65.0	3220	22.62	19700	1.35		
74.0	2850	20.07	19300	1.50		
81.0	2590	18.21	19000	1.65	**MR 107 MRF 107**	**Y..180L-4 AM180 AD5**
94.0	2220	15.65	18400	1.95		
108	1940	13.66	17900	2.20	**MR 107 MRF 107**	**Y..180L-4 AM180 AD6**
127	1650	11.59	17300	2.60		
146	1440	10.13	16800	3.00		
172	1210	8.56	16100	3.50		
221	940	6.66	15300	3.10	**MR 107 MRF 107**	**Y..180L-4 AM180 AD6**
253	820	5.82	14800	3.60		
73.0	2860	20.14	14000	0.90	**MR 97 MRF 97**	**Y..180L-4 AM180 AD5**
81.0	2590	18.24	13900	0.95		
91.0	2300	16.17	13700	1.05		
101	2080	14.62	13500	1.10		

n₂ [1/min]	M₂ [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P₁=22.0kw						
119	1760	12.39	13200	1.25	**MR 97 MRF 97**	**Y..180L-4 AM180 AD5**
136	1540	10.83	12900	1.35		
159	1320	9.29	13100	1.55		
176	1190	8.39	12800	1.70		
207	1010	7.12	12300	1.95		
237	880	6.21	11900	2.10		
284	740	5.20	11300	2.40	**MR 97 MRF 97**	**Y..180L-4 AM180 AD6**
328	640	4.50	10900	2.50		
149	1410	9.90	9640	0.85	**MR 87 MRF 87**	**Y..180L-4 AM180 AD4**
161	1300	9.14	10100	0.95	**MR 87 MRF 87**	**Y..180L-4 AM180 AD5**
179	1170	8.22	9950	1.00		
207	1010	7.13	9680	1.05		
231	900	6.39	9470	1.10		
278	750	5.30	9100	1.20		
351	595	4.20	7330	1.40	**MRX 107 MRXF 107**	**Y..180L-4 AM180 AD5**
387	540	3.81	7220	1.55		
436	480	3.38	7080	1.70		
480	435	3.07	6950	1.90	**MRX 107 MRXF 107**	**Y..180L-4 AM180 AD6**
559	375	2.64	6750	2.20		
640	325	2.30	6550	2.50	**MRX 107 MRXF 107**	**Y..180L-4 AM180 AD6**
755	275	1.95	6310	2.80		
863	240	1.71	6110	2.90		
1020	205	1.44	5860	3.10		
405	515	3.64	5720	1.15	**MRX 97 MRXF 97**	**Y..180L-4 AM180 AD5**
447	465	3.30	5650	1.25		
505	415	2.92	5550	1.45		
558	375	2.64	5460	1.60		
658	315	2.24	5290	1.85		
754	275	1.96	5150	2.00		
901	230	1.64	4950	2.20		
1040	200	1.42	4780	2.20	**MRX 97 MRXF 97**	**Y..180L-4 AM180 AD6**
534	390	2.76	1310	1.05	**MRX 87 MRXF 87**	**Y..180L-4 AM180 AD5**
594	350	2.48	1750	1.15		
685	305	2.15	2190	1.25	**MRX 87 MRXF 87**	**Y..180L-4 AM180 AD5**
765	270	1.93	2480	1.30		
922	225	1.60	2780	1.40		
1060	198	1.39	3060	1.45		
P₁=30.0kw						
14.0	20800	107.49	120000	0.85	**MR 167 MRF 167**	**Y..200L-4 AM200 AD5**
16.0	18000	93.19	120000	1.00		
18.0	16100	82.91	120000	1.10		



n₂ [1/min]	M₂ [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P₁=30.0kw						
20.0	14300	73.70	120000	1.25	**MR 167 MRF 167**	**Y..200L-4 AM200 AD5**
22.0	13000	67.40	120000	1.40	**MR 167 MRF 167**	**Y..200L-4 AM200 AD6**
25.0	11300	58.65	120000	1.60		
28.0	10000	51.76	120000	1.80		
33.0	8710	44.87	120000	2.10	**MR 167 MRF 167**	**Y..200L-4 AM200 AD7**
37.0	7750	39.92	120000	2.30		
43.0	6680	34.41	120000	2.70		
53.0	5430	27.96	120000	3.30	**MR 167 MRF 167**	**Y..200L-4 AM200 AD8**
62.0	4600	23.71	120000	3.90		
18.0	16200	83.47	33300	0.80	**MR 147 MRF 147**	**Y..200L-4 AM200 AD4**
20.0	14000	72.09	60500	0.95	**MR 147 MRF 147**	**Y..200L-4 AM200 AD5**
22.0	13000	66.99	62600	1.00		
24.0	11800	61.09	64800	1.10		
28.0	10200	52.87	67400	1.25		
32.0	9060	46.65	69000	1.45		
37.0	7820	40.29	70500	1.65	**MR 147 MRF 147**	**Y..200L-4 AM200 AD6**
41.0	6920	35.64	71400	1.90	**MR 147 MRF 147**	**Y..200L-4 AM200 AD7**
49.0	5810	29.95	72400	2.20		
61.0	4690	24.19	73100	2.50		
72.0	3960	20.44	73600	3.00	**MR 147 MRF 147**	**Y..200L-4 AM200 AD8**
82.0	3500	18.04	73800	3.00		
94.0	3030	15.64	74000	4.30		
29.0	9870	50.86	32800	0.80	**MR 137 MRF 137**	**Y..200L-4 AM200 AD5**
33.0	8620	44.39	51300	0.95		
39.0	7310	37.65	54800	1.10		
45.0	6390	32.91	56400	1.25		
53.0	5400	27.83	57900	1.40	**MR 137 MRF 137**	**Y..200L-4 AM200 AD5**
61.0	4680	24.12	58800	1.70	**MR 137 MRF 137**	**Y..200L-4 AM200 AD6**
67.0	4270	22.00	59200	1.85	**MR 137 MRF 137**	**Y..200L-4 AM200 AD7**
77.0	3690	19.04	59800	2.20		
88.0	3260	16.80	60100	2.40		
102	2810	14.51	59500	2.80	**MR 137 MRF 137**	**Y..200L-4 AM200 AD7**
115	2490	12.83	58400	3.20		
137	2090	10.79	56600	3.80		
194	1470	7.59	53300	3.50		
231	1230	6.38	51200	4.10		

n₂ [1/min]	M₂ [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P₁=30.0kw						
74.0	3890	20.07	17600	1.10	**MR 107 MRF 107**	**Y..200L-4 AM200 AD5**
81.0	3530	18.21	17400	1.20		
94.0	3030	15.65	17100	1.40		
108	2650	13.66	16800	1.60	**MR 107 MRF 107**	**Y..200L-4 AM200 AD6**
127	2250	11.59	16300	1.90		
146	1960	10.13	15900	2.20		
172	1660	8.56	15400	2.60		
188	1520	7.86	15500	1.95		
221	1290	6.66	14900	2.30		
253	1130	5.82	14400	2.60		
300	950	4.92	13700	3.00		
101	2840	14.62	12000	0.80	**MR 97 MRF 97**	**Y..200L-4 AM200 AD5**
119	2400	12.39	11900	0.90		
136	2100	10.83	11800	1.00		
159	1800	9.29	12300	1.15		
176	1630	8.39	12100	1.25		
207	1380	7.12	11700	1.45	**MR 97 MRF 97**	**Y..200L-4 AM200 AD5**
237	1200	6.21	11300	1.55		
284	1000	5.20	10900	1.75	**MR 97 MRF 97**	**Y..200L-4 AM200 AD6**
328	870	4.50	10500	1.85		
436	655	3.38	6370	1.25	**MRX 107 MRXF 107**	**Y..200L-4 AM200 AD5**
480	595	3.07	6300	1.40	**MRX 107 MRXF 107**	**Y..200L-4 AM200 AD6**
559	510	2.64	6180	1.60		
640	445	2.30	6050	1.85		
755	375	1.95	5870	2.00		
863	330	1.71	5710	2.10	**MRX 107 MRXF 107**	**Y..200L-4 AM200 AD6**
1020	280	1.44	5520	2.30		
505	565	2.92	3140	1.05	**MRX 97 MRXF 97**	**Y..200L-4 AM200 AD5**
558	510	2.64	3580	1.15		
658	435	2.24	4070	1.35		
754	380	1.96	4460	1.50		
901	315	1.64	4570	1.60		
1040	275	1.42	4450	1.65	**MRX 97 MRXF 97**	**Y..200L-4 AM200 AD6**
P₁=37.0kw						
16.0	22200	93.19	120000	0.80	**MR 167 MRF 167**	**Y..225S-4 AM225 AD5**
18.0	19800	82.91	120000	0.90		
20.0	17600	73.70	120000	1.00		
22.0	16100	67.40	120000	1.10	**MR 167 MRF 167**	**Y..225S-4 AM225 AD6**
25.0	14000	58.65	120000	1.30		
29.0	12300	51.76	120000	1.45		



n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=37.0kw						
33.0	10700	44.87	120000	1.70	MR 167 MRF 167	Y..225S-4 AM225 AD7
37.0	9540	39.92	120000	1.90		
43.0	8230	34.41	120000	2.20		
53.0	6680	27.96	120000	2.70	MR 167 MRF 167	Y..225S-4 AM225 AD8
48.0	7340	30.71	120000	1.35	MR 167 MRF 167	Y..225S-4 AM225 AD6
60.0	5870	24.57	120000	2.40	MR 167 MRF 167	Y..225S-4 AM225 AD8
68.0	5220	21.85	120000	2.50		
78.0	4550	19.03	120000	3.50		
87.0	4060	16.98	120000	3.70	MR 167 MRF 167	Y..225S-4 AM225 AD8
22.0	16000	66.99	36200	0.80	MR 147 MRF 147	Y..225S-4 AM225 AD5
24.0	14600	61.09	55000	0.90		
28.0	12600	52.87	63400	1.05		
32.0	11100	46.65	66000	1.15	MR 147 MRF 147	Y..225S-4 AM225 AD5
37.0	9630	40.29	68300	1.35	MR 147 MRF 147	Y..225S-4 AM225 AD6
41.0	8520	35.64	69700	1.50	MR 147 MRF 147	Y..225S-4 AM225 AD7
49.0	7160	29.95	71200	1.80		
61.0	5780	24.19	72400	2.10		
72.0	4880	20.44	73000	2.40	MR 147 MRF 147	Y..225S-4 AM225 AD8
82.0	4310	18.04	73400	2.40		
94.0	3740	15.64	73700	3.50		
106	3320	13.91	73900	3.80	MR 147 MRF 147	Y..225S-4 AM225 AD8
39.0	9000	37.65	49200	0.90	MR 137 MRF 137	Y..225S-4 AM225 AD5
45.0	7870	32.91	53700	1.00		
53.0	6650	27.83	56000	1.15		
61.0	5770	24.12	57400	1.40	MR 137 MRF 137	Y..225S-4 AM225 AD6
67.0	5260	22.00	58100	1.50	MR 137 MRF 137	Y..225S-4 AM225 AD7
78.0	4550	19.04	57800	1.75		
88.0	4010	16.80	57300	2.00		
102	3470	14.51	56500	2.30	MR 137 MRF 137	Y..225S-4 AM225 AD7
115	3070	12.83	55700	2.60		
137	2580	10.79	54400	3.10		
170	2080	8.71	52500	3.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=37.0kw						
195	1810	7.59	51800	2.80	MR 137 MRF 137	Y..225S-4 AM225 AD7
232	1520	6.38	50000	3.40		
287	1230	5.15	47700	3.70		
74.0	4800	20.07	16100	0.90	MR 107 MRF 107	Y..225S-4 AM225 AD5
81.0	4350	18.21	16100	1.00		
94.0	3740	15.65	15900	1.15		
108	3260	13.66	15700	1.30	MR 107 MRF 107	Y..225S-4 AM225 AD6
127	2770	11.59	15400	1.55		
146	2420	10.13	15100	1.75		
172	2040	8.56	14700	2.10		
188	1870	7.86	15000	1.60		
222	1590	6.66	14400	1.85		
254	1390	5.82	14000	2.10		
300	1170	4.92	13400	2.50		
436	800	3.38	4510	1.05	MRX 107 MRXF 107	Y..225S-4 AM225 AD5
481	730	3.07	4990	1.15	MRX 107 MRXF 107	Y..225S-4 AM225 AD6
559	630	2.64	5560	1.30		
641	550	2.30	5610	1.50		
756	465	1.95	5480	1.65		
865	405	1.71	5370	1.70		
1025	345	1.44	5220	1.85		
P_1=45.0kw						
20.0	21400	73.70	120000	0.85	MR 167 MRF 167	Y..225M-4 AM225 AD5
22.0	19500	67.40	120000	0.90	MR 167 MRF 167	Y..225M-4 AM225 AD6
25.0	17000	58.65	120000	1.05		
29.0	15000	51.76	120000	1.20		
33.0	13000	44.87	120000	1.40	MR 167 MRF 167	Y..225M-4 AM225 AD7
37.0	11600	39.92	120000	1.55		
43.0	10000	34.41	120000	1.80		
53.0	8120	27.96	120000	2.20	MR 167 MRF 167	Y..225M-4 AM225 AD8
62.0	6890	23.71	120000	2.60		
48.0	8920	30.71	120000	1.10	MR 167 MRF 167	Y..225M-4 AM225 AD6
60.0	7140	24.57	120000	1.95	MR 167 MRF 167	Y..225M-4 AM225 AD8
68.0	6350	21.85	120000	2.00		
78.0	5530	19.03	120000	2.90		
87.0	4930	16.98	120000	3.00		
28.0	15300	52.87	45500	0.85	MR 147 MRF 147	Y..225M-4 AM225 AD5
32.0	13500	46.65	61500	0.95		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=45.0kw						
37.0	11700	40.29	65100	1.10	MR 147 MRF 147	Y..225M-4 AM225 AD6
41.0	10300	35.64	67300	1.25	MR 147 MRF 147	Y..225M-4 AM225 AD7
49.0	8700	29.95	69500	1.50		
61.0	7030	24.19	71300	1.70		
72.0	5940	20.44	72300	2.00	MR 147 MRF 147	Y..225M-4 AM225 AD8
82.0	5240	18.04	72800	2.00		
95.0	4540	15.64	73200	2.90		
106	4040	13.91	73500	3.10		
123	3480	11.99	73800	3.70		
204	2100	7.25	74300	4.10		
45.0	9560	32.91	39600	0.85	MR 137 MRF 137	Y..225M-4 AM225 AD5
53.0	8090	27.83	51300	0.95		
61.0	7010	24.12	52400	1.15	MR 137 MRF 137	Y..225M-4 AM225 AD6
67.0	6390	22.00	52900	1.25	MR 137 MRF 137	Y..225M-4 AM225 AD7
78.0	5530	19.04	53300	1.45		
88.0	4880	16.80	53400	1.65		
102	4210	14.51	53200	1.90	MR 137 MRF 137	Y..225M-4 AM225 AD7
115	3730	12.83	52700	2.10		
137	3130	10.79	51900	2.60		
170	2530	8.71	50500	3.10		
195	2200	7.59	50200	2.30		
232	1850	6.38	48600	2.80		
287	1490	5.15	46600	3.10		
94.0	4550	15.65	14600	0.95	MR 107 MRF 107	Y..225M-4 AM225 AD5
108	970	13.66	14600	1.10	MR 107 MRF 107	Y..225M-4 AM225 AD6
128	3360	11.59	14400	1.30		
146	2940	10.13	14300	1.45		
173	2480	8.56	14000	1.75		
188	2280	7.86	14400	1.30		
222	1930	6.66	13900	1.55		
254	1690	5.82	13600	1.75	MR 107 MRF 107	Y..225M-4 AM225 AD6
300	1430	4.92	13100	2.00		
437	980	3.38	1420	0.85	MRX 107 MRXF 107	Y..225M-4 AM225 AD5
481	890	3.07	2130	0.95	MRX 107 MRXF 107	Y..225M-4 AM225 AD6
560	765	2.64	3010	1.10		
641	670	2.30	3680	1.25		
756	565	1.95	4230	1.35		
865	495	1.71	4570	1.40		
1025	420	1.44	4880	1.55		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=55.0kw						
25.0	20800	58.65	120000	0.85	MR 167 MRF 167	Y..250M-4 AM250 AD6
28.0	18400	51.76	120000	1.00		
33.0	15900	44.87	120000	1.15	MR 167 MRF 167	Y..250M-4 AM250 AD7
37.0	14200	39.92	120000	1.25		
43.0	12200	34.41	120000	1.45		
53.0	9950	27.96	120000	1.80	MR 167 MRF 167	Y..250M-4 AM250 AD8
62.0	8440	23.71	120000	2.10		
60.0	8740	24.57	120000	1.60	MR 167 MRF 167	Y..250M-4 AM250 AD8
68.0	7770	21.85	120000	1.65		
77.0	6770	19.03	120000	2.40		
87.0	6040	16.98	120000	2.50	MR 167 MRF 167	Y..250M-4 AM250 AD8
102	5150	14.48	120000	3.50		
123	4270	11.99	120000	4.00		
32.0	16600	46.65	26700	0.80	MR 147 MRF 147	Y..250M-4 AM250 AD5
37.0	14300	40.29	58200	0.90	MR 147 MRF 147	Y..250M-4 AM250 AD6
41.0	12600	35.64	63300	1.00	MR 147 MRF 147	Y..250M-4 AM250 AD7
49.0	10600	29.95	66800	1.20		
61.0	8610	24.19	69600	1.40		
72.0	7270	20.44	71100	1.65	MR 147 MRF 147	Y..250M-4 AM250 AD8
82.0	6420	18.04	71900	1.65		
94.0	5560	15.64	72500	2.30		
106	4950	13.91	73000	2.50	MR 147 MRF 147	Y..250M-4 AM250 AD8
123	4260	11.99	73400	3.00	MR 147 MRF 147	Y..250M-4 AM250 AD8
151	3460	9.74	73800	3.80		
203	2580	7.25	74200	3.40		
250	2090	5.89	72500	4.10		
77.0	6770	19.04	47800	1.20	MR 137 MRF 137	Y..250M-4 AM250 AD7
88.0	5980	16.80	48500	1.35		
102	5160	14.51	48900	1.55		
115	4560	12.83	49000	1.75	MR 137 MRF 137	Y..250M-4 AM250 AD7
137	3840	10.79	48800	2.10		
169	3100	8.71	48000	2.50		
194	2700	7.59	48100	1.90		
231	2270	6.38	46900	2.20		
286	1830	5.15	45200	2.50		
P_1=75.0kw						
33.0	21700	44.87	120000	0.85	MR 167 MRF 167	Y..280S-4 AM280 AD7
37.0	19300	39.92	120000	0.95		
43.0	16600	34.41	120000	1.10		

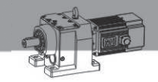
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=75.0kw						
53.0	13500	27.96	120000	1.35	**MR 167**	**Y..280S-4**
62.0	11400	23.71	120000	1.55	**MRF 167**	**AM280**
						AD8
60.0	11800	24.57	120000	1.20	**MR 167**	**Y..280S-4**
68.0	10500	21.85	120000	1.25	**MRF 167**	**AM280**
78.0	9210	19.03	120000	1.75		**AD8**
87.0	8210	16.98	120000	1.85	**MR 167**	**Y..280S-4**
102	7000	14.48	120000	2.60	**MRF 167**	**AM280**
123	5800	11.99	116600	2.90		**AD8**
145	4950	10.24	112800	3.40		
49.0	14400	29.95	56500	0.90	**MR 147**	**Y..280S-4**
61.0	11700	24.19	65100	1.00	**MRF 147**	**AM280**
						AD7
72.0	9890	20.44	67900	1.20	**MR 147**	**Y..280S-4**
82.0	8720	18.04	69500	1.20	**MRF 147**	**AM280**
95.0	7560	15.64	70800	1.70		**AD8**
106	6730	13.91	71600	1.85		
123	5800	11.99	72400	2.20	**MR 147**	**Y..280S-4**
152	4710	9.74	73100	2.80	**MRF 147**	**AM280**
179	3990	8.26	73500	3.20		**AD8**
204	3500	7.25	73100	2.50		
251	2850	5.89	70100	3.00		
296	2410	5.00	67600	3.60		
P_1=90.0kw						
37.0	23100	39.92	120000	0.80	**MR 167**	**Y..280M-4**
43.0	19900	34.41	120000	0.90	**MRF 167**	**AM280**
						AD7
53.0	16200	27.96	120000	1.10	**MR 167**	**Y..280M-4**
62.0	13700	23.71	120000	1.30	**MRF 167**	**AM280**
78.0	11000	19.03	120000	1.45		**AD8**
87.0	9860	16.98	120000	1.50		
102	8400	14.48	117300	2.10		
123	6960	11.99	113500	2.40		
145	5940	10.24	110100	2.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=90.0kw						
95.0	9080	15.64	69000	1.45	**MR 147**	**Y..280M-4**
106	8070	13.91	70200	1.55	**MRF 147**	**AM280**
						AD8
123	6960	11.99	71400	1.85	**MR 147**	**Y..280M-4**
152	5650	9.74	72500	2.30	**MRF 147**	**AM280**
179	4790	8.26	73000	2.70		**AD8**
204	4210	7.25	70900	2.10		
251	3420	5.89	68300	2.50		
296	2900	5.00	66100	3.00		
P_1=110kw						
53.0	19800	27.96	117100	0.90	**MR 167**	**Y..315S-4**
63.0	16700	23.71	116900	1.05	**MRF 167**	**-**
						AD8
78.0	13400	19.03	115500	1.20	**MR 167**	**Y..315S-4**
					MRF 167	**-**
						AD8
87.0	12000	16.98	114300	1.25	**MR 167**	**Y..315S-4**
102	10200	14.48	112200	1.75	**MRF 167**	**-**
124	8490	11.99	109300	2.00		**AD8**
145	7250	10.24	106500	2.30		
P_1=132kw						
63.0	20100	23.71	107900	0.90	**MR 167**	**Y..315M-4**
					MRF 167	**-**
						AD8
78.0	16100	19.03	108300	1.00	**MR 167**	**Y..315M-4**
87.0	14400	16.98	107800	1.05	**MRF 167**	**-**
						AD8
103	12200	14.48	106700	1.45	**MR 167**	**Y..315M-4**
124	10100	11.99	104700	1.65	**MRF 167**	**-**
145	8680	10.24	102600	1.95		**AD8**

2.8 MR../MRF..性能参数 / MR../MRF..Performance Parameters

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=130Nm				
0.16	8612	4230		
0.19	7425	4230		
0.20	6921	4230		
0.23	6050	4230		
0.26	5217	4230		
0.30	4661	4230	**MR 27 MRF17**	**Y..63M_1-4**
0.34	4073	4230	**MRF 27 MRF17**	**Y..63M_1-4**
0.39	3516	4230		
0.44	3160	4230		
0.50	2763	4230		
0.57	2414	4230		
0.65	2110	4230		
0.76	1822	4230		
0.87	1580	4230		
0.94	1464	4230		
1.10	1270	4230		
1.20	1100	4230	**MR 27 MRF17**	**Y..63M_1-4**
1.40	972	4230	**MRF 27 MRF17**	**Y..63M_1-4**
1.60	840	4230		
1.90	741	4230		
2.10	654	4230		
2.40	566	4230		
2.80	499	4230		
3.10	440	4230		
3.60	381	4230		
4.20	329	4230	**MR 27 MRF17**	**Y..63M_1-4**
4.80	290	4230	**MRF 27 MRF17**	**Y..63M_1-4**
5.40	256	4230		
6.10	227	4230		
6.80	203	4230		
7.40	179	4230		
8.50	156	4230	**MR 27 MRF17**	**Y..63M_2-4**
9.80	135	4230	**MRF 27 MRF17**	**Y..63M_2-4**
11.0	118	4230		
12.0	104	4230	**MR 27 MRF17**	**Y..71M_1-4**
14.0	90	4230	**MRF 27 MRF17**	**Y..71M_1-4**
M_{2max}=200Nm				
0.16	8595	4940		
0.19	7411	4940		
0.20	6907	4940		
0.23	6038	4940		
0.27	5206	4940		
0.30	4561	4940	**MR 37 MRF17**	**Y..63M_1-4**
0.34	4065	4940	**MRF 37 MRF17**	**Y..63M_1-4**
0.38	3658	4940		
0.44	3154	4940		
0.50	2757	4940		
0.57	2409	4940		
0.66	2106	4940		
0.76	1818	4940	**MR 37 MRF17**	**Y..63M_1-4**
0.88	1576	4940	**MRF 37 MRF17**	**Y..63M_1-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=200Nm				
1.00	1359	4940		
1.10	1267	4940		
1.30	1098	4940		
1.40	970	4940	**MR 37 MRF17**	**Y..63M_1-4**
1.60	839	4940	**MRF 37 MRF17**	**Y..63M_1-4**
1.90	740	4940		
2.10	653	4940		
2.40	577	4940		
2.80	498	4940		
3.10	439	4940		
3.60	378	4940	**MR 37 MRF17**	**Y..63M_1-4**
4.20	328	4940	**MRF 37 MRF17**	**Y..63M_1-4**
4.80	289	4940		
5.00	265	4940		
5.80	226	4940	**MR 37 MRF17**	**Y..63M_2-4**
6.50	202	4940	**MRF 37 MRF17**	**Y..63M_2-4**
7.40	179	4940		
8.40	156	4940	**MR 37 MRF17**	**Y..71M_1-4**
9.70	135	4940	**MRF 37 MRF17**	**Y..71M_1-4**
10.0	127	4940		
13.0	104	4940	**MR 37 MRF17**	**Y..71M_2-4**
15.0	90	4940	**MRF 37 MRF17**	**Y..71M_2-4**
M_{2max}=300Nm				
0.10	13598	5420		
0.11	12472	5420		
0.13	10619	5420		
0.15	9155	5420		
0.16	8534	5420		
0.18	7460	5420		
0.20	6993	5420		
0.22	6171	5420	**MR 47 MRF37**	**Y..63M_1-4**
0.25	5624	5420	**MRF 47 MRF37**	**Y..63M_1-4**
0.28	4849	5420		
0.31	4520	5420		
0.35	3951	5420		
0.37	3704	5420		
0.42	3268	5420		
0.48	2898	5420		
0.56	2463	5420		
0.53	2598	5420		
0.58	2383	5420		
0.68	2029	5420		
0.79	1749	5420		
0.85	1630	5420		
0.97	1425	5420	**MR 47 MRF37**	**Y..63M_1-4**
1.00	1336	5420	**MRF 47 MRF37**	**Y..63M_1-4**
1.20	1179	5420		
1.30	1074	5420		
1.50	927	5420		
1.60	863	5420		
1.80	755	5420		

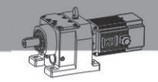


n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=300Nm					
2.50	546	5420	**MR**	**47 MRF37**	**Y..63M1-4**
2.80	502	5420	**MRF**	**47 MRF37**	**Y..63M1-4**
3.20	429	5420			
3.60	372	5420	**MR**	**47 MRF37**	**Y..63M2-4**
3.80	348	5420	**MRF**	**47 MRF37**	**Y..63M2-4**
4.40	301	5420			
5.10	255	5420	**MR**	**47 MRF37**	**Y..71M1-4**
5.70	228	5420	**MRF**	**47 MRF37**	**Y..71M1-4**
M_{2max}=450Nm					
0.10	14369	7100			
0.11	12095	7100			
0.13	10860	7100			
0.15	9445	7100	**MR**	**57 MRF37**	**Y..63M1-4**
0.16	8480	7100	**MRF**	**57 MRF37**	**Y..63M1-4**
0.19	7312	7100			
0.21	6521	7100			
0.25	5585	7100			
0.28	4928	7100			
0.32	4378	7100			
0.36	3873	7100			
0.41	3344	7100	**MR**	**57 MRF37**	**Y..63M1-4**
0.47	2907	7100	**MRF**	**57 MRF37**	**Y..63M1-4**
0.54	2567	7100			
0.61	2244	7100			
0.70	1967	7100			
0.80	1732	7100			
0.89	1555	7100			
0.99	1399	7100	**MR**	**57 MRF37**	**Y..63M1-4**
1.20	1189	7100	**MRF**	**57 MRF37**	**Y..63M1-4**
1.30	1034	7100			
1.80	782	7100			
2.00	678	7100			
2.20	604	7100	**MR**	**57 MRF37**	**Y..63M2-4**
2.50	537	7100	**MRF**	**57 MRF37**	**Y..63M2-4**
2.80	471	7100			
3.60	357	7100	**MR**	**57 MRF37**	**Y..71M1-4**
4.10	319	7100	**MRF**	**57 MRF37**	**Y..71M1-4**
5.10	273	7100	**MR**	**57 MRF37**	**Y..71M2-4**
5.70	241	7100	**MRF**	**57 MRF37**	**Y..71M2-4**
M_{2max}=600Nm					
0.09	15361	7560	**MR**	**67 MRF37**	**Y..63M1-4**
0.11	12931	7560	**MRF**	**67 MRF37**	**Y..63M1-4**
0.12	11996	7560			
0.14	10097	7560			
0.15	9066	7560			
0.18	7816	7560	**MR**	**67 MRF37**	**Y..63M1-4**
0.20	6732	7560	**MRF**	**67 MRF37**	**Y..63M1-4**
0.23	5970	7560			
0.26	5268	7560			

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=600Nm					
0.29	4680	7560			
0.33	4136	7560			
0.39	3566	7560	**MR**	**67 MRF37**	**Y..63M1-4**
0.44	3125	7560	**MRF**	**67 MRF37**	**Y..63M1-4**
0.50	2745	7560			
0.57	2403	7560			
0.51	2682	7560			
0.56	2460	7560			
0.66	2094	7560	**MR**	**67 MRF37**	**Y..63M1-4**
0.76	1805	7560	**MRF**	**67 MRF37**	**Y..63M1-4**
0.85	1629	7560			
0.94	1471	7560			
1.00	1379	7560			
1.80	730	7560	**MR**	**67 MRF37**	**Y..63M2-4**
2.30	571	7560	**MRF**	**67 MRF37**	**Y..63M2-4**
2.70	486	7560	**MR**	**67 MRF37**	**Y..71M1-4**
			MRF	**67 MRF37**	**Y..71M1-4**
0.84	1652	7560			
0.96	1432	7560	**MR**	**67 MRF37**	**Y..63M1-4**
1.10	1259	7560	**MRF**	**67 MRF37**	**Y..63M1-4**
1.20	1106	7560			
1.60	836	7560			
1.80	750	7560	**MR**	**67 MRF37**	**Y..63M2-4**
2.00	646	7560	**MRF**	**67 MRF37**	**Y..63M2-4**
2.30	574	7560			
2.60	495	7560	**MR**	**67 MRF37**	**Y..71M1-4**
3.00	438	7560	**MRF**	**67 MRF37**	**Y..71M1-4**
3.40	388	7560			
4.00	344	7560	**MR**	**67 MRF37**	**Y..71M2-4**
4.70	294	7560	**MRF**	**67 MRF37**	**Y..71M2-4**
M_{2max}=820Nm					
0.08	16370	9920			
0.09	15015	9920			
0.10	13885	9920			
0.11	12783	9920			
0.13	11021	9920			
0.14	9788	9920			
0.16	8714	9920			
0.18	7617	9920	**MR**	**77 MRF37**	**Y..63M1-4**
0.20	6770	9920	**MRF**	**77 MRF37**	**Y..63M1-4**
0.24	5838	9920			
0.27	5184	9920			
0.31	4470	9920			
0.35	3999	9920			
0.40	3488	9920			
0.45	3053	9920			
0.52	2671	9920			
0.44	3151	9920	**MR**	**77 MRF37**	**Y..63M1-4**
0.48	2890	9920	**MRF**	**77 MRF37**	**Y..63M1-4**
0.56	2460	9920			

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=820Nm					
0.65	2121	9920			
0.70	1977	9920			
0.80	1728	9920	**MR**	**77 MRF37**	**Y..63M1-4**
0.85	1620	9920	**MRF**	**77 MRF37**	**Y..63M1-4**
0.97	1430	9920			
1.10	1303	9920			
1.20	1124	9920			
1.30	1047	9920	**MR**	**77 MRF37**	**Y..63M2-4**
1.40	915	9920	**MRF**	**77 MRF37**	**Y..63M2-4**
1.50	858	9920			
1.70	757	9920			
1.90	671	9920	**MR**	**77 MRF37**	**Y..71M1-4**
2.30	571	9920	**MRF**	**77 MRF37**	**Y..71M1-4**
2.30	560	9920	**MR**	**77 MRF37**	**Y..71M1-4**
			MRF	**77 MRF37**	**Y..71M1-4**
2.80	488	9920	**MR**	**77 MRF37**	**Y..71M2-4**
3.20	436	9920	**MRF**	**77 MRF37**	**Y..71M2-4**
3.70	373	9920			
4.20	327	9920	**MR**	**77 MRF37**	**Y..80M1-4**
4.80	289	9920	**MRF**	**77 MRF37**	**Y..80M1-4**
5.30	260	9920			
M_{2max}=1550Nm					
0.08	17452	16900			
0.09	15310	16900			
0.10	13813	16900			
0.11	12025	16900			
0.13	10549	16900			
0.15	9244	16900			
0.17	8109	16900	**MR**	**87 MRF57**	**Y..63M1-4**
0.20	7038	16900	**MRF**	**87 MRF57**	**Y..63M1-4**
0.22	6174	16900			
0.25	5449	16900			
0.29	4831	16900			
0.33	4206	16900			
0.37	3744	16900			
0.43	3233	16900			
0.48	2873	16900			
0.67	1961	16900	**MR**	**87 MRF57**	**Y..63M2-4**
			MRF	**87 MRF57**	**Y..63M2-4**
0.34	4020	16900			
0.43	3182	16900	**MR**	**87 MRF57**	**Y..63M1-4**
0.50	2770	16900	**MRF**	**87 MRF57**	**Y..63M1-4**
0.53	2595	16900			
0.62	2129	16900			
0.68	1930	16900	**MR**	**87 MRF57**	**Y..63M2-4**
0.76	1733	16900	**MRF**	**87 MRF57**	**Y..63M2-4**
0.89	1489	16900			
0.95	1395	16900			

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=1550Nm					
1.00	1232	16900			
1.10	1145	16900	**MR**	**87 MRF57**	**Y..71M1-4**
1.20	1037	16900	**MRF**	**87 MRF57**	**Y..71M1-4**
1.70	802	16900	**MR**	**87 MRF57**	**Y..71M2-4**
1.80	754	16900	**MRF**	**87 MRF57**	**Y..71M2-4**
0.76	1737	16900	**MR**	**87 MRF57**	**Y..63M2-4**
0.87	1524	16900	**MRF**	**87 MRF57**	**Y..63M2-4**
1.00	1303	16900	**MR**	**87 MRF57**	**Y..71M1-4**
1.30	1008	16900	**MRF**	**87 MRF57**	**Y..71M1-4**
1.60	885	16900	**MR**	**87 MRF57**	**Y..71M2-4**
2.00	685	16900	**MRF**	**87 MRF57**	**Y..71M2-4**
2.30	599	16900	**MR**	**87 MRF57**	**Y..80M1-4**
			MRF	**87 MRF57**	**Y..80M1-4**
3.60	398	16900	**MR**	**87 MRF57**	**Y..80M2-4**
4.10	352	16900	**MRF**	**87 MRF57**	**Y..80M2-4**
4.60	305	16900	**MR**	**87 MRF57**	**Y..90S-4**
5.30	268	16900	**MRF**	**87 MRF57**	**Y..90S-4**
2.60	538	16900	**MR**	**87 MRF57**	**Y..80M1-4**
2.90	472	16900	**MRF**	**87 MRF57**	**Y..80M1-4**
3.60	400	16900	**MR**	**87 MRF57**	**Y..80M2-4**
4.00	361	16900	**MRF**	**87 MRF57**	**Y..80M2-4**
4.70	300	16900	**MR**	**87 MRF57**	**Y..90S-4**
5.60	256	16900	**MRF**	**87 MRF57**	**Y..90S-4**
M_{2max}=3000Nm					
0.06	21769	19800			
0.07	19332	19800			
0.08	17230	19800			
0.09	14999	19800			
0.10	13320	19800			
0.12	11156	19800	**MR**	**97 MRF57**	**Y..63M1-4**
0.14	10030	19800	**MRF**	**97 MRF57**	**Y..63M1-4**
0.16	8706	19800			
0.18	7692	19800			
0.21	6708	19800			
0.23	5931	19800			
0.27	5161	19800			
0.33	4004	19800	**MR**	**97 MRF57**	**Y..63M2-4**
0.38	3481	19800	**MRF**	**97 MRF57**	**Y..63M2-4**
0.29	4678	19800	**MR**	**97 MRF57**	**Y..63M1-4**
			MRF	**97 MRF57**	**Y..63M1-4**
0.31	4309	19800	**MR**	**97 MRF57**	**Y..63M2-4**
0.36	3702	19800	**MRF**	**97 MRF57**	**Y..63M2-4**
0.44	3019	19800			



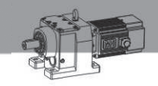
MR

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=3000Nm					
0.49	2668	19800	MR	97 MRF57	Y..71M_1-4
0.58	2245	19800	MRF	97 MRF57	Y..71M_1-4
0.64	2016	19800			
0.80	1733	19800	MR	97 MRF57	Y..71M_2-4
0.85	1623	19800	MRF	97 MRF57	Y..71M_2-4
0.96	1434	19800			
1.10	1207	19800			
1.30	1084	19800	MR	97 MRF57	Y..80M_1-4
1.50	934	19800	MRF	97 MRF57	Y..80M_1-4
1.60	878	19800			
1.90	755	19800	MR	97 MRF57	Y..80M_2-4
			MRF	97 MRF57	Y..80M_2-4
0.76	1823	19800	MR	97 MRF57	Y..71M_2-4
0.87	1583	19800	MRF	97 MRF57	Y..71M_2-4
0.99	1396	19800			
1.10	1228	19800	MR	97 MRF57	Y..80M_1-4
1.30	1069	19800	MRF	97 MRF57	Y..80M_1-4
1.50	938	19800			
1.70	824	19800	MR	97 MRF57	Y..80M_2-4
2.00	737	19800	MRF	97 MRF57	Y..80M_2-4
2.20	632	19800	MR	97 MRF57	Y..90S-4
2.50	560	19800	MRF	97 MRF57	Y..90S-4
2.90	484	19800			
3.30	431	19800	MR	97 MRF57	Y..90L-4
3.80	379	19800	MRF	97 MRF57	Y..90L-4
4.20	336	19800	MR	97 MRF57	Y..90L-4
			MRF	97 MRF57	Y..90L-4
4.80	296	19800	MR	97 MRF57	Y..100L_1-4
5.70	249	19800	MRF	97 MRF57	Y..100L_1-4
6.10	234	19800			
2.30	625	19800	MR	97 MRF57	Y..90S-4
2.60	549	19800	MRF	97 MRF57	Y..90S-4
5.30	270	19800	MR	97 MRF57	Y..100L_1-4
6.30	227	19800	MRF	97 MRF57	Y..100L_1-4
M_{2max}=4300Nm					
0.07	20018	29500			
0.08	17080	29500			
0.09	14936	29500			
0.11	12829	29500	MR	107 MRF77	Y..63M_1-4
0.12	11256	29500	MRF	107 MRF77	Y..63M_1-4
0.14	9547	29500			
0.16	8618	29500			
0.18	7583	29500			
0.20	6743	29500	MR	107 MRF77	Y..63M_2-4
0.22	5914	29500	MRF	107 MRF77	Y..63M_2-4
0.26	5168	29500			

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=4300Nm					
0.30	4435	29500	MR	107 MRF77	Y..63M_2-4
			MRF	107 MRF77	Y..63M_2-4
0.33	3896	29500	MR	107 MRF77	Y..71M_1-4
0.43	3039	29500	MRF	107 MRF77	Y..71M_1-4
0.33	3918	29500	MR	107 MRF77	Y..71M_1-4
0.39	3343	29500	MRF	107 MRF77	Y..71M_1-4
0.43	3034	29500			
0.52	2653	29500	MR	107 MRF77	Y..71M_2-4
0.61	2280	29500	MRF	107 MRF77	Y..71M_2-4
0.67	2067	29500			
0.82	1693	29500	MR	107 MRF77	Y..80M_1-4
0.89	1550	29500	MRF	107 MRF77	Y..80M_1-4
0.98	1407	29500			
1.20	1209	29500	MR	107 MRF77	Y..80M_2-4
1.40	1055	29500	MRF	107 MRF77	Y..80M_2-4
1.50	919	29500	MR	107 MRF77	Y..90S-4
1.70	815	29500	MRF	107 MRF77	Y..90S-4
2.00	717	29500			
2.30	626	29500	MR	107 MRF77	Y..90L-4
2.70	528	29500	MRF	107 MRF77	Y..90L-4
0.69	1987	29500	MR	107 MRF77	Y..71M_2-4
			MRF	107 MRF77	Y..71M_2-4
0.76	1827	29500	MR	107 MRF77	Y..80M_1-4
0.86	1599	29500	MRF	107 MRF77	Y..80M_1-4
0.99	1400	29500			
1.20	1226	29500	MR	107 MRF77	Y..80M_2-4
1.30	1104	29500	MRF	107 MRF77	Y..80M_2-4
1.50	939	29500	MR	107 MRF77	Y..90S-4
1.70	822	29500	MRF	107 MRF77	Y..90S-4
2.30	614	29500	MR	107 MRF77	Y..90L-4
2.60	544	29500	MRF	107 MRF77	Y..90L-4
2.90	492	29500			
3.40	417	29500	MR	107 MRF77	Y..100L_1-4
3.90	369	29500	MRF	107 MRF77	Y..100L_1-4
4.40	323	29500			
5.10	285	29500	MR	107 MRF77	Y..100L_2-4
5.80	253	29500	MRF	107 MRF77	Y..100L_2-4
6.80	214	29500	MR	107 MRF77	Y..112M-4
7.80	187	29500	MRF	107 MRF77	Y..112M-4
3.00	469	29500	MR	107 MRF77	Y..90L-4
			MRF	107 MRF77	Y..90L-4
3.40	426	29500	MR	107 MRF77	Y..100L_1-4
3.80	377	29500	MRF	107 MRF77	Y..100L_1-4

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=4300Nm					
4.40	325	29500	MR	107 MRF77	Y..100L_1-4
			MRF	107 MRF77	Y..100L_1-4
5.10	284	29500	MR	107 MRF77	Y..100L_2-4
5.70	256	29500	MRF	107 MRF77	Y..100L_2-4
6.60	220	29500	MR	107 MRF77	Y..112M-4
7.60	193	29500	MRF	107 MRF77	Y..112M-4
8.40	172	29500	MR	107 MRF77	Y..132S-4
			MRF	107 MRF77	Y..132S-4
M_{2max}=8000Nm					
0.06	22203	53400			
0.07	18945	53400			
0.08	16566	53400	MR	137 MRF77	Y..63M_1-4
0.09	14777	53400	MRF	137 MRF77	Y..63M_1-4
0.11	12921	53400			
0.11	11712	53400	MR	137 MRF77	Y..63M_2-4
0.12	10573	53400	MRF	137 MRF77	Y..63M_2-4
0.15	8784	53400			
0.17	7479	53400	MR	137 MRF77	Y..71M_1-4
0.20	6559	53400	MRF	137 MRF77	Y..71M_1-4
0.22	5834	53400			
0.27	5116	53400	MR	137 MRF77	Y..71M_2-4
0.31	4464	53400	MRF	137 MRF77	Y..71M_2-4
0.35	3928	53400			
0.40	3454	53400	MR	137 MRF77	Y..80M_1-4
0.46	2993	53400	MRF	137 MRF77	Y..80M_1-4
0.29	4709	53400	MR	137 MRF77	Y..71M_2-4
0.34	4018	53400	MRF	137 MRF77	Y..71M_2-4
0.39	3514	53400			
0.41	3338	53400	MR	137 MRF77	Y..80M_1-4
0.47	2929	53400	MRF	137 MRF77	Y..80M_1-4
0.56	2484	53400			
0.64	2242	53400	MR	137 MRF77	Y..80M_2-4
0.77	1863	53400	MRF	137 MRF77	Y..80M_2-4
0.90	1586	53400	MR	137 MRF77	Y..90S-4
1.00	1391	53400	MRF	137 MRF77	Y..90S-4
1.10	1256	53400			
1.30	1105	53400	MR	137 MRF77	Y..90L-4
1.40	1043	53400	MRF	137 MRF77	Y..90L-4
1.60	888	53400			
2.00	699	53400	MR	137 MRF77	Y..100L_1-4
2.30	609	53400	MRF	137 MRF77	Y..100L_1-4
0.52	2658	53400	MR	137 MRF77	Y..80M_1-4
0.57	2412	53400	MRF	137 MRF77	Y..80M_1-4

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=8000Nm					
0.69	2073	53400	MR	137 MRF77	Y..80M_2-4
0.78	1839	53400	MRF	137 MRF77	Y..80M_2-4
0.89	1598	53400	MR	137 MRF77	Y..90S-4
1.00	1397	53400	MRF	137 MRF77	Y..90S-4
1.20	1226	53400			
1.30	1090	53400	MR	137 MRF77	Y..90L-4
1.50	951	53400	MRF	137 MRF77	Y..90L-4
1.70	831	53400	MR	137 MRF77	Y..100L_1-4
2.00	730	53400	MRF	137 MRF77	Y..100L_1-4
2.30	629	53400			
2.60	560	53400	MR	137 MRF77	Y..100L_2-4
3.00	490	53400	MRF	137 MRF77	Y..100L_2-4
3.40	428	53400	MR	137 MRF77	Y..112M-4
3.80	381	53400	MRF	137 MRF77	Y..112M-4
4.50	323	53400	MR	137MRF77	Y..132S-4
5.00	291	53400	MRF	137 MRF77	Y..132S-4
5.70	255	53400			
2.60	564	53400	MR	137 MRF77	Y..100L_2-4
2.80	517	53400	MRF	137 MRF77	Y..100L_2-4
3.20	453	53400			
3.90	376	53400	MR	137 MRF77	Y..112M-4
4.30	339	53400	MRF	137 MRF77	Y..112M-4
4.90	297	53400	MR	137 MRF77	Y..132S-4
			MRF	137 MRF77	Y..132S-4
M_{2max}=13000Nm					
0.06	23401	62700	MR	147 MRF77	Y..63M_1-4
0.06	21342	62700	MRF	147 MRF77	Y..63M_1-4
0.07	18210	62700			
0.08	15923	62700	MR	147 MRF77	Y..63M_2-4
0.09	14075	62700	MRF	147 MRF77	Y..63M_2-4
0.11	12344	62700			
0.12	11143	62700	MR	147 MRF77	Y..71M_1-4
0.13	9743	62700	MRF	147 MRF77	Y..71M_1-4
0.16	8443	62700	MR	147 MRF77	Y..71M_2-4
0.19	7307	62700	MRF	147 MRF77	Y..71M_2-4
0.21	6447	62700			
0.25	5568	62700	MR	147 MRF77	Y..80M_1-4
0.28	4926	62700	MRF	147 MRF77	Y..80M_1-4
0.32	4325	62700			
0.38	3754	62700	MR	147 MRF77	Y..80M_2-4
0.43	3302	62700	MRF	147 MRF77	Y..80M_2-4
0.49	2898	62700	MR	147 MRF77	Y..90S-4
			MRF	147 MRF77	Y..90S-4

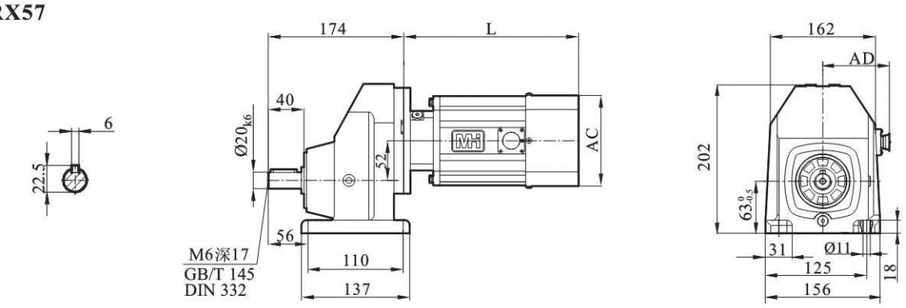


n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=13000Nm				
0.56	2555	62700	**MR 147 MRF77**	**Y..90S-4**
0.64	2211	62700	**MRF 147 MRF77**	**Y..90S-4**
0.73	1951	62700		
0.84	1705	62700	**MR 147 MRF77**	**Y..90L-4**
0.93	1536	62700	**MRF 147 MRF77**	**Y..90L-4**
1.10	1329	62700	**MR 147 MRF77**	**Y..100L-4**
1.20	1166	62700	**MRF 147 MRF77**	**Y..100L-4**
1.40	1029	62700		
1.60	889	62700	**MR 147 MRF77**	**Y..100L$_2$-4**
1.90	784	62700	**MRF 147 MRF77**	**Y..100L$_2$-4**
2.10	695	62700	**MR 147 MRF77**	**Y..112M-4**
2.40	619	62700	**MRF 147 MRF77**	**Y..112M-4**
2.60	558	62700		
3.00	489	62700	**MR 147 MRF77**	**Y..132S-4**
			MRF 147 MRF77	**Y..132S-4**
2.70	533	62700	**MR 147 MRF77**	**Y..132S-4**
3.20	462	62700	**MRF 147 MRF77**	**Y..132S-4**
3.40	426	62700		
4.00	368	62700	**MR 147 MRF77**	**Y..132M-4**
4.50	326	62700	**MRF 147 MRF77**	**Y..132M-4**
6.90	214	62700	**MR 147 MRF77**	**Y..160M-4**
			MRF 147 MRF77	**Y..160M-4**
M_{2max}=18000Nm				
0.05	27001	120000		
0.06	22482	120000		
0.07	20002	120000		
0.08	17361	120000		
0.09	15446	120000	**MR 167 MRF97**	**Y..80M$_1$-4**
0.10	14051	120000	**MRF 167 MRF97**	**Y..80M$_1$-4**
0.12	11812	120000		
0.13	10509	120000		
0.14	9631	120000		
0.19	7749	120000	**MR 167 MRF97**	**Y..80M$_2$-4**
0.221	6894	120000	**MRF 167 MRF97**	**Y..80M$_2$-4**

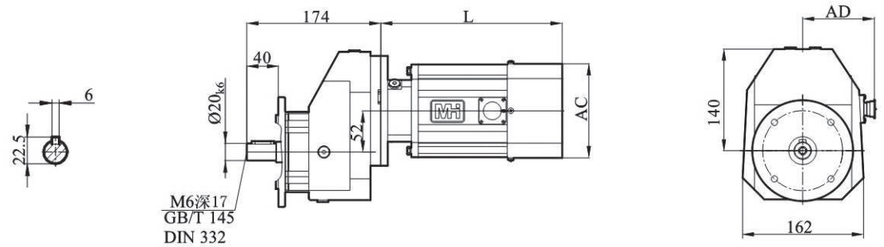
n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=4300Nm				
0.23	6077	120000	**MR 167 MRF97**	**Y..80M$_1$-4**
			MRF 167 MRF97	**Y..80M$_1$-4**
0.27	5407	120000	**MR 167 MRF97**	**Y..80M$_2$-4**
0.31	4650	120000	**MRF 167 MRF97**	**Y..80M$_2$-4**
0.34	4129	120000	**MR 167 MRF97**	**Y..90S-4**
0.38	3692	120000	**MRF 167 MRF97**	**Y..90S-4**
0.54	2657	120000	**MR 167 MRF97**	**Y..90L-4**
0.61	2333	120000	**MRF 167 MRF97**	**Y..90L-4**
0.69	2085	120000		
0.76	1877	120000	**MR 167 MRF97**	**Y..100L$_1$-4**
0.85	1670	120000	**MRF 167 MRF97**	**Y..100L$_1$-4**
0.99	1438	120000		
1.10	1279	120000	**MR 167 MRF97**	**Y..100L$_2$-4**
1.30	1123	120000	**MRF 167 MRF97**	**Y..100L$_2$-4**
1.50	999	120000		
1.70	861	120000	**MR 167 MRF97**	**Y..112M-4**
1.90	760	120000	**MRF 167 MRF97**	**Y..112M-4**
2.20	656	120000	**MR 167 MRF97**	**Y..132S-4**
2.50	579	120000	**MRF 167 MRF97**	**Y..132S-4**
2.90	503	120000	**MR 167 MRF97**	**Y..132M-4**
3.40	432	120000	**MRF 167 MRF97**	**Y..132M-4**
4.90	303	120000	**MR 167 MRF97**	**Y..160M-4**
5.30	279	120000	**MRF 167 MRF97**	**Y..160M-4**
5.00	295	120000	**MR 167 MRF107**	**Y..160M-4**
			MRF 167 MRF107	**Y..160M-4**
5.40	270	120000	**MR 167 MRF107**	**Y..160L-4**
6.40	229	120000	**MRF 167 MRF107**	**Y..160L-4**
7.30	200	120000		
5.10	291	120000	**MR 167 MRF107**	**Y..160M-4**
			MRF 167 MRF107	**Y..160M-4**
5.60	264	120000	**MR 167 MRF107**	**Y..160L-4**
6.50	227	120000	**MRF 167 MRF107**	**Y..160L-4**
7.40	198	120000		

2. 9 外形尺寸 / Dimensions

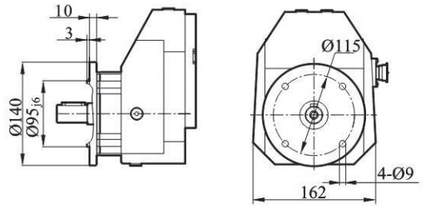
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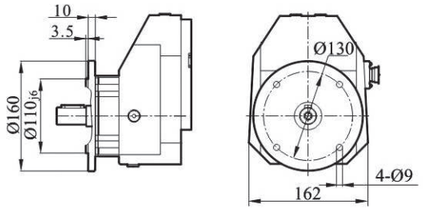
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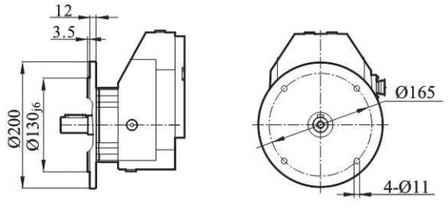
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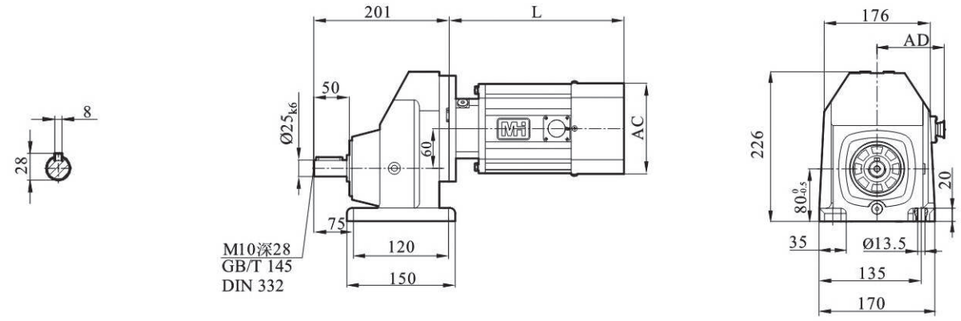


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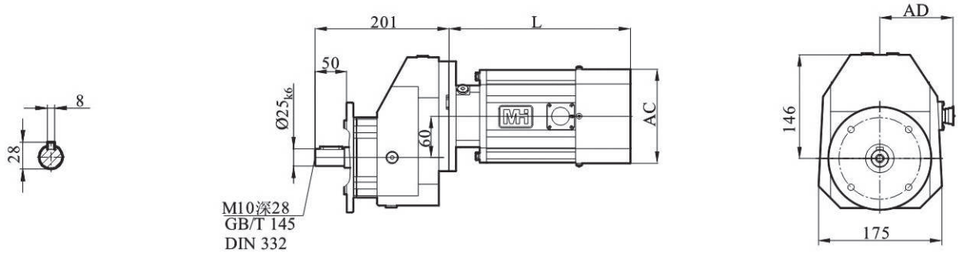


YE2电机机座号 Motor Size	63	71	80	90S	90L	100L	112M	132S
L	205	260	290	300	330	330	380	430
AC	120	145	170	190	190	195	215	260
AD	110	130	135	145	145	180	190	210

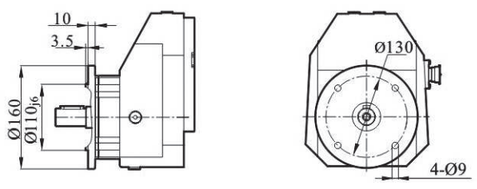
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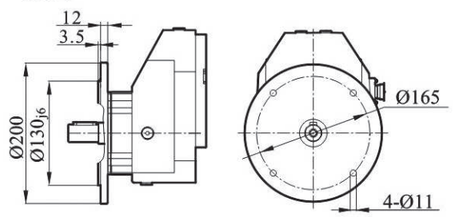
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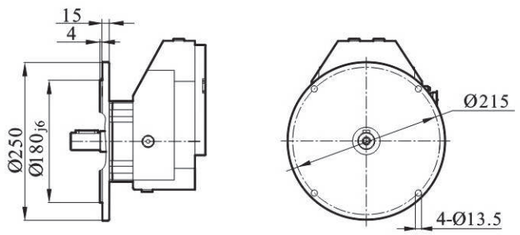
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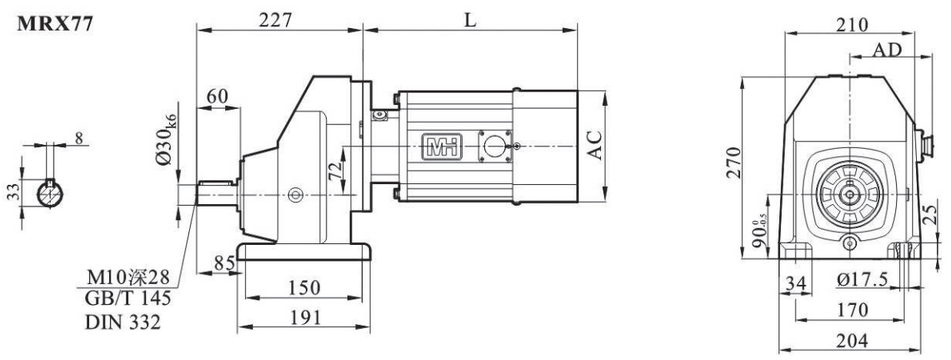


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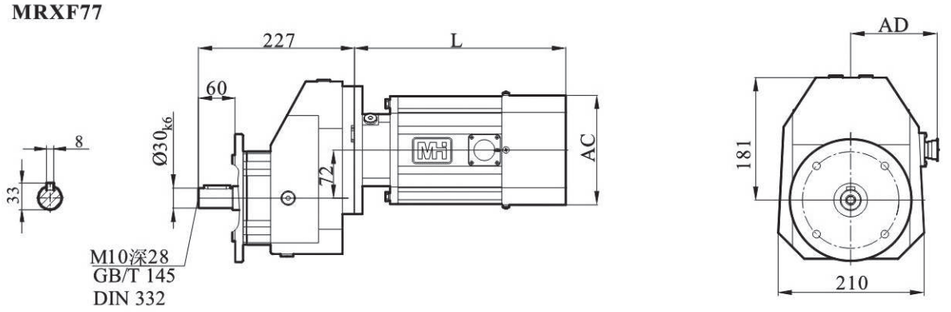


YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	330	330	380	430
AC	120	145	170	190	190	210	230	280
AD	110	130	135	145	145	160	215	215

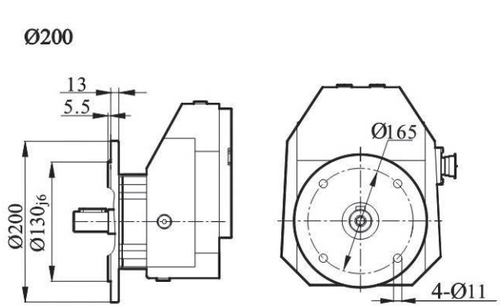
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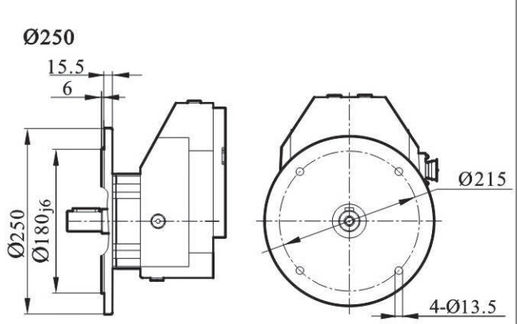
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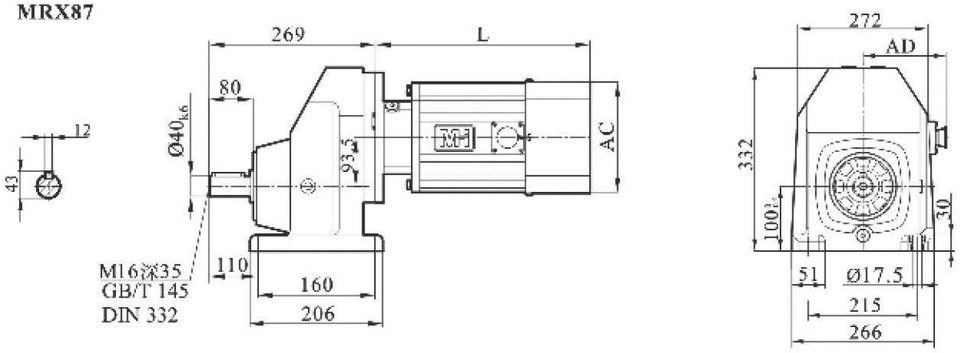


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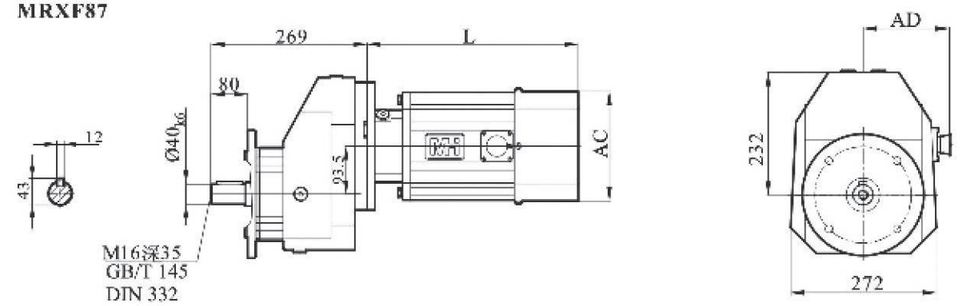


YE2电机机座号 Motor Size	71	80	90S	90L	100	112M	132S	132M	160M
L	254	284	292	322	322	370	418	457	524
AC	145	170	190	190	210	230	280	280	315
AD	130	135	145	145	160	215	215	215	255

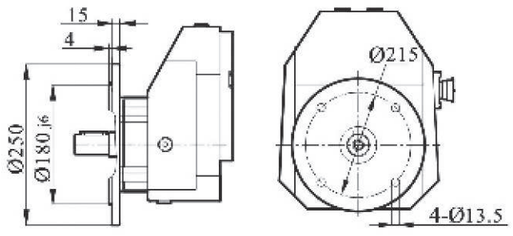
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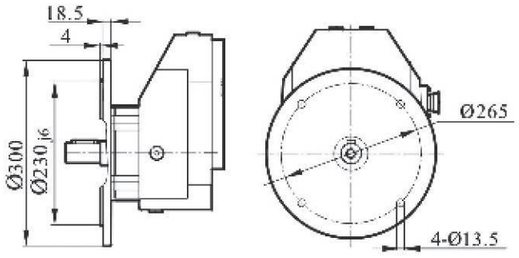
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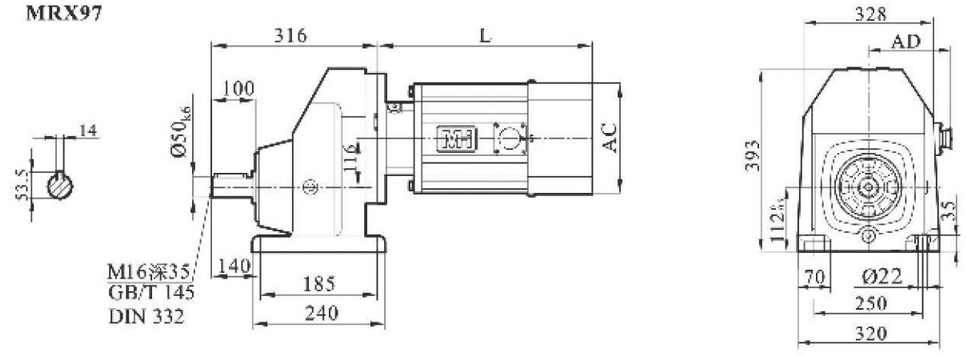


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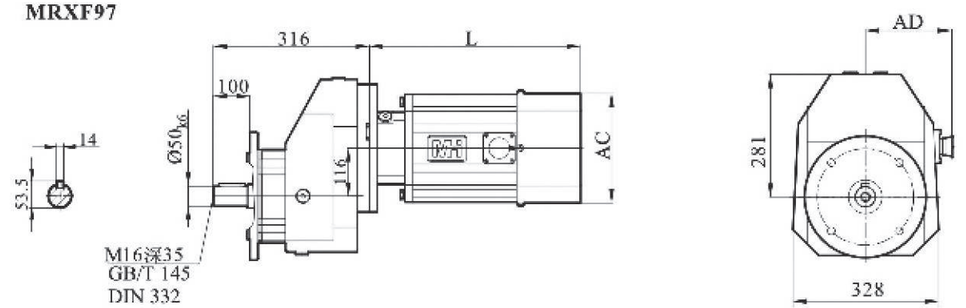


YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M	160L	180M	180L
L	280	288	318	318	365	413	452	524	527	583	616
AC	170	190	190	210	230	280	280	315	315	350	350
AD	135	145	145	160	215	215	215	255	255	280	280

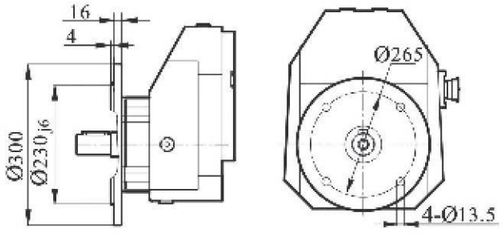
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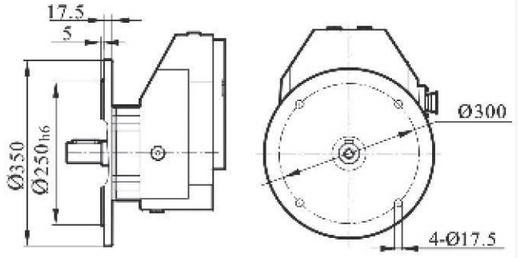
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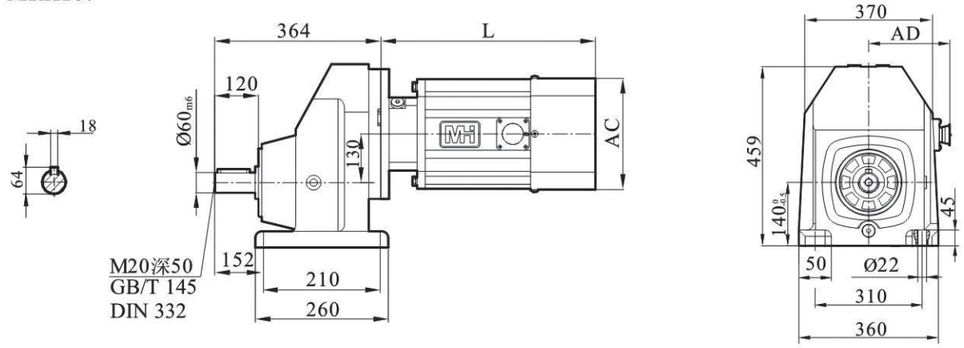


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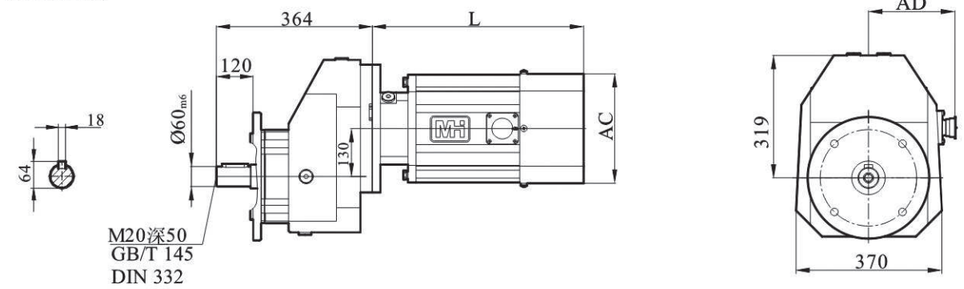


YE2电机机座号 Motor Size	90S	90L	100	112M	132S	132M	160M	160L	180M	180L	200L
L	280	310	312	360	408	487	524	519	555	588	654
AC	190	190	210	230	280	280	315	315	350	350	395
AD	145	145	160	215	215	215	255	255	280	280	305

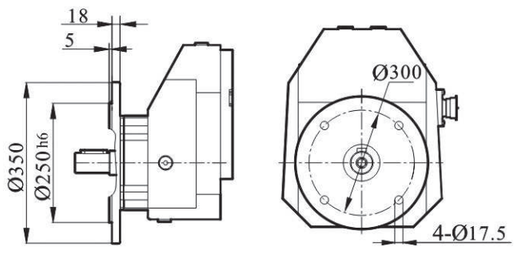
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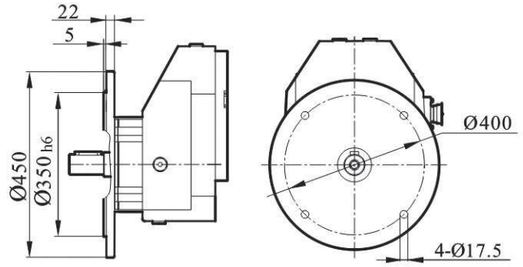
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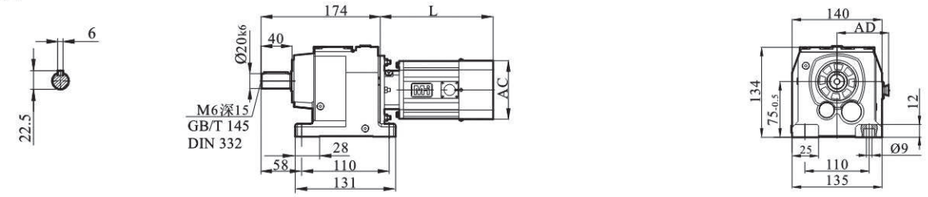


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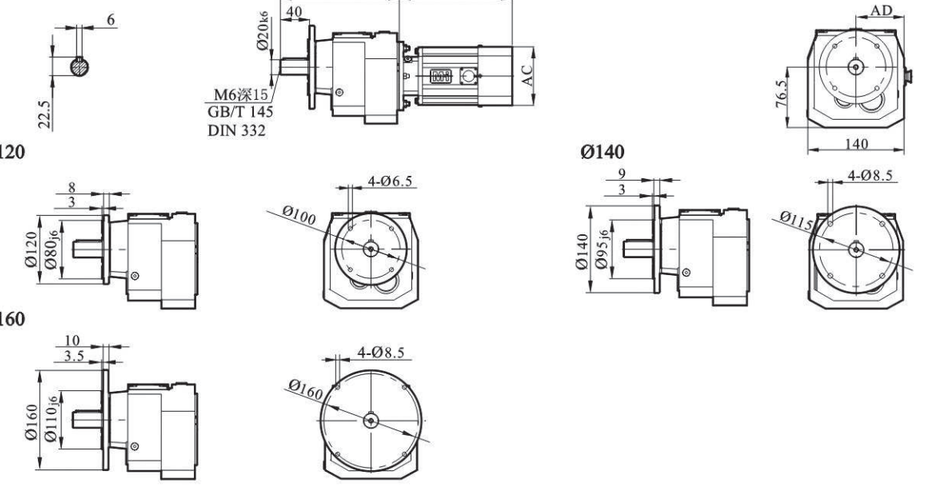


YE2电机机座号 Motor Size	132S	132M	160M	160L	180M	180L	200L	225S	225M
L	403	482	524	519	555	588	654	680	702
AC	280	280	315	315	350	350	395	450	450
AD	215	215	255	255	280	280	305	335	335

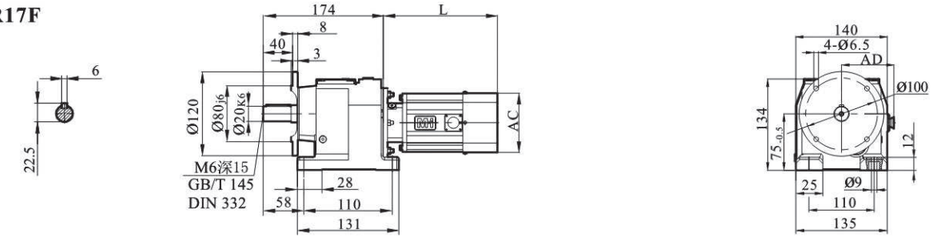
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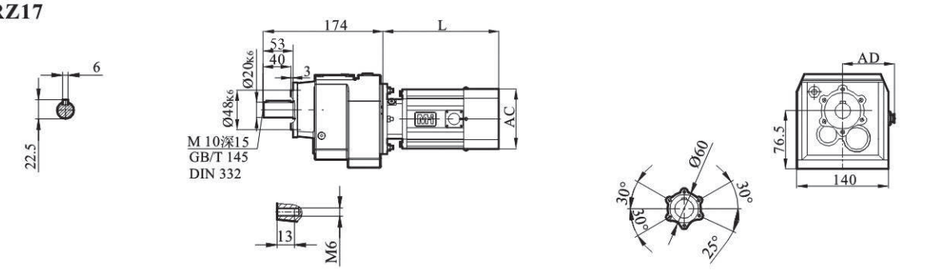
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MR17F

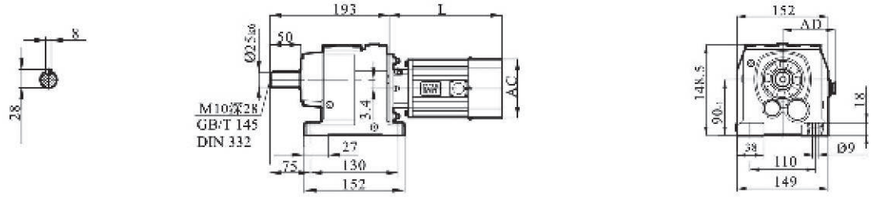


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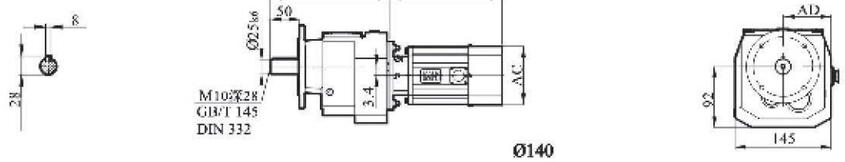


YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	225	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

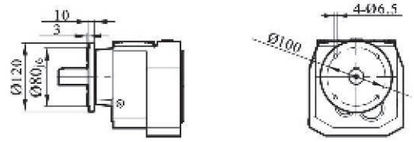
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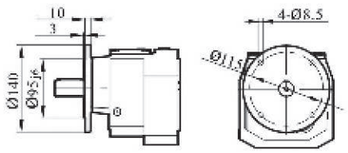
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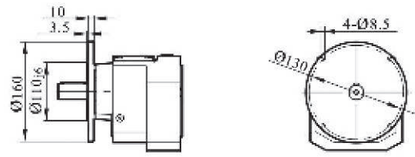
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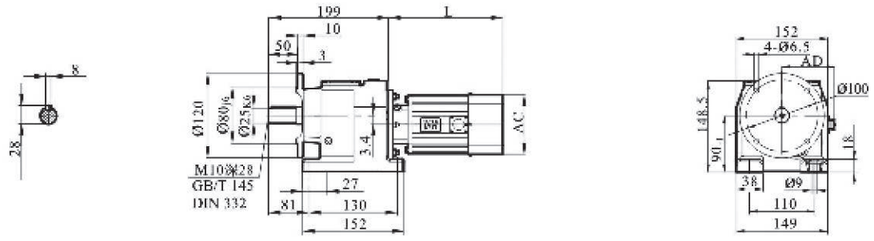
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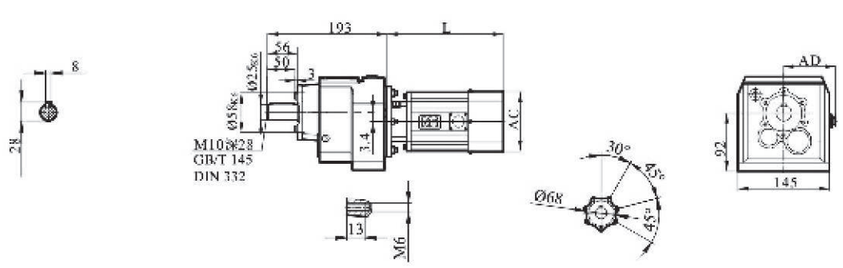
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MR27F

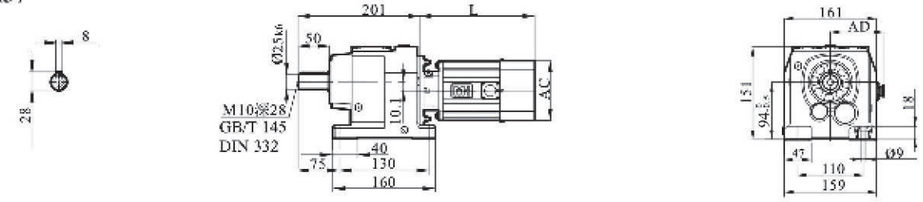


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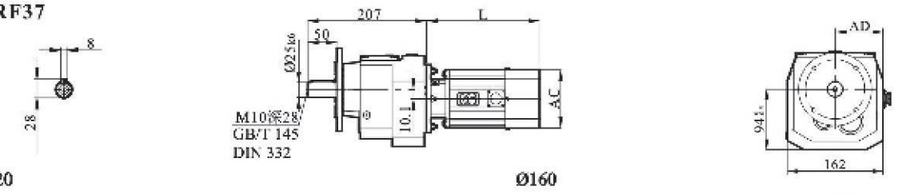


YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	225	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

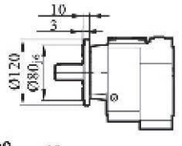
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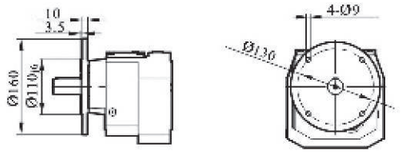
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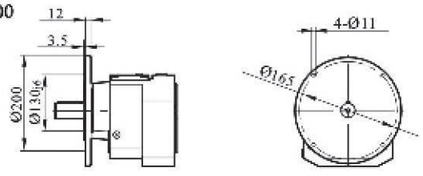
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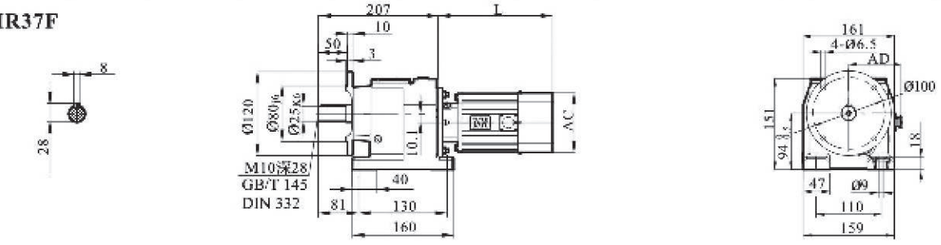
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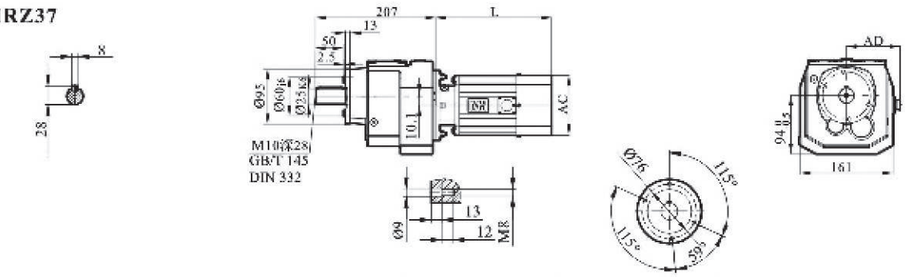
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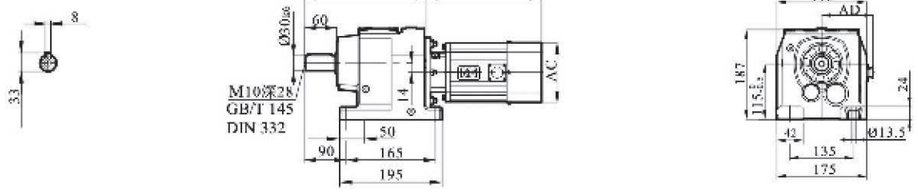


MRZ37

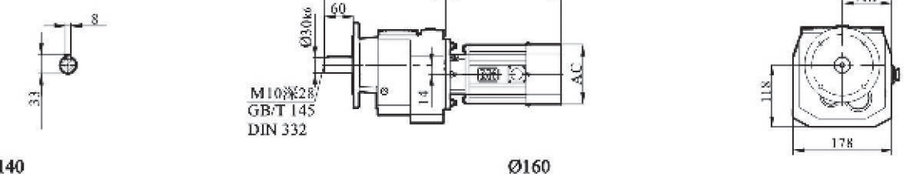


YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	225	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

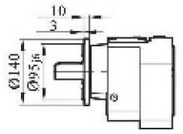
MR47

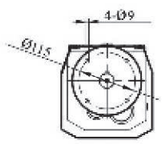


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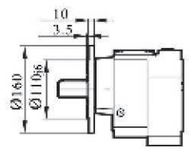


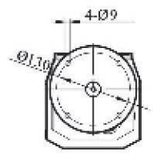
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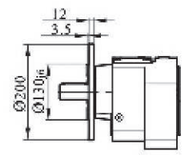


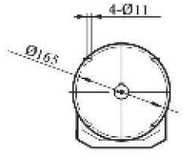
Ø160



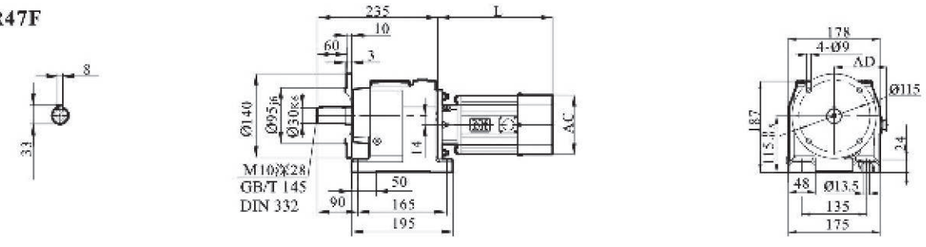


Ø200

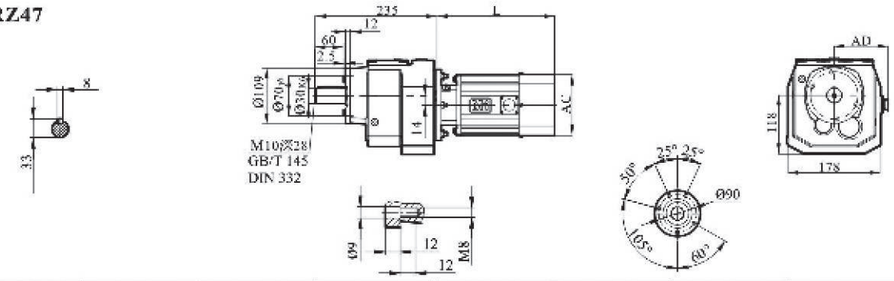




MR47F

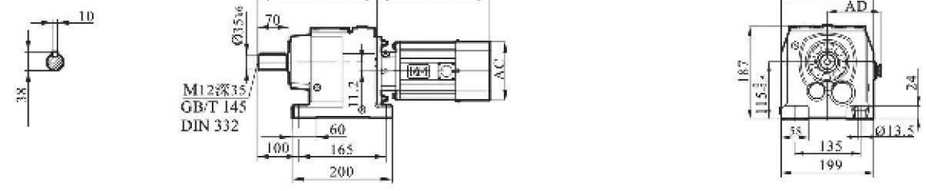


MRZ47

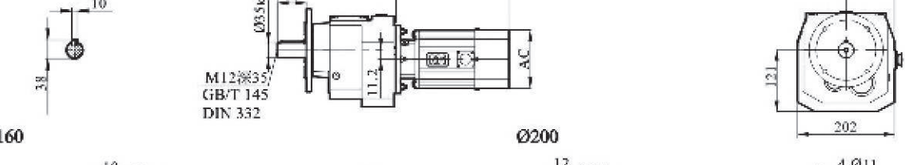


YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	320	330	380	430
AC	120	145	170	190	190	195	215	260
AD	110	130	135	145	145	180	190	210

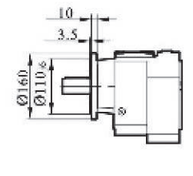
MR57

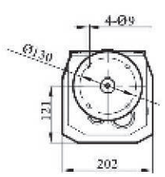


MRF57

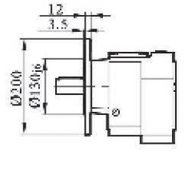


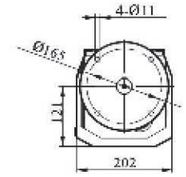
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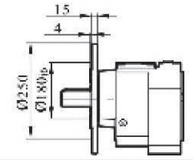


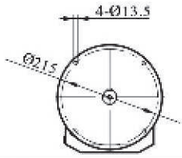
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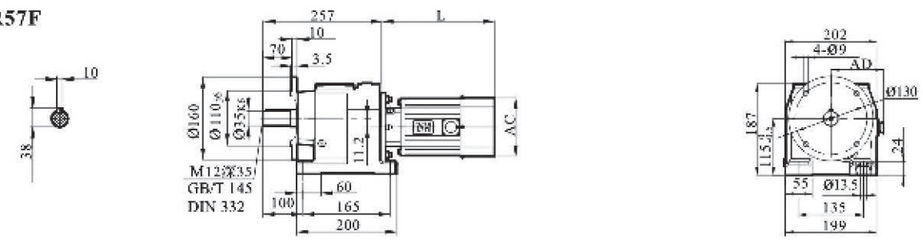


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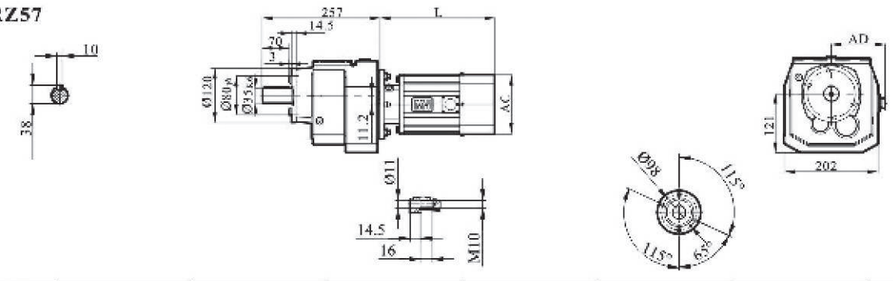




MR57F

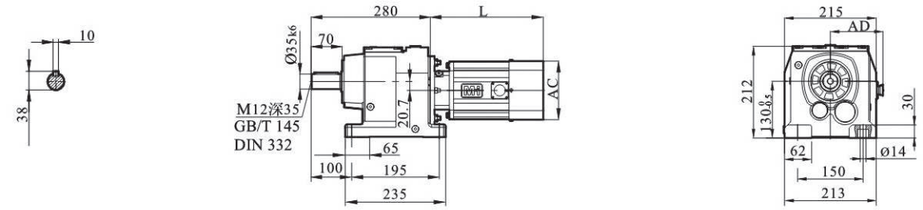


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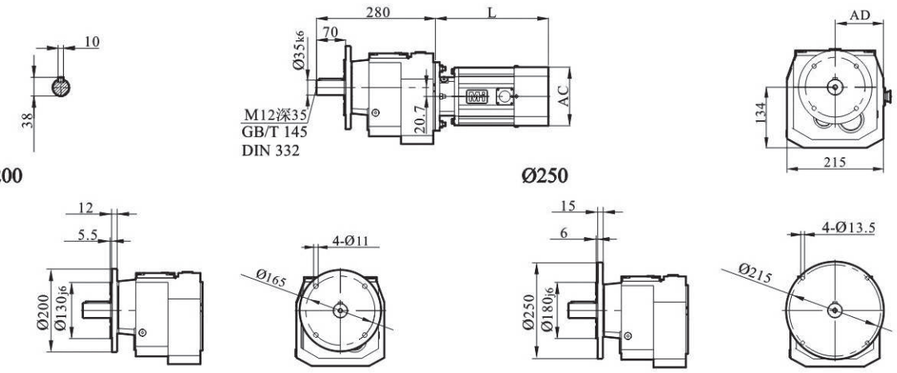


YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M
L	205	260	290	300	330	330	380
AC	120	145	170	190	190	210	230
AD	110	130	135	145	145	160	215

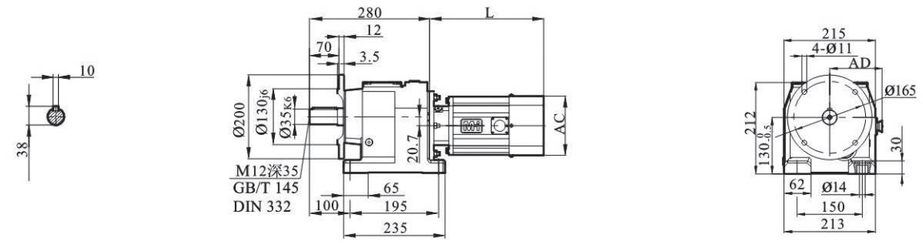
MR67



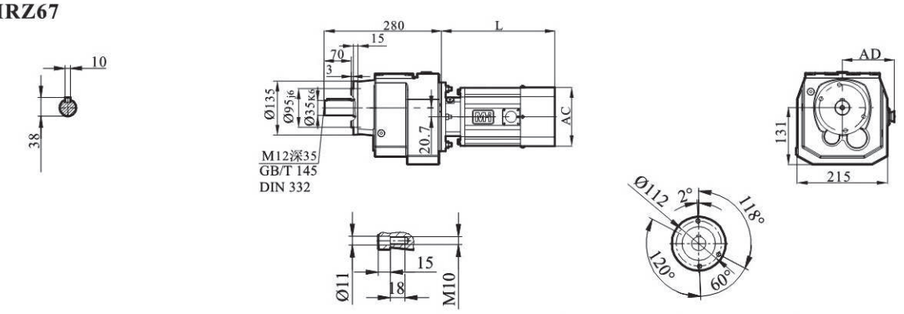
MRF67



MR67F

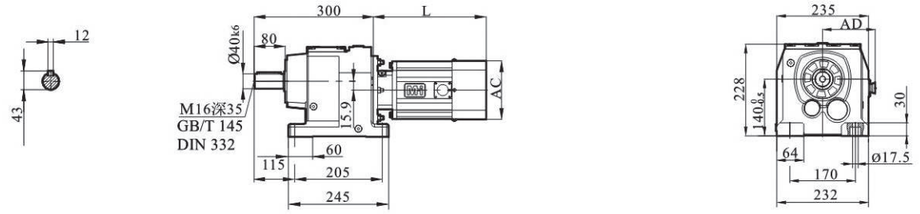


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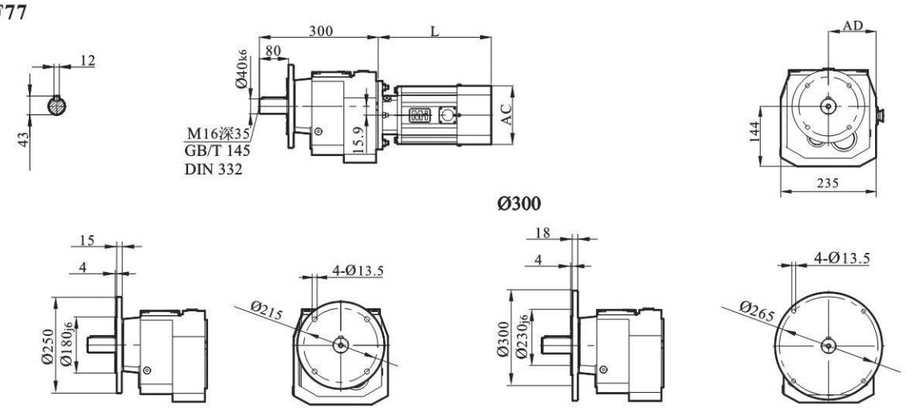


YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	330	330	380	430
AC	120	145	170	190	190	210	230	280
AD	110	130	135	145	145	160	215	215

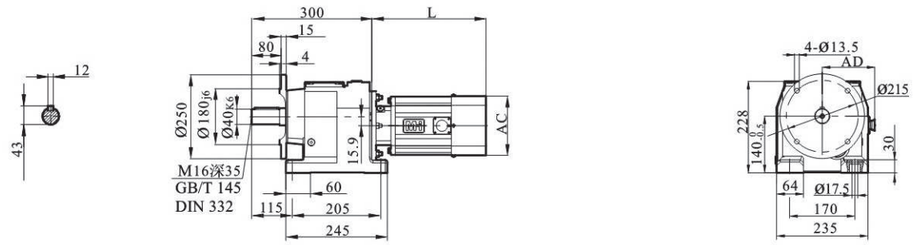
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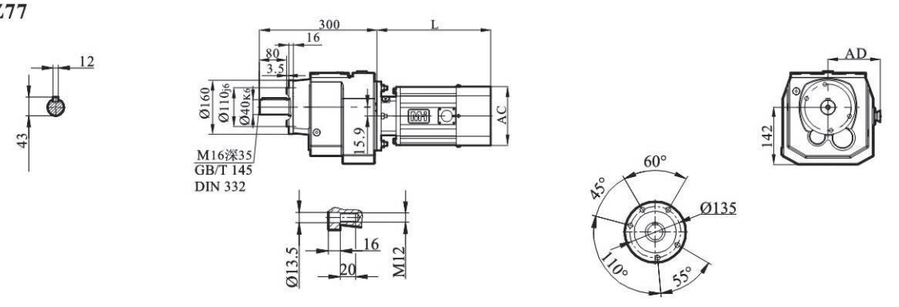
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MR77F

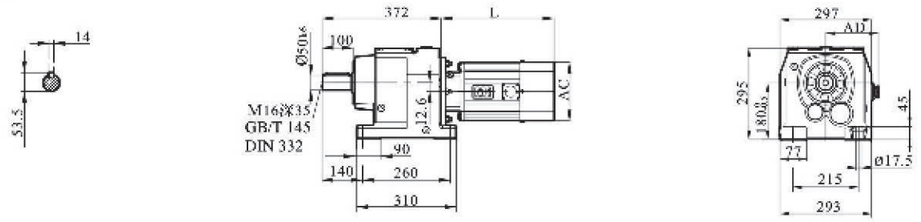


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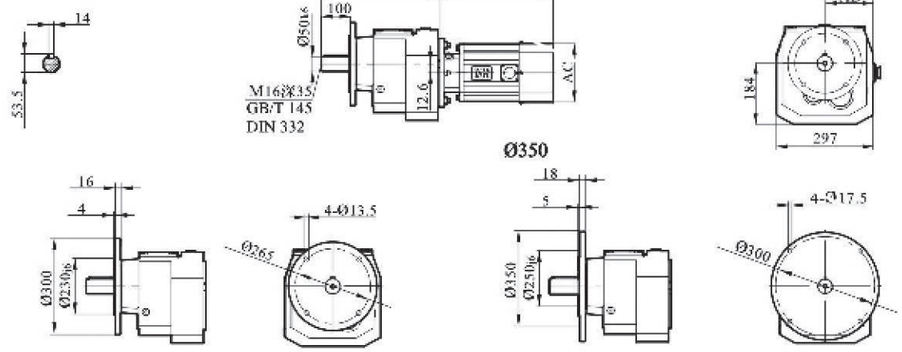


YE2电机机座号 Motor Size	71	80	90S	90L	100	112M	132S	132M	160M
L	254	284	292	322	322	370	418	457	524
AC	145	170	190	190	210	230	280	280	315
AD	130	135	145	145	160	215	215	215	255

MR87

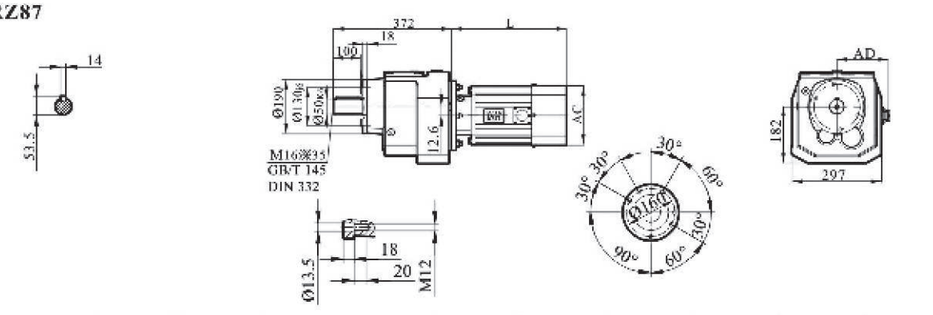


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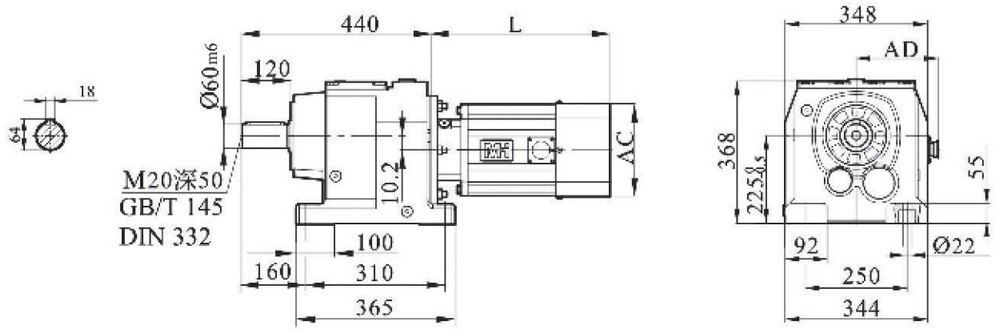
MR87F

MRZ87

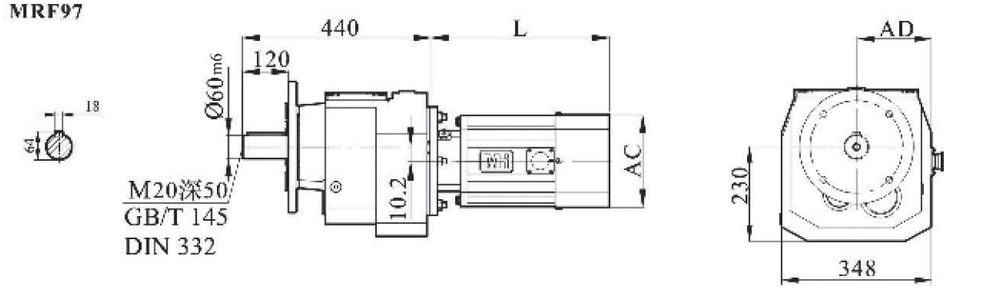


YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M	160L	180M	180L
L	280	288	318	318	365	413	452	524	547	583	616
AC	170	190	190	210	230	280	280	315	315	350	350
AD	135	145	145	160	215	215	215	255	255	280	280

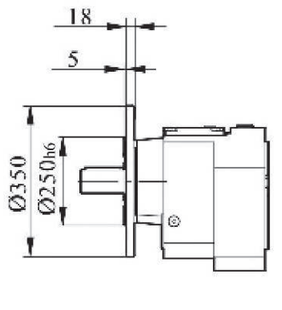
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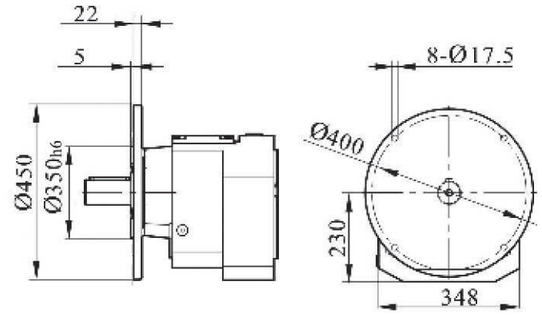
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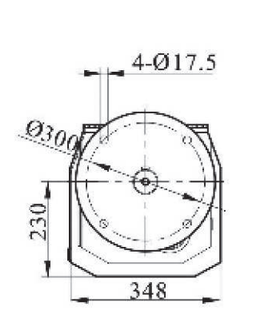


Ø350



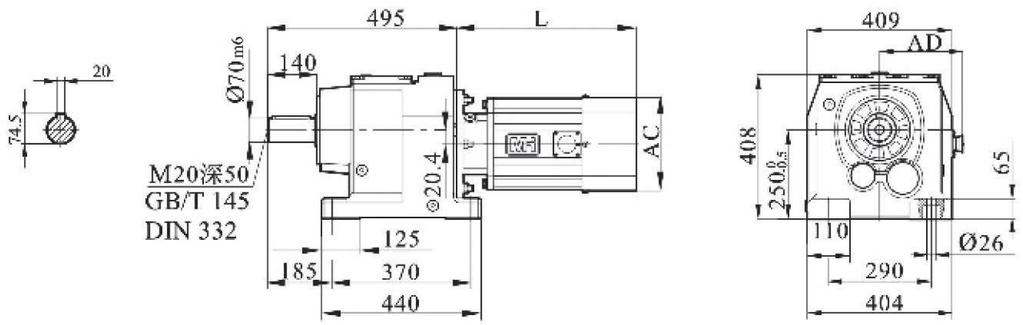
Ø450



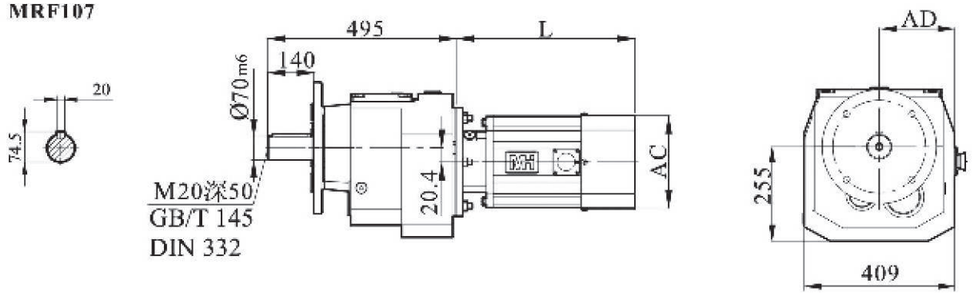


YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M	160L	180M	180L	200L
L	246	280	310	312	360	408	487	524	519	555	588	654
AC	170	190	190	210	230	280	280	315	315	350	350	395
AD	135	145	145	160	215	215	215	255	255	280	280	305

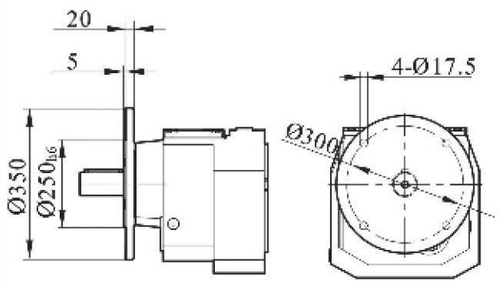
MR107



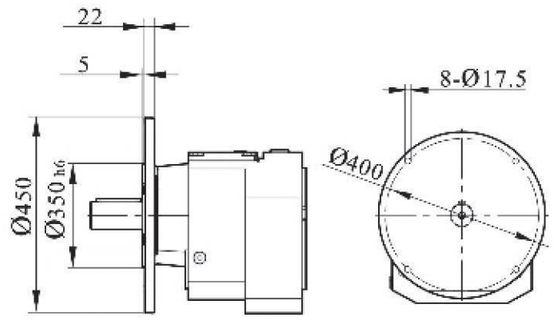
MRF107



Ø350

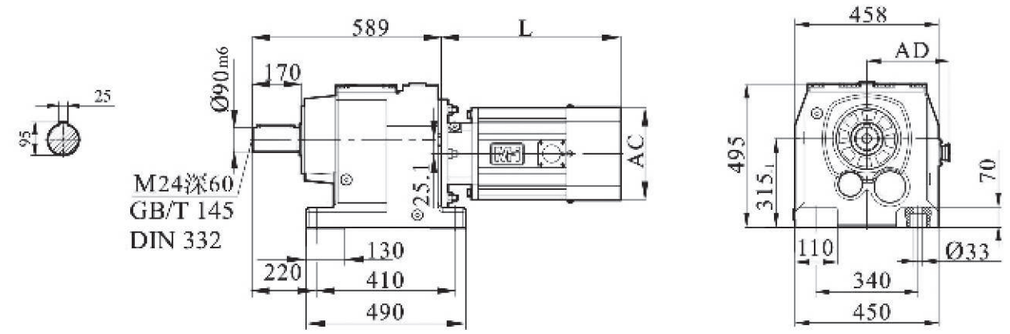


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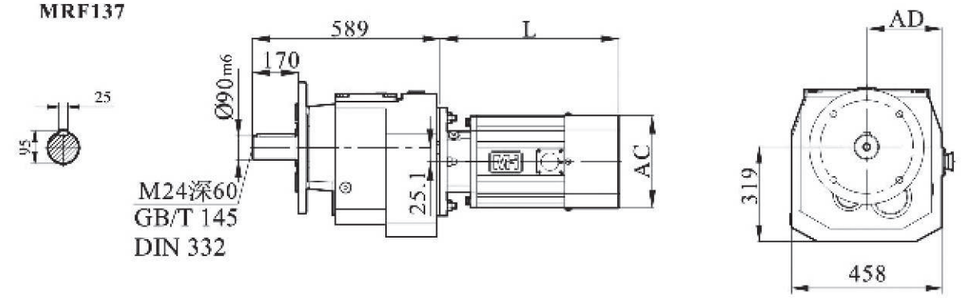


YE2电机机座号 Motor Size	100	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
L	308	354	403	482	524	519	555	588	654	680	702
AC	210	230	280	280	315	315	350	350	395	450	450
AD	160	215	215	215	255	255	280	280	305	335	335

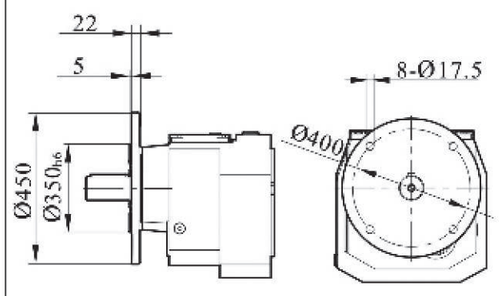
MR137



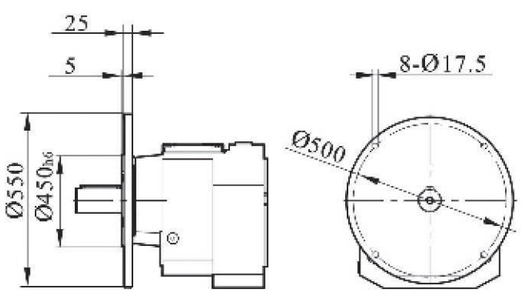
MRF137



Ø450

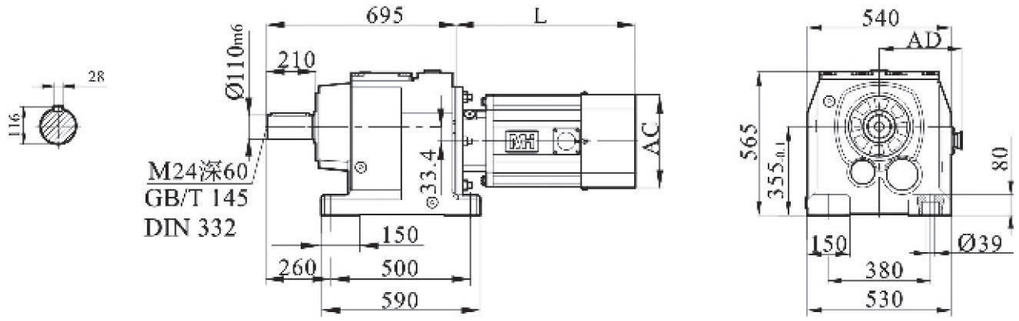


Ø550

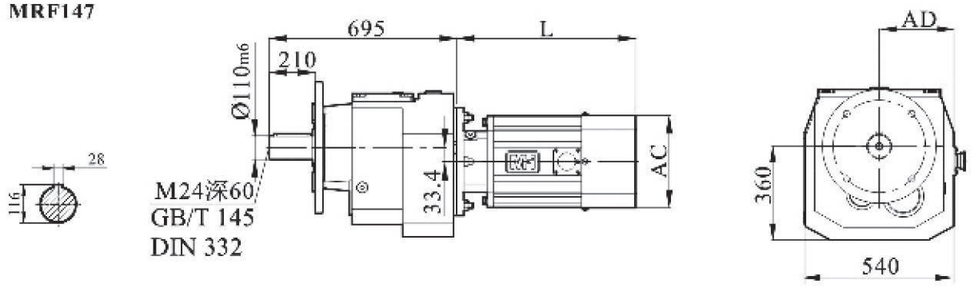


YE2电机机座号 Motor Size	132S	132M	160M	160L	180M	180L	200L	225S	225M
L	396	475	476	519	555	588	654	680	702
AC	280	280	315	315	350	350	395	450	450
AD	215	215	255	255	280	280	305	335	335

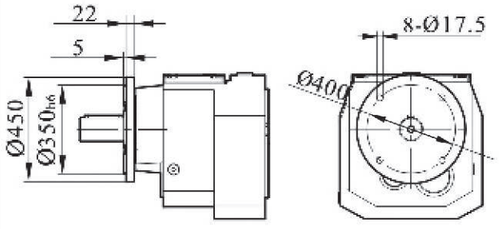
MR147



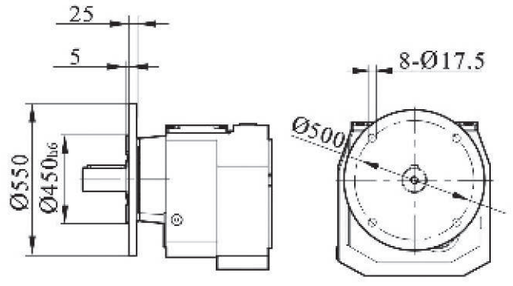
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Ø450

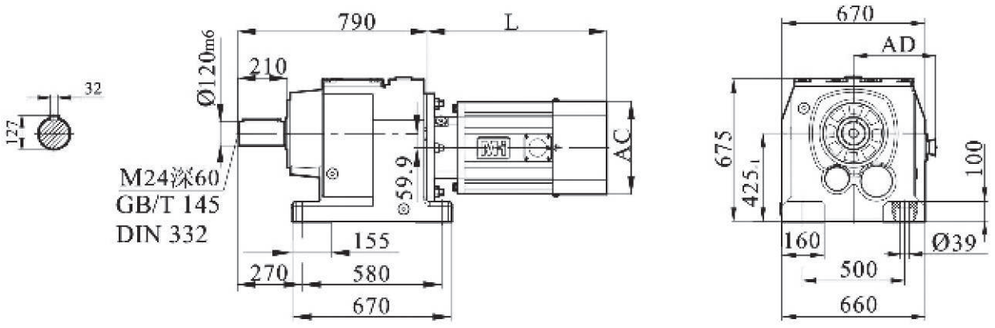


Ø550

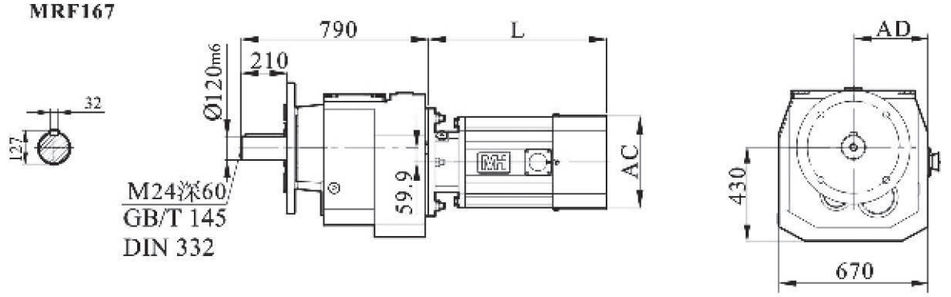


YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
L	567	602	635	666	642	669	691	770	828	879
AC	315	315	350	350	395	450	450	480	530	530
AD	255	255	280	280	305	335	335	370	410	410

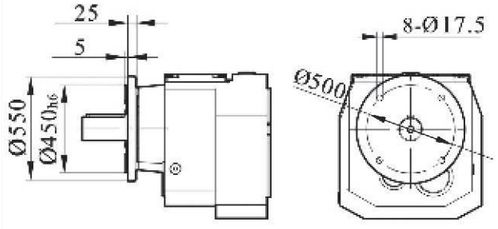
MR167



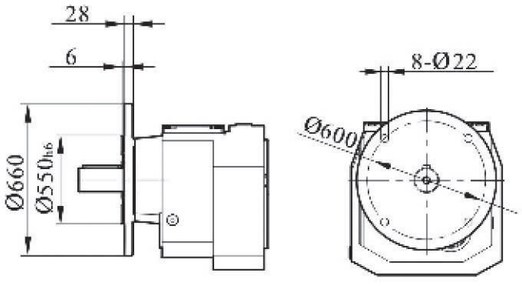
MRF167



Ø550

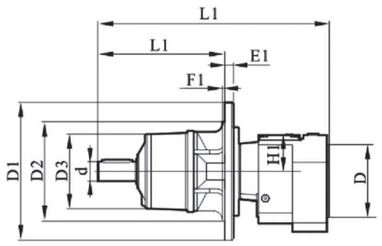


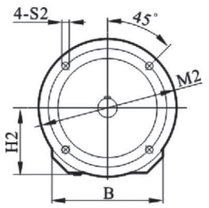
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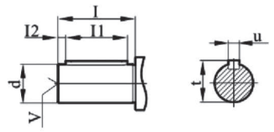
YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
L	567	602	635	666	642	669	691	770	828	879	1100	1210	1210
AC	315	315	350	350	395	450	450	480	530	530	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	530

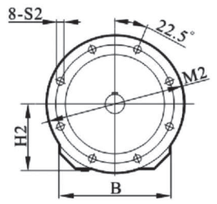
MRM57~MRM167外形尺寸/MRM57~MRM167Dimensions





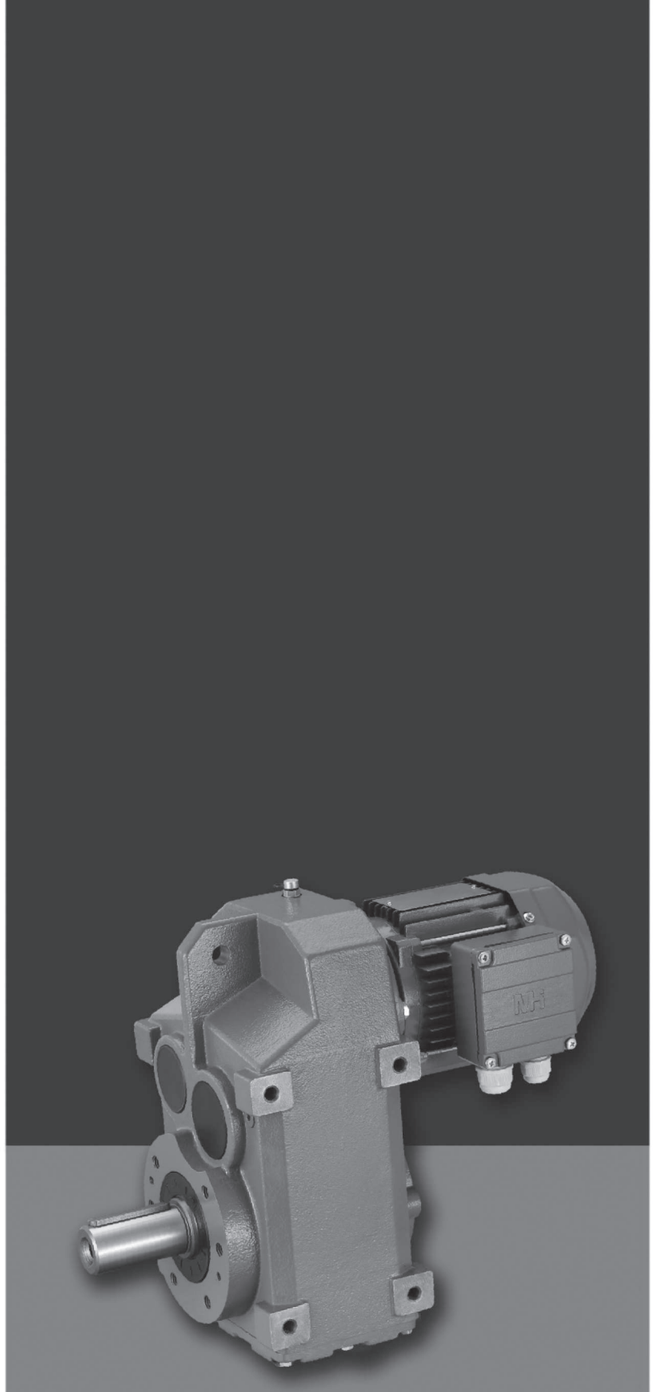
MRM57~MRM87





MRM97~MRM167

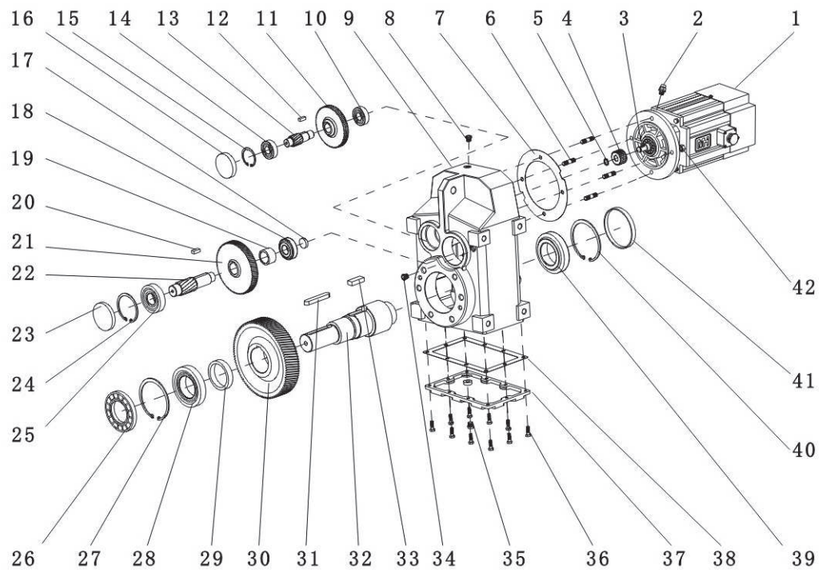
型号 Size	A	B	D1	D2	D3	E1 F1	H1 H2	M S2	L L1	D d	I	I1	I2	u	t	v
MRM57	11.2	202	250	180j6	135	15 4	72 121	215 13.5	420 230	160 35k6	70	60	5	10	38	M12
MRM67	20.7	215	300	230j6	144	16 4	82 134	265 13.5	459 240	160 40k6	80	70	5	12	43	M16
MRM77	15.9	235	350	250h6	170	18 5	88 144	300 17.5	527 300	200 50k6	100	80	10	14	53.5	M16
MRM87	12.6	297	350	250h6	186	18 5	88 144	300 17.5	639 360	250 50k6	120	110	5	18	64	M20
MRM97	10.2	348	450	350h6	214	22 5	144 230	400 17.5	745 420	300 70m6	140	125	7.5	20	74.5	M20
MRM107	20.4	409	550	450h6	232	25 5	158 255	500 17.5	864 500	350 80m6	170	125	20	22	85	M20
MRM137	25.1	458	550	450h6	253	25 5	180 320	500 17.5	1024 600	400 100m6	210	180	15	28	106	M24
MRM147	33.4	540	660	550h6	274	28 6	210 361	600 22	1154 660	450 110m6	210	180	15	28	116	M24
MRM167	59.9	670	660	550h6	290	28 6	250 430	600 22	1313 730	550 125m6	210	200	5	32	134	M24



MF

MF系列平行轴-斜齿轮减速电机
MF SERIES PARALLEL SHAFT
HELICAL GEARED MOTORS

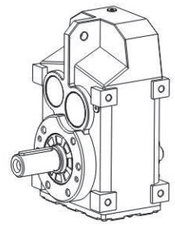
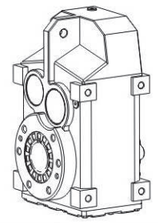
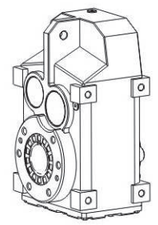
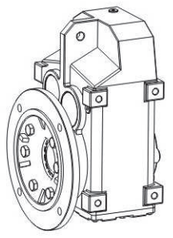
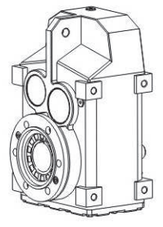
3.1 部件分解图 / Spare Parts List

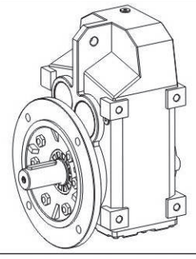
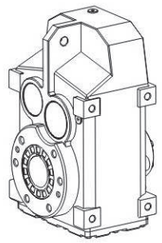
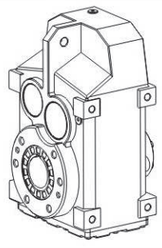
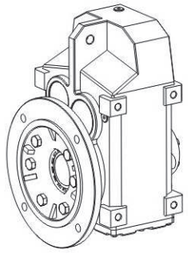
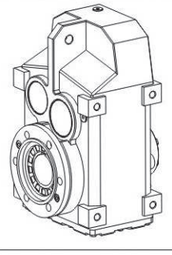


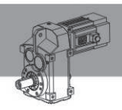
1 电机/motor
2 透气阀/breather valve
3 平键/flat key
4 齿轮/gear
5 轴用挡圈/retaining rings for shafts
6 双头螺栓/stud
7 纸垫/gasket
8 油塞/oil level plug
9 箱体/housing
10 轴承/bearing
11 齿轮/gear
12 平键/flat key
13 齿轮轴/gear shaft
14 轴承/bearing
15 孔用挡圈/retaining rings for bores
16 平面油封/plane seal
17 平面油封/plane seal
18 轴承/bearing
19 轴套/spacer tube
20 平键/flat key
21 齿轮/gear
22 齿轮轴/gear shaft
23 平面油封/plane seal
24 孔用挡圈/retaining rings for bores
25 轴承/bearing
26 骨架油封/skeleton oil seal
27 孔用挡圈/retaining rings for bores
28 轴承/bearing
29 轴套/spacer tube
30 齿轮/gear
31 平键/flat key
32 输出轴/output shaft
33 平键/flat key
34 油塞/oil level plug
35 油塞/oil level plug
36 外六角螺钉/hex head screw
37 盖板/cover plate
38 纸垫/gasket
39 轴承/bearing
40 孔用挡圈/ retaining rings for bores
41 平面油封/plane seal
42 六角螺母/hexagon nut

3.2 机型版本 / Versions

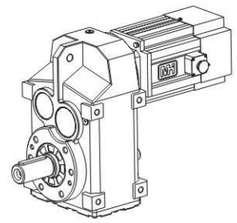
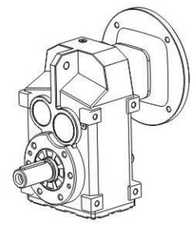
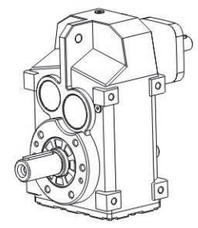
3.2.1 基本型式 / Basic Versions

	**MF..** 底脚安装平行轴 - 斜齿轮减速机 Foot-mounted parallel shaft helical geared units.
	**MFA..B** 底脚空心轴安装平行轴 - 斜齿轮减速机 Foot-mounted parallel shaft helical geared units. **MFV..B** 底脚花键空心轴（DIN5480）安装平行轴 - 斜齿轮减速机 Foot-mounted parallel shaft helical geared motor with splined hollow shaft to DIN5480.
	**MFA..** 空心轴安装平行轴 - 斜齿轮减速机 Parallel shaft helical geared units with hollow shaft. **MFV..** 花键空心轴（DIN5480）安装平行轴 - 斜齿轮减速机 Parallel shaft helical geared units with splined hollow shaft to DIN5480.
	**MFAF..** B5法兰空心轴安装平行轴 - 斜齿轮减速机 Parallel shaft helical geared units in B5 flangemounted version with hollow shaft. **MFVF..** B5法兰花键空心轴（DIN5480）安装平行轴 - 斜齿轮减速机 Paeallel shaft helical geared units in B5 flange-mounted version with splined hollow shaft to DIN5480.
	**MFAZ..** B14法兰空心轴安装平行轴 - 斜齿轮减速机 Parallel shaft helical geared units in B14 flange-mounted version with hollow shaft. **MFVZ..** B14法兰花键空心轴（DIN5480）安装平行轴 斜齿轮减速机 Parallel sfaft helical geared units in B14 flange-mounted wersion with splined hollow shaft to DIN5480.

	**MFF..** B5法兰安装平行轴-斜齿轮减速机 Parallel shaft helical geared units in B5 flange-mounted version.
	**MFH..B** 底脚空心轴锁紧盘安装平行轴-斜齿轮减速机 Foot-mounted parallel shaft helical geared units with hollow shaft and shrink disk.
	**MFH..** 空心轴锁紧盘安装平行轴-斜齿轮减速机 Parallel shaft helical geared units with hollow shaft and shrink disk.
	**MFHF..** B5法兰空心轴锁紧盘安装平行轴-斜齿轮减速机 Parallel shaft helical geared units in B5 flange-mounted version with hollow shaft and shrink disk.
	**MFHZ..** B14法兰空心轴锁紧盘安装平行轴-斜齿轮减速机 Parallel shaft helical geared units in B14 flange-mounted with hollow shaft and shrink disk.

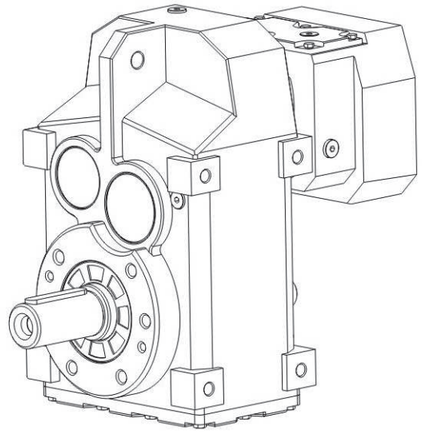


3.2.2 输入型式 / Input Versions

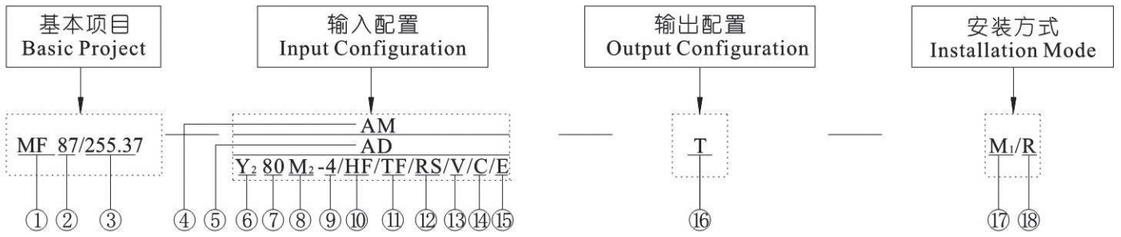
	**MF..Y..** 直联电机输入 Input with geared motors.
	**MF..AM..** AM（IEC）法兰输入 Input with AM adapters for mounting IEC motors.
	**MF..AD..** AD 轴输入 Input with AD shaft assembly.

3.2.3 MF..与MRF..组合/MF..and MRF..Combination

当需要特别低速输出时，可选择MRF齿轮箱作为MF齿轮箱的输入。
If special low speed is needed,MRF.. gearbox can be the input of MF.. Gearbox.



3.3 产品标注 / Product Code



	标号 NO.	含义 Meaning	说明 Explanation
基本项目 Basic Project	①	系列代号 Series Code	MF、MFF、MFA...(详见3. 2. 1) MF,MFF,MFA...(see 3. 2. 1).
	②	机座号 Frame Size	机座号: 37、47、57. . . Frame Size: 37, 47, 57. . .
	③	传动比 Transmission Ratio	传动比 i Transmission Ratio I.
输入配置 Input Configuration	④	法兰输入代号 Flange Input Code	AM(IEC): 63、71、80. . .
	⑤	轴输入代号 Shaft Input Code	AD: 1、2、3. . .
	⑥	电机代号 Motor Code	Y_2: 三相异步电动机 Y_2: Three Phase Asynchronous Motor. YD: 变极多速三相异步电动机 YD: Variable-pole Multi-speed Three Phase Asynchronous Motor. YS: 小功率三相异步电动机 YS: Small Power Three Phase Asynchronous Motor. YVF_2: 变频调速三相异步电动机 YVF_2: Variable Frequency Speed Control Three Phase Asynchronous Motor. Y_2EJ: 电磁制动三相异步电动机 Y_2EJ: Electromagnetic Brake Three Phase Asynchronous Motor. YB2: 隔爆三相异步电动机 YB2: Flame Proof Three Phase Asynchronous Motor.
	⑦	电机机座号 Motor Frame Size.	63、71、80. . .
	⑧	电机定子铁芯长度代号 Length Code of Stator Core.	M、M_1、M_2、S、S_1、S_2、L、L_1、L_2
	⑨	电机极数 Pole Number of Motor.	2、4、6、8

	标号 NO.	含义 Meaning	说明 Explanation
输入配置 Input Configuration	⑩	手动释放装置 Manual Release Device	无 代 码: 无手动释放装置 No Code: No manual release device. H F: 手动释放装置带自锁功能 H F: Manual release device with self-locking Fun-Ction. H R: 手动释放装置不带自锁功能 H R: Manual release device without self-Locking function.
	⑪	电机热保护装置 Motor Heat-protection Device.	无 代 码: 无电机热保护装置 No Code: No motor heat-protection device. T F: 电机热保护装置 T F: Motor heat-protection device.
	⑫	逆止器 Backstop	无 代 码: 无逆止器 No Code: No backstop. R S: 逆止器 R S: Backstop.
	⑬	强制冷却风扇 Forced Cooling Fan	无 代 码: 无强制冷却风扇 No Code: no forced cooling fan. V: 强制冷却风扇 V: Forced cooling fan.
	⑭	防雨罩 Cover	无 代 码: 无风扇防护罩 No Code: No fan cover. C: 防雨罩 C: cover.
	⑮	编码器 Encoder	无 代 码 : 无编码器 No Code: No encoder. E: 编码器 E: Encoder
输出配置 Output Configuration	⑯	扭力臂 Torque Arm	无 代 码: 无扭力臂 No Code: No torque arm. T: 扭力臂 T: Torque Arm.
安装方式 Mounting Positions	⑰	安装方位 Mounting Position	M1、M2、M3、M4、M5、M6
	⑱	电机接线盒方位 Position for motor terminal box.	R、B、L、T

说明:

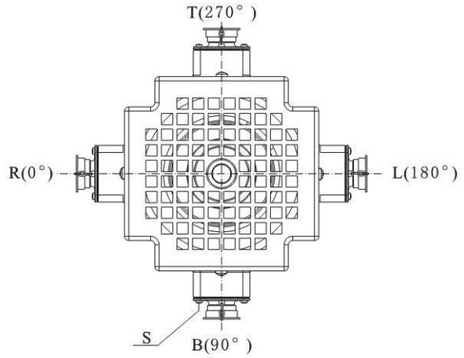
1. 基本项目不可省略;
2. 输入配置中，只能在 AM、AD 和电机之间选择一种;
3. 安装方式参数若省略，默认按 M1 安装方位，R 接线盒方位提供。

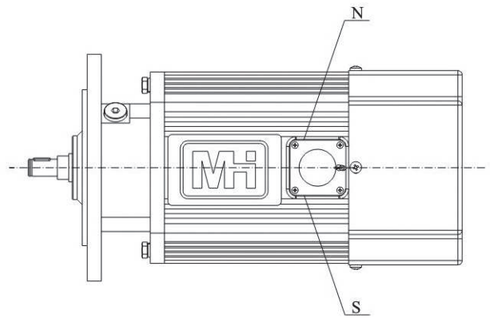
Notes:

1. Basic project can not be omitted.
2. Input configuration can only be one of AM, AD and motor.
3. If not mounting position, default mounting position will be M1, default position for motor terminal will be R.

3.4 安装方位 / Mounting Positions

3.4.1 电机接线盒方位 / Position of Motor Terminal Box





R(0°): 默认接线盒方位
R(0°): Default Position for Motor Terminal Box

注：图为M1安装方位。
Mark: This picture is the installation position of M1

S: 默认进线方位
S: Default Line Position

说明:

上图的视图方向为：从电机尾部的风罩向前看。

可提供R（0°）、B（90°）、L（180°）、T（270°）四种电机接线盒方位。其中R（0°）位置是默认方位。如无特别说明，将按默认方位提供。

可提供S和N两种进线方位，其中S位置是默认方位。如无特别说明，将按默认方位提供。

Notes:

The view direction of above figure: from the fan cover in the end of the motor to look forward.

There will be four position for motor terminal box: R(0°)□ B(90°)□ L(180°)□ T(270°). And default position is R(0°).If no special explaination, it will be provided in default position.If no special explaination, it will be provided in default position.

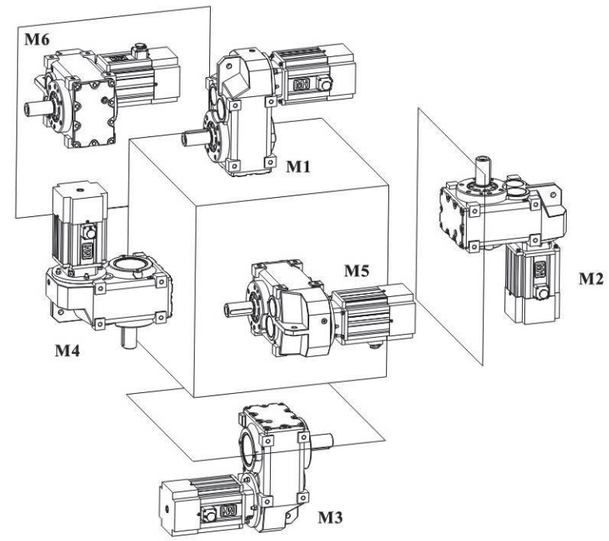
There will be two line position: S and N. Default position is S.If no special explaination, it will be provided in default position.If no special explaination, it will be provided in default position.

3.4.2 油位符号说明 / Oil Level Symbol Explanation

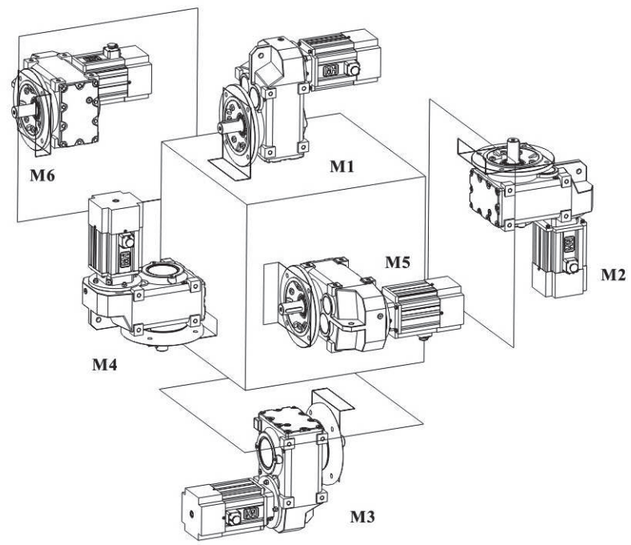
符号 Symbol	含义	Meaning
	通气帽	BREATHER VALVE
	油标	OIL LEVEL PLUG
	排油塞	OIL DRAIN PLUG

3.4.3 安装位置示意 / Mounting Position Designation

MF..安装位置示意图 / MF.. Mounting Position Designation



MFF..安装位置示意图 / MFF.. Mounting Position Designation



3.4.4安装方位 / Mounting Positions

*→提示:

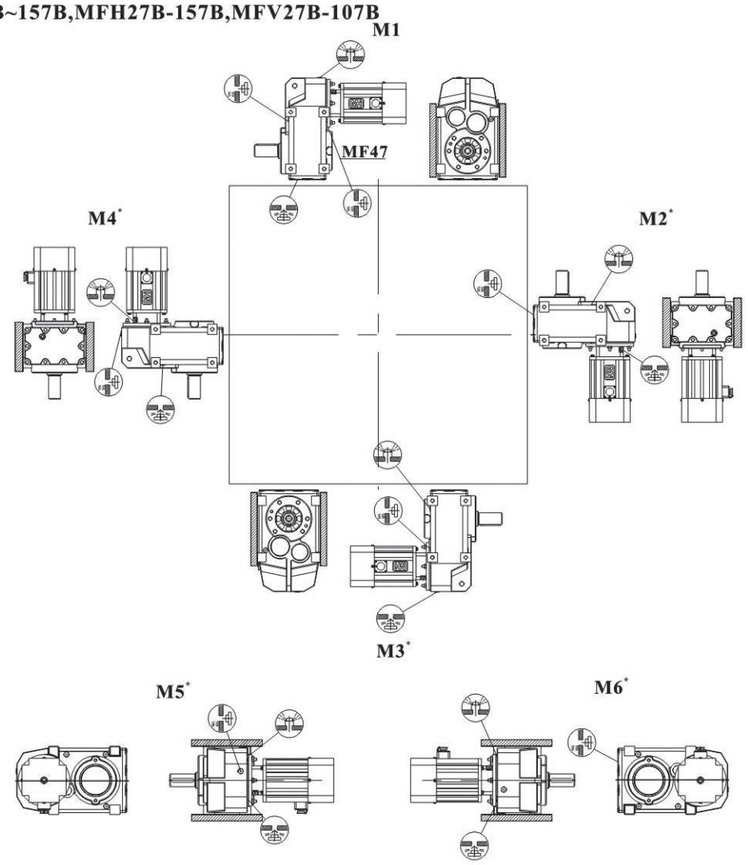
当采用下表列出的安装方式及输入转速时，齿轮箱会产生不可忽视的搅油损失。请联系本公司。

*→Reminder:

Increased churning losses may arise in the following mounting positions. Contact Greatwall Machinery.

安装方式 Mounting Position	齿轮箱规格 Gear Unit Size	输入转速 Input Speed（r/min）
M2 , M3 , M4 , M5 , M6	97-107	>2500
	>107	>1500

MF,MFA27B~157B,MFH27B-157B,MFV27B-107B



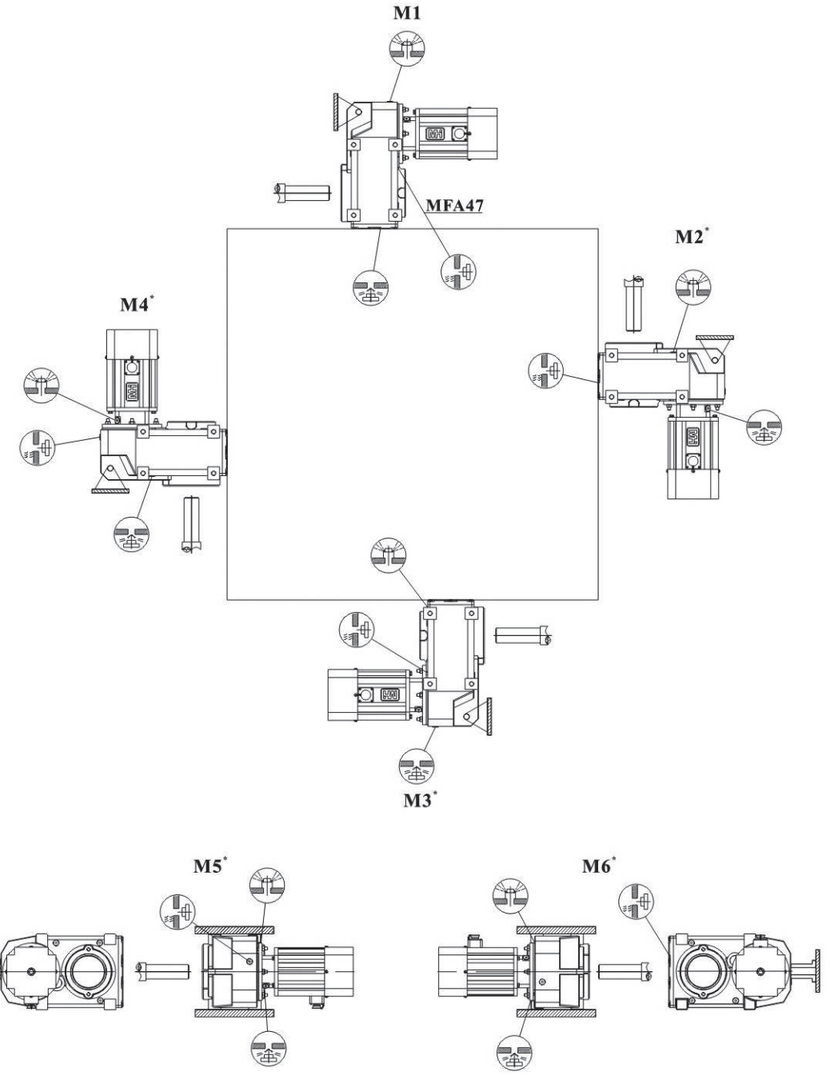
MF..27 M1,M3,M5,M6

MF..27 M1-M6

MF..27 M1,M3,M5,M6

*→page 095

MFA27-157,MFH27-157,MFV27-107

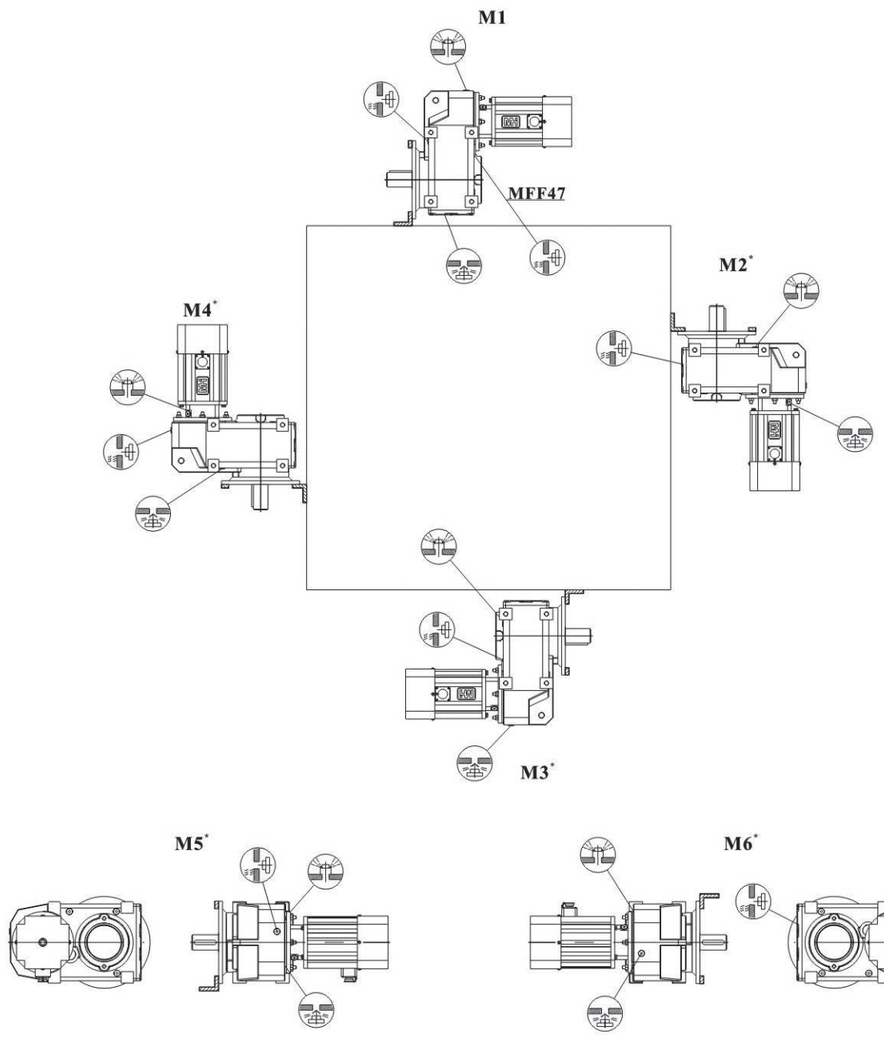


MF..27 M1,M3,M5,M6

MF..27 M1-M6

MF..27 M1,M3,M5,M6

*→page 095



MF..27 M1,M3,M5,M6

MF..27 M1-M6

MF..27 M1,M3,M5,M6

*→page 095

3.5 减速器组合表 / Gear Unit Combination Table

为得到特别低的输出转速，可以通过MRF齿轮箱与 MF 齿轮箱相连的方式实现。

当采用这种传动方案时，可配置电动机的功率依赖于减速机的极限输出扭矩，而不能通过电动机的额定功率和减速机的总传动比计算得出减速机的输出扭矩。

MRF series of gear units and MF series of gear units can be connected together to get special output speed.

For this transmission scheme, the power of the motor depends on the limit output torque of the gear-box, instead of the output torque calculated based on rated power of the motor and the transmission ratio of the gear unit.

MF..与MRF..齿轮箱可能的组合 / Possible Combination of MF.. and MRF..

	MRF17	MRF27	MRF37	MRF47	MRF57	MRF67	MRF77	MRF87	MRF97	MRF107
MF..27	■									
MF..37	■									
MF..47	■									
MF..57			■							
MF..67			■							
MF..77			■							
MF..87					■					
MF..97					■					
MF..107							■			
MF..127							■	■		
MF..157									■	

说明:

■ : 表示可能的组合。

□ : 表示不允许的组合。

Notes:

■ : Possible Combination.

□ : Impossible Combination.

3.6 MF..功率配置 / MF..Power Configuration

MF27 n_1=1400 1/min — 130Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20		
3									
9.90	130	4500	140.74	■					
11.0	130	4500	129.09	■					
13.0	130	4500	109.90	■	■				
15.0	130	4500	94.76	■	■	■			
16.0	130	4500	88.32	■	■	■			
18.0	130	4500	77.21	■	■	■	■		
19.0	130	4500	72.37	■	■	■			
22.0	130	4400	63.86	■	■	■	■		
25.0	130	4180	56.62	■	■	■	■		
28.0	130	3980	50.19	■	■	■			
30.0	130	3860	46.78	■	■	■			
34.0	130	3640	40.89	■	■	■	■		
37.0	130	3530	38.33	■	■	■			
41.0	130	3340	33.83	■	■	■	■		
2									
47.0	130	3140	29.56	■					
52.0	130	3030	27.18	■					
60.0	130	2820	23.25	■	■				
69.0	130	2630	20.15	■	■	■			
74.0	130	2550	18.84	■	■	■			
86.0	130	2370	16.28	■	■	■	■		
101	130	2180	13.84	■	■	■	■		
113	130	2060	12.35	■	■	■	■		
133	130	1900	10.55	■	■	■	■		
142	130	1830	9.88	■	■	■	■		
149	130	1660	9.40	■	■	■			
172	123	1580	8.13	■	■	■	■		
203	114	1530	6.91	■	■	■	■		
227	109	1480	6.17	■	■	■	■		
266	100	1440	5.27	■	■	■	■		
284	96	1420	4.93	■	■	■	■		
337	87	1380	4.16	■	■	■	■		

MF37 n_1=1400 1/min — 200Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
3									
11.0	200	4290	128.51	■					
12.0	200	4290	117.88	■					
14.0	200	4290	100.36	■	■				
16.0	200	4290	86.53	■	■	■			
17.0	200	4290	80.65	■	■	■			

MF37 n_1=1400 1/min — 200Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.30		
3									
20.0	200	4290	70.50	■	■	■	■		
21.0	200	4290	66.09	■	■	■			
24.0	200	4290	58.32	■	■	■	■		
26.0	200	4290	54.54	■	■				
27.0	200	4290	51.70	■	■	■	■		
30.0	200	4290	47.02	■	■	■			
32.0	200	4290	43.83	■	■	■			
37.0	200	4290	38.31	■	■	■	■		
39.0	200	4290	35.91	■	■	■			
44.0	200	4290	31.69	■	■	■	■		
50.0	200	4060	28.09	■	■	■	■		
59.0	200	3760	23.88	■	■	■	■		
2									
59.0	200	3740	23.63	■	■				
68.0	200	3500	20.57	■	■	■			
73.0	200	3390	19.27	■	■	■			
82.0	200	3180	17.03	■	■	■	■		
89.0	200	3070	15.81	■	■	■			
98.0	200	2910	14.33	■	■	■	■		
109	200	2750	12.87	■	■	■	■		
126	190	2620	11.08	■	■	■	■		
134	185	2580	10.42	■	■	■	■		
156	175	2460	8.97	■	■	■	■		
175	170	2360	8.01	■	■	■	■		
188	145	2350	7.44	■	■	■			
208	140	2270	6.74	■	■	■	■		
231	135	2190	6.05	■	■	■	■		
269	125	2120	5.21	■	■	■	■		
286	120	2100	4.90	■	■	■	■		
332	110	2030	4.22	■	■	■	■		
371	105	1970	3.77	■	■	■	■		

MF47 n_1=1400 1/min — 400Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
3									
7.30	400	5920	190.76	■					
8.00	400	5920	175.38	■					
9.30	400	5920	150.06	■	■				
11.0	400	5920	130.07	■	■	■			
12.0	400	5920	121.57	■	■	■			
13.0	400	5920	105.09	■	■	■	■		

MF47 n_1=1400 1/min — 400Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.30		
3									
16.0	400	5920	89.29	■	■	■	■		
18.0	400	5920	79.72	■	■	■	■		
21.0	400	5920	68.09	■	■	■	■		
21.0	400	5920	65.36	■	■	■			
25.0	400	5920	56.49	■	■	■	■		
29.0	400	5920	48.00	■	■	■	■		
33.0	400	5920	42.86	■	■	■	■		
38.0	400	5920	36.61	■	■	■	■		
41.0	400	5920	34.29	■	■	■	■		
48.0	400	5790	28.88	■	■	■	■		
2									
45.0	400	5920	30.86	■	■	■			
48.0	400	5830	29.32	■	■	■			
54.0	400	5460	25.72	■	■	■	■		
64.0	400	5030	21.82	■	■	■	■		
71.0	400	4770	19.70	■	■	■	■		
81.0	400	4450	17.33	■	■	■	■		
86.0	400	4320	16.36	■	■	■	■		
101	400	3950	13.93	■	■	■	■		
111	400	3740	12.66	■	■	■	■		
128	400	3440	10.97	■	■	■	■		
156	330	3250	8.96	■	■	■	■		
178	380	2630	7.88	■	■	■	■		
188	380	2530	7.44	■	■	■	■		
221	350	2470	6.34	■	■	■	■		
243	340	2390	5.76	■	■	■	■		
281	320	2310	4.99	■	■	■	■		

MF57 n_1=1400 1/min — 600Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50
3									
7.00	600	9200	199.70	■					
7.60	600	9200	183.60	■					
8.90	600	9200	157.09	■	■				
10.0	600	9200	136.16	■	■	■			
11.0	600	9200	127.27	■	■	■			
13.0	600	9200	110.01	■	■	■	■		
15.0	600	9200	93.47	■	■	■	■	■	
17.0	600	9200	83.46	■	■	■	■	■	
19.0	600	9200	72.98	■	■	■			
21.0	600	9200	68.22	■	■	■			
24.0	600	9200	58.97	■	■	■	■		
28.0	600	9200	50.10	■	■	■	■	■	

MF57 n_1=1400 1/min — 600Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.30	4.00	5.50
3									
31.0	600	9160	44.73	■	■	■	■	■	
37.0	600	8510	38.21	■	■	■	■	■	■
39.0	600	8250	35.79	■	■	■	■	■	■
46.0	590	7650	30.15	■	■	■	■	■	■
2									
35.0	290	10500	40.13	■					
41.0	500	8670	34.24	■	■				
47.0	545	7890	29.94	■	■	■			
49.0	535	7760	28.45	■	■	■			
56.0	575	7060	24.96	■	■	■	■		
66.0	600	6350	21.17	■	■	■	■	■	
73.0	600	6020	19.11	■	■	■	■	■	
83.0	600	5620	16.81	■	■	■	■	■	■
88.0	600	5450	15.88	■	■	■	■	■	■
104	600	4980	13.52	■	■	■	■	■	■
114	600	4710	12.29	■	■	■	■	■	■
132	600	4320	10.64	■	■	■	■	■	■
150	420	4760	9.31	■	■	■	■	■	
171	420	4450	8.19	■	■	■	■	■	■
181	420	4310	7.73	■	■	■	■	■	■
213	420	3940	6.58	■	■	■	■	■	■
234	420	3730	5.98	■	■	■	■	■	■
270	415	3460	5.18	■	■	■	■	■	■

MF67 n_1=1400 1/min — 820Nm

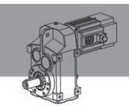
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50
3									
6.10	820	10300	228.99	■					
7.20	820	10300	195.39	■	■				
8.20	820	10300	170.85	■	■	■			
8.60	820	10300	162.31	■	■	■			
9.80	820	10300	142.40	■	■	■	■		
12.0	820	10300	120.79	■	■	■	■	■	
13.0	820	10300	109.04	■	■	■	■	■	
15.0	820	10300	95.94	■	■	■	■	■	■
15.0	820	10300	90.59	■	■	■	■	■	■
18.0	820	10300	79.76	■	■	■	■		
21.0	820	10300	67.65	■	■	■	■	■	
23.0	820	10300	61.07	■	■	■	■	■	
26.0	820	10300	53.73	■	■	■	■	■	■
28.0	820	10300	50.74	■	■	■	■	■	■
32.0	820	10300	43.20	■	■	■	■	■	■
36.0	780	10700	39.26	■	■	■	■	■	■
41.0	740	11000	34.01	■	■	■	■	■	■

MF67 n_1=1400 1/min									820Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50
2									
39.0	820	10300	36.30						
44.0	820	10300	32.08						
51.0	820	10300	27.41						
56.0	820	10300	25.13						
63.0	820	10300	22.05						
67.0	820	10300	20.90						
77.0	820	10300	18.29						
85.0	820	10300	16.48						
97.0	820	10300	14.46						
110	820	10300	12.76						
124	820	10300	11.31						
145	820	10300	9.66						
154	530	11400	9.08						
163	570	10900	8.60						
186	610	10100	7.53						
206	620	9660	6.78						
235	610	9200	5.95						
267	590	8850	5.25						
300	560	8590	4.66						
353	500	8390	3.97						

MF77 n_1=1400 1/min									1500Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.18 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
5.00	1500	15700	281.71						
5.30	1500	15700	262.93						
6.20	1500	15700	225.79						
7.10	1500	15700	198.31						
7.40	1500	15700	188.40						
8.40	1500	15700	166.47						
9.80	1500	15700	142.27						
11.0	1500	15700	130.42						
12.0	1500	15700	114.45						
13.0	1500	15700	108.46						
15.0	1500	15700	94.93						
16.0	1500	15700	85.52						
19.0	1500	15700	75.02						
19.0	1500	15700	72.50						
21.0	1500	15700	66.46						
24.0	1500	15700	58.32						
25.0	1500	15700	55.27						
29.0	1500	15700	48.37						
32.0	1500	15700	43.58						
37.0	1500	15700	38.23						
41.0	1500	15700	33.74						
47.0	1500	15700	29.91						
55.0	1450	16100	25.54						

MF77 n_1=1400 1/min									1500Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.18 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
2									
38.0	1110	17900	36.58						
44.0	1380	16500	31.51						
49.0	1430	16200	28.75						
55.0	1500	15700	25.50						
65.0	1500	15700	21.43						
71.0	1500	15700	19.70						
80.0	1500	15700	17.49						
90.0	1500	15700	15.64						
100	1500	15700	14.06						
115	1500	14900	12.20						
128	1500	14200	10.93						
151	1080	13800	9.30						
169	1080	13100	8.26						
189	1080	12500	7.39						
211	1080	12000	6.64						
243	1080	11300	5.76						
271	1080	10700	5.16						
327	1010	10200	4.28						

MF77 n_1=1400 1/min									1500Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0					
3									
5.00	1500	15700	281.71						
5.30	1500	15700	262.93						
6.20	1500	15700	225.79						
7.10	1500	15700	198.31						
7.40	1500	15700	188.40						
8.40	1500	15700	166.47						
9.80	1500	15700	142.27						
11.0	1500	15700	130.42						
12.0	1500	15700	114.45						
13.0	1500	15700	108.46						
15.0	1500	15700	94.93						
16.0	1500	15700	85.52						
19.0	1500	15700	75.02						
19.0	1500	15700	72.50						
21.0	1500	15700	66.46						
24.0	1500	15700	58.32						
25.0	1500	15700	55.27						
29.0	1500	15700	48.37						
32.0	1500	15700	43.58						
37.0	1500	15700	38.23						
41.0	1500	15700	33.74						
47.0	1500	15700	29.91						
55.0	1450	16100	25.54						
2									
38.0	1110	17900	36.58						
44.0	1380	16500	31.51						

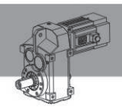


MF77 n_1=1400 1/min									1500Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0					
2									
49.0	1430	16200	28.75						
55.0	1500	15700	25.50						
65.0	1500	15700	21.43						
71.0	1500	15700	19.70						
80.0	1500	15700	17.49						
90.0	1500	15700	15.64						
100	1500	15700	14.06						
115	1500	14900	12.20						
128	1500	14200	10.93						
151	1080	13800	9.30						
169	1080	13100	8.26						
189	1080	12500	7.39						
211	1080	12000	6.64						
243	1080	11300	5.76						
271	1080	10700	5.16						
327	1010	10200	4.28						

MF87 n_1=1400 1/min									3000Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
3									
5.20	3000	19800	270.68						
5.50	3000	19800	255.37						
6.10	3000	19800	228.93						
7.10	3000	19800	197.20						
7.80	3000	19800	179.97						
8.80	3000	19800	159.61						
10.0	3000	19800	134.16						
11.0	3000	19800	123.29						
13.0	3000	19800	109.49						
14.0	3000	19800	97.89						
16.0	3000	19800	88.01						
18.0	3000	19800	76.39						
20.0	3000	19600	68.40						
25.0	3000	17700	56.75						
28.0	2940	16800	50.36						
31.0	2820	16200	45.28						
36.0	2720	15400	39.30						
40.0	2610	14900	35.19						
48.0	2510	13800	29.20						
2									
41.0	2610	14600	33.92						
49.0	2450	13900	28.78						
53.0	3000	11100	26.50						
59.0	3000	10300	23.68						
66.0	3000	9520	21.32						
73.0	3000	8840	19.31						
82.0	3000	8040	17.12						
90.0	3000	7390	15.48						

MF87 n_1=1400 1/min									3000Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.30	4.00	5.50 7.50
2									
107	3000	6370	13.12						
122	3000	5580	11.46						
146	2880	5050	9.58						
169	1530	8890	8.29						
190	1530	8280	7.35						
211	1530	7790	6.65						
249	1530	7020	5.63						
285	1530	6430	4.92						
340	1460	5980	4.12						

MF87 n_1=1400 1/min						3000Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	
3						
5.20	3000	19800	270.68			
5.50	3000	19800	255.37			
6.10	3000	19800	228.93			
7.10	3000	19800	197.20			
7.80	3000	19800	179.97			
8.80	3000	19800	159.61			
10.0	3000	19800	134.16			
11.0	3000	19800	123.29			
13.0	3000	19800	109.49			
14.0	3000	19800	97.89			
16.0	3000	19800	88.01			
18.0	3000	19800	76.39			
20.0	3000	19600	68.40			
25.0	3000	17700	56.75			
28.0	2940	16800	50.36			
31.0	2820	16200	45.28			
36.0	2720	15400	39.30			
40.0	2610	14900	35.19			
48.0	2510	13800	29.20			
2						
41.0	2610	14600	33.92			
49.0	2450	13900	28.78			
53.0	3000	11100	26.50			
59.0	3000	10300	23.68			
66.0	3000	9520	21.32			
73.0	3000	8840	19.31			
82.0	3000	8040	17.12			
90.0	3000	7390	15.48			
107	3000	6370	13.12			
122	3000	5580	11.46			
146	2880	5050	9.58			
169	1530	8890	8.29			
190	1530	8280	7.35			
211	1530	7790	6.65			
249	1530	7020	5.63			
285	1530	6430	4.92			
340	1460	5980	4.12			



MF97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.10 ~1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0
3									
5.10	4300	29900	276.77	■	■	■			
5.50	4300	29900	253.41	■	■	■			
6.30	4300	29900	223.88	■	■	■	■		
7.40	4300	29900	189.92	■	■	■	■		
8.00	4300	29900	174.87	■	■	■	■	■	
9.00	4300	29900	156.30	■	■	■	■	■	
9.90	4300	29900	140.71	■	■	■	■	■	
11.0	4300	29900	127.42	■	■	■	■	■	
12.0	4300	29900	112.99	■	■	■	■	■	
14.0	4300	29900	102.16		■	■	■	■	
14.0	4300	29900	97.58	■	■	■	■		
16.0	4300	29900	89.85	■	■	■	■	■	
16.0	4300	29900	86.59		■	■	■	■	■
17.0	4300	29900	80.31	■	■	■	■	■	
19.0	4300	29900	75.63				■	■	■
19.0	4300	29900	72.29	■	■	■	■	■	■
21.0	4300	29000	65.47	■	■	■	■	■	■
24.0	4300	27200	58.06	■	■	■	■	■	■
27.0	4300	25800	52.49				■	■	■
31.0	4300	23600	44.49				■	■	■
36.0	4300	21900	38.86				■	■	■
43.0	4300	19800	32.50				■	■	■
2									
32.0	3070	27600	43.28	■	■	■	■		
38.0	3070	25500	36.64	■	■	■	■		
41.0	4300	20300	33.91	■	■	■	■	■	
46.0	4300	19000	30.39	■	■	■	■	■	
51.0	4300	17900	27.44	■	■	■	■	■	■
56.0	4300	16800	24.92	■	■	■	■	■	■
63.0	4300	15600	22.11	■	■	■	■	■	■
70.0	4300	14600	20.07		■	■	■	■	■
81.0	4300	13200	17.25		■	■	■	■	■
93.0	4300	11900	15.06				■	■	■
110	4300	10500	12.77				■	■	■
125	4100	10000	11.16				■	■	■
155	2360	13400	9.06	■	■	■	■	■	■
170	2360	12600	8.22		■	■	■	■	■
198	2360	11500	7.07		■	■	■	■	■
227	2250	11100	6.17				■	■	■
268	2150	10400	5.23				■	■	■
306	2050	9950	4.57				■	■	■
362	1800	9960	3.87					■	■

MF97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	30.0					
3									
5.10	4300	29900	276.77						
5.50	4300	29900	253.41						

MF97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	30.0					
3									
6.30	4300	29900	223.88						
7.40	4300	29900	189.92						
8.00	4300	29900	174.87						
9.00	4300	29900	156.30						
9.90	4300	29900	140.71						
11.0	4300	29900	127.42						
12.0	4300	29900	112.99	■					
14.0	4300	29900	102.16	■					
14.0	4300	29900	97.58						
16.0	4300	29900	89.85						
16.0	4300	29900	86.59	■					
17.0	4300	29900	80.31						
19.0	4300	29900	75.63	■					
19.0	4300	29900	72.29						
21.0	4300	29000	65.47						
24.0	4300	27200	58.06	■					
27.0	4300	25800	52.49	■					
31.0	4300	23600	44.49	■					
36.0	4300	21900	38.86	■					
43.0	4300	19800	32.50	■					
2									
32.0	3070	27600	43.28						
38.0	3070	25500	36.64						
41.0	4300	20300	33.91						
46.0	4300	19000	30.39						
51.0	4300	17900	27.44						
56.0	4300	16800	24.92						
63.0	4300	15600	22.11	■					
70.0	4300	14600	20.07	■					
81.0	4300	13200	17.25	■					
93.0	4300	11900	15.06	■					
110	4300	10500	12.77	■					
125	4100	10000	11.16	■					
155	2360	13400	9.06	■					
170	2360	12600	8.22	■					
198	2360	11500	7.07	■					
227	2250	11100	6.17	■					
268	2150	10400	5.23	■					
306	2050	9950	4.57	■					
362	1800	9960	3.87	■					

MF107 n_1=1400 1/min — 7840Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	2.20 3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0
3									
8.70	7680	49800	161.28	■	■	■	■	■	
9.60	7680	49800	146.49	■	■	■	■	■	
11.0	7680	49800	129.97	■	■	■	■	■	■
12.0	7680	49800	117.94	■	■	■	■	■	■
14.0	7680	49800	101.38	■	■	■	■	■	■
15.0	7680	49800	92.47	■	■	■	■	■	
16.0	7680	49800	88.49			■	■	■	■
17.0	7680	49800	83.99	■	■	■	■	■	
19.0	7680	49800	74.52	■	■	■	■	■	■
21.0	7680	49800	67.62	■	■	■	■	■	■
24.0	7680	47800	58.12	■	■	■	■	■	■
28.0	7680	45100	50.73			■	■	■	■
33.0	7680	42000	43.03			■	■	■	■
37.0	7680	39500	37.61			■	■	■	■
44.0	7680	36500	31.80				■	■	■
3									
41.0	7400	38300	33.79	■	■	■	■	■	■
51.0	7840	33300	27.57	■	■	■	■	■	■
56.0	7840	31500	25.14	■	■	■	■	■	■
64.0	7840	28800	21.76	■	■	■	■	■	■
73.0	7840	26500	19.20			■	■	■	■
84.0	7840	23900	16.58			■	■	■	■
95.0	7680	22400	14.67			■	■	■	■
114	7000	22600	12.33				■	■	■
141	6500	21500	9.96					■	■
144	4910	23500	9.69			■	■	■	■
167	4800	22000	8.37			■	■	■	■
189	4600	21300	7.40			■	■	■	■
225	4600	19000	6.22				■	■	■
278	4600	16400	5.03					■	■

MF107 n_1=1400 1/min — 7840Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	2.20 3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0
3									
5.50	7680	49800	254.40	■	■	■			
6.50	7680	49800	215.37	■	■	■			
7.00	7680	49800	199.31	■	■	■	■		
7.80	7680	49800	178.64	■	■	■	■		

MF127 n_1=1400 1/min — 12000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	7.50	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 90.0	
2									
52.0	8500	55300	26.86	■	■	■	■		
57.0	8500	53300	24.57	■	■	■	■		
65.0	12000	38000	21.38	■	■	■	■	■	
74.0	11000	38800	18.87	■	■	■	■	■	
86.0	11000	35400	16.36	■	■	■	■	■	
96.0	11000	32600	14.55	■	■	■	■	■	
112	10000	33300	12.54	■	■	■	■	■	
137	9500	30900	10.19	■	■	■	■	■	
158	7000	36400	8.86	■	■	■	■	■	
178	6000	37000	7.88	■	■	■	■	■	
206	7000	32200	6.80	■	■	■	■	■	
254	6000	31700	5.52	■	■	■	■	■	
299	6000	29500	4.68	■	■	■	■	■	

MF157 n_1=1400 1/min — 18000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 90.0	110 132	
3									
5.20	18000	100300	267.43	■					
6.40	18000	100300	217.62	■	■				
7.90	18000	100300	178.20	■	■	■			
8.60	18000	100300	162.96	■	■	■			
9.90	18000	100300	141.80	■	■	■	■		
11.0	18000	100300	125.14	■	■	■	■		
13.0	18000	100300	108.49	■	■	■	■	■	
15.0	18000	100300	96.53	■	■	■	■	■	
16.0	18000	95800	85.80	■	■	■			
18.0	18000	92300	78.46	■	■	■			
21.0	18000	87000	68.28	■	■	■	■		
23.0	18000	82500	60.25	■	■	■	■		
27.0	18000	77500	52.24	■	■	■	■	■	
30.0	18000	73600	46.48	■	■	■	■	■	
35.0	18000	68900	40.06	■	■	■	■	■	
43.0	18000	62500	32.55	■	■	■	■	■	
51.0	18000	57800	27.60	■	■	■	■	■	
2									
26.0	8000	98400	53.55	■	■				
32.0	10000	87800	43.94	■	■	■			
39.0	11000	79300	35.75	■	■	■	■		
49.0	17000	60800	28.60	■	■	■	■	■	
55.0	15000	61500	25.43	■	■	■	■	■	
63.0	18000	51800	22.16	■	■	■	■	■	
71.0	17000	50900	19.77	■	■	■	■	■	
83.0	18000	44900	16.85	■	■	■	■	■	
100	17000	42500	13.96	■	■	■	■	■	
117	16000	40900	11.92	■	■	■	■	■	

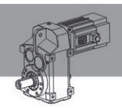
3.7 MF..性能参数 / MF.. Performance Parameters

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
0.06	13900	22323	86700	0.85	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..63M$_1$-4 AM63 AD2
0.07	11800	19048	90000	1.00		
0.08	10300	16656	90000	1.15		
0.09	9180	14722	90000	1.30		
0.11	7990	12912	90000	1.50		
0.12	7040	11656	90000	1.70		
0.14	6310	10191	90000	1.90		
0.10	8850	14767	65000	0.90	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..63M$_1$-4 AM63 AD2
0.11	7550	11348	65000	1.05		
0.13	6600	10039	65000	1.20		
0.14	5890	8548	65000	1.35		
0.17	5150	7674	65000	1.55		
0.19	4490	6767	65000	1.80		
0.22	3700	5954	65000	2.20		
0.24	3210	5223	65000	2.50		
0.27	2910	4567	65000	2.70		
0.32	2670	3521	65000	3.00		
0.21	4140	6469	30400	1.05	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..63M$_1$-4 AM63 AD2
0.25	3820	5615	31300	1.15		
0.28	3320	4961	32500	1.30		
0.32	2900	4333	33500	1.50		
0.35	2690	3906	34000	1.60	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..63M$_1$-4 AM63 AD2
0.41	2320	3352	34800	1.85		
0.47	1910	2907	35500	2.20		
0.54	1750	2553	35800	2.40		
0.33	2760	4245	23800	1.10	MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57	Y..63M$_1$-4 AM63 AD2
0.37	2210	3721	25800	1.35		
0.43	2240	3244	25700	1.35		
0.48	1990	2881	26500	1.50		
0.54	1780	2576	27100	1.70		
0.63	1510	2199	27800	2.00		
0.72	1300	1930	28300	2.30		
0.81	1170	1709	28600	2.60		
0.92	1030	1493	28900	2.90		
1.10	820	1300	29300	3.70		
1.20	745	1148	29500	4.00		
0.53	1820	2613	13000	0.80	MFA 77 MRF37 MFAF 77 MRF37 MF 77 MRF37 MFF 77 MRF37	Y..63M$_1$-4 AM63 AD2
0.60	1570	2284	15200	0.95		
0.68	1380	2029	16400	1.10		
0.80	1180	1728	17500	1.25		
0.89	1090	1544	17900	1.40		
1.00	950	1354	18500	1.55		
1.20	840	1200	18800	1.75		
1.30	740	1053	19100	2.00		
1.50	630	910	19400	2.40		
1.70	525	810	19600	2.80		
1.90	460	710	19800	3.20		
0.97	960	1429	7070	0.85	MFA 67 MRF37 MFAF 67 MRF37 MF 67 MRF37 MFF 67 MRF37	Y..63M$_1$-4 AM63 AD2
1.10	860	1271	9840	0.95		
1.20	725	1102	11100	1.15		
1.40	635	970	11700	1.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
1.60	560	858	12100	1.45	MFA 67 MRF37 MFAF 67 MRF37 MF 67 MRF37 MFF 67 MRF37	Y..63M$_1$-4 AM63 AD2
1.80	490	755	12400	1.65		
2.20	415	641	12700	1.95		
2.40	390	572	12800	2.10		
2.70	330	509	13000	2.50		
3.20	285	437	13000	2.80		
1.60	610	851	9100	1.00	MFA 57 MRF37 MFAF 57 MRF37 MF 57 MRF37 MFF 57 MRF37	Y..63M$_1$-4 AM63 AD2
1.90	520	738	9750	1.15		
2.10	455	646	10200	1.30		
2.50	385	558	10600	1.55		
2.70	345	506	10900	1.75		
3.00	295	452	11100	2.00		
3.20	310	426	11100	1.95		
3.60	270	382	11300	2.20		
4.20	230	330	11500	2.60		
4.60	210	298	11500	2.80		
5.30	185	262	11500	3.20		
2.50	385	543	6100	1.05	MFA 47 MRF17 MFAF 47 MRF17 MF 47 MRF17 MFF 47MRF17	Y..63M$_1$-4 AM63 -
2.90	330	475	6740	1.20		
3.30	290	419	7150	1.40		
2.60	380	524	6190	1.05		
2.80	350	489	6530	1.15		
3.20	300	427	7020	1.30		
3.60	265	381	7310	1.50		
4.10	235	334	7550	1.70		
4.70	205	295	7740	1.95		
5.40	172	253	7910	2.30		
4.30	215	322	3990	0.90	MFA 37 MRF17 MFAF 37 MRF17 MF 37 MRF17 MFF 37 MRF17	Y..63M$_1$-4 AM63 -
5.00	192	278	4400	1.05		
5.70	162	242	4750	1.25		
6.20	156	221	4820	1.30		
4.20	235	326	3710	0.85		
4.80	200	285	4250	1.00		
5.50	177	250	4590	1.15		
6.30	156	219	4820	1.30		
7.40	132	186	5040	1.50		
8.30	118	167	5140	1.70		
6.20	155	221	4500	0.85	MFA 27 MRF17 MFAF 27 MRF17 MF 27 MRF17 MFF 27 MRF17	Y..63M$_1$-4 AM63 -
8.00	119	172	4500	1.10		
9.00	104	153	4500	1.25		
11.0	87	130	4500	1.50		
6.50	150	211	4500	0.85		
7.40	131	186	4500	1.00		
9.70	102	142	4500	1.25		
11.0	88	124	4500	1.45		
13.0	77	109	4500	1.70		
14.0	67	96	4500	1.95		
6.90	166	199.7	11500	3.60	MFA 57 MFAF 57 MF 57 MFF 57	Y..63M$_1$-4 AM63 AD2
7.50	152	183.6	11500	3.90		
8.80	130	157.09	11500	4.60		
10.0	113	136.16	11500	5.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
7.20	158	190.76	7970	2.50	MFA 47 MFAF 47 MF 47 MFF 47	Y..63M$_1$-4 AM63 AD1
7.90	146	175.38	8020	2.80		
9.20	125	150.06	8100	3.20		
11.0	108	130.07	8150	3.70		
11.0	107	128.51	5220	1.85	MFA 37 MFAF 37 MF 37 MFF 37	Y..63M$_1$-4 AM63 AD1
12.0	98	117.88	5270	2.00		
14.0	83	100.36	5340	2.40		
16.0	72	86.53	5400	2.80		
17.0	67	80.65	5410	3.00		
9.80	117	140.74	4500	1.10	MFA 27 MFAF 27 MF 27 MFF 27	Y..63M$_1$-4 AM63 AD1
11.0	107	129.09	4500	1.20		
13.0	91	109.9	4500	1.40		
15.0	79	94.76	4500	1.65		
16.0	73	88.32	4500	1.75		
18.0	64	77.21	4500	2.00		
19.0	60	72.37	4500	2.20		
22.0	53	63.86	4500	2.40		
24.0	47	56.62	4500	2.80		
28.0	42	50.19	4500	3.10		
30.0	39	46.78	4500	3.40		
34.0	34	40.89	4500	3.80		
36.0	32	38.33	4430	4.10		
41.0	28	33.83	4270	4.60		
47.0	24	29.56	4100	5.30	MFA 27 MFAF 27 MF 27 MFF 27	Y..63M$_1$-4 AM63 AD2
51.0	23	27.18	4000	5.80		
59.0	19	23.25	3820	6.70		
68.0	17	20.15	3650	7.80		
73.0	16	18.84	3580	8.30		
85.0	14	16.28	3420	9.60		
100	12	13.84	3250	11.0		
112	10	12.35	3140	13.0	MFA 27 MFAF 27 MF 27 MFF 27	Y..63M$_1$-4 AM63 AD2
131	8.8	10.55	2990	15.0		
140	8.2	9.88	2920	16.0		
147	7.8	9.4	2870	17.0		
170	6.7	8.13	2740	18.0		
200	5.7	6.91	2600	20.0		
224	5.1	6.17	2510	21.0		
262	4.4	5.27	2390	23.0		
280	4.1	4.93	2340	23.0		
332	3.5	4.16	2210	25.0		
P_1=0.18kw						
0.10	13600	12912	87200	0.90	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..63M$_2$-4 AM63 AD2
0.11	12100	11656	90000	1.00		
0.13	10700	10191	90000	1.10		
0.15	8940	8831	90000	1.35		
0.17	7740	7643	90000	1.55		
0.20	7130	6715	90000	1.70		
0.15	8440	8548	47700	0.90	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..63M$_2$-4 AM63 AD2
0.17	8130	7674	48600	0.95		
0.20	7070	6767	51400	1.10		
0.22	6080	5954	53800	1.25		
0.25	5290	5223	55700	1.45		
0.29	4850	4567	56600	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
0.37	3670	3521	59100	2.10	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..63M$_2$-4 AM63 AD2
0.43	3250	3037	59900	2.40	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..63M$_2$-4 AM63 AD3
0.48	2950	2756	60500	2.60		
0.56	2540	2369	61200	3.00		
0.64	2210	2068	61800	3.50		
0.30	4800	4333	22800	0.90	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..63M$_2$-4 AM63 AD2
0.34	4420	3906	29500	0.95		
0.39	3800	3352	31300	1.15		
0.45	3210	2907	32800	1.35		
0.52	2890	2553	33600	1.50		
0.59	2540	2245	34300	1.70		
0.67	2210	1970	35000	1.95		
0.77	1950	1722	35500	2.20	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..63M$_2$-4 AM63 AD2
0.86	1730	1527	35900	2.50		
0.99	1420	1327	36400	3.00		
1.10	1330	1171	36500	3.20		
0.51	2920	2576	22300	1.00	MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57	Y..63M$_2$-4 AM63 AD2
0.60	2490	2199	24800	1.20		
0.68	2160	1930	25900	1.40		
0.77	1930	1709	26600	1.55		
0.88	1690	1493	27300	1.75		
1.00	1390	1300	28100	2.10		
1.20	1250	1148	28400	2.40		
1.30	1080	1010	28800	2.80		
1.50	970	887	29000	3.10	MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57	Y..63M$_2$-4 AM63 AD3
1.70	830	780	29300	3.60		
0.86	1770	1544	13500	0.85	MFA 77 MRF37 MFAF 77 MRF37 MF 77 MRF37 MFF 77 MRF37	Y..63M$_2$-4 AM63 AD2
0.98	1550	1354	15300	0.95		
1.10	1380	1200	16500	1.10		
1.20	1210	1053	17400	1.25		
1.40	1030	910	18200	1.45		
1.60	880	810	18700	1.70		
1.90	780	710	19000	1.90		
2.20	690	615	19300	2.20		
1.50	940	858	8660	0.85	MFA 67 MRF37 MFAF 67 MRF37 MF 67 MRF37 MFF 67 MRF37	Y..63M$_2$-4 AM63 AD2
1.80	820	755	10200	1.00		
2.10	700	641	11200	1.15		
2.30	645	572	11600	1.25		
2.60	555	509	12100	1.45		
3.00	480	437	12500	1.70		
3.40	430	384	12700	1.90		
2.60	575	500	12000	1.40	MFA 67 MRF37 MFAF 67 MRF37 MF 67 MRF37 MFF 67 MRF37	Y..63M$_2$-4 AM63 AD2
2.90	525	454	12300	1.55		
3.40	450	392	12600	1.80		
4.00	380	333	12900	2.20		
4.40	335	297	13000	2.40		
5.10	295	261	13000	2.80		



n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
5.60	260	238	13000	3.10	**MFA 67 MRF37** **MFAF 67 MRF37** **MF 67 MRF37** **MFF 67 MRF37**	**Y..63M$_2$-4** **AM63** **AD2**
6.60	215	200	13000	3.70		
2.40	635	558	7570	0.95		
2.60	570	506	9420	1.05		
2.90	495	452	9930	1.20		
3.40	425	386	10400	1.40		
3.90	370	338	10700	1.60	**MFA 57 MRF37** **MFAF 57 MRF37** **MF 57 MRF37** **MFF 57 MRF37**	**Y..63M$_2$-4** **AM63** **AD2**
3.10	500	426	9910	1.20		
3.50	445	382	10300	1.35		
4.00	380	330	10700	1.55		
4.40	340	298	10900	1.75		
5.00	300	262	11100	2.00		
5.80	255	226	11400	2.30		
6.60	220	200	11500	2.70		
3.60	410	370	5210	0.95		
4.10	375	324	6250	1.05		
4.60	325	288	6810	1.20		
5.30	275	249	7250	1.45	**MFA 47 MRF17** **MFAF 47 MRF17** **MF 47 MRF17** **MFF 47MRF17**	**Y..63M$_2$-4** **AM63** **-**
4.00	385	334	6100	1.05		
4.50	335	295	6680	1.20		
5.20	285	253	7190	1.40		
6.10	250	217	7430	1.55		
7.00	220	190	7650	1.80		
7.40	205	178	7740	1.95		
7.10	215	186	4060	0.95	**MFA 37 MRF17** **MFAF 37 MRF17** **MF 37 MRF17** **MFF 37 MRF17**	**Y..63M$_2$-4** **AM63** **-**
7.90	194	167	4380	1.05		
9.10	171	145	4660	1.15		
10.0	151	129	4870	1.30		
9.30	166	142	4500	0.80	**MFA 27 MRF17** **MFAF 27 MRF17** **MF 27 MRF17** **MFF 27 MRF17**	**Y..63M$_2$-4** **AM63** **-**
11.0	144	124	4500	0.90		
12.0	126	109	4500	1.05		
14.0	110	96	4500	1.20		
3.10	555	281.71	19600	2.70	**MFA 77** **MFAF 77** **MF 77** **MFF 77**	**Y..71 M$_1$-6** **AM71** **AD2**
3.30	515	262.93	19700	2.90		
3.80	445	225.79	19800	3.40		
3.80	450	228.99	12600	1.80	**MFA 67** **MFAF 67** **MF 67** **MFF 67**	**Y..71 M$_1$-6** **AM71** **AD2**
4.40	385	195.39	12900	2.10		
5.10	335	170.85	13000	2.40		
5.80	295	228.99	13000	2.80	**MFA 67** **MFAF 67** **MF 67** **MFF 67**	**Y..63M$_2$-4** **AM63** **AD2**
6.80	250	195.39	13000	3.20		
7.70	220	170.85	13000	3.70		
4.40	390	199.7	10600	1.50		
4.70	360	183.6	10800	1.65	**MFA 57** **MFAF 57** **MF 57** **MFF 57**	**Y..71 M$_1$-6** **AM71** **AD2**
5.50	310	157.09	11100	1.95		
6.40	265	136.16	11300	2.20		
6.80	250	127.27	11400	2.40		
7.90	215	110.01	11500	2.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
6.60	260	199.7	11300	2.30	**MFA 57** **MFAF 57** **MF 57** **MFF 57**	**Y..63M$_2$-4** **AM63** **AD2**
7.20	235	183.6	11500	2.50		
8.40	200	157.09	11500	2.90		
9.70	177	136.16	11500	3.40		
10.0	166	127.27	11500	3.60		
4.60	375	190.76	6240	1.05	**MFA 47** **MFAF 47** **MF 47** **MFF 47**	**Y..71M$_1$-6** **AM71** **AD1**
5.00	345	175.38	6600	1.15		
5.80	295	150.06	7090	1.35		
6.70	255	130.07	7410	1.55		
7.20	240	121.57	7530	1.65		
6.90	245	190.76	7470	1.60	**MFA 47** **MFAF 47** **MF 47** **MFF 47**	**Y..63M$_2$-4** **AM63** **AD1**
7.50	225	175.38	7600	1.75		
8.80	195	150.06	7800	2.00		
10.0	169	130.07	7920	2.40		
11.0	158	121.57	7970	2.50		
7.40	230	117.88	3750	0.85	**MFA 37** **MFAF 37** **MF 37** **MFF 37**	**Y..71M$_1$-6** **AM71** **AD1**
8.70	198	100.36	4320	1.00		
10.0	171	86.53	4660	1.15		
11.0	159	80.65	4790	1.25		
12.0	139	70.5	4970	1.45		
10.0	167	128.51	4700	1.20		
11.0	154	117.88	4840	1.30		
13.0	131	100.36	5040	1.55	**MFA 37** **MFAF 37** **MF 37** **MFF 37**	**Y..63M$_2$-4** **AM63** **AD1**
15.0	113	86.53	5180	1.75		
16.0	105	80.65	5230	1.90		
19.0	92	70.5	5300	2.20		
20.0	86	66.09	5330	2.30		
23.0	76	58.32	5380	2.60		
12.0	143	109.9	4500	0.90		
14.0	123	94.76	4500	1.05		
15.0	115	88.32	4500	1.15		
17.0	100	77.21	4500	1.30		
18.0	94	72.37	4500	1.40	**MFA 27** **MFAF 27** **MF 27** **MFF 27**	**Y..63M$_2$-4** **AM63** **AD1**
21.0	83	63.86	4500	1.55		
23.0	74	56.62	4500	1.75		
26.0	65	50.19	4500	2.00		
28.0	61	46.78	4500	2.10		
32.0	53	40.89	4410	2.40		
34.0	50	38.33	4340	2.60		
39.0	44	33.83	4200	3.00		
45.0	38.0	29.56	4040	3.40		
49.0	35.0	27.18	3950	3.70		
57.0	30.0	23.25	3780	4.30		
65.0	26.0	20.15	3630	5.00		
70.0	24.0	18.84	3560	5.30		
81.0	21.0	16.28	3410	6.10	**MFA 27** **MFAF 27** **MF 27** **MFF 27**	**Y..63M$_2$-4** **AM63** **AD2**
95.0	18.0	13.84	3240	7.20		
107	16.0	12.35	3140	8.10		
125	14.0	10.55	2990	9.50		
134	13.0	9.88	2930	10.0		
140	12.0	9.40	2870	11.0		
162	11.0	8.13	2750	12.0		
191	9.00	6.91	2610	13.0		
214	8.00	6.17	2520	14.0		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
251	6.90	5.27	2400	14.0	**MFA 27** **MFAF 27** **MF 27** **MFF 27**	**Y..63M$_2$-4** **AM63** **AD2**
268	6.40	4.93	2350	15.0		
318	5.40	4.16	2230	16.0		
335	5.10	8.13	2190	24.0		
394	4.40	6.91	2080	26.0	**MFA 27** **MFAF 27** **MF 27** **MFF 27**	**Y..63 M$_1$-2** **AM63** **AD2**
441	3.90	6.17	2000	28.0		
516	3.30	5.27	1910	30.0		
551	3.10	4.93	1870	31.0		
655	2.60	4.16	1770	33.0		
P_1=0.25kw						
0.15	13300	8831	87900	0.90		
0.17	11500	7643	90000	1.05	**MFA 127 MRF77** **MFAF 127 MRF77** **MF 127 MRF77** **MFF 127 MRF77**	**Y..71M$_1$-4** **AM71** **AD2**
0.19	10400	6715	90000	1.15		
0.22	9230	5925	90000	1.30		
0.25	7940	5153	90000	1.50		
0.29	6890	4533	90000	1.75		
0.22	9050	5954	46000	0.85	**MFA 107 MRF77** **MFAF 107 MRF77** **MF 107 MRF77** **MFF 107 MRF77**	**Y..71M$_1$-4** **AM71** **AD2**
0.25	7890	5223	49300	0.95		
0.28	7120	4567	51300	1.10		
0.37	5430	3521	55300	1.40		
0.43	4780	3037	56800	1.60		
0.47	4340	2756	57700	1.75	**MFA 107 MRF77** **MFAF 107 MRF77** **MF 107 MRF77** **MFF 107 MRF77**	**Y..71M1-4** **AM71** **AD3**
0.55	3730	2369	59000	2.10		
0.63	3250	2068	59900	2.40		
0.81	2490	1597	61300	3.10		
0.93	2150	1401	61900	3.60		
0.45	4670	2907	27500	0.90		
0.51	4180	2553	30300	1.05		
0.58	3670	2245	31600	1.15	**MFA 97 MRF57** **MFAF 97 MRF57** **MF 97 MRF57** **MFF 97 MRF57**	**Y..71M$_1$-4** **AM71** **AD2**
0.66	3200	1970	32800	1.35		
0.85	2500	1527	34400	1.70		
0.98	2090	1327	35200	2.00		
1.10	1910	1171	35500	2.20		
1.30	1670	1022	36000	2.60		
0.75	2820	1722	33700	1.50	**MFA 97 MRF57** **MFAF 97 MRF57** **MF 97 MRF57** **MFF 97 MRF57**	**Y..71M$_1$-4** **AM71** **AD3**
0.67	3130	1930	13500	0.95		
0.76	2790	1709	23700	1.05	**MFA 87 MRF57** **MFAF 87 MRF57** **MF 87 MRF57** **MFF 87 MRF57**	**Y..71M$_1$-4** **AM71** **AD2**
0.87	2440	1493	25000	1.25		
1.00	2050	1300	26300	1.45		
1.10	1830	1148	26900	1.65		
1.30	1590	1010	27600	1.90		
1.50	1410	887	28000	2.10	**MFA 87 MRF57** **MFAF 87 MRF57** **MF 87 MRF57** **MFF 87 MRF57**	**Y..71M$_1$-4** **AM71** **AD3**
1.70	1230	780	28500	2.40		
1.90	1040	674	28900	2.90		

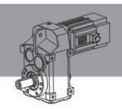
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
1.20	1740	1053	13900	0.85	**MFA 77 MRF37** **MFAF 77 MRF37** **MF 77 MRF37** **MFF 77 MRF37**	**Y..71M$_1$-4** **AM71** **AD2**
1.40	1490	910	15700	1.00		
1.60	1290	810	16900	1.15		
1.80	1130	710	17700	1.30		
2.10	1000	615	18300	1.50	**MFA 77 MRF37** **MFAF 77 MRF37** **MF 77 MRF37** **MFF 77 MRF37**	**Y..71M$_1$-4** **AM71** **AD2**
2.40	870	538	18700	1.70		
2.70	775	480	19000	1.95		
3.20	660	413	19400	2.30		
2.30	930	572	9150	0.90		
2.60	810	509	10400	1.00		
3.00	700	437	11200	1.15		
2.60	830	500	10200	1.00	**MFA 67 MRF37** **MFAF 67 MRF37** **MF 67 MRF37** **MFF 67 MRF37**	**Y..71M$_1$-4** **AM71** **AD2**
2.90	755	454	10800	1.10		
3.30	650	392	11600	1.25		
3.90	550	333	12200	1.50		
4.40	485	297	12500	1.70		
5.00	425	261	12700	1.90		
5.50	385	238	12900	2.10		
3.40	620	386	8830	0.95		
3.80	540	338	9640	1.10		
5.10	405	255	10500	1.45		
3.40	635	382	7390	0.95	**MFA 57 MRF37** **MFAF 57 MRF37** **MF 57 MRF37** **MFF 57 MRF37**	**Y..71M$_1$-4** **AM71** **AD2**
3.90	550	330	9570	1.10		
4.40	495	298	9950	1.20		
5.00	435	262	10300	1.35		
5.80	370	226	10700	1.60		
6.50	320	200	11000	1.85		
7.60	275	170	11300	2.20		
5.20	400	249	5880	1.00		
6.00	355	218	6470	1.10		
6.70	315	193	6920	1.25		
7.40	285	175	7180	1.40	**MFA 47 MRF17** **MFAF 47 MRF17** **MF 47 MRF17** **MFF 47MRF17**	**Y..71M1-4** **AM71** **-**
5.10	410	253	4980	0.95		
6.00	365	217	6380	1.10		
6.80	315	190	6900	1.25		
7.30	295	178	7090	1.35		
8.70	245	149	7480	1.60		
9.90	215	131	7670	1.85		
8.90	245	145	3420	0.80	**MFA 37 MRF17** **MFAF 37 MRF17** **MF 37 MRF17** **MFF 37 MRF17**	**Y..71M1-4** **AM71** **-**
10.0	215	129	4040	0.90		
11.0	198	118	4320	1.00		
13.0	164	98	4740	1.20		
15.0	144	87	4940	1.40		
3.20	750	281.71	19100	2.00	**MFA 77** **MFAF 77** **MF 77** **MFF 77**	**Y..71 M$_2$-6** **AM71** **AD2**
3.40	700	262.93	19300	2.10		
4.00	600	225.79	19500	2.50		
4.50	525	198.31	19600	2.80		
4.80	500	188.40	19700	3.00		
3.90	610	228.99	11800	1.35	**MFA 67** **MFAF 67** **MF 67** **MFF 67**	**Y..71 M$_2$-6** **AM71** **AD2**
4.60	520	195.39	12300	1.55		
5.20	455	170.85	12600	1.80		
5.50	430	162.31	12700	1.90		
6.30	375	142.40	12900	2.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
5.70	420	228.99	12700	1.95	**MFA 67 MFAF 67 MF 67 MFF 67**	**Y..71 M_1-4 AM71 AD2**
6.60	355	195.39	13000	2.30		
7.60	310	170.85	13000	2.60		
8.00	295	162.31	13000	2.80		
9.10	260	142.40	13000	3.10		
4.50	530	199.70	9700	1.15	**MFA 57 MFAF 57 MF 57 MFF 57**	**Y..71 M_2-6 AM71 AD2**
4.90	485	183.60	9990	1.25		
5.70	415	157.09	10500	1.45		
6.60	360	136.16	10800	1.65		
7.00	335	127.27	10900	1.75		
8.10	290	110.01	11200	2.00		
6.50	365	199.70	10800	1.65	**MFA 57 MFAF 57 MF 57 MFF 57**	**Y..71M_1-4 AM71 AD2**
7.10	335	183.60	10900	1.80		
8.30	285	157.09	11200	2.10		
9.60	250	136.16	11400	2.40		
10.0	230	127.27	11500	2.60		
12.0	200	110.01	11500	3.00		
6.00	400	150.06	5920	1.00	**MFA 47 MFAF 47 MF 47 MFF 47**	**Y..71M_2-6 AM71 AD1**
6.90	345	130.07	6590	1.15		
7.40	320	121.57	6830	1.25		
8.50	280	105.09	7230	1.45		
6.80	350	190.76	6550	1.15	**MFA 47 MFAF 47 MF 47 MFF 47**	**Y..71M_1-4 AM71 AD1**
7.40	320	175.38	6850	1.25		
8.70	275	150.06	7270	1.45		
10.0	235	130.07	7540	1.65		
11.0	220	121.57	7640	1.80		
12.0	193	105.09	7810	2.10		
15.0	164	89.29	7950	2.40		
10.0	235	128.51	3690	0.85	**MFA 37 MFAF 37 MF 37 MFF 37**	**Y..71M_1-4 AM71 AD1**
11.0	215	117.88	4040	0.90		
13.0	184	100.36	4500	1.10		
15.0	159	86.53	4790	1.25		
16.0	148	80.65	4900	1.35		
18.0	130	70.50	5060	1.55		
20.0	121	66.09	5120	1.65		
22.0	107	58.32	5210	1.85		
24.0	100	54.54	5260	2.00		
25.0	95	51.70	5280	2.10		
28.0	86	47.02	5330	2.30	**MFA 37 MFAF 37 MF 37 MFF 37**	**Y..71M_1-4 AM71 AD2**
30.0	80	43.83	5360	2.50		
34.0	70	38.31	5400	2.80		
36.0	66	35.91	5420	3.00		
41.0	58	31.69	5440	3.40		
17.0	142	77.21	4500	0.90	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..71M_1-4 AM71 AD1**
18.0	133	72.37	4500	1.00		
20.0	117	63.86	4500	1.10		
23.0	104	56.62	4500	1.25		
26.0	92	50.19	4440	1.40		
28.0	86	46.78	4370	1.50		
32.0	75	40.89	4240	1.75		
34.0	70	38.33	4180	1.85		
38.0	62	33.83	4060	2.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
44.0	54	29.56	3920	2.40	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..71M_1-4 AM71 AD2**
48.0	50	27.18	3840	2.60		
56.0	43	23.25	3690	3.00		
64.0	37	20.15	3550	3.50		
69.0	35	18.84	3480	3.80		
80.0	30	16.28	3350	4.40		
94.0	25	13.84	3200	5.10		
105	23	12.35	3090	5.70		
123	19	10.55	2950	6.70		
132	18	9.88	2900	7.20		
138	17	9.4	2840	7.50		
160	15	8.13	2720	8.30		
188	13	6.91	2590	9.00		
211	11	6.17	2500	9.60		
247	9.7	5.27	2380	10.0		
264	9.1	4.93	2340	11.0		
313	7.6	4.16	2220	11.0		
327	7.3	8.13	2180	17.0	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..63 M_2-2 AM63 AD2**
385	6.2	6.91	2080	18.0		
431	5.5	6.17	2000	20.0		
505	4.7	5.27	1910	21.0		
539	4.4	4.93	1870	22.0		
640	3.7	4.16	1770	24.0		
P_1=0.37kw						
0.21	14900	6715	84600	0.80	**MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77**	**Y..71M_2-4 AM71 AD2**
0.23	13200	5925	88100	0.90		
0.27	11400	5153	90000	1.05		
0.30	9930	4533	90000	1.20		
0.35	8690	3926	90000	1.40		
0.40	7560	3454	90000	1.60		
0.46	6610	3031	90000	1.80		
0.45	6850	3037	52000	1.10	**MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77**	**Y..71M_2-4 AM71 AD3**
0.50	6210	2756	53500	1.25		
0.58	5340	2369	55500	1.45		
0.67	4660	2068	57000	1.65		
0.86	3570	1597	59300	2.20		
0.70	4540	1970	29200	0.95	**MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57**	**Y..71M_2-4 AM71 AD2**
0.90	3540	1527	32000	1.20		
1.00	2990	1327	33300	1.45		
1.20	2710	1171	33900	1.60		
1.40	2370	1022	34700	1.80		
1.50	2000	898	35400	2.10	**MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57**	**Y..71M_2-4 AM71 AD3**
0.80	3990	1722	30800	1.10		
1.10	2930	1300	22000	1.00	**MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57**	**Y..71M_2-4 AM71 AD2**
1.20	2610	1148	24400	1.15		
1.40	2280	1010	25600	1.30		
1.60	2010	887	26400	1.50	**MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57**	**Y..71M_2-4 AM71 AD3**
1.80	1760	780	27100	1.70		
2.00	1500	674	27800	2.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
2.30	1370	609	28100	2.20	**MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57**	**Y..71M_2-4 AM71 AD3**
2.70	1150	515	28600	2.60		
3.00	1020	452	28900	2.90		
1.70	1840	810	11300	0.80	**MFA 77 MRF37 MFAF 77 MRF37 MF 77 MRF37 MFF 77 MRF37**	**Y..71M_2-4 AM71 AD2**
1.90	1620	710	14900	0.95		
2.20	1420	615	16200	1.05		
2.60	1240	538	17200	1.20		
2.90	1100	480	17900	1.35		
3.40	940	413	18500	1.60		
3.80	840	367	18900	1.80		
4.30	750	323	19100	2.00		
3.60	880	384	9670	0.95	**MFA 67 MRF37 MFAF 67 MRF37 MF 67 MRF37 MFF 67 MRF37**	**Y..71M_2-4 AM71 AD2**
4.10	785	338	10600	1.05		
4.50	700	305	11200	1.15		
5.40	590	257	11900	1.40		
6.00	520	231	12300	1.55		
5.40	580	255	9330	1.05	**MFA 57 MRF37 MFAF 57 MRF37 MF 57 MRF37 MFF 57 MRF37**	**Y..71M_2-4 AM71 AD2**
6.90	455	201	10200	1.30		
7.60	410	181	10500	1.45		
5.30	615	262	9070	0.95		
6.10	525	226	9740	1.15		
6.90	460	200	10200	1.30		
8.10	390	170	10600	1.50		
9.00	345	152	10900	1.70		
10.0	305	134	11100	1.95		
7.90	400	175	5860	1.00	**MFA 47 MRF17 MFAF 47 MRF17 MF 47 MRF17 MFF 47MRF17**	**Y..71M_2-4 AM71 -**
9.40	340	147	6660	1.15		
11.0	300	130	7050	1.35		
3.30	1050	270.68	28900	2.80	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..80M_1-6 AM80 AD2**
3.50	990	255.37	29000	3.00		
4.00	890	228.93	29200	3.40		
4.00	880	225.79	18700	1.70	**MFA 77 MFAF 77 MF 77 MFF 77**	**Y..80 M_1-6 AM80 AD2**
4.60	770	198.31	19100	1.95		
4.80	735	188.40	19200	2.00		
5.40	645	166.47	19400	2.30		
6.40	555	142.27	19600	2.70		
4.90	720	281.71	19200	2.10	**MFA 77 MFAF 77 MF 77 MFF 77**	**Y..71 M_2-4 AM71 AD2**
5.20	670	262.93	19300	2.20		
6.10	575	225.79	19500	2.60		
7.00	505	198.31	19700	3.00		
4.60	760	195.39	10800	1.05	**MFA 67 MFAF 67 MF 67 MFF 67**	**Y..80M_1-6 AM80 AD2**
5.30	665	170.85	11500	1.25		
5.60	630	162.31	11700	1.30		
6.40	555	142.40	12100	1.45		
7.50	470	120.79	12500	1.75		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
6.00	585	228.99	12000	1.40	**MFA 67 MFAF 67 MF 67 MFF 67**	**Y..71M_2-4 AM71 AD2**
7.10	500	195.39	12400	1.65		
8.10	435	170.85	12700	1.85		
8.50	415	162.31	12800	1.95		
9.70	360	142.40	12900	2.20		
11.0	305	120.79	13000	2.60		
5.80	610	157.09	9100	1.00	**MFA 57 MFAF 57 MF 57 MFF 57**	**Y..80M_1-6 AM80 AD2**
6.60	530	136.16	9700	1.15		
7.10	495	127.27	9940	1.20		
8.20	425	110.01	10400	1.40		
6.90	510	199.70	9850	1.15	**MFA 57 MFAF 57 MF 57 MFF 57**	**Y..71M_2-4 AM71 AD2**
7.50	470	183.60	10100	1.30		
8.80	400	157.09	10600	1.50		
10.0	345	136.16	10900	1.70		
11.0	325	127.27	11000	1.85		
13.0	280	110.01	11200	2.10		
15.0	235	93.47	11500	2.50		
17.0	210	83.46	11500	2.80		
9.20	380	150.06	6140	1.05	**MFA 47 MFAF 47 MF 47 MFF 47**	**Y..71M_2-4 AM71 AD1**
11.0	330	130.07	6740	1.20		
13.0	265	105.09	7320	1.50		
15.0	225	89.29	7600	1.75		
17.0	200	79.72	7750	1.95		
20.0	174	68.09	7900	2.30		
21.0	167	65.36	7930	2.40	**MFA 47 MFAF 47 MF 47 MFF 47**	**Y..71M_2-4 AM71 AD2**
16.0	220	86.53	3960	0.90	**MFA 37 MFAF 37 MF 37 MFF 37**	**Y..71M_2-4 AM71 AD1**
17.0	205	80.65	4200	0.95		
20.0	180	70.50	4550	1.10		
21.0	169	66.09	4680	1.20		
24.0	149	58.32	4880	1.35		
25.0	140	54.54	4970	1.45		
27.0	132	51.70	5030	1.50		
29.0	120	47.02	5120	1.65	**MFA 37 MFAF 37 MF 37 MFF 37**	**Y..71M_2-4 AM71 AD2**
31.0	112	43.83	5180	1.80		
36.0	98	38.31	5270	2.00		
38.0	92	35.91	5300	2.20		
44.0	81	31.69	5300	2.50		
49.0	72	28.09	5140	2.80		
58.0	61	23.88	4930	3.30		
24.0	145	56.62	4080	0.90	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..71M_2-4 AM71 AD1**
28.0	128	50.19	4010	1.00		
30.0	120	46.78	3970	1.10		
34.0	105	40.89	3880	1.25		
36.0	98	38.33	3840	1.35		
41.0	87	33.83	3750	1.50		
47.0	76	29.56	3650	1.70	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..71M_2-4 AM71 AD2**
51.0	70	27.18	3580	1.85		
59.0	60	23.25	3460	2.20		
68.0	52	20.15	3340	2.50		



n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
73.0	48	18.84	3290	2.70	MFA 27 MFAF 27 MF 27 MFF 27	Y..71M$_2$-4 AM71 AD2
85.0	42	16.28	3170	3.10		
100	35	13.84	3040	3.70		
112	32	12.35	2950	4.10		
131	27	10.55	2820	4.80		
140	25	9.88	2770	5.10		
147	24	9.4	2710	5.40		
170	21	8.13	2600	5.90		
200	18	6.91	2490	6.40		
224	16	6.17	2410	6.90		
262	14	5.27	2300	7.40		
280	13	4.93	2250	7.60		
332	11	4.16	2140	8.20		
326	11	8.13	2150	11.0	MFA 27 MFAF 27 MF 27 MFF 27	Y..71M$_1$-2 AM71 AD2
384	9.2	6.91	2050	12.0		
430	8.2	6.17	1980	13.0		
503	7	5.27	1890	14.0		
537	6.6	4.93	1850	15.0		
638	5.5	4.16	1750	16.0		
P_1=0.55kw						
0.22	20100	6295	93100	0.90	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_1$-4 AM80 AD3
0.26	16800	5404	103500	1.05		
0.50	8660	2780	119000	2.10		
0.57	7660	2427	120000	2.40	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_1$-4 AM80 AD5
0.82	5440	1674	120000	3.30	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_1$-4 AM80 AD4
1.10	4200	1308	120000	4.30	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_1$-4 AM80 AD5
1.20	3680	1169	120000	4.90		
0.35	13200	3926	88100	0.90	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..80M$_1$-4 AM80 AD2
0.40	11500	3454	90000	1.05		
0.46	10100	3031	90000	1.20		
0.58	8120	2369	48600	0.95	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..80M$_1$-4 AM80 AD3
0.67	7090	2068	51400	1.10		
0.76	6090	1826	53800	1.25		
0.86	5450	1597	55300	1.40		
0.98	4750	1401	56900	1.60		
1.10	4140	1243	58100	1.85		
1.30	3710	1087	59000	2.10		
1.40	3170	950	60100	2.40		
1.70	2750	834	60800	2.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
2.20	2140	640	61900	3.60	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..80M$_1$-4 AM80 AD4
1.00	4550	1327	29100	0.95	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..80M$_1$-4 AM80 AD2
1.20	4080	1171	30500	1.05		
1.40	3570	1022	31900	1.20		
1.50	3050	898	33200	1.40	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..80M$_1$-4 AM80 AD3
1.80	2700	784	34000	1.60		
2.00	2340	690	34700	1.85		
2.30	2070	605	35300	2.10		
2.60	1790	529	35800	2.40		
3.00	1580	467	36100	2.70		
3.40	1360	406	36500	3.20		
3.80	1220	363	36700	3.50		
1.60	3050	887	17400	1.00	MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57	Y..80M$_1$-4 AM80 AD3
1.80	2670	780	24200	1.10		
2.00	2290	674	25500	1.30		
2.30	2080	609	26200	1.45		
2.70	1760	515	27100	1.70		
3.00	1550	452	27700	1.95		
4.00	1160	345	28600	2.60		
2.90	1660	480	14500	0.90	MFA 77 MRF37 MFAF 77 MRF37 MF 77 MRF37 MFF 77 MRF37	Y..80M$_1$-4 AM80 AD2
3.40	1420	413	16200	1.05		
3.80	1270	367	17100	1.20		
4.30	1120	323	17800	1.35		
5.40	890	257	9610	0.90	MFA 67 MRF37 MFAF 67 MRF37 MF 67 MRF37 MFF 67 MRF37	Y..80M$_1$-4 AM80 AD2
6.00	790	231	10500	1.05		
6.70	705	205	11200	1.15		
7.90	600	175	11900	1.35		
3.40	1550	270.68	27700	1.95	MFA 87 MFAF 87 MF 87 MFF 87	Y..80M$_2$-6 AM80 AD2
3.60	1460	255.37	27900	2.00		
4.00	1310	228.93	28300	2.30		
4.60	1130	197.20	28700	2.60		
5.10	1030	179.97	28900	2.90		
4.00	1290	225.79	17000	1.15	MFA 77 MFAF 77 MF 77 MFF 77	Y..80M$_2$-6 AM80 AD2
4.60	1130	198.31	17700	1.30		
4.90	1080	188.40	18000	1.40		
5.50	950	166.47	18500	1.55	MFA 77 MFAF 77 MF 77 MFF 77	Y..80M$_2$-6 AM80 AD2
6.40	810	142.27	18900	1.85		
7.00	745	130.42	19100	2.00		
6.10	850	225.79	18800	1.75	MFA 77 MFAF 77 MF 77 MFF 77	Y..80M$_1$-4 AM80 AD2
7.00	750	198.31	19100	2.00		
7.30	715	188.4	19200	2.10		
8.30	630	166.47	19400	2.40		
9.70	540	142.27	19600	2.80		
11.00	495	130.42	19700	3.00		
12.00	435	114.45	19800	3.40		
13.00	410	108.46	19800	3.60		
15.00	360	94.93	19900	4.20		
7.10	740	195.39	10900	1.10	MFA 67 MFAF 67 MF 67 MFF 67	Y..80M$_1$-4 AM80 AD2
8.10	650	170.85	11600	1.25		
8.50	615	162.31	11800	1.35		
9.70	540	142.4	12200	1.50		
11.0	455	120.79	12600	1.80		
13.0	415	109.04	12800	2.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
14.0	365	95.94	12900	2.20	MFA 67 MFAF 67 MF 67 MFF 67	Y..80M$_1$-4 AM80 AD2
15.0	340	90.59	13000	2.40		
17.0	300	79.76	13000	2.70		
8.80	595	157.09	9220	1.00	MFA 57 MFAF 57 MF 57 MFF 57	Y..80M$_1$-4 AM80 AD2
10.0	515	136.16	9800	1.15		
11.0	480	127.27	10000	1.25		
13.0	415	110.01	10500	1.45		
15.0	355	93.47	10800	1.70		
17.0	315	83.46	11000	1.90		
19.0	275	72.98	11300	2.20		
20.0	255	68.22	11400	2.30		
23.0	220	58.97	11500	2.70		
13.0	395	105.09	5920	1.00	MFA 47 MFAF 47 MF 47 MFF 47	Y..80M$_1$-4 AM80 AD1
15.0	335	89.29	6670	1.20		
17.0	300	79.72	7030	1.30		
20.0	255	68.09	7390	1.55		
21.0	245	65.36	7470	1.60	MFA 47 MFAF 47 MF 47 MFF 47	Y..80M$_1$-4 AM80 AD2
24.0	215	56.49	7690	1.85		
29.0	183	48.00*	7860	2.20		
32.0	163	42.86	7950	2.40		
24.0	220	58.32	3950	0.90	MFA 37 MFAF 37 MF 37 MFF 37	Y..80M$_1$-4 AM80 AD1
25.0	205	54.54	4180	0.95		
27.0	197	51.70	4340	1.00		
29.0	179	47.02	4570	1.10	MFA 37 MFAF 37 MF 37 MFF 37	Y..80M$_1$-4 AM80 AD2
31.0	167	43.83	4710	1.20		
36.0	146	38.31	4920	1.35		
38.0	137	35.91	5000	1.45		
44.0	121	31.69	4980	1.65		
49.0	107	28.09	4860	1.85		
58.0	91	23.88	4680	2.20		
58.0	90	23.63	4670	2.20	MFA 37 MFAF 37 MF 37 MFF 37	Y..80M$_1$-4 AM80 AD2
67.0	78	20.57	4520	2.60		
72.0	73	19.27	4450	2.70		
81.0	65	17.03	4320	3.10		
96.0	54	14.33	4130	3.70		
36.0	144	77.21	3410	0.90	MFA 27 MFAF 27 MF 27 MFF 27	Y..71M$_2$-2 AM71 AD1
39.0	135	72.37	3390	0.95		
44.0	119	63.86	3350	1.10		
50.0	106	56.62	3290	1.25		
56.0	94	50.19	3230	1.40		
59.0	88	23.25	3200	1.45	MFA 27 MFAF 27 MF 27 MFF 27	Y..80M$_1$-4 AM80 AD2
68.0	77	20.15	3120	1.70		
73.0	72	18.84	3080	1.80		
85.0	62	16.28	2990	2.10		
100	53	13.84	2890	2.50		
112	47	12.35	2810	2.80		
131	40	10.55	2710	3.20		
140	38	9.88	2660	3.50		
147	36	9.40	2600	3.60		
170	31	8.13	2500	4.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
200	26	6.91	2400	4.30	MFA 27 MFAF 27 MF 27 MFF 27	Y..80M$_1$-4 AM80 AD2
224	24	6.17	2330	4.60		
262	20	5.27	2230	5.00		
280	19	4.93	2190	5.10		
332	16	4.16	2090	5.50		
346	15	8.13	2070	8.10	MFA 27 MFAF 27 MF 27 MFF 27	Y..71M$_2$-2 AM71 AD2
407	13	6.91	1970	8.80		
456	12	6.17	1910	9.50		
533	9.8	5.27	1820	10.0		
570	9.2	4.93	1790	10.0		
676	7.8	4.16	1700	11.0		
P_1=0.75kw						
0.52	11700	2780	114600	1.55	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_2$-4 AM80 AD3
0.86	7310	1674	120000	2.50	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_2$-4 AM80 AD4
0.59	10300	2427	116800	1.75	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..80M$_2$-4 AM80 AD5
1.10	5640	1308	120000	3.20		
1.20	4980	1169	120000	3.60		
0.47	13400	3031	87600	0.90	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..80M$_2$-4 AM80 AD2
0.54	12100	2672	90000	1.00	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..80M$_2$-4 AM80 AD3
0.61	10600	2357	90000	1.15		
0.70	9150	2038	90000	1.30		
0.80	7960	1784	90000	1.50		
0.89	7150	1606	90000	1.70		
0.79	8120	1826	48600	0.95	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..80M$_2$-4 AM80 AD3
0.90	7220	1597	51000	1.05		
1.00	6310	1401	53300	1.20		
1.20	5530	1243	55100	1.40		
1.30	4920	1087	56500	1.55		
1.50	4220	950	58000	1.80		
1.70	3680	834	59100	2.10		
2.20	2860	640	60600	2.70	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..80M$_2$-4 AM80 AD4
3.30	1940	436	62300	3.90		
1.40	4710	1022	26300	0.90	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..80M$_2$-4 AM80 AD2

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
1.60	4050	898	30600	1.05	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..80M$_2$-4 AM80 AD3
1.80	3580	784	31900	1.20		
2.10	3110	690	33000	1.40		
2.40	2740	605	33900	1.55		
2.70	2380	529	34600	1.80		
3.10	2100	467	35200	2.00		
3.50	1810	406	35700	2.40		
4.00	1620	363	36100	2.60		
2.10	3040	674	18000	1.00	MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57	Y..80M$_2$-4 AM80 AD3
2.40	2760	609	23800	1.10		
2.80	2330	515	25400	1.30		
3.20	2050	452	26300	1.45		
4.20	1540	345	27700	1.95		
3.90	1680	367	14400	0.90	MFA 77 MRF37 MFAF 77 MRF37 MF 77 MRF37 MFF 77 MRF37	Y..80M$_2$-4 AM80 AD2
4.40	1480	323	15800	1.00		
5.10	1280	280	17000	1.15		
3.40	2100	276.77	35200	2.00	MFA 97 MFAF 97 MF 97 MFF 97	Y..90S-6 AM90 AD3
3.70	1930	253.41	35500	2.20		
4.20	1700	223.88	35900	2.50		
3.50	2060	270.68	26200	1.45	MFA 87 MFAF 87 MF 87 MFF 87	Y..90S-6 AM90 AD2
3.70	1940	255.37	26600	1.55		
4.10	1740	228.93	27200	1.70		
4.80	1500	197.20	27800	2.00		
5.20	1370	179.97	28100	2.20		
5.90	1210	159.61	28500	2.50		
5.30	1350	270.68	28200	2.20	MFA 87 MFAF 87 MF 87 MFF 87	Y..80M$_2$-4 AM80 AD2
5.60	1270	255.37	28400	2.40		
6.30	1140	228.93	28700	2.60		
4.70	1510	198.31	15700	1.00	MFA 77 MFAF 77 MF 77 MFF 77	Y..90S-6 AM90 AD2
5.00	1430	188.40	16100	1.05		
5.60	1260	166.47	17100	1.20		
6.60	1080	142.27	18000	1.40		
7.20	990	130.42	18300	1.50		
6.40	1120	225.79	17800	1.35	MFA 77 MFAF 77 MF 77 MFF 77	Y..80M$_2$-4 AM80 AD2
7.20	980	198.31	18300	1.50		
7.60	940	188.40	18500	1.60		
8.60	830	166.47	18900	1.80		
10.0	710	142.27	19200	2.10		
11.0	650	130.42	19400	2.30		
13.0	570	114.45	19600	2.60		
13.0	540	108.46	19600	2.80		
8.40	850	170.85	10000	0.95	MFA 67 MFAF 67 MF 67 MFF 67	Y..80M$_2$-4 AM80 AD2
8.80	810	162.31	10400	1.00		
10.0	710	142.40	11200	1.15		
12.0	600	120.79	11900	1.35		
13.0	540	109.04	12200	1.50		
15.0	475	95.94	12500	1.70		
16.0	450	90.59	12600	1.80		
18.0	395	79.76	12800	2.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
21.0	335	67.65	13000	2.40	MFA 67 MFAF 67 MF 67 MFF 67	Y..80M$_2$-4 AM80 AD2
24.0	300	61.07	13000	2.70		
11.0	635	127.27	7770	0.95	MFA 57 MFAF 57 MF 57 MFF 57	Y..80M$_2$-4 AM80 AD2
13.0	545	110.01	9580	1.10		
15.0	465	93.47	10100	1.30		
17.0	415	83.46	10500	1.45		
20.0	360	72.98	10800	1.65		
21.0	340	68.22	10900	1.75		
24.0	290	58.97	11200	2.00		
29.0	250	50.10	11400	2.40		
32.0	220	44.73	11300	2.70		
18.0	395	79.72	5950	1.00	MFA 47 MFAF 47 MF 47 MFF 47	Y..80M$_2$-4 AM80 AD1
21.0	335	68.09	6670	1.20		
22.0	325	65.36	6810	1.25	MFA 47 MFAF 47 MF 47 MFF 47	Y..80M$_2$-4 AM80 AD2
25.0	280	56.49	7220	1.40		
30.0	235	48.00	7530	1.65		
33.0	210	42.86	7690	1.85		
39.0	183	36.61	7860	2.20		
42.0	171	34.29	7780	2.30		
50.0	144	28.88	7460	2.80		
31.0	230	47.02	3720	0.85	MFA 37 MFAF 37 MF 37 MFF 37	Y..80M$_2$-4 AM80 AD2
33.0	215	43.83	4000	0.90		
37.0	191	38.31	4420	1.05		
40.0	179	35.91	4570	1.10		
45.0	158	31.69	4590	1.25		
51.0	140	28.09	4510	1.45		
61.0	118	23.63	4370	1.70		
70.0	103	20.57	4260	1.95		
74.0	96	19.27	4200	2.10		
84.0	85	17.03	4090	2.40		
100	72	14.33	3930	2.80		
112	64	12.87	3840	3.10		
62.0	116	23.25	2910	1.10	MFA 27 MFAF 27 MF 27 MFF 27	Y..80M$_2$-4 AM80 AD2
71.0	101	20.15	2860	1.30		
76.0	94	18.84	2840	1.40		
88.0	81	16.28	2770	1.60		
104	69	13.84	2700	1.90		
116	62	12.35	2640	2.10		
136	53	10.55	2560	2.50		
145	49	9.88	2520	2.60		
153	47	9.40	2450	2.80	MFA 27 MFAF 27 MF 27 MFF 27	Y..80M$_2$-4 AM80 AD2
177	41	8.13	2370	3.00		
208	34	6.91	2290	3.30		
233	31	6.17	2230	3.50		
272	26	5.27	2140	3.80		
291	25	4.93	2100	3.90		
345	21	4.16	2010	4.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
356	20	8.13	2000	6.10	MFA 27 MFAF 27 MF 27 MFF 27	Y..80M$_1$-2 AM80 AD2
418	17	6.91	1910	6.70		
469	15	6.17	1850	7.10		
549	13	5.27	1770	7.60		
586	12	4.93	1740	7.90		
695	10	4.16	1650	8.40		
P_1=1.10kw						
0.51	17900	2780	100500	1.00	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..90S-4 AM90 AD3
0.58	15800	2427	106100	1.15	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..90S-4 AM90 AD5
0.65	14100	2185	110000	1.25		
0.73	12500	1944	113100	1.45		
0.85	11100	1674	115600	1.60		
1.10	8610	1308	119100	2.10		
1.20	7630	1169	120000	2.40		
1.50	6100	953	120000	3.00		
1.70	5330	845	120000	3.40		
3.20	2810	446	120000	6.40		
4.70	1900	302	120000	9.40		
0.70	13700	2038	87000	0.85	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..90S-4 AM90 AD3
0.80	12000	1784	90000	1.00		
0.88	10700	1606	90000	1.10		
1.00	9330	1390	90000	1.30		
1.20	8150	1220	90000	1.45		
1.30	7250	1077	90000	1.65		
1.10	8350	1243	48000	0.90	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..90S-4 AM90 AD3
1.30	7380	1087	50600	1.05		
1.50	6380	950	53100	1.20		
1.70	5570	834	55000	1.40		
1.90	4890	736	56500	1.55		
2.20	4310	6405	7800	1.80	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..90S-4 AM90 AD4
2.10	4670	690	27400	0.90	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..90S-4 AM90 AD3
2.40	4110	605	30400	1.05		
2.70	3580	529	31900	1.20		
3.00	3160	467	32900	1.35		
3.50	2730	406	33900	1.55		
3.90	2450	363	34500	1.75		
3.10	3080	452	16400	0.95	MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57	Y..90S-4 AM90 AD3
4.10	2320	345	25400	1.30		
4.70	2010	300	26400	1.50		
5.70	1670	249	27400	1.80		
3.40	3090	276.77	33100	1.40	MFA 97 MFAF 97 MF 97 MFF 97	Y..90L-6 AM90 AD3
3.70	2830	253.41	33700	1.50		
4.20	2500	223.88	34400	1.70		
5.00	2120	189.92	35200	2.00		
5.40	1950	174.87	35500	2.20		

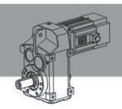
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
5.10	2040	276.77	35300	2.10	MFA 97 MFAF 97 MF 97 MFF 97	Y..90S-4 AM90 AD3
5.60	1870	253.41	35600	2.30		
6.30	1650	223.88	36000	2.60		
4.10	2550	228.93	24600	1.15	MFA 87 MFAF 87 MF 87 MFF 87	Y..90L-6 AM90 AD2
4.80	2200	197.20	25800	1.35		
5.20	2010	179.97	26400	1.50		
5.90	1780	159.61	27100	1.70		
5.20	2000	270.68	26400	1.50	MFA 87 MFAF 87 MF 87 MFF 87	Y..90S-4 AM90 AD2
5.60	1880	255.37	26800	1.60		
6.20	1690	228.93	27300	1.75		
7.20	1450	197.20	27900	2.10		
7.90	1330	179.97	28200	2.20	MFA 87 MFAF 87 MF 87 MFF 87	Y..90S-4 AM90 AD2
8.90	1180	159.61	28600	2.50		
11.0	990	134.16	29000	3.00		
12.0	910	123.29	29200	3.30		
7.20	1460	198.31	15900	1.00	MFA 77 MFAF 77 MF 77 MFF 77	Y..90S-4 AM90 AD2
7.50	1390	188.4	16400	1.10		
8.50	1230	166.47	17300	1.20		
10.0	1050	142.27	18100	1.45		
11.0	960	130.42	18400	1.55		
12.0	840	114.45	18800	1.75		
13.0	800	108.46*	19000	1.85		
15.0	700	94.93	19300	2.10		
17.0	630	85.52	19400	2.40		
19.0	555	75.02	19600	2.70		
12.0	890	120.79	9600	0.90	MFA 67 MFAF 67 MF 67 MFF 67	Y..90S-4 AM90 AD2
13.0	800	109.04	10400	1.00		
15.0	705	95.94	11200	1.15		
16.0	670	90.59	11500	1.20		
18.0	590	79.76	12000	1.40		
21.0	500	67.65	12400	1.65		
23.0	450	61.07	12600	1.80		
26.0	395	53.73	12800	2.10		
28.0	375	50.74	12900	2.20		
33.0	315	43.20	13000	2.60		
36.0	290	39.26	13000	2.70		
42.0	250	34.01	13000	2.90		
17.0	615	83.46	9070	0.95	MFA 57 MFAF 57 MF 57 MFF 57	Y..90S-4 AM90 AD2
19.0	535	72.98	9640	1.10		
21.0	500	68.22	9890	1.20		
24.0	435	58.97	10300	1.40		
28.0	370	50.10	10700	1.60		
32.0	330	44.73	10700	1.80		
37.0	280	38.21	10300	2.10		
40.0	260	35.79	10200	2.30		
47.0	220	30.15	9780	2.60		
25.0	415	56.49	4570	0.95	MFA 47 MFAF 47 MF 47 MFF 47	Y..90S-4 AM90 AD2
30.0	355	48.00*	6500	1.15		
33.0	315	42.86	6900	1.25		
39.0	270	36.61	7300	1.50		
41.0	250	34.29	7240	1.60		
49.0	210	28.88	7020	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
46.0	225	30.86	7110	1.75	**MFA 47**	**Y..90S-4 AM90 AD2**
48.0	215	29.32	7040	1.85	**MFAF 47**	
55.0	190	25.72	6860	2.10	**MF 47**	
65.0	161	21.82	6620	2.50	**MFF 47**	
72.0	146	19.70	6470	2.80		
45.0	230	31.69	3720	0.85		
51.0	205	28.09	3970	0.95		
59.0	177	23.88	3930	1.15		
69.0	152	20.57	3870	1.30	**MFA 37**	**Y..90S-4 AM90 AD2**
74.0	143	19.27	3840	1.40	**MFAF 37**	
83.0	126	17.03	3770	1.60	**MF 37**	
99.0	106	14.33	3670	1.90	**MFF 37**	
110	95	12.87	3600	2.10		
128	82	11.08	3490	2.30		
136	77	10.42	3450	2.40		
158	66	8.97	3340	2.60		
70.0	149	20.15	2440	0.85		
75.0	139	18.84	2440	0.95		
87.0	120	16.28	2440	1.10		
103	102	13.84	2410	1.25		
115	91	12.35	2390	1.40		
135	78	10.55	2340	1.65	**MFA 27**	**Y..90S-4 AM90 AD2**
144	73	9.88	2320	1.80	**MFAF 27**	
151	70	9.40	2240	1.85	**MF 27**	
175	60	8.13	2190	2.00	**MFF 27**	
206	51	6.91	2130	2.20		
230	46	6.17	2090	2.40		
270	39	5.27	2020	2.60		
288	36	4.93	2000	2.60		
342	31	4.16	1920	2.80		
353	30	8.13	1910	4.10		
416	25	6.91	1840	4.50	**MFA 27**	**Y..80M_2-2 AM80 AD2**
465	23	6.17	1780	4.80	**MFAF 27**	
545	19	5.27	1720	5.20	**MF 27**	
582	18	4.93	1680	5.30	**MFF 27**	
691	15	4.16	1610	5.70		
P_1=1.50kw						
0.85	15200	1674	107600	1.20	**MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97**	**Y..90L-4 AM90 AD4**
0.59	21800	2427	86800	0.80		
0.65	19500	2185	95400	0.90		
0.74	17300	1944	102100	1.05		
1.10	11800	1308	114400	1.50	**MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97**	**Y..90L-4 AM90 AD5**
1.20	10500	1169	116500	1.70		
1.50	8450	953	119300	2.10		
1.70	7410	845	120000	2.40		
3.20	3910	446	120000	4.60		
4.70	2650	302	120000	6.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
0.89	14700	1606	85100	0.80		
1.00	12700	1390	89000	0.95		
1.20	11100	1220	90000	1.05	**MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77**	**Y..90L-4 AM90 AD3**
1.30	9910	1077	90000	1.20		
1.50	8500	930	90000	1.40		
1.70	7480	820	90000	1.60		
2.00	6610	727	90000	1.80		
2.20	5960	648	90000	2.00	**MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77**	**Y..90L-4 AM90 AD4**
1.50	8720	950	46900	0.90		
1.70	7630	834	49900	1.00	**MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77**	**Y..90L-4 AM90 AD3**
1.90	6710	736	52300	1.15		
2.20	5890	640	54300	1.30		
2.60	5090	560	56100	1.50		
2.90	4440	489	57500	1.75		
3.30	4010	436	58400	1.90	**MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77**	**Y..90L-4 AM90 AD4**
3.90	3400	370	59600	2.30		
2.70	4880	529	19300	0.90	**MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57**	**Y..90L-4 AM90 AD3**
3.10	4320	467	29800	1.00		
3.50	3730	406	31500	1.15		
3.90	3340	363	32500	1.30		
4.80	2760	300	23900	1.10	**MFA 87 MRF57 MFAF 87 MRF57 MF 87 MRF57 MFF 87 MRF57**	**Y..90L-4 AM90 AD3**
5.70	2290	249	25500	1.30		
3.70	3870	254.40	58700	2.00	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..100L-6 AM100 AD3**
4.40	3280	215.37	59800	2.30		
4.70	3030	199.31	60300	2.50		
5.30	2720	178.64	60900	2.80		
3.40	4210	276.77	30100	1.00	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..100L-6 AM100 AD3**
3.70	3860	253.41	31100	1.10		
4.20	3410	223.88	32300	1.25		
5.00	2890	189.92	33600	1.50		
5.40	2660	174.87	34100	1.60		
5.20	2770	276.77	33800	1.55	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..90L-4 AM90 AD3**
5.60	2530	253.41	34300	1.70		
6.40	2240	223.88	34900	1.90		
7.50	1900	189.92	35600	2.30		
8.20	1750	174.87	35800	2.40		
5.30	2710	270.68	24000	1.10	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..90L-4 AM90 AD2**
5.60	2550	255.37	24600	1.15		
6.20	2290	228.93	25500	1.30		
7.20	1970	197.20	26500	1.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
8.00	1800	179.97	27000	1.65	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..90L-4 AM90 AD2**
9.00	1590	159.61	27600	1.90		
11.00	1340	134.16	28200	2.20		
13.00	1090	109.49	28800	2.70		
15.00	980	97.89	29000	3.10		
8.60	1660	166.47	14500	0.90		
10.0	1420	142.27	16200	1.05		
11.0	1300	130.42	16900	1.15	**MFA 77 MFAF 77 MF 77 MFF 77**	**Y..90L-4 AM90 AD2**
12.0	1140	114.45	17700	1.30		
13.0	1080	108.46	18000	1.40		
15.0	950	94.93	18500	1.60		
17.0	850	85.52	18800	1.75		
19.0	750	75.02	19100	2.00		
20.0	725	72.50	19200	2.10	**MFA 77 MFAF 77 MF 77 MFF 77**	**Y..90L-4 AM90 AD2**
22.0	665	66.46	19300	2.20		
25.0	580	58.32	19500	2.60		
26.0	550	55.27	19600	2.70		
30.0	480	48.37	19700	3.10		
33.0	435	43.58	19800	3.40	**MFA 77 MFAF 77 MF 77 MFF 77**	**Y..90L-4 AM90 AD3**
37.0	380	38.23	19900	3.90		
39.0	365	36.58	19900	3.00		
45.0	315	31.51	20000	4.40		
16.0	900	90.59	9450	0.90		
18.0	795	79.76	10500	1.05		
21.0	675	67.65	11400	1.20	**MFA 67 MFAF 67 MF 67 MFF 67**	**Y..90L-4 AM90 AD2**
23.0	610	61.07	11800	1.35		
27.0	535	53.73	12200	1.50		
28.0	505	50.74	12400	1.60		
33.0	430	43.20	12700	1.90		
36.0	390	39.26	12800	2.00		
39.0	360	36.30	12900	2.30		
45.0	320	32.08	13000	2.60	**MFA 67 MFAF 67 MF 67 MFF 67**	**Y..90L-4 AM90 AD3**
52.0	270	27.41	13000	3.00		
57.0	250	25.13	13000	3.30		
24.0	590	58.97	9270	1.00		
29.0	500	50.10	9910	1.20	**MFA 57 MFAF 57 MF 57 MFF 57**	**Y..90L-4 AM90 AD2**
32.0	445	44.73	9970	1.35		
37.0	380	38.21	9710	1.55		
40.0	355	35.79	9600	1.65		
47.0	300	30.15	9280	1.95		
39.0	365	36.61	6360	1.10	**MFA 47 MFAF 47 MF 47 MFF 47**	**Y..90L-4 AM90 AD2**
42.0	340	34.29	6610	1.15		
50.0	285	28.88	6480	1.40		
46.0	305	30.86	6540	1.30		
49.0	290	29.32	6500	1.35	**MFA 47 MFAF 47 MF 47 MFF 47**	**Y..90L-4 AM90 AD2**
56.0	255	25.72	6380	1.55		
66.0	215	21.82	6210	1.85		
73.0	197	19.70	6100	2.00		
83.0	174	17.33	5950	2.30		
87.0	164	16.36	5880	2.40		
103	140	13.93	5680	2.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
70.0	205	20.57	3410	0.95	**MFA 37 MFAF 37 MF 37 MFF 37**	**Y..90L-4 AM90 AD2**
74.0	193	19.27	3410	1.05		
84.0	170	17.03	3390	1.15		
100	144	14.33	3350	1.40		
111	129	12.87	3310	1.55		
129	111	11.08	3240	1.70		
137	104	10.42	3210	1.75		
159	90	8.97	3130	1.95		
178	80	8.01	3070	2.10		
103	139	13.84	2080	0.95	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..90L-4 AM90 AD2**
116	124	12.35	2090	1.05		
136	106	10.55	2090	1.25		
145	99	9.88	2080	1.30		
152	94	9.40	1990	1.40		
176	81	8.13	1970	1.50		
207	69	6.91	1950	1.65		
232	62	6.17	1920	1.75		
271	53	5.27	1880	1.90		
290	49	4.93	1860	1.95		
344	42	4.16	1810	2.10		
348	41	8.13	1810	3.00	**MFA 27 MFAF 27 MF 27 MFF 27**	**Y..90S-2 AM90 AD2**
410	35	6.91	1750	3.30		
459	31	6.17	1710	3.50		
537	27	5.27	1650	3.80		
574	25	4.93	1630	3.80		
681	21	4.16	1560	4.10		
P_1=2.20kw						
0.99	18500	1441	98700	0.95	**MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97**	**Y..100L_1-4 AM100 AD4**
1.10	17600	1308	101300	1.00		
1.20	15700	1169	106400	1.15		
1.50	12600	953	112900	1.40		
1.70	11100	845	115500	1.60		
1.90	10000	764	117200	1.80	**MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97**	**Y..100L_1-4 AM100 AD5**
2.10	8930	680	118700	2.00		
2.50	7490	576	120000	2.40		
3.20	5900	446	120000	3.00		
4.70	3990	302	120000	4.50		
5.20	3590	273	120000	5.00		
6.20	3010	232	120000	6.00		
7.30	2550	197	120000	7.00		
1.30	14700	1077	85200	0.80	**MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77**	**Y..100L_1-4 AM100 AD3**
1.50	12600	930	89200	0.95		
1.70	11100	820	90000	1.10		
2.00	9840	727	90000	1.20		
2.20	8840	648	90000	1.35	**MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77**	**Y..100L_1-4 AM100 AD4**
2.60	7490	549	90000	1.60		
2.90	6740	495	90000	1.80		
3.30	5830	428	90000	2.10		



MF

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
2.50	7590	560	50000	1.00	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..100L$_1$-4 AM100 AD3
2.90	6620	489	52500	1.15		
2.20	8730	640	46900	0.90	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..100L$_1$-4 AM100 AD4
3.30	5950	436	54100	1.30		
3.80	5040	370	56200	1.50		
4.30	4540	333	57300	1.70		
5.00	3900	285	31000	1.10	MFA 97 MRF57 MFAF 97 MRF57 MF 97 MRF57 MFF 97 MRF57	Y..100L$_1$-4 AM100 AD3
5.80	3350	245	32500	1.30		
3.80	5590	254.40	55000	1.35	MFA 107 MFAF 107 MF 107 MFF 107	Y..112M-6 AM112 AD3
4.40	4730	215.37	56900	1.60		
4.80	4380	199.31	57600	1.75		
5.40	3920	178.64	58600	1.95		
5.60	3750	254.40	58900	2.00	MFA 107 MFAF 107 MF 107 MFF 107	Y..100L$_1$-4 AM100 AD3
6.60	3170	215.37	60100	2.40		
7.20	2930	199.31	60500	2.60		
8.00	2630	178.64	61100	2.90		
4.30	4920	223.88	17400	0.85	MFA 97 MFAF 97 MF 97 MFF 97	Y..112M-6 AM112 AD3
5.00	4170	189.92	30300	1.05		
5.50	3840	174.87	31200	1.10		
6.10	3430	156.30	32300	1.25		
5.20	4080	276.77	30500	1.05	MFA 97 MFAF 97 MF 97 MFF 97	Y..100L$_1$-4 AM100 AD3
5.60	3730	253.41	31500	1.15		
6.40	3300	223.88	32600	1.30		
7.50	2790	189.92	33800	1.55		
8.20	2570	174.87	34200	1.65		
9.10	2300	156.30	34800	1.85		
10.0	2070	140.71	35300	2.10		
11.0	1870	127.42	35600	2.30		
7.20	2900	197.20	23000	1.05	MFA 87 MFAF 87 MF 87 MFF 87	Y..100L$_1$-4 AM100 AD2
7.90	2650	179.97	24300	1.15		
8.90	2350	159.61	25300	1.25		
11.0	1970	134.16	26500	1.50		
12.0	1810	123.29	27000	1.65		
13.0	1610	109.49	27500	1.85		
15.0	1440	97.89	28000	2.10		
16.0	1290	88.01	28300	2.30		
19.0	1120	76.39	27800	2.70		
21.0	1000	68.40	27100	3.00	MFA 87 MFAF 87 MF 87 MFF 87	Y..100L$_1$-4 AM100 AD3
25.0	830	56.75	25900	3.60		
28.0	740	50.36	25100	4.00		
31.0	665	45.28	24400	4.20		
12.0	1680	114.45	14300	0.90	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_1$-4 AM100 AD2
13.0	1590	108.46	15000	0.95		
15.0	1390	94.93	16400	1.05		
17.0	1260	85.52	17100	1.20		
19.0	1100	75.02	17900	1.35		
21.0	970	66.46	18400	1.55		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
24.0	850	58.32	18800	1.75	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_1$-4 AM100 AD2
26.0	810	55.27	18900	1.85		
29.0	710	48.37	19200	2.10		
33.0	640	43.58	19400	2.30	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_1$-4 AM100 AD3
39.0	535	36.58	19600	2.10		
45.0	460	31.51	19800	3.00		
50.0	420	28.75	19800	3.40		
56.0	375	25.50	19900	4.00	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_1$-4 AM100 AD4
23.0	900	61.07	9520	0.90	MFA 67 MFAF 67 MF 67 MFF 67	Y..100L$_1$-4 AM100 AD2
27.0	790	53.73	10600	1.05		
28.0	745	50.74	10900	1.10		
33.0	635	43.20	11700	1.30		
36.0	575	39.26	12000	1.35		
42.0	500	34.01	12400	1.50		
44.0	470	32.08	12500	1.75	MFA 67 MFAF 67 MF 67 MFF 67	Y..100L$_1$-4 AM100 AD3
52.0	400	27.41	12800	2.00		
57.0	370	25.13	12900	2.20		
65.0	325	22.05	13000	2.50		
68.0	305	20.90*	13000	2.70		
78.0	265	18.29	13000	3.00		
32.0	655	44.73	5420	0.90	MFA 57 MFAF 57 MF 57 MFF 57	Y..100L$_1$-4 AM100 AD2
37.0	560	38.21	8660	1.05		
40.0	525	35.79	8610	1.15		
47.0	440	30.15	8450	1.35		
57.0	365	24.96	8230	1.55		
67.0	310	21.17	8000	1.90	MFA 57 MFAF 57 MF 57 MFF 57	Y..100L$_1$-4 AM100 AD3
75.0	280	19.11	7850	2.10		
85.0	245	16.81	7650	2.40		
90.0	230	15.88	7560	2.60		
55.0	375	25.72	5560	1.05	MFA 47 MFAF 47 MF 47 MFF 47	Y..100L$_1$-4 AM100 AD2
65.0	320	21.82	5520	1.25		
72.0	290	19.70	5470	1.40		
82.0	255	17.33	5400	1.55		
87.0	240	16.36	5360	1.65		
102	205	13.93	5240	1.95		
113	187	12.66	5160	2.10		
130	162	10.97	5030	2.50		
159	132	8.96	4730	2.50		
99.0	210	14.33	2800	0.95	MFA 37 MFAF 37 MF 37 MFF 37	Y..100L$_1$-4 AM100 AD2
111	190	12.87	2810	1.05		
129	163	11.08	2820	1.15		
137	154	10.42	2810	1.20		
159	132	8.97	2790	1.30		
178	118	8.01	2760	1.45		
211	99	6.74	2620	1.40		
236	89	6.05	2590	1.50		
273	77	5.21	2540	1.65		
291	72	4.90	2510	1.65		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
338	62	4.22	2450	1.75	MFA 37 MFAF 37 MF 37 MFF 37	Y..100L$_1$-4 AM100 AD2
378	56	3.77	2400	1.90		
177	119	16.28	1720	1.10	MFA 27 MFAF 27 MF 27 MFF 27	Y..100L$_1$-4 AM100 AD2
208	101	13.84	1730	1.30		
233	90	12.35	1730	1.45		
273	77	10.55	1720	1.70		
291	72	9.88	1710	1.80		
354	59	8.13	1610	2.10		
417	50	6.91	1590	2.30		
467	45	6.17	1560	2.40		
547	38	5.27	1520	2.60		
584	36	4.93	1510	2.70		
693	30	4.16	1460	2.90		
P_1=3.00kw						
1.20	21100	1169	89500	0.85	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..100L$_2$-4 AM100 AD5
1.50	17100	953	102800	1.05		
1.70	15100	845	107900	1.20		
1.90	13500	764	111100	1.30		
2.10	12000	680	114000	1.50		
2.50	10100	576	117000	1.75		
3.30	7980	446	119800	2.20		
4.80	5400	302	120000	3.30		
5.30	4860	273	120000	3.70		
6.30	4080	232	120000	4.40		
7.40	3460	197	120000	5.20		
2.00	13200	727	88100	0.90	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..100L$_2$-4 AM100 AD3
2.20	11800	648	90000	1.00	MFA 127 MRF77 MFAF 127 MRF77 MF 127 MRF77 MFF 127 MRF77	Y..100L$_2$-4 AM100 AD4
2.60	10000	549	90000	1.20		
2.90	9040	495	90000	1.35		
3.30	7970	436	49000	0.95	MFA 107 MRF77 MFAF 107 MRF77 MF 107 MRF77 MFF 107 MRF77	Y..100L$_2$-4 AM100 AD4
3.90	6760	370	52200	1.15		
4.40	6090	333	53800	1.25		
5.00	5320	291	55600	1.45		
3.80	7630	254.40*	49900	1.00	MFA 107 MFAF 107 MF 107 MFF 107	Y..132S-6 AM132 AD3
4.40	6460	215.37	52900	1.20		
4.80	5970	199.31	54100	1.30		
5.40	5350	178.64	55500	1.45		
5.70	5000	254.40*	56300	1.55	MFA 107 MFAF 107 MF 107 MFF 107	Y..100L$_2$-4 AM100 AD3
6.80	4240	215.37	57900	1.80		
7.30	3920	199.31	58600	1.95		
8.10	3510	178.64	59400	2.20		
9.00	3170	161.28*	60100	2.40		
6.50	4400	223.88	29600	1.00	MFA 97 MFAF 97 MF 97 MFF 97	Y..100L$_2$-4 AM100 AD3
7.70	3730	189.92	31500	1.15		
8.30	3440	174.87	32200	1.25		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
9.30	3070	156.30	33100	1.40	MFA 97 MFAF 97 MF 97 MFF 97	Y..100L$_2$-4 AM100 AD3
10.0	2770	140.71	33800	1.55		
11.0	2500	127.42	34400	1.70		
13.0	2220	112.99	35000	1.95		
14.0	2010	102.16	35400	2.10		
16.0	1760	89.85	35800	2.40		
11.0	2640	134.16	24300	1.15	MFA 87 MFAF 87 MF 87 MFF 87	Y..100L$_2$-4 AM100 AD2
12.0	2420	123.29	25100	1.25		
13.0	2150	109.49	26000	1.40		
15.0	1920	97.89	26700	1.55		
17.0	1730	88.01	26700	1.75		
19.0	1500	76.39	26100	2.00		
21.0	1340	68.40	25500	2.20	MFA 87 MFAF 87 MF 87 MFF 87	Y..100L$_2$-4 AM100 AD3
26.0	1110	56.75	24600	2.70		
29.0	990	50.36	23900	3.00		
17.0	1680	85.52	14400	0.90	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_2$-4 AM100 AD2
19.0	1470	75.02	15900	1.00		
22.0	1300	66.46	16900	1.15		
25.0	1140	58.32	17700	1.30		
26.0	1080	55.27	18000	1.40		
30.0	950	48.37	18500	1.55		
33.0	850	43.58	18800	1.75	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_2$-4 AM100 AD3
38.0	750	38.23	19100	2.00		
40.0	720	36.58	19200	1.55		
46.0	620	31.51	19500	2.20		
51.0	565	28.75	19600	2.50		
57.0	500	25.50*	19700	3.00	MFA 77 MFAF 77 MF 77 MFF 77	Y..100L$_2$-4 AM100 AD4
68.0	420	21.43	19800	3.60		
34.0	850	43.20	10000	0.95	MFA 67 MFAF 67 MF 67 MFF 67	Y..100L$_2$-4 AM100 AD2
37.0	770	39.26	10700	1.00		
43.0	665	34.01	11500	1.10		
45.0	630	32.08	11700	1.30	MFA 67 MFAF 67 MF 67 MFF 67	Y..100L$_2$-4 AM100 AD3
53.0	535	27.41	12200	1.50		
58.0	490	25.13	12400	1.65		
66.0	430	22.05	12700	1.90		
70.0	410	20.90*	12800	2.00		
80.0	360	18.29	12900	2.30		
88.0	320	16.48	13000	2.50		
101	280	14.46	13000	2.90		
58.0	490	24.96	7420	1.15	MFA 57 MFAF 57 MF 57 MFF 57	Y..100L$_2$-4 AM100 AD2
69.0	415	21.17	7310	1.45	MFA 57 MFAF 57 MF 57 MFF 57	Y..100L$_2$-4 AM100 AD3
76.0	375	19.11	7220	1.60		
87.0	330	16.81	7100	1.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
92.0	310	15.88	7040	1.90	**MFA 57**	**Y..100L$_2$-4**
108	265	13.52	6850	2.20	**MFAF 57**	**AM100**
118	240	12.29	6730	2.50	**MF 57**	**AD3**
137	205	10.64	6540	2.90	**MFF 57**	
74.0	385	19.70	4760	1.05	**MFA 47**	**Y..100L$_2$-4**
84.0	340	17.33	4760	1.15	**MFAF 47**	**AM100**
89.0	320	16.36	4760	1.25	**MF 47**	**AD2**
104	270	13.93	4720	1.45	**MFF 47**	
115	245	12.66	4690	1.60		
133	215	10.97	4620	1.85		
162	176	8.96	4350	1.85		
131	215	11.08	2340	0.85	**MFA 37**	**Y..100L$_2$-4**
140	205	10.42	2360	0.90	**MFAF 37**	**AM100**
162	177	8.97	2400	1.00	**MF 37**	**AD2**
182	158	8.01	2410	1.10	**MFF 37**	
216	133	6.74	2290	1.05		
240	119	6.05	2290	1.15		
279	103	5.21	2280	1.20		
297	96	4.90	2270	1.25		
345	83	4.22	2240	1.35		
386	74	3.77	2210	1.40		
P_1=4.00kw						
1.70	20200	845	92900	0.90	**MFA 157 MRF97**	**Y..112M-4**
1.90	18200	764	99500	1.00	**MFAF 157 MRF97**	**AM112**
2.20	16200	680	105100	1.10	**MF 157 MRF97**	**AD5**
2.50	13600	576	111000	1.30	**MFF 157 MRF97**	
3.30	10700	446	116200	1.70		
4.80	7240	302	120000	2.50		
5.30	6520	273	120000	2.80		
6.30	5500	232	120000	3.30		
7.40	4660	197	120000	3.90		
2.70	13300	549	87800	0.90	**MFA 127 MRF77**	**Y..112M-4**
3.00	12000	495	90000	1.00	**MFAF 127 MRF77**	**AM112**
3.40	10400	428	90000	1.15	**MF 127 MRF77**	**AD4**
3.90	9140	376	90000	1.30	**MFF 127 MRF77**	
4.40	8120	333	48600	0.95	**MFA 107 MRF77**	**Y..112M-4**
5.00	7090	291	51300	1.10	**MFAF 107 MRF77**	**AM112**
5.70	6210	255	53500	1.25	**MF 107 MRF77**	**AD4**
					MFF 107 MRF77	
5.70	6650	254.40	52400	1.15	**MFA 107**	**Y..112M-4**
6.80	5630	215.37	54900	1.35	**MFAF 107**	**AM112**
7.30	5210	199.31	55800	1.45	**MF 107**	**AD3**
8.20	4670	178.64	57000	1.65	**MFF 107**	
9.00	4210	161.28	58000	1.80		
10.0	3830	146.49	58800	2.00		
11.0	3400	129.97	59600	2.30		
12.0	3080	117.94	60200	2.50		
14.0	2650	101.38	61000	2.90	**MFA 107**	**Y..112M-4**
					MFAF 107	**AM112**
					MF 107	**AD4**
					MFF 107	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
8.40	4570	174.87	29100	0.95	**MFA 97**	**Y..112M-4**
9.30	4080	156.30	30500	1.05	**MFAF 97**	**AM112**
10.0	3680	140.71	31600	1.15	**MF 97**	**AD3**
11.0	3330	127.42	32500	1.30	**MFF 97**	
13.0	2950	112.99	33400	1.45		
14.0	2670	102.16	34000	1.60		
15.0	2550	97.58	34300	1.70		
16.0	2350	89.85	34700	1.85		
18.0	2100	80.31	35200	2.00		
20.0	1890	72.29	35600	2.30		
22.0	1710	65.47	35900	2.50	**MFA 97**	**Y..112M-4**
					MFAF 97	**AM112**
					MF 97	**AD4**
					MFF 97	
13.0	2860	109.49	23500	1.05	**MFA 87**	**Y..112M-4**
15.0	2560	97.89	24600	1.15	**MFAF 87**	**AM112**
17.0	2300	88.01	24500	1.30	**MF 87**	**AD2**
19.0	1990	76.39	24100	1.50	**MFF 87**	
21.0	1780	68.40	23800	1.70	**MFA 87**	**Y..112M-4**
26.0	1480	56.75	23100	2.00	**MFAF 87**	**AM112**
29.0	1310	50.36	22600	2.20	**MF 87**	**AD3**
32.0	1180	45.28	22200	2.40	**MFF 87**	
22.0	1730	66.46	13900	0.85	**MFA 77**	**Y..112M-4**
25.0	1520	58.32	15600	1.00	**MFAF 77**	**AM112**
26.0	1440	55.27	16100	1.05	**MF 77**	**AD2**
30.0	1260	48.37	17100	1.20	**MFF 77**	
34.0	1140	43.58	17700	1.30	**MFA 77**	**Y..112M-4**
38.0	1000	38.23	18300	1.50	**MFAF 77**	**AM112**
43.0	880	33.74	18700	1.70	**MF 77**	**AD3**
49.0	780	29.91	19000	1.90	**MFF 77**	
57.0	665	25.54	19300	2.20		
46.0	820	31.51	18900	1.65		
51.0	750	28.75	19100	1.90		
57.0	665	25.50	19300	2.20	**MFA 77**	**Y..112M-4**
68.0	560	21.43	19600	2.70	**MFAF 77**	**AM112**
74.0	515	19.70	19700	2.90	**MF 77**	**AD4**
					MFF 77	
53.0	715	27.41	11100	1.15	**MFA 67**	**Y..112M-4**
58.0	655	25.13	11600	1.25	**MFAF 67**	**AM112**
66.0	575	22.05	12000	1.40	**MF 67**	**AD3**
70.0	545	20.90	12200	1.50	**MFF 67**	
80.0	475	18.29	12500	1.70		
89.0	430	16.48	12700	1.90		
101	375	14.46	12900	2.20	**MFA 67**	**Y..112M-4**
114	330	12.76	13000	2.50	**MFAF 67**	**AM112**
129	295	11.31	13000	2.80	**MF 67**	**AD3**
151	250	9.66	13000	3.20	**MFF 67**	
161	235	9.08	12900	2.20		
170	225	8.60	12700	2.50		
194	197	7.53	12300	3.10		
215	178	6.78	12000	3.50		
245	156	5.95	11700	3.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
278	137	5.25	11300	4.30	**MFA 67**	**Y..112M-4**
314	122	4.66	11000	4.60	**MFAF 67**	**AM112**
367	104	3.97	10500	4.80	**MF 67**	**AD3**
					MFF 67	
69.0	550	21.17	6490	1.10	**MFA 57**	**Y..112M-4**
76.0	500	19.11	6480	1.20	**MFAF 57**	**AM112**
87.0	435	16.81	6440	1.35	**MF 57**	**AD3**
92.0	415	15.88	6420	1.45	**MFF 57**	
108	350	13.52	6320	1.70		
119	320	12.29	6250	1.85		
137	275	10.64	6120	2.20		
157	240	9.31	5820	1.70		
178	210	8.19	5710	1.95		
189	200	7.73	5650	2.10		
222	172	6.58	5480	2.40		
244	157	5.98	5380	2.70		
282	136	5.18	5220	3.10		
P_1=5.50kw						
2.50	19000	576	96900	0.95	**MFA 157 MRF97**	**Y..132S-4**
2.90	16500	503	104200	1.10	**MFAF 157 MRF97**	**AM132**
3.30	14800	446	108400	1.20	**MF 157 MRF97**	**AD5**
4.10	11600	353	114800	1.55	**MFF 157 MRF97**	
4.80	10000	302	117200	1.80		
5.30	9080	273	118500	2.00		
6.30	7660	232	120000	2.40		
7.20	6660	202	120000	2.70		
7.40	6500	197	120000	2.80		
3.50	13900	418	86600	0.85	**MFA 127 MRF87**	**Y..132S-4**
3.90	12500	374	89500	0.95	**MFAF 127 MRF87**	**AM132**
					MF 127 MRF87	**AD4**
					MFF 127 MRF87	
4.70	10400	312	90000	1.15	**MFA 127 MRF87**	**Y..132S-4**
5.00	9770	293	90000	1.25	**MFAF 127 MRF87**	**AM132**
5.60	8620	259	90000	1.40	**MF 127 MRF87**	**AD5**
6.50	7450	223	90000	1.60	**MFF 127 MRF87**	
3.40	14400	428	85700	0.85	**MFA 127 MRF77**	**Y..132S-4**
3.90	12600	376	89200	0.95	**MFAF 127 MRF77**	**AM132**
					MF 127 MRF77	**AD4**
					MFF 127 MRF77	
6.80	7770	215.37	49600	1.00	**MFA 107**	**Y..132S-4**
7.30	7190	199.31	51100	1.05	**MFAF 107**	**AM132**
8.10	6440	178.64	53000	1.20	**MF 107**	**AD3**
9.00	5820	161.28	54400	1.30	**MFF 107**	
9.90	5280	146.49	55700	1.45	**MFA 107**	**Y..132S-4**
11.0	4690	129.97	57000	1.65	**MFAF 107**	**AM132**
12.0	4250	117.94	57900	1.80	**MF 107**	**AD3**
					MFF 107	
14.0	3650	101.38	59100	2.10	**MFA 107**	**Y..132S-4**
16.0	3330	92.47	59700	2.30	**MFAF 107**	**AM132**
16.0	3190	88.49	60000	2.40	**MF 107**	**AD4**
17.0	3030	83.99	60300	2.50	**MFF 107**	

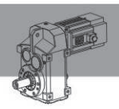
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
11.0	4590	127.42	29000	0.95	**MFA 97**	**Y..132S-4**
13.0	4070	112.99	30500	1.05	**MFAF 97**	**AM132**
14.0	3680	102.16	31600	1.15	**MF 97**	**AD3**
					MFF 97	
15.0	3520	97.58	32000	1.20	**MFA 97**	**Y..132S-4**
16.0	3240	89.85	32700	1.35	**MFAF 97**	**AM132**
17.0	3120	86.59	33000	1.40	**MF 97**	**AD3**
18.0	2890	80.31	33500	1.50	**MFF 97**	
19.0	2730	75.63	33900	1.60		
20.0	2600	72.29	34200	1.65		
22.0	2360	65.47	34700	1.80	**MFA 97**	**Y..132S-4**
25.0	2090	58.06	34400	2.00	**MFAF 97**	**AM132**
28.0	1890	52.49	33800	2.30	**MF 97**	**AD4**
					MFF 97	
17.0	3170	88.01	11000	0.95	**MFA 87**	**Y..132S-4**
19.0	2750	76.39	21200	1.10	**MFAF 87**	**AM132**
					MF 87	**AD2**
					MFF 87	
21.0	2460	68.40	21200	1.20	**MFA 87**	**Y..132S-4**
26.0	2040	56.75	21000	1.45	**MFAF 87**	**AM132**
29.0	1810	50.36	20700	1.60	**MF 87**	**AD3**
32.0	1630	45.28	20500	1.75	**MFF 87**	
37.0	1410	39.30	20100	1.90		
41.0	1270	35.19	19700	2.00	**MFA 87**	**Y..132S-4**
50.0	1050	29.20	19100	2.40	**MFAF 87**	**AM132**
43.0	1220	33.92	19600	2.10	**MF 87**	**AD4**
51.0	1030	28.78	19000	2.40	**MFF 87**	
55.0	950	26.50	18700	3.10	**MFA 87**	**Y..132S-4**
61.0	850	23.68	18300	3.50	**MFAF 87**	**AM132**
					MF 87	**AD5**
					MFF 87	
30.0	1740	48.37	13800	0.85	**MFA 77**	**Y..132S-4**
					MFAF 77	**AM132**
					MF 77	**AD2**
					MFF 77	
33.0	1570	43.58	15200	0.95	**MFA 77**	**Y..132S-4**
38.0	1380	38.23	16500	1.10	**MFAF 77**	**AM132**
43.0	1210	33.74	17400	1.25	**MF 77**	**AD3**
49.0	1070	29.91	18000	1.40	**MFF 77**	
57.0	920	25.54	18600	1.55		
57.0	920	25.50	18600	1.65	**MFA 77**	**Y..132S-4**
68.0	770	21.43	19100	1.95	**MFAF 77**	**AM132**
74.0	710	19.70	19200	2.10	**MF 77**	**AD4**
83.0	630	17.49	19400	2.40	**MFF 77**	
93.0	560	15.64	19600	2.70		
103	505	14.06	19200	3.00		
119	440	12.20	18600	3.40		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
66.0	795	22.05	10500	1.05	MFA 67 MFAF 67 MF 67 MFF 67	Y..132S-4 AM132 AD3
70.0	750	20.90	10900	1.10		
80.0	660	18.29	11500	1.25		
88.0	590	16.48	11900	1.40		
101	520	14.46	12300	1.55		
114	460	12.76	12600	1.80		
129	405	11.31	12800	2.00		
151	345	9.66	12900	2.40		
160	325	9.08	12400	1.60		
169	310	8.60	12200	1.85		
193	270	7.53	11900	2.20		
214	240	6.78	11700	2.50		
245	210	5.95	11300	2.80		
277	190	5.25	11000	3.10		
313	168	4.66	10700	3.30		
366	144	3.97	10300	3.50		
87.0	605	16.81	5460	1.00	MFA 57 MFAF 57 MF 57 MFF 57	Y..132S-4 AM132 AD3
92.0	570	15.88	5490	1.05		
108	485	13.52	5530	1.25		
118	440	12.29	5530	1.35		
137	380	10.64	5500	1.55		
178	295	8.19	5180	1.40	MFA 57 MFAF 57 MF 57 MFF 57	Y..132S-4 AM132 AD3
188	275	7.73	5150	1.50		
221	235	6.58	5060	1.75		
243	215	5.98	5000	1.95		
281	187	5.18	4890	2.20		
P_1=7.50kw						
4.70	14100	312	86300	0.85	MFA 127 MRF87 MFAF 127 MRF87 MF 127 MRF87 MFF 127 MRF87	Y..132M-4 AM132 AD5
5.00	13200	293	88000	0.90		
5.70	11700	259	90000	1.05		
6.60	10100	223	90000	1.20		
7.40	8930	198	90000	1.35		
8.60	8320	170.83	90000	1.45	MFA 127 MFAF 127 MF 127 MFF 127	Y..132M-4 AM132 AD4
9.60	7480	153.67	90000	1.60		
12.0	6100	125.37	90000	1.95		
8.20	8700	178.64	47000	0.90	MFA 107 MFAF 107 MF 107 MFF 107	Y..132M-4 AM132 AD3
9.10	7850	161.28	49300	1.00		
10.0	7130	146.49	51200	1.10		
11.0	6330	129.97	53200	1.20		
12.0	5740	117.94	54600	1.35		
14.0	4930	101.38	56400	1.55	MFA 107 MFAF 107 MF 107 MFF 107	Y..132M-4 AM132 AD4
16.0	4500	92.47	57400	1.70		
17.0	4310	88.49	57800	1.80		
18.0	4090	83.99	58200	1.90		
20.0	3630	74.52	59200	2.10		
22.0	3290	67.62	59800	2.30		
15.0	4750	97.58	24800	0.90	MFA 97 MFAF 97 MF 97 MFF 97	Y..132M-4 AM132 AD3
16.0	4370	89.85	29700	1.00		
17.0	4210	86.59	30100	1.00		
18.0	3910	80.31	31000	1.10		
19.0	3680	75.63	31600	1.15		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.50kw						
20.0	3520	72.29	32000	1.20	MFA 97 MFAF 97 MF 97 MFF 97	Y..132M-4 AM132 AD3
22.0	3180	65.47	32200	1.35	MFA 97 MFAF 97 MF 97 MFF 97	Y..132M-4 AM132 AD4
25.0	2820	58.06	31700	1.50		
28.0	2550	52.49	31300	1.70		
33.0	2160	44.49	30500	2.00		
38.0	1890	38.86	29800	2.30		
45.0	1580	32.50	28800	2.70		
34.0	2100	43.28	30400	1.45		
40.0	1780	36.64	29400	1.70		
43.0	1650	33.91	29000	2.60	MFA 97 MFAF 97 MF 97 MFF 97	Y..132M-4 AM132 AD5
48.0	1480	30.39	28400	2.90		
26.0	2760	56.75	18100	1.10	MFA 87 MFAF 87 MF 87 MFF 87	Y..132M-4 AM132 AD3
29.0	2450	50.36	18200	1.20		
32.0	2200	45.28	18200	1.30		
37.0	1910	39.30	18100	1.40		
42.0	1710	35.19	17900	1.50	MFA 87 MFAF 87 MF 87 MFF 87	Y..132M-4 AM132 AD4
50.0	1420	29.20	17600	1.75		
51.0	1400	28.78	17500	1.75		
55.0	1290	26.50	17300	2.30	MFA 87 MFAF 87 MF 87 MFF 87	Y..132M-4 AM132 AD5
62.0	1150	23.68	17100	2.60		
69.0	1030	21.32	16800	2.90		
76.0	940	19.31	16500	3.20		
86.0	830	17.12	16100	3.60		
95.0	750	15.48	15800	4.00		
44.0	1640	33.74	14700	0.90	MFA 77 MFAF 77 MF 77 MFF 77	Y..132M-4 AM132 AD3
49.0	1450	29.91	16000	1.05		
58.0	1240	25.54	17200	1.15		
58.0	1240	25.50	17200	1.20	MFA 77 MFAF 77 MF 77 MFF 77	Y..132M-4 AM132 AD4
69.0	1040	21.43	18100	1.45		
75.0	950	19.70	18500	1.55		
84.0	850	17.49	18800	1.75		
94.0	760	15.64	18900	1.95		
105	685	14.06	18500	2.20		
120	590	12.20	17900	2.50		
135	530	10.93	17500	2.80		
158	450	9.30	16400	2.40		
178	400	8.26	16000	2.70		
199	355	7.39	15600	3.00		
221	320	6.64	15200	3.30		
255	280	5.76	14700	3.80		
285	250	5.16	14400	4.30		
343	205	4.28	13700	4.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
4.90	20000	302	93600	0.90	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..160M-4 AM160 AD5
5.40	18100	273	99900	1.00		
6.40	15300	232	107400	1.15		
7.30	13300	202	111600	1.35		
7.50	12900	197	112300	1.40		
6.60	14800	223	84900	0.80	MFA 127 MRF87 MFAF 127 MRF87 MF 127 MRF87 MFF 127 MRF87	Y..160M-4 AM160 AD5
7.50	13100	198	88300	0.90		
8.90	11000	166	90000	1.10		
5.50	19000	267.43	97000	0.95	MFA 157 MFAF 157 MF 157 MFF 157	Y..160M-4 AM160 AD5
6.80	15400	217.62	106900	1.15		
8.30	12600	178.20	112900	1.40		
9.00	11600	162.96	114800	1.55		
10.0	10000	141.80	117100	1.80		
12.0	8910	125.14	118700	2.00		
14.0	7720	108.49	120000	2.30		
15.0	6870	96.53	120000	2.60		
17.0	6110	85.80	117400	3.00		
19.0	5580	78.46	115000	3.20		
22.0	4860	68.28	111300	3.70		
8.60	12100	170.83	90000	1.00	MFA 127 MFAF 127 MF 127 MFF 127	Y..160M-4 AM160 AD4
9.60	10900	153.67	90000	1.10		
12.0	8920	125.37	90000	1.35		
13.0	8140	114.34	90000	1.45		
15.0	7040	98.95	90000	1.70		
17.0	6210	87.31	90000	1.95		
20.0	5370	75.41	88200	2.20		
13.0	8390	117.94	47900	0.90	MFA 107 MFAF 107 MF 107 MFF 107	Y..160M-4 AM160 AD3
15.0	7210	101.38	51000	1.05	MFA 107 MFAF 107 MF 107 MFF 107	Y..160M-4 AM160 AD4
16.0	6580	92.47	52600	1.15		
18.0	5980	83.99	54100	1.30		
20.0	5300	74.52	55600	1.45		
22.0	4810	67.62	56700	1.60		
25.0	4130	58.12	56200	1.85		
29.0	3610	50.73	54900	2.10		
34.0	3060	43.03	53300	2.50	MFA 107 MFAF 107 MF 107 MFF 107	Y..160M-4 AM160 AD5
44.0	2400	33.79	50700	3.10	MFA 107 MFAF 107 MF 107 MFF 107	Y..160M-4 AM160 AD6
54.0	1960	27.57	48500	4.00		
59.0	1790	25.14	47500	4.40		
23.0	4660	65.47	26900	0.90	MFA 97 MFAF 97 MF 97 MFF 97	Y..160M-4 AM160 AD4
25.0	4130	58.06	27100	1.05		
28.0	3730	52.49	27100	1.15		
33.0	3160	44.49	26900	1.35		
38.0	2760	38.86	26700	1.55		
45.0	2310	32.50	26200	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
44.0	2410	33.91	26300	1.80	MFA 97 MFAF 97 MF 97 MFF 97	Y..160M-4 AM160 AD5
49.0	2160	30.39	25900	2.00	MFA 97 MFAF 97 MF 97 MFF 97	Y..160M-4 AM160 AD5
54.0	1950	27.44	25500	2.20		
59.0	1770	24.92	25100	2.40		
67.0	1570	22.11	24600	2.70		
38.0	2790	39.30	14600	0.95	MFA 87 MFAF 87 MF 87 MFF 87	Y..160M-4 AM160 AD3
42.0	2500	35.19	14800	1.05	MFA 87 MFAF 87 MF 87 MFF 87	Y..160M-4 AM160 AD4
51.0	2070	29.20	15000	1.20		
56.0	1880	26.50	15000	1.60	MFA 87 MFAF 87 MF 87 MFF 87	Y..160M-4 AM160 AD5
62.0	1680	23.68	15000	1.80		
69.0	1510	21.32	14900	2.00		
76.0	1370	19.31	14800	2.20		
86.0	1210	17.12	14600	2.50		
95.0	1100	15.48	14400	2.70		
112	930	13.12	14000	3.20		
75.0	1400	19.70	16300	1.05	MFA 77 MFAF 77 MF 77 MFF 77	Y..160M-4 AM160 AD4
84.0	1240	17.49	17200	1.20		
94.0	1110	15.64	17600	1.35		
105	1000	14.06	17300	1.50		
121	860	12.20	16900	1.75		
135	775	10.93	16600	1.95		
159	660	9.30	15400	1.65		
179	585	8.26	15100	1.85	MFA 77 MFAF 77 MF 77 MFF 77	Y..160M-4 AM160 AD4
200	525	7.39	14800	2.00		
222	470	6.64	14500	2.30		
256	410	5.76	14100	2.60		
286	365	5.16	13800	2.90		
345	300	4.28	13300	3.30		
P_1=15.0kw						
6.30	21100	232	89700	0.85	MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97	Y..160L-4 AM160 AD5
7.20	18400	202	99000	1.00		
7.50	17900	197	100500	1.00		
6.70	21200	217.62	89000	0.85	MFA 157 MFAF 157 MF 157 MFF 157	Y..160L-4 AM160 AD5
8.20	17400	178.20	101900	1.05		
9.00	15900	162.96	105900	1.15		
10.0	13800	141.80	110600	1.30		
12.0	12200	125.14	113700	1.45		
14.0	10600	108.49	116400	1.70		
15.0	9430	96.53	115700	1.90		
17.0	8380	85.80	113200	2.20		
19.0	7670	78.46	111100	2.40		
21.0	6670	68.28	108000	2.70		

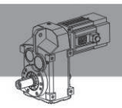


n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
24.0	5890	60.25	105100	3.10	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..160L-4 AM160 AD5**
12.0	12200	125.37	89000	1.00	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..160L-4 AM160 AD4**
13.0	11100	114.34	88300	1.05		
15.0	9670	98.95	87000	1.25		
17.0	8530	87.31	85600	1.40		
19.0	7370	75.41	83800	1.65		
21.0	6850	70.07	82800	1.75	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..160L-4 AM160 AD5**
16.0	9040	92.47	46000	0.85	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..160L-4 AM160 AD4**
17.0	8650	88.49	47100	0.90		
17.0	8210	83.99	48400	0.95		
20.0	7280	74.52	50800	1.05		
22.0	6610	67.62	52600	1.15		
25.0	5680	58.12	52200	1.35	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..160L-4 AM160 AD4**
29.0	4960	50.73	51500	1.55		
34.0	4200	43.03	50300	1.85	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..160L-4 AM160 AD5**
39.0	3670	37.61	49300	2.10		
46.0	3100	31.80	47900	2.50		
43.0	3300	33.79	48400	2.20	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..160L-4 AM160 AD6**
53.0	2690	27.57	46700	2.90		
58.0	2450	25.14	45800	3.20		
67.0	2120	21.76	44500	3.70		
33.0	4340	44.49	22900	1.00	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..160L-4 AM160 AD4**
38.0	3790	38.86	23100	1.15		
45.0	3170	32.50	23200	1.35		
43.0	3310	33.91	23200	1.30	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..160L-4 AM160 AD5**
48.0	2970	30.39	23200	1.45		
53.0	2680	27.44	23100	1.60		
59.0	2430	24.92	22900	1.75		
66.0	2160	22.11	22600	2.00		
73.0	1960	20.07	22400	2.20		
85.0	1680	17.25	21900	2.60		
97.0	1470	15.06	21400	2.90		
115	1240	12.77	20800	3.40	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..160L-4 AM160 AD6**
131	1090	11.16	20200	3.80		
55.0	2590	26.50	12400	1.15	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..160L-4 AM160 AD5**
62.0	2310	23.68	12600	1.30		
69.0	2080	21.32	12700	1.45		
76.0	1880	19.31	12800	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
86.0	1670	17.12	12900	1.80	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..160L-4 AM160 AD5**
95.0	1510	15.48	12800	2.00		
112	1280	13.12*	12700	2.30		
128	1120	11.46	12600	2.70		
153	930	9.58	12300	3.10		
177	810	8.29	11700	1.90		
199	715	7.35	11500	2.10		
220	645	6.65	11300	2.40		
260	550	5.63	11000	2.80		
298	480	4.92	10700	3.20		
356	400	4.12	10300	3.60		
P_1=18.5kw						
7.20	22700	202	70200	0.80	**MFA 157 MRF97 MFAF 157 MRF97 MF 157 MRF97 MFF 157 MRF97**	**Y..180M-4 AM180 AD5**
7.50	22100	197	83800	0.80		
8.20	21400	178.20	88200	0.85	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..180M-4 AM180 AD5**
9.00	19600	162.96	95000	0.90		
10.0	17000	141.80	102800	1.05		
12.0	15000	125.14	107900	1.20		
14.0	13000	108.49	112100	1.40		
15.0	11600	96.53	111300	1.55		
17.0	10300	85.80	109300	1.75		
19.0	9460	78.46	107600	1.90		
21.0	8230	68.28	104900	2.20		
24.0	7260	60.25	102300	2.50		
28.0	6290	52.24	99400	2.90	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..180M-4 AM180 AD6**
13.0	13700	114.34	82200	0.85	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..180M-4 AM180 AD4**
15.0	11900	98.95	81700	1.00		
17.0	10500	87.31	80900	1.15		
19.0	9090	75.41	79700	1.30		
21.0	8450	70.07	79000	1.40	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..180M-4 AM180 AD5**
23.0	7700	63.91	78100	1.55		
26.0	6660	55.31	76400	1.80		
30.0	5880	48.80	74900	2.00		
20.0	8980	74.52	46200	0.85	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..180M-4 AM180 AD4**
22.0	8150	67.62	48500	0.95		
25.0	7000	58.12	48700	1.10		
29.0	6110	50.73	48400	1.25		
34.0	5180	43.03	47700	1.50	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..180M-4 AM180 AD5**
39.0	4530	37.61	47000	1.70		
46.0	3830	31.80	46000	2.00		
43.0	4070	33.79	46400	1.80	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..180M-4 AM180 AD6**
53.0	3320	27.57	45000	2.40		
58.0	3030	25.14	44300	2.60		
67.0	2620	21.76	43200	3.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=18.5kw						
38.0	4680	38.86	20000	0.90	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..180M-4 AM180 AD4**
45.0	3910	32.50	20600	1.10		
53.0	3300	27.44	20900	1.30	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..180M-4 AM180 AD5**
59.0	3000	24.92	20900	1.45		
66.0	2660	22.11	20900	1.60		
73.0	2410	20.07	20800	1.80		
85.0	2070	17.25	20500	2.10		
97.0	1810	15.06	20200	2.40		
115	1530	12.77	19800	2.80	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..180M-4 AM180 AD6**
131	1340	11.16	19300	3.00		
69.0	2570	21.32	10900	1.15	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..180M-4 AM180 AD5**
76.0	2320	19.31	11100	1.30		
86.0	2060	17.12	11400	1.45		
95.0	1860	15.48	11500	1.60		
112	1580	13.12	11600	1.90		
128	1380	11.46	11600	2.20		
153	1150	9.58	11500	2.50		
177	990	8.29	10900	1.55		
199	880	7.35	10800	1.75		
220	800	6.65	10700	1.90		
260	675	5.63	10400	2.20		
298	590	4.92	10200	2.60		
356	495	4.12	9900	2.90		
P_1=22.0kw						
10.0	20100	141.80	93100	0.90	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..180L-4 AM180 AD5**
12.0	17800	125.14	100800	1.00		
14.0	15400	108.49	107000	1.15		
15.0	13700	96.53	106900	1.30		
17.0	12200	85.80	105200	1.45		
19.0	11100	78.46	103900	1.60		
22.0	9720	68.28	101600	1.85		
24.0	8580	60.25	99500	2.10		
28.0	7440	52.24	96800	2.40	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..180L-4 AM180 AD6**
32.0	6610	46.48	94600	2.70	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..180L-4 AM180 AD7**
37.0	5700	40.06	91800	3.20		
45.0	4630	32.55	87700	3.90		
15.0	14000	98.95	76300	0.85	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..180L-4 AM180 AD4**
17.0	12400	87.31	76300	0.95		
20.0	10700	75.41	75700	1.10		
21.0	9980	70.07	75300	1.20	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..180L-4 AM180 AD5**
23.0	9100	63.91	74600	1.30		
27.0	7870	55.31	73400	1.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=22.0kw						
30.0	6950	48.80	72200	1.75	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..180L-4 AM180 AD5**
35.0	6000	42.15	70600	2.00		
25.0	8270	58.12	45200	0.95	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..180L-4 AM180 AD4**
29.0	7220	50.73	45300	1.05		
34.0	6120	43.03	45100	1.25	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..180L-4 AM180 AD5**
39.0	5350	37.61	44700	1.45		
46.0	4520	31.80	44000	1.70		
44.0	4810	33.79	44300	1.55	**MFA 107 MFAF 107 MF 107 MFF 107**	**Y..180L-4 AM180 AD6**
54.0	3920	27.57	43300	2.00		
59.0	3580	25.14	42700	2.20		
68.0	3090	21.76	41800	2.50		
77.0	2730	19.20	40900	2.90		
54.0	3900	27.44	18700	1.10	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..180L-4 AM180 AD5**
59.0	3540	24.92	18900	1.20		
67.0	3140	22.11	19100	1.35		
74.0	2850	20.07	19200	1.50		
86.0	2450	17.25	19100	1.75		
98.0	2140	15.06	19000	2.00		
116	1810	12.77	18700	2.40	**MFA 97 MFAF 97 MF 97 MFF 97**	**Y..180L-4 AM180 AD6**
132	1580	11.16	18400	2.60		
69.0	3030	21.32	9020	1.00	**MFA 87 MFAF 87 MF 87 MFF 87**	**Y..180L-4 AM180 AD5**
76.0	2740	19.31	9450	1.10		
86.0	2430	17.12	9870	1.25		
95.0	2200	15.48	10100	1.35		
112	1860	13.12	10400	1.60		
129	1630	11.46	10600	1.85		
154	1360	9.58	10600	2.10		
178	1180	8.29	10100	1.30		
201	1040	7.35	10100	1.45		
222	940	6.65	10000	1.60		
262	800	5.63	9890	1.90		
300	700	4.92	9740	2.20		
358	585	4.12	9490	2.50		
P_1=30.0kw						
14.0	21000	108.49	89800	0.85	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..200L-4 AM200 AD5**
15.0	18700	96.53	96900	0.95		
17.0	16600	85.80	96400	1.10		
19.0	15200	78.46	95800	1.20		
22.0	13200	68.28	94600	1.35		
24.0	11700	60.25	93200	1.55		
28.0	10100	52.24	91400	1.75	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..200L-4 AM200 AD6**



MF

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=30.0kw						
32.0	9020	46.48	89800	2.00	MFA 157 MFAF 157 MF 157 MFF 157	Y..200L-4 AM200 AD7
37.0	7780	40.06	87600	2.30		
20.0	14600	75.41	64500	0.80	MFA 127 MFAF 127 MF 127 MFF 127	Y..200L-4 AM200 AD4
21.0	13600	70.07	65700	0.90	MFA 127 MFAF 127 MF 127 MFF 127	Y..200L-4 AM200 AD5
23.0	12400	63.91	66800	0.95		
27.0	10700	55.31	66700	1.10		
30.0	9470	48.80	66300	1.25		
35.0	8180	42.15	65500	1.45		
40.0	7240	37.28	64700	1.65	MFA 127 MFAF 127 MF 127 MFF 127	Y..200L-4 AM200 AD6
55.0	5210	26.86	61800	1.65		
60.0	4770	24.57	60800	1.80		
47.0	6080	31.33	63200	1.95	MFA 127 MFAF 127 MF 127 MFF 127	Y..200L-4 AM200 AD7
58.0	4910	25.30	61100	2.40		
69.0	4150	21.38	59300	2.90	MFA 127 MFAF 127 MF 127 MFF 127	Y..200L-4 AM200 AD8
78.0	3660	18.87	57900	3.00		
34.0	8350	43.03	39200	0.90	MFA 107 MFAF 107 MF 107 MFF 107	Y..200L-4 AM200 AD5
39.0	7300	37.61	39600	1.05		
46.0	6170	31.80	39700	1.25		
54.0	5350	27.57	39500	1.45	MFA 107 MFAF 107 MF 107 MFF 107	Y..200L-4 AM200 AD6
59.0	4880	25.14	39300	1.60		
68.0	4220	21.76	38800	1.85		
77.0	3720	19.20	38300	2.10		
89.0	3220	16.58	37600	2.40		
101	2840	14.67	36900	2.70		
120	2390	12.33	35800	2.90		
148	1930	9.96	34400	3.40		
67.0	4290	22.11	15100	1.00	MFA 97 MFAF 97 MF 97 MFF 97	Y..200L-4 AM200 AD5
74.0	3890	20.07	15500	1.10		
86.0	3350	17.25	16000	1.30		
98.0	2920	15.06	16300	1.45		
116	2480	12.77	16400	1.75	MFA 97 MFAF 97 MF 97 MFF 97	Y..200L-4 AM200 AD6
132	2160	11.16	16400	1.90		
163	1760	9.06	15400	1.35		
179	1590	8.22	15300	1.50		
209	1370	7.07	15100	1.70		
239	1190	6.17	14900	1.90		
282	1010	5.23	14600	2.10		
322	880	4.57	14300	2.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=37.0kw						
17.0	20500	85.80	88600	0.90	MFA 157 MFAF 157 MF 157 MFF 157	Y..225S-4 AM225 AD5
19.0	18700	78.46	88700	0.95		
22.0	16300	68.28	88400	1.10		
25.0	14400	60.25	87800	1.25		
28.0	12400	52.24	86700	1.45	MFA 157 MFAF 157 MF 157 MFF 157	Y..225S-4 AM225 AD6
32.0	11100	46.48	85600	1.60	MFA 157 MFAF 157 MF 157 MFF 157	Y..225S-4 AM225 AD7
37.0	9580	40.06	84000	1.90		
45.0	7780	32.55	81300	2.30		
54.0	6600	27.60	79000	2.70	MFA 157 MFAF 157 MF 157 MFF 157	Y..225S-4 AM225 AD8
27.0	13200	55.31	59200	0.90	MFA 127 MFAF 127 MF 127 MFF 127	Y..225S-4 AM225 AD5
30.0	11600	48.80	60800	1.05		
35.0	10000	42.15	61100	1.20		
40.0	8910	37.28	60700	1.35	MFA 127 MFAF 127 MF 127 MFF 127	Y..225S-4 AM225 AD6
55.0	6420	26.86	58900	1.30		
60.0	5870	24.57	58200	1.45		
47.0	7490	31.33	59900	1.60	MFA 127 MFAF 127 MF 127 MFF 127	Y..225S-4 AM225 AD7
58.0	6050	25.30	58500	2.00		
69.0	5110	21.38	57100	2.40	MFA 127 MFAF 127 MF 127 MFF 127	Y..225S-4 AM225 AD8
78.0	4510	18.87	55900	2.40		
90.0	3910	16.36	54500	2.80		
102	3480	14.55	53400	3.20		
118	3000	12.54	51800	3.30		
145	2430	10.19	49600	3.90		
167	2110	8.86	47700	3.30		
187	1880	7.88	46400	3.20		
54.0	6590	27.57	36200	1.20	MFA 107 MFAF 107 MF 107 MFF 107	Y..225S-4 AM225 AD6
59.0	6010	25.14	36300	1.30		
68.0	5200	21.76	36200	1.50		
77.0	4590	19.20	36000	1.70		
89.0	3960	16.58	35600	2.00		
101	3500	14.67	35100	2.20		
120	2940	12.33	34300	2.40		
148	2380	9.96	33200	2.70		
152	2310	9.69	32400	2.10		
176	2000	8.37	31700	2.40		
199	1770	7.40	31000	2.60		
237	1480	6.22	30000	3.10		

MF

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=45.0kw						
22.0	19800	68.28	81400	0.90	MFA 157 MFAF 157 MF 157 MFF 157	Y..225M-4 AM225 AD5
25.0	17500	60.25	81600	1.05		
28.0	15100	52.24	81300	1.20	MFA 157 MFAF 157 MF 157 MFF 157	Y..225M-4 AM225 AD6
32.0	13500	46.48	80800	1.35	MFA 157 MFAF 157 MF 157 MFF 157	Y..225M-4 AM225 AD7
37.0	11600	40.06	79800	1.55		
45.0	9460	32.55	78000	1.90		
54.0	8020	27.60	76200	2.20	MFA 157 MFAF 157 MF 157 MFF 157	Y..225M-4 AM225 AD8
30.0	14100	48.80	51600	0.85	MFA 127 MFAF 127 MF 127 MFF 127	Y..225M-4 AM225 AD5
35.0	12200	42.15	54300	1.00		
40.0	10800	37.28	55800	1.10	MFA 127 MFAF 127 MF 127 MFF 127	Y..225M-4 AM225 AD6
55.0	7810	26.86	55700	1.10		
60.0	7140	24.57	55300	1.20		
47.0	9100	31.33	56100	1.30	MFA 127 MFAF 127 MF 127 MFF 127	Y..225M-4 AM225 AD7
58.0	7350	25.30	55400	1.65		
69.0	6210	21.38	54500	1.95	MFA 127 MFAF 127 MF 127 MFF 127	Y..225M-4 AM225 AD8
78.0	5480	18.87	53600	2.00		
90.0	4750	16.36	52600	2.30		
102	4230	14.55	51600	2.60		
118	3640	12.54	50300	2.70		
145	2960	10.19	48300	3.20		
167	2570	8.86	46500	2.70		
187	2290	7.88	45400	2.60		
218	1970	6.80	44000	3.50		
268	1600	5.52	42000	3.70		
54.0	8010	27.57	31500	1.00	MFA 107 MFAF 107 MF 107 MFF 107	Y..225M-4 AM225 AD6
59.0	7310	25.14	32600	1.05		
68.0	6320	21.76	33200	1.25		
77.0	5580	19.20	33300	1.40		
89.0	4820	16.58	33300	1.65		
101	4260	14.67	33100	1.80		
120	3580	12.33	32600	1.95		
148	2890	9.96	31900	2.20		
152	2810	9.69	30900	1.75		
177	2430	8.37	30400	1.95		
200	2150	7.40	29900	2.10		
238	1800	6.22	29000	2.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=55.0kw						
24.0	21400	60.25	73800	0.85	MFA 157 MFAF 157 MF 157 MFF 157	Y..250M-4 AM250 AD5
28.0	18600	52.24	74600	0.95	MFA 157 MFAF 157 MF 157 MFF 157	Y..250M-4 AM250 AD6
32.0	16500	46.48	74800	1.10	MFA 157 MFAF 157 MF 157 MFF 157	Y..250M-4 AM250 AD7
37.0	14200	40.06	74700	1.25		
45.0	11500	32.55	73800	1.55		
53.0	9820	27.60	72600	1.85	MFA 157 MFAF 157 MF 157 MFF 157	Y..250M-4 AM250 AD8
52.0	10100	28.60	72900	1.65		
58.0	9050	25.43	71900	1.65		
67.0	7890	22.16	70600	2.30		
75.0	7030	19.77	69400	2.40		
88.0	6000	16.85	67600	3.00		
40.0	13200	37.28	46900	0.90	MFA 127 MFAF 127 MF 127 MFF 127	Y..250M-4 AM250 AD6
47.0	11100	31.33	49900	1.10	MFA 127 MFAF 127 MF 127 MFF 127	Y..250M-4 AM250 AD7
58.0	9010	25.30	51600	1.35		
69.0	7610	21.38	51300	1.60	MFA 127 MFAF 127 MF 127 MFF 127	Y..250M-4 AM250 AD8
78.0	6710	18.87	50800	1.65		
90.0	5820	16.36	50100	1.90		
101	5180	14.55	49400	2.10		
118	4460	12.54	48400	2.20		
145	3620	10.19	46800	2.60		
166	3150	8.86	45100	2.20		
187	2800	7.88	44200	2.10		
217	2410	6.80	42900	2.90		
315	1660	4.68	39600	3.60		
P_1=75.0kw						
32.0	22400	46.48	62900	0.80	MFA 157 MFAF 157 MF 157 MFF 157	Y..280S-4 AM280 AD7
37.0	19300	40.06	64400	0.95		
45.0	15700	32.55	65400	1.15		
54.0	13300	27.60	65500	1.35	MFA 157 MFAF 157 MF 157 MFF 157	Y..280S-4 AM280 AD8
52.0	13800	28.60	65500	1.25		
58.0	12300	25.43	65400	1.20		
67.0	10700	22.16	64900	1.70		
75.0	9560	19.77	64300	1.80		
88.0	8150	16.85	63200	2.20		
106	6750	13.96	61600	2.50		
124	5760	11.92	60100	2.80		

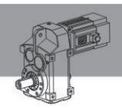
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=75.0kw						
58.0	12200	25.30	40000	1.00	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..280S-4 AM280 AD7**
69.0	10300	21.38	43000	1.15		
78.0	9120	18.87	44400	1.20		
90.0	7910	16.36	45200	1.40		
102	7040	14.55	45000	1.55	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..280S-4 AM280 AD8**
118	6060	12.54	44600	1.65		
145	4930	10.19	43700	1.95		
167	4280	8.86	42200	1.65		
188	3810	7.88	41600	1.55		
218	3280	6.80	40700	2.10		
268	2670	5.52	39300	2.20		
316	2260	4.68	38100	2.60		
P_1=90.0kw						
45.0	18900	32.55	59100	0.95	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..280M-4 AM280 AD7**
54.0	16000	27.60	60200	1.10		
67.0	12800	22.16	60600	1.40	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..280M-4 AM280 AD8**
75.0	11400	19.77	60500	1.50		
88.0	9780	16.85	59900	1.85		
106	8100	13.96	58900	2.10		
124	6920	11.92	57800	2.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=90.0kw						
58.0	14600	25.30	29600	0.80	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..280M-4 AM280 AD7**
90.0	9490	16.36	39900	1.15		
102	8450	14.55	41100	1.30		
118	7280	12.54	41800	1.35		
145	5910	10.19	41400	1.60	**MFA 127 MFAF 127 MF 127 MFF 127**	**Y..280M-4 AM280 AD8**
167	5140	8.86	40100	1.35		
188	4570	7.88	39700	1.30		
218	3940	6.80	39000	1.75		
268	3200	5.52	37900	1.85		
316	2710	4.68	36900	2.20		
P_1=110kw						
54.0	19500	27.60	53100	0.90		
67.0	15600	22.16	54900	1.15	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..315S-4 - AD8**
75.0	14000	19.77	55400	1.20		
88.0	11900	16.85	55600	1.50		
106	9890	13.96	55300	1.70		
124	8440	11.92	54700	1.90		
P_1=132kw						
67.0	18800	22.16	48700	0.95	**MFA 157 MFAF 157 MF 157 MFF 157**	**Y..315M-4 - AD8**
75.0	16700	19.77	49800	1.00		
88.0	14300	16.85	50900	1.25		
106	11800	13.96	51400	1.45		
125	10100	11.92	51400	1.60		

3.8 MF../MRF..性能参数 / MF../MRF.. Performance Parameters

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 130Nm				
0.15	8972	4500		
0.18	7736	4500		
0.19	7211	4500		
0.22	6303	4500		
0.25	5435	4500	**MFA 27 MRF17 MFAF 27 MRF17 MF 27 MRF17 MFF 27 MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
0.28	4855	4500		
0.33	4243	4500		
0.37	3715	4500		
0.43	3247	4500		
0.48	2878	4500		
0.55	2515	4500		
0.62	2217	4500		
0.73	1898	4500		
0.84	1645	4500		
0.90	1525	4500		
1.00	1322	4500	**MFA 27 MRF17 MFAF 27 MRF17 MF 27 MRF17 MFF 27 MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
1.20	1146	4500		
1.40	1013	4500		
1.60	890	4500		
1.80	778	4500		
2.00	682	4500		
2.30	602	4500		
2.60	520	4500		
3.00	458	4500		
3.50	397	4500		
4.00	342	4500	**MFA 27 MRF17 MFAF 27 MRF17 MF 27 MRF17 MFF 27 MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
4.60	302	4500		
5.20	266	4500		
5.80	236	4500		
6.50	211	4500		
7.40	186	4500		
9.30	142	4500	**MFA 27 MRF17 MFAF 27 MRF17 MF 27 MRF17 MFF 27 MRF17**	**Y..63M_2-4 Y..63M_2-4 Y..63M_2-4 Y..63M_2-4**
11.0	124	4500		
12.0	109	4500	**MFA 27 MRF17 MFAF 27 MRF17 MF 27 MRF17 MFF 27 MRF17**	**Y..71M_1-4 Y..71M_1-4 Y..71M_1-4 Y..71M_1-4**
14.0	96	4500		
M_{2max} 200Nm				
0.17	8193	4290		
0.20	7064	4290		
0.21	6585	4290		
0.24	5756	4290		
0.28	4963	4290	**MFA 37 MRF17 MFAF 37 MRF17 MF 37 MRF17 MFF 37 MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
0.31	4434	4290		
0.36	3875	4290		
0.41	3392	4290		
0.47	2965	4290		
0.53	2587	4290		
0.60	2284	4290		
0.69	1997	4290		

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 200Nm				
0.72	1929	4290		
0.82	1679	4290		
0.89	1550	4290		
1.00	1356	4290		
1.20	1180	4290		
1.30	1044	4290	**MFA 37 MRF17 MFAF 37 MRF17 MF 37 MRF17 MFF 37 MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
1.50	914	4290		
1.70	808	4290		
2.00	698	4290		
2.20	616	4290		
2.50	544	4290		
3.00	466	4290		
3.40	411	4290		
3.80	364	4290		
4.20	326	4290	**MFA 37 MRF17 MFAF 37 MRF17 MF 37 MRF17 MFF 37 MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
4.80	285	4290		
5.30	250	4290	**MFA 37 MRF17 MFAF 37 MRF17 MF 37 MRF17 MFF 37 MRF17**	**Y..63M_2-4 Y..63M_2-4 Y..63M_2-4 Y..63M_2-4**
6.00	219	4290		
7.10	186	4290		
7.80	167	4290	**MFA 37 MRF17 MFAF 37 MRF17 MF 37 MRF17 MFF 37 MRF17**	**Y..71M_1-4 Y..71M_1-4 Y..71M_1-4 Y..71M_1-4**
8.90	145	4290		
10.0	129	4290		
M_{2max} 400Nm				
0.11	12251	5920		
0.13	10619	5920		
0.14	9846	5920		
0.16	8534	5920		
0.19	7460	5920		
0.21	6536	5920	**MFA 47 MRF17 MFAF 47 MRF17 MF 47 MRF17 MFF 47MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
0.24	5746	5920		
0.27	5022	5920		
0.31	4401	5920		
0.36	3883	5920		
0.40	3443	5920		
0.46	2976	5920		
0.52	2629	5920		
0.55	2519	5920		
0.58	2394	5920		
0.64	2172	5920		
0.68	2025	5920		
0.78	1770	5920	**MFA 47 MRF17 MFAF 47 MRF17 MF 47 MRF17 MFF 47MRF17**	**Y..63M_1-4 Y..63M_1-4 Y..63M_1-4 Y..63M_1-4**
0.88	1576	5920		
1.00	1363	5920		
1.20	1192	5920		
1.30	1061	5920		
1.50	931	5920		
1.70	822	5920		
2.00	706	5920		



n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 400Nm				
2.20	619	5920	**MFA 47MRF17** **MFAF 47MRF17** **MF 47MRF17** **MFF 47MRF17**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
2.50 524 **2.70** 489 **3.10** 427 **3.50** 381		5920	**MFA 47MRF17** **MFAF 47MRF17** **MF 47MRF17** **MFF 47MRF17**	**Y..63M2-4** **Y..63M2-4** **Y..63M2-4** **Y..63M2-4**
3.90 334 **4.40** 295 **5.10** 253		5920	**MFA 47MRF17** **MFAF 47MRF17** **MF 47MRF17** **MFF 47MRF17**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**
6.40 217 **7.30** 190 **7.80** 178		5920	**MFA 47MRF17** **MFAF 47MRF17** **MF 47MRF17** **MFF 47MRF17**	**Y..71M2-4** **Y..71M2-4** **Y..71M2-4** **Y..71M2-4**
9.20 149 **11.0** 131		5920	**MFA 47MRF17** **MFAF 47MRF17** **MF 47MRF17** **MFF 47MRF17**	**Y..80M1-4** **Y..80M1-4** **Y..80M1-4** **Y..80M1-4**
M_{2max} 600Nm				
0.09 14832 **0.10** 13604 **0.11** 12602 **0.12** 11252 **0.14** 9986 **0.16** 8787 **0.17** 7908 **0.20** 6913 **0.23** 6030 **0.26** 5289 **0.30** 4654 **0.34** 4060 **0.39** 3564 **0.44** 3161		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
0.48 2854 **0.54** 2576 **0.61** 2266 **0.69** 2012 **0.77** 1791 **0.85** 1617 **0.97** 1422 **1.10** 1243 **1.30** 1066 **1.40** 949 **1.60** 856		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
1.80 749 **2.00** 658 **2.40** 549		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..63M2-4** **Y..63M2-4** **Y..63M2-4** **Y..63M2-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 600Nm				
2.70	483	9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**
3.00 426 **3.40** 382		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**
4.20 330 **4.60** 298 **5.30** 262		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..71M2-4** **Y..71M2-4** **Y..71M2-4** **Y..71M2-4**
6.10 226 **6.90** 200		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..80M1-4** **Y..80M1-4** **Y..80M1-4** **Y..80M1-4**
8.40 170 **9.40** 152 **11.0** 134		9200	**MFA 57MRF37** **MFAF 57MRF37** **MF 57MRF37** **MFF 57MRF37**	**Y..80M2-4** **Y..80M2-4** **Y..80M2-4** **Y..80M2-4**
M_{2max} 820Nm				
0.07 19199 **0.08** 17610 **0.09** 14992 **0.11** 12926 **0.12** 11480 **0.14** 10220 **0.15** 8933 **0.17** 7940 **0.19** 7096 **0.23** 6080 **0.26** 5341 **0.29** 4690 **0.34** 4091 **0.39** 3574 **0.44** 3133 **0.50** 2756 **0.57** 2439		10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
0.41 3377 **0.47** 2912 **0.51** 2714 **0.58** 2372 **0.65** 2126 **0.85** 1631 **0.96** 1437 **1.10** 1256		10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
1.20 1126 **1.30** 984 **1.50** 864		10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..63M2-4** **Y..63M2-4** **Y..63M2-4** **Y..63M2-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 820Nm				
1.80 722 **2.00** 634 **2.40** 539		10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**
0.73	1884	10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
2.60	500	10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**
3.00 454 **3.50** 392		10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..71M2-4** **Y..71M2-4** **Y..71M2-4** **Y..71M2-4**
4.10 333 **4.60** 297 **5.30** 261 **5.80** 238		10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..80M1-4** **Y..80M1-4** **Y..80M1-4** **Y..80M1-4**
7.20	200	10300	**MFA 67MRF37** **MFAF 67MRF37** **MF 67MRF37** **MFF 67MRF37**	**Y..80M2-4** **Y..80M2-4** **Y..80M2-4** **Y..80M2-4**
M_{2max} 1500Nm				
0.07 19180 **0.08** 17593 **0.09** 16128 **0.09** 14978 **0.10** 13731 **0.11** 12049 **0.13** 11035 **0.14** 9683 **0.16** 8464 **0.18** 7520 **0.21** 6580 **0.24** 5808 **0.27** 5026		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
0.31 4435 **0.36** 3832 **0.46** 2978 **0.53** 2613 **0.60** 2284		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
0.65 2029 **0.76** 1728 **0.86** 1544 **0.98** 1354		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..63M2-4** **Y..63M2-4** **Y..63M2-4** **Y..63M2-4**
1.10 1200 **1.20** 1053		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 1500Nm				
1.50 910 **1.70** 810 **1.90** 710		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..71M2-4** **Y..71M2-4** **Y..71M2-4** **Y..71M2-4**
2.20 615 **2.60** 538 **2.90** 480		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..80M1-4** **Y..80M1-4** **Y..80M1-4** **Y..80M1-4**
3.50 413 **3.90** 367		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..80M2-4** **Y..80M2-4** **Y..80M2-4** **Y..80M2-4**
4.40 323		15700	**MFA 77MRF37** **MFAF 77MRF37** **MF 77MRF37** **MFF 77MRF37**	**Y..90S-4** **Y..90S-4** **Y..90S-4** **Y..90S-4**
M_{2max} 3000Nm				
0.06 23042 **0.07** 20462 **0.08** 18238 **0.09** 15877 **0.10** 14099 **0.11** 12205 **0.13** 10433 **0.15** 9381 **0.17** 8142 **0.19** 7100 **0.22** 6273 **0.25** 5510 **0.28** 4954		19800	**MFA 87MRF57** **MFAF 87MRF57** **MF 87MRF57** **MFF 87MRF57**	**Y..63M1-4** **Y..63M1-4** **Y..63M1-4** **Y..63M1-4**
0.31 4245 **0.35** 3721 **0.41** 3244 **0.46** 2881		19800	**MFA 87MRF57** **MFAF 87MRF57** **MF 87MRF57** **MFF 87MRF57**	**Y..63M2-4** **Y..63M2-4** **Y..63M2-4** **Y..63M2-4**
0.50 2576 **0.59** 2199 **0.67** 1930		19800	**MFA 87MRF57** **MFAF 87MRF57** **MF 87MRF57** **MFF 87MRF57**	**Y..71M1-4** **Y..71M1-4** **Y..71M1-4** **Y..71M1-4**
0.81 1709 **0.92** 1493		19800	**MFA 87MRF57** **MFAF 87MRF57** **MF 87MRF57** **MFF 87MRF57**	**Y..71M2-4** **Y..71M2-4** **Y..71M2-4** **Y..71M2-4**
1.10 1300 **1.20** 1148 **1.40** 1010 **1.60** 887		19800	**MFA 87MRF57** **MFAF 87MRF57** **MF 87MRF57** **MFF 87MRF57**	**Y..80M1-4** **Y..80M1-4** **Y..80M1-4** **Y..80M1-4**
1.80 780 **2.10** 674		19800	**MFA 87MRF57** **MFAF 87MRF57** **MF 87MRF57** **MFF 87MRF57**	**Y..80M2-4** **Y..80M2-4** **Y..80M2-4** **Y..80M2-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 3000Nm				
2.30	609	19800	**MFA 87 MRF57**	**Y..90S-4**
2.80	515	19800	**MFAF 87 MRF57**	**Y..90S-4**
3.10	452	19800	**MF 87 MRF57**	**Y..90S-4**
			MFF 87 MRF57	**Y..90S-4**
4.10	345	19800	**MFA 87 MRF57**	**Y..90L-4**
			MFAF 87 MRF57	**Y..90L-4**
			MF 87 MRF57	**Y..90L-4**
			MFF 87 MRF57	**Y..90L-4**
M_{2max} 4300Nm				
0.07	20183	29900		
0.08	18119	29900		
0.09	15472	29900		
0.10	14022	29900	**MFA 97 MRF57**	**Y..63M$_1$-4**
0.11	12324	29900	**MFAF 97 MRF57**	**Y..63M$_1$-4**
0.13	10838	29900	**MF 97 MRF57**	**Y..63M$_1$-4**
0.14	9576	29900	**MFF 97 MRF57**	**Y..63M$_1$-4**
0.17	8318	29900		
0.19	7328	29900		
0.20	6469	29900		
0.24	5615	29900	**MFA 97 MRF57**	**Y..63M$_2$-4**
0.27	4961	29900	**MFAF 97 MRF57**	**Y..63M$_2$-4**
0.30	4333	29900	**MF 97 MRF57**	**Y..63M$_2$-4**
0.34	3906	29900	**MFF 97 MRF57**	**Y..63M$_2$-4**
0.39	3352	29900	**MFA 97 MRF57**	**Y..71M$_1$-4**
0.45	2907	29900	**MFAF 97 MRF57**	**Y..71M$_1$-4**
			MF 97 MRF57	**Y..71M$_1$-4**
			MFF 97 MRF57	**Y..71M$_1$-4**
0.54	2553	29900	**MFA 97 MRF57**	**Y..71M$_2$-4**
0.61	2245	29900	**MFAF 97 MRF57**	**Y..71M$_2$-4**
0.70	1970	29900	**MF 97 MRF57**	**Y..71M$_2$-4**
			MFF 97 MRF57	**Y..71M$_2$-4**
0.80	1722	29900	**MFA 97 MRF57**	**Y..80M$_1$-4**
0.90	1527	29900	**MFAF 97 MRF57**	**Y..80M$_1$-4**
1.00	1327	29900	**MF 97 MRF57**	**Y..80M$_1$-4**
			MFF 97 MRF57	**Y..80M$_1$-4**
1.20	1171	29900	**MFA 97 MRF57**	**Y..80M$_2$-4**
1.40	1022	29900	**MFAF 97 MRF57**	**Y..80M$_2$-4**
			MF 97 MRF57	**Y..80M$_2$-4**
			MFF 97 MRF57	**Y..80M$_2$-4**
1.60	898	29900	**MFA 97 MRF57**	**Y..90S-4**
1.80	784	29900	**MFAF 97 MRF57**	**Y..90S-4**
2.10	690	29900	**MF 97 MRF57**	**Y..90S-4**
			MFF 97 MRF57	**Y..90S-4**
2.40	605	29900	**MFA 97 MRF57**	**Y..90L-4**
2.70	529	29900	**MFAF 97 MRF57**	**Y..90L-4**
3.10	467	29900	**MF 97 MRF57**	**Y..90L-4**
			MFF 97 MRF57	**Y..90L-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 600Nm				
3.50	406	29900	**MFA 97 MRF57**	**Y..100L$_1$-4**
3.90	363	29900	**MFAF 97 MRF57**	**Y..100L$_1$-4**
			MF 97 MRF57	**Y..100L$_1$-4**
			MFF 97 MRF57	**Y..100L$_1$-4**
5.10	285	29900	**MFA 97 MRF57**	**Y..100L$_2$-4**
6.00	245	29900	**MFAF 97 MRF57**	**Y..100L$_2$-4**
			MF 97 MRF57	**Y..100L$_2$-4**
			MFF 97 MRF57	**Y..100L$_2$-4**
M_{2max} 7680Nm				
0.05	25375	49800		
0.06	21652	49800	**MFA 107 MRF77**	**Y..63M$_1$-4**
0.07	18933	49800	**MFAF 107 MRF77**	**Y..63M$_1$-4**
0.08	16888	49800	**MF 107 MRF77**	**Y..63M$_1$-4**
0.09	14767	49800	**MFF 107 MRF77**	**Y..63M$_1$-4**
0.12	11348	49800	**MFA 107 MRF77**	**Y..63M$_2$-4**
0.13	10039	49800	**MFAF 107 MRF77**	**Y..63M$_2$-4**
0.15	8548	49800	**MF 107 MRF77**	**Y..63M$_2$-4**
0.17	7674	49800	**MFF 107 MRF77**	**Y..63M$_2$-4**
0.19	6767	9800	**MFA 107 MRF77**	**Y..71M$_1$-4**
0.22	5954	49800	**MFAF 107 MRF77**	**Y..71M$_1$-4**
0.25	5223	49800	**MF 107 MRF77**	**Y..71M$_1$-4**
			MFF 107 MRF77	**Y..71M$_1$-4**
0.30	4567	49800	**MFA 107 MRF77**	**Y..71M$_2$-4**
0.39	3521	49800	**MFAF 107 MRF77**	**Y..71M$_2$-4**
			MF 107 MRF77	**Y..71M$_2$-4**
			MFF 107 MRF77	**Y..71M$_2$-4**
0.45	3037	49800	**MFA 107 MRF77**	**Y..80M$_1$-4**
0.50	2756	49800	**MFAF 107 MRF77**	**Y..80M$_1$-4**
0.58	2369	49800	**MF 107 MRF77**	**Y..80M$_1$-4**
			MFF 107 MRF77	**Y..80M$_1$-4**
0.69	2068	49800	**MFA 107 MRF77**	**Y..80M$_2$-4**
0.79	1826	49800	**MFAF 107 MRF77**	**Y..80M$_2$-4**
			MF 107 MRF77	**Y..80M$_2$-4**
			MFF 107 MRF77	**Y..80M$_2$-4**
0.89	1597	49800	**MFA 107 MRF77**	**Y..90S-4**
1.00	1401	49800	**MFAF 107 MRF77**	**Y..90S-4**
1.10	1243	49800	**MF 107 MRF77**	**Y..90S-4**
			MFF 107 MRF77	**Y..90S-4**
1.30	1087	49800	**MFA 107 MRF77**	**Y..90L-4**
1.50	950	49800	**MFAF 107 MRF77**	**Y..90L-4**
			MF 107 MRF77	**Y..90L-4**
			MFF 107 MRF77	**Y..90L-4**
1.70	834	49800	**MFA 107 MRF77**	**Y..100L$_1$-4**
1.90	736	49800	**MFAF 107 MRF77**	**Y..100L$_1$-4**
2.20	640	49800	**MF 107 MRF77**	**Y..100L$_1$-4**
			MFF 107 MRF77	**Y..100L$_1$-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 7680Nm				
2.60	560	49800	**MFA 107 MRF77**	**Y..100L$_2$-4**
3.00	489	49800	**MFAF 107 MRF77**	**Y..100L$_2$-4**
3.30	436	49800	**MF 107 MRF77**	**Y..100L$_2$-4**
			MFF 107 MRF77	**Y..100L$_2$-4**
4.00	370	49800	**MFA 107 MRF77**	**Y..112M-4**
4.40	333	49800	**MFAF 107 MRF77**	**Y..112M-4**
			MF 107 MRF77	**Y..112M-4**
			MFF 107 MRF77	**Y..112M-4**
M_{2max} 12000Nm				
0.06	24478	90000	**MFA 127 MRF77**	**Y..63M$_1$-4**
0.06	22323	90000	**MFAF 127 MRF77**	**Y..63M$_1$-4**
			MF 127 MRF77	**Y..63M$_1$-4**
			MFF 127 MRF77	**Y..63M$_1$-4**
0.07	19048	90000	**MFA 127 MRF77**	**Y..63M$_2$-4**
0.08	16656	90000	**MFAF 127 MRF77**	**Y..63M$_2$-4**
0.09	14722	90000	**MF 127 MRF77**	**Y..63M$_2$-4**
0.10	12912	90000	**MFF 127 MRF77**	**Y..63M$_2$-4**
0.11	11656	90000		
0.13	10191	90000	**MFA 127 MRF77**	**Y..71M$_1$-4**
0.15	8831	90000	**MFAF 127 MRF77**	**Y..71M$_1$-4**
			MF 127 MRF77	**Y..71M$_1$-4**
			MFF 127 MRF77	**Y..71M$_1$-4**
0.18	7643	90000	**MFA 127 MRF77**	**Y..71M$_2$-4**
0.21	6715	90000	**MFAF 127 MRF77**	**Y..71M$_2$-4**
0.23	5925	90000	**MF 127 MRF77**	**Y..71M$_2$-4**
			MFF 127 MRF77	**Y..71M$_2$-4**
0.27	5153	90000	**MFA 127 MRF77**	**Y..80M$_1$-4**
0.30	4533	90000	**MFAF 127 MRF77**	**Y..80M$_1$-4**
0.35	3926	90000	**MF 127 MRF77**	**Y..80M$_1$-4**
			MFF 127 MRF77	**Y..80M$_1$-4**
0.42	3454	90000	**MFA 127 MRF77**	**Y..80M$_2$-4**
0.47	3031	90000	**MFAF 127 MRF77**	**Y..80M$_2$-4**
0.54	2672	90000	**MF 127 MRF77**	**Y..80M$_2$-4**
			MFF 127 MRF77	**Y..80M$_2$-4**
0.60	2357	90000	**MFA 127 MRF77**	**Y..90S-4**
0.70	2038	90000	**MFAF 127 MRF77**	**Y..90S-4**
0.80	1784	90000	**MF 127 MRF77**	**Y..90S-4**
			MFF 127 MRF77	**Y..90S-4**
0.89	1606	90000	**MFA 127 MRF77**	**Y..90L-4**
1.00	1390	90000	**MFAF 127 MRF77**	**Y..90L-4**
			MF 127 MRF77	**Y..90L-4**
			MFF 127 MRF77	**Y..90L-4**
1.20	1220	90000	**MFA 127 MRF77**	**Y..100L$_1$-4**
1.30	1077	90000	**MFAF 127 MRF77**	**Y..100L$_1$-4**
1.50	930	90000	**MF 127 MRF77**	**Y..100L$_1$-4**
			MFF 127 MRF77	**Y..100L$_1$-4**

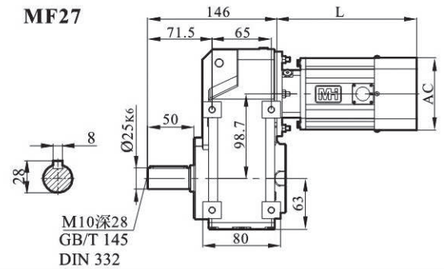
n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 12000Nm				
1.80	820	90000	**MFA 127 MRF77**	**Y..100L$_2$-4**
2.00	727	90000	**MFAF 127 MRF77**	**Y..100L$_2$-4**
			MF 127 MRF77	**Y..100L$_2$-4**
			MFF 127 MRF77	**Y..100L$_2$-4**
2.20	648	90000	**MFA 127 MRF77**	**Y..112M-4**
2.70	549	90000	**MFAF 127 MRF77**	**Y..112M-4**
3.00	495	90000	**MF 127 MRF77**	**Y..112M-4**
			MFF 127 MRF77	**Y..112M-4**
3.40	428	90000	**MFA 127 MRF77**	**Y..132S-4**
3.90	376	90000	**MFAF 127 MRF77**	**Y..132S-4**
			MF 127 MRF77	**Y..132S-4**
			MFF 127 MRF77	**Y..132S-4**
3.00	483	90000	**MFA 127 MRF77**	**Y..132S-4**
3.50	418	90000	**MFAF 127 MRF77**	**Y..132S-4**
3.90	374	90000	**MF 127 MRF77**	**Y..132S-4**
			MFF 127 MRF77	**Y..132S-4**
4.70	312	90000	**MFA 127 MRF77**	**Y..132M-4**
5.00	293	90000	**MFAF 127 MRF77**	**Y..132M-4**
			MF 127 MRF77	**Y..132M-4**
			MFF 127 MRF77	**Y..132M-4**
7.50	198	90000	**MFA 127 MRF77**	**Y..160M-4**
			MFAF 127 MRF77	**Y..160M-4**
			MF 127 MRF77	**Y..160M-4**
			MFF 127 MRF77	**Y..160M-4**
M_{2max} 18000Nm				
0.04	31434	100300		
0.05	26173	100300		
0.06	23464	100300	**MFA 157 MRF97**	**Y..80M$_1$-4**
0.07	20212	100300	**MFAF 157 MRF97**	**Y..80M$_1$-4**
0.08	17984	100300	**MF 157 MRF97**	**Y..80M$_1$-4**
0.08	16358	100300	**MFF 157 MRF97**	**Y..80M$_1$-4**
0.10	13751	100300		
0.11	12235	100300		
0.14	10033	100300	**MFA 157 MRF97**	**Y..80M$_2$-4**
0.16	9021	100300	**MFAF 157 MRF97**	**Y..80M$_2$-4**
0.18	8026	100300	**MF 157 MRF97**	**Y..80M$_2$-4**
			MFF 157 MRF97	**Y..80M$_2$-4**
0.20	7075	100300	**MFA 157 MRF97**	**Y..80M$_1$-4**
0.22	6295	100300	**MFAF 157 MRF97**	**Y..80M$_1$-4**
			MF 157 MRF97	**Y..80M$_1$-4**
			MFF 157 MRF97	**Y..80M$_1$-4**
0.27	5404	100300	**MFA 157 MRF97**	**Y..80M$_2$-4**
0.30	4831	100300	**MFAF 157 MRF97**	**Y..80M$_2$-4**
			MF 157 MRF97	**Y..80M$_2$-4**
			MFF 157 MRF97	**Y..80M$_2$-4**
0.34	4130	100300	**MFA 157 MRF97**	**Y..90S-4**
			MFAF 157 MRF97	**Y..90S-4**
			MF 157 MRF97	**Y..90S-4**
			MFF 157 MRF97	**Y..90S-4**

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 18000Nm				
0.40	3607	100300	**MFA 157 MRF97**	**Y..100L$_1$-4**
			MFAF 157 MRF97	**Y..100L$_1$-4**
0.44	3210	100300	**MF 157 MRF97**	**Y..100L$_1$-4**
			MFF 157 MRF97	**Y..100L$_1$-4**
0.51	2780	100300	**MFA 157 MRF97**	**Y..90L-4**
			MFAF 157 MRF97	**Y..90L-4**
			MF 157 MRF97	**Y..90L-4**
			MFF 157 MRF97	**Y..90L-4**
0.99	1441	100300	**MFA 157 MRF97**	**Y..100L$_1$-4**
			MFAF 157 MRF97	**Y..100L$_1$-4**
			MF 157 MRF97	**Y..100L$_1$-4**
			MFF 157 MRF97	**Y..100L$_1$-4**
0.59	2427	100300	**MFA 157 MRF97**	**Y..90L-4**
			MFAF 157 MRF97	**Y..90L-4**
0.65	2185	100300	**MF 157 MRF97**	**Y..90L-4**
			MFF 157 MRF97	**Y..90L-4**
0.73	1944	100300	**MFA 157 MRF97**	**Y..100L$_1$-4**
			MFAF 157 MRF97	**Y..100L$_1$-4**
0.85	1674	100300	**MF 157 MRF97**	**Y..100L$_1$-4**
			MFF 157 MRF97	**Y..100L$_1$-4**
1.10	1308	100300	**MFA 157 MRF97**	**Y..100L$_2$-4**
			MFAF 157 MRF97	**Y..100L$_2$-4**
1.20	1169	100300	**MF 157 MRF97**	**Y..100L$_2$-4**
			MFF 157 MRF97	**Y..100L$_2$-4**

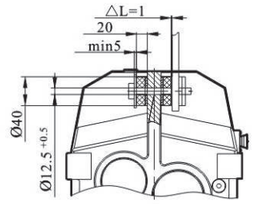
n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max} 18000Nm				
1.50	953	100300	**MFA 157 MRF97**	**Y..112M-4**
			MFAF 157 MRF97	**Y..112M-4**
1.70	845	100300	**MF 157 MRF97**	**Y..112M-4**
1.90	764	100300	**MFF 157 MRF97**	**Y..112M-4**
2.10	680	100300	**MFA 157 MRF97**	**Y..132S-4**
			MFAF 157 MRF97	**Y..132S-4**
2.50	576	100300	**MF 157 MRF97**	**Y..132S-4**
			MFF 157 MRF97	**Y..132S-4**
2.90	503	100300	**MFA 157 MRF97**	**Y..132M-4**
			MFAF 157 MRF97	**Y..132M-4**
3.30	446	100300	**MF 157 MRF97**	**Y..132M-4**
			MFF 157 MRF97	**Y..132M-4**
4.90	302	100300	**MFA 157 MRF97**	**Y..160M-4**
			MFAF 157 MRF97	**Y..160M-4**
5.40	273	100300	**MF 157 MRF97**	**Y..160M-4**
			MFF 157 MRF97	**Y..160M-4**
6.30	232	100300	**MFA 157 MRF97**	**Y..160L-4**
			MFAF 157 MRF97	**Y..160L-4**
7.20	202	100300	**MF 157 MRF97**	**Y..160L-4**
			MFF 157 MRF97	**Y..160L-4**
7.50	197	100300	**MFA 157 MRF97**	**Y..180M-4**
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			MF 157 MRF97	**Y..180M-4**
			MFF 157 MRF97	**Y..180M-4**

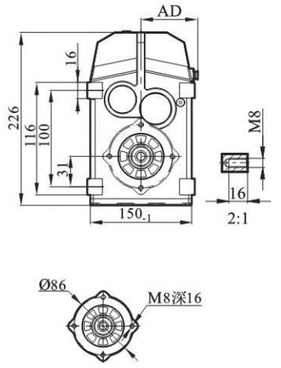
3.9 外形尺寸 / Dimensions

MF27

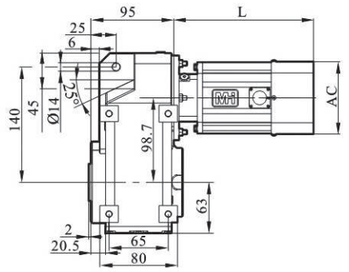


MFA27-T

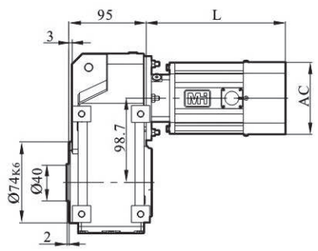




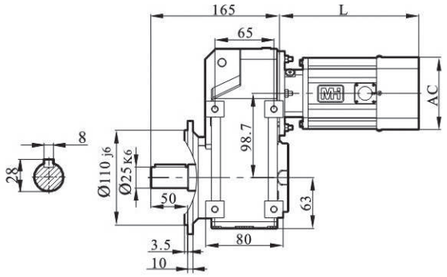
MFA/MFH/MFV27



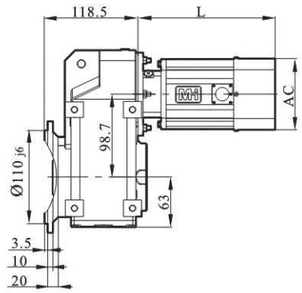
MFAZ/MFHZ/MFVZ27

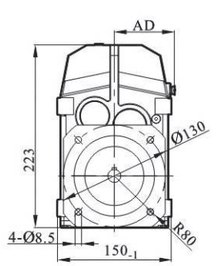


MFF27

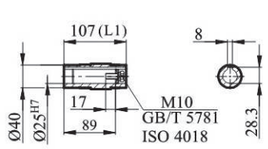


MFAF/MFHF/MFVF27

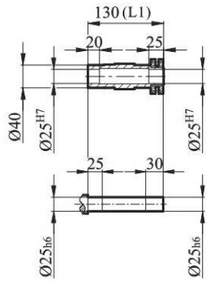




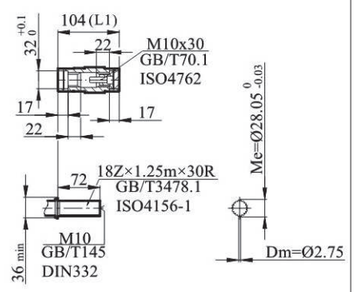
MFA/MFAZ/MFAF27输出轴



MFH/MFHZ/MFHF27输出轴

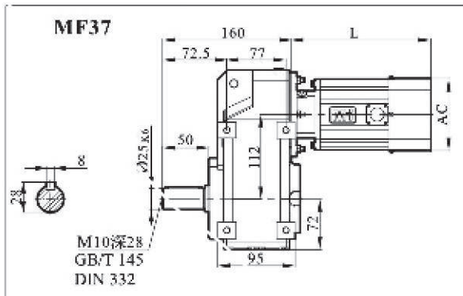


MFV/MFVZ/MFVF27输出轴

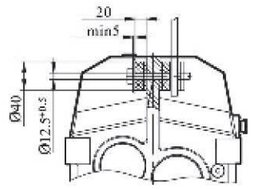


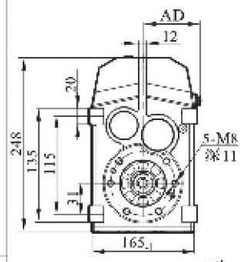
YE2电机机座号 Motor Size	63	71	80	90S	90L
L	225	260	290	300	330
AC	120	145	170	190	190
AD	110	130	135	145	145

MF37

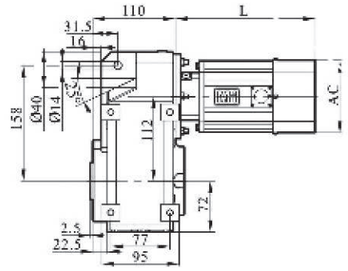


MFA37-T

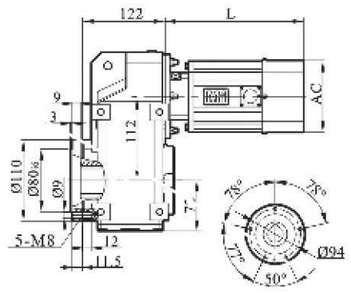


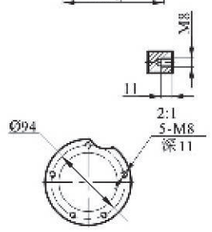


MFA/MFH/MFV37

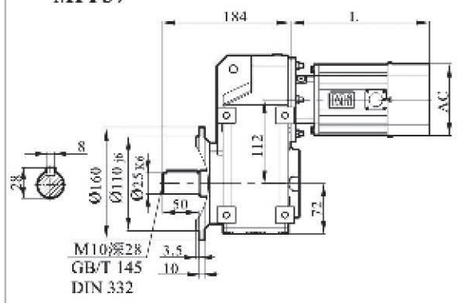


MFAZ/MFHZ/MFVZ37

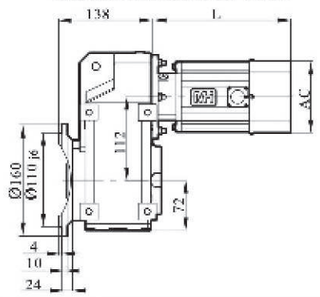


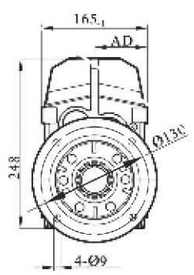


MFF37

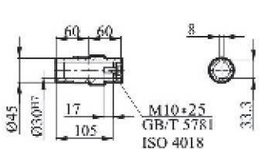


MFAF/MFHF/MFVF37

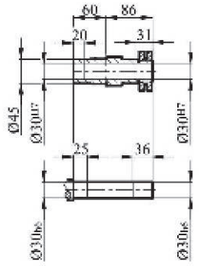




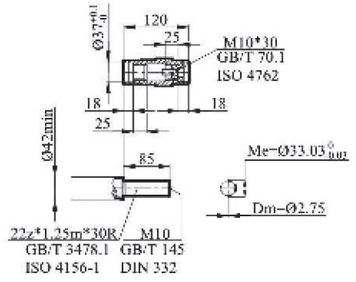
MFA/MFAZ/MFAF37输出轴



MFH/MFHZ/MFHF37输出轴

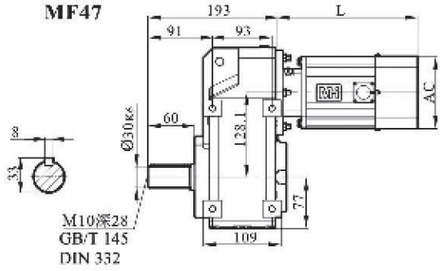


MFV/MFVZ/MFVF37输出轴

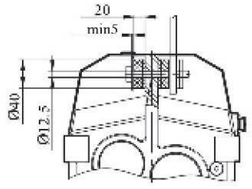


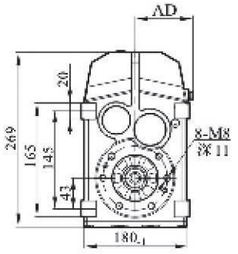
YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	225	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

MF47

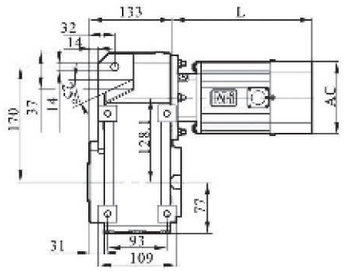


MFA47-T

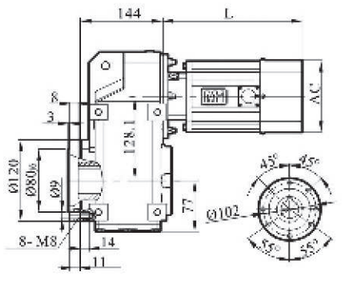


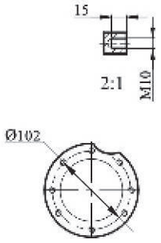


MFA/MFH/MFV47

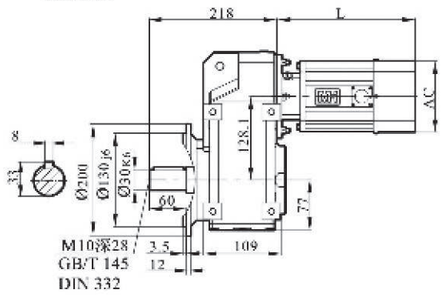


MFAZ/MFHZ/MFVZ47

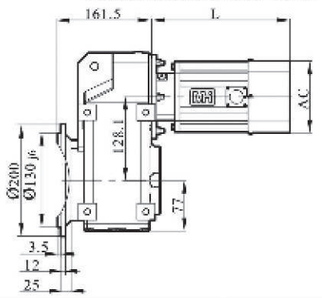


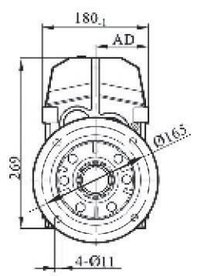


MFF47

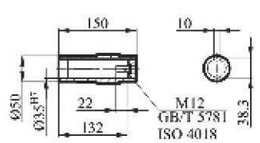


MFAF/MFHF/MFVF47

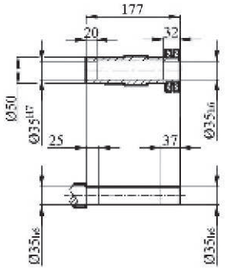




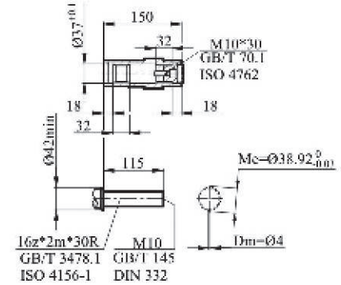
MFA/MFAZ/MFAF47输出轴



MFH/MFHZ/MFHF47输出轴

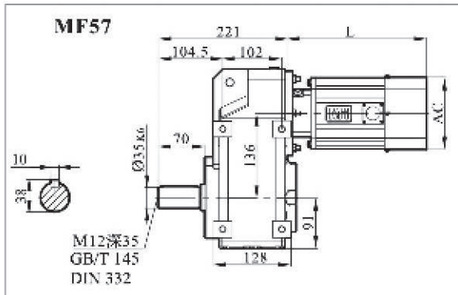


MFV/MFVZ/MFVF47输出轴

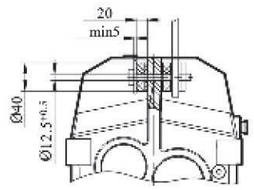


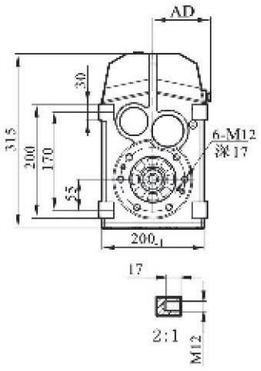
YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	225	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

MF57

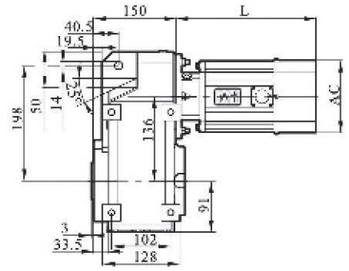


MFA57-T

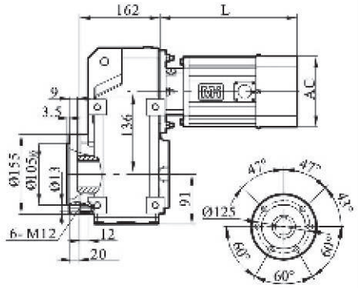




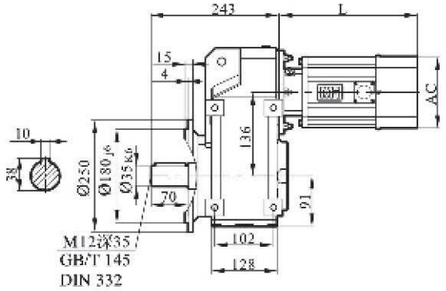
MFA/MFH/MFV57



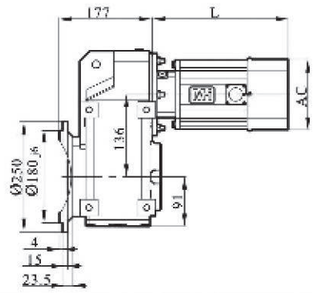
MFAZ/MFHZ/MFVZ57

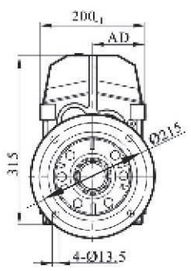


MFF57

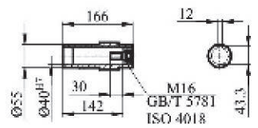


MFAF/MFHF/MFVF57

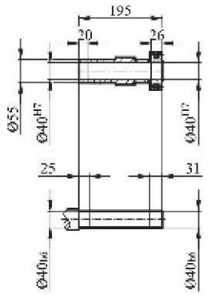




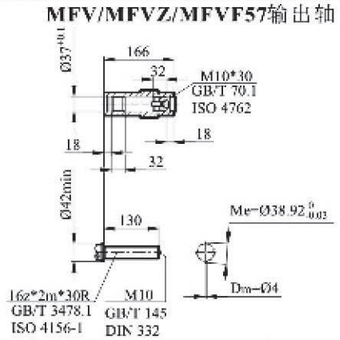
MFA/MFAZ/MFAF57输出轴



MFH/MFHZ/MFHF57输出轴

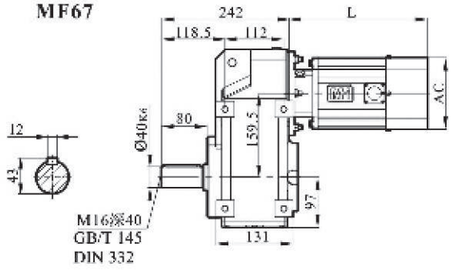


MFV/MFVZ/MFVF57输出轴

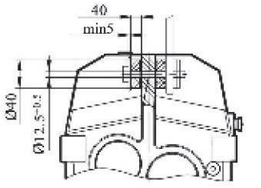


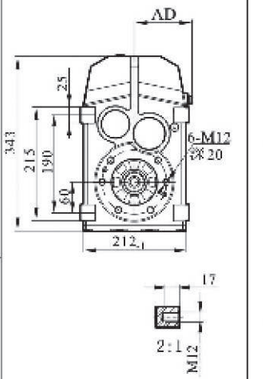
YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	330	340	380	430
AC	120	145	170	190	190	195	230	260
AD	110	130	135	145	145	180	215	210

MF67

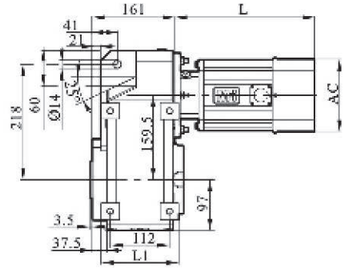


MFA67-T

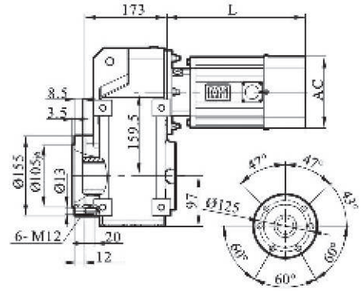




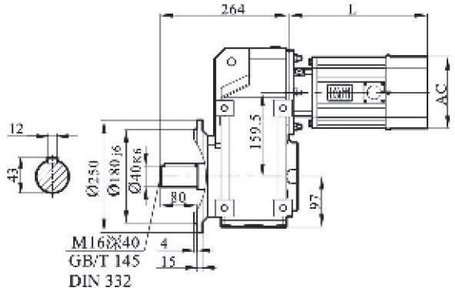
MFA/MFH/MFV67



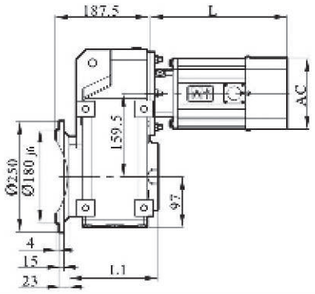
MFAZ/MFHZ/MFVZ67

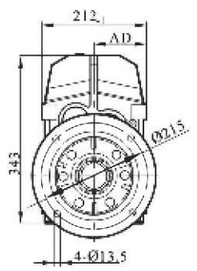


MFF67

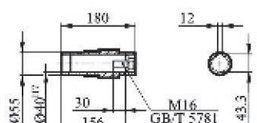


MFAF/MFHF/MFVF67

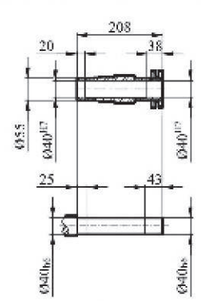




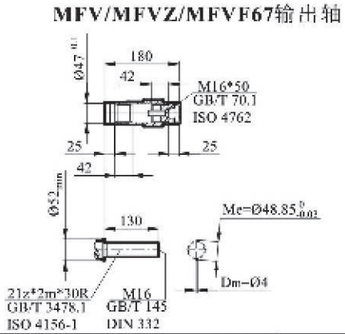
MFA/MFAZ/MFAF67输出轴



MFH/MFHZ/MFHF67输出轴

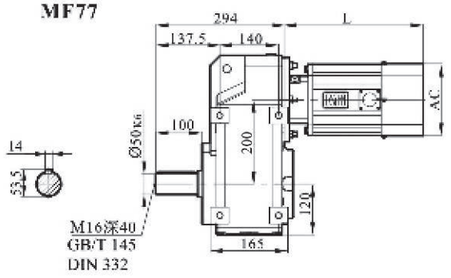


MFV/MFVZ/MFVF67输出轴

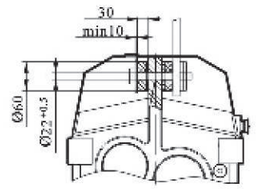


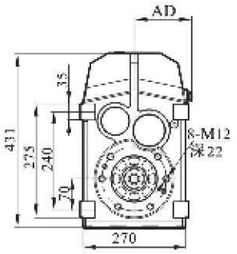
YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	330	330	380	430
AC	120	145	170	190	190	210	230	280
AD	110	130	135	145	145	160	215	215

MF77

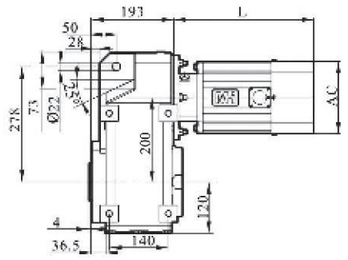


MFA77-T

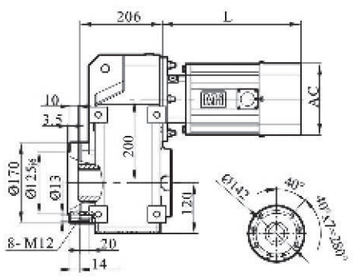


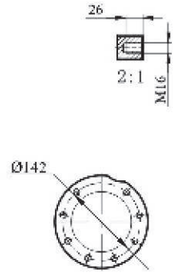


MFA/MFH/MFV77

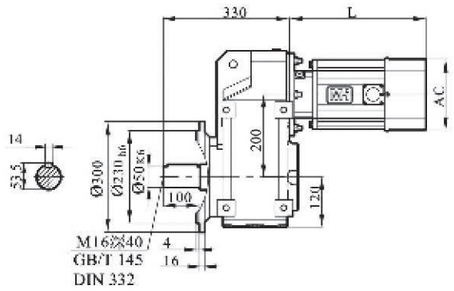


MFAZ/MFHZ/MFVZ77

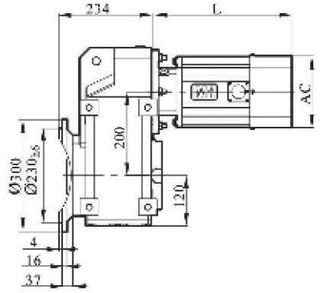


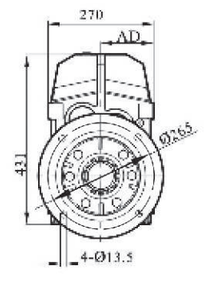


MFF77

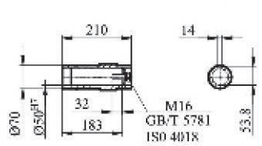


MFAF/MFHF/MFVF77

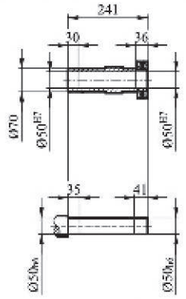




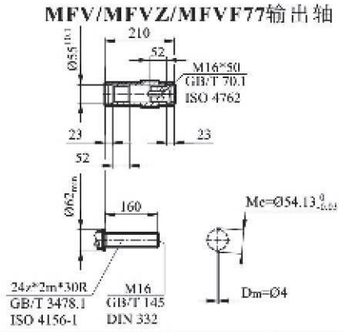
MFA/MFAZ/MFAF77输出轴



MFH/MFHZ/MFHF77输出轴

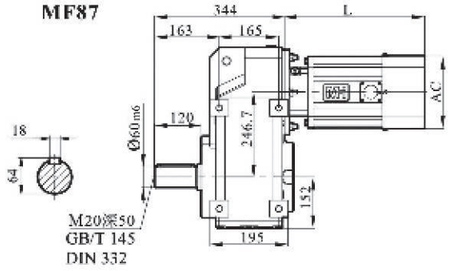


MFV/MFVZ/MFVF77输出轴

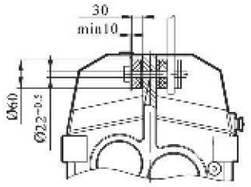


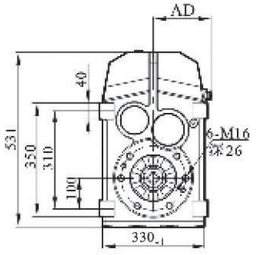
YE2电机机座号 Motor Size	71	80	90S	90L	100	112M	132S	132M	160M
L	254	284	292	322	322	370	418	457	524
AC	145	170	190	190	210	230	280	280	315
AD	130	135	145	145	160	215	215	215	255

MF87

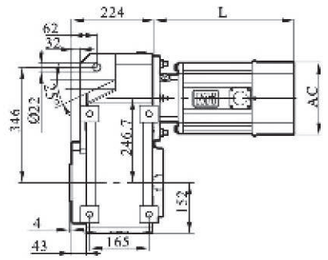


MFA87-T

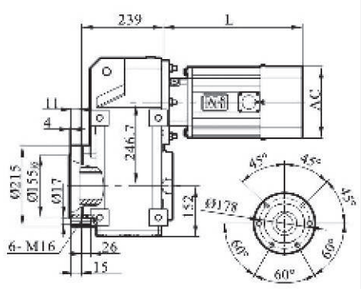


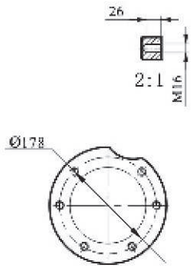


MFA/MFH/MFV87

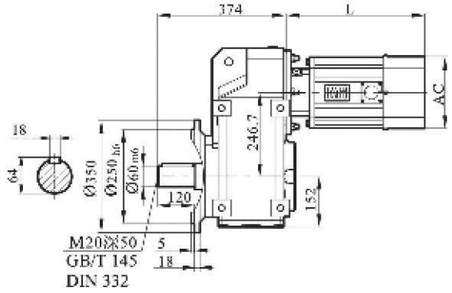


MFAZ/MFHZ/MFVZ87

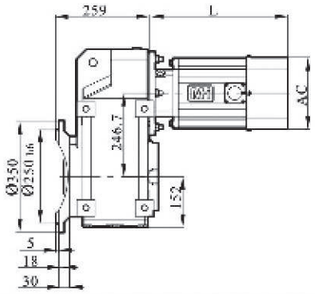


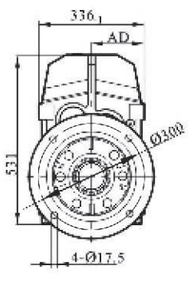


MFF87

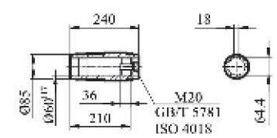


MFAF/MFHF/MFVF87

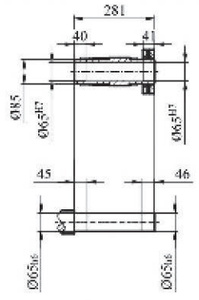




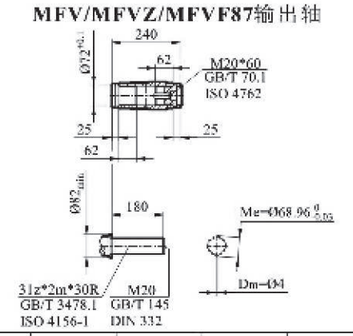
MFA/MFAZ/MFAF87输出轴



MFH/MFHZ/MFHF87输出轴

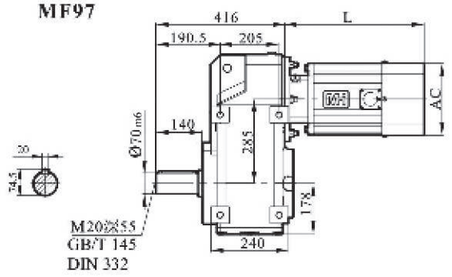


MFV/MFVZ/MFVF87输出轴

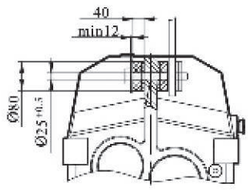


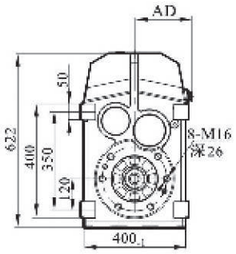
YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M	160L	180M	180L
L	280	288	318	318	365	413	452	524	547	583	616
AC	170	190	190	210	230	280	280	315	315	350	350
AD	135	145	145	160	215	215	215	255	255	280	280

MF97

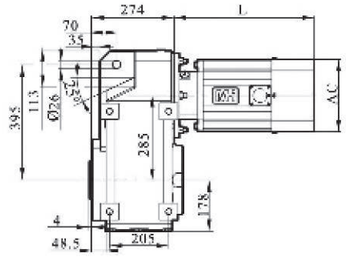


MFA97-T

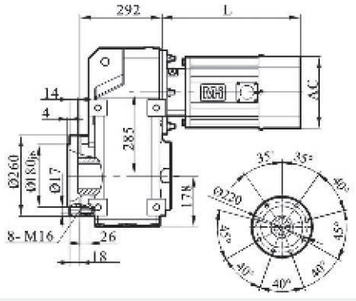


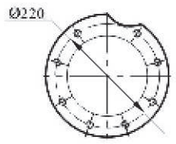


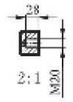
MFA/MFH/MFV97



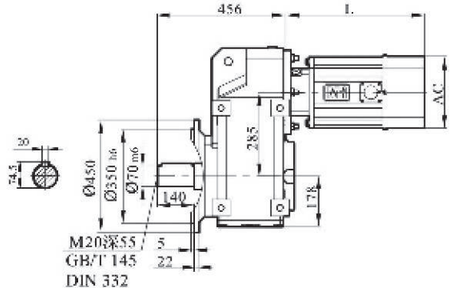
MFAZ/MFHZ/MFVZ97



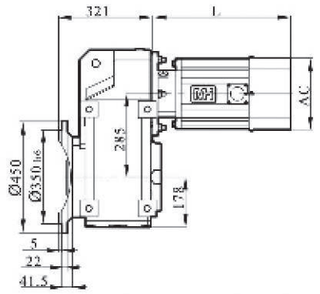


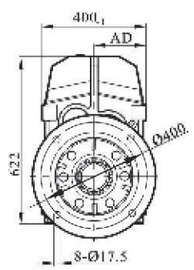


MFF97

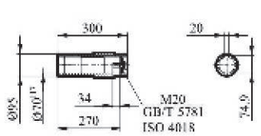


MFAF/MFHF/MFVF97

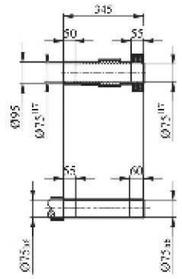




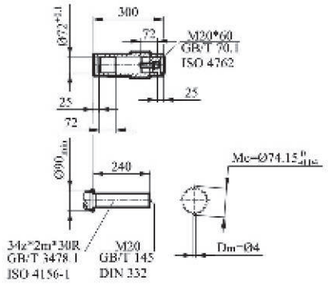
MFA/MFAZ/MFAF97输出轴



MFH/MFHZ/MFHF97输出轴

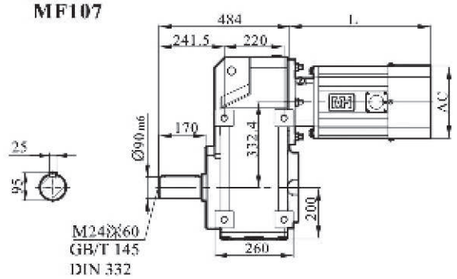


MFV/MFVZ/MFVF97输出轴

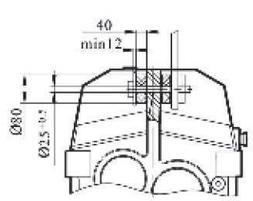


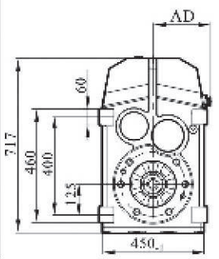
YE2电机机座号 Motor Size	90S	90L	100	112M	132S	132M	160M	160L	180M	180L	200L
L	280	310	312	360	408	487	524	519	555	588	654
AC	190	190	210	230	280	280	315	315	350	350	395
AD	145	145	160	215	215	215	255	255	280	280	305

MF107

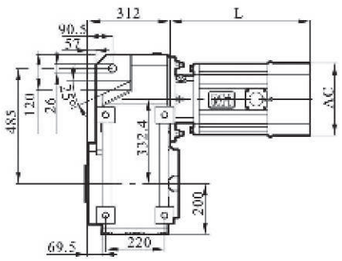


MFA107-T

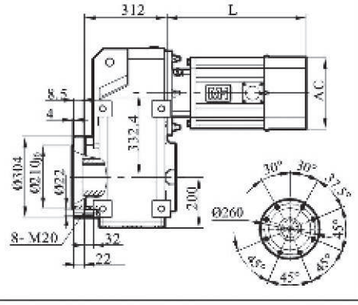


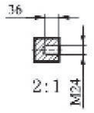


MFA/MFH/MFV107

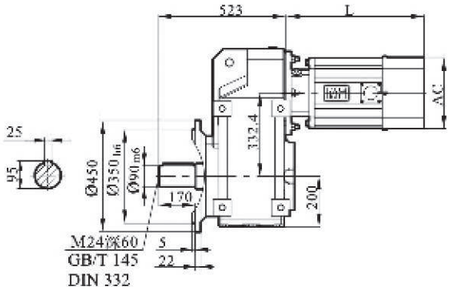


MFAZ/MFHZ/MFVZ107

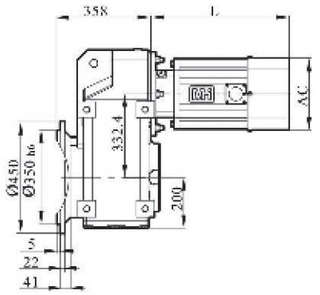


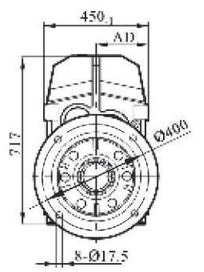


MFF107

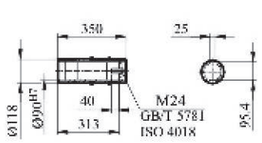


MFAF/MFHF/MFVF107

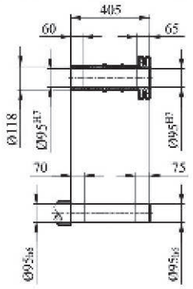




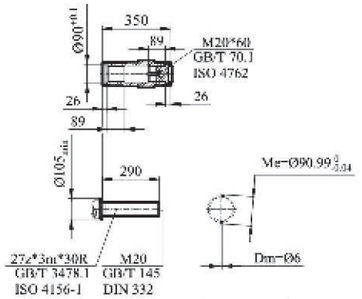
MFA/MFAZ/MFAF107输出轴



MFH/MFHZ/MFHF107输出轴



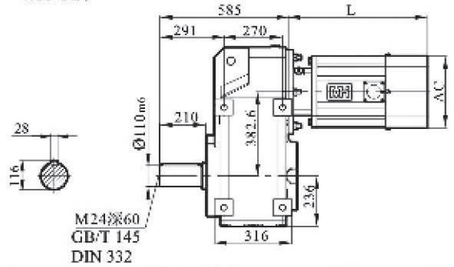
MFV/MFVZ/MFVF107输出轴



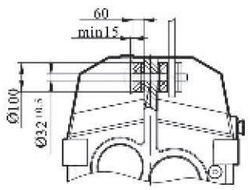
YE2电机机座号 Motor Size	100	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
L	308	354	403	482	524	519	555	588	654	680	702
AC	210	230	280	280	315	315	350	350	395	450	450
AD	160	215	215	215	255	255	280	280	305	335	335

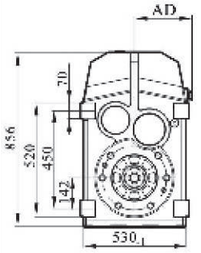
MF

MF127

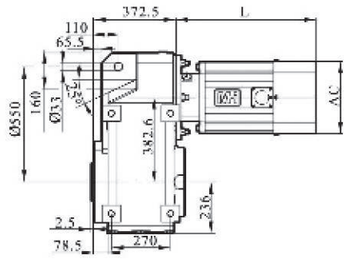


MFA127-T

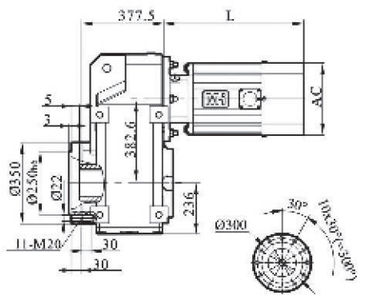


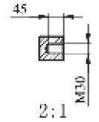


MFA/MFH/MFV127

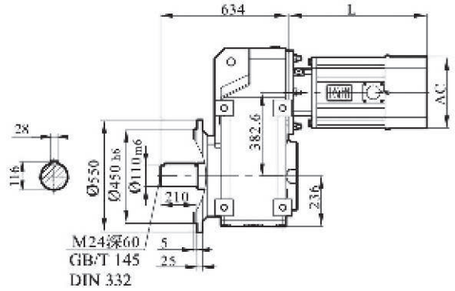


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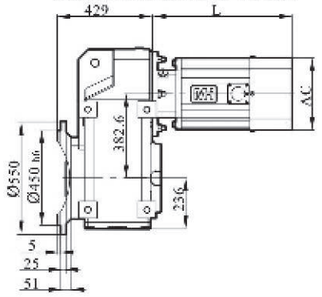


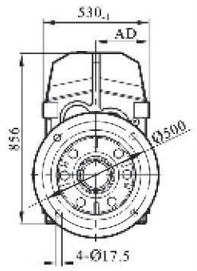


MFF127

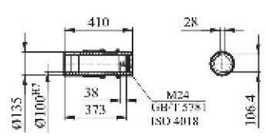


MFAF/MFHF/MFVF127

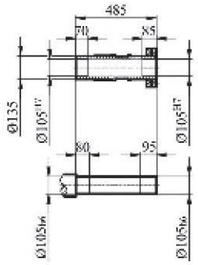




MFA/MFAZ/MFAF127输出轴

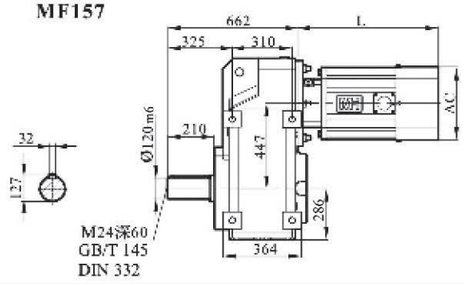


MFH/MFHZ/MFHF127输出轴

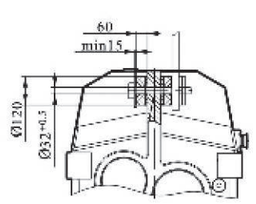


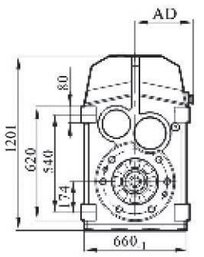
YE2电机机座号 Motor Size	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
L	520	567	602	635	666	642	669	691	770	828	879
AC	260	315	315	350	350	395	450	450	480	530	530
AD	210	255	255	280	280	305	335	335	370	410	410

MF157

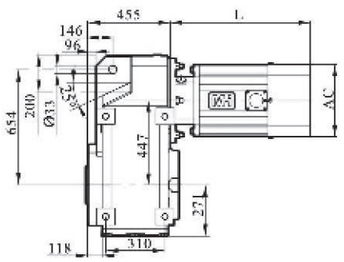


MFA157-T

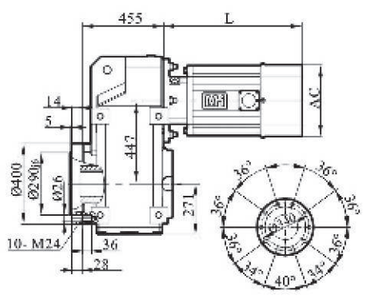


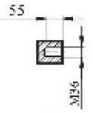


MFA/MFH/MFV157

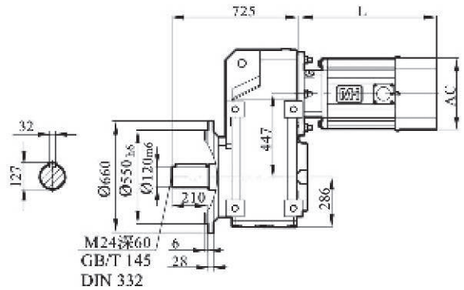


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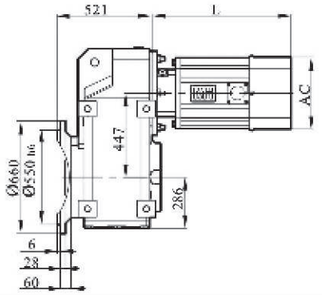


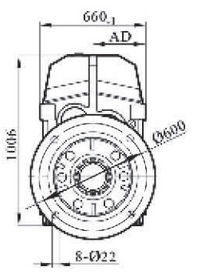


MFF157

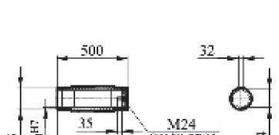


MFAF/MFHF/MFVF157

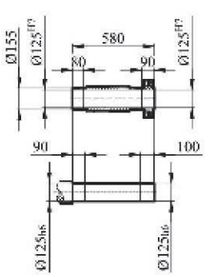




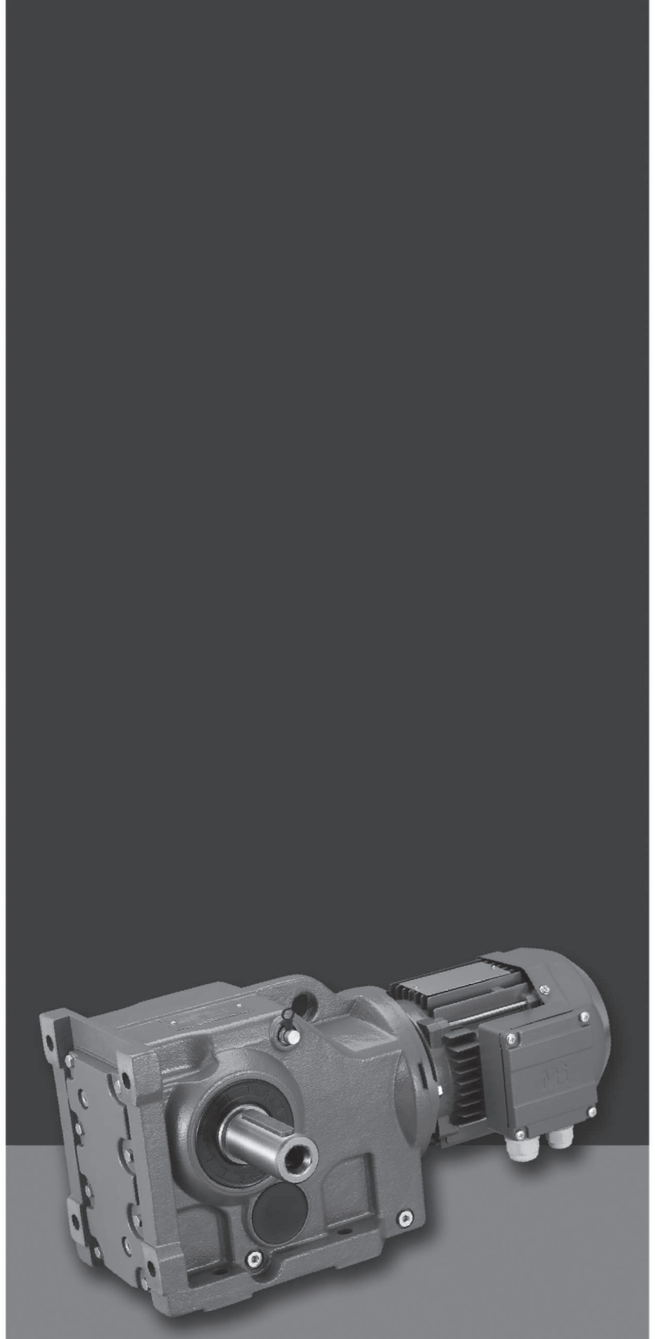
MFA/MFAZ/MFAF157输出轴



MFH/MFHZ/MFHF157输出轴



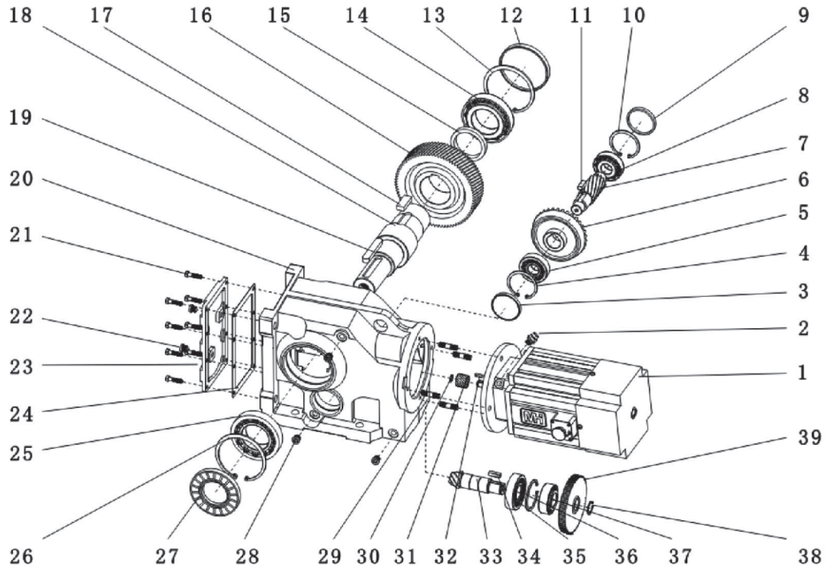
YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
L	567	602	635	666	642	669	691	770	828	879	1100	1210	1210
AC	315	315	350	350	395	450	450	480	530	530	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	530



MK

MK系列斜齿轮-伞齿轮减速电机
MK SERIES HELICAL-
BEVEL GEARED MOTORS

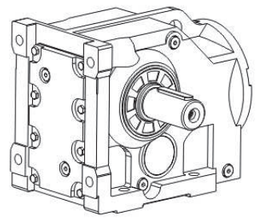
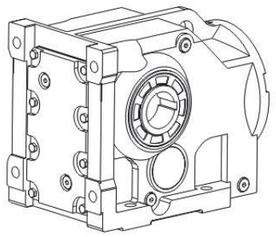
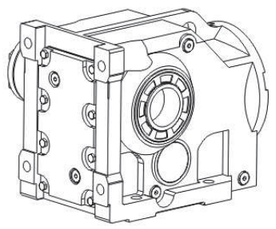
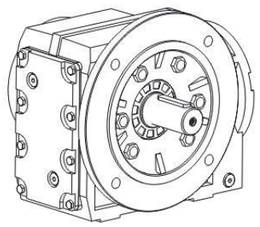
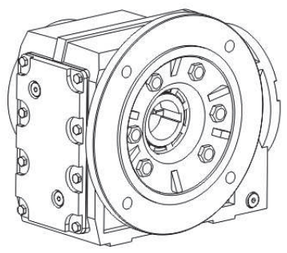
4.1 部件分解图 / Spare Parts List

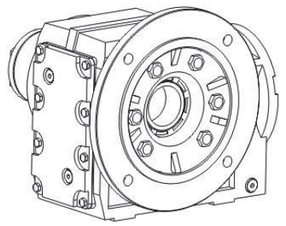
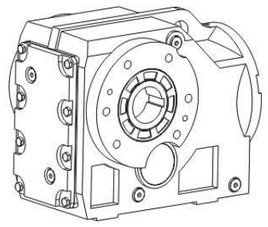
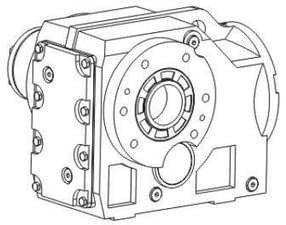
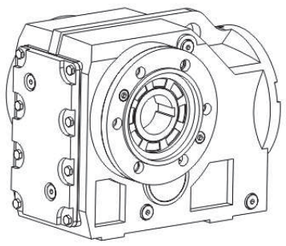
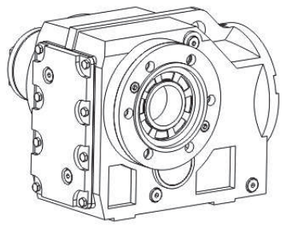


1 电机/motor
2 透气阀/breather valve
3 平面油封/plane seal
4 孔用挡圈/retaining rings for bores
5 轴承/bearing
6 伞齿轮/bevel gear
7 齿轮轴/gear shaft
8 轴承/bearing
9 平面油封/plane seal
10 孔用挡圈/retaining rings for bores
11 平键/flat key
12 平面油封/plane seal
13 孔用挡圈/retaining rings for bores
14 轴承/bearing
15 垫片/spacer tube
16 齿轮/gear
17 平键/flat key
18 输出轴/output shaft
19 平键/flat key
20 箱体/housing
21 外六角螺钉/six angle screw
22 油塞/oil level plug
23 盖板/cover plate
24 纸垫/gasket
25 轴承/bearing
26 孔用挡圈/retaining rings for bores
27 骨架油封/skeleton oil seal
28 油塞/oil level plug
29 双头螺栓/stud
30 轴用挡圈/retaining rings for shafts
31 齿轮/gear
32 平键/flat key
33 伞齿轴/bevel gear shaft
34 平键/flat key
35 轴承/bearing
36 孔用挡圈/retaining rings for bores
37 轴承/bearing
38 轴用挡圈/retaining rings for shafts
39 齿轮/gear

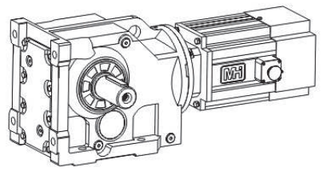
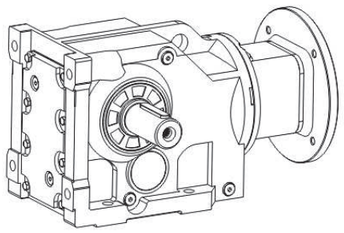
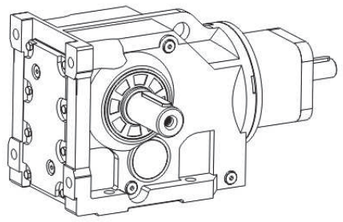
4.2 机型版本 /Versions

4.2.1 基本型式 /Basic Versions

	**MK..** 底脚安装斜齿-伞齿减速机 Foot-mounted helical-bevel gear unit.
	**MKA..B** 底脚空心轴安装斜齿-伞齿减速机 Foot-mounted helical-bevel gear unit with hollow shaft. **MKV..B** 底脚花键空心轴（DIN 5480）安装斜齿-伞齿减速机 Foot-mounted helical-bevel gear unit with hollow shaft and splined hollow shaft to DIN 5480.
	**MKH..B** 底脚空心轴锁紧盘安装斜齿-伞齿减速机 Foot-mounted helical-bevel gear unit with hollow shaft and shrink disc.
	**MKFF..** B5 法兰安装斜齿-伞齿减速机 Helical-bevel gear unit in B5 flange-mounted version.
	**MKFAF..** B5 法兰空心轴安装斜齿-伞齿减速机 Helical-bevel gear unit in B5 flange-mounted version with hollow shaft. **MKFVF..** B5 法兰花键空心轴（DIN 5480）安装斜齿-伞齿减速机 Helical-bevel gear unit in B5 flange-mounted version with hollow shaft and splined hollow shaft to DIN 5480.

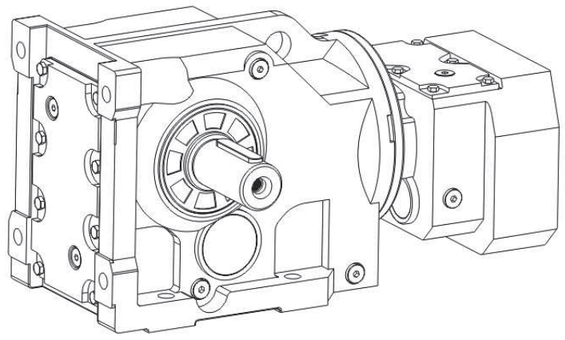
	**MKFHF..** B5 法兰空心轴锁紧盘安装斜齿-伞齿减速机 Helical-bevel gear unit in B5 flange-mounted version with hollow shaft and shrink disc.
	**MKFA..** 空心轴安装斜齿-伞齿减速机 Helical-bevel gear unit with hollow shaft. **MKFA..** 花键空心轴（DIN 5480）安装斜齿-伞齿减速机 Helical-bevel gear unit with hollow shaft and splined hollow shaft to DIN 5480.
	**MKFH..** 空心轴锁紧盘安装斜齿-伞齿减速机 Helical-bevel gear unit with hollow shaft and shrink disc. **MKFT..** 空心轴扭力臂安装斜齿-伞齿减速机 Helical-bevel gear unit with hollow shaft and torque arm.
	**MKFAZ..** B14 法兰空心轴安装斜齿-伞齿减速机 Helical-bevel gear unit in B14 flange-mounted version with hollow shaft. **MKFVZ..** B14 法兰花键空心轴(DIN 5480)安装斜齿-伞齿减速机 Helical-bevel gear unit in B14 flange-mounted version with hollow shaft and splined hollow shaft to DIN 5480.
	**MKFHZ..** B14 法兰空心轴锁紧盘安装斜齿-伞齿减速机 Helical-bevel gear unit in B14 flange-mounted version with hollow shaft and shrink disc.

4.2.2 输入型式 / Input Versions

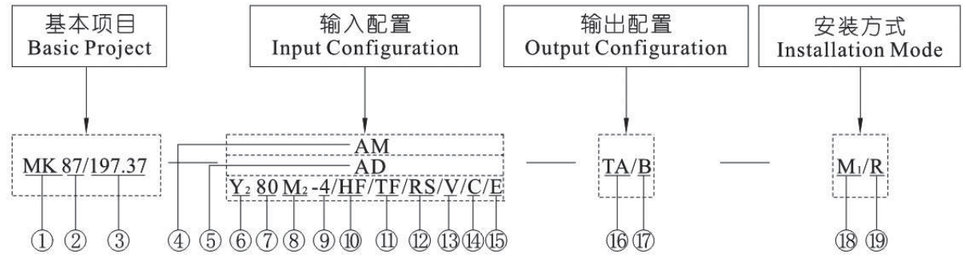
	**MK.. Y..** 直联电机输入 Input with geared motors.
	**MK.. AM..** AM（IEC）法兰输入 Input with AM adapters for mounting IEC motors.
	**MK.. AD..** AD 轴输入 Input with AD shaft assembly.

4.2.3 MK..与 MRF..组合 / MK.. and MRF.. Combination

当需要特别低速输出时，可选择 MRF 齿轮箱作为 MK 齿轮箱的输入。
If special low speed is needed, MRF.. gearbox can be the input of MK.. Mearbox.



4.3 产品标注 / Product Code



	标号 NO.	含义 Meaning	说明 Explanation
基本项目 Basic Project	①	系列代号 Series Code	MK、MKF、MKA...(详见4.2.1) MK,MKF,MKA...(see 4.2.1).
	②	机座号 Frame Size	机座号: 37、47、57... Frame Size: 37, 47, 57...
	③	传动比 Transmission Ratio	传动比 i Transmission Ratio I.
输入配置 Input Configuration	④	法兰输入代号 Flange Input Code	AM(IEC): 63、71、80...
	⑤	轴输入代号 Shaft Input Code	AD:1、2、3...
	⑥	电机代号 Motor Code	Y_2: 三相异步电动机 Y_2: Three Phase Asynchronous Motor. YD: 变极多速三相异步电动机 YD: Variable-pole Multi-speed Three Phase Asynchronous Motor. YS: 小功率三相异步电动机 YS: Small Power Three Phase Asynchronous Motor. YVF_2: 变频调速三相异步电动机 YVF_2: Variable Frequency Speed Control Three Phase Asynchronous Motor. Y_2EJ: 电磁制动三相异步电动机 Y_2EJ: Electromagnetic Brake Three Phase Asynchronous Motor. YB2: 隔爆三相异步电动机 YB2: Flame Proof Three Phase Asynchronous Motor.
	⑦	电机机座号 Motor Frame Size.	63、71、80...
	⑧	电机定子铁芯长度代号 Length Code of Stator Core.	M、M_1、M_2、S、S_1、S_2、L、L_1、L_2
	⑨	电机极数 Pole Number of Motor.	2、4、6、8

	标号 NO.	含义 Meaning	说明 Explanation
输入配置 Input Configuration	⑩	手动释放装置 Manual Release Device	无 代 码: 无手动释放装置 No Code: No manual release device. H F: 手动释放装置带自锁功能 H F: Manual release device with self-locking Fun-Ction. H R: 手动释放装置不带自锁功能 H R: Manual release device without self-Locking function.
	⑪	电机热保护装置 Motor Heat-protection Device.	无 代 码: 无电机热保护装置 No Code: No motor heat-protection device. T F: 电机热保护装置 T F: Motor heat-protection device.
	⑫	逆止器 Backstop	无 代 码: 无逆止器 No Code: No backstop. R S: 逆止器 R S: Backstop.
	⑬	强制冷却风扇 Forced Cooling Fan	无 代 码: 无强制冷却风扇 No Code: no forced cooling fan. V: 强制冷却风扇 V: Forced cooling fan.
	⑭	防雨罩 Cover	无 代 码: 无风扇防护罩 No Code: No fan cover. C: 防雨罩 C: cover.
	⑮	编码器 Encoder	无 代 码: 无编码器 No Code: No encoder. E: 编码器 E: Encoder
输出配置 Output Configuration	⑯	扭力臂 Torque Arm	无 代 码: 无扭力臂 No Code: No torque arm. T A: 扭力臂指向 A T A: Torque arm pointing to A. T B: 扭力臂指向B T B: Torque arm pointing to B.
	⑰	法兰或轴指向 Flange or Shaft Pointing direction.	A: 法兰或轴指向A A: Flange or shaft pointing to A. B: 法兰或轴指向B B: Flange or shaft pointing to B. A+B: 双出轴或双法兰 A+B: Double flange or shaft.
安装方式 Mounting Positions	⑱	安装方位 Mounting Position	M1、M2、M3、M4、M5、M6
	⑲	电机接线盒方位 Position for motor ter-minal box.	R、B、L、T

说明:

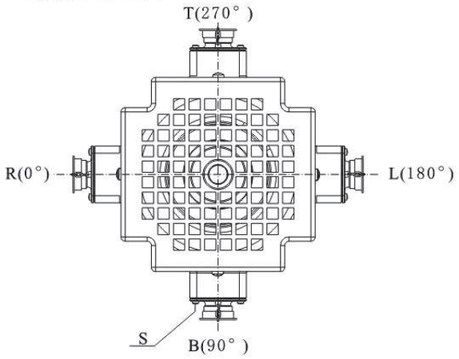
1. 基本项目不可省略;
2. 输入配置中，只能在 AM、AD 和电机之间选择一种;
3. 输出配置参数若省略，默认按A方向提供;
4. 安装方式参数若省略，默认按 M1 安装方位，R 接线盒方位提供。

Notes:

1. Basic project can not be omitted.
2. Input configuration can only be one of AM, AD and motor.
3. If no output configuration, default pointing direction will be B.
4. If not mounting position, default mounting position will be M1, default position for motor terminal will be R.

4.4 安装方位 / Mounting Positions

4.4.1 电机接线盒方位 / Position of Motor Terminal Box



R(0°): 默认接线盒方位
R(0°): Default Position for Motor Terminal Box

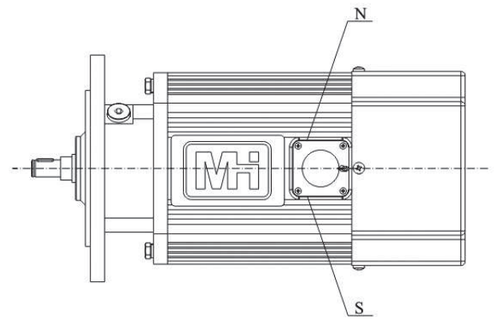
注: 图为M1安装方位。
Mark: This picture is the installation position of M1

说明:

上图的视图方向为: 从电机尾部的风罩向前看。

可提供R (0°)、B (90°)、L (180°)、T (270°) 四种电机接线盒方位。其中 R (0°) 位置是默认方位。如无特别说明，将按默认方位提供。

可提供 S 和 N 两种进线方位，其中 S 位置是默认方位。如无特别说明，将按默认方位提供。



S: 默认进线方位
S: Default Line Position

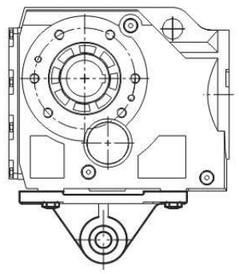
Notes:

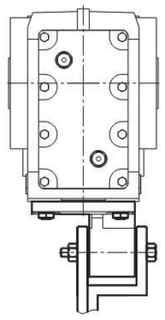
The view direction of above figure: from the fan cover in the end of the motor to look forward.

There will be four position for motor terminal box: R(0°)、B(90°)、L(180°)、T(270°). And default position is R(0°).If no special explaination, it will be provided in default position.If no special explaination, it will be provided in default position.

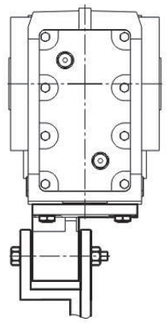
There will be two line position: S and N. Default position is S.If no special explaination, it will be provided in default position.If no special explaination, it will be provided in default position.

4.4.2 扭力臂方位 / Position of Torque Arm





TA



TB

说明:

扭力臂方位 TA 与 TB 是对称的。

Notes:

TA and TB are symmetrical.

4.4.3 法兰或轴指向 / Position of The Output Shaft and Flange

说明:

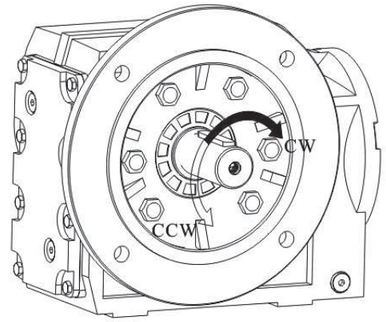
上图的视图方向为：从电机尾部的风罩向前看。

可提供 A、B 或 A+B 三种输出法兰或输出轴的方位。

Notes:

The view direction of above figure is from the fan cover in the end of the motor to look forward. There are three positions: A or B or A+B.

4.4.4 输出轴旋转方向 / Direction of Rotation of Output Shaft



说明:

当减速电机带逆止器时，需规定输出轴的旋转方向。

上图中，从输出轴观看，顺时针旋转规定为 CW；逆时针旋转规定为 CCW。

当减速电机采用 A+B 方式输出时（见4.3），需指出给定的旋转方向是从 A 端观看还是从 B 端观看。

Notes:

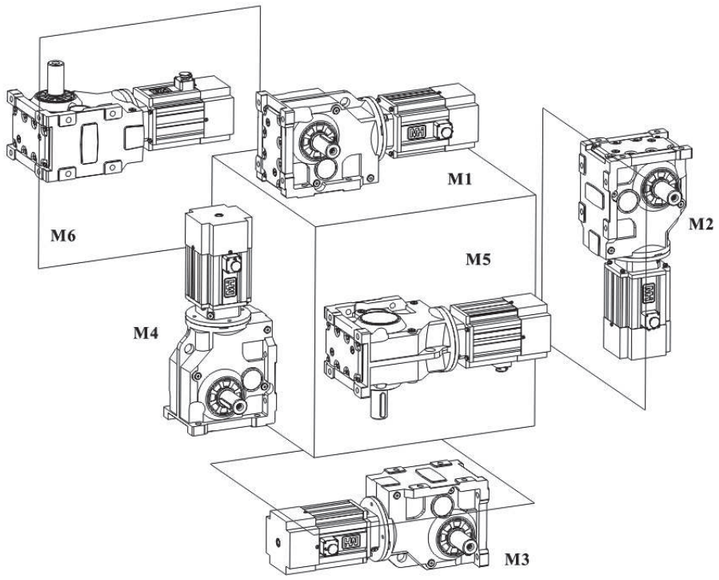
It is necessary to stipulate the direction of ratation of the output shaft if the drive has a back stop.
For above figure, the following definition applies:
Looking onto the output shaft.
CW = Rotating Clockwise
CCW = Rotation Counter-clockwise
If the position of the output shaft or flange is A+B, it is necessary to stipulate for certain direction of rotation, it was looked on the A or B.

4.4.5 油位符号说明 / Oil Level Symbol Explanation

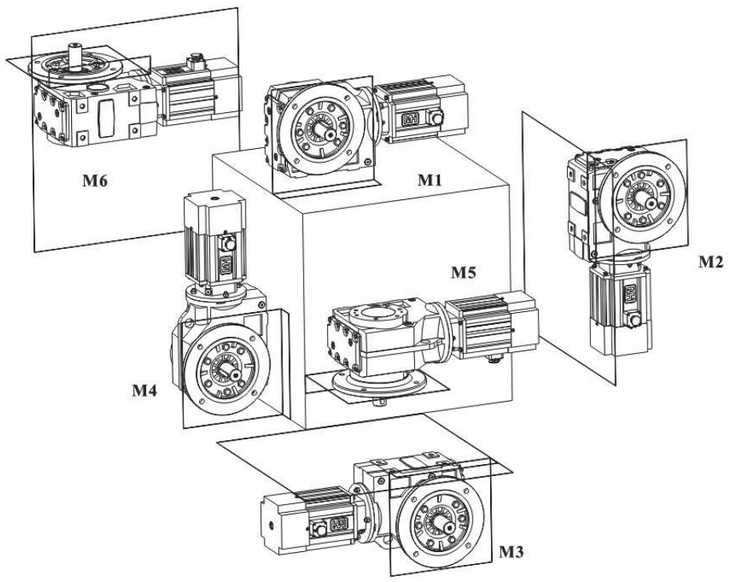
符号 Symbol	含义	Meaning
	通气帽	BREATHER VALVE
	油标	OIL LEVEL PLUG
	排油塞	OIL DRAIN PLUG

4.4.6 安装位置示意 / Mounting Position Designation

MK..安装位置示意图 / MK.. Mounting Position Designation



MKFF..安装位置示意图 / MKFF.. Mounting Position Designation



4.4.7 安装方位 / Mounting Positions

*→提示:

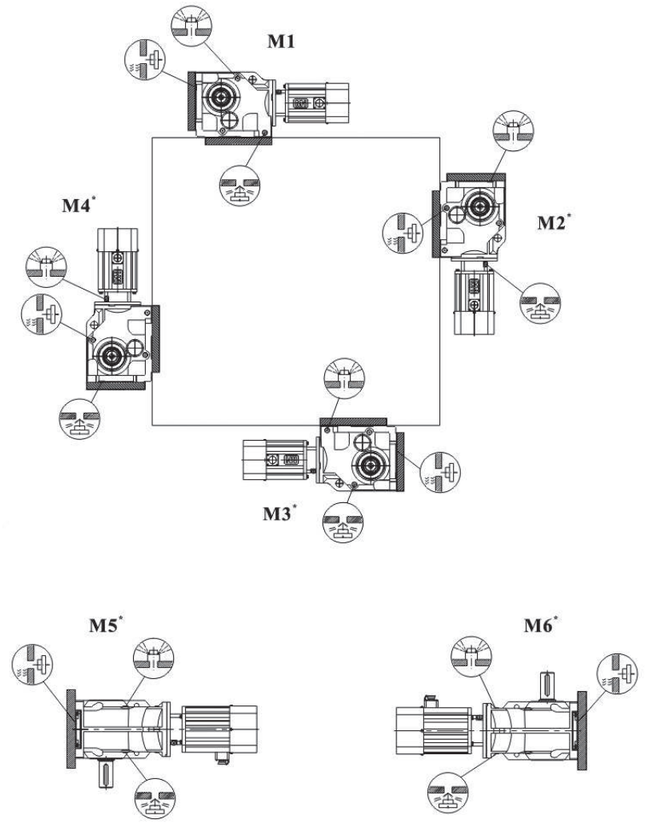
当采用下表列出的安装方式及输入转速时，齿轮箱会产生不可忽视的搅油损失。请联系本公司。

*→**Reminder:**

Increased churning losses may arise in the following mounting positions. Contact Greatwall Machinery.

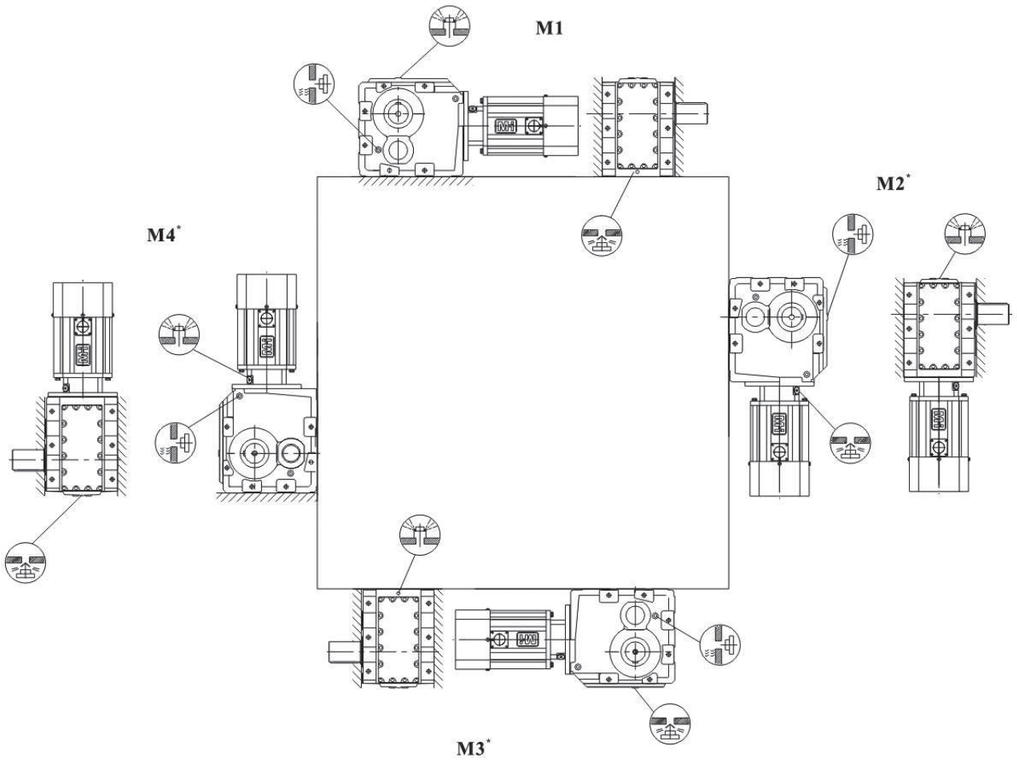
安装方式 Mounting Position	齿轮箱规格 Gear Unit Size	输入转速 Input Speed (r/min)
M2，M3，M4，M5，M6	77,87,97,107	>2500
	>107	>1500

MK/MKA..B / MKH47B~157B，MKV37B~107B

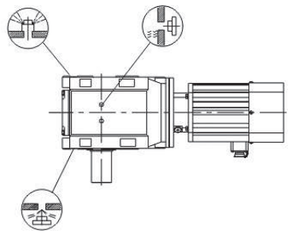


*→page 155

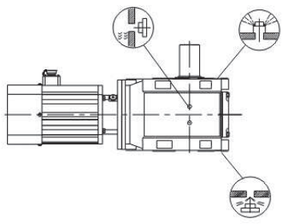
MK167~187,MKH167B~187B



M5*

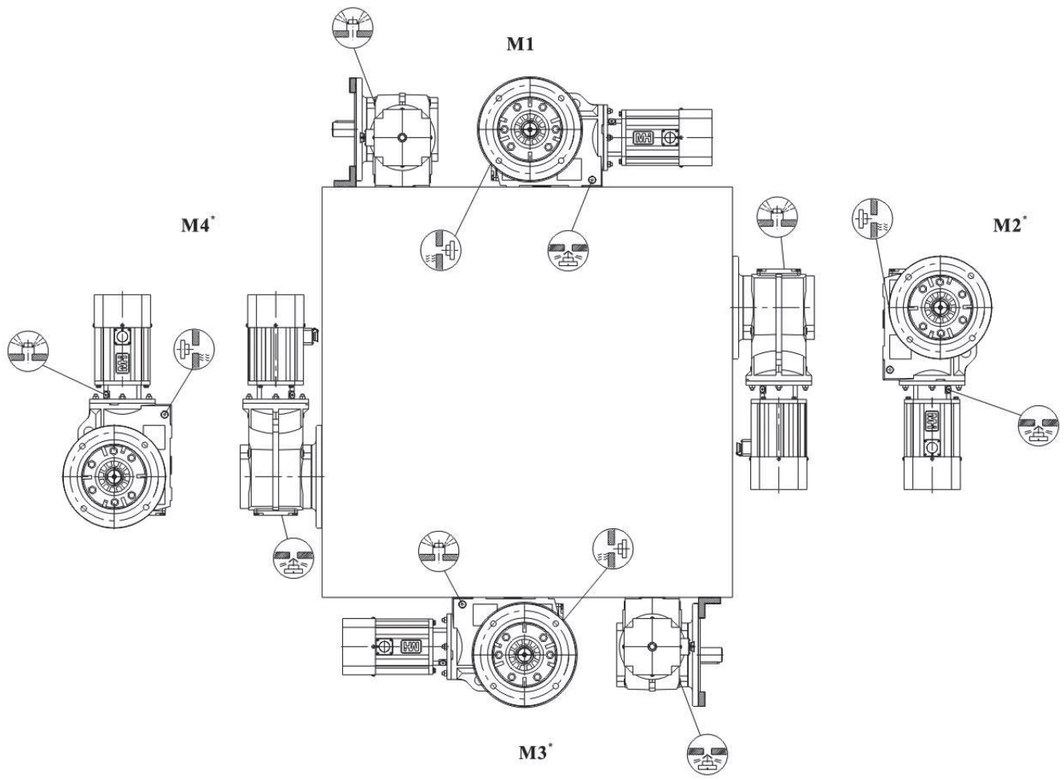


M6*

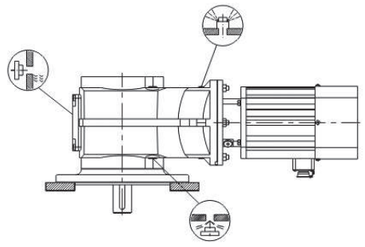


*→page 155

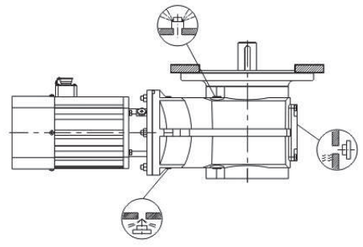
MKFF/MKFAF/MKFHF/MKFAZ/MKFHZ37~157,MKFVF/MKFVZ37~107



M5*

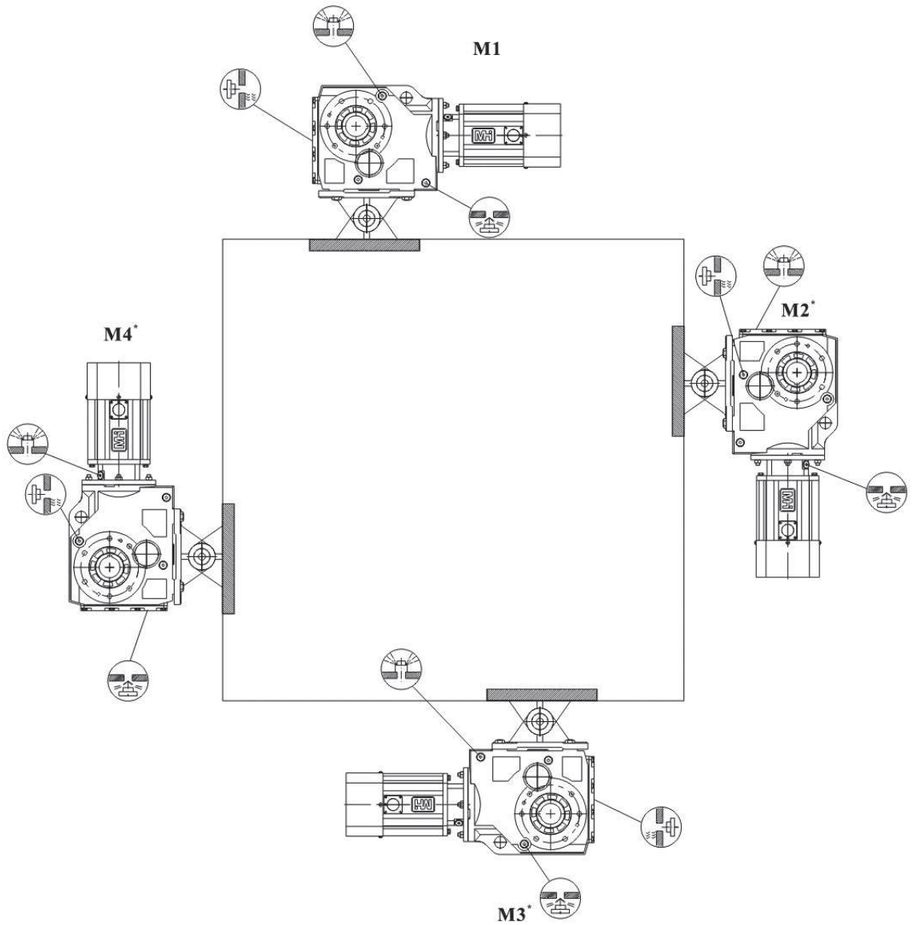


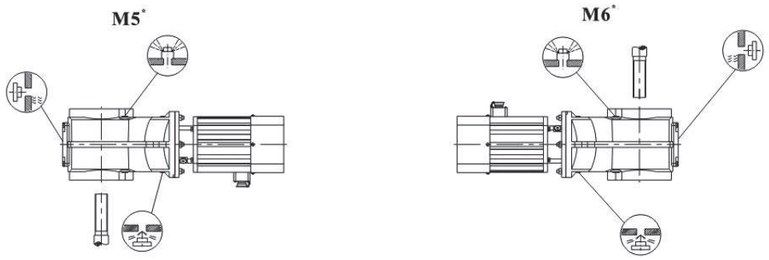
M6*



*→page 155

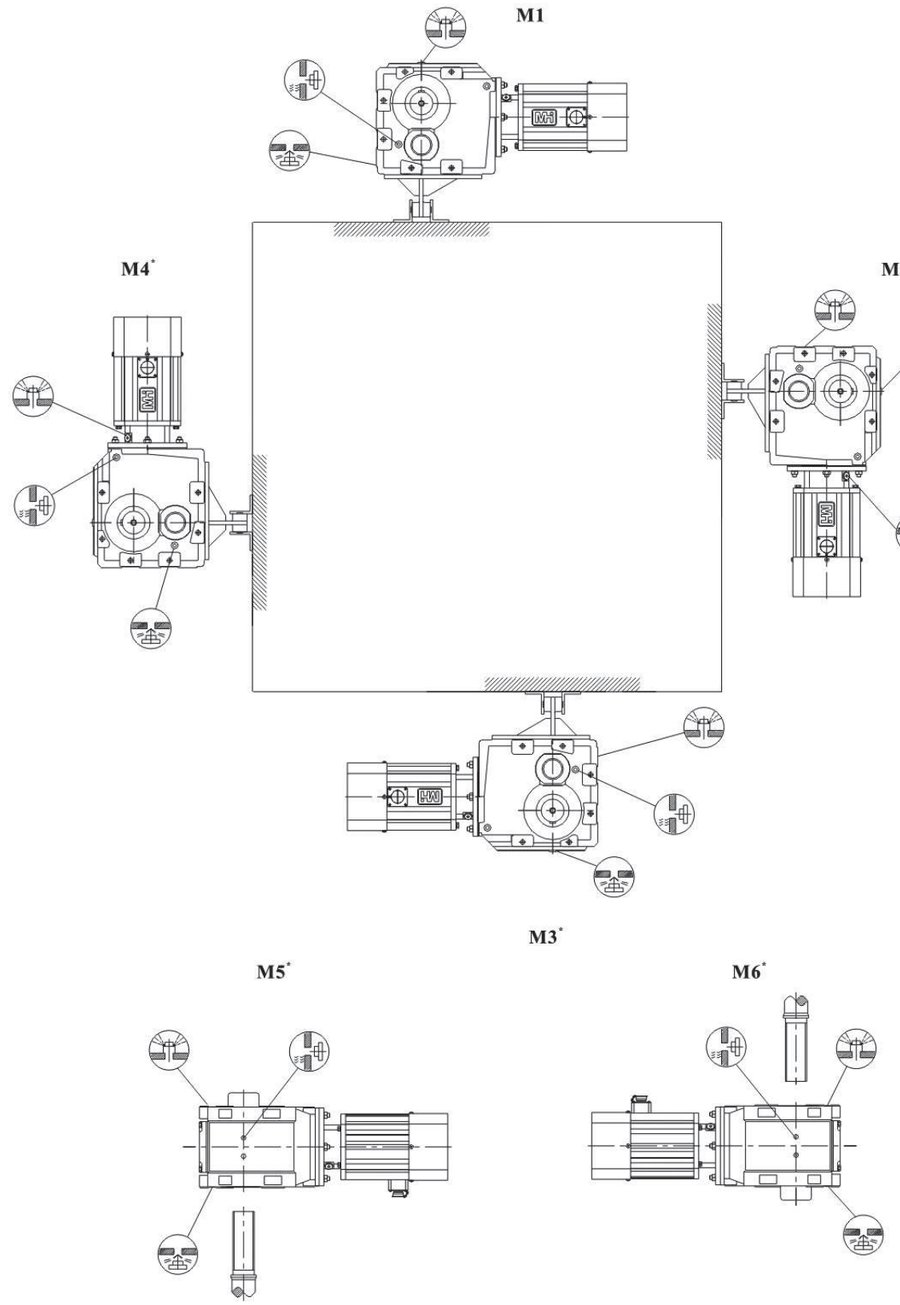
MKFA/MKFH37~157,MKFV37~107,MKFT37~97





*→page 155

MKH167~187



*→page 155

4.5 减速器组合表 / Gear Unit Combination Table

为得到特别低的输出转速，可以通过MRF齿轮箱与 MK 齿轮箱相连的方式实现。

当采用这种传动方案时，可配置电动机的功率依赖于减速机的极限输出扭矩，而不能通过电动机的额定功率和减速机的总传动比计算得出减速机的输出扭矩。

MRF series of gear units and MK series of gear units can be connected together to get special output speed.

For this transmission scheme, the power of the motor depends on the limit output torque of the gear-box, instead of the output torque calculated based on rated power of the motor and the transmission ratio of the gear unit.

MK..与MRF..齿轮箱可能的组合 / Possible Combination of MK.. and MRF..

	MRF17	MRF27	MRF37	MRF47	MRF57	MRF67	MRF77	MRF87	MRF97	MRF107
MK..37	■									
MK..47			■							
MK..57			■							
MK..67			■							
MK..77			■							
MK..87					■					
MK..97					■					
MK..107							■			
MK..127							■	■		
MK..157									■	■
MK..167									■	■
MK..187									■	■

说明:

■ : 表示可能的组合。

□ : 表示不允许的组合。

Notes:

■ : Possible Combination.

□ : Impossible Combination.

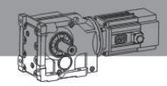
4.6 MK..功率配置 / MK..Power Configuration

MK37 n_1=1400 1/min									200Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20		
13.0	200	5640	106.38	■					
14.0	200	5640	97.81	■					
17.0	200	5640	83.69	■	■				
19.0	200	5520	72.54	■	■	■			
21.0	200	5360	67.80	■	■	■			
24.0	200	5020	58.60	■	■	■	■		
28.0	200	4660	49.79	■	■	■	■		
31.0	200	4420	44.46	■	■	■	■		
37.0	200	4100	37.97	■	■	■	■		
39.0	200	3970	35.57	■	■	■	■		
47.0	200	3650	29.96	■	■	■	■		
49.0	200	3580	28.83	■	■				
56.0	200	3330	24.99	■	■	■			
60.0	195	3260	23.36	■	■	■			
69.0	185	3110	20.19	■	■	■	■		
82.0	180	2900	17.15	■	■	■	■		
91.0	175	2780	15.31	■	■	■	■		
107	165	2650	13.08	■	■	■	■		
115	160	2600	12.14	■	■	■			
133	160	2410	10.49	■	■	■	■		
157	160	2200	8.91	■	■	■	■		
176	155	2110	7.96	■	■	■	■		
206	150	1980	6.80	■	■	■	■		
220	145	1950	6.37	■	■	■	■		
261	140	1810	5.36	■	■	■	■		
352	125	1660	3.98	■	■	■	■		

MK47 n_1=1400 1/min									400Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
11.0	400	5920	131.87	■					
12.0	400	5920	121.48	■					
13.0	400	5920	104.37	■	■				
15.0	400	5920	90.86	■	■	■			
16.0	400	5920	85.12	■	■	■			
19.0	400	5920	75.20	■	■	■	■		
20.0	400	5920	69.84	■	■	■			
22.0	400	5920	63.30	■	■	■	■		
25.0	400	5920	56.83	■	■	■	■		
29.0	400	5920	48.95	■	■	■	■		
30.0	400	5920	46.03	■	■	■	■		
35.0	400	5920	39.61	■	■	■	■		
40.0	400	5920	35.39	■	■	■	■		

MK47 n_1=1400 1/min									400Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.30		
45.0	400	5700	31.30	■	■	■			
48.0	400	5520	29.32	■	■	■			
54.0	400	5170	25.91	■	■	■	■		
58.0	400	4970	24.06	■	■	■			
64.0	400	4710	21.81	■	■	■	■		
72.0	400	4440	19.58	■	■	■	■		
83.0	380	4220	16.86	■	■	■	■		
88.0	380	4080	15.86	■	■	■	■		
103	360	3890	13.65	■	■	■	■		
115	350	3720	12.19	■	■	■	■		
119	280	4060	11.77	■	■	■	■		
133	280	3830	10.56	■	■	■	■		
154	280	3540	9.10	■	■	■	■		
164	270	3500	8.56	■	■	■	■		
190	250	3380	7.36	■	■	■	■		
213	240	3270	6.58	■	■	■	■		
241	230	3140	5.81	■	■	■	■		
302	205	2980	4.64	□	■	■	■		

MK57 n_1=1400 1/min									600Nm
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.30	4.00	
9.60	600	7630	145.14	■	■	■	■	■	
11.0	600	7630	123.85	■	■	■	■	■	
13.0	600	7630	108.29	■	■	■	■		
14.0	600	7630	102.88	■	■	■	■	■	
16.0	600	7630	90.26	■	■	■	■	■	
18.0	600	7630	76.56	■	■	■	■	■	
20.0	600	7630	69.12	■	■	■	■	■	
23.0	600	7630	60.81	■	■	■	■	■	
24.0	600	7630	57.42	■	■	■	■	■	
29.0	600	7630	48.89	■	■	■	■	■	
32.0	600	7630	44.43	■	■	■	■	■	
36.0	600	7630	38.49	■	■	■	■	■	
39.0	600	7630	35.70	■	■	■	■	■	
46.0	600	7300	30.28	■	■	■	■	■	
51.0	600	6930	27.34	■	■	■	■	■	
58.0	600	6480	24.05	■	■	■	■	■	
62.0	600	6280	22.71	■	■	■	■	■	
72.0	575	5910	19.34	■	■	■	■	■	
80.0	555	5740	17.57	■	■	■	■	■	
92.0	535	5430	15.22	■	■	■	■	■	
106	510	5190	13.25	□	■	■	■	■	



MK57 n_1=1400 1/min — 600Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.30	4.00	
117	415	5150	11.92						
124	415	4990	11.26						
146	405	4650	9.59						
161	390	4520	8.71						
185	365	4360	7.55						
213	345	4180	6.57						
299	300	3800	4.69						

MK67 n_1=1400 1/min — 820Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.18 ~0.55	0.75 1.10	1.50	2.20 3.30	4.00	5.50
9.70	820	10300	144.79						
11.0	820	10300	123.54						
13.0	820	10300	108.03						
14.0	820	10300	102.62						
16.0	820	10300	90.04						
18.0	820	10300	76.37						
20.0	820	10300	68.95						
23.0	820	10300	60.66						
24.0	820	10300	57.28						
29.0	820	10300	48.77						
32.0	820	10300	44.32						
36.0	820	10500	38.39						
39.0	820	10300	35.62						
46.0	820	10300	30.22						
51.0	820	10300	27.28						
58.0	800	10500	24.00						
62.0	780	10700	22.66						
73.0	760	10800	19.30						
80.0	740	11000	17.54						
92.0	700	11300	15.19						
106	670	11500	13.22						
112	530	12300	12.48						
132	500	11800	10.63						
145	480	11500	9.66						
167	440	11100	8.37						
192	420	10700	7.28						
269	350	9860	5.20						

MK77 n_1=1400 1/min — 1550Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.37 0.55	0.75 1.10	1.50	2.20 3.30	4.00	5.50 7.50
7.30	1450	16100	192.18						
7.80	1450	16100	179.37						
9.10	1550	15400	154.02						

MK77 n_1=1400 1/min — 1550Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.37 0.55	0.75 1.10	1.50	2.20 3.30	4.00	5.50 7.50
10.0	1550	15400	135.28						
11.0	1550	15400	128.52						
12.0	1550	15400	113.56						
14.0	1550	15400	97.05						
16.0	1550	15400	88.97						
18.0	1550	15400	78.07						
19.0	1550	15400	73.99						
22.0	1550	15400	64.75						
24.0	1550	15400	58.34						
27.0	1550	15400	51.18						
31.0	1550	15400	45.16						
35.0	1550	15400	40.04						
36.0	1550	15700	38.39						
40.0	1550	15400	35.20						
45.0	1550	15400	30.89						
48.0	1550	15400	29.27						
55.0	1550	15400	25.62						
61.0	1550	15400	23.08						
69.0	1500	15700	20.25						
78.0	1450	16100	17.87						
88.0	1400	15500	15.84						
104	1340	14800	13.52						
113	1000	15100	12.36						
129	990	14400	10.84						
146	940	13900	9.56						
165	890	13500	8.48						
193	820	13100	7.24						

MK77 n_1=1400 1/min — 1550Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0					
7.30	1450	16100	192.18						
7.80	1450	16100	179.37						
9.10	1550	15400	154.02						
10.0	1550	15400	135.28						
11.0	1550	15400	128.52						
12.0	1550	15400	113.56						
14.0	1550	15400	97.05						
16.0	1550	15400	88.97						
18.0	1550	15400	78.07						
19.0	1550	15400	73.99						
22.0	1550	15400	64.75						
24.0	1550	15400	58.43						
27.0	1550	15400	51.18						
31.0	1550	15400	45.16						
35.0	1550	15400	40.04						
36.0	1550	15700	38.39						
40.0	1550	15400	35.20						
45.0	1550	15400	30.89						
48.0	1550	15400	29.27						
55.0	1550	15400	25.62						
61.0	1550	15400	23.08						
69.0	1500	15700	20.25						
78.0	1450	16100	17.87						
88.0	1400	15500	15.84						
104	1340	14800	13.52						
113	1000	15100	12.36						
129	990	14400	10.84						
146	940	13900	9.56						
165	890	13500	8.48						
193	820	13100	7.24						

MK87 n_1=1400 1/min — 2700Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	7.5 11.0	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0
7.10	2700	27300	197.37						
8.00	2700	27300	174.19						
8.50	2700	27300	164.34						
9.50	2700	27300	147.32						
11.0	2700	27300	126.91						
12.0	2700	27300	115.82						
14.0	2700	27300	102.71						
16.0	2700	27300	86.34						
18.0	2700	27300	79.34						
20.0	2700	27300	70.46						
22.0	2700	26200	63.00						
25.0	2700	25000	56.64						
28.0	2700	23500	49.16						
32.0	2600	22800	44.02						
38.0	2500	21400	36.52						
45.0	2700	19200	31.39						
50.0	2600	18500	27.88						
56.0	2500	18000	24.92						
62.0	2300	17900	22.41						
72.0	2300	16800	19.45						
80.0	2200	16300	17.42						
88.0	1800	16000	16.00						
97.0	2100	15300	14.45						
111	2000	14800	12.56						
125	1500	14900	11.17						

MK87 n_1=1400 1/min — 2700Nm

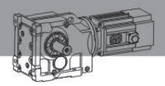
n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	7.5 11.0	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0
140	1500	14200	10.00						
169	1400	13500	8.29						
194	1300	13200	7.21						

MK87 n_1=1400 1/min — 2700Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	18.5 22.0					
7.10	2700	27300	197.37						
8.00	2700	27300	174.19						
8.50	2700	27300	164.34						
9.50	2700	27300	147.32						
11.0	2700	27300	126.91						
12.0	2700	27300	115.82						
14.0	2700	27300	102.71						
16.0	2700	27300	86.34						
18.0	2700	27300	79.34						
20.0	2700	27300	70.46						
22.0	2700	26200	63.00						
25.0	2700	25000	56.64						
28.0	2700	23500	49.16						
32.0	2600	22800	44.02						
38.0	2500	21400	36.52						
45.0	2700	19200	31.39						
50.0	2600	18500	27.88						
56.0	2500	18000	24.92						
62.0	2300	17900	22.41						
72.0	2300	16800	19.45						
80.0	2200	16300	17.42						
88.0	1800	16000	16.00						
97.0	2100	15300	14.45						
111	2000	14800	12.56						
125	1500	14900	11.17						
140	1500	14200	10.00						
169	1400	13500	8.29						
194	1300	13200	7.21						

MK97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.10	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0
8.00	4300	40000	176.05						
9.10	4300	40000	153.21						
10.0	4300	40000	140.28						
11.0	4300	40000	123.93						
13.0	4300	40000	105.13						
14.0	4300	40000	96.80						



MK97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.10	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0
16.0	4300	38800	86.52						
18.0	4300	37100	77.89						
20.0	4300	35600	70.54						
22.0	4300	33800	62.55						
25.0	4300	32300	56.55						
29.0	4300	30000	47.93						
33.0	4300	28300	41.87						
37.0	4300	27100	38.30						
41.0	4300	25700	34.23						
45.0	4300	24500	30.82						
50.0	4300	23300	27.91						
57.0	4300	22000	24.75						
63.0	4300	20900	22.37						
74.0	4300	19100	18.96						
85.0	4300	17800	16.56						
101	4300	16100	13.85						
117	3890	16200	11.99						
134	2870	16400	10.41						
161	2660	15800	8.71						
186	2400	15700	7.54						

MK97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	18.5 22.0	30.0
8.00	4300	40000	176.05		
9.10	4300	40000	153.21		
10.0	4300	40000	140.28		
11.0	4300	40000	123.93		
13.0	4300	40000	105.13		
14.0	4300	40000	96.80		
16.0	4300	38800	86.52		
18.0	4300	37100	77.89		
20.0	4300	35600	70.54		
22.0	4300	33800	62.55		
25.0	4300	32300	56.55		
29.0	4300	30000	47.93		
33.0	4300	28300	41.87		
37.0	4300	27100	38.30		
41.0	4300	25700	34.23		
45.0	4300	24500	30.82		
50.0	4300	23300	27.91		
57.0	4300	22000	24.75		
63.0	4300	20900	22.37		
74.0	4300	19100	18.96		
85.0	4300	17800	16.56		

MK97 n_1=1400 1/min — 4300Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	18.5 22.0	30.0
101	4300	16100	13.85		
117	3890	16200	11.99		
134	2870	16400	10.41		
161	2660	15800	8.71		
186	2400	15700	7.54		

MK107 n_1=1400 1/min — 8000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0	30.0 ~45.0
9.80	8000	65000	143.47						
12.0	8000	61500	121.46						
12.0	8000	59300	112.41						
14.0	8000	56200	100.75						
15.0	8000	53500	90.96						
17.0	8000	50900	82.61						
19.0	8000	47900	73.30						
21.0	8000	45400	66.52						
24.0	8000	41700	57.17						
28.0	7840	39300	49.90						
33.0	7360	37900	42.33						
38.0	7200	35800	37.00						
43.0	7200	33200	32.69						
45.0	6800	34200	31.28						
48.0	7200	30700	29.00						
53.0	7200	28800	26.32						
62.0	7200	25800	22.62						
71.0	7200	23200	19.74						
84.0	7050	21000	16.75						
96.0	6890	19500	14.64						
104	4300	29200	13.43						
119	4300	27500	11.73						
141	4190	25800	9.94						
161	4070	24600	8.69						
190	3600	24400	7.35						

MK127 n_1=1400 1/min — 13000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	7.50	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	
9.60	13000	79200	146.07						
10.0	13000	79200	136.14						
11.0	13000	79200	122.48						
13.0	13000	79200	110.18						
16.0	13000	75100	89.89						
17.0	13000	72100	81.98						
20.0	13000	67700	70.95						

MK127 n_1=1400 1/min — 13000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	7.50	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	
22.0	13000	64000	62.60						
26.0	13000	59800	54.07						
29.0	13000	56500	47.82						
35.0	13000	52000	40.19						
39.0	13000	49400	36.25						
45.0	13000	45900	31.37						
51.0	13000	43000	27.68						
59.0	13000	39800	23.91						
66.0	13000	37200	21.15						
79.0	13000	32600	17.77						
98.0	12100	31000	14.35						
109	8530	35400	12.79						
130	8000	33900	10.74						
161	7230	32500	8.68						

MK157 n_1=1400 1/min — 18000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	110 132	160
9.30	18000	112200	150.41						
11.0	18000	106500	122.39						
14.0	18000	98000	100.22						
15.0	18000	94400	91.65						
18.0	18000	88900	79.75						
20.0	18000	84200	70.38						
23.0	18000	79000	61.02						
26.0	18000	74900	54.29						
30.0	18000	70000	46.79						
37.0	18000	63400	38.02						
45.0	18000	57500	31.30						
51.0	18000	54000	27.62						
58.0	18000	50000	23.95						
66.0	18000	47000	21.31						
76.0	18000	43200	18.37						
94.0	18000	38200	14.92						
111	17000	36700	12.65						

MK167 n_1=1400 1/min — 32000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	110 132	160
23.0	32000	125600	60.74						
27.0	32000	117000	51.77						
33.0	32000	107400	42.89						
38.0	32000	99700	36.61						
43.0	32000	93700	32.25						
49.0	32000	88600	28.77						
57.0	32000	81700	24.52						
69.0	32000	74000	20.32						
81.0	32000	67900	17.34						

MK167 n_1=1400 1/min — 32000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	11.0 15.0	18.5 22.0	30.0 ~45.0	55.0 ~90.0	110 132	160
8.50	32000	150000	164.50						
10.0	32000	150000	134.99						
13.0	32000	150000	109.83						
16.0	32000	147200	87.86						
18.0	32000	140100	78.14						
21.0	32000	132000	68.07						

MK187 n_1=1400 1/min — 50000Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	18.5 22.0	30.0 ~45.0	55.0 ~90.0	110 132	160	
7.80	50000	190000	179.86						
8.50	50000	190000	165.21						
9.70	50000	190000	144.59						
11.0	50000	188200	129.69						
12.0	50000	177200	112.60						
14.0	50000	169900	102.16						
16.0	50000	159000	88.00						
19.0	50000	147000	73.96						
22.0	50000	137600	64.04						
26.0	50000	126100	53.36						
31.0	50000	116600	45.50						
33.0	50000	112700	42.51						
36.0	50000	107200	38.57						
42.0	50000	99100	33.23						
50.0	50000	90200	27.92						
58.0	47600	86800	24.18						
69.0	43900	84000	20.15						
81.0	41400	80800	17.18						

4.7 MK..性能参数 / MK.. Performance Parameters

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
0.08	10800	17550	80300	1.20	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..63M$_1$-4 AM63 AD2
0.09	9890	16006	80700	1.30		
0.09	9260	14975	81000	1.40		
0.11	7690	12440	81600	1.70		
0.13	6750	10915	81900	1.95		
0.14	6070	9819	82000	2.10		
0.16	5180	8443	82300	2.50		
0.18	4620	7482	82400	2.80		
0.10	8850	14311	65000	0.90	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107MRF77	Y..63M$_1$-4 AM63 AD2
0.11	7550	12211	65000	1.05		
0.13	6600	10677	65000	1.20		
0.14	5890	9524	65000	1.35		
0.17	5150	8328	65000	1.55		
0.19	4490	7270	65000	1.80		
0.22	3700	6184	65000	2.20		
0.24	3210	5662	65000	2.50		
0.27	2910	5138	65000	2.70		
0.32	2670	4359	65000	3.00		
0.17	5460	8054	39400	0.80	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..63M$_1$-4 AM63 AD2
0.20	4420	6970	40000	0.95		
0.23	4000	6027	40000	1.05		
0.26	3650	5391	40000	1.20		
0.30	3020	4669	40000	1.40		
0.34	2730	4082	40000	1.55		
0.39	2370	3583	40000	1.80		
0.44	2090	3108	40000	2.00		
0.50	1770	2757	40000	2.40		
0.57	1650	2419	40000	2.60		
0.65	1420	2123	40000	3.00		
0.74	1270	1856	40000	3.40		
0.85	1040	1625	40000	4.10		
0.96	890	1430	40000	4.80		
1.10	860	1261	40000	5.00	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..63M$_1$-4 AM63 AD2
1.20	755	1102	40000	5.70		
0.26	3470	5240	26200	0.80	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..63M$_1$-4 AM63 AD2
0.30	2890	4562	27000	0.95		
0.34	2680	4037	27300	1.00		
0.38	2390	3609	27600	1.15		
0.44	2060	3107	28000	1.30		
0.51	1730	2728	28300	1.55		
0.58	1530	2371	28400	1.75		
0.66	1430	2088	28500	1.90		
0.74	1270	1854	28600	2.10		
0.83	1130	1657	28700	2.40		
0.97	960	1415	28800	2.80		
1.10	830	1229	28900	3.20		
1.30	720	1078	28900	3.70		
1.40	610	951	29000	4.40		
1.60	520	837	29000	5.20		
1.90	450	726	29000	5.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
0.51	1840	2717	11500	0.85	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..63M$_1$-4 AM63 AD2
0.58	1530	2370	15500	1.00		
0.67	1430	2050	16100	1.10		
0.78	1220	1772	17300	1.25		
0.91	1040	1514	18100	1.50		
0.99	960	1388	18500	1.60		
1.10	840	1218	18900	1.85		
1.30	735	1053	19200	2.10		
1.50	645	924	19400	2.40		
1.70	570	815	19600	2.70		
2.00	445	709	19800	3.50		
2.20	390	622	19900	3.90		
1.00	960	1351	6940	0.85	MK 67 MRF37 MKF 67 MRF37 MKA 67 MRF37 MKAF 67 MRF37	Y..63M$_1$-4 AM63 AD2
1.20	820	1171	10300	1.00		
1.30	720	1034	11100	1.15		
1.50	600	903	11900	1.35		
1.70	570	793	12100	1.45		
2.00	455	697	12600	1.80		
2.20	400	613	12800	2.00		
2.60	350	542	13000	2.30	MK 67 MRF37 MKF 67 MRF37 MKA 67 MRF37 MKAF 67 MRF37	Y..63M$_1$-4 AM63 AD2
2.90	325	471	13000	2.50		
3.30	270	420	13000	3.00		
3.80	245	361	13000	3.30		
4.30	215	323	13000	3.80		
5.00	181	279	13000	4.50		
5.60	159	246	13000	5.20		
6.40	139	217	13000	5.90		
1.50	605	906	7580	1.00	MK 57 MRF37 MKF 57 MRF37 MKA 57 MRF37 MKAF 57 MRF37	Y..63M$_1$-4 AM63 AD2
1.70	545	806	8060	1.10		
2.00	455	699	8620	1.30		
2.20	400	615	8870	1.50		
2.50	350	544	9080	1.70		
2.90	320	473	9190	1.85		
3.30	270	421	9390	2.20		
3.80	245	362	9470	2.40		
4.30	215	319	9570	2.80		
4.90	181	280	9690	3.30		
5.60	160	246	9760	3.80		
6.40	141	215	9810	4.30		
7.20	126	192	9850	4.80		
2.50	380	552	6170	1.05	MK 47 MRF37 MKF 47 MRF37 MKA 47 MRF37 MKAF 47 MRF37	Y..63M$_1$-4 AM63 AD2
2.80	320	495	6840	1.25		
3.20	285	426	7160	1.40		
3.70	240	375	7510	1.65		
4.20	225	327	7620	1.75		
4.80	198	289	7780	2.00		
4.00	240	346	3540	0.80	MK 37 MRF17 MKF 37 MRF17 MKA 37 MRF17 MKAF 37 MRF17	Y..63M$_1$-4 AM63 -
4.50	205	304	5570	0.95		
5.20	189	267	5760	1.05		
5.90	163	234	6010	1.20		
6.70	142	205	6180	1.40		
7.60	124	181	6300	1.60		
8.60	109	160	6400	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
10.0	91	136	6490	2.20	MK 37 MRF17 MKF 37 MRF17 MKA 37 MRF17 MKAF 37 MRF17	Y..63M$_1$-4 AM63 -
9.50	120	145.14	9870	5.00	MK 57 MKF 57 MKA 57 MKAF 57	Y..63M$_1$-4 AM63 AD2
11.0	103	123.85	9920	5.80		
13.0	90	108.29	9950	6.70		
13.0	85	102.88	9960	7.00		
15.0	75	90.26	9990	8.00		
10.0	110	131.87	8140	3.60	MK 47 MKF 47 MKA 47 MKAF 47	Y..63M$_1$-4 AM63 AD2
11.0	101	121.48	8170	4.00		
13.0	88	106.38	6500	2.30	MK 37 MKF 37 MKA 37 MKAF 37	Y..63M$_1$-4 AM63 AD1
14.0	81	97.81	6530	2.50		
16.0	70	83.69	6570	2.90		
19.0	60	72.54	6600	3.30		
20.0	56	67.8	6610	3.60		
24.0	49	58.6	6430	4.10		
28.0	41	49.79	6130	4.80		
31.0	37	44.46	5930	5.40		
36.0	32	37.97	5660	6.40		
39.0	30	35.57	5550	6.80		
46.0	25	29.96	5270	8.00	MK 37 MKF 37 MKA 37 MKAF 37	Y..63M$_1$-4 AM63 AD2
48.0	24	28.83	5200	8.40		
55.0	21	24.99	4980	9.60		
59.0	19	23.36	4880	10.0		
68.0	17	20.19	4660	11.0		
80.0	14	17.15	4430	13.0		
90.0	13	15.31	4280	14.0		
105	11	13.08	4070	15.0		
114	10	12.14	3970	16.0		
P_1=0.18kw						
0.09	15700	14975	74400	0.80	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..63M$_2$-4 AM63 AD2
0.11	13100	12440	79100	1.00		
0.12	11500	10915	80000	1.15		
0.13	10300	9819	80500	1.25		
0.16	8870	8443	81100	1.45		
0.18	7880	7482	81500	1.65		
0.20	6910	6565	81800	1.90		
0.23	5880	5804	82100	2.20		
0.26	5210	5027	82300	2.50		
0.30	4480	4423	82400	2.90		
0.34	3900	3889	82500	3.30		
0.40	3240	3311	82600	4.00		
0.16	8770	8328	65000	0.90	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..63M$_2$-4 AM63 AD2
0.18	7660	7270	65000	1.05		
0.21	6410	6184	65000	1.25		
0.23	5690	5662	65000	1.40		
0.26	5160	5138	65000	1.55		
0.30	4580	4359	65000	1.75		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
0.35	4000	3810	65000	2.00	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..63M$_2$-4 AM63 AD2
0.39	3400	3358	65000	2.40		
0.44	3080	2977	65000	2.60		
0.51	2690	2599	65000	3.00		
0.58	2310	2286	65000	3.40		
0.28	5050	4669	39800	0.85	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..63M$_2$-4 AM63 AD2
0.32	4530	4082	40000	0.95		
0.37	3940	3583	40000	1.10		
0.42	3450	3108	40000	1.25		
0.48	2980	2757	40000	1.45		
0.55	2720	2419	40000	1.60		
0.62	2360	2123	40000	1.80		
0.71	2090	1856	40000	2.10		
0.81	1760	1625	40000	2.40		
0.92	1520	1430	40000	2.80		
1.00	1420	1261	40000	3.00		
1.20	1240	1102	40000	3.50		
1.40	1080	957	40000	4.00		
1.50	970	855	40000	4.40		
1.80	770	743	40000	5.60	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..63M$_2$-4 AM63 AD3
2.00	690	652	40000	6.20		
0.42	3430	3107	26200	0.80	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..63M$_2$-4 AM63 AD2
0.48	2920	2728	27000	0.90		
0.56	2560	2371	27400	1.05		
0.63	2350	2088	27700	1.15		
0.71	2080	1854	28000	1.30		
0.80	1860	1657	28200	1.45	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..63M$_2$-4 AM63 AD2
0.93	1590	1415	28400	1.70		
1.10	1380	1229	28600	1.95		
1.20	1200	1078	28700	2.20		
1.40	1030	951	28800	2.60		
1.60	890	837	28800	3.00		
1.80	775	726	28900	3.50		
0.87	1710	1514	14100	0.90	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..63M$_2$-4 AM63 AD2
0.95	1570	1388	15200	1.00		
1.10	1380	1218	16500	1.10		
1.20	1200	1053	17400	1.30		
1.40	1050	924	18100	1.45	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..63M$_2$-4 AM63 AD2
1.60	930	815	18600	1.65		
1.90	760	709	19100	2.00		
2.10	665	622	19300	2.30		
2.40	600	552	19500	2.60		
2.70	525	485	19600	2.90		
3.10	465	428	19800	3.30		
3.60	410	367	19800	3.80		
1.70	920	793	9240	0.90	MK 67 MRF37 MKF 67 MRF37 MKA 67 MRF37 MKAF 67 MRF37	Y..63M$_2$-4 AM63 AD2
1.90	760	697	10800	1.05		
2.20	670	613	11500	1.20		
2.40	590	542	12000	1.40		
2.80	535	471	12200	1.50		
3.20	455	420	12600	1.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
3.60	405	361	12800	2.00	MK 67 MRF37	Y..63M_2-4
4.10	360	323	12900	2.30	MKF 67 MRF37	AM63
4.70	300	279	13000	2.70	MKA 67 MRF37	AD2
					MKAF 67 MRF37	
2.40	590	544	7690	1.00	MK 57 MRF37	Y..63M_2-4
2.80	535	473	8150	1.10	MKF 57 MRF37	AM63
3.10	455	421	8620	1.30	MKA 57 MRF37	AD2
3.60	405	362	8840	1.45	MKAF 57 MRF37	
4.10	360	319	9050	1.65		
4.70	300	280	9270	1.95		
5.40	265	246	9400	2.20		
6.10	235	215	9510	2.50	MK 57 MRF37	Y..63M_2-4
6.90	210	192	9600	2.80	MKF 57 MRF37	AM63
7.90	182	166	9690	3.30	MKA 57 MRF37	AD2
					MKAF 57 MRF37	
3.50	405	375	5600	1.00	MK 47 MRF37	Y..63M_2-4
4.00	365	327	6320	1.10	MKF 47 MRF37	AM63
4.60	325	289	6800	1.20	MKA 47 MRF37	AD2
5.20	275	256	7240	1.45	MKAF 47 MRF37	
5.90	250	225	7450	1.60		
6.70	215	198	7680	1.85		
7.70	188	171	7840	2.10		
8.60	168	153	7930	2.40		
10.0	147	131	8020	2.70		
6.40	230	205	4860	0.85	MK 37 MRF17	Y..63M_2-4
7.30	200	181	5590	1.00	MKF 37 MRF17	AM63
8.20	180	160	5860	1.10	MKA 37 MRF17	-
9.70	151	136	6110	1.35	MKAF 37 MRF17	
10.0	145	127	6160	1.40		
6.00	285	144.79	13000	2.90	MK 67	Y..71M_1-6
7.00	240	123.54	13000	3.40	MKF 67	AM71
8.00	210	108.03	13000	3.80	MKA 67	AD2
8.50	200	102.62	13000	4.00	MKAF 67	
9.10	188	144.79	13000	4.40	MK 67	Y..63M_2-4
11.0	161	123.54	13000	5.10	MKF 67	AM63
12.0	141	108.03	13000	5.80	MKA 67	AD2
					MKAF 67	
6.00	285	145.14	9340	2.10	MK 57	Y..71M_1-6
7.00	240	123.85	9480	2.40	MKF 57	AM71
8.00	210	108.29	9590	2.80	MKA 57	AD2
8.50	200	102.88	9620	3.00	MKAF 57	
9.60	178	90.26	9700	3.40		
9.10	189	145.14	9670	3.20	MK 57	Y..63M_2-4
11.0	161	123.85	9750	3.70	MKF 57	AM63
12.0	141	108.29	9810	4.30	MKA 57	AD2
13.0	134	102.88	9830	4.50	MKAF 57	
15.0	118	90.26	9880	5.10	MK 57	Y..63M_2-4
17.0	100	76.56	9920	6.00	MKF 57	AM63
					MKA 57	AD2
					MKAF 57	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
6.60	260	131.87	7380	1.55	MK 47	Y..71M_1-6
7.20	240	121.48	7530	1.65	MKF 47	AM71
8.30	205	104.37	7740	1.95	MKA 47	AD2
9.60	180	90.86	7880	2.20	MKAF 47	
10.0	168	85.12	7930	2.40		
10.0	172	131.87	7910	2.30	MK 47	Y..63M_2-4
11.0	158	121.48	7970	2.50	MKF 47	AM63
13.0	136	104.37	8060	2.90	MKA 47	AD2
					MKAF 47	
15.0	118	90.86	8120	3.40	MK 47	Y..63M_2-4
16.0	111	85.12	8140	3.60	MKF 47	AM63
					MKA 47	AD2
					MKAF 47	
8.20	210	106.38	5520	0.95	MK 37	Y..71M_1-6
8.90	193	97.81	5710	1.05	MKF 37	AM71
10.0	165	83.69	5990	1.20	MKA 37	AD1
12.0	143	72.54	6170	1.40	MKAF 37	
12.0	138	106.38	6210	1.45	MK 37	Y..63M_2-4
14.0	127	97.81	6280	1.55	MKF 37	AM63
16.0	109	83.69	6400	1.85	MKA 37	AD1
18.0	94	72.54	6470	2.10	MKAF 37	
19.0	88	67.8	6500	2.30		
23.0	76	58.6	6280	2.60		
27.0	65	49.79	6010	3.10		
30.0	58	44.46	5830	3.40		
35.0	49	37.97	5580	4.00		
37.0	46	35.57	5480	4.30		
44.0	39	29.96	5220	5.10	MK 37	Y..63M_2-4
46.0	38	28.83	5160	5.30	MKF 37	AM63
53.0	32	24.99	4950	6.20	MKA 37	AD2
57.0	30	23.36	4850	6.40	MKAF 37	
65.0	26	20.19	4650	7.00		
77.0	22	17.15	4430	8.10		
86.0	20	15.31	4280	8.80		
101	17	13.08	4080	9.70	MK 37	Y..63M_2-4
109	16	12.14	3980	10.0	MKF 37	AM63
126	14	10.49	3810	12.0	MKA 37	AD2
148	12	8.91	3620	14.0	MKAF 37	
166	10	7.96	3490	15.0		
P_1=0.25kw						
0.13	15100	9819	75600	0.85	MK 127 MRF77	Y..71M_1-4
0.15	13000	8443	79200	1.00	MKF 127 MRF77	AM71
0.17	11500	7482	79900	1.10	MKA 127 MRF77	AD2
0.20	10100	6565	80600	1.30	MKAF127 MRF77	
0.22	8750	5804	81200	1.50		
0.26	7690	5027	81600	1.70		
0.29	6660	4423	81900	1.95		
0.33	5820	3889	82100	2.20	MK 127 MRF77	Y..71M_1-4
0.39	4870	3311	82300	2.70	MKF 127 MRF77	AM71
					MKA 127 MRF77	AD2
					MKAF127 MRF77	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
0.21	9460	6184	65000	0.85	MK 107 MRF77	Y..71M_1-4
0.23	8480	5662	65000	0.95	MKF 107 MRF77	AM71
0.25	7690	5138	65000	1.05	MKA 107 MRF77	AD2
0.30	6730	4359	65000	1.20	MKAF107 MRF77	
0.34	5880	3810	65000	1.35	MK 107 MRF77	Y..71M_1-4
0.39	5060	3358	65000	1.60	MKF 107 MRF77	AM71
0.44	4550	2977	65000	1.75	MKA 107 MRF77	AD2
					MKAF107 MRF77	
0.50	3970	2599	65000	2.00	MK 107 MRF77	Y..71M_1-4
0.57	3440	2286	65000	2.30	MKF 107 MRF77	AM71
0.67	2920	1939	65000	2.70	MKA 107 MRF77	AD2
					MKAF107 MRF77	
0.76	2670	1713	65000	3.00	MK 107 MRF77	Y..71M_1-4
0.84	2430	1554	65000	3.30	MKF 107 MRF77	AM71
0.97	2080	1336	65000	3.80	MKA 107 MRF77	AD3
					MKAF107 MRF77	
0.42	4980	3108	39900	0.85	MK 97 MRF57	Y..71M_1-4
0.47	4350	2757	40000	1.00	MKF 97 MRF57	AM71
0.54	3920	2419	40000	1.10	MKA 97 MRF57	AD2
0.61	3420	2123	40000	1.25	MKAF 97 MRF57	
0.70	3010	1856	40000	1.40		
0.80	2570	1625	40000	1.65	MK 97 MRF57	Y..71M_1-4
0.91	2240	1430	40000	1.90	MKF 97 MRF57	AM71
					MKA 97 MRF57	AD2
					MKAF 97 MRF57	
1.00	2050	1261	40000	2.10	MK 97 MRF57	Y..71M_1-4
1.20	1790	1102	40000	2.40	MKF 97 MRF57	AM71
1.40	1560	957	40000	2.70	MKA 97 MRF57	AD2
1.50	1400	855	40000	3.10	MKAF 97 MRF57	
0.62	3390	2088	26300	0.80	MK 87 MRF57	Y..71M_1-4
0.70	3010	1854	26900	0.90	MKF 87 MRF57	AM71
0.78	2690	1657	27300	1.00	MKA 87 MRF57	AD2
0.92	2290	1415	27800	1.15	MKAF 87 MRF57	
1.10	1990	1229	28100	1.35		
1.20	1730	1078	28300	1.55		
1.40	1500	951	28500	1.80		
1.60	1310	837	28600	2.10		
1.80	1130	726	28700	2.40		
2.00	1010	638	28800	2.70	MK 87 MRF57	Y..71M_1-4
					MKF 87 MRF57	AM71
					MKA 87 MRF57	AD3
					MKAF 87 MRF57	
1.20	1720	1053	14000	0.90	MK 77 MRF37	Y..71M_1-4
1.40	1510	924	15600	1.00	MKF 77 MRF37	AM71
1.60	1330	815	16700	1.15	MKA 77 MRF37	AD2
1.80	1110	709	17800	1.40	MKAF 77 MRF37	
2.10	970	622	18400	1.60		
2.40	870	552	18700	1.75		
2.70	765	485	19100	2.00		
3.00	675	428	19300	2.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
3.50	590	367	19500	2.60	MK 77 MRF37	Y..71M_1-4
4.00	525	328	19600	2.90	MKF 77 MRF37	AM71
4.50	465	290	19700	3.30	MKA 77 MRF37	AD2
5.20	400	252	19900	3.80	MKAF 77 MRF37	
5.90	350	221	19900	4.40		
6.70	310	195	20000	5.00		
7.40	270	175	20000	5.60		
2.10	970	613	5680	0.85	MK 67 MRF37	Y..71M_1-4
2.40	860	542	9920	0.95	MKF 67 MRF37	AM71
2.80	775	471	10700	1.05	MKA 67 MRF37	AD2
3.10	665	420	11500	1.25	MKAF 67 MRF37	
3.60	590	361	11900	1.4		
4.00	520	323	12300	1.55		
4.70	440	279	12600	1.85		
5.30	390	246	12800	2.10		
6.00	345	217	13000	2.40		
3.10	665	421	4200	0.90	MK 57 MRF37	Y..71M_1-4
3.60	590	362	7690	1.00	MKF 57 MRF37	AM71
4.10	520	319	8260	1.15	MKA 57 MRF37	AD2
4.60	440	280	8680	1.35	MKAF 57 MRF37	
5.30	390	246	8920	1.55		
6.00	345	215	9110	1.75		
6.80	305	192	9260	1.95		
7.80	265	166	9410	2.30		
9.00	230	145	9530	2.60		
10.0	210	129	9600	2.80		
12.0	178	111	9700	3.40		
13.0	156	97	9770	3.80		
4.70	510	192.18	19700	2.80	MK 77	Y..71M_2-6
5.00	475	179.37	19700	3.00	MKF 77	AM71
5.80	410	154.02	19800	3.80	MKA 77	AD2
6.60	360	135.28	19900	4.30	MKAF 77	
6.20	385	144.79	12900	2.10	MK 67	Y..71M_2-6
7.20	325	123.54	13000	2.50	MKF 67	AM71
8.30	285	108.03	13000	2.80	MKA 67	AD2
8.70	270	102.62	13000	3.00	MKAF 67	
9.00	265	144.79	13000	3.10	MK 67	Y..71M_1-4
11.0	225	123.54	13000	3.60	MKF 67	AM71
12.0	198	108.03	13000	4.10	MKA 67	AD2
13.0	188	102.62	13000	4.40	MKAF 67	
6.20	385	145.14	8940	1.55	MK 57	Y..71M_2-6
7.20	330	123.85	9170	1.80	MKF 57	AM71
8.30	285	108.29	9330	2.10	MKA 57	AD2
8.70	270	102.88	9380	2.20	MKAF 57	
9.90	240	90.26	9500	2.50		
12.0	200	76.56	9620	2.90		
9.00	265	145.14	9410	2.20	MK 57	Y..71M_1-4
10.0	225	123.85	9540	2.60	MKF 57	AM71
12.0	199	108.29	9640	3.00	MKA 57	AD2
13.0	189	102.88	9670	3.20	MKAF 57	
14.0	166	90.26	9740	3.60		
17.0	141	76.56	9810	4.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
6.80	350	131.87	6540	1.15	MK 47 MKF 47 MKA 47 MKAF 47	Y..71M$_2$-6 AM71 AD2
7.40	320	121.48	6830	1.25		
8.60	275	104.37	7240	1.45		
9.80	240	90.86	7510	1.65		
11.0	225	85.12	7610	1.75		
9.90	240	131.87	7510	1.65	MK 47 MKF 47 MKA 47 MKAF 47	Y..71M$_1$-4 AM71 AD2
11.0	220	121.48	7640	1.80		
12.0	192	104.37	7820	2.10		
14.0	167	90.86	7930	2.40		
15.0	156	85.12	7980	2.60		
11.0	220	83.69	5350	0.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_2$-6 AM71 AD1
12.0	194	72.54	5710	1.05		
13.0	181	67.8	5840	1.10		
15.0	156	58.6	6070	1.30		
18.0	133	49.79	6250	1.50		
12.0	195	106.38	5690	1.00	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_1$-4 AM71 AD1
13.0	180	97.81	5860	1.10		
16.0	154	83.69	6090	1.30		
18.0	133	72.54	6240	1.50		
19.0	124	67.8	6220	1.60		
22.0	108	58.6	6030	1.85		
26.0	91	49.79	5810	2.20		
29.0	82	44.46	5650	2.40		
34.0	70	37.97	5430	2.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_1$-4 AM71 AD1
37.0	65	35.57	5340	3.10		
43.0	55	29.96	5100	3.60	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_1$-4 AM71 AD2
45.0	53	28.83	5050	3.80		
52.0	46	24.99	4860	4.40		
56.0	43	23.36	4770	4.60		
64.0	37	20.19	4580	5.00		
76.0	32	17.15	4370	5.70		
85.0	28	15.31	4220	6.20		
99.0	24	13.08	4030	6.90		
107	22	12.14	3940	7.20		
124	19	10.49	3780	8.30		
146	16	8.91	3590	9.80		
163	15	7.96	3470	11.0		
191	12	6.8	3300	12.0	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_1$-4 AM71 AD2
204	12	6.37	3240	12.0		
P_1=0.37kw						
0.18	16500	7482	72700	0.80	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF 127 MRF77	Y..71M$_2$-4 AM71 AD2
0.21	14500	6565	76900	0.90		
0.24	12600	5804	79400	1.05		
0.27	11000	5027	80200	1.20		
0.31	9610	4423	80800	1.35		
0.35	8410	3889	81300	1.55		
0.42	7080	3311	81800	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
0.72	4280	1926	82400	3.00	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF 127 MRF77	Y..71M$_2$-4 AM71 AD3
0.79	3900	1757	82500	3.30		
0.90	3390	1541	82600	3.80		
0.36	8420	3810	65000	0.95	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF 107 MRF77	Y..71M$_2$-4 AM71 AD2
0.41	7290	3358	65000	1.10		
0.46	6530	2977	65000	1.20		
0.53	5700	2599	65000	1.40		
0.60	4960	2286	65000	1.60		
0.71	4210	1939	65000	1.90		
0.81	3830	1713	65000	2.10	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF 107 MRF77	Y..71M$_2$-4 AM71 AD3
0.89	3470	1554	65000	2.30		
1.00	2990	1336	65000	2.70		
1.20	2600	1166	65000	3.10		
0.65	4850	2123	40000	0.90	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..71M$_2$-4 AM71 AD2
0.74	4270	1856	40000	1.00		
0.85	3670	1625	40000	1.15		
0.96	3200	1430	40000	1.35		
1.10	2900	1261	40000	1.50		
1.20	2530	1102	40000	1.70		
1.40	2220	957	40000	1.95		
1.60	1980	855	40000	2.20		
2.40	1310	573	40000	3.30		
1.90	1640	743	40000	2.60	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..71M$_2$-4 AM71 AD3
2.10	1450	652	40000	3.00		
1.90	1640	743	40000	2.60	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..71M$_2$-4 AM71 AD3
2.10	1450	652	40000	3.00		
0.97	3250	1415	26500	0.85	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..71M$_2$-4 AM71 AD2
1.10	2820	1229	27100	0.95		
1.30	2460	1078	27600	1.10		
1.40	2140	951	27900	1.25		
1.60	1870	837	28200	1.45		
1.90	1620	726	28400	1.65		
2.20	1440	638	28500	1.85	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..71M$_2$-4 AM71 AD3
2.50	1250	562	28600	2.20		
2.90	1050	474	28800	2.60		
3.20	950	426	28800	2.80		
3.70	830	373	28900	3.20		
1.70	1880	815	7450	0.80	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..71M$_2$-4 AM71 AD2
2.00	1590	709	15100	0.95		
2.20	1390	622	16400	1.10		
2.50	1250	552	17200	1.25		
2.80	1090	485	17900	1.40		
3.20	960	428	18400	1.60		
3.80	840	367	18900	1.85		
4.20	745	328	19100	2.10		
4.80	665	290	19400	2.30		
5.50	570	252	19600	2.70		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
6.20	500	221	19700	3.10	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..71M$_2$-4 AM71 AD2
7.10	440	195	19800	3.50		
7.90	390	175	19900	4.00		
9.00	345	154	19900	4.50		
3.30	940	420	8130	0.85	MK 67 MRF37 MKF 67 MRF37 MKA 67 MRF37 MKAF 67 MRF37	Y..71M$_2$-4 AM71 AD2
3.80	830	361	10200	1.00		
4.30	740	323	10900	1.10		
5.00	630	279	11700	1.30		
5.60	555	246	12100	1.50		
7.20	430	191	12700	1.90		
8.30	370	166	12900	2.20		
9.60	325	144	13000	2.50		
11.0	275	122	13000	2.90		
4.90	630	280	7350	0.95	MK 57 MRF37 MKF 57 MRF37 MKA 57 MRF37 MKAF 57 MRF37	Y..71M$_2$-4 AM71 AD2
5.60	555	246	7980	1.10		
6.40	490	215	8460	1.20		
7.20	435	192	8720	1.40		
8.30	375	166	8980	1.60		
11.0	295	129	9290	2.00		
12.0	250	111	9460	2.40		
14.0	220	97	9560	2.70		
4.60	770	197.37	28900	3.50	MK 87 MKF 87 MKA 87 MKAF 87	Y..80M$_1$-6 AM80 AD2
5.20	680	174.19	28900	4.00		
5.90	600	154.02	19500	2.60	MK 77 MKF 77 MKA 77 MKAF 77	Y..80M$_1$-6 AM80 AD2
6.70	525	135.28	19600	2.90		
7.00	500	128.52	19700	3.10		
8.00	440	113.56	19800	3.50		
7.20	490	192.18	19700	3.00	MK 77 MKF 77 MKA 77 MKAF 77	Y..71M$_2$-4 AM71 AD2
7.70	455	179.37	19800	3.20		
9.00	390	154.02	19900	3.90		
7.30	480	123.54	12500	1.70	MK 67 MKF 67 MKA 67 MKAF 67	Y..80M$_1$-6 AM80 AD2
8.40	420	108.03	12700	1.95		
8.80	400	102.62	12800	2.00		
10.0	350	90.04	13000	2.30		
9.50	370	144.79	12900	2.20	MK 67 MKF 67 MKA 67 MKAF 67	Y..71M$_2$-4 AM71 AD2
11.0	315	123.54	13000	2.60		
13.0	275	108.03	13000	3.00		
15.0	230	90.04	13000	3.60		
18.0	196	76.37	13000	4.20		
7.30	480	123.85	8500	1.25	MK 57 MKF 57 MKA 57 MKAF 57	Y..80M$_1$-6 AM80 AD2
8.40	420	108.29	8780	1.40		
8.80	400	102.88	8880	1.50		
10.0	350	90.26	9080	1.70		
12.0	295	76.56	9290	2.00		
13.0	265	69.12	9400	2.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
9.50	370	145.14	9000	1.60	MK 57 MKF 57 MKA 57 MKAF 57	Y..71M$_2$-4 AM71 AD2
11.0	315	123.85	9220	1.90		
13.0	275	108.29	9370	2.20		
13.0	260	102.88	9420	2.30		
18.0	196	76.56	9640	3.10		
20.0	177	69.12	9700	3.40		
8.70	405	104.37	5720	1.00	MK 47 MKF 47 MKA 47 MKAF 47	Y..80M$_1$-6 AM80 AD2
10.0	350	90.86	6500	1.15		
11.0	330	85.12	6750	1.20		
12.0	290	75.20	7120	1.35		
10.0	335	131.87	6690	1.20	MK 47 MKF 47 MKA 47 MKAF 47	Y..71M$_2$-4 AM71 AD2
11.0	310	121.48	6960	1.30		
13.0	265	104.37	7330	1.50		
15.0	230	90.86	7580	1.70		
16.0	215	85.12	7670	1.85		
18.0	192	75.20	7810	2.10		
20.0	179	69.84	7880	2.20		
22.0	162	63.30	7960	2.50		
14.0	250	97.81	2520	0.80	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_2$-4 AM71 AD1
16.0	210	83.69	5470	0.95		
19.0	186	72.54	5690	1.10		
20.0	174	67.8	5630	1.15		
24.0	150	58.6	5500	1.35		
28.0	128	49.79	5350	1.55		
31.0	114	44.46	5230	1.75		
36.0	97	37.97	5060	2.10		
39.0	91	35.57	4990	2.20		
46.0	77	29.96	4800	2.60	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_2$-4 AM71 AD2
48.0	74	28.83	4750	2.70		
55.0	64	24.99	4590	3.10		
59.0	60	23.36	4510	3.30		
68.0	52	20.19	4350	3.60		
80.0	44	17.15	4160	4.10		
90.0	39	15.31	4040	4.50		
105	34	13.08	3860	4.90		
114	31	12.14	3780	5.10		
132	27	10.49	3630	6.00		
155	23	8.91	3460	7.00		
173	20	7.96	3350	7.60		
203	17	6.8	3190	8.60		
217	16	6.37	3130	8.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..71M$_2$-4 AM71 AD2
257	14	5.36	2970	10.0		
P_1=0.55kw						
0.08	54100	16978	190000	0.90	MK 187 MRF97 MKH 187 MRF97	Y..80M$_1$-4 AM80 AD3
0.10	45400	14272	190000	1.10		
0.11	41300	13116	190000	1.20		
0.12	36000	11647	190000	1.40		
0.19	23300	7343	190000	2.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
0.12	36900	11573	150000	0.85	MK 167 MRF97 MKH 167 MRF97	Y..80M$_1$-4 AM80 AD3
0.13	32700	10264	150000	1.00		
0.16	27400	8628	150000	1.15		
0.21	20800	6562	150000	1.55		
0.26	16500	5355	150000	1.95		
0.34	12800	4079	150000	2.50		
0.20	21900	6881	110000	0.80	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..80M$_1$-4 AM80 AD3
0.23	18800	5931	111700	0.95		
0.35	12600	3979	114500	1.40		
0.45	9710	3051	115400	1.85		
0.31	14600	4423	76600	0.90	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..80M$_1$-4 AM80 AD2
0.35	12800	3889	79200	1.00		
0.42	10800	3311	80300	1.20		
0.46	9840	3009	80700	1.30		
0.53	8450	2607	81300	1.55		
0.72	6520	1926	81900	2.00	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..80M$_1$-4 AM80 AD3
0.79	5940	1757	82100	2.20		
0.90	5180	1541	82300	2.50		
1.00	4540	1342	82400	2.90		
1.20	3950	1177	82500	3.30		
1.40	3460	1025	82600	3.80		
0.46	9950	2977	65000	0.80	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..80M$_1$-4 AM80 AD2
0.53	8690	2599	65000	0.90		
0.60	7590	2286	65000	1.05		
0.71	6440	1939	65000	1.25		
0.81	5820	1713	65000	1.35	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..80M$_1$-4 AM80 AD3
0.89	5280	1554	65000	1.50		
1.00	4540	1336	65000	1.75		
1.20	3960	1166	65000	2.00		
1.30	3400	1030	65000	2.40		
1.50	2960	904	65000	2.70		
1.70	2680	793	65000	3.00		
2.00	2330	696	65000	3.40		
2.20	2010	615	65000	4.00		
0.96	4860	1430	40000	0.90	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..80M$_1$-4 AM80 AD2
1.10	4360	1261	40000	1.00		
1.20	3810	1102	40000	1.15		
1.40	3340	957	40000	1.30		
1.60	2990	855	40000	1.45		
2.40	1980	573	40000	2.20		
1.90	2500	743	40000	1.70	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..80M$_1$-4 AM80 AD3
2.10	2210	652	40000	1.95		
2.70	1690	504	40000	2.50		
3.20	1450	437	40000	3.00		
3.60	1300	382	40000	3.30		
4.50	1040	305	40000	4.10		
1.40	3250	951	26500	0.85	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..80M$_1$-4 AM80 AD2
1.60	2840	837	27100	0.95		
1.90	2470	726	27600	1.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
2.20	2180	638	27900	1.25	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..80M$_1$-4 AM80 AD3
2.50	1910	562	28100	1.40		
2.90	1610	474	28400	1.70		
3.20	1440	426	28500	1.85		
3.70	1270	373	28600	2.10		
4.20	1100	330	28700	2.40		
4.70	990	294	28800	2.70		
5.50	860	250	28900	3.10		
5.80	810	236	28900	3.30		
6.90	685	201	28900	3.90		
2.80	1660	485	14600	0.95	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..80M$_1$-4 AM80 AD2
3.20	1460	428	16000	1.05		
3.80	1260	367	17100	1.20		
4.20	1120	328	17800	1.35		
4.80	1000	290	18300	1.55	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..80M$_1$-4 AM80 AD2
5.50	860	252	18800	1.80		
6.20	755	221	19100	2.00		
7.10	665	195	19300	2.30		
7.90	595	175	19500	2.60		
9.00	525	154	19600	3.00		
5.00	950	279	7650	0.85	MK 67 MRF37 MKF 67 MRF37 MKA 67 MRF37 MKAF 67 MRF37	Y..80M$_1$-4 AM80 AD2
5.60	840	246	10100	0.95		
6.40	745	217	10900	1.10		
7.20	655	191	11600	1.25		
7.20	655	192	5460	0.90	MK 57 MRF37 MKF 57 MRF37 MKA 57 MRF37 MKAF 57 MRF37	Y..80M$_1$-4 AM80 AD2
8.30	570	166	7870	1.05		
9.60	500	145	8420	1.20		
11.0	445	129	8660	1.35		
12.0	380	111	8960	1.55		
14.0	335	97	9140	1.80		
4.60	1130	197.37	28700	2.40	MK 87 MKF 87 MKA 87 MKAF 87	Y..80M$_2$-6 AM80 AD2
5.20	990	174.19	28800	2.70		
5.60	940	164.34	28800	2.90		
6.20	840	147.32	28900	3.20		
5.90	880	154.02	18700	1.75	MK 77 MKF 77 MKA 77 MKAF 77	Y..80M$_2$-6 AM80 AD2
6.80	775	135.28	19100	2.00		
7.10	735	128.52	19200	2.10		
8.10	650	113.56	19400	2.40		
9.00	585	154.02	19500	2.60	MK 77 MKF 77 MKA 77 MKAF 77	Y..80M$_1$-4 AM80 AD2
10.0	510	135.28	19700	3.00		
11.0	485	128.52	19700	3.20		
12.0	430	113.56	19800	3.60		
14.0	365	97.05	19900	4.20		
7.40	705	123.54	11200	1.15	MK 67 MKF 67 MKA 67 MKAF 67	Y..80M$_2$-6 AM80 AD2
8.50	620	108.03	11800	1.30		
8.90	585	102.62	12000	1.40		
10.0	515	90.04	12300	1.60		
12.0	435	76.37	12700	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
11.0	470	123.54	12500	1.75	MK 67 MKF 67 MKA 67 MKAF 67	Y..80M$_1$-4 AM80 AD2
13.0	410	108.03	12800	2.00		
15.0	340	90.04	13000	2.40		
18.0	290	76.37	13000	2.80		
8.40	620	108.29	7450	0.95	MK 57 MKF 57 MKA 57 MKAF 57	Y..80M$_2$-6 AM80 AD2
8.90	590	102.88	7710	1.00		
10.0	515	90.26	8280	1.15		
12.0	435	76.56	8710	1.35		
13.0	395	69.12	8900	1.50		
15.0	345	60.81	9100	1.70		
16.0	325	57.42	9170	1.80		
11.0	470	123.85	8560	1.25	MK 57 MKF 57 MKA 57 MKAF 57	Y..80M$_1$-4 AM80 AD2
13.0	410	108.29	8830	1.45		
13.0	390	102.88	8920	1.55		
15.0	340	90.26	9120	1.75		
18.0	290	76.56	9320	2.10		
20.0	260	69.12	9420	2.30		
23.0	230	60.81	9530	2.60		
24.0	215	57.42	9570	2.80		
13.0	395	104.37	5960	1.00	MK 47 MKF 47 MKA 47 MKAF 47	Y..80M$_1$-4 AM80 AD2
15.0	345	90.86	6600	1.15		
16.0	320	85.12	6830	1.25		
18.0	285	75.20	7180	1.40		
20.0	265	69.84	7340	1.50		
22.0	240	63.30	7520	1.65		
24.0	215	56.83	7680	1.85		
28.0	186	48.95	7840	2.20		
30.0	175	46.03	7900	2.30		
24.0	220	58.6	4840	0.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M$_1$-4 AM80 AD1
28.0	190	49.79	4780	1.05		
31.0	169	44.46	4730	1.20		
36.0	144	37.97	4630	1.40		
39.0	135	35.57	4580	1.50		
46.0	114	29.96	4460	1.75	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M$_1$-4 AM80 AD2
48.0	110	28.83	4420	1.80		
55.0	95	24.99	4310	2.10		
59.0	89	23.36	4250	2.20		
68.0	77	20.19	4120	2.40		
80.0	65	17.15	3970	2.80		
90.0	58	15.31	3860	3.00	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M$_1$-4 AM80 AD2
105	50	13.08	3720	3.30		
114	46	12.14	3650	3.50		
132	40	10.49	3510	4.00		
155	34	8.91	3360	4.70		
173	30	7.96	3260	5.10		
203	26	6.8	3120	5.80		
217	24	6.37	3060	6.00	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M$_1$-4 AM80 AD2
257	20	5.36	2910	6.90		
347	15	3.98	2670	8.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
0.11	55500	13116	190000	0.90	MK 187 MRF97 MKH 187 MRF97	Y..80M$_2$-4 AM80 AD3
0.12	48600	11647	190000	1.05		
0.20	31300	7343	190000	1.60		
0.21	28500	6747	190000	1.75		
0.24	25000	5991	190000	2.00		
0.17	36800	8628	150000	0.85	MK 167 MRF97 MKH 167 MRF97	Y..80M$_2$-4 AM80 AD3
0.22	28000	6562	150000	1.15		
0.27	22300	5355	150000	1.45		
0.35	17200	4079	150000	1.85		
0.43	14400	3376	150000	2.20		
0.36	16900	3979	112700	1.05	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..80M$_2$-4 AM80 AD3
0.47	13000	3051	114300	1.40		
0.87	7160	1659	116000	2.50	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..80M$_2$-4 AM80 AD4
1.00	5770	1365	116200	3.10	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..80M$_2$-4 AM80 AD5
0.43	14500	3311	77000	0.90	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..80M$_2$-4 AM80 AD2
0.48	13100	3009	79100	1.00		
0.55	11200	2607	80100	1.15		
0.74	8650	1926	81200	1.50	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..80M$_2$-4 AM80 AD3
0.82	7880	1757	81500	1.65		
0.93	6880	1541	81800	1.90		
1.10	6020	1342	82100	2.20		
1.20	5250	1177	82200	2.50	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..80M$_2$-4 AM80 AD3
1.40	4600	1025	82400	2.80		
1.60	4010	899	82500	3.20		
0.84	7710	1713	65000	1.05	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..80M$_2$-4 AM80 AD3
0.92	7000	1554	65000	1.15		
1.10	6020	1336	65000	1.35		
1.20	5250	1166	65000	1.50		
1.40	4540	1030	65000	1.75		
1.60	3960	904	65000	2.00		
1.80	3560	793	65000	2.20		
2.10	3100	696	65000	2.60		
2.30	2690	615	65000	3.00		
1.30	5030	1102	39900	0.85	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..80M$_2$-4 AM80 AD2
1.50	4410	957	40000	0.95		
1.70	3940	855	40000	1.10		
2.50	2620	573	40000	1.65		
1.90	3320	743	40000	1.30	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..80M$_2$-4 AM80 AD3
2.20	2930	652	40000	1.45		
2.80	2250	504	40000	1.90		
3.30	1940	437	40000	2.20		
3.80	1720	382	40000	2.50		
4.70	1390	305	40000	3.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
5.60	1170	258	40000	3.70	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..80M_2-4 AM80 AD3
6.20	1050	232	40000	4.10		
7.20	890	199	40000	4.80		
2.00	3270	726	26500	0.80	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..80M_2-4 AM80 AD2
2.20	2890	638	27000	0.95	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..80M_2-4 AM80 AD3
2.60	2530	562	27500	1.05		
3.00	2130	474	27900	1.25		
3.40	1910	426	28100	1.40		
3.80	1680	373	28300	1.60		
4.40	1470	330	28500	1.85		
4.90	1310	294	28600	2.0	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..80M_2-4 AM80 AD3
5.70	1130	250	28700	2.4		
6.10	1070	236	28700	2.5		
7.10	910	201	28800	3.0		
3.90	1670	367	14400	0.95	MK 77 MRF37 MKF 77 MRF37 MKA 77 MRF37 MKAF 77 MRF37	Y..80M_2-4 AM80 AD2
4.40	1490	328	15800	1.05		
5.00	1320	290	16800	1.15		
5.70	1140	252	17700	1.35		
6.50	1000	221	18300	1.55		
5.40	1320	174.19	28600	2.00	MK 87 MKF 87 MKA 87 MKAF 87	Y..90S-6 AM90 AD2
5.70	1250	164.34	28600	2.20		
6.40	1120	147.32	28700	2.40		
7.40	960	126.91	28800	2.80		
7.30	980	197.37	28800	2.70	MK 87 MKF 87 MKA 87 MKAF 87	Y..80M_2-4 AM80 AD2
8.20	860	174.19	28800	3.10		
8.70	820	164.34	28900	3.30		
9.70	735	147.32	28900	3.70		
7.00	1030	135.28	18200	1.50	MK 77 MKF 77 MKA 77 MKAF 77	Y..90S-6 AM90 AD2
7.30	970	128.52	18400	1.60		
8.30	860	113.56	18800	1.80		
9.70	735	97.05	19200	2.10		
11.0	675	88.97	19300	2.30		
9.30	765	154.02	19100	2.00	MK 77 MKF 77 MKA 77 MKAF 77	Y..80M_2-4 AM80 AD2
11.0	675	135.28	19300	2.30		
11.0	640	128.52	19400	2.40		
13.0	565	113.56	19600	2.70		
15.0	480	97.05	19700	3.20		
12.0	615	123.54	11800	1.35	MK 67 MKF 67 MKA 67 MKAF 67	Y..80M_2-4 AM80 AD2
13.0	535	108.03	12200	1.50		
16.0	445	90.04	12600	1.80		
19.0	380	76.37	12900	2.20		
21.0	340	68.95	13000	2.40		
24.0	300	60.66	13000	2.70		
25.0	285	57.28	13000	2.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
12.0	615	123.85	7480	0.95	MK 57 MKF 57 MKA 57 MKAF 57	Y..80M_2-4 AM80 AD2
13.0	540	108.29	8110	1.10		
14.0	510	102.88	8320	1.15		
16.0	450	90.26	8660	1.35		
19.0	380	76.56	8960	1.55		
21.0	345	69.12	9110	1.75		
24.0	300	60.81	9270	2.00		
25.0	285	57.42	9340	2.10		
29.0	240	48.89	9490	2.50		
32.0	220	44.43	9560	2.70		
19.0	375	75.20	6260	1.05	MK 47 MKF 47 MKA 47 MKAF 47	Y..80M_2-4 AM80 AD2
21.0	345	69.84	6570	1.15		
23.0	315	63.30	6910	1.25		
25.0	280	56.83	7200	1.40		
29.0	240	48.95	7500	1.65		
31.0	225	46.03	7600	1.75		
36.0	198	39.61	7780	2.00		
41.0	177	35.39	7700	2.30		
46.0	156	31.3	7490	2.60		
32.0	220	44.46	4170	0.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M_2-4 AM80 AD1
38.0	190	37.97	4140	1.05		
40.0	178	35.57	4130	1.15		
48.0	150	29.96	4060	1.35	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M_2-4 AM80 AD2
50.0	144	28.83	4040	1.40		
57.0	125	24.99	3970	1.60		
61.0	117	23.36	3930	1.65		
71.0	101	20.19	3840	1.85		
84.0	86	17.15	3720	2.10		
94.0	76	15.31	3640	2.30		
110	65	13.08	3520	2.50		
118	61	12.14	3460	2.60		
137	52	10.49	3350	3.00		
161	44	8.91	3220	3.60		
180	40	7.96	3130	3.90		
211	34	6.8	3000	4.40	MK 37 MKF 37 MKA 37 MKAF 37	Y..80M_2-4 AM80 AD2
225	32	6.37	2950	4.60		
268	27	5.36	2810	5.20		
361	20	3.98	2590	6.30		
P_1=1.1kw						
0.15	58700	9363	190000	0.85	MK 187 MRF97 MKH 187 MRF97	Y..90S-4 AM90 AD3
0.17	50200	8126	190000	1.00		
0.19	47600	7343	190000	1.05		
0.21	43500	6747	190000	1.15		
0.24	38300	5991	190000	1.30		
0.27	33900	5358	190000	1.45	MK 187 MRF97 MKH 187 MRF97	Y..90S-4 AM90 AD4
0.29	30200	4817	190000	1.65		
0.32	27400	4370	190000	1.80		
0.27	34200	5355	150000	0.95	MK 167 MRF97 MKH 167 MRF97	Y..90S-4 AM90 AD3
0.30	30300	4788	150000	1.05		
0.35	26300	4079	150000	1.20		
0.42	21900	3376	150000	1.45		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.1kw						
0.52	17600	2755	150000	1.80	MK 167 MRF97 MKH 167 MRF97	Y..90S-4 AM90 AD3
0.65	14300	2182	150000	2.20	MK 167 MRF97 MKH 167 MRF97	Y..90S-4 AM90 AD4
1.00	9240	1408	150000	3.50		
0.83	11100	1704	150000	2.90	MK 167 MRF97 MKH 167 MRF97	Y..90S-4 AM90 AD5
1.10	8460	1296	150000	3.80		
0.40	22200	3516	109700	0.80	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..90S-4 AM90 AD3
0.47	19800	3051	111200	0.90		
0.54	16300	2610	113000	1.10	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..90S-4 AM90 AD4
0.61	14500	2322	113700	1.25		
0.86	10800	1659	115000	1.65		
1.00	8840	1365	115600	2.00	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..90S-4 AM90 AD5
1.20	7880	1229	115800	2.30		
1.30	7010	1093	116000	2.60		
1.50	6040	942	116200	3.00		
1.70	5420	854	116300	3.30		
0.74	12900	1926	79200	1.00	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..90S-4 AM90 AD3
0.81	11800	1757	79800	1.10		
0.92	10300	1541	80500	1.25		
1.10	9030	1342	81100	1.45		
1.20	7900	1177	81500	1.65		
1.40	6900	1025	81800	1.90		
1.60	6030	899	82000	2.20		
1.80	5190	790	82300	2.50		
2.00	4700	704	82400	2.80	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..90S-4 AM90 AD4
2.30	4040	610	82500	3.20		
2.60	3650	549	82600	3.60		
3.00	3140	477	82600	4.10		
1.20	7870	1166	65000	1.00	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..90S-4 AM90 AD3
1.40	6860	1030	65000	1.15		
1.60	5990	904	65000	1.35		
1.80	5340	793	65000	1.50		
2.00	4670	696	65000	1.70		
2.30	4080	615	65000	1.95		
2.70	3460	522	65000	2.30		
3.10	3040	461	65000	2.60		
3.50	2680	408	65000	3.00		
3.90	2420	364	65000	3.30	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..90S-4 AM90 AD4
4.50	2120	318	65000	3.80		
2.50	3920	573	40000	1.10	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..90S-4 AM90 AD2

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.1kw						
1.90	4990	743	39900	0.85	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..90S-4 AM90 AD3
2.20	4390	652	40000	1.00		
2.80	3380	504	40000	1.25		
3.20	2920	437	40000	1.45		
3.70	2580	382	40000	1.65	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..90S-4 AM90 AD3
4.20	2280	342	40000	1.90		
3.00	3200	474	26600	0.85	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..90S-4 AM90 AD3
3.30	2870	426	27100	0.95		
3.80	2530	373	27500	1.05		
4.30	2210	330	27800	1.20		
4.80	1980	294	28100	1.35	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..90S-4 AM90 AD3
5.70	1700	250	28300	1.60		
6.00	1610	236	28400	1.70		
7.10	1360	201	28600	1.95		
5.30	1960	176.05	40000	2.20	MK 97 MKF 97 MKA 97 MKAF 97	Y..90L-6 AM90 AD3
6.10	1710	153.21	40000	2.50		
6.70	1560	140.28	40000	2.70		
7.60	1380	123.93	40000	3.10		
8.10	1300	176.05	40000	3.30	MK 97 MKF 97 MKA 97 MKAF 97	Y..90S-4 AM90 AD3
9.30	1130	153.21	40000	3.80		
10.0	1030	140.28	40000	4.10		
6.40	1640	147.32	28400	1.65	MK 87 MKF 87 MKA 87 MKAF 87	Y..90L-6 AM90 AD2
7.40	1410	126.91	28500	1.90		
8.20	1280	174.19	28600	2.10	MK 87 MKF 87 MKA 87 MKAF 87	Y..90S-4 AM90 AD2
8.60	1210	164.34	28700	2.20		
9.60	1080	147.32	28700	2.50		
11.0	930	126.91	28800	2.90		
12.0	850	115.82	28900	3.20		
8.30	1260	113.56	17100	1.20	MK 77 MKF 77 MKA 77 MKAF 77	Y..90L-6 AM90 AD2
9.70	1080	97.05	18000	1.45		
10.0	1000	135.28	18300	1.55	MK 77 MKF 77 MKA 77 MKAF 77	Y..90S-4 AM90 AD2
11.0	950	128.52	18500	1.65		
12.0	840	113.56	18900	1.85		
15.0	715	97.05	19200	2.20		
16.0	655	88.97	19400	2.40		
18.0	575	78.07	19500	2.70		
19.0	545	73.99	19600	2.80		
13.0	795	108.03	10500	1.05	MK 67 MKF 67 MKA 67 MKAF 67	Y..90S-4 AM90 AD2
14.0	755	102.62	10800	1.10		
16.0	665	90.04	11500	1.25		
19.0	560	76.37	12100	1.45		
21.0	510	68.95	12400	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.1kw						
23.0	445	60.66	12600	1.85	MK 67 MKF 67 MKA 67 MKAF 67	Y..90S-4 AM90 AD2
25.0	420	57.28	12700	1.95		
29.0	360	48.77	12900	2.30		
32.0	325	44.32	13000	2.50		
37.0	280	38.39	13000	2.80		
16.0	665	90.26	4300	0.90	MK 57 MKF 57 MKA 57 MKAF 57	Y..90S-4 AM90 AD2
19.0	565	76.56	7900	1.05		
21.0	510	69.12	8330	1.15		
23.0	445	60.81	8660	1.35		
25.0	420	57.42	8770	1.40		
29.0	360	48.89	9040	1.65		
32.0	325	44.43	9180	1.85		
37.0	280	38.49	9340	2.10		
40.0	260	35.7	9420	2.30		
47.0	220	30.28	9550	2.70		
52.0	200	27.34	9480	3.00		
59.0	178	24.05	9190	3.40		
63.0	168	22.71	9060	3.60		
73.0	143	19.34	8690	4.00		
81.0	130	17.57	8470	4.30		
93.0	113	15.22	8150	4.80	MK 57 MKF 57 MKA 57 MKAF 57	Y..90S-4 AM90 AD3
107	98	13.25	7850	5.20		
119	88	11.92	7540	4.70		
126	83	11.26	7420	5.00		
148	71	9.59	7090	5.70		
163	64	8.71	6900	6.10		
188	56	7.55	6620	6.50		
216	49	6.57	6360	7.10		
303	35	4.69	5750	8.60		
25.0	420	56.83	4240	0.95	MK 47 MKF 47 MKA 47 MKAF 47	Y..90S-4 AM90 AD2
29.0	360	48.95	6420	1.10		
31.0	340	46.03	6660	1.15		
36.0	290	39.61	7120	1.35		
40.0	260	35.39	7080	1.55		
45.0	230	31.3	6940	1.75		
48.0	215	29.32	6870	1.85		
55.0	192	25.91	6720	2.10		
65.0	161	21.81	6490	2.50		
73.0	145	19.58	6340	2.80		
47.0	220	29.96	3430	0.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..90S-4 AM90 AD2
57.0	185	24.99	3440	1.10		
61.0	173	23.36	3440	1.15		
70.0	149	20.19	3410	1.25		
83.0	127	17.15	3360	1.40		
93.0	113	15.31	3320	1.55		
109	97	13.08	3250	1.70		
117	90	12.14	3210	1.80	MK 37 MKF 37 MKA 37 MKAF 37	Y..90S-4 AM90 AD2
135	78	10.49	3130	2.10		
159	66	8.91	3040	2.40		
178	59	7.96	2960	2.60		
209	50	6.8	2860	3.00		
223	47	6.37	2820	3.10		
265	40	5.36	2710	3.50		
357	29	3.98	2510	4.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.5kw						
0.21	59800	6747	190000	0.85	MK 187 MRF97 MKH 187 MRF97	Y..90L-4 AM90 AD3
0.24	52800	5991	190000	0.95		
0.27	46900	5358	190000	1.05	MK 187 MRF97 MKH 187 MRF97	Y..90L-4 AM90 AD4
0.30	41800	4817	190000	1.20		
0.33	37900	4370	190000	1.30		
0.40	32500	3609	190000	1.55		
0.47	27500	3062	190000	1.80		
0.57	22400	2519	190000	2.20	MK 187 MRF97 MKH 187 MRF97	Y..90L-4 AM90 AD5
0.63	20000	2268	190000	2.50		
0.35	36100	4079	150000	0.90	MK 167 MRF97 MKH 167 MRF97	Y..90L-4 AM90 AD3
0.42	30000	3376	150000	1.05		
0.52	24200	2755	150000	1.30		
0.66	19600	2182	150000	1.60	MK 167 MRF97 MKH 167 MRF97	Y..90L-4 AM90 AD4
1.00	12600	1408	150000	2.50		
0.84	15300	1704	150000	2.10	MK 167 MRF97 MKH 167 MRF97	Y..90L-4 AM90 AD5
1.10	11600	1296	150000	2.80		
0.62	20100	2322	111000	0.90	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..90L-4 AM90 AD4
0.86	14900	1659	113600	1.20		
1.00	12100	1365	114600	1.50	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..90L-4 AM90 AD5
1.20	10800	1229	115000	1.65		
1.30	9680	1093	115400	1.85		
1.50	8350	942	115700	2.20		
1.70	7500	854	115900	2.40		
2.50	4930	567	116300	3.60		
2.80	4380	504	116400	4.10		
2.70	4750	536	82400	2.70	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..90L-4 AM90 AD4
3.40	3740	418	82500	3.50		
3.90	3290	367	82600	3.90	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..90L-4 AM90 AD5
0.81	16100	1757	73600	0.80	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..90L-4 AM90 AD3
0.93	14100	1541	77700	0.90		
1.10	12300	1342	79600	1.05		
1.20	10700	1177	80300	1.20		
1.40	9410	1025	80900	1.40		
1.60	8230	899	81400	1.60		
1.80	7130	790	81700	1.80		
2.00	6420	704	81900	2.00	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..90L-4 AM90 AD4
2.30	5540	610	82200	2.40		
2.60	5000	549	82300	2.60		
3.00	4300	477	82400	3.00		
3.40	3810	418	82500	3.40		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.5kw						
1.40	9380	1030	65000	0.85	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107MRF77	Y..90L-4 AM90 AD3
1.60	8200	904	65000	1.00		
1.80	7280	793	65000	1.10		
2.10	6370	696	65000	1.25		
2.30	5580	615	65000	1.45		
2.70	4730	522	65000	1.70		
3.10	4160	461	65000	1.90		
3.50	3680	408	65000	2.20		
3.90	3310	364	65000	2.40	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107MRF77	Y..90L-4 AM90 AD4
4.50	2900	318	65000	2.80		
2.50	5340	573	39500	0.80	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..90L-4 AM90 AD2
2.80	4610	504	40000	0.95	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..90L-4 AM90 AD3
3.30	3980	437	40000	1.10		
3.70	3510	382	40000	1.20		
4.20	3110	342	40000	1.40		
4.70	2830	305	40000	1.50		
5.60	2390	258	40000	1.80		
6.20	2150	232	40000	2.00		
7.20	1840	199	40000	2.30		
4.30	3020	330	26900	0.90	MK 87 MRF57 MKF 87 MRF57 MKA 87 MRF57 MKAF 87 MRF57	Y..90L-4 AM90 AD3
4.90	2700	294	27300	1.00		
5.70	2320	250	27700	1.15		
6.00	2190	236	27900	1.25		
7.10	1860	201	28200	1.45		
7.80	1690	183	28300	1.60		
5.30	2680	176.05	40000	1.60	MK 97 MKF 97 MKA 97 MKAF 97	Y..100L-6 AM100 AD3
6.10	2330	153.21	40000	1.85		
6.70	2130	140.28	40000	2.00		
7.60	1880	123.93	40000	2.30		
8.10	1760	176.05	40000	2.40	MK 97 MKF 97 MKA 97 MKAF 97	Y..90L-4 AM90 AD3
9.30	1530	153.21	40000	2.80		
10.0	1400	140.28	40000	3.10		
12.0	1240	123.93	40000	3.50		
6.40	2240	147.32	27800	1.20	MK 87 MKF 87 MKA 87 MKAF 87	Y..100L-6 AM100 AD2
7.40	1930	126.91	28100	1.40		
8.10	1760	115.82	28300	1.55		
9.20	1560	102.71	28400	1.75		
8.20	1740	174.19	28300	1.55	MK 87 MKF 87 MKA 87 MKAF 87	Y..90L-4 AM90 AD2
8.70	1640	164.34	28400	1.65		
9.70	1470	147.32	28500	1.85		
11.0	1270	126.91	28600	2.10		
12.0	1160	115.82	28700	2.30		
14.0	1020	102.71	28800	2.60		
17.0	860	86.34	28900	3.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.5kw						
8.30	1730	113.56	14000	0.90	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L-6 AM100 AD2
9.70	1470	97.05	15900	1.05		
11.0	1350	88.97	16600	1.15		
12.0	1180	78.07	17500	1.30		
11.0	1350	135.28	16600	1.15	MK 77 MKF 77 MKA 77 MKAF 77	Y..90L-4 AM90 AD2
11.0	1280	128.52	17000	1.20		
13.0	1130	113.56	17700	1.35		
15.0	970	97.05	18400	1.60		
16.0	890	88.97	18700	1.75		
18.0	780	78.07	19000	2.00		
19.0	740	73.99	19200	2.10		
22.0	645	64.75	19400	2.40		
25.0	580	58.34	19500	2.60		
28.0	510	51.18	19700	3.00		
32.0	450	45.16	19800	3.40		
36.0	400	40.04	19900	3.90	MK 77 MKF 77 MKA 77 MKAF 77	Y..90L-4 AM90 AD3
16.0	900	90.04	9500	0.90	MK 67 MKF 67 MKA 67 MKAF 67	Y..90L-4 AM90 AD2
19.0	765	76.37	10800	1.05		
21.0	690	68.95	11300	1.20		
24.0	605	60.66	11900	1.35		
25.0	570	57.28	12000	1.45		
29.0	485	48.77	12500	1.70		
32.0	440	44.32	12600	1.85		
37.0	380	38.39	12900	2.10		
40.0	355	35.62	13000	2.30		
47.0	300	30.22	13000	2.70	MK 67 MKF 67 MKA 67 MKAF 67	Y..90L-4 AM90 AD3
52.0	270	27.28	13000	3.00		
60.0	240	24	13000	3.30		
24.0	605	60.81	7560	1.00	MK 57 MKF 57 MKA 57 MKAF 57	Y..90L-4 AM90 AD2
25.0	575	57.42	7830	1.05		
29.0	485	48.89	8470	1.25		
32.0	445	44.43	8680	1.35		
37.0	385	38.49	8940	1.55		
40.0	355	35.7	9060	1.70		
47.0	300	30.28	9170	2.00		
52.0	270	27.34	8990	2.20		
59.0	240	24.05	8750	2.50		
63.0	225	22.71	8640	2.60		
74.0	194	19.34	8340	3.00		
36.0	395	39.61	5970	1.00	MK 47 MKF 47 MKA 47 MKAF 47	Y..90L-4 AM90 AD2
40.0	350	35.39	6350	1.15		
46.0	310	31.3	6300	1.30		
49.0	290	29.32	6260	1.35		
55.0	255	25.91	6180	1.55		
66.0	215	21.81	6040	1.85		
73.0	196	19.58	5940	2.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.5kw						
85.0	169	16.86	5780	2.20	MK 47 MKF 47 MKA 47 MKAF 47	Y..90L-4 AM90 AD2
90.0	159	15.86	5720	2.40		
105	137	13.65	5550	2.60		
117	122	12.19	5420	2.90		
122	118	11.77	5320	2.40		
61.0	230	23.36	2870	0.85	MK 37 MKF 37 MKA 37 MKAF 37	Y..90L-4 AM90 AD2
71.0	200	20.19	2920	0.90		
83.0	172	17.15	2940	1.05		
93.0	153	15.31	2940	1.15		
109	131	13.08	2930	1.25		
118	122	12.14	2920	1.30		
136	105	10.49	2880	1.50		
160	89	8.91	2820	1.80		
180	80	7.96	2770	1.95		
210	68	6.8	2700	2.20		
225	64	6.37	2660	2.30		
267	54	5.36	2570	2.60		
359	40	3.98	2410	3.10		
P_1=2.2kw						
0.33	57000	4370	190000	0.90	MK 187 MRF97 MKH 187 MRF97	Y..100L_1-4 AM100 AD4
0.51	35900	2818	190000	1.40		
0.39	48400	3609	190000	1.05		
0.47	41100	3062	190000	1.20		
0.57	33500	2519	190000	1.50	MK 187 MRF97 MKH 187 MRF97	Y..100L_1-4 AM100 AD5
0.63	30100	2268	190000	1.65		
0.69	27100	2054	190000	1.85		
0.78	23800	1821	190000	2.10		
0.89	21200	1605	190000	2.40		
0.52	36200	2755	150000	0.90	MK 167 MRF97 MKH 167 MRF97	Y..100L_1-4 AM100 AD3
0.63	29100	2263	150000	1.10	MK 167 MRF97 MKH 167 MRF97	Y..100L_1-4 AM100 AD4
0.65	29300	2182	150000	1.10		
1.00	18800	1408	150000	1.70		
0.84	22800	1704	150000	1.40	MK 167 MRF97 MKH 167 MRF97	Y..100L_1-4 AM100 AD5
1.10	17300	1296	150000	1.85		
1.30	14400	1101	150000	2.20		
1.50	12400	944	150000	2.60	MK 167 MRF97 MKH 167 MRF97	Y..100L_1-4 AM100 AD5
0.86	22200	1659	109700	0.80	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..100L_1-4 AM100 AD4
1.00	18200	1365	112100	1.00	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..100L_1-4 AM100 AD5
1.20	16300	1229	113000	1.10		
1.30	14500	1093	113800	1.25		
1.50	12500	942	114500	1.45		
1.70	11200	854	114900	1.60		
1.90	9760	756	115400	1.85		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.2kw						
2.70	7110	536	81700	1.85	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..100L_1-4 AM100 AD4
3.00	6220	473	82000	2.10		
3.40	5610	418	82200	2.30		
3.90	4910	367	82300	2.60	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..100L_1-4 AM100 AD5
4.30	4400	330	82400	3.00		
1.40	13900	1025	78100	0.95	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..100L_1-4 AM100 AD3
1.60	12200	899	79600	1.05		
1.80	10600	790	80400	1.20		
2.00	9530	704	80900	1.35	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..100L_1-4 AM100 AD4
2.30	8230	610	81400	1.60		
2.60	7420	549	81600	1.75		
3.00	6410	477	81900	2.00		
3.40	5650	418	82100	2.30		
2.30	8300	615	65000	0.95	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..100L_1-4 AM100 AD3
2.70	7040	522	65000	1.15		
3.10	6190	461	65000	1.30		
3.50	5480	408	65000	1.45		
3.90	4920	364	65000	1.60	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107 MRF77	Y..100L_1-4 AM100 AD4
4.50	4300	318	65000	1.85		
5.00	3870	286	65000	2.10		
5.70	3390	251	65000	2.40		
3.70	5200	382	39700	0.85	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..100L_1-4 AM100 AD3
4.20	4620	342	40000	0.95		
4.70	4190	305	40000	1.00		
5.50	3540	258	40000	1.20		
6.10	3180	232	40000	1.35		
7.20	2730	199	40000	1.55		
6.20	3370	153.21	40000	1.30	MK 97 MKF 97 MKA 97 MKAF 97	Y..112M-6 AM112 AD3
6.80	3080	140.28	40000	1.40		
7.70	2720	123.93	40000	1.60		
9.10	2310	105.13	40000	1.85		
8.10	2590	176.05	40000	1.65	MK 97 MKF 97 MKA 97 MKAF 97	Y..100L_1-4 AM100 AD3
9.30	2250	153.21	40000	1.90		
10.0	2060	140.28	40000	2.10		
12.0	1820	123.93	40000	2.40		
14.0	1540	105.13	40000	2.80		
15.0	1420	96.8	40000	3.00		
9.70	2170	147.32	27900	1.25	MK 87 MKF 87 MKA 87 MKAF 87	Y..100L_1-4 AM100 AD2
11.0	1870	126.91	28200	1.45		
12.0	1700	115.82	28300	1.60		
14.0	1510	102.71	28500	1.80	MK 87 MKF 87 MKA 87 MKAF 87	Y..100L_1-4 AM100 AD2
16.0	1270	86.34	28600	2.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.2kw						
18.0	1160	79.34	28700	2.30	MK 87 MKF 87 MKA 87 MKAF 87	Y..100L_1-4 AM100 AD3
20.0	1030	70.46	28800	2.60		
23.0	920	63.00	28800	2.90		
13.0	1670	113.56	14400	0.95	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L_1-4 AM100 AD2
15.0	1430	97.05	16200	1.10		
16.0	1310	88.97	16900	1.20		
18.0	1150	78.07	17700	1.35		
19.0	1090	73.99	17900	1.40		
22.0	950	64.75	18500	1.60		
24.0	860	58.34	18800	1.80		
28.0	750	51.18	19100	2.00	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L_1-4 AM100 AD2
32.0	665	45.16	19300	2.30		
13.0	1670	113.56	14400	0.95	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L_1-4 AM100 AD2
15.0	1430	97.05	16200	1.10		
16.0	1310	88.97	16900	1.20		
18.0	1150	78.07	17700	1.35		
19.0	1090	73.99	17900	1.40		
22.0	950	64.75	18500	1.60		
24.0	860	58.34	18800	1.80		
28.0	750	51.18	19100	2.00		
32.0	665	45.16	19300	2.30		
36.0	590	40.04	19500	2.60	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L_1-4 AM100 AD3
40.0	515	35.2	19700	3.00		
46.0	455	30.89	19800	3.40		
49.0	430	29.27	19800	3.60	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L_1-4 AM100 AD4
56.0	375	25.62	19900	4.10		
23.0	890	60.66	9590	0.90	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L_1-4 AM100 AD2
25.0	840	57.28	10100	0.95		
29.0	715	48.77	11100	1.15		
32.0	650	44.32	11600	1.25		
37.0	565	38.39	12100	1.40		
40.0	525	35.62	12300	1.55		
47.0	445	30.22	12600	1.85	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L_1-4 AM100 AD3
52.0	400	27.28	12800	2.00		
59.0	350	24	13000	2.30		
63.0	330	22.66	13000	2.30		
74.0	280	19.3	13000	2.70		
81.0	255	17.54	13000	2.90		
94.0	220	15.19	13000	3.10		
108	195	13.22	13000	3.40		
114	184	12.48	13000	2.90		
134	157	10.63	13000	3.20		
148	142	9.66	13000	3.40	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L_1-4 AM100 AD3

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.2kw						
170	123	8.37	13000	3.60	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L_1-4 AM100 AD3
196	107	7.28	12700	3.90	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L_1-4 AM100 AD3
274	77	5.2	11600	4.60		
32.0	655	44.43	5920	0.90	MK 57 MKF 57 MKA 57 MKAF 57	Y..100L_1-4 AM100 AD2
37.0	565	38.49	7900	1.05		
40.0	525	35.7	8220	1.15		
47.0	445	30.28	8240	1.35		
52.0	400	27.34	8150	1.50		
59.0	350	24.05	8020	1.70		
63.0	330	22.71	7950	1.80		
74.0	285	19.34	7750	2.00		
81.0	255	17.57	7620	2.10		
94.0	220	15.22	7410	2.40	MK 57 MKF 57 MKA 57 MKAF 57	Y..100L_1-4 AM100 AD3
108	195	13.25	7200	2.60		
120	176	11.92	6880	2.40		
127	166	11.26	6800	2.50		
55.0	380	25.91	5260	1.05	MK 47 MKF 47 MKA 47 MKAF 47	Y..100L_1-4 AM100 AD2
65.0	320	21.81	5260	1.25		
73.0	285	19.58	5240	1.40		
84.0	245	16.86	5180	1.55		
90.0	230	15.86	5150	1.65		
104	200	13.65	5060	1.80		
117	180	12.19	4980	1.95		
121	174	11.77	4880	1.60		
135	156	10.56	4800	1.80		
157	134	9.1	4680	2.10		
109	193	13.08	2370	0.85	MK 37 MKF 37 MKA 37 MKAF 37	Y..100L_1-4 AM100 AD2
136	155	10.49	2430	1.05		
160	131	8.91	2440	1.20		
179	117	7.96	2430	1.30		
210	100	6.8	2410	1.50		
224	94	6.37	2390	1.55		
266	79	5.36	2350	1.75		
358	59	3.98	2240	2.10		
P_1=3.0kw						
0.52	48700	2818	190000	1.05	MK 187 MRF97 MKH 187 MRF97	Y..100L_2-4 AM100 AD4
0.48	55200	3062	190000	0.90		
0.58	45200	2519	190000	1.10	MK 187 MRF97 MKH 187 MRF97	Y..100L_2-4 AM100 AD5
0.64	40500	2268	190000	1.25		
0.71	36600	2054	190000	1.35		
0.80	32200	1821	190000	1.55		
0.91	28600	1605	190000	1.75	MK 187 MRF97 MKH 187 MRF97	Y..100L_2-4 AM100 AD5
1.00	24400	1395	190000	2.00		
1.20	21200	1196	190000	2.40		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.0kw						
1.00	25300	1408	150000	1.25	MK 167 MRF97 MKH 167 MRF97	Y..100L$_2$-4 AM100 AD4
0.85	30600	1704	150000	1.05	MK 167 MRF97 MKH 167 MRF97	Y..100L$_2$-4 AM100 AD5
1.10	23300	1296	150000	1.35		
1.30	19500	1101	150000	1.65		
1.50	16800	944	150000	1.90		
1.70	14700	843	150000	2.20		
1.90	13300	757	150000	2.40		
1.20	21900	1229	109900	0.80	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..100L$_2$-4 AM100 AD5
1.30	19500	1093	111400	0.90		
1.50	16800	942	112700	1.05		
1.70	15200	854	113500	1.20		
1.90	13200	756	114300	1.35		
2.60	10000	567	115300	1.80		
2.90	8930	504	115600	2.00		
2.70	9580	536	80900	1.35	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..100L$_2$-4 AM100 AD4
3.10	8410	473	81300	1.55		
3.50	7560	418	81600	1.70		
4.00	6610	367	81900	1.95	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..100L$_2$-4 AM100 AD5
4.40	5930	330	82100	2.20		
5.10	5090	287	82300	2.60		
1.80	14200	790	77400	0.90	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..100L$_2$-4 AM100 AD3
2.10	12700	704	79300	1.00	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127 MRF77	Y..100L$_2$-4 AM100 AD4
2.40	11000	610	80200	1.20		
2.60	9960	549	80700	1.30		
3.00	8620	477	81200	1.50		
3.50	7590	418	81600	1.70		
3.20	8320	461	65000	0.95	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107MRF77	Y..100L$_2$-4 AM100 AD3
3.60	7360	408	65000	1.10		
4.00	6600	364	65000	1.20	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107MRF77	Y..100L$_2$-4 AM100 AD4
4.60	5770	318	65000	1.40		
5.10	5190	286	65000	1.55		
5.80	4550	251	65000	1.75		
6.60	4000	222	65000	2.00		
7.40	3540	196	65000	2.20		
8.40	3170	174	65000	2.30		
9.40	2800	154	65000	2.60		
10.0	2540	140	65000	2.80		
5.60	4740	258	40000	0.90	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..100L$_2$-4 AM100 AD3
6.30	4270	232	40000	1.00		
7.30	3660	199	40000	1.15		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.0kw						
6.70	4300	143.47	65000	1.85	MK 107 MKF 107 MKA 107 MKAF107	Y..132S-6 AM132 AD4
7.90	3640	121.46	65000	2.20		
8.50	3370	112.41	65000	2.40		
9.50	3020	100.75	65000	2.60		
10.0	2820	143.47	65000	2.80	MK 107 MKF 107 MKA 107 MKAF107	Y..100L$_2$-4 AM100 AD4
12.0	2390	121.46	65000	3.40		
7.70	3710	123.93	40000	1.15	MK 97 MKF 97 MKA 97 MKAF 97	Y..132S-6 AM132 AD3
9.10	3150	105.13	40000	1.35		
9.90	2900	96.8	40000	1.50		
11.0	2590	86.52	40000	1.65		
8.30	3460	176.05	40000	1.25	MK 97 MKF 97 MKA 97 MKAF 97	Y..100L$_2$-4 AM100 AD3
9.50	3010	153.21	40000	1.45		
10.0	2760	140.28	40000	1.55		
12.0	2440	123.93	40000	1.75		
14.0	2070	105.13	40000	2.10		
15.0	1900	96.8	40000	2.30		
17.0	1700	86.52	40000	2.50		
19.0	1530	77.89	40000	2.80		
21.0	1380	70.54	40000	3.10		
23.0	1230	62.55	40000	3.50	MK 97 MKF 97 MKA 97 MKAF 97	Y..100L$_2$-4 AM100 AD4
26.0	1110	56.55	40000	3.90		
9.90	2900	147.32	27000	0.95	MK 87 MKF 87 MKA 87 MKAF 87	Y..100L$_2$-4 AM100 AD2
11.0	2490	126.91	27500	1.10		
13.0	2280	115.82	27800	1.20		
14.0	2020	102.71	28000	1.35		
17.0	1690	86.34	28300	1.60		
18.0	1560	79.34	28400	1.75	MK 87 MKF 87 MKA 87 MKAF 87	Y..100L$_2$-4 AM100 AD3
21.0	1380	70.46	28600	1.95		
23.0	1240	63.00	28600	2.20		
26.0	1110	56.64	28700	2.40		
30.0	960	49.16	28800	2.80		
33.0	860	44.02	28800	3.00		
40.0	715	36.52	28200	3.50		
16.0	1750	88.97	13800	0.90	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L$_2$-4 AM100 AD2
19.0	1530	78.07	15500	1.00		
20.0	1450	73.99	16000	1.05		
22.0	1270	64.75	17100	1.20		
25.0	1140	58.34	17700	1.35		
28.0	1000	51.18	18300	1.55		
32.0	880	45.16	18700	1.75	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L$_2$-4 AM100 AD2
36.0	785	40.04	19000	1.95	MK 77 MKF 77 MKA 77 MKAF 77	Y..100L$_2$-4 AM100 AD3
41.0	690	35.2	19300	2.20		
47.0	605	30.89	19500	2.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.0kw						
33.0	870	44.32	9810	0.95	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L$_2$-4 AM100 AD2
38.0	755	38.39	10800	1.05		
41.0	700	35.62	11300	1.15		
48.0	590	30.22	11900	1.40	MK 67 MKF 67 MKA 67 MKAF 67	Y..100L$_2$-4 AM100 AD3
53.0	535	27.28	12200	1.55		
61.0	470	24	12500	1.70		
64.0	445	22.66	12600	1.75		
75.0	375	19.3	12900	2.00		
83.0	345	17.54	13000	2.10		
96.0	295	15.19	13000	2.30		
110	260	13.22	13000	2.60		
117	245	12.48	13000	2.20		
137	205	10.63	13000	2.40		
151	190	9.66	13000	2.50		
48.0	595	30.28	7190	1.00	MK 57 MKF 57 MKA 57 MKAF 57	Y..100L$_2$-4 AM100 AD2
53.0	535	27.34	7190	1.10		
60.0	470	24.05	7170	1.25		
64.0	445	22.71	7150	1.35		
75.0	380	19.34	7060	1.50		
83.0	345	17.57	6980	1.60		
96.0	295	15.22	6860	1.80	MK 57 MKF 57 MKA 57 MKAF 57	Y..100L$_2$-4 AM100 AD3
110	260	13.25	6710	1.95		
122	230	11.92	6380	1.75		
129	220	11.26	6330	1.85		
152	189	9.59	6160	2.20		
167	172	8.71	6050	2.30		
193	149	7.55	5870	2.50	MK 57 MKF 57 MKA 57 MKAF 57	Y..100L$_2$-4 AM100 AD3
222	129	6.57	5700	2.70		
310	92	4.69	5270	3.20		
74.0	385	19.58	4450	1.05	MK 47 MKF 47 MKA 47 MKAF 47	Y..100L$_2$-4 AM100 AD2
86.0	330	16.86	4500	1.15		
92.0	310	15.86	4510	1.2		
107	265	13.65	4500	1.35		
119	240	12.19	4480	1.45		
124	230	11.77	4360	1.20		
138	205	10.56	4340	1.35		
160	179	9.1	4280	1.55		
170	168	8.56	4250	1.60	MK 47 MKF 47 MKA 47 MKAF 47	Y..100L$_2$-4 AM100 AD3
198	145	7.36	4160	1.70		
221	130	6.58	4090	1.85		
250	114	5.81	4000	2.00		
314	91	4.64	3830	2.20		
163	176	8.91	2020	0.90	MK 37 MKF 37 MKA 37 MKAF 37	Y..100L$_2$-4 AM100 AD2
183	157	7.96	2050	1.00		
214	134	6.8	2080	1.10		
229	125	6.37	2090	1.15		
271	106	5.36	2090	1.35		
366	78	3.98	2040	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.0kw						
1.80	19500	835	190000	2.60	MK 187 MRF107 MKH 187 MRF107	Y..112M-4 AM112 AD5
2.80	12200	520	190000	4.10		
0.58	60400	2519	190000	0.85	MK 187 MRF97 MKH 187 MRF97	Y..112M-4 AM112 AD5
0.64	54200	2268	190000	0.90		
0.71	49000	2054	190000	1.00		
0.80	43300	1821	190000	1.15		
0.91	38300	1605	190000	1.30		
1.00	32800	1395	190000	1.50		
1.20	28400	1196	190000	1.75		
1.40	24800	1046	190000	2.00		
1.50	22400	945	190000	2.20		
1.00	33900	1408	150000	0.95	MK 167 MRF97 MKH 167 MRF97	Y..112M-4 AM112 AD4
1.10	31100	1296	150000	1.05	MK 167 MRF97 MKH 167 MRF97	Y..112M-4 AM112 AD5
1.30	26100	1101	150000	1.20		
1.60	22500	944	150000	1.40		
1.70	19800	843	150000	1.60		
1.90	17900	757	150000	1.80		
2.30	15000	632	150000	2.10		
1.70	20300	854	110900	0.90	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..112M-4 AM112 AD5
1.90	17800	756	112300	1.00		
2.60	13400	567	114200	1.35		
2.90	11900	504	114700	1.50		
3.40	10200	434	115200	1.75		
2.70	12800	536	79300	1.00	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..112M-4 AM112 AD4
3.10	11200	473	80100	1.15		
3.50	10100	418	80600	1.30		
4.00	8830	367	81200	1.45	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..112M-4 AM112 AD5
4.40	7930	330	81500	1.65		
5.10	6820	287	81800	1.90		
5.80	6030	253	82100	2.20		
2.40	14700	610	76500	0.90	MK 127 MRF77 MKF 127 MRF77 MKA 127 MRF77 MKAF127MRF77	Y..112M-4 AM112 AD4
2.70	13200	549	79000	1.00		
3.10	11500	477	80000	1.15		
3.50	10100	418	80600	1.30		
4.00	8800	364	65000	0.90	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF107MRF77	Y..112M-4 AM112 AD4
4.60	7690	318	65000	1.05		
5.10	6920	286	65000	1.15		
5.80	6060	251	65000	1.30		
6.60	5340	222	65000	1.50		
7.40	4730	196	65000	1.70		
8.40	4230	174	65000	1.70		
9.50	3740	154	65000	1.90		
10.0	3400	140	65000	2.10		
7.30	4880	199	40000	0.90	MK 97 MRF57 MKF 97 MRF57 MKA 97 MRF57 MKAF 97 MRF57	Y..112M-4 AM112 AD3

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.0kw						
6.60	5810	146.07	82100	2.20	MK 127 MKF 127 MKA 127 MKAF 127	Y..132M$_1$-6 AM132 AD4
7.00	5410	136.14	82200	2.40		
7.80	4870	122.48	82300	2.70		
8.70	4380	110.18	82400	3.00		
6.70	5700	143.47	65000	1.40	MK 107 MKF 107 MKA 107 MKAF 107	Y..132M$_1$-6 AM132 AD4
7.90	4830	121.46	65000	1.65		
8.50	4470	112.41	65000	1.80		
9.50	4000	100.75	65000	2.00		
11.0	3610	90.96	65000	2.20		
10.0	3750	143.47	65000	2.10	MK 107 MKF 107 MKA 107 MKAF 107	Y..112M-4 AM112 AD4
12.0	3170	121.46	65000	2.50		
13.0	2940	112.41	65000	2.70		
14.0	2630	100.75	65000	3.00		
16.0	2370	90.96	65000	3.40		
18.0	2160	82.61	65000	3.70		
20.0	1910	73.3	65000	4.20		
9.50	4000	153.21	40000	1.05	MK 97 MKF 97 MKA 97 MKAF 97	Y..112M-4 AM112 AD3
10.0	3670	140.28	40000	1.15		
12.0	3240	123.93	40000	1.35		
14.0	2750	105.13	40000	1.55		
15.0	2530	96.8	40000	1.70		
17.0	2260	86.52	40000	1.90		
19.0	2030	77.89	40000	2.10		
21.0	1840	70.54	40000	2.30		
13.0	3030	115.82	26800	0.90	MK 87 MKF 87 MKA 87 MKAF 87	Y..112M-4 AM112 AD2
14.0	2680	102.71	27300	1.00		
17.0	2250	86.34	27800	1.20		
18.0	2070	79.34	28000	1.30	MK 87 MKF 87 MKA 87 MKAF 87	Y..112M-4 AM112 AD3
21.0	1840	70.46	28200	1.45		
23.0	1640	63.00	28400	1.65		
26.0	1480	56.64	28500	1.80		
30.0	1280	49.16	28600	2.10		
33.0	1150	44.02	28200	2.30		
40.0	950	36.52	27200	2.60		
23.0	1690	64.75	14300	0.90	MK 77 MKF 77 MKA 77 MKAF 77	Y..112M-4 AM112 AD2
25.0	1520	58.34	15500	1.00		
29.0	1330	51.18	16700	1.15		
32.0	1180	45.16	17500	1.30		
36.0	1040	40.04	18100	1.50	MK 77 MKF 77 MKA 77 MKAF 77	Y..112M-4 AM112 AD3
38.0	1000	38.39	18300	1.50		
41.0	920	35.2	18600	1.70		
47.0	800	30.89	19000	1.90		
50.0	765	29.27	19100	2.00	MK 77 MKF 77 MKA 77 MKAF 77	Y..112M-4 AM112 AD4
57.0	670	25.62	19300	2.30		
63.0	600	23.08	19500	2.60		
72.0	525	20.25	19600	2.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.0kw						
48.0	790	30.22	10600	1.05	MK 67 MKF 67 MKA 67 MKAF 67	Y..112M-4 AM112 AD3
54.0	710	27.28	11200	1.15		
61.0	625	24	11700	1.25		
64.0	590	22.66	11900	1.30		
76.0	500	19.3	12400	1.50		
83.0	455	17.54	12600	1.60		
96.0	395	15.19	12800	1.75		
110	345	13.22	13000	1.95		
117	325	12.48	13000	1.60		
137	275	10.63	13000	1.80		
151	250	9.66	12800	1.90		
175	215	8.37	12400	2.00		
201	190	7.28	12100	2.20		
281	136	5.2	11100	2.60		
61.0	625	24.05	6140	0.95	MK 57 MKF 57 MKA 57 MKAF 57	Y..112M-4 AM112 AD2
64.0	590	22.71	6170	1.00		
76.0	505	19.34	6230	1.15		
83.0	455	17.57	6230	1.20		
96.0	395	15.22	6200	1.35	MK 57 MKF 57 MKA 57 MKAF 57	Y..112M-4 AM112 AD3
110	345	13.25	6140	1.45		
122	310	11.92	5800	1.35		
130	290	11.26	5780	1.40		
152	250	9.59	5690	1.60		
168	225	8.71	5620	1.70		
193	197	7.55	5500	1.85		
222	172	6.57	5380	2.00		
311	123	4.69	5040	2.40		
P_1=5.5kw						
0.80	60200	1821	190000	0.85	MK 187 MRF97 MKH 187 MRF97	Y..132S-4 AM132 AD5
0.91	53200	1605	190000	0.95		
1.00	45800	1395	190000	1.10		
1.20	39500	1196	190000	1.25		
1.40	34500	1046	190000	1.45	MK 187 MRF97 MKH 187 MRF97	Y..132S-4 AM132 AD5
1.50	31100	945	190000	1.60		
2.00	24300	738	190000	2.00		
2.30	20400	621	190000	2.40		
1.30	36300	1101	150000	0.90	MK 167 MRF97 MKH 167 MRF97	Y..132S-4 AM132 AD5
1.50	31200	944	150000	1.00		
1.70	27700	843	150000	1.15		
1.90	24900	757	150000	1.30		
2.30	20800	632	150000	1.55		
2.60	18300	561	150000	1.75		
3.00	15800	481	150000	2.00		
3.40	13800	423	150000	2.30		
2.20	21500	661	110200	0.85	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF 157 MRF97	Y..132S-4 AM132 AD5
2.60	18700	567	111800	0.95		
2.90	16600	504	112800	1.10		
3.40	14200	434	113900	1.25		
3.80	12300	379	114600	1.45		
4.40	10900	333	115000	1.65		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.5kw						
3.50	14000	418	77900	0.95	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF 127 MRF87	Y..132S-4 AM132 AD4
4.00	12200	367	79600	1.05	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF 127 MRF87	Y..132S-4 AM132 AD5
4.40	10900	330	80200	1.20		
5.10	9480	287	80900	1.35		
5.70	8380	253	81300	1.55		
6.80	7040	213	81800	1.85		
7.30	6710	200	81900	1.80		
8.80	5550	166	82200	2.20		
9.90	4900	147	82300	2.40		
6.60	7400	222	65000	1.10	MK 107 MRF77 MKF 107 MRF77 MKA 107 MRF77 MKAF 107 MRF77	Y..132S-4 AM132 AD4
7.40	6550	196	65000	1.20		
8.40	5860	174	65000	1.25		
9.40	5190	154	65000	1.40		
10.0	4710	140	65000	1.55		
7.10	7400	136.14	81700	1.75	MK 127 MKF 127 MKA 127 MKAF 127	Y..132M$_2$-6 AM132 AD4
7.90	6660	122.48	81900	1.95		
8.80	5990	110.18	82100	2.20		
11.0	4890	89.89	82300	2.70	MK 127 MKF 127 MKA 127 MKAF 127	Y..132M$_2$-6 AM132 AD5
8.60	6110	112.41	65000	1.30	MK 107 MKF 107 MKA 107 MKAF 107	Y..132M$_2$-6 AM132 AD4
9.60	5480	100.75	65000	1.45		
11.0	4950	90.96	65000	1.60		
12.0	4490	82.61	65000	1.80		
10.0	5170	143.47	65000	1.55	MK 107 MKF 107 MKA 107 MKAF 107	Y..132S-4 AM132 AD4
12.0	4380	121.46	65000	1.80		
13.0	4050	112.41	65000	1.95		
14.0	3630	100.75	65000	2.20		
16.0	3280	90.96	65000	2.40		
18.0	2980	82.61	65000	2.70		
12.0	4470	123.93	40000	0.95	MK 97 MKF 97 MKA 97 MKAF 97	Y..132S-4 AM132 AD3
14.0	3790	105.13	40000	1.15		
15.0	3490	96.8	40000	1.25		
17.0	3120	86.52	40000	1.40		
19.0	2810	77.89	40000	1.55		
21.0	2540	70.54	40000	1.70		
23.0	2250	62.55	40000	1.90	MK 97 MKF 97 MKA 97 MKAF 97	Y..132S-4 AM132 AD4
26.0	2040	56.55	39600	2.10		
30.0	1730	47.93	38400	2.50		
17.0	3110	86.34	26700	0.85	MK 87 MKF 87 MKA 87 MKAF 87	Y..132S-4 AM132 AD2

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.5kw						
18.0	2860	79.34	27100	0.95	MK 87 MKF 87 MKA 87 MKAF 87	Y..132S-4 AM132 AD3
21.0	2540	70.46	27500	1.05		
23.0	2270	63.00	27400	1.20		
26.0	2040	56.64	27200	1.30		
30.0	1770	49.16	26800	1.50		
33.0	1580	44.02	26500	1.65	MK 87 MKF 87 MKA 87 MKAF 87	Y..132S-4 AM132 AD3
40.0	1310	36.52	25800	1.90		
46.0	1130	31.39	25100	2.40	MK 87 MKF 87 MKA 87 MKAF 87	Y..132S-4 AM132 AD4
52.0	1000	27.88	24600	2.60		
32.0	1630	45.16	14800	0.95	MK 77 MKF 77 MKA 77 MKAF 77	Y..132S-4 AM132 AD2
36.0	1440	40.04	16100	1.05	MK 77 MKF 77 MKA 77 MKAF 77	Y..132S-4 AM132 AD3
47.0	1110	30.89	17800	1.40		
50.0	1050	29.27	18100	1.45	MK 77 MKF 77 MKA 77 MKAF 77	Y..132S-4 AM132 AD4
57.0	920	25.62	18600	1.70		
63.0	830	23.08	18900	1.85		
72.0	730	20.25	19200	2.00		
81.0	640	17.87	19400	2.20		
92.0	570	15.84	19100	2.40		
108	485	13.52	18500	2.80		
61.0	860	24	9880	0.90	MK 67 MKF 67 MKA 67 MKAF 67	Y..132S-4 AM132 AD3
64.0	810	22.66	10300	0.95		
75.0	695	19.3	11300	1.10		
83.0	630	17.54	11700	1.15		
96.0	545	15.19	12200	1.30		
110	475	13.22	12500	1.40		
117	450	12.48	12600	1.20		
137	380	10.63	12400	1.30	MK 67 MKF 67 MKA 67 MKAF 67	Y..132S-4 AM132 AD3
151	345	9.66	12200	1.40		
174	300	8.37	11900	1.45		
200	260	7.28	11600	1.60		
280	188	5.2	10800	1.85		
P_1=7.5kw						
1.80	37100	835	190000	1.35	MK 187 MRF107 MKH 187 MRF107	Y..132M-4 AM132 AD5
2.00	32200	729	190000	1.55	MK 187 MRF107 MKH 187 MRF107	Y..132M-4 AM132 AD6
2.40	27400	622	190000	1.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.5kw						
1.20	53600	1196	190000	0.95	MK 187 MRF97 MKH 187 MRF97	Y..132M-4 AM132 AD5
1.40	46800	1046	190000	1.05		
1.60	42300	945	190000	1.20		
2.00	33000	738	190000	1.50		
2.40	27700	621	190000	1.80		
2.80	23400	527	190000	2.10		
1.70	37600	843	150000	0.85	MK 167 MRF97 MKH 167 MRF97	Y..132M-4 AM132 AD5
1.90	33800	757	150000	0.95		
2.30	28300	632	150000	1.15		
2.60	24900	561	150000	1.30		
3.10	21500	481	150000	1.50		
3.50	18800	423	150000	1.70		
4.00	16400	369	150000	1.95	MK 167 MRF97 MKH 167 MRF97	Y..132M-4 AM132 AD5
3.40	19300	434	111500	0.95	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157MRF97	Y..132M-4 AM132 AD5
3.90	16800	379	112700	1.05		
4.40	14800	333	113600	1.20		
5.00	12900	291	114400	1.40		
4.40	14800	330	76200	0.85	MK 127 MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..132M-4 AM132 AD5
5.10	12800	287	79300	1.00		
5.80	11300	253	80000	1.15		
6.90	9550	213	80900	1.35		
7.30	9100	200	81100	1.30		
8.80	7530	166	81600	1.60		
10.0	6640	147	81900	1.80		
10.0	7110	146.07	81700	1.85	MK 127 MKF 127 MKA 127 MKAF127	Y..132M-4 AM132 AD4
11.0	6630	136.14	81900	1.95		
12.0	5960	122.48	82100	2.20		
13.0	5360	110.18	82200	2.40		
16.0	4370	89.89	82400	3.00	MK 127 MKF 127 MKA 127 MKAF127	Y..132M-4 AM132 AD5
18.0	3990	81.98	82500	3.20		
21.0	3450	70.95	82600	3.80		
10.0	6990	143.47	65000	1.15	MK 107 MKF 107 MKA 107 MKAF107	Y..132M-4 AM132 AD4
12.0	5910	121.46	65000	1.35		
13.0	5470	112.41	65000	1.45		
15.0	4900	100.75	64900	1.65		
16.0	4430	90.96	63900	1.80		
18.0	4020	82.61	62900	2.00		
20.0	3570	73.3	61600	2.20		
22.0	3240	66.52	60500	2.50		
26.0	2780	57.17	58800	2.90		
29.0	2430	49.9	57100	3.20		
35.0	2060	42.33	55100	3.60	MK 107 MKF 107 MKA 107 MKAF107	Y..132M-4 AM132 AD5
40.0	1800	37.00	53500	4.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.5kw						
15.0	4710	96.8	38300	0.90	MK 97 MKF 97 MKA 97 MKAF 97	Y..132M-4 AM132 AD3
17.0	4210	86.52	38300	1.00		
19.0	3790	77.89	38100	1.15		
21.0	3430	70.54	37800	1.25		
15.0	4710	96.8	38300	0.90		
17.0	4210	86.52	38300	1.00		
19.0	3790	77.89	38100	1.15		
21.0	3430	70.54	37800	1.25		
24.0	3040	62.55	37400	1.40	MK 97 MKF 97 MKA 97 MKAF 97	Y..132M-4 AM132 AD4
26.0	2750	56.55	37000	1.55		
31.0	2330	47.93	36200	1.85		
35.0	2030	41.87	35500	2.10		
38.0	1860	38.3	35000	2.30	MK 97 MKF 97 MKA 97 MKAF 97	Y..132M-4 AM132 AD5
43.0	1660	34.23	34300	2.60		
23.0	3060	63.00	24100	0.90	MK 87 MKF 87 MKA 87 MKAF 87	Y..132M-4 AM132 AD3
26.0	2750	56.64	24200	1.00		
30.0	2390	49.16	24200	1.15		
33.0	2140	44.02	24100	1.20		
40.0	1770	36.52	23800	1.40		
47.0	1520	31.39	23400	1.75	MK 87 MKF 87 MKA 87 MKAF 87	Y..132M-4 AM132 AD4
53.0	1350	27.88	23100	1.90		
59.0	1210	24.92	22700	2.10		
66.0	1090	22.41	22400	2.10		
76.0	940	19.45	21800	2.40		
84.0	840	17.42	21400	2.60		
92.0	775	16	20500	2.30		
102	700	14.45	20600	3.00		
48.0	1500	30.89	15700	1.05	MK 77 MKF 77 MKA 77 MKAF 77	Y..132M-4 AM132 AD3
50.0	1420	29.27	16200	1.10	MK 77 MKF 77 MKA 77 MKAF 77	Y..132M-4 AM132 AD4
57.0	1240	25.62	17200	1.25		
64.0	1120	23.08	17800	1.40		
73.0	980	20.25	18400	1.50		
82.0	870	17.87	18500	1.65		
93.0	770	15.84	18100	1.80		
109	655	13.52	17700	2.00		
119	600	12.36	17000	1.65		
136	525	10.84	16600	1.90		
154	465	9.56	16200	2.00		
173	410	8.48	15800	2.20		
203	350	7.24	15300	2.30		
P_1=11.0kw						
1.80	54600	835	190000	0.90	MK 187 MRF107 MKH 187 MRF107	Y..160M-4 AM160 AD5
2.80	34300	520	190000	1.45		
2.00	47500	729	190000	1.05	MK 187 MRF107 MKH 187 MRF107	Y..160M-4 AM160 AD6
2.40	40500	622	190000	1.25		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
3.20	29900	454	190000	1.65	MK 187 MRF107 MKH 187 MRF107	Y..160M-4 AM160 AD6
4.20	23100	355	190000	2.20		
2.00	48500	738	190000	1.05	MK 187 MRF97 MKH 187 MRF97	Y..160M-4 AM160 AD5
2.40	40800	621	190000	1.20		
2.80	34500	527	190000	1.45		
4.60	21000	318	150000	1.50	MK 167 MRF107 MKH 167 MRF107	Y..160M-4 AM160 AD5
5.30	18200	278	150000	1.75	MK 167 MRF107 MKH 167 MRF107	Y..160M-4 AM160 AD6
6.00	15800	244	150000	2.00		
6.90	13800	213	150000	2.30		
7.20	13400	206	150000	2.40		
2.60	36600	561	150000	0.85	MK 167 MRF97 MKH 167 MRF97	Y..160M-4 AM160 AD5
3.10	31600	481	150000	1.00		
3.50	27700	423	150000	1.15		
4.00	24100	369	150000	1.30		
4.40	21800	333	110000	0.80	MK 157 MRF97 MKF 157 MRF97 MKA 157 MRF97 MKAF157 MRF97	Y..160M-4 AM160 AD5
5.10	19000	291	111600	0.95		
6.90	14000	213	77900	0.95	MK 127MRF87 MKF 127 MRF87 MKA 127 MRF87 MKAF127 MRF87	Y..160M-4 AM160 AD5
7.40	13300	200	79000	0.90		
8.90	11000	166	80200	1.10		
10.0	9760	147	80800	1.25		
9.00	11700	164.5	150000	2.70	MK 167 MKF 167 MKA 167 MKAF167	Y..160M-4 AM160 AD5
11.0	9610	134.99	150000	3.30	MK 167 MKF 167 MKA 167 MKAF167	Y..160M-4 AM160 AD6
9.80	10700	150.41	115100	1.70	MK 157 MKF 157 MKA 157 MKAF157	Y..160M-4 AM160 AD5
12.0	8710	122.39	115600	2.10		
15.0	7130	100.22	116000	2.50		
16.0	6520	91.65	116100	2.80		
11.0	9690	136.14	80800	1.35	MK 127 MKF 127 MKA 127 MKAF127	Y..160M-4 AM160 AD4
12.0	8720	122.48	81200	1.50		
13.0	7840	110.18	81500	1.65		
16.0	6400	89.89	82000	2.00	MK 127 MKF 127 MKA 127 MKAF127	Y..160M-4 AM160 AD5
18.0	5830	81.98	82100	2.20		
21.0	5050	70.95	82300	2.60		
13.0	8000	112.41	57800	1.00	MK 107 MKF 107 MKA 107 MKAF107	Y..160M-4 AM160 AD4
15.0	7170	100.75	58200	1.10		
16.0	6470	90.96	57900	1.25		
18.0	5880	82.61	57400	1.35		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
20.0	5210	73.3	56700	1.55	MK 107 MKF 107 MKA 107 MKAF107	Y..160M-4 AM160 AD4
22.0	4730	66.52	56100	1.70		
26.0	4070	57.17	54900	1.95		
30.0	3550	49.9	53800	2.20		
35.0	3010	42.33	52300	2.40	MK 107 MKF 107 MKA 107 MKAF107	Y..160M-4 AM160 AD5
40.0	2630	37.00	51000	2.70		
21.0	5020	70.54	32300	0.85	MK 97 MKF 97 MKA 97 MKAF 97	Y..160M-4 AM160 AD3
24.0	4450	62.55	32500	0.95	MK 97 MKF 97 MKA 97 MKAF 97	Y..160M-4 AM160 AD4
26.0	4020	56.55	32500	1.05		
31.0	3410	47.93	32400	1.25		
35.0	2980	41.87	32200	1.45		
39.0	2720	38.3	31900	1.60	MK 97 MKF 97 MKA 97 MKAF 97	Y..160M-4 AM160 AD5
43.0	2430	34.23	31600	1.75		
48.0	2190	30.82	31200	1.95		
53.0	1980	27.91	30700	2.20		
60.0	1760	24.75	30200	2.40		
66.0	1590	22.37	29700	2.70		
34.0	3130	44.02	20100	0.85	MK 87 MKF 87 MKA 87 MKAF 87	Y..160M-4 AM160 AD3
40.0	2600	36.52	20500	0.95		
47.0	2230	31.39	20600	1.20	MK 87 MKF 87 MKA 87 MKAF 87	Y..160M-4 AM160 AD4
53.0	1980	27.88	20500	1.30		
59.0	1770	24.92	20400	1.40		
66.0	1590	22.41	20300	1.45		
76.0	1380	19.45	20000	1.65		
85.0	1230	17.42	19800	1.75		
92.0	1130	16	18800	1.60		
102.0	1020	14.45	19300	2.00		
117.0	890	12.56	18900	2.20		
132.0	790	11.17	17900	1.90		
148	710	10	17600	2.10	MK 87 MKF 87 MKA 87 MKAF 87	Y..160M-4 AM160 AD5
178	590	8.29	17000	2.40		
205	510	7.21	16600	2.50		
64.0	1640	23.08	14700	0.95	MK 77 MKF 77 MKA 77 MKAF 77	Y..160M-4 AM160 AD4
73.0	1440	20.25	16100	1.05		
83.0	1270	17.87	16600	1.15		
93.0	1120	15.84	16500	1.25		
109	960	13.52	16200	1.40		
119	870	12.36	15500	1.15		
136	770	10.84	15300	1.30		
154	680	9.56	15000	1.40		
174	600	8.48	14800	1.45		
204	515	7.24	14400	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
2.80	47400	520	190000	1.05	**MK 187 MRF107 MKH 187 MRF107**	**Y..160L-4 AM160 AD5**
2.40	55900	622	190000	0.90	**MK 187 MRF107 MKH 187 MRF107**	**Y..160L-4 AM160 AD6**
3.20	41200	454	190000	1.20		
4.10	31900	355	190000	1.55		
5.60	23700	261	190000	2.10		
4.60	28900	318	150000	1.10	**MK 167 MRF107 MKH 167 MRF107**	**Y..160L-4 AM160 AD5**
5.30	25200	278	150000	1.25	**MK 167 MRF107 MKH 167 MRF107**	**Y..160L-4 AM160 AD6**
6.00	21800	244	150000	1.45		
6.90	19000	213	150000	1.70		
7.10	18600	206	150000	1.70		
8.10	16000	180	150000	2.00		
9.20	14500	160	150000	2.20		
6.40	20500	230	110800	0.90	**MK 157 MRF107 MKF 157 MRF107 MKA 157 MRF107 MKAF157 MRF107**	**Y..160L-4 AM160 AD6**
6.90	19300	213	111500	0.95		
7.80	16600	187	112800	1.10		
9.30	14100	157	113900	1.25		
12.0	11000	122	115000	1.60		
14.0	9670	107	115400	1.85		
8.90	16000	164.5	150000	2.00	**MK 167 MKH 167**	**Y..160L-4 AM160 AD5**
11.0	13100	134.99	150000	2.40	**MK 167 MKH 167**	**Y..160L-4 AM160 AD6**
9.70	14700	150.41	113700	1.20	**MK 157 MKF 157 MKA 157 MKAF157**	**Y..160L-4 AM160 AD5**
12.0	11900	122.39	114700	1.50		
15.0	9790	100.22	114100	1.85		
16.0	8960	91.65	112400	2.00		
18.0	7790	79.75	109500	2.30		
11.0	13300	136.14	79000	1.00	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..160L-4 AM160 AD4**
12.0	11900	122.48	79700	1.10		
13.0	10700	110.18	80300	1.20		
16.0	8780	89.89	81200	1.50	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..160L-4 AM160 AD5**
18.0	8010	81.98	81500	1.60		
21.0	6930	70.95	81500	1.85		
23.0	6120	62.6	79900	2.10		
27.0	5280	54.07	77900	2.50		
31.0	4670	47.82	76200	2.80		
16.0	8890	90.96	48200	0.90	**MK 107 MKF 107 MKA 107 MKAF107**	**Y..160L-4 AM160 AD4**
18.0	8070	82.61	49400	1.00		
20.0	7160	73.3	50500	1.10		
22.0	6500	66.52	51000	1.25		
26.0	5590	57.17	50600	1.45		
29.0	4870	49.9	50000	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=15.0kw						
35.0	4130	42.33	49100	1.80	**MK 107 MKF 107 MKA 107 MKAF107**	**Y..160L-4 AM160 AD5**
40.0	3610	37.00	48200	2.00		
45.0	3190	32.69	47300	2.20		
47.0	3050	31.28	46900	2.20		
51.0	2830	29	46300	2.50	**MK 107 MKF 107 MKA 107 MKAF107**	**Y..160L-4 AM160 AD6**
31.0	4680	47.93	28100	0.90	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..160L-4 AM160 AD4**
35.0	4090	41.87	28400	1.05		
38.0	3740	38.3	28500	1.15	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..160L-4 AM160 AD5**
43.0	3340	34.23	28500	1.30		
48.0	3010	30.82	28400	1.45		
53.0	2720	27.91	28200	1.60		
59.0	2410	24.75	28000	1.80	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..160L-4 AM160 AD5**
65.0	2180	22.37	27700	1.95		
77.0	1850	18.96	27200	2.30		
88.0	1610	16.56	26600	2.70		
47.0	3060	31.39	17300	0.90	**MK 87 MKF 87 MKA 87 MKAF 87**	**Y..160L-4 AM160 AD4**
53.0	2720	27.88	17600	0.95		
59.0	2430	24.92	17800	1.05		
65.0	2190	22.41	18000	1.05		
75.0	1900	19.45	18000	1.20		
84.0	1700	17.42	18000	1.30		
92.0	1560	16	16800	1.15		
101	1410	14.45	17800	1.50		
117	1220	12.56	17600	1.65		
131	1090	11.17	16600	1.35		
147	970	10	16400	1.55	**MK 87 MKF 87 MKA 87 MKAF 87**	**Y..160L-4 AM160 AD5**
177	810	8.29	16000	1.75		
203	705	7.21	15700	1.85		
P_1=18.5kw						
2.80	58500	520	190000	0.85	**MK 187 MRF107 MKH 187 MRF107**	**Y..180M-4 AM180 AD5**
3.20	51000	454	190000	1.00	**MK 187 MRF107 MKH 187 MRF107**	**Y..180M-4 AM180 AD6**
4.10	39400	355	190000	1.25		
5.60	29300	261	190000	1.70		
6.60	24800	221	190000	2.00		
4.60	35800	318	150000	0.90	**MK 167 MRF107 MKH 167 MRF107**	**Y..180M-4 AM180 AD5**
5.30	31200	278	150000	1.00	**MK 167 MRF107 MKH 167 MRF107**	**Y..180M-4 AM180 AD6**
6.00	27000	244	150000	1.20		
6.90	23600	213	150000	1.35		
7.10	23000	206	150000	1.40		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=18.5kw						
8.10	19900	180	150000	1.60	**MK 167 MRF107 MKH 167 MRF107**	**Y..180M-4 AM180 AD6**
9.20	17900	160	150000	1.80		
11.0	15100	135	150000	2.10	**MK 167 MRF107 MKH 167 MRF107**	**Y..180M-4 AM180 AD6**
12.0	13200	118	150000	2.40		
7.80	20600	187	110700	0.85	**MK 157 MRF107 MKF 157 MRF107 MKA 157 MRF107 MKAF157 MRF107**	**Y..180M-4 AM180 AD6**
9.30	17500	157	112400	1.05		
12.0	13700	122	113900	1.30		
14.0	11900	107	112000	1.50		
8.20	21600	179.86	190000	2.30	**MK 187 MKH 187**	**Y..180M-4 AM180 AD6**
8.90	19900	165.21	190000	2.50		
10.0	17400	144.59	190000	2.90		
11.0	15600	129.69	190000	3.20	**MK 187 MKH 187**	**Y..180M-4 AM180 AD7**
11.0	16200	134.99	150000	1.95	**MK 167 MKH 167**	**Y..180M-4 AM180 AD6**
13.0	13200	109.83	150000	2.40		
17.0	10500	87.86	150000	3.00	**MK 167 MKH 167**	**Y..180M-4 AM180 AD7**
12.0	14700	122.39	111600	1.20	**MK 157 MKF 157 MKA 157 MKAF157**	**Y..180M-4 AM180 AD5**
15.0	12000	100.22	109100	1.50		
16.0	11000	91.65	107800	1.65		
18.0	9610	79.75	105600	1.85		
21.0	8480	70.38	103400	2.10		
24.0	7350	61.02	100700	2.40		
27.0	6540	54.29	98500	2.80	**MK 157 MKF 157 MKA 157 MKAF157**	**Y..180M-4 AM180 AD6**
31.0	5640	46.79	95500	3.20	**MK 157 MKF 157 MKA 157 MKAF157**	**Y..180M-4 AM180 AD7**
39.0	4580	38.02	91300	3.90		
13.0	13200	110.18	79000	1.00	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..180M-4 AM180 AD4**
16.0	10800	89.89	79000	1.20	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..180M-4 AM180 AD5**
18.0	9880	81.98	78500	1.30		
21.0	8550	70.95	77500	1.50		
23.0	7540	62.6	76400	1.70		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=18.5kw						
27.0	6510	54.07	74800	2.00	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..180M-4 AM180 AD5**
31.0	5760	47.82	73400	2.20		
36.0	4840	40.19	71300	2.70	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..180M-4 AM180 AD6**
40.0	4370	36.25	69900	3.00	**MK 127 MKF 127 MKA 127 MKAF127**	**Y..180M-4 AM180 AD7**
47.0	3780	31.37	68000	3.40		
53.0	3330	27.68	66200	3.90		
20.0	8830	73.3	42700	0.90	**MK 107 MKF 107 MKA 107 MKAF107**	**Y..180M-4 AM180 AD4**
22.0	8020	66.52	44200	1.00		
26.0	6890	57.17	45800	1.15		
29.0	6010	49.9	46600	1.30		
35.0	5100	42.33	46300	1.45	**MK 107 MKF 107 MKA 107 MKAF107**	**Y..180M-4 AM180 AD5**
40.0	4460	37.00	45700	1.60		
45.0	3940	32.69	45100	1.85		
47.0	3770	31.28	44800	1.80		
51.0	3490	29	44400	2.10	**MK 107 MKF 107 MKA 107 MKAF107**	**Y..180M-4 AM180 AD6**
56.0	3170	26.32	43800	2.30		
65.0	2720	22.62	42700	2.60		
74.0	2380	19.74	41700	3.00		
88.0	2010	16.75	40400	3.50		
35.0	5040	41.87	25100	0.85	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..180M-4 AM180 AD4**
48.0	3710	30.82	26000	1.15	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..180M-4 AM180 AD5**
53.0	3360	27.91	26000	1.30		
59.0	2980	24.75	26000	1.45		
65.0	2690	22.37	25900	1.60		
77.0	2280	18.96	25700	1.90	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..180M-4 AM180 AD5**
88.0	1990	16.56	25300	2.20		
106	1670	13.85	24800	2.60	**MK 97 MKF 97 MKA 97 MKAF 97**	**Y..180M-4 AM180 AD6**
59.0	3000	24.92	15600	0.85	**MK 87 MKF 87 MKA 87 MKAF 87**	**Y..180M-4 AM180 AD4**
65.0	2700	22.41	15900	0.85		
75.0	2340	19.45	16200	1.00		
84.0	2090	17.42	16400	1.05		
101	1740	14.45	16500	1.20		
117	1510	12.56	16400	1.30		
131	1340	11.17	15400	1.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=18.5kw						
147	1200	10	15300	1.25	MK 87 MKF 87 MKA 87 MKAF 87	Y..180M-4 AM180 AD5
177	1000	8.29	15100	1.40		
203	860	7.21	14900	1.50		
P_1=22kw						
3.20	60400	454	190000	0.85	MK 187 MRF107 MKH 187 MRF107	Y..180L-4 AM180 AD6
4.20	46700	355	190000	1.05		
5.60	34700	261	190000	1.45		
6.70	29400	221	190000	1.70		
7.60	25600	193	190000	1.95		
9.00	21600	163	190000	2.30		
5.30	36900	278	150000	0.85	MK 167 MRF107 MKH 167 MRF107	Y..180L-4 AM180 AD6
6.00	32000	244	150000	1.00		
6.90	27900	213	150000	1.15		
7.20	27200	206	150000	1.15		
8.20	23500	180	150000	1.35		
9.20	21200	160	150000	1.50		
11.0	17900	135	150000	1.80		
12.0	15600	118	150000	2.00		
9.40	20700	157	109400	0.85	MK 157 MRF107 MKF 157 MRF107 MKA 157 MRF107 MKA 157 MRF107	Y..180L-4 AM180 AD6
12.0	16200	122	108100	1.10		
14.0	14100	107	106900	1.25		
8.20	25600	179.86	190000	1.95	MK 187 MKH 187	Y..180L-4 AM180 AD6
8.90	23500	165.21	190000	2.10		
10.0	20500	144.59	190000	2.40		
11.0	18400	129.69	190000	2.70	MK 187 MKH 187	Y..180L-4 AM180 AD7
11.0	19200	134.99	150000	1.65	MK 167 MKH 167	Y..180L-4 AM180 AD6
13.0	15600	109.83	150000	2.00		
17.0	12500	87.86	150000	2.60	MK 167 MKH 167	Y..180L-4 AM180 AD7
19.0	11100	78.14	150000	2.90		
12.0	17400	122.39	105500	1.05	MK 157 MKF 157 MKA 157 MKAF 157	Y..180L-4 AM180 AD5
15.0	14200	100.22	104000	1.25		
16.0	13000	91.65	103200	1.40		
18.0	11300	79.75	101500	1.60		
21.0	10000	70.38	99700	1.80		
24.0	8690	61.02	97600	2.10		
27.0	7730	54.29	95700	2.30	MK 157 MKF 157 MKA 157 MKAF 157	Y..180L-4 AM180 AD6
32.0	6660	46.79	93100	2.70	MK 157 MKF 157 MKA 157 MKAF 157	Y..180L-4 AM180 AD7
39.0	5410	38.02	89300	3.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=22kw						
16.0	12800	89.89	73900	1.00	MK 127 MKF 127 MKA 127 MKAF 127	Y..180L-4 AM180 AD5
18.0	11600	81.98	73800	1.10		
21.0	10100	70.95	73400	1.30		
24.0	8910	62.6	72700	1.45		
27.0	7700	54.07	71700	1.70		
31.0	6810	47.82	70600	1.90		
37.0	5720	40.19	68900	2.30	MK 127 MKF 127 MKA 127 MKAF 127	Y..180L-4 AM180 AD6
41.0	5160	36.25	67800	2.50	MK 127 MKF 127 MKA 127 MKAF 127	Y..180L-4 AM180 AD7
47.0	4460	31.37	66100	2.90		
53.0	3940	27.68	64500	3.30		
62.0	3400	23.91	62700	3.80		
70.0	3010	21.15	61100	4.30	MK 127 MKF 127 MKA 127 MKAF 127	Y..180L-4 AM180 AD8
26.0	8140	57.17	39800	1.00	MK 107 MKF 107 MKA 107 MKAF 107	Y..180L-4 AM180 AD4
30.0	7100	49.9	41600	1.10		
35.0	6020	42.33	42900	1.20	MK 107 MKF 107 MKA 107 MKAF 107	Y..180L-4 AM180 AD5
40.0	5260	37.00	43200	1.35		
45.0	4650	32.69	42900	1.55		
47.0	4450	31.28	42700	1.55		
51.0	4120	29	42400	1.75	MK 107 MKF 107 MKA 107 MKAF 107	Y..180L-4 AM180 AD6
56.0	3740	26.32	42000	1.90		
65.0	3220	22.62	41200	2.20		
75.0	2810	19.74	40400	2.60		
88.0	2380	16.75	39300	3.00	MK 107 MKF 107 MKA 107 MKAF 107	Y..180L-4 AM180 AD6
101	2080	14.64	38300	3.30		
110	1910	13.43	36700	2.20		
126	1660	11.73	35800	2.60		
148	1410	9.94	34700	3.00		
48.0	4380	30.82	23500	1.00	MK 97 MKF 97 MKA 97 MKAF 97	Y..180L-4 AM180 AD5
53.0	3970	27.91	23800	1.10		
60.0	3520	24.75	24100	1.20		
66.0	3180	22.37	24200	1.35		
78.0	2700	18.96	24100	1.60		
89.0	2350	16.56	24000	1.80		
106	1970	13.85	23700	2.20	MK 97 MKF 97 MKA 97 MKAF 97	Y..180L-4 AM180 AD6
123	1700	11.99	23300	2.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=22kw						
142	1480	10.41	21800	1.95	MK 97 MKF 97 MKA 97 MKAF 97	Y..180L-4 AM180 AD5
169	1240	8.71	21300	2.20	MK 97 MKF 97 MKA 97 MKAF 97	Y..180L-4 AM180 AD6
76.0	2760	19.45	14500	0.85	MK 87 MKF 87 MKA 87 MKAF 87	Y..180L-4 AM180 AD4
85.0	2470	17.42	14800	0.90		
102	2050	14.45	15200	1.00		
117	1780	12.56	15300	1.10		
132	1580	11.17	14200	0.95		
148	1420	10	14200	1.05	MK 87 MKF 87 MKA 87 MKAF 87	Y..180L-4 AM180 AD5
178	1180	8.29	14300	1.20		
205	1020	7.21	14200	1.25		
P_1=30kw						
5.60	47400	261	190000	1.05	MK 187 MRF107 MKH 187 MRF107	Y..200L-4 AM200 AD6
6.70	40200	221	190000	1.25		
7.60	35100	193	190000	1.40		
9.00	29600	163	190000	1.70		
6.90	38200	213	150000	0.85	MK 167 MRF107 MKH 167 MRF107	Y..200L-4 AM200 AD6
7.20	37300	206	150000	0.85		
8.20	32300	180	150000	1.00		
9.20	29000	160	150000	1.10		
11.0	24500	135	150000	1.30		
12.0	21400	118	150000	1.50		
8.20	34900	179.86	190000	1.45	MK 187 MKF 187 MKA 187 MKAF 187	Y..200L-4 AM200 AD6
8.90	32000	165.21	190000	1.55		
10.0	28000	144.59	190000	1.80		
11.0	25100	129.69	190000	2.00	MK 187 MKF 187 MKA 187 MKAF 187	Y..200L-4 AM200 AD7
13.0	21800	112.6	190000	2.30		
14.0	19800	102.16	190000	2.50		
17.0	17000	88	190000	2.90	MK 187 MKF 187 MKA 187 MKAF 187	Y..200L-4 AM200 AD8
13.0	21300	109.83	150000	1.50	MK 167 MKF 167 MKA 167 MKAF 167	Y..200L-4 AM200 AD6
17.0	17000	87.86	150000	1.90	MK 167 MKF 167 MKA 167 MKAF 167	Y..200L-4 AM200 AD7
19.0	15100	78.14	150000	2.10		
22.0	13200	68.07	150000	2.40		
24.0	11700	60.74	150000	2.70		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=30kw						
15.0	19400	100.22	92700	0.90	MK 157 MKF 157 MKA 157 MKAF 157	Y..200L-4 AM200 AD5
16.0	17800	91.65	92800	1.00		
18.0	15400	79.75	92400	1.15		
21.0	13600	70.38	91800	1.30		
24.0	11800	61.02	90700	1.50		
27.0	10500	54.29	89500	1.70	MK 157 MKF 157 MKA 157 MKAF 157	Y..200L-4 AM200 AD6
32.0	9080	46.79	87800	2.00	MK 157 MKF 157 MKA 157 MKAF 157	Y..200L-4 AM200 AD7
39.0	7380	38.02	85000	2.40		
47.0	6070	31.3	82100	3.00	MK 157 MKF 157 MKA 157 MKAF 157	Y..200L-4 AM200 AD8
21.0	13700	70.95	64200	0.95	MK 127 MKF 127 MKA 127 MKAF 127	Y..200L-4 AM200 AD5
24.0	12100	62.6	64600	1.05		
27.0	10500	54.07	64700	1.25		
31.0	9280	47.82	64400	1.40		
37.0	7800	40.19	63700	1.65	MK 127 MKF 127 MKA 127 MKAF 127	Y..200L-4 AM200 AD6
41.0	7030	36.25	63100	1.85	MK 127 MKF 127 MKA 127 MKAF 127	Y..200L-4 AM200 AD7
47.0	6090	31.37	62000	2.10		
53.0	5370	27.68	61000	2.40		
62.0	4640	23.91	59600	2.80		
35.0	8220	42.33	32500	0.90	MK 107 MKF 107 MKA 107 MKAF 107	Y..200L-4 AM200 AD5
40.0	7180	37.00	34700	1.00		
47.0	6070	31.28	36600	1.10		
51.0	5630	29	37200	1.30	MK 107 MKF 107 MKA 107 MKAF 107	Y..200L-4 AM200 AD6
56.0	5100	26.32	37700	1.40		
65.0	4390	22.62	37700	1.65		
75.0	3830	19.74	37400	1.90		
88.0	3250	16.75	36700	2.20		
101	2840	14.64	36100	2.40		
110	2600	13.43	34400	1.65		
126	2270	11.73	33800	1.90		
148	1930	9.94	32900	2.20		
170	1680	8.69	32200	2.40		
60.0	4800	24.75	19600	0.90	MK 97 MKF 97 MKA 97 MKAF 97	Y..200L-4 AM200 AD5
66.0	4340	22.37	20100	1.00		
78.0	3680	18.96	20700	1.15		
89.0	3210	16.56	21000	1.35		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=30kw						
106	2690	13.85	21200	1.60	MK 97 MKF 97 MKA 97 MKAF 97	Y..200L-4 AM200 AD6
123	2320	11.99	21100	1.65		
142	2020	10.41	19500	1.40	MK 97 MKF 97 MKA 97 MKAF 97	Y..200L-4 AM200 AD5
169	1690	8.71	19400	1.55	MK 97 MKF 97 MKA 97 MKAF 97	Y..200L-4 AM200 AD6
P_1=37kw						
5.70	58500	261	190000	0.85	MK 187 MRF107 MKH 187 MRF107	Y..225S-4 AM225 AD6
6.70	49600	221	190000	1.00		
7.60	43300	193	190000	1.15		
9.00	36500	163	190000	1.35		
8.20	39800	180	150000	0.80	MK 167 MRF107 MKH 167 MRF107	Y..225S-4 AM225 AD6
9.20	35800	160	150000	0.90		
11.0	30300	135	150000	1.05		
12.0	26400	118	150000	1.20		
8.20	43000	179.86	190000	1.15	MK 187 MKH 187	Y..225S-4 AM225 AD6
8.90	39500	165.21	190000	1.25		
10.0	34500	144.59	190000	1.45		
11.0	31000	129.69	190000	1.60	MK 187 MKH 187	Y..225S-4 AM225 AD7
13.0	26900	112.6	190000	1.85		
14.0	24400	102.16	190000	2.00		
17.0	21000	88	190000	2.40	MK 187 MKH 187	Y..225S-4 AM225 AD8
13.0	26200	109.83	150000	1.20	MK 167 MKH 167	Y..225S-4 AM225 AD6
17.0	21000	87.86	150000	1.50	MK 167 MKH 167	Y..225S-4 AM225 AD7
19.0	18600	78.14	150000	1.70		
22.0	16200	68.07	150000	1.95		
24.0	14500	60.74	150000	2.20		
29.0	12300	51.77	150000	2.60	MK 167 MKH 167	Y..225S-4 AM225 AD8
16.0	21900	91.65	83700	0.80	MK 157 MKF 157 MKA 157 MKAF 157	Y..225S-4 AM225 AD5
19.0	19000	79.75	84500	0.95		
21.0	16800	70.38	84800	1.05		
24.0	14500	61.02	84600	1.25		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=37kw						
27.0	12900	54.29	84100	1.40	MK 157 MKF 157 MKA 157 MKAF 157	Y..225S-4 AM225 AD6
32.0	11100	46.79	83100	1.60	MK 157 MKF 157 MKA 157 MKAF 157	Y..225S-4 AM225 AD7
39.0	9090	38.02	81200	2.00		
47.0	7480	31.3	79000	2.40	MK 157 MKF 157 MKA 157 MKAF 157	Y..225S-4 AM225 AD8
24.0	14900	62.6	57500	0.85	MK 127 MKF 127 MKA 127 MKAF 127	Y..225S-4 AM225 AD5
27.0	12900	54.07	58500	1.00		
31.0	11400	47.82	59000	1.15		
37.0	9610	40.19	59100	1.35	MK 127 MKF 127 MKA 127 MKAF 127	Y..225S-4 AM225 AD6
41.0	8660	36.25	58900	1.50	MK 127 MKF 127 MKA 127 MKAF 127	Y..225S-4 AM225 AD7
47.0	7500	31.37	58400	1.75		
53.0	6620	27.68	57800	1.95		
62.0	5710	23.91	56900	2.30		
70.0	5050	21.15	55900	2.60	MK 127 MKF 127 MKA 127 MKAF 127	Y..225S-4 AM225 AD8
83.0	4250	17.77	54500	3.10		
103	3430	14.35	52500	3.50		
116	3050	12.79	50200	2.80		
137	2560	10.74	48600	3.10		
170	2070	8.68	46500	3.50		
40.0	8850	37.00	25900	0.80	MK 107 MKF 107 MKA 107 MKAF 107	Y..225S-4 AM225 AD5
47.0	7480	31.28	29700	0.90		
51.0	6930	29	31000	1.05	MK 107 MKF 107 MKA 107 MKAF 107	Y..225S-4 AM225 AD6
56.0	6290	26.32	32300	1.15		
65.0	5400	22.62	33700	1.35		
75.0	4720	19.74	34400	1.50		
88.0	4000	16.75	34500	1.75		
101	3500	14.64	34100	1.95		
110	3210	13.43	32300	1.35		
126	2800	11.73	31900	1.55		
149	2370	9.94	31400	1.75		
170	2070	8.69	30900	1.95		
P_1=45kw						
6.70	60300	221	190000	0.85	MK 187 MRF107 MKH 187 MRF107	Y..225M-4 AM225 AD6
7.60	52700	193	190000	0.95		
9.00	44500	163	190000	1.10		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=45kw						
11.0	36900	135	150000	0.85	MK 167 MRF107 MKH 167 MRF107	Y..225M-4 AM225 AD6
12.0	32200	118	150000	1.00		
8.20	52200	179.86	190000	0.95	MK 187 MKH 187	Y..225M-4 AM225 AD6
9.00	48000	165.21	190000	1.05		
10.0	42000	144.59	190000	1.20		
11.0	37700	129.69	190000	1.35	MK 187 MKH 187	Y..225M-4 AM225 AD7
13.0	32700	112.6	190000	1.55		
14.0	29700	102.16	190000	1.70		
17.0	25500	88	190000	1.95	MK 187 MKH 187	Y..225M-4 AM225 AD8
20.0	21500	73.96	187500	2.30		
13.0	31900	109.83	150000	1.00	MK 167 MKH 167	Y..225M-4 AM225 AD6
17.0	25500	87.86	150000	1.25	MK 167 MKH 167	Y..225M-4 AM225 AD7
19.0	22700	78.14	150000	1.40		
22.0	19700	68.07	150000	1.60		
24.0	17600	60.74	148900	1.80		
29.0	15000	51.77	145200	2.10	MK 167 MKH 167	Y..225M-4 AM225 AD8
34.0	12400	42.89	140500	2.60		
21.0	20400	70.38	76800	0.90	MK 157 MKF 157 MKA 157 MKAF 157	Y..225M-4 AM225 AD5
24.0	17700	61.02	77700	1.00		
27.0	15700	54.29	77900	1.15	MK 157 MKF 157 MKA 157 MKAF 157	Y..225M-4 AM225 AD6
32.0	13600	46.79	77800	1.30	MK 157 MKF 157 MKA 157 MKAF 157	Y..225M-4 AM225 AD7
39.0	11000	38.02	76900	1.65		
47.0	9100	31.3	75500	2.00	MK 157 MKF 157 MKA 157 MKAF 157	Y..225M-4 AM225 AD8
54.0	8030	27.62	74300	2.20		
62.0	6960	23.95	72800	2.60		
69.0	6190	21.31	71400	2.90		
80.0	5330	18.37	69600	3.40		
31.0	13900	47.82	52800	0.95	MK 127 MKF 127 MKA 127 MKAF 127	Y..225M-4 AM225 AD5
37.0	11600	40.19	53900	1.10	MK 127 MKF 127 MKA 127 MKAF 127	Y..225M-4 AM225 AD6

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=45kw						
41.0	10500	36.25	54200	1.25	MK 127 MKF 127 MKA 127 MKAF 127	Y..225M-4 AM225 AD7
47.0	9110	31.37	54400	1.45		
53.0	8040	27.68	54200	1.60		
62.0	6940	23.91	53800	1.85		
70.0	6140	21.15	53200	2.10	MK 127 MKF 127 MKA 127 MKAF 127	Y..225M-4 AM225 AD8
83.0	5160	17.77	52200	2.50		
103	4170	14.35	50600	2.90		
116	3710	12.79	48300	2.30		
138	3120	10.74	47000	2.60		
170	2520	8.68	45200	2.90		
51.0	8420	29	22900	0.85	MK 107 MKF 107 MKA 107 MKAF 107	Y..225M-4 AM225 AD6
56.0	7640	26.32	25300	0.95		
65.0	6570	22.62	28100	1.10		
75.0	5730	19.74	29800	1.25		
88.0	4860	16.75	31100	1.45		
101	4250	14.64	31700	1.60		
110	3900	13.43	29900	1.10		
126	3400	11.73	29900	1.25		
149	2890	9.94	29600	1.45		
170	2520	8.69	29300	1.60		
P_1=55kw						
10.0	51400	144.59	190000	0.95	MK 187 MKH 187	Y..250M-4 AM250 AD6
11.0	46100	129.69	190000	1.10	MK 187 MKH 187	Y..250M-4 AM250 AD7
13.0	40000	112.6	188600	1.25		
14.0	36300	102.16	187100	1.35		
17.0	31300	88	184200	1.60	MK 187 MKH 187	Y..250M-4 AM250 AD8
20.0	26300	73.96	180200	1.90		
23.0	22800	64.04	176300	2.20		
17.0	31200	87.86	145300	1.00	MK 167 MKH 167	Y..250M-4 AM250 AD7
19.0	27800	78.14	144600	1.15		
22.0	24200	68.07	143300	1.30		
24.0	21600	60.74	141700	1.50		
28.0	18400	51.77	139100	1.75	MK 167 MKH 167	Y..250M-4 AM250 AD8
34.0	15200	42.89	135400	2.10		
40.0	13000	36.61	131900	2.40		
24.0	21700	61.02	69000	0.85	MK 157 MKF 157 MKA 157 MKAF 157	Y..250M-4 AM250 AD5
27.0	19300	54.29	70200	0.95	MK 157 MKF 157 MKA 157 MKAF 157	Y..250M-4 AM250 AD6
32.0	16600	46.79	71200	1.10	MK 157 MKF 157 MKA 157 MKAF 157	Y..250M-4 AM250 AD7
39.0	13500	38.02	71500	1.35		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=55kw						
47.0	11100	31.3	71000	1.60	MK 157 MKF 157 MKA 157 MKAF157	Y..250M-4 AM250 AD8
53.0	9830	27.62	70400	1.85		
62.0	8520	23.95	69400	2.10		
69.0	7580	21.31	68400	2.40		
80.0	6530	18.37	67000	2.80		
99.0	5310	14.92	64800	3.40		
117	4500	12.65	62900	3.80		
37.0	14300	40.19	47400	0.90	MK 127 MKF 127 MKA 127 MKAF127	Y..250M-4 AM250 AD6
47.0	11100	31.37	49300	1.15	MK 127 MKF 127 MKA 127 MKAF127	Y..250M-4 AM250 AD7
53.0	9850	27.68	49700	1.30		
62.0	8510	23.91	49900	1.55		
70.0	7520	21.15	49800	1.75	MK 127 MKF 127 MKA 127 MKAF127	Y..250M-4 AM250 AD8
83.0	6320	17.77	49300	2.00		
103	5100	14.35	48300	2.40		
115	4550	12.79	45900	1.85		
137	3820	10.74	45000	2.10		
170	3080	8.68	43600	2.30		
P_1=75kw						
11.0	62700	129.69	164100	0.80	MK 187 MKH 187	Y..280S-4 AM280 AD7
13.0	54400	112.6	166100	0.90		
14.0	49400	102.16	166600	1.00		
17.0	42500	88	166600	1.15	MK 187 MKH 187	Y..280S-4 AM280 AD8
20.0	35700	73.96	165300	1.40		
23.0	30900	64.04	163400	1.60		
28.0	25800	53.36	160100	1.95		
33.0	22000	45.5	156700	2.30		
19.0	37800	78.14	126200	0.85	MK 167 MKH 167	Y..280S-4 AM280 AD7
22.0	32900	68.07	127200	0.95		
24.0	29300	60.74	127300	1.10		
29.0	25000	51.77	126800	1.30	MK 167 MKH 167	Y..280S-4 AM280 AD8
34.0	20700	42.89	125200	1.55		
40.0	17700	36.61	123200	1.80		
46.0	15600	32.25	121300	2.00		
51.0	13900	28.77	119300	2.30		
60.0	11800	24.52	116300	2.70		
39.0	18300	38.02	60800	1.00	MK 157 MKF 157 MKA 157 MKAF157	Y..280S-4 AM280 AD7
47.0	15100	31.3	62200	1.20	MK 157 MKF 157 MKA 157 MKAF157	Y..280S-4 AM280 AD8
54.0	13300	27.62	62600	1.35		
62.0	11500	23.95	62600	1.55		
69.0	10300	21.31	62400	1.75		
81.0	8880	18.37	61800	2.00		
99.0	7220	14.92	60500	2.50		
117	6120	12.65	59300	2.80		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=75kw						
47.0	15100	31.37	37900	0.85	MK 127 MKF 127 MKA 127 MKAF127	Y..280S-4 AM280 AD7
53.0	13300	27.68	40800	0.95		
62.0	11500	23.91	42200	1.10		
70.0	10200	21.15	42900	1.25	MK 127 MKF 127 MKA 127 MKAF127	Y..280S-4 AM280 AD8
83.0	8590	17.77	43600	1.50		
103	6940	14.35	43700	1.75		
116	6180	12.79	41100	1.40		
138	5190	10.74	41000	1.55		
171	4190	8.68	40400	1.70		
P_1=90kw						
14.0	59300	102.16	151300	0.85	MK 187 MKH 187	Y..280M-4 AM280 AD7
17.0	51100	88	153400	1.00	MK 187 MKH 187	Y..280M-4 AM280 AD8
20.0	42900	73.96	154200	1.15		
23.0	37100	64.04	153800	1.35		
28.0	30900	53.36	152200	1.60		
33.0	26400	45.50	149900	1.90		
35.0	24600	42.51	148700	2.00		
38.0	22300	38.57	146900	2.20		
22.0	39500	68.07	115100	0.80	MK 167 MKH 167	Y..280M-4 AM280 AD7
24.0	35200	60.74	116600	0.90		
29.0	30000	51.77	117600	1.05	MK 167 MKH 167	Y..280M-4 AM280 AD8
34.0	24900	42.89	117600	1.30		
40.0	21200	36.61	116700	1.50		
46.0	18700	32.25	115500	1.70		
51.0	16700	28.77	114200	1.90		
60.0	14200	24.52	111900	2.20		
73.0	11700	20.32	108800	2.70		
85.0	10000	17.34	106000	3.20		
39.0	22000	38.02	52700	0.80	MK 157 MKF 157 MKA 157 MKAF157	Y..280M-4 AM280 AD7
62.0	13900	23.95	57500	1.30	MK 157 MKF 157 MKA 157 MKAF157	Y..280M-4 AM280 AD8
69.0	12300	21.31	57900	1.45		
81.0	10600	18.37	57900	1.70		
99.0	8660	14.92	57400	2.10		
117	6120	12.65	59300	2.80		
62.0	13800	23.91	35400	0.95	MK 127 MKF 127 MKA 127 MKAF127	Y..280M-4 AM280 AD7
70.0	12200	21.15	37800	1.05	MK 127 MKF 127 MKA 127 MKAF127	Y..280M-4 AM280 AD8
83.0	10300	17.77	39200	1.25		
103	8330	14.35	40200	1.45		
116	7420	12.79	37600	1.15		
138	6230	10.74	38000	1.30		
171	5030	8.68	38000	1.45		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=110kw						
17.0	62300	88	135900	0.80	MK 187 MKH 187	Y..315S-4 - AD8
20.0	52300	73.96	139500	0.95		
23.0	45300	64.04	141000	1.10		
28.0	37700	53.36	141500	1.30		
33.0	32200	45.50	140800	1.55		
35.0	30100	42.51	140200	1.65		
38.0	27300	38.57	139100	1.85		
45.0	23500	33.23	137100	2.10		
53.0	19700	27.92	134100	2.50		
29.0	36600	51.77	105400	0.85	MK 167 MKH 167	Y..315S-4 - AD8
35.0	30300	42.89	107500	1.05		
41.0	25900	36.61	108100	1.25		
46.0	22800	32.25	107900	1.40		
52.0	20300	28.77	107400	1.55		
60.0	17300	24.52	106100	1.85		
73.0	14300	20.32	104000	2.20		
86.0	12200	17.34	101800	2.60		
62.0	16900	23.95	50800	1.05	MK 157 MKF 157 MKA 157 MKAF157	Y..315S-4 - AD8
70.0	15000	21.31	51800	1.20		
81.0	13000	18.37	52700	1.40		
99.0	10500	14.92	53100	1.70		
117	8960	12.65	53000	1.90		
P_1=132kw						
20.0	62700	73.96	123300	0.80	MK 187 MKH 187	Y..315M-4 - AD8
23.0	54300	64.04	127000	0.90		
28.0	45200	53.36	129800	1.10		
33.0	38600	45.5	130800	1.30	MK 187 MKH 187	Y..315M-4 - AD8
35.0	36000	42.51	130900	1.40		
38.0	32700	38.57	130700	1.55		
45.0	28200	33.23	129800	1.75		
53.0	23700	27.92	127900	2.10		
61.0	20500	24.18	125900	2.30		
74.0	17100	20.15	122800	2.60		
86.0	14500	17.18	119700	2.80		
35.0	36400	42.89	96400	0.90	MK 167 MKH 167	Y..315M-4 - AD8
41.0	31000	36.61	98600	1.05		
46.0	27300	32.25	99600	1.15		
52.0	24400	28.77	99900	1.30		
61.0	20800	24.52	99800	1.55		
73.0	17200	20.32	98700	1.85		
86.0	14700	17.34	97300	2.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=132kw						
62.0	20300	23.95	43400	0.90	MK 157 MKF 157 MKA 157 MKAF157	Y..315M-4 - AD8
70.0	18000	21.31	45300	1.00		
81.0	15500	18.37	47000	1.15		
100	12600	14.92	48500	1.40		
117	10700	12.65	49100	1.60		
P_1=160kw						
28.0	54900	53.36	114900	0.90	MK 187 MKH 187	Y..315L_1-4 - AD8
33.0	46800	45.50	118100	1.05		
45.0	34200	33.23	120500	1.45	MK 187 MKH 187	Y..315L_1-4 - AD8
53.0	28700	27.92	120100	1.75		
61.0	24800	24.18	119100	1.90		
74.0	20700	20.15	117200	2.10		
86.0	17600	17.18	114900	2.30		
41.0	37600	36.61	86500	0.85	MK 167 MKH 167	Y..315L_1-4 - AD8
61.0	25200	24.52	91700	1.25		
73.0	20900	20.32	92000	1.55		
86.0	17800	17.34	91600	1.80		
81.0	18900	18.37	39800	0.95	MK 157 MKF 157 MKA 157 MKAF157	Y..315M-4 - AD8
99.0	15300	14.92	42600	1.15		
117	13000	12.65	44100	1.30		
P_1=200kw						
33.0	58600	45.50	100000	0.85	MK 187 MKH 187	Y..315L_2-4 - AD8
45.0	42800	33.23	107300	1.15		
53.0	35900	27.92	109000	1.40		
61.0	31100	24.18	109500	1.55		
74.0	25900	20.15	109200	1.70		
86.0	22100	17.18	108100	1.85		
60.0	31600	24.52	80100	1.00	MK 167 MKH 167	Y..315L_2-4 - AD8
73.0	26100	20.32	82400	1.20		
85.0	22300	17.34	83400	1.45		
99.0	19200	14.92	34200	0.95	MK 157 MKF 157 MKA 157 MKAF157	Y..315L_2-4 - AD8
117	16300	12.65	36900	1.05		

4.8 MK../MRF..性能参数 / MK../MRF.. Performance Parameters

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=200Nm				
0.20	6832	5640		
0.23	5922	5640		
0.25	5491	5640		
0.29	4759	5640		
0.33	4160	5640		
0.38	3645	5640		
0.43	3205	5640		
0.49	2801	5640		
0.56	2454	5640		
0.64	2166	5640		
0.73	1891	5640		
0.83	1660	5640	MK 37 MRF17	Y..63M1-4
0.94	1466	5640	MKF 37 MRF17	Y..63M1-4
1.10	1288	5640	MKA 37 MRF17	Y..63M1-4
1.20	1136	5640	MKAF 37 MRF17	Y..63M1-4
1.40	996	5640		
1.60	876	5640		
1.80	761	5640		
2.10	671	5640		
2.40	585	5640		
2.70	512	5640		
3.10	451	5640		
3.50	396	5640		
4.00	346	5640		
4.50	304	5640		
4.90	267	5640	MK 37 MRF17	Y..63M2-4
5.60	234	5640	MKF 37 MRF17	Y..63M2-4
6.40	205	5640	MKA 37 MRF17	Y..63M2-4
7.30	181	5640	MKAF 37 MRF17	Y..63M2-4
8.10	160	5640	MK 37 MRF17	Y..71M1-4
9.50	136	5640	MKF 37 MRF17	Y..71M1-4
10.0	127	5640	MKA 37 MRF17	Y..71M1-4
			MKAF 37 MRF17	Y..71M1-4
12.0	110	5640	MK 37 MRF17	Y..71M2-4
14.0	96	5640	MKF 37 MRF17	Y..71M2-4
			MKA 37 MRF17	Y..71M2-4
			MKAF 37 MRF17	Y..71M2-4
M_{2max}=400Nm				
0.14	10138	5920		
0.16	8534	5920		
0.18	7662	5920		
0.20	6826	5920		
0.23	5983	5920		
0.27	5159	5920	MK 47 MRF37	Y..63M1-4
0.30	4601	5920	MKF 47 MRF37	Y..63M1-4
0.35	3940	5920	MKA 47 MRF37	Y..63M1-4
0.40	3477	5920	MKAF 47 MRF37	Y..63M1-4
0.45	3043	5920		
0.51	2733	5920		
0.59	2354	5920		
0.67	2063	5920		
0.76	1819	5920		

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=400Nm				
0.87	1586	5920		
0.99	1388	5920		
1.10	1222	5920	MK 47 MRF37	Y..63M1-4
1.30	1097	5920	MKF 47 MRF37	Y..63M1-4
1.50	945	5920	MKA 47 MRF37	Y..63M1-4
1.70	831	5920	MKAF 47 MRF37	Y..63M1-4
1.90	718	5920		
2.20	639	5920		
2.40	552	5920	MK 47 MRF37	Y..63M2-4
2.70	495	5920	MKF 47 MRF37	Y..63M2-4
3.10	426	5920	MKA 47 MRF37	Y..63M2-4
3.50	375	5920	MKAF 47 MRF37	Y..63M2-4
4.00	327	5920	MK 47 MRF37	Y..71M1-4
4.50	289	5920	MKF 47 MRF37	Y..71M1-4
5.10	256	5920	MKA 47 MRF37	Y..71M1-4
			MKAF 47 MRF37	Y..71M1-4
6.20	225	5920	MK 47 MRF37	Y..71M2-4
7.00	198	5920	MKF 47 MRF37	Y..71M2-4
			MKA 47 MRF37	Y..71M2-4
			MKAF 47 MRF37	Y..71M2-4
8.10	171	5920	MK 47 MRF37	Y..80M1-4
9.00	153	5920	MKF 47 MRF37	Y..80M1-4
11.00	131	5920	MKA 47 MRF37	Y..80M1-4
			MKAF 47 MRF37	Y..80M1-4
M_{2max}=600Nm				
0.11	12169	7630		
0.12	11162	7630		
0.15	9503	7630		
0.16	8547	7630		
0.19	7277	7630		
0.21	6478	7630		
0.24	5662	7630		
0.27	5033	7630		
0.32	4340	7630		
0.36	3854	7630	MK 57 MRF37	Y..63M1-4
0.41	3390	7630	MKF 57 MRF37	Y..63M1-4
0.47	2924	7630	MKA 57 MRF37	Y..63M1-4
0.53	2593	7630	MKAF 57 MRF37	Y..63M1-4
0.61	2249	7630		
0.70	1986	7630		
0.79	1743	7630		
0.90	1539	7630		
1.00	1354	7630		
1.20	1174	7630		
1.30	1036	7630		
1.50	906	7630		
1.60	806	7630	MK 57 MRF37	Y..63M2-4
1.90	699	7630	MKF 57 MRF37	Y..63M2-4
2.20	615	7630	MKA 57 MRF37	Y..63M2-4
			MKAF 57 MRF37	Y..63M2-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=600Nm				
2.40	544	7630	MK 57 MRF37	Y..71M1-4
2.80	473	7630	MKF 57 MRF37	Y..71M1-4
3.10	421	7630	MKA 57 MRF37	Y..71M1-4
			MKAF 57 MRF37	Y..71M1-4
3.80	362	7630	MK 57 MRF37	Y..71M2-4
4.30	319	7630	MKF 57 MRF37	Y..71M2-4
4.90	280	7630	MKA 57 MRF37	Y..71M2-4
			MKAF 57 MRF37	Y..71M2-4
5.60	246	7630	MK 57 MRF37	Y..80M1-4
6.40	215	7630	MKF 57 MRF37	Y..80M1-4
7.20	192	7630	MKA 57 MRF37	Y..80M1-4
			MKAF 57 MRF37	Y..80M1-4
8.60	166	7630	MK 57 MRF37	Y..80M2-4
9.90	145	7630	MKF 57 MRF37	Y..80M2-4
			MKA 57 MRF37	Y..80M2-4
			MKAF 57 MRF37	Y..80M2-4
11.0	129	7630	MK 57 MRF37	Y..90S-4
13.0	111	7630	MKF 57 MRF37	Y..90S-4
15.0	97	7630	MKA 57 MRF37	Y..90S-4
			MKAF 57 MRF37	Y..90S-4
M_{2max}=820Nm				
0.11	12139	10300		
0.12	11134	10300		
0.15	9479	10300		
0.17	8173	10300		
0.19	7259	10300		
0.21	6462	10300		
0.24	5648	10300	MK 67 MRF37	Y..63M1-4
0.28	4846	10300	MKF 67 MRF37	Y..63M1-4
0.32	4329	10300	MKA 67 MRF37	Y..63M1-4
0.37	3750	10300	MKAF 67 MRF37	Y..63M1-4
0.42	3315	10300		
0.47	2917	10300		
0.55	2532	10300		
0.62	2244	10300		
0.70	1981	10300		
0.79	1739	10300	MK 67 MRF37	Y..63M1-4
0.90	1535	10300	MKF 67 MRF37	Y..63M1-4
1.00	1351	10300	MKA 67 MRF37	Y..63M1-4
1.20	1171	10300	MKAF 67 MRF37	Y..63M1-4
1.30	1034	10300	MK 67 MRF37	Y..63M2-4
1.50	903	10300	MKF 67 MRF37	Y..63M2-4
1.70	793	10300	MKA 67 MRF37	Y..63M2-4
			MKAF 67 MRF37	Y..63M2-4
1.90	697	10300	MK 67 MRF37	Y..71M1-4
2.10	613	10300	MKF 67 MRF37	Y..71M1-4
2.40	542	10300	MKA 67 MRF37	Y..71M1-4
			MKAF 67 MRF37	Y..71M1-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=820Nm				
2.90	471	10300	MK 67 MRF37	Y..71M2-4
3.30	420	10300	MKF 67 MRF37	Y..71M2-4
3.80	361	10300	MKA 67 MRF37	Y..71M2-4
			MKAF 67 MRF37	Y..71M2-4
4.30	323	10300	MK 67 MRF37	Y..80M1-4
5.00	279	10300	MKF 67 MRF37	Y..80M1-4
5.60	246	10300	MKA 67 MRF37	Y..80M1-4
			MKAF 67 MRF37	Y..80M1-4
6.60	217	10300	MK 67 MRF37	Y..80M2-4
7.50	191	10300	MKF 67 MRF37	Y..80M2-4
			MKA 67 MRF37	Y..80M2-4
			MKAF 67 MRF37	Y..80M2-4
M_{2max}=1550Nm				
0.09	15310	15400		
0.10	14043	15400		
0.12	11955	15400		
0.14	10217	15400	MK 77 MRF37	Y..63M1-4
0.16	8809	15400	MKF 77 MRF37	Y..63M1-4
0.18	7528	15400	MKA 77 MRF37	Y..63M1-4
0.21	6606	15400	MKAF 77 MRF37	Y..63M1-4
0.24	5774	15400		
0.27	5089	15400		
0.31	4489	15400	MK 77 MRF37	Y..63M2-4
0.35	3961	15400	MKF 77 MRF37	Y..63M2-4
0.40	3485	15400	MKA 77 MRF37	Y..63M2-4
0.48	2901	15400	MKAF 77 MRF37	Y..63M2-4
0.51	2717	15400		
0.56	2370	15400	MK 77 MRF37	Y..63M2-4
0.64	2050	15400	MKF 77 MRF37	Y..63M2-4
0.75	1772	15400	MKA 77 MRF37	Y..63M2-4
0.87	1514	15400	MKAF 77 MRF37	Y..63M2-4
0.95	1388	15400		
1.10	1218	15400	MK 77 MRF37	Y..71M1-4
1.20	1053	15400	MKF 77 MRF37	Y..71M1-4
			MKA 77 MRF37	Y..71M1-4
			MKAF 77 MRF37	Y..71M1-4
1.50	924	15400	MK 77 MRF37	Y..71M2-4
1.70	815	15400	MKF 77 MRF37	Y..71M2-4
2.00	709	15400	MKA 77 MRF37	Y..71M2-4
			MKAF 77 MRF37	Y..71M2-4
2.20	622	15400	MK 77 MRF37	Y..80M1-4
2.50	552	15400	MKF 77 MRF37	Y..80M1-4
2.80	485	15400	MKA 77 MRF37	Y..80M1-4
			MKAF 77 MRF37	Y..80M1-4
3.40	428	15400	MK 77 MRF37	Y..80M2-4
3.90	367	15400	MKF 77 MRF37	Y..80M2-4
			MKA 77 MRF37	Y..80M2-4
			MKAF 77 MRF37	Y..80M2-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=2700Nm				
4.30	328	15400	MK 77 MRF37	Y..90S-4
4.90	290	15400	MKF 77 MRF37	Y..90S-4
5.60	252	15400	MKA 77 MRF37	Y..90S-4
			MKAF 77 MRF37	Y..90S-4
0.09	14829	27300		
0.10	13168	27300		
0.12	11737	27300		
0.14	10217	27300	MK 87 MRF57	Y..63M1-4
0.15	9073	27300	MKF 87 MRF57	Y..63M1-4
0.18	7854	27300	MKA 87 MRF57	Y..63M1-4
0.20	6832	27300	MKAF 87 MRF57	Y..63M1-4
0.23	5930	27300		
0.26	5240	27300		
0.30	4562	27300		
0.33	4037	27300	MK 87 MRF57	Y..63M2-4
0.37	3609	27300	MKF 87 MRF57	Y..63M2-4
0.42	3107	27300	MKA 87 MRF57	Y..63M2-4
0.48	2728	27300	MKAF 87 MRF57	Y..63M2-4
0.55	2371	27300	MK 87 MRF57	Y..71M1-4
0.62	2088	27300	MKF 87 MRF57	Y..71M1-4
0.70	1854	27300	MKA 87 MRF57	Y..71M1-4
			MKAF 87 MRF57	Y..71M1-4
0.83	1657	27300	MK 87 MRF57	Y..71M2-4
0.97	1415	27300	MKF 87 MRF57	Y..71M2-4
1.10	1229	27300	MKA 87 MRF57	Y..71M2-4
			MKAF 87 MRF57	Y..71M2-4
1.30	1078	27300	MK 87 MRF57	Y..80M1-4
1.40	951	27300	MKF 87 MRF57	Y..80M1-4
1.60	837	27300	MKA 87 MRF57	Y..80M1-4
			MKAF 87 MRF57	Y..80M1-4
2.00	726	27300	MK 87 MRF57	Y..80M2-4
2.20	638	27300	MKF 87 MRF57	Y..80M2-4
			MKA 87 MRF57	Y..80M2-4
			MKAF 87 MRF57	Y..80M2-4
2.50	562	27300	MK 87 MRF57	Y..90S-4
3.00	474	27300	MKF 87 MRF57	Y..90S-4
3.30	426	27300	MKA 87 MRF57	Y..90S-4
			MKAF 87 MRF57	Y..90S-4
3.80	373	27300	MK 87 MRF57	Y..90L-4
4.30	330	27300	MKF 87 MRF57	Y..90L-4
4.90	294	27300	MKA 87 MRF57	Y..90L-4
			MKAF 87 MRF57	Y..90L-4
5.70	250	27300	MK 87 MRF57	Y..100L1-4
6.00	236	27300	MKF 87 MRF57	Y..100L1-4
7.10	201	27300	MKA 87 MRF57	Y..100L1-4
			MKAF 87 MRF57	Y..100L1-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=4300Nm				
0.08	18091	40000	MK 97 MRF57	Y..63M1-4
0.08	16666	40000	MKF 97 MRF57	Y..63M1-4
0.09	14897	40000	MKA 97 MRF57	Y..63M1-4
0.10	13182	40000	MKAF 97 MRF57	Y..63M1-4
0.12	11677	40000		
0.13	10317	40000	MK 97 MRF57	Y..63M1-4
0.15	9083	40000	MKF 97 MRF57	Y..63M1-4
0.17	8054	40000	MKA 97 MRF57	Y..63M1-4
0.20	6970	40000	MKAF 97 MRF57	Y..63M1-4
0.22	6027	40000	MK 97 MRF57	Y..63M2-4
0.24	5391	40000	MKF 97 MRF57	Y..63M2-4
0.28	4669	40000	MKA 97 MRF57	Y..63M2-4
0.32	4082	40000	MKAF 97 MRF57	Y..63M2-4
0.36	3583	40000	MK 97 MRF57	Y..71M1-4
0.42	3108	40000	MKF 97 MRF57	Y..71M1-4
0.47	2757	40000	MKA 97 MRF57	Y..71M1-4
			MKAF 97 MRF57	Y..71M1-4
0.57	2419	40000	MK 97 MRF57	Y..71M2-4
0.65	2123	40000	MKF 97 MRF57	Y..71M2-4
			MKA 97 MRF57	Y..71M2-4
			MKAF 97 MRF57	Y..71M2-4
0.74	1856	40000	MK 97 MRF57	Y..80M1-4
0.85	1625	40000	MKF 97 MRF57	Y..80M1-4
0.96	1430	40000	MKA 97 MRF57	Y..80M1-4
1.10	1261	40000	MKAF 97 MRF57	Y..80M1-4
1.30	1102	40000	MK 97 MRF57	Y..80M2-4
1.50	957	40000	MKF 97 MRF57	Y..80M2-4
			MKA 97 MRF57	Y..80M2-4
			MKAF 97 MRF57	Y..80M2-4
1.70	855	40000	MK 97 MRF57	Y..90S-4
1.90	743	40000	MKF 97 MRF57	Y..90S-4
2.20	652	40000	MKA 97 MRF57	Y..90S-4
			MKAF 97 MRF57	Y..90S-4
2.50	573	40000	MK 97 MRF57	Y..90L-4
2.80	504	40000	MKF 97 MRF57	Y..90L-4
			MKA 97 MRF57	Y..90L-4
			MKAF 97 MRF57	Y..90L-4
3.30	437	40000	MK 97 MRF57	Y..100L1-4
3.70	382	40000	MKF 97 MRF57	Y..100L1-4
4.20	342	40000	MKA 97 MRF57	Y..100L1-4
			MKAF 97 MRF57	Y..100L1-4
4.80	305	40000	MK 97 MRF57	Y..100L2-4
5.60	258	40000	MKF 97 MRF57	Y..100L2-4
			MKA 97 MRF57	Y..100L2-4
			MKAF 97 MRF57	Y..100L2-4
6.30	232	40000	MK 97 MRF57	Y..112M-4
7.30	199	40000	MKF 97 MRF57	Y..112M-4
			MKA 97 MRF57	Y..112M-4
			MKAF 97 MRF57	Y..112M-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=8000Nm				
0.10	14311	65000	MK 107 MRF77	Y..63M1-4
			MKF 107 MRF77	Y..63M1-4
			MKA 107 MRF77	Y..63M1-4
			MKAF107 MRF77	Y..63M1-4
0.11	12211	65000	MK 107 MRF77	Y..63M2-4
0.12	10677	65000	MKF 107 MRF77	Y..63M2-4
0.14	9524	65000	MKA 107 MRF77	Y..63M2-4
0.16	8328	65000	MKAF107 MRF77	Y..63M2-4
0.18	7270	65000	MK 107 MRF77	Y..71M1-4
0.21	6184	65000	MKF 107 MRF77	Y..71M1-4
0.23	5662	65000	MKA 107 MRF77	Y..71M1-4
			MKAF107 MRF77	Y..71M1-4
0.27	5138	65000	MK 107 MRF77	Y..71M2-4
0.32	4359	65000	MKF 107 MRF77	Y..71M2-4
0.36	3810	65000	MKA 107 MRF77	Y..71M2-4
			MKAF107 MRF77	Y..71M2-4
0.41	3358	65000	MK 107 MRF77	Y..80M1-4
0.46	2977	65000	MKF 107 MRF77	Y..80M1-4
0.53	2599	65000	MKA 107 MRF77	Y..80M1-4
			MKAF107 MRF77	Y..80M1-4
0.63	2286	65000	MK 107 MRF77	Y..80M2-4
0.74	1939	65000	MKF 107 MRF77	Y..80M2-4
			MKA 107 MRF77	Y..80M2-4
			MKAF107 MRF77	Y..80M2-4
0.83	1713	65000	MK 107 MRF77	Y..90S-4
0.91	1554	65000	MKF 107 MRF77	Y..90S-4
1.10	1336	65000	MKA 107 MRF77	Y..90S-4
			MKAF107 MRF77	Y..90S-4
1.20	1166	65000	MK 107 MRF77	Y..90L-4
1.40	1030	65000	MKF 107 MRF77	Y..90L-4
1.60	904	65000	MKA 107 MRF77	Y..90L-4
			MKAF107 MRF77	Y..90L-4
1.80	793	65000	MK 107 MRF77	Y..100L1-4
2.00	696	65000	MKF 107 MRF77	Y..100L1-4
2.30	615	65000	MKA 107 MRF77	Y..100L1-4
			MKAF107 MRF77	Y..100L1-4
2.80	522	65000	MK 107 MRF77	Y..100L2-4
3.20	461	65000	MKF 107 MRF77	Y..100L2-4
			MKA 107 MRF77	Y..100L2-4
			MKAF107 MRF77	Y..100L2-4
3.60	408	65000	MK 107 MRF77	Y..112M-4
4.00	364	65000	MKF 107 MRF77	Y..112M-4
			MKA 107 MRF77	Y..112M-4
			MKAF107 MRF77	Y..112M-4
4.60	318	65000	MK 107 MRF77	Y..132S-4
5.10	286	65000	MKF 107 MRF77	Y..132S-4
5.80	251	65000	MKA 107 MRF77	Y..132S-4
			MKAF107 MRF77	Y..132S-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=13000Nm				
0.08	17550	79200	MK 127 MRF77	Y..63M2-4
0.08	16006	79200	MKF 127 MRF77	Y..63M2-4
0.09	14975	79200	MKA 127 MRF77	Y..63M2-4
0.11	12440	79200	MKAF127 MRF77	Y..63M2-4
0.12	10915	79200	MK 127 MRF77	Y..71M1-4
0.13	9819	79200	MKF 127 MRF77	Y..71M1-4
0.15	8443	79200	MKA 127 MRF77	Y..71M1-4
			MKAF127 MRF77	Y..71M1-4
0.18	7482	79200	MK 127 MRF77	Y..71M2-4
0.21	6565	79200	MKF 127 MRF77	Y..71M2-4
			MKA 127 MRF77	Y..71M2-4
			MKAF127 MRF77	Y..71M2-4
0.24	5804	79200	MK 127 MRF77	Y..80M1-4
0.27	5027	79200	MKF 127 MRF77	Y..80M1-4
0.31	4423	79200	MKA 127 MRF77	Y..80M1-4
			MKAF127 MRF77	Y..80M1-4
0.37	3889	79200	MK 127 MRF77	Y..80M2-4
0.43	3311	79200	MKF 127 MRF77	Y..80M2-4
0.48	3009	79200	MKA 127 MRF77	Y..80M2-4
			MKAF127 MRF77	Y..80M2-4
0.54	2607	79200	MK 127 MRF77	Y..90S-4
0.63	2268	79200	MKF 127 MRF77	Y..90S-4
			MKA 127 MRF77	Y..90S-4
			MKAF127 MRF77	Y..90S-4
0.74	1926	79200	MK 127 MRF77	Y..90L-4
0.81	1757	79200	MKF 127 MRF77	Y..90L-4
0.93	1541	79200	MKA 127 MRF77	Y..90L-4
			MKAF127 MRF77	Y..90L-4
1.10	1342	79200	MK 127 MRF77	Y..100L1-4
1.20	1177	79200	MKF 127 MRF77	Y..100L1-4
1.40	1025	79200	MKA 127 MRF77	Y..100L1-4
			MKAF127 MRF77	Y..100L1-4
1.60	899	79200	MK 127 MRF77	Y..100L2-4
1.80	790	79200	MKF 127 MRF77	Y..100L2-4
			MKA 127 MRF77	Y..100L2-4
			MKAF127 MRF77	Y..100L2-4
2.10	704	79200	MK 127 MRF77	Y..112M-4
2.40	610	79200	MKF 127 MRF77	Y..112M-4
2.70	549	79200	MKA 127 MRF77	Y..112M-4
			MKAF127 MRF77	Y..112M-4
3.00	477	79200	MK 127 MRF77	Y..132S-4
3.50	418	79200	MKF 127 MRF77	Y..132S-4
			MKA 127 MRF77	Y..132S-4
			MKAF127 MRF77	Y..132S-4
2.70	536	79200	MK 127 MRF77	Y..132S-4
3.10	473	79200	MKF 127 MRF77	Y..132S-4
3.50	418	79200	MKA 127 MRF77	Y..132S-4
			MKAF127 MRF77	Y..132S-4

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=13000Nm				
4.00	367	79200	**MK 127 MRF87**	**Y..132M-4**
4.40	330	79200	**MKF 127 MRF87**	**Y..132M-4**
			MKA 127 MRF87	**Y..132M-4**
			MKAF127 MRF87	**Y..132M-4**
M_{2max}=18000Nm				
0.08	17679	112200		
0.09	15729	112200		
0.09	14721	112200	**MK 157 MRF97**	**Y..80M$_1$-4**
0.11	13097	112200	**MKF 157 MRF97**	**Y..80M$_1$-4**
0.12	11368	112200	**MKA 157 MRF97**	**Y..80M$_1$-4**
0.14	10114	112200	**MKAF157 MRF97**	**Y..80M$_1$-4**
0.16	8718	112200		
0.18	7734	112200		
			MK 157 MRF97	**Y..80M$_2$-4**
0.28	5074	112200	**MKF 157 MRF97**	**Y..80M$_2$-4**
0.32	4514	112200	**MKA 157 MRF97**	**Y..80M$_2$-4**
			MKAF157 MRF97	**Y..80M$_2$-4**
0.36	3979	112200	**MK 157 MRF97**	**Y..90S-4**
0.40	3516	112200	**MKF 157 MRF97**	**Y..90S-4**
0.47	3051	112200	**MKA 157 MRF97**	**Y..90S-4**
			MKAF157 MRF97	**Y..90S-4**
0.55	2610	112200	**MK 157 MRF97**	**Y..90L-4**
0.62	2322	112200	**MKF 157 MRF97**	**Y..90L-4**
			MKA 157 MRF97	**Y..90L-4**
			MKAF157 MRF97	**Y..90L-4**
0.72	2029	112200	**MK 157 MRF97**	**Y..100L$_1$-4**
0.79	1805	112200	**MKF 157 MRF97**	**Y..100L$_1$-4**
0.86	1659	112200	**MKA 157 MRF97**	**Y..100L$_1$-4**
1.00	1365	112200	**MKAF157 MRF97**	**Y..100L$_1$-4**
1.20	1229	112200	**MK 157 MRF97**	**Y..100L$_2$-4**
1.30	1093	112200	**MKF 157 MRF97**	**Y..100L$_2$-4**
			MKA 157 MRF97	**Y..100L$_2$-4**
			MKAF157 MRF97	**Y..100L$_2$-4**
1.60	942	112200	**MK 157 MRF97**	**Y..112M-4**
1.70	854	112200	**MKF 157 MRF97**	**Y..112M-4**
			MKA 157 MRF97	**Y..112M-4**
			MKAF157 MRF97	**Y..112M-4**
1.90	756	112200	**MK 157 MRF97**	**Y..132S-4**
2.20	661	112200	**MKF 157 MRF97**	**Y..132S-4**
2.60	567	112200	**MKA 157 MRF97**	**Y..132S-4**
			MKAF157 MRF97	**Y..132S-4**
2.90	504	112200	**MK 157 MRF97**	**Y..132M-4**
3.40	434	112200	**MKF 157 MRF97**	**Y..132M-4**
			MKA 157 MRF97	**Y..132M-4**
			MKAF157 MRF97	**Y..132M-4**
5.10	291	112200	**MK 157 MRF97**	**Y..160M-4**
4.50	325	112200	**MKF 157 MRF97**	**Y..160M-4**
4.90	299	112200	**MKA 157 MRF97**	**Y..160M-4**
			MKAF157 MRF97	**Y..160M-4**

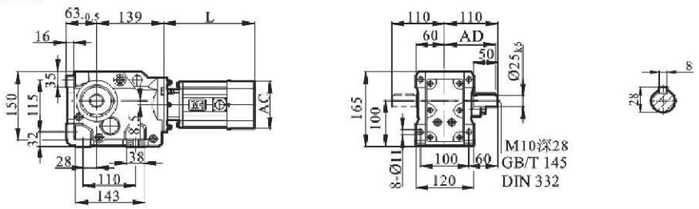
n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=18000Nm				
5.80	253	112200	**MK 157 MRF97**	**Y..160L-4**
6.40	230	112200	**MKF 157 MRF97**	**Y..160L-4**
6.90	213	112200	**MKA 157 MRF97**	**Y..160L-4**
			MKAF157 MRF97	**Y..160L-4**
M_{2max}=32000Nm				
0.07	19723	150000		
0.08	17406	150000		**Y..80M$_1$-4**
0.09	15000	150000	**MK 167 MRF97**	**Y..80M$_1$-4**
0.10	13238	150000	**MKH 167 MRF97**	**Y..80M$_1$-4**
0.12	11573	150000		**Y..80M$_1$-4**
0.13	10264	150000		
0.17	8628	150000		**Y..80M$_2$-4**
			MK 167 MRF97	**Y..80M$_2$-4**
			MKH 167 MRF97	**Y..80M$_2$-4**
				Y..80M$_2$-4
0.22	6562	150000	**MK 167 MRF97**	**Y..90S-4**
0.27	5355	150000	**MKH 167 MRF97**	**Y..90S-4**
0.30	4788	150000	**MK 167 MRF97**	**Y..90L-4**
0.35	4079	150000	**MKH 167 MRF97**	**Y..90L-4**
0.42	3376	150000	**MK 167 MRF97**	**Y..100L$_1$-4**
0.52	2755	150000	**MKH 167 MRF97**	**Y..100L$_1$-4**
0.64	2263	15000	**MK 167 MRF97**	**Y..100L$_2$-4**
0.67	2182	15000	**MKH 167 MRF97**	**Y..100L$_2$-4**
0.86	1704	15000	**MK 167 MRF97**	**Y..112M-4**
1.00	1408	15000	**MKH 167 MRF97**	**Y..112M-4**
1.10	1296	15000	**MK 167 MRF97**	**Y..132S-4**
1.30	1101	15000	**MKH 167 MRF97**	**Y..132S-4**
1.60	944	15000	**MK 167 MRF97**	**Y..132M-4**
1.70	843	15000	**MKH 167 MRF97**	**Y..132M-4**
1.90	757	15000		
2.60	561	15000	**MK 167 MRF97**	**Y..160M-4**
			MKH 167 MRF97	**Y..160M-4**
3.00	481	15000	**MK 167 MRF97**	**Y..160L-4**
3.50	423	15000	**MKH 167 MRF97**	**Y..160L-4**
4.00	369	15000		
4.60	318	15000	**MK 167 MRF107**	**Y..180M-4**
			MKH 167 MRF107	**Y..180M-4**
5.30	278	15000	**MK 167 MRF107**	**Y..180L-4**
6.00	244	15000	**MKH 167 MRF107**	**Y..180L-4**
6.90	213	15000	**MK 167 MRF107**	**Y..200L-4**
7.20	206	15000	**MKH 167 MRF107**	**Y..200L-4**
8.20	180	15000		

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=32000Nm				
9.20	160	15000	**MK 167 MRF107**	**Y..225S-4**
			MKH 167 MRF107	**Y..225S-4**
11.0	135	15000	**MK 167 MRF107**	**Y..250M-4**
12.0	118	15000	**MKH 167 MRF107**	**Y..250M-4**
M_{2max}=50000Nm				
0.04	32625	19000		
0.05	27165	19000		
0.06	24353	19000	**MK 187 MRF97**	**Y..80M$_1$-4**
0.07	19144	19000	**MKH 187 MRF97**	**Y..80M$_1$-4**
0.08	16978	19000		
0.10	14272	19000	**MK 187 MRF97**	**Y..80M$_2$-4**
0.11	13116	19000	**MKH 187 MRF97**	**Y..80M$_2$-4**
0.12	11647	19000		
0.14	10413	19000	**MK 187 MRF97**	**Y..90S-4**
0.15	9363	19000	**MKH 187 MRF97**	**Y..90S-4**
0.17	8126	19000		
0.19	7343	19000		
0.21	6747	19000	**MK 187 MRF97**	**Y..90L-4**
0.24	5991	19000	**MKH 187 MRF97**	**Y..90L-4**
0.27	5358	19000		
0.30	4817	19000	**MK 187 MRF97**	**Y..100L$_1$-4**
0.33	4370	19000	**MKH 187 MRF97**	**Y..100L$_1$-4**
0.40	3609	19000	**MK 187 MRF97**	**Y..100L$_2$-4**
0.48	3062	19000	**MKH 187 MRF97**	**Y..100L$_2$-4**

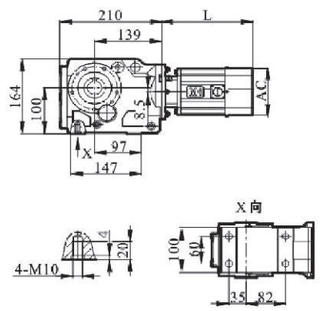
n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=50000Nm				
0.58	2519	19000	**MK 187 MRF97**	**Y..112M-4**
0.64	2268	19000	**MKH 187 MRF97**	**Y..112M-4**
0.71	2054	19000		
0.80	1821	19000	**MK 187 MRF97**	**Y..132S-4**
0.91	1605	19000	**MKH 187 MRF97**	**Y..132S-4**
1.00	1395	19000	**MK 187 MRF97**	**Y..132M-4**
1.20	1196	19000	**MKH 187 MRF97**	**Y..132M-4**
2.00	738	19000	**MK 187 MRF97**	**Y..160L-4**
2.40	621	19000	**MKH 187 MRF97**	**Y..160L-4**
2.80	527	19000	**MK 187 MRF97**	**Y..180M-4**
			MKH 187 MRF97	**Y..180M-4**
1.80	835	19000	**MK 187 MRF107**	**Y..160M-4**
			MKH 187 MRF107	**Y..160M-4**
2.00	729	19000	**MK 187 MRF97**	**Y..160L-4**
2.40	622	19000	**MKH 187 MRF97**	**Y..160L-4**
2.80	520	19000	**MK 187 MRF97**	**Y..180M-4**
3.20	454	19000	**MKH 187 MRF97**	**Y..180M-4**
4.20	355	19000	**MK 187 MRF97**	**Y..200L-4**
			MKH 187 MRF97	**Y..200L-4**
5.70	261	19000	**MK 187 MRF97**	**Y..225S-4**
			MKH 187 MRF97	**Y..225S-4**
6.70	221	19000	**MK 187 MRF97**	**Y..225M-4**
7.60	193	19000	**MKH 187 MRF97**	**Y..225M-4**

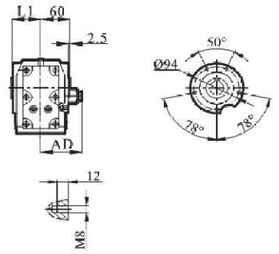
4.9 外形尺寸 / Dimensions

MK37

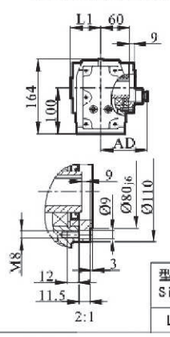


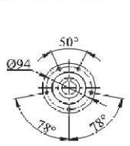
MKFA/MKFH/MKFV37





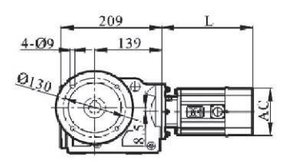
MKFAZ/MKFHZ/MKFVZ37

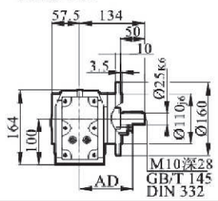




型号 Size	MKFA	MKFH	MKFV
	MKFAZ	MKFHZ	MKFVZ
	MKFAF	MKFHF	MKFVF
L1	60	86	60

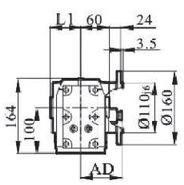
MKFF37



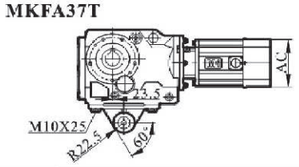




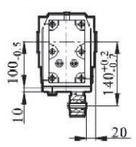
MKFAF/MKFHF/MKFVH37



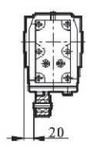
MKFA37T

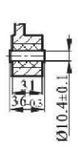


TA

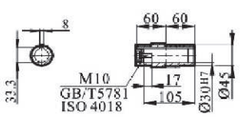


TB

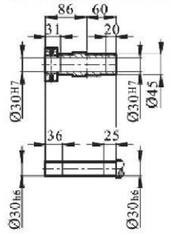




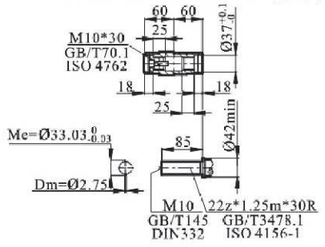
MKA/MKAZ/MKAF37输出轴



MKH/MKHZ/MKHF37输出轴

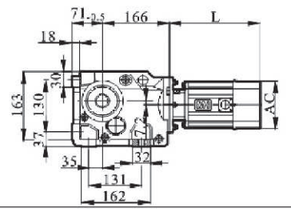


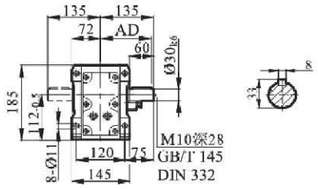
MKV/MKVZ/MKVF37输出轴



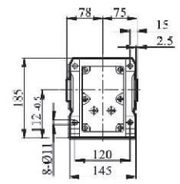
YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	225	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

MK47

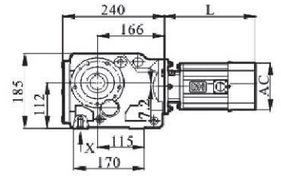


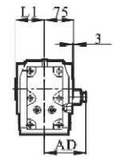


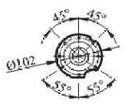
MKA47B MKH47B MKV47B

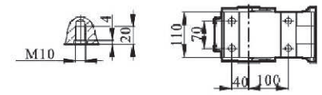


MKFA/MKFH/MKFV47

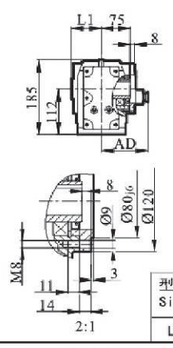


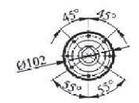






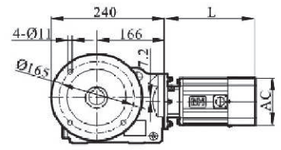
MKFAZ/MKFHZ/MKFVZ47

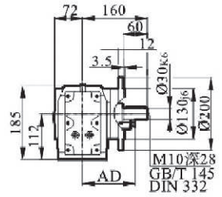




型号 Size	MKFA	MKFH	MKFV
	MKFAZ	MKFHZ	MKFVZ
	MKFAF	MKFHF	MKFVF
L1	75	105	75

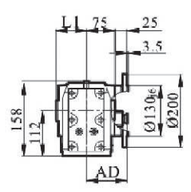
MKFF47



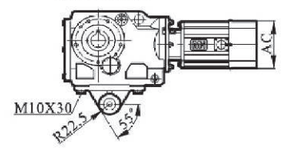




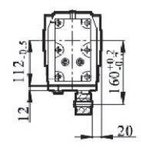
MKFAF/MKFHF/MKFVH47



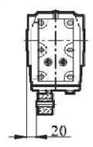
MKFA47T

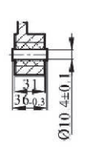


TA

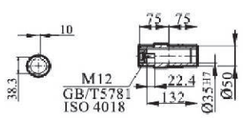


TB

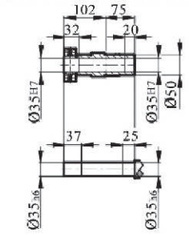




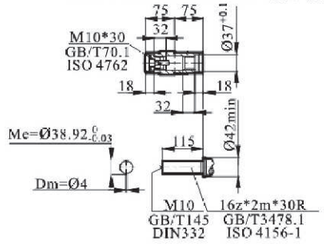
MKA/MKAZ/MKAF47输出轴



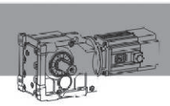
MKH/MKHZ/MKHF47输出轴



MKV/MKVZ/MKVF47输出轴

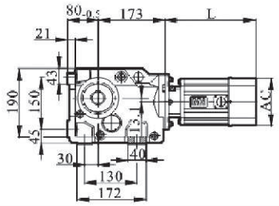


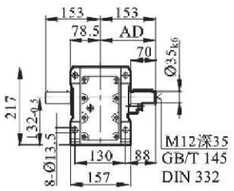
YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	205	260	290	300	320	330
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180



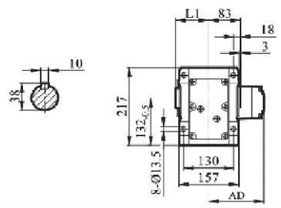
MK

MK57

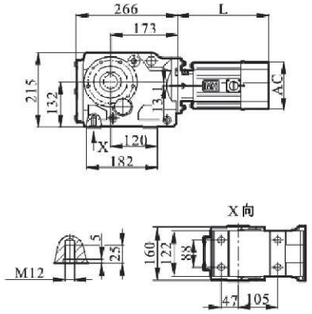


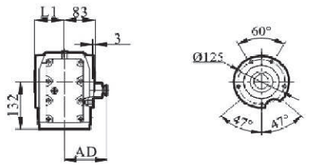


MKA57B MKH57B MKV57B

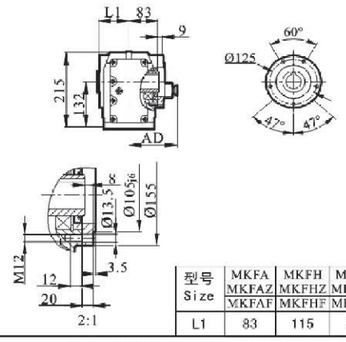


MKFA/MKFH/MKFV57



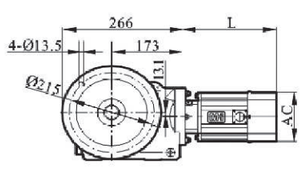


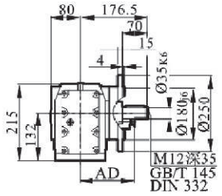
MKFAZ/MKFHZ/MKFVZ57



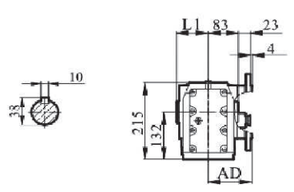
型号 Size	MKFA MKFAZ MKFAF	MKFH MKFHZ MKFHF	MKFV MKFVZ MKFVF
L1	83	115	83

MKFF57

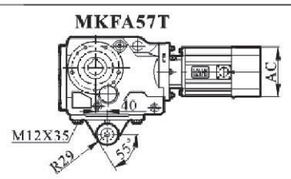




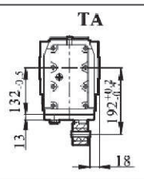
MKFAF/MKFHF/MKFVH57



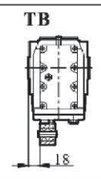
MKFA57T

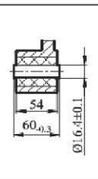


TA

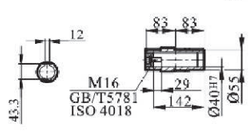


TB

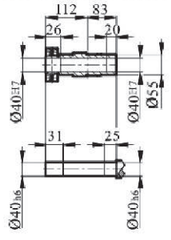




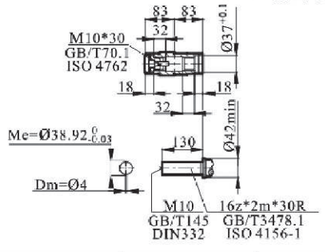
MKA/MKAZ/MKAF57输出轴



MKH/MKHZ/MKHF57输出轴

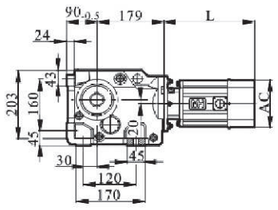


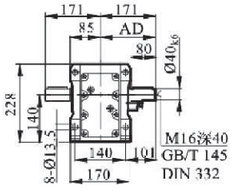
MKV/MKVZ/MKVF57输出轴



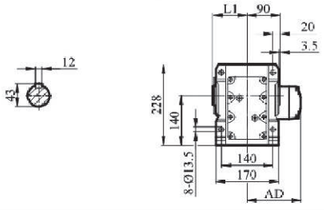
YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M
L	205	260	290	300	330	330	380
AC	120	145	170	190	190	195	230
AD	110	130	135	145	145	180	215

MK67

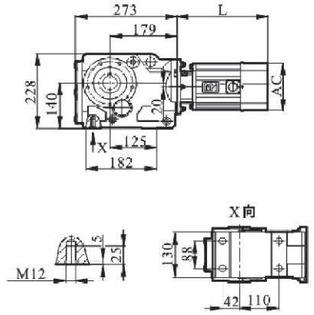


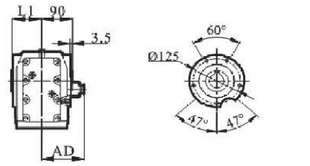


MKA67B MKH67B MKV67B

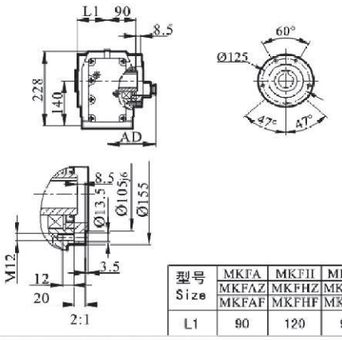


MKFA/MKFH/MKFV67



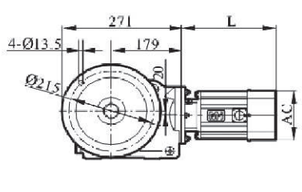


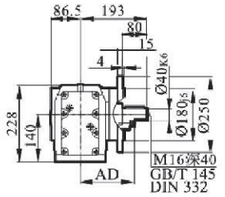
MKFAZ/MKFHZ/MKFVZ67



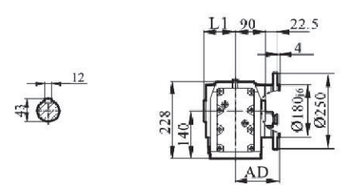
型号 Size	MKFA MKFAZ MKFAF	MKFH MKFHZ MKFHF	MKFV MKFVZ MKFVF
L1	90	120	90

MKFF67

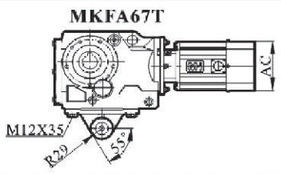




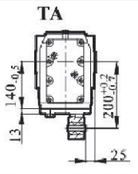
MKFAF/MKFHF/MKFVH67



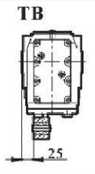
MKFA67T

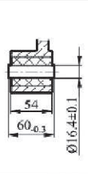


TA

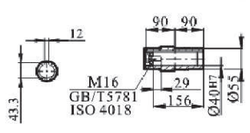


TB

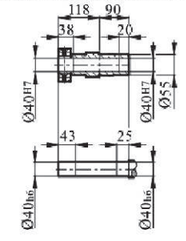




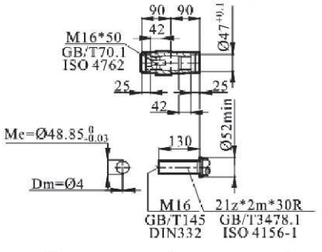
MKA/MKAZ/MKAF67输出轴



MKH/MKHZ/MKHF67输出轴

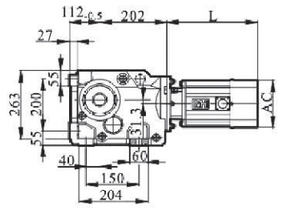


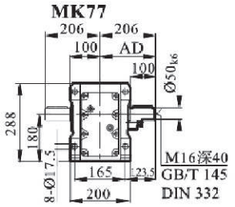
MKV/MKVZ/MKVF67输出轴



YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	330	330	380	430
AC	120	145	170	190	190	210	230	280
AD	110	130	135	145	145	160	215	215

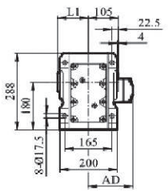
MK77



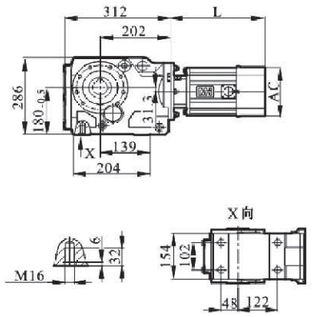


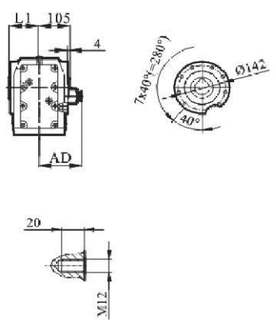
MKA77B MKH77B MKV77B



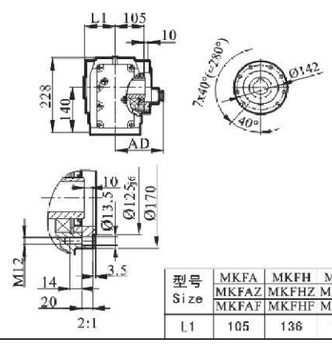


MKFA/MKFH/MKFV77



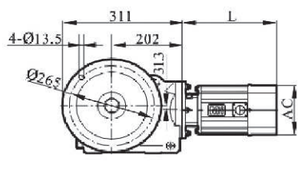


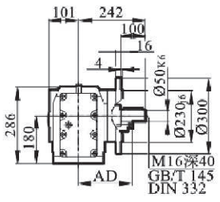
MKFAZ/MKFHZ/MKFVZ77



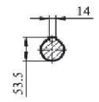
型号 Size	MKFA	MKFH	MKFV
	MKFAZ	MKFHZ	MKFVZ
	MKFAF	MKFHF	MKFVF
L1	105	136	105

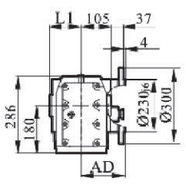
MKFF77



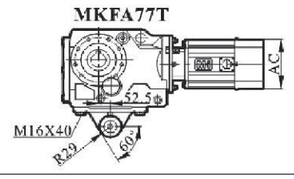


MKFAF/MKFHF/MKFVH77

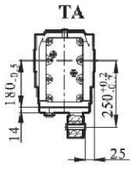




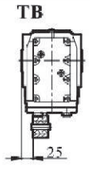
MKFA77T

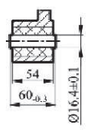


TA

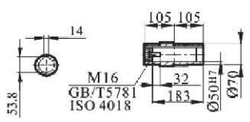


TB

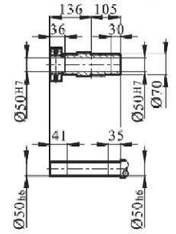




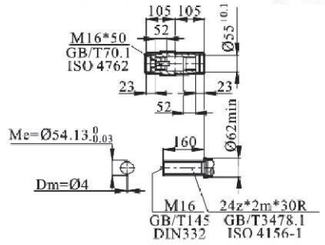
MKA/MKAZ/MKAF77输出轴



MKH/MKHZ/MKHF77输出轴

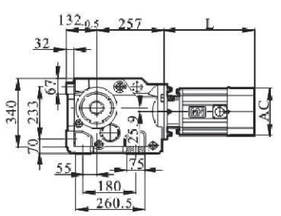


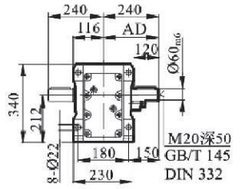
MKV/MKVZ/MKVF77输出轴



YE2电机机座号 Motor Size	71	80	90S	90L	100	112M	132S	132M	160M
L	254	284	292	322	322	370	418	457	524
AC	145	170	190	190	210	230	280	280	315
AD	130	135	145	145	160	215	215	215	255

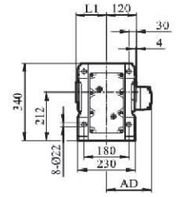
MK87



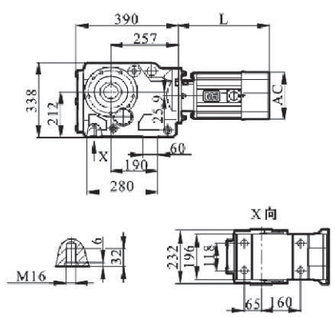


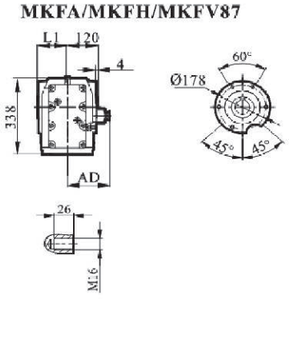
MKA87B MKH87B MKV87B



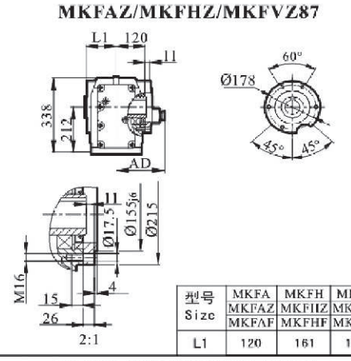


MKFA/MKFH/MKFV87



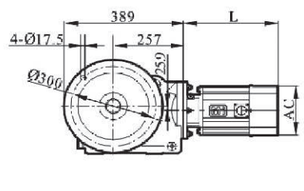


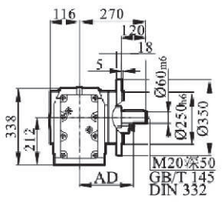
MKFAZ/MKFHZ/MKFVZ87



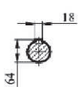
型号 Size	MKFA	MKFH	MKFV
	MKFAZ	MKFHZ	MKFVZ
	MKFAF	MKFHF	MKFVF
L1	120	161	120

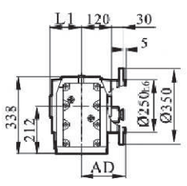
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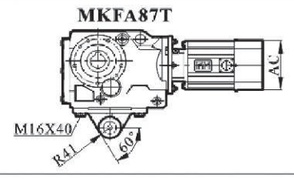


MKFAF/MKFHF/MKFVH87

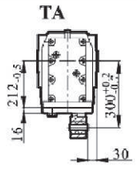




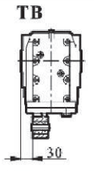
MKFA87T

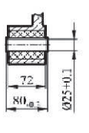


TA

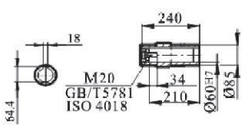


TB

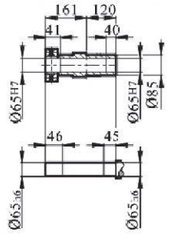




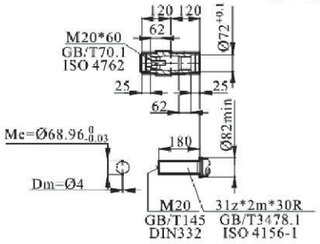
MKA/MKAZ/MKAF87输出轴



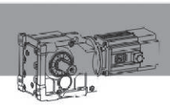
MKH/MKHZ/MKHF87输出轴



MKV/MKVZ/MKVF87输出轴

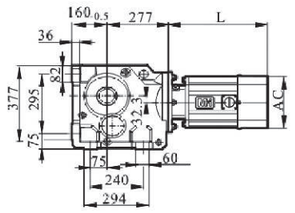


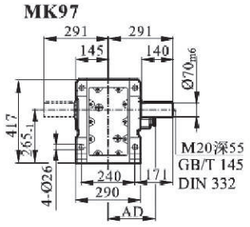
YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M	160L	180M	180L
L	280	288	318	318	365	413	452	524	547	583	616
AC	170	190	190	210	230	280	280	315	315	350	350
AD	135	145	145	160	215	215	215	255	255	280	280



MK

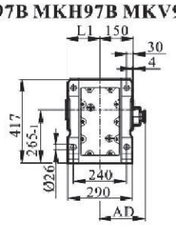
MK97



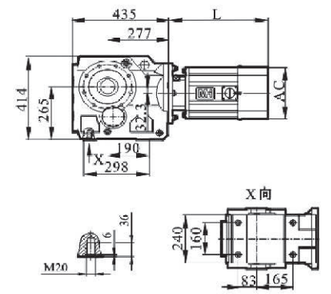


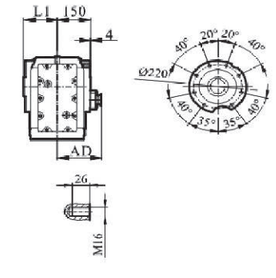


MKA97B MKH97B MKV97B

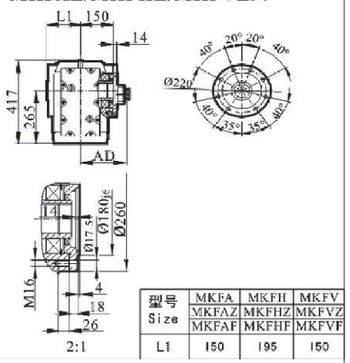


MKFA/MKFH/MKFV97



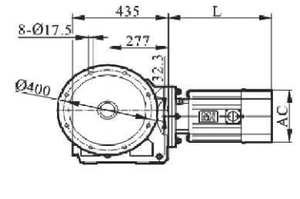


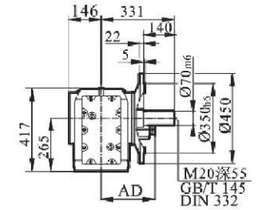
MKFAZ/MKFHZ/MKFVZ97

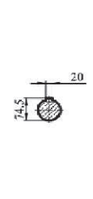


型号 Size	MKFA	MKFH	MKFV
	MKFAZ	MKFHZ	MKFVZ
	MKFAF	MKFHF	MKFVF
L1	150	195	150

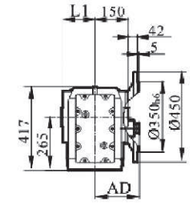
MKFF97



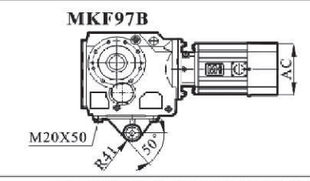




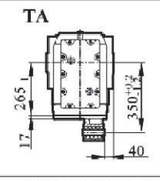
MKFAF/MKFHF/MKFVH97



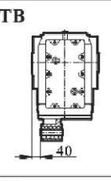
MKF97B

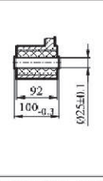


TA

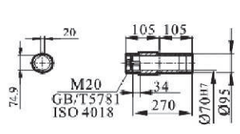


TB

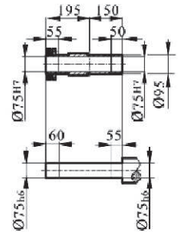




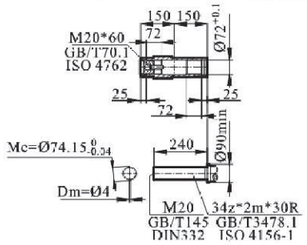
MKA/MKAZ/MKAF97输出轴



MKH/MKHZ/MKHF97输出轴

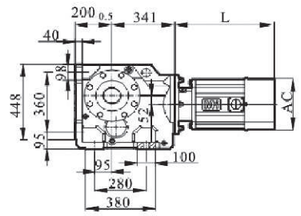


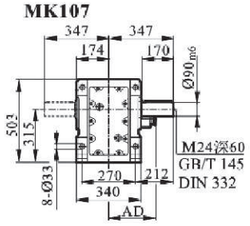
MKV/MKVZ/MKVF97输出轴



YE2电机机座号 Motor Size	90S	90L	100	112M	132S	132M	160M	160L	180M	180L	200L
L	280	310	312	360	408	487	524	519	555	588	654
AC	190	190	210	230	280	280	315	315	350	350	395
AD	145	145	160	215	215	215	255	255	280	280	305

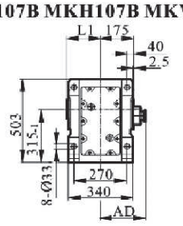
MK107



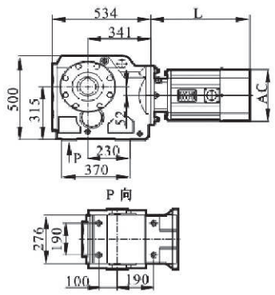


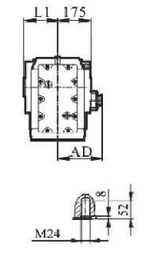


MKA107B MKH107B MKV107B

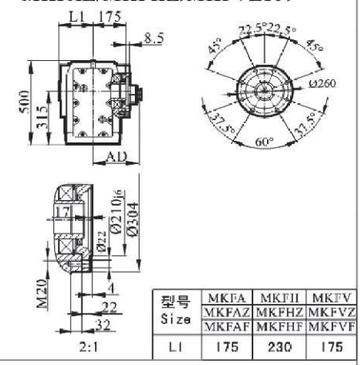


MKFA/MKFH/MKFV107



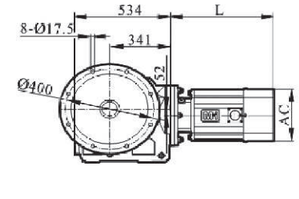


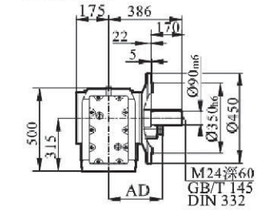
MKFAZ/MKFHZ/MKFVZ107

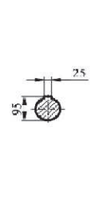


型号 Size	MKFA	MKFH	MKFV
	MKFAZ	MKFHZ	MKFVZ
	MKFAF	MKFHF	MKFVF
L1	175	230	175

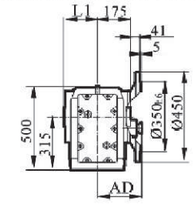
MKFF107



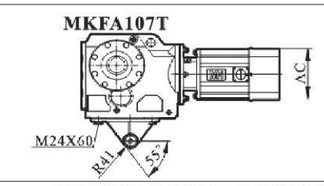




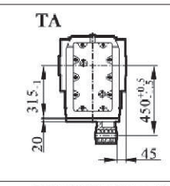
MKAF/MKFHF/MKFVH107



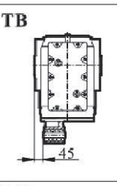
MKFA107T

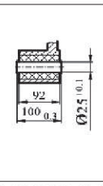


TA

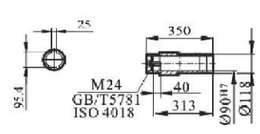


TB

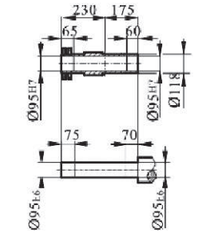




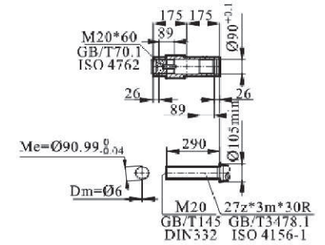
MKA/MKAZ/MKAF107输出轴



MKH/MKHZ/MKHF107输出轴

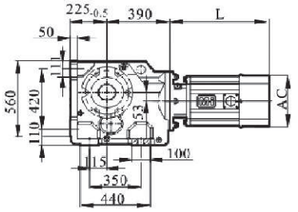


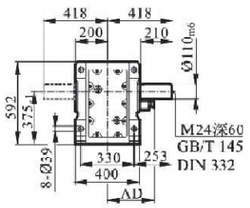
MKV/MKVZ/MKVF107输出轴



YE2电机机座号 Motor Size	100	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
L	308	354	403	482	524	519	555	588	654	680	702
AC	210	230	280	280	315	315	350	350	395	450	450
AD	160	215	215	215	255	255	280	280	305	335	335

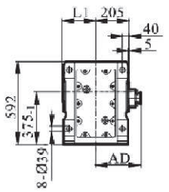
MK127



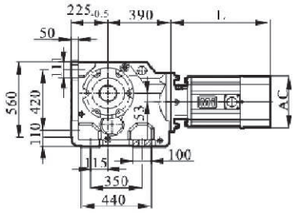


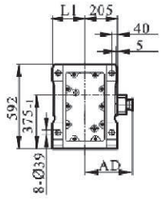


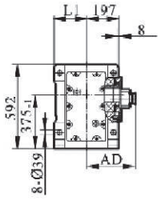
MKA127B MKH127B MKV127B



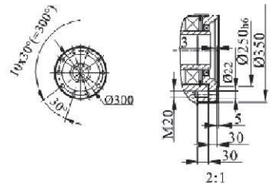
MKA/MKH127



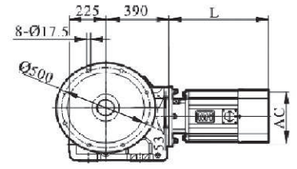


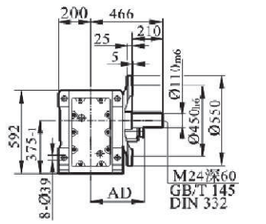


MKAZ/MKHZ127



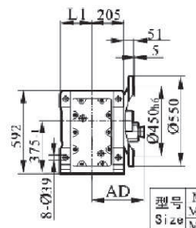
MKF127





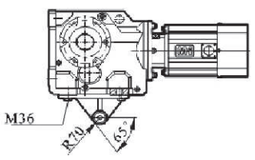


MKAF/MKHF/MKVH127

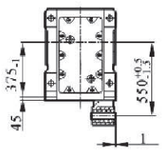


型号 Size	MKFA MKFAZ MKFAF	MKFH MKFHZ MKFHF
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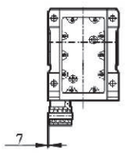
MKA127T

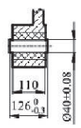


TA

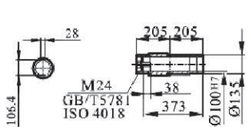


TB

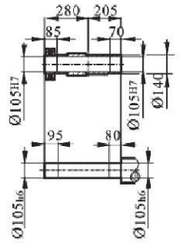




MKA/MKAZ/MKAF127输出轴

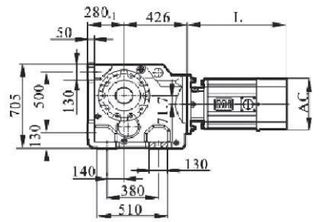


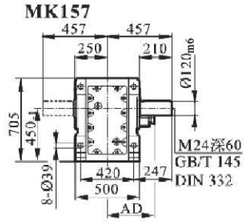
MKH/MKHZ/MKHF127输出轴



YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
L	567	602	635	666	642	669	691	770	828	879
AC	315	315	350	350	395	450	450	480	530	530
AD	255	255	280	280	305	335	335	370	410	410

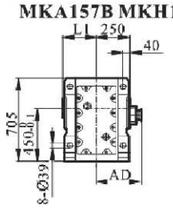
MK157



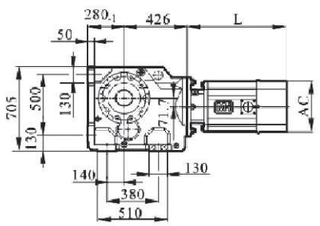


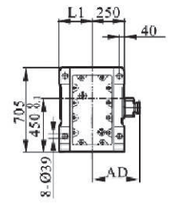


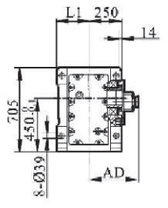
MKA157B MKH157B



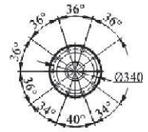
MKA/MKH157

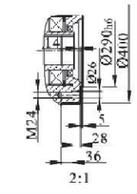




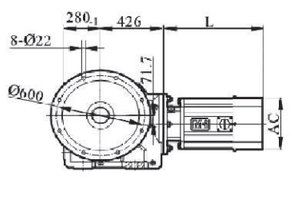


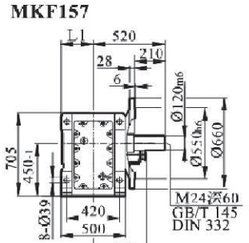
MKAZ/MKHZ157



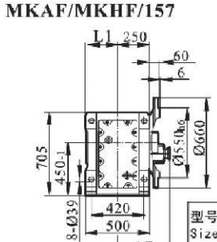


MKF157



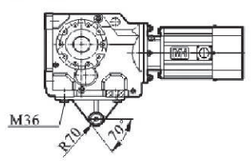


MKAF/MKHF/157

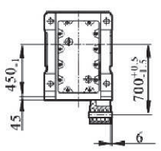


型号 Size	MKFA MKFAZ MKFAF	MKFH MKFHZ MKFHF
L1	250	330

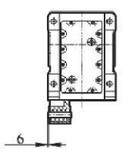
MK157B

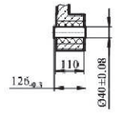


TA

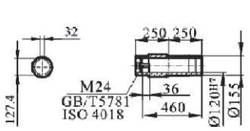


TB

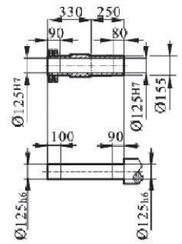




MKA/MKAZ/MKAF157输出轴

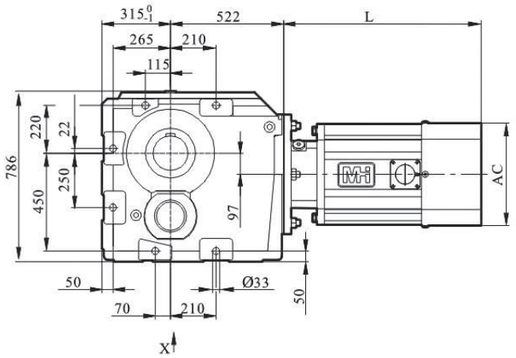


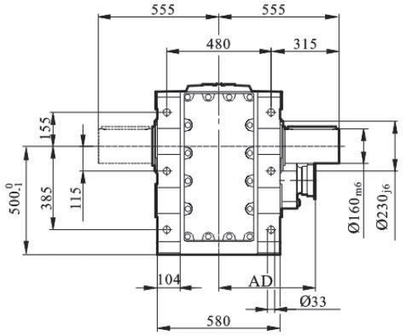
MKH/MKHZ/MKHF157输出轴



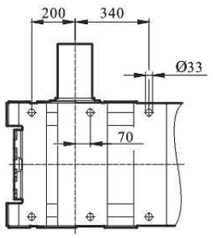
YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
L	567	602	635	666	642	669	691	770	828	879	1100	1210	1210
AC	315	315	350	350	395	450	450	480	530	530	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	530

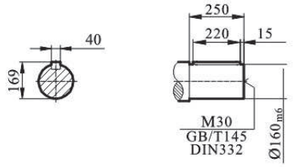
MK167



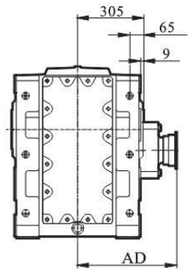


X

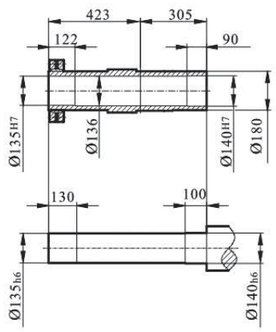




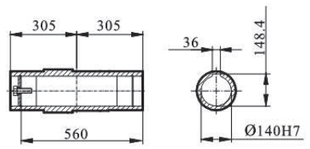
MKFA/MKFH167



MKH167输出轴

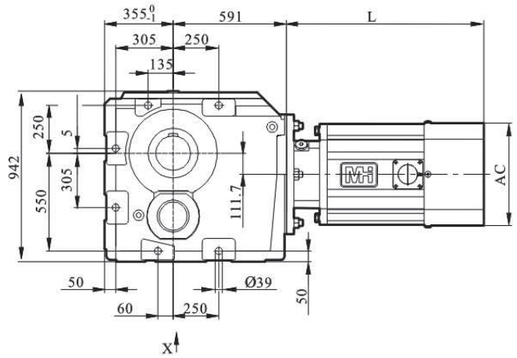


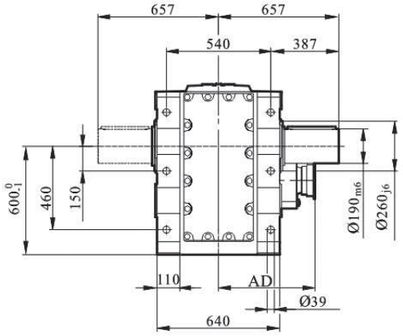
MKA167输出轴



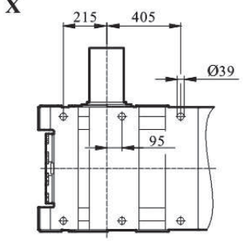
YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
L	567	602	635	666	642	669	691	770	828	879	1100	1210	1210
AC	315	315	350	350	395	450	450	480	530	530	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	530

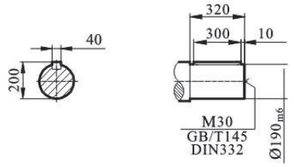
MK187



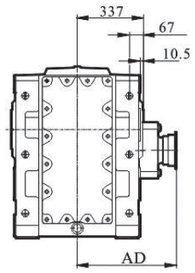


X

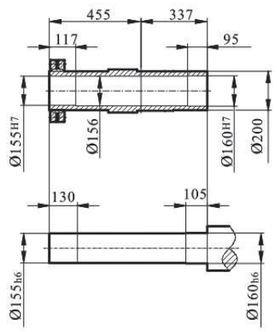




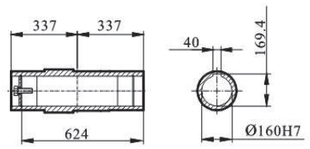
MKFA/MKFH187



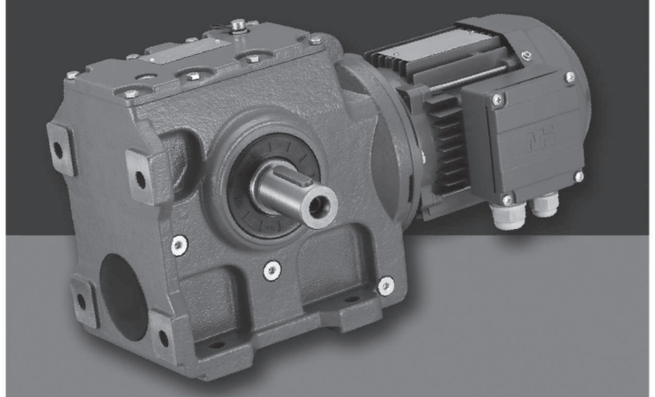
MKH187输出轴



MKA187输出轴



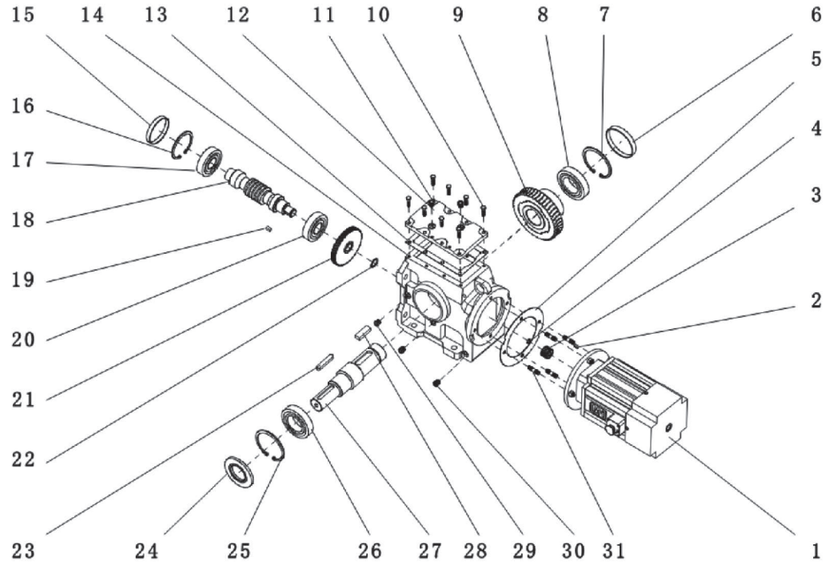
YE2电机机座号 Motor Size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
L	567	602	635	666	642	669	691	770	828	879	1100	1210	1210
AC	315	315	350	350	395	450	450	480	530	530	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	530



MS

MS系列斜齿轮-蜗轮蜗杆减速电机
MS SERIES HELICAL-
WORM GEARED MOTORS

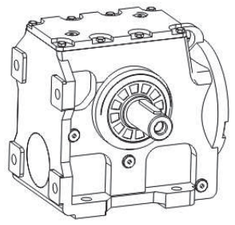
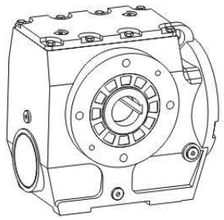
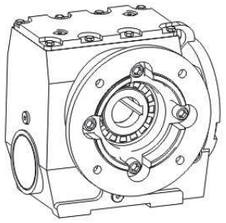
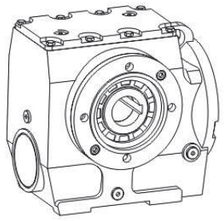
5.1 部件分解图 / Spare Parts List

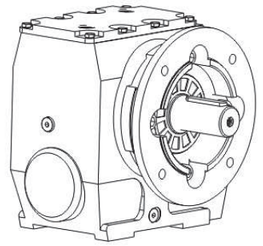
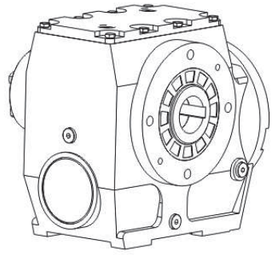
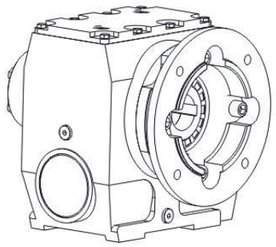
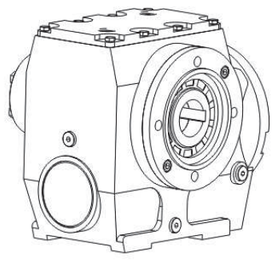


1 电机/motor
2 平键/flat key
3 齿轮/gear
4 轴用挡圈/retaining rings for shaft
5 纸垫/gasket
6 平面油封/plan seal
7 孔用挡圈/retaining rings for bores
8 轴承/bearing
9 蜗轮/worm gear
10 外六角螺钉/six angle screw
11 油塞/oil level plug
12 盖板/cover plate
13 纸垫/gasket
14 箱体/housing
15 平面油封/plan seal
16 孔用挡圈/retaining rings for bores
17 轴承/bearing
18 蜗杆/worm
19 平键/flat key
20 轴承/bearing
21 齿轮/gear
22 轴用挡圈/retaining rings for shaft
23 平键/flat key
24 骨架油封/skeleton oil seal
25 孔用挡圈/retaining rings for bores
26 轴承/bearing
27 输出轴/output shaft
28 平键/flat key
29 油塞/oil level plug
30 油塞/oil level plug
31 双头螺柱/stud
32 六角螺母/hexagon nut

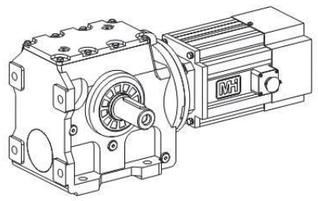
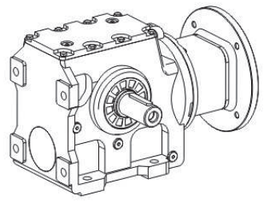
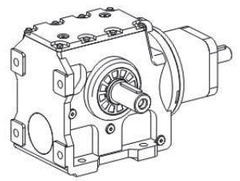
5.2 机型版本 / Versions

5.2.1 基本型式 / Basic Versions

	**MS..** 底脚安装斜齿轮-蜗轮蜗杆减速机 Foot-mounted helical worm geared units.
	**MSFA..** 空心轴安装斜齿轮-蜗轮蜗杆减速机 Helical-worm geared units with hollow shaft.
	**MSFAF..** B5法兰空心轴安装斜齿轮-蜗轮蜗杆减速机 Helical-worm geared units in B5 flange mounted version with hollow shaft.
	**MSFAZ..** B14法兰空心轴安装斜齿轮-蜗轮蜗杆减速机 Helical-worm geared units in B14 flange mounted version with hollow shaft.

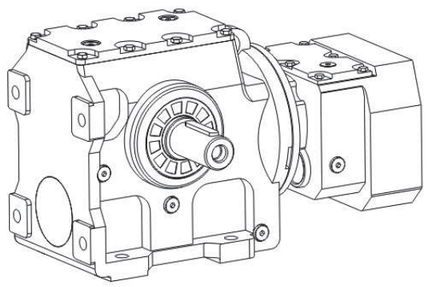
	**MSFF..** B5法兰安装斜齿轮-蜗轮蜗杆减速机 Helical-worm geared units in B5 flange mounted version.
	**MSFH..** 空心轴锁紧盘安装斜齿轮-蜗轮蜗杆减速机 Helical-wrom geared units with hollow shaft and shrink disk.
	**MSFHF..** B5法兰空心轴锁紧盘安装斜齿轮-蜗轮蜗杆减速机 Helical-worm geared units in B5 flange-mounted version with hollow shaft and shrink disk.
	**MSFHZ..** B14法兰空心轴锁紧盘安装斜齿轮-蜗轮蜗杆减速机 Helical-worm geared units in B14 flange-mounted version with hollow shaft and shrink disk.

5.2.2 **输入型式** / Input Versions

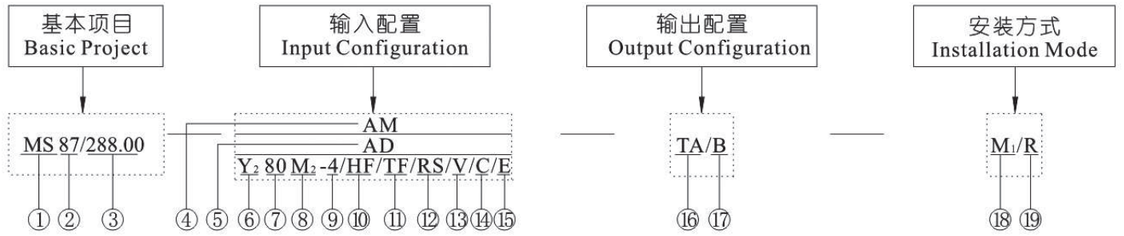
	**MS.. Y..** 直联电机输入 Input with geared motors.
	**MS.. AM..** AM（IEC）法兰输入 Input with AM adapters for mounting IEC motors.
	**MS.. AD..** AD 轴输入 Input with AD shaft assembly.

5.2.3 **MS..与 MRF..组合** / MS.. and MRF.. Combination

当需要特别低速输出时，可选择 MRF 齿轮箱作为 MS 齿轮箱的输入。
If special low speed is needed, MRF.. gearbox can be the input of MS.. Gearbox.

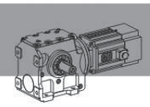


5.3 **产品标注** / Product Code



	标号 NO.	含义 Meaning	说明 Explanation
基本项目 Basic Project	①	系列代号 Series Code	MS、MSF、MSA...（详见5.2.1） MS,MSF,MSA...(see 5.2.1).
	②	机座号 Frame Size	机座号: 37、47、57... Frame Size: 37, 47, 57...
	③	传动比 Transmission Ratio	传动比 i Transmission Ratio I.
输入配置 Input Configuration	④	法兰输入代号 Flange Input Code	AM(IEC): 63、71、80...
	⑤	轴输入代号 Shaft Input Code	AD:1、2、3...
	⑥	电机代号 Motor Code	Y_2: 三相异步电动机 Y_2: Three Phase Asynchronous Motor. YD: 变极多速三相异步电动机 YD: Variable-pole Multi-speed Three Phase Asynchronous Motor. YS: 小功率三相异步电动机 YS: Small Power Three Phase Asynchronous Motor. YVF_2: 变频调速三相异步电动机 YVF_2: Variable Frequency Speed Control Three Phase Asynchronous Motor. Y_2EJ: 电磁制动三相异步电动机 Y_2EJ: Electromagnetic Brake Three Phase Asynchronous Motor. YB2: 隔爆三相异步电动机 YB2: Flame Proof Three Phase Asynchronous Motor.
	⑦	电机机座号 Motor Frame Size.	63、71、80...
	⑧	电机定子铁芯长度代号 Length Code of Stator Core.	M、M_1、M_2、S、S_1、S_2、L、L_1、L_2
	⑨	电机极数 Pole Number of Motor.	2、4、6、8

	标号 NO.	含义 Meaning	说明 Explanation
输入配置 Input Configuration	⑩	手动释放装置 Manual Release Device	无 代 码: 无手动释放装置 No Code: No manual release device. H F: 手动释放装置带自锁功能 H F: Manual release device with self-locking Fun-Ction. H R: 手动释放装置不带自锁功能 H R: Manual release device without self-Locking function.
	⑪	电机热保护装置 Motor Heat-protection Device.	无 代 码: 无电机热保护装置 No Code: No motor heat-protection device. T F: 电机热保护装置 T F: Motor heat-protection device.
	⑫	逆止器 Backstop	无 代 码: 无逆止器 No Code: No backstop. R S: 逆止器 R S: Backstop.
	⑬	强制冷却风扇 Forced Cooling Fan	无 代 码: 无强制冷却风扇 No Code: no forced cooling fan. V: 强制冷却风扇 V: Forced cooling fan.
	⑭	防雨罩 Cover	无 代 码: 无风扇防护罩 No Code: No fan cover. C: 防雨罩 C: cover.
	⑮	编码器 Encoder	无 代 码 : 无编码器 No Code: No encoder. E: 编码器 E: Encoder
输出配置 Output Configuration	⑯	扭力臂 Torque Arm	无 代 码: 无扭力臂 No Code: No torque arm. T A: 扭力臂指向 A T A: Torque arm pointing to A. T B: 扭力臂指向B T B: Torque arm pointing to B.
	⑰	法兰或轴指向 Flange or Shaft Pointing direction.	A: 法兰或轴指向A A: Flange or shaft pointing to A. B: 法兰或轴指向B B: Flange or shaft pointing to B. A+B: 双出轴或双法兰 A+B: Double flange or shaft.
安装方式 Mounting Positions	⑱	安装方位 Mounting Position	M1、M2、M3、M4、M5、M6
	⑲	电机接线盒方位 Position for motor terminal box.	R、B、L、T



说明:

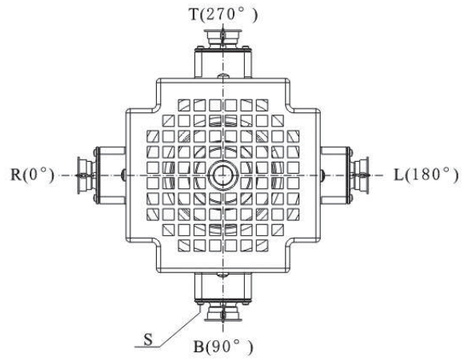
1. 基本项目不可省略;
2. 输入配置中，只能在 AM、AD 和电机之间选择一种;
3. 输出配置参数若省略，默认按A方向提供;
4. 安装方式参数若省略，默认按 M1 安装方位，R 接线盒方位提供。

Notes:

1. Basic project can not be omitted.
2. Input configuration can only be one of AM, AD and motor.
3. If no output configuration, default pointing direction will be A.
4. If not mounting position, default mounting position will be M1, default position for motor terminal will be R.

5.4 安装方位 / Mounting Positions

5.4.1 电机接线盒方位 / Position of Motor Terminal Box



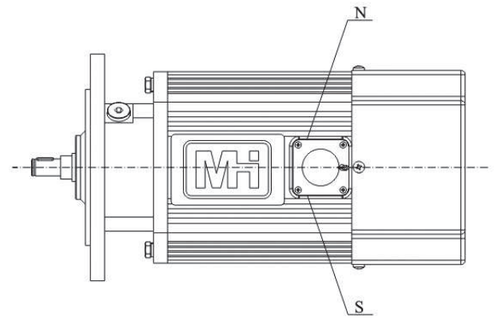
R(0°): 默认接线盒方位
R(0°): Default Position for Motor Terminal Box
注: 图为M1安装方位。
Mark: This picture is the installation position of M1

说明:

上图的视图方向为: 从电机尾部的风罩向前看。

可提供R (0°)、B (90°)、L (180°)、T (270°) 四种电机接线盒方位。其中 R (0°) 位置是默认方位。如无特别说明，将按默认方位提供。

可提供 S 和 N 两种进线方位，其中 S 位置是默认方位。如无特别说明，将按默认方位提供。



S: 默认进线方位
S: Default Line Position

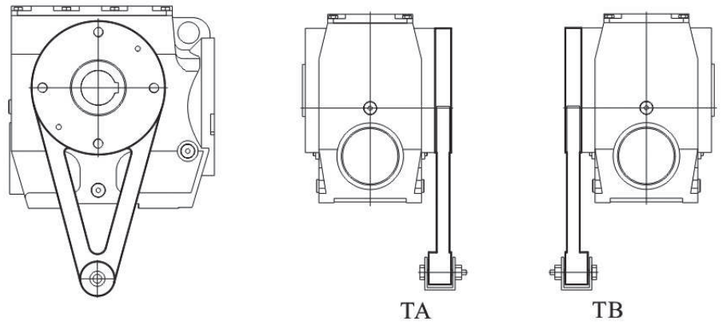
Notes:

The view direction of above figure: from the fan cover in the end of the motor to look forward.

There will be four position for motor terminal box: R(0°)、B(90°)、L(180°)、T(270°). And default position is R(0°).If no special explaination, it will be provided in default position.If no special explaination, it will be provided in default position.

There will be two line position: S and N. Default position is S.If no special explaination, it will be provided in default position.If no special explaination, it will be provided in default position.

5.4.2 **扭力臂方位** / Position of Torque Arm



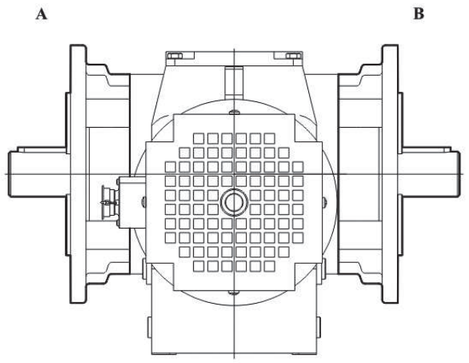
说明:

扭力臂方位 TA 与 TB 是对称的。

Notes:

TA and TB are symmetrical.

5.4.3 **法兰或轴指向** / Position of The Output Shaft and Flange



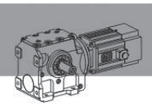
说明:

上图的视图方向为：从电机尾部的风罩向前看。

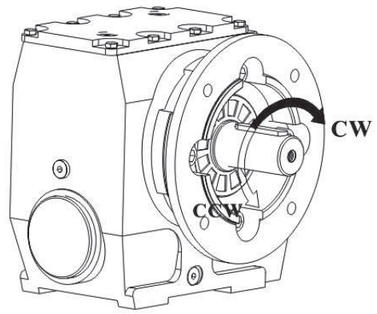
可提供 A、B 或 A+B 三种输出法兰或输出轴的方位。

Notes:

The view direction of above figure is from the fan cover in the end of the motor to look forward. There are three positions: A or B or A+B.



5.4.4 **输出轴旋转方向** / Direction of Rotation of Output Shaft.



说明:

当减速电机带逆止器时，需规定输出轴的旋转方向。

上图中，从输出轴观看，顺时针旋转规定为 CW；逆时针旋转规定为 CCW。

当减速电机采用 A+B 方式输出时（见5. 4. 3），需指出给定的旋转方向是从A 端观看还是从 B 端观看。

Notes:

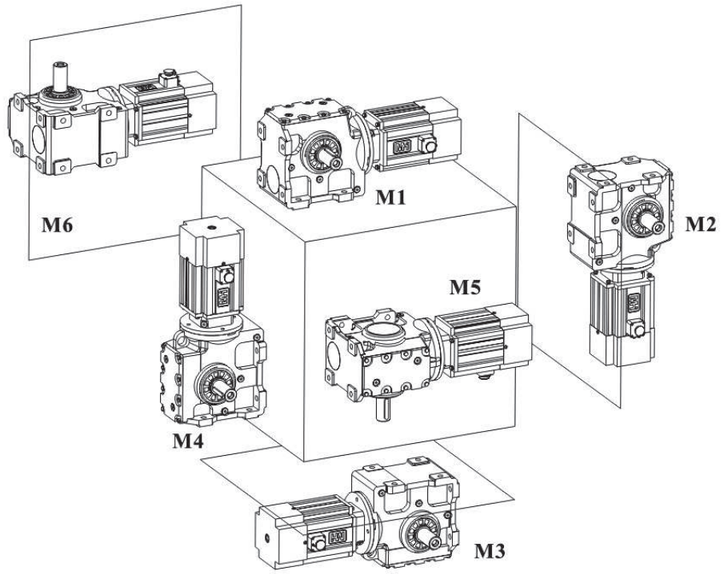
It is necessary to stipulate the direction of ratation of the output shaft if the drive has a back stop.
For above figure, the following definition applies:
Looking onto the output shaft.
CW = Rotating Clockwise
CCW = Rotation Counter-clockwise
If the position of the output shaft or flange is A+B, it is necessary to stipulate for certain direction of rotation, it was looked on the AorB.

5.4.5 **油位符号说明** / Oil Level Symbol Explanation

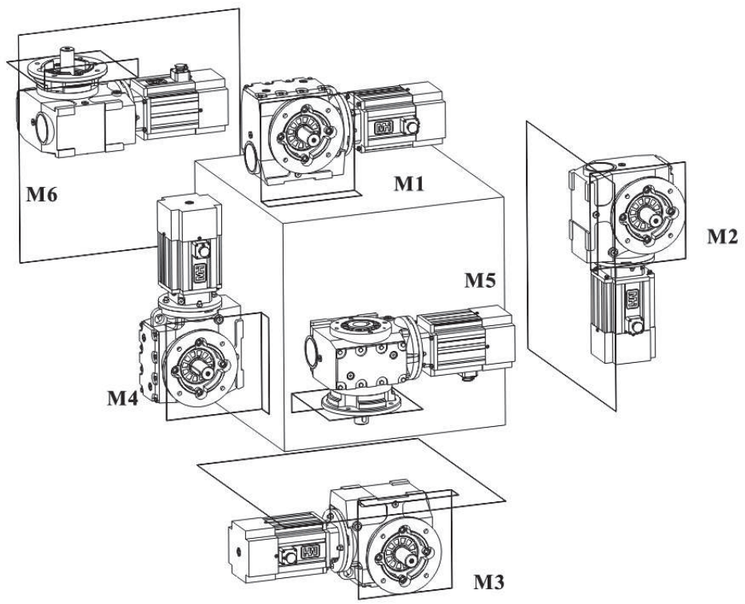
符号 Symbol	含义	Meaning
	通气帽	BREATHER VALVE
	油标	OIL LEVEL PLUG
	排油塞	OIL DRAIN PLUG

5.4.6 安装位置示意 / Mounting Position Designation

MS..安装位置示意图 / MS.. Mounting Position Designation



MSFF..安装位置示意图 / MSFF.. Mounting Position Designation



5.4.7 安装方位 / Mounting Positions

*→提示:

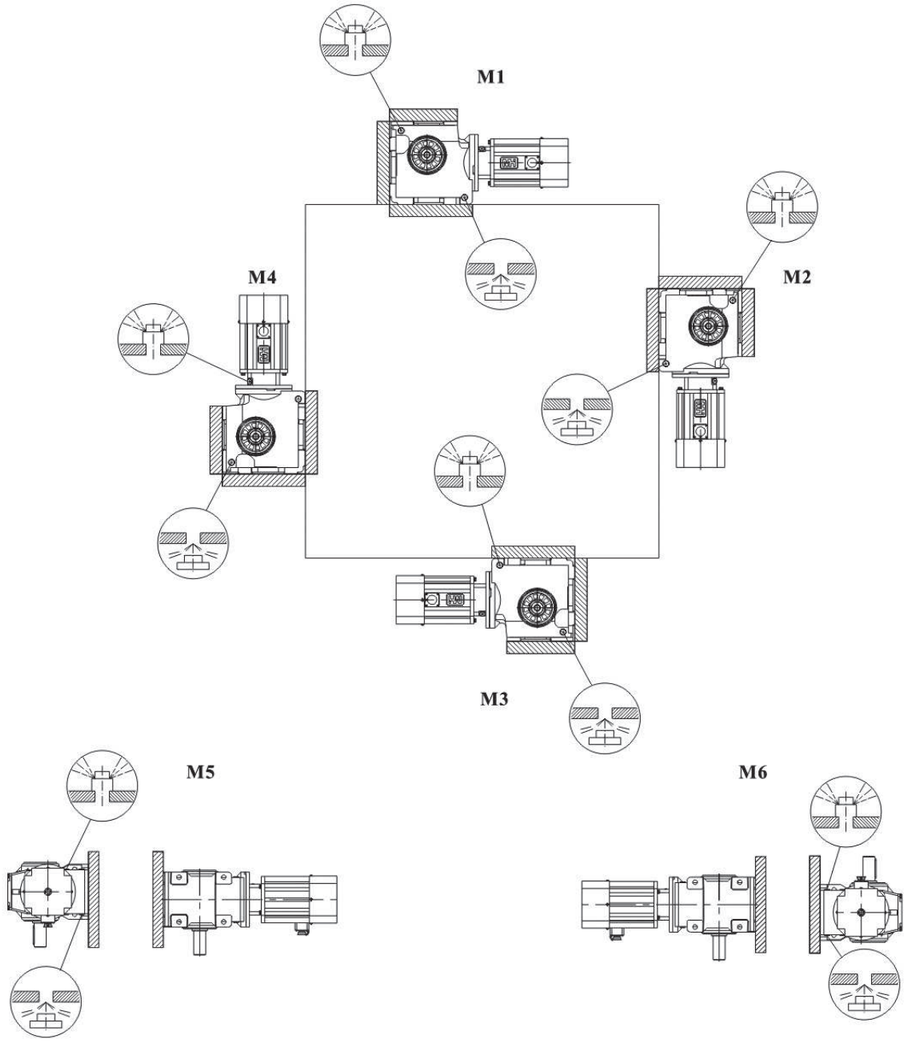
当采用下表列出的安装方式及输入转速时，齿轮箱会产生不可忽视的搅油损失。请联系本公司。

*→**Reminder:**

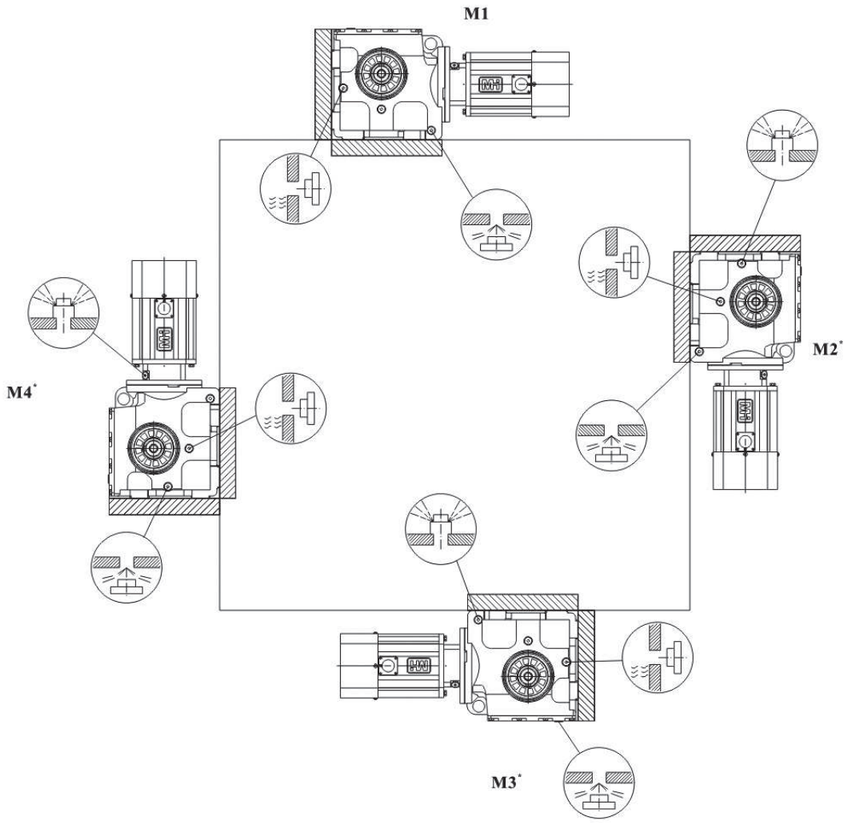
Increased churning losses may arise in the following mounting positions. Contact Greatwall Machinery.

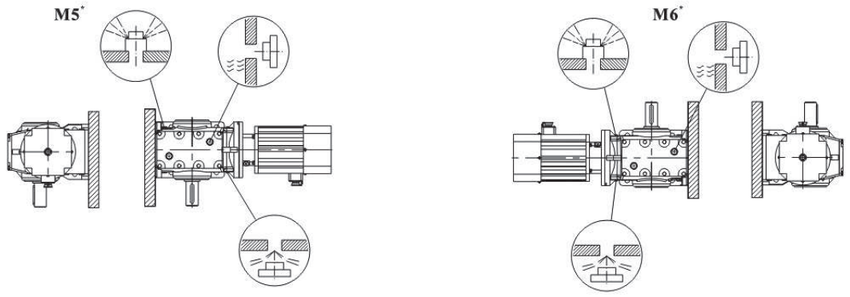
安装方式 Mounting Position	齿轮箱规格 Gear Unit Size	输入转速 Input Speed（r/min）
M2，M3，M4，M5，M6	77-97	>2500

MS37



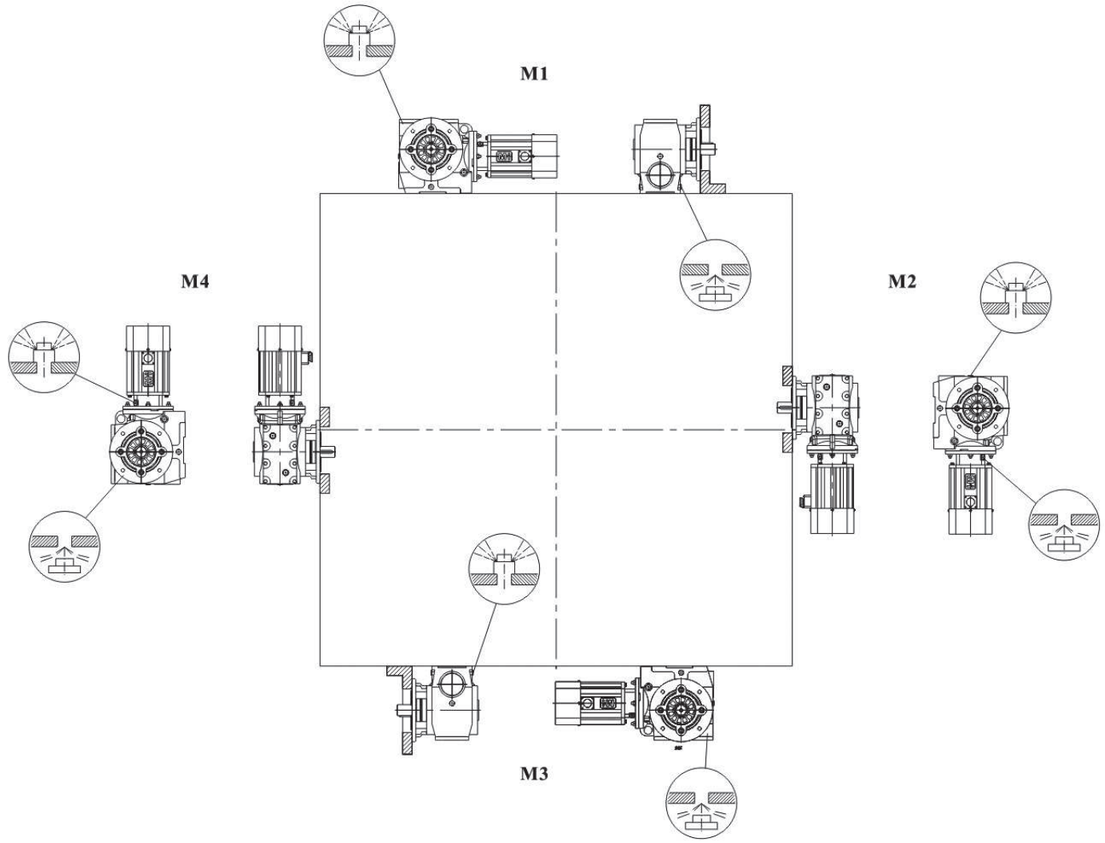
MS47~97

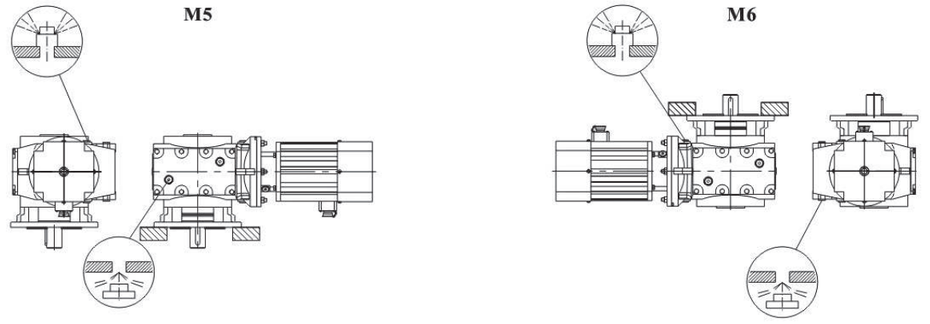




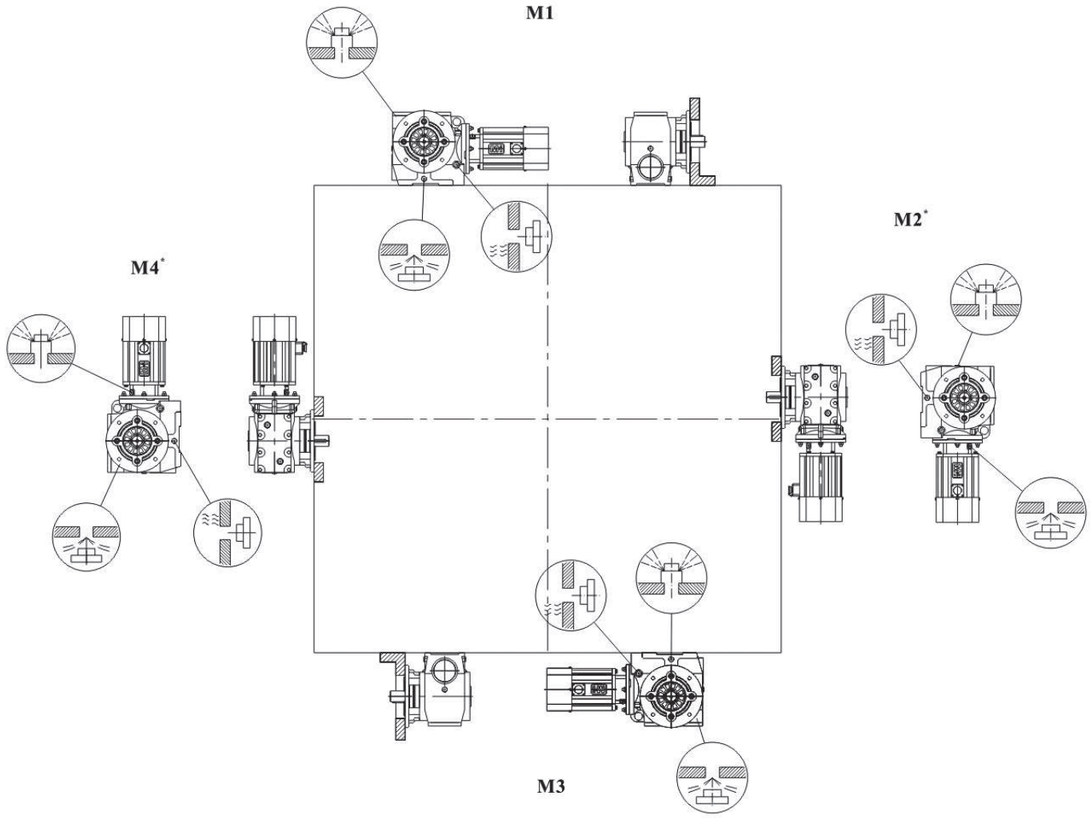
*→page 223

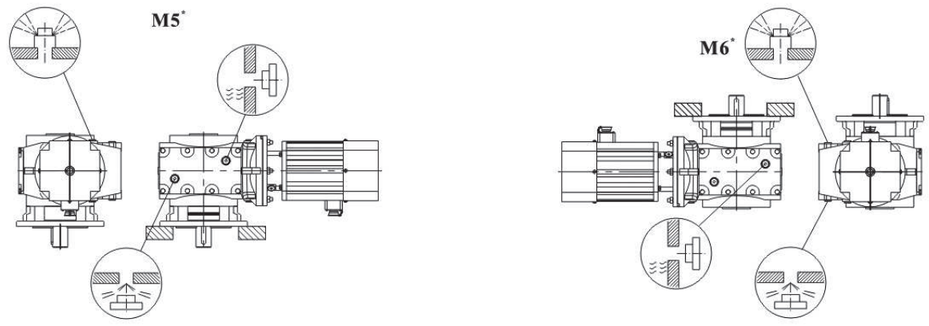
MSFF/MSFAF/MSFHF37





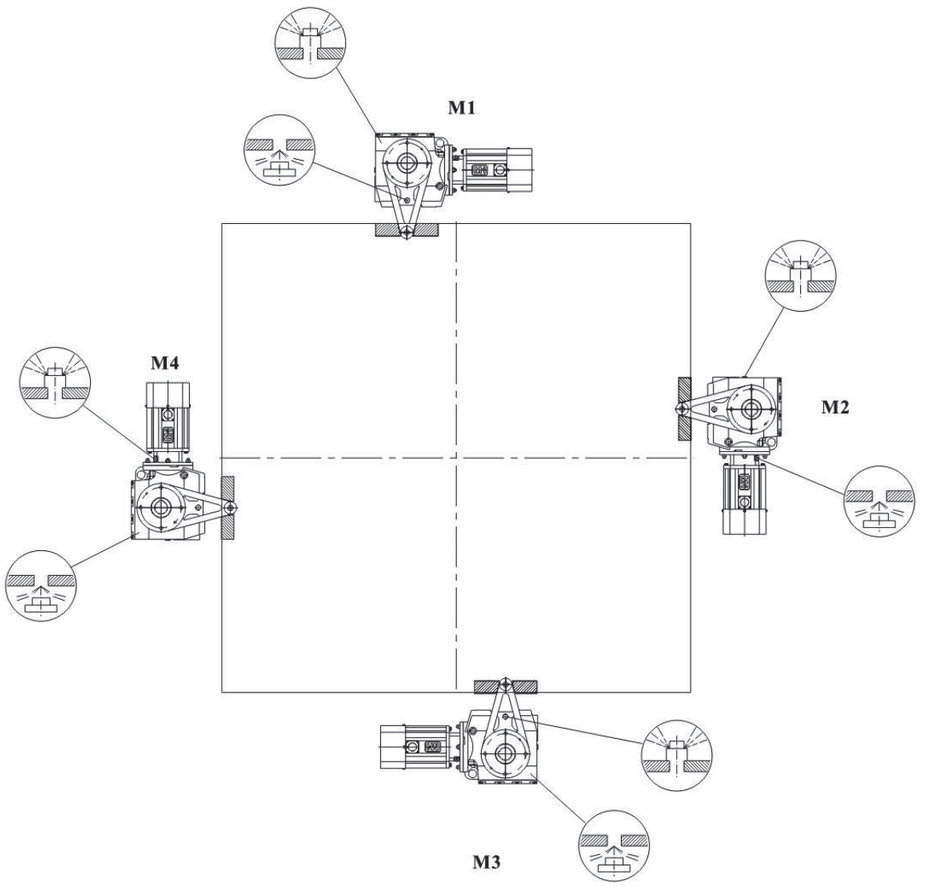
MSFF/MSFAF/MSFHF/MSFAZ47~97

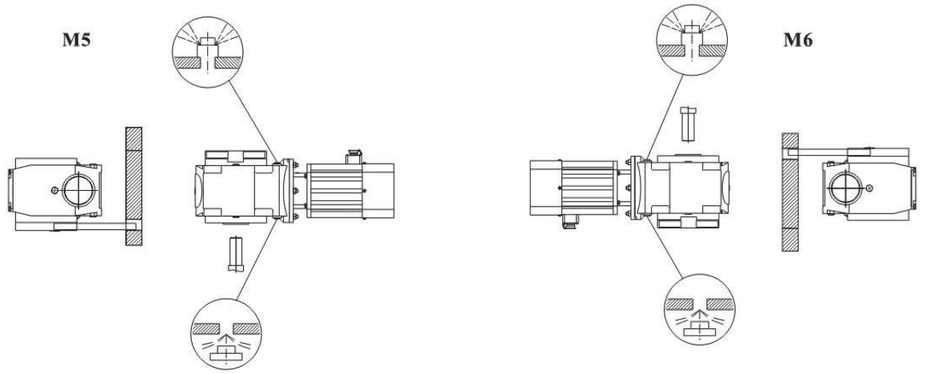




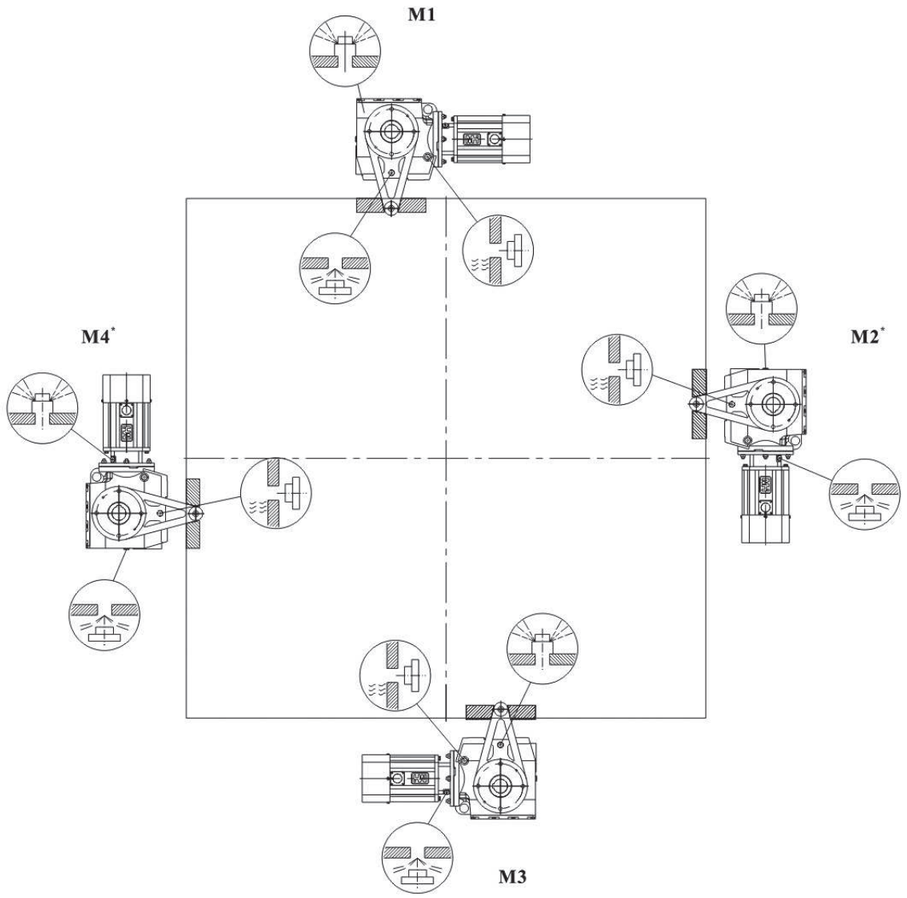
*→page 223

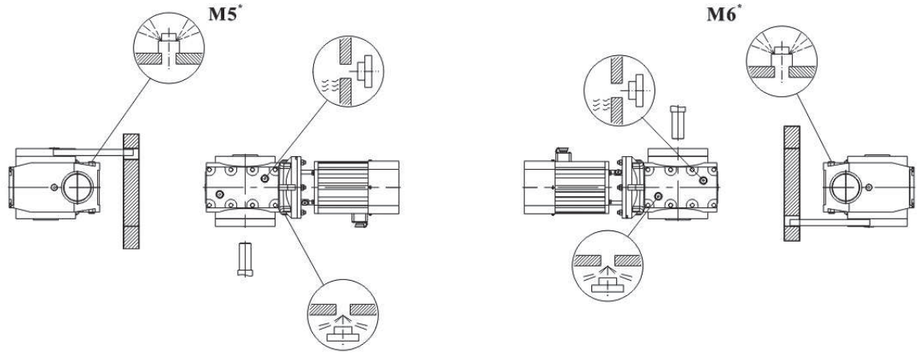
MSFA/MSFH37/T





*→page 223





*→page 223

5.5 减速器组合表 / Gear Unit Combination Table

为得到特别低的输出转速，可以通过MRF齿轮箱与 MS 齿轮箱相连的方式实现。

当采用这种传动方案时，可配置电动机的功率依赖于减速机的极限输出扭矩，而不能通过电动机的额定功率和减速机的总传动比计算得出减速机的输出扭矩。

MRF series of gear units and MS series of gear units can be connected together to get special output speed.

For this transmission scheme, the power of the motor depends on the limit output torque of the gear-box, instead of the output torque calculated based on rated power of the motor and the transmission ratio of the gear unit.

MS..与MRF..齿轮箱可能的组合 / Possible Combination of MS.. and MRF..

	MRF17	MRF27	MRF37	MRF47	MRF57
MS..37	■				
MS..47	■				
MS..57	■				
MS..67			■		
MS..77			■		
MS..87					■
MS..97					■

说明：

■ ：表示可能的组合。

□ ：表示不允许的组合。

Notes:

■ : Possible Combination.

□ : Impossible Combination.

5.6 MS..功率配置 / MS..Power Configuration

MS37 n_1=1400 1/min — 92Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10				
8.90	92	3000	157.43						
9.70	92	3000	144.40						
11.0	91	3000	122.94						
13.0	88	3000	106.00						
14.0	87	3000	98.80						
16.0	86	3000	86.36						
17.0	85	3000	80.96						
20.0	84	3000	71.44						
22.0	82	3000	63.33						
25.0	81	3000	55.93						
26.0	80	3000	53.83						
27.0	81	3000	51.30						
32.0	81	3000	43.68						
37.0	79	3000	37.66						
40.0	78	3000	35.10						
46.0	76	2860	30.68						
49.0	75	2800	28.76						
55.0	74	2660	25.38						
62.0	73	2530	22.50						
70.0	52	2470	19.89						
73.0	71	2380	19.13						
77.0	52	2380	18.24						
90.0	50	2240	15.53						
105	49	2110	13.39						
112	48	2060	12.48						
128	48	1940	10.91						
137	47	1900	10.23						
155	46	1810	9.02						
175	45	1730	8.00						
206	43	1630	6.80						
221	35	1670	6.33						
260	34	1570	5.38						
288	33	1520	4.86						
353	32	1400	3.97						

MS47 n_1=1400 1/min — 170Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50			
7.00	170	5340	201.00						
7.60	170	5340	184.80						
8.90	170	5340	158.12						
10.0	168	5350	137.05						
11.0	168	5350	128.10						

MS47 n_1=1400 1/min — 170Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50			
13.0	168	5350	110.73						
15.0	168	5350	94.08						
17.0	167	5360	84.00						
20.0	167	5360	71.75						
20.0	155	5370	69.39						
21.0	167	5360	67.20						
22.0	155	5370	63.80						
25.0	165	5320	56.61						
26.0	155	5150	54.59						
30.0	155	4850	47.32						
32.0	155	4710	44.22						
37.0	155	4420	38.23						
43.0	155	4120	32.48						
48.0	155	3920	29.00						
57.0	155	3650	24.77						
60.0	152	3570	23.20						
69.0	110	3370	20.33						
72.0	144	3370	19.54						
79.0	110	3160	17.62						
85.0	110	3060	16.47						
98.0	110	2850	14.24						
116	109	2650	12.10						
130	109	2500	10.80						
152	109	2310	9.23						
162	109	2230	8.64						
192	103	2110	7.28						
205	78	2300	6.83						

MS57 n_1=1400 1/min — 295Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
7.00	295	7130	201.00						
7.60	295	7130	184.80						
8.90	295	7130	158.12						
10.0	295	7130	137.05						
11.0	295	7130	128.10						
13.0	295	7130	110.73						
15.0	295	7130	94.08						
17.0	295	7130	84.00						
20.0	290	7170	71.75						
20.0	245	7520	69.39						
21.0	285	7220	67.20						
22.0	245	7520	63.80						

MS57 n_1=1400 1/min — 295Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.12 ~0.55	0.75 1.10	1.50	2.20 3.00		
25.0	265	7370	56.61						
26.0	245	7520	54.59						
30.0	245	7520	47.32						
32.0	245	7520	44.22						
37.0	245	7320	38.23						
43.0	245	6840	32.48						
48.0	245	6520	29.00						
57.0	245	6100	24.77						
60.0	245	5930	23.20						
69.0	168	5690	20.33						
72.0	215	5720	19.54						
79.0	168	5350	17.62						
85.0	168	5200	16.47						
98.0	169	4860	14.24						
116	169	4520	12.10						
130	169	4290	10.80						
152	169	3990	9.23						
162	166	3900	8.64						
192	146	3790	7.28						
205	100	4100	6.83						
219	98	4010	6.40						
260	95	3760	5.39						
294	93	3590	4.76						
350	88	3380	4.00						

MS67 n_1=1400 1/min — 520Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.25 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50
6.40	520	8680	217.41						
7.40	520	8680	190.11						
7.80	520	8680	180.60						
8.80	520	8680	158.45						
10.0	520	8680	134.40						
12.0	520	8680	121.33						
13.0	520	8680	106.75						
14.0	520	8680	100.80						
16.0	520	8680	85.83						
18.0	520	8680	78.00						
19.0	480	9020	75.06						
21.0	520	8680	67.57						
21.0	480	9020	65.63						
22.0	480	9020	62.35						
24.0	500	8850	58.80						
26.0	480	8670	54.70						
30.0	480	8060	46.40						

MS67 n_1=1400 1/min — 520Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.25 ~0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50
33.0	480	7690	41.89						
38.0	480	7250	36.85						
40.0	480	7060	34.80						
47.0	480	6540	29.63						
52.0	480	6240	26.93						
57.0	340	6040	24.44						
60.0	480	5810	23.33						
60.0	340	5890	23.22						
69.0	340	5520	20.37						
69.0	425	5760	20.30						
81.0	340	5080	17.28						
90.0	340	4820	15.60						
102	340	4510	13.73						
108	340	4310	12.96						
127	340	3660	11.03						
140	340	3290	10.03						
161	335	2860	8.69						
185	295	3220	7.56						

MS77 n_1=1400 1/min — 1270Nm

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
5.50	1270	11700	256.47						
6.20	1270	11700	225.26						
6.50	1270	11700	214.00						
7.40	1270	11700	189.09						
8.70	1260	11800	161.60						
9.40	1240	12000	148.15						
11.0	1210	12200	130.00						
11.0	1200	12300	123.20						
13.0	1170	12600	107.83						
14.0	1140	12800	97.14						
16.0	1100	13100	85.22						
19.0	1070	12800	75.20						
19.0	1100	11900	75.09						
20.0	1100	11600	71.33						
21.0	1040	12300	66.67						
22.0	1100	10900	63.03						
25.0	990	11600	56.92						
26.0	1100	10100	53.87						
28.0	1100	9650	49.38						
32.0	1100	9010	43.33						
34.0	1100	8750	41.07						
39.0	1100	8140	35.94						
43.0	1090	7720	32.38						

MS77 n_1=1400 1/min — **1270Nm**

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.55	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50
49.0	1050	7370	28.41						
56.0	1020	7010	25.07						
61.0	705	5960	22.89						
63.0	980	6740	22.22						
67.0	705	5380	20.99						
74.0	930	6390	18.97						
76.0	705	4550	18.42						
80.0	710	4120	17.45						
92.0	710	3320	15.28						
102	710	2710	13.76						
116	720	1800	12.07						
131	720	1130	10.65						
148	725	415	9.44						
174	680	440	8.06						

MS87 n_1=1400 1/min — **2280Nm**

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0
4.90	2280	27900	288.00						
5.40	2280	27900	258.18						
6.30	2280	27900	222.40						
6.90	2260	28000	202.96						
7.80	2210	28100	180.00						
9.30	2150	28200	151.30						
10.0	2100	28300	139.05						
11.0	2060	28300	123.48						
13.0	2000	28400	110.40						
14.0	1960	29100	99.26						
15.0	1510	28600	91.20						
16.0	1880	29000	86.15						
17.0	1600	28700	81.76						
18.0	1820	29000	77.14						
20.0	1600	29000	70.43						
22.0	1600	28900	64.27						
22.0	1700	28900	64.00						
25.0	1600	29000	57.00						
29.0	1600	29000	47.91						
32.0	1600	29000	44.03						
36.0	1600	28200	39.10						
40.0	1600	27100	34.96						
45.0	1600	26000	31.43						
51.0	1600	24700	27.28						
55.0	1240	23400	25.50						
57.0	1600	23700	24.43						
65.0	1240	21800	21.43						

MS87 n_1=1400 1/min — **2280Nm**

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	0.75 1.10	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0
69.0	1600	22100	20.27						
71.0	1240	21100	19.70						
80.0	1240	20200	17.49						
90.0	1240	19300	15.64						
100	1240	18500	14.06						
115	1240	17400	12.21						
128	1240	16400	10.93						
154	1140	15900	9.07						
178	1010	15700	7.88						

MS97 n_1=1400 1/min — **4000Nm**

n_2 [1/min]	M_{2max} [Nm]	Fr [N]	i	1.50	2.20 3.00	4.00	5.50 7.50	11.0 15.0	18.5 22.0
4.90	4000	33200	286.40						
5.30	4000	33200	262.22						
6.00	4000	33200	231.67						
7.10	4000	33200	196.52						
7.70	3920	33400	180.95						
8.70	3840	33500	161.74						
9.60	3730	33700	145.60						
11.0	3650	33900	131.85						
12.0	3510	34100	116.92						
13.0	3440	34300	105.71						
16.0	3240	34600	89.60						
17.0	3230	34600	80.85						
18.0	3080	34800	78.26						
20.0	3300	34500	71.43						
21.0	2900	35100	65.45						
23.0	3300	34500	60.59						
25.0	3300	34500	55.79						
28.0	3300	34500	49.87						
31.0	3300	34100	44.89						
34.0	3300	32800	40.65						
39.0	3300	31300	36.05						
43.0	3200	30400	32.60						
51.0	3010	29000	27.63						
53.0	2600	26100	26.39						
58.0	2870	28000	24.13						
59.0	2600	24500	23.59						
66.0	2600	22800	21.23						
73.0	2600	21200	19.23						
82.0	2570	19700	17.05						
91.0	2470	19400	15.42						
107	2330	18800	13.07						
123	2210	18400	11.41						
147	2040	18200	9.55						
169	1770	18800	8.26						

5.7 MS..性能参数 / MS.. Performance Parameters

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
0.12	4740	11267	25100	0.90	MS 97 MRF57	Y..63M_1-4 AM63 AD2
0.14	4330	10078	32500	0.95	MSF 97 MRF57	
0.16	3590	8608	34000	1.15	MSA 97 MRF57	
0.18	3180	7554	34700	1.30	MSAF 97 MRF57	
0.21	2690	6706	27100	0.95	MS 87 MRF57	Y..63M_1-4 AM63 AD2
0.23	2400	5875	27700	1.05	MSF 87 MRF57	
0.27	1980	5187	28500	1.25	MSA 87 MRF57	
0.30	1760	4606	28800	1.40	MSAF 87 MRF57	
0.36	1460	3872	29200	1.70		
0.39	1370	3540	7240	0.90	MS 77 MRF37	Y..63M_1-4 AM63 AD2
0.45	1200	3098	12300	1.05	MSF 77 MRF37	
0.58	1320	2374	10600	0.95	MSA 77 MRF37	
0.66	1160	2083	12600	1.05	MSAF 77 MRF37	
0.76	980	1813	13900	1.25		
0.79	930	1745	14200	1.30		
0.86	860	1600	14600	1.45		
0.98	755	1404	15100	1.65		
1.10	660	1245	15500	1.90		
1.20	585	1194	7990	0.95	MS 67 MRF37	Y..63M_1-4 AM63 AD2
1.30	530	1045	8560	1.05	MSF 67 MRF37	
1.50	455	914	9180	1.25	MSA 67 MRF37	
1.70	415	809	9460	1.35	MSAF 67 MRF37	
1.90	365	712	9780	1.55		
2.20	305	615	10100	1.85		
2.50	275	543	10200	2.10		
2.90	225	469	10400	2.50		
3.30	200	424	10500	2.80		
3.80	187	365	10500	3.00		
2.10	325	655	6800	0.90	MS 57 MRF17	Y..63M_1-4 AM63 -
2.40	285	574	7200	1.05	MSF 57 MRF17	
2.70	250	506	7480	1.20	MSA 57 MRF17	
3.20	215	438	7700	1.40	MSAF 57 MRF17	
3.60	189	388	7850	1.60		
4.10	169	336	7950	1.80		
4.70	145	294	8050	2.10		
5.10	139	269	8070	2.20		
3.20	215	438	5010	0.85	MS 47 MRF17	Y..63M_1-4 AM63 -
3.60	189	388	5170	1.00	MSF 47 MRF17	
4.10	168	336	5290	1.10	MSA 47 MRF17	
4.70	143	294	5420	1.30	MSAF 47 MRF17	
5.40	98	257	5660	1.90		
6.00	118	229	5550	1.55		
6.90	102	200	5610	1.80		
7.40	96	187	5640	1.95		
6.80	103	202	3000	0.90	MS 37 MRF17	Y..63M_1-4 AM63 -
7.70	91	179	3000	1.00	MSF 37 MRF17	
8.70	82	158	3000	1.15	MSA 37 MRF17	
9.60	75	144	3000	1.20	MSAF 37 MRF17	
12.0	61	118	3000	1.50		
13.0	57	110	3000	1.60		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.12kw						
6.90	95	201.00	5680	1.80	MS 47 MSF 47 MSA 47 MSAF 47	Y..63M_1-4 AM63 AD1
7.50	89	184.80	5700	1.90		
8.70	77	158.12	5740	2.20		
10.0	68	137.05	5780	2.50		
11.0	64	128.10	5790	2.60		
12.0	57	110.73	5810	3.00		
8.80	74	157.43	3000	1.25	MS 37 MSF 37 MSA 37 MSAF 37	Y..63M_1-4 AM63 AD1
9.60	68	144.40	3000	1.35		
11.0	60	122.94	3000	1.55		
13.0	52	106.00	3000	1.70		
14.0	49	98.80	3000	1.75		
16.0	44	86.36	3000	1.95		
17.0	41	80.96	3000	2.10		
19.0	37	71.44	3000	2.30	MS 37 MSF 37 MSA 37 MSAF 37	Y..63M_1-4 AM63 AD1
22.0	33	63.33	3000	2.50		
25.0	35	55.93	3000	2.30		
27.0	33	51.30	3000	2.50	MS 37 MSF 37 MSA 37 MSAF 37	Y..63M_1-4 AM63 AD1
32.0	28	43.68	3000	2.90		
37.0	24	37.66	3000	3.20		
39.0	23	35.10	3000	3.40		
45.0	20	30.68	3000	3.70		
48.0	19	28.76	3000	3.90		
54.0	17	25.38	3000	4.40		
61.0	15	22.50	3000	4.80		
69.0	14	19.89	3000	3.60		
76.0	13	18.24	3000	3.90		
89.0	11	15.53	2870	4.40		
P_1=0.18kw						
0.29	3010	4606	19200	0.85	MS 87 MRF57 MSF 87 MRF57 MSA 87 MRF57 MSAF 87 MRF57	Y..63M_2-4 AM63 AD2
0.34	2510	3872	27500	1.00		
0.38	2420	3475	27700	1.05		
0.45	2030	2905	28400	1.25		
0.51	1760	2586	28800	1.40		
0.57	1570	2335	29100	1.60		
0.64	1360	2054	29300	1.85		
0.72	1200	1824	29500	2.10		
0.81	1080	1631	29600	2.30	MS 87 MRF57 MSF 87 MRF57 MSA 87 MRF57 MSAF 87 MRF57	Y..63M_2-4 AM63 AD3
0.94	1240	1404	11900	1.00	MS 77 MRF37 MSF 77 MRF37 MSA 77 MRF37 MSAF 77 MRF37	Y..63M_2-4 AM63 AD2
1.10	1090	1245	13200	1.15		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
1.20	1020	1100	13700	1.20		
1.40	870	954	14500	1.40	**MS 77 MRF37**	**Y..63M_2-4**
1.60	770	837	15000	1.60	**MSF 77 MRF37**	**AM63**
1.80	640	714	15600	1.95	**MSA 77 MRF37**	**AD2**
2.10	565	637	15800	2.20	**MSAF 77 MRF37**	
2.30	515	574	16000	2.40		
1.90	600	712	7860	0.95		
2.20	505	615	8800	1.15	**MS 67 MRF37**	**Y..63M_2-4**
2.40	450	543	9230	1.25	**MSF 67 MRF37**	**AM63**
2.80	375	469	9720	1.50	**MSA 67 MRF37**	**AD2**
3.10	340	424	9930	1.65	**MSAF 67 MRF37**	
3.60	305	365	10100	1.85		
3.00	355	438	6520	0.85		
3.40	310	388	6970	0.95		
3.90	275	336	7290	1.10	**MS 57 MRF17**	**Y..63M_2-4**
4.50	235	294	7560	1.25	**MSF 57 MRF17**	**AM63**
4.90	225	269	7650	1.35	**MSA 57 MRF17**	**-**
5.80	193	229	7830	1.55	**MSAF 57 MRF17**	
6.50	174	204	7920	1.75		
7.00	159	187	7990	1.90		
4.50	235	294	4480	0.80		
5.10	162	257	5380	1.15		
5.80	190	229	5170	0.95	**MS 47 MRF17**	**Y..63M_2-4**
6.60	167	200	5300	1.10	**MSF 47 MRF17**	**AM63**
7.00	156	187	5360	1.20	**MSA 47 MRF17**	**-**
8.00	138	165	5450	1.35	**MSAF 47 MRF17**	
9.00	124	148	5520	1.50		
10.0	110	131	5580	1.70		
4.00	250	217.41	10300	2.20	**MS 67**	**Y..71M_1-6**
4.60	220	190.11	10400	2.50	**MSF 67**	**AM71**
4.80	210	180.60	10400	2.60	**MSA 67**	**AD2**
					MSAF 67	
4.30	220	201.00	7670	1.35	**MS 57**	**Y..71M_1-6**
4.70	205	184.80	7760	1.45	**MSF 57**	**AM71**
5.50	180	158.12	7900	1.65	**MSA 57**	**AD1**
6.40	158	137.05	7990	1.85	**MSAF 57**	
6.60	154	201.00	8010	1.90	**MS 57**	**Y..63M_2-4**
7.10	143	184.80	8050	2.10	**MSF 57**	**AM63**
8.40	125	158.12	8120	2.40	**MSA 57**	**AD1**
9.60	110	137.05	8160	2.70	**MSAF 57**	
4.30	210	201.00	5090	0.85		
4.70	199	184.80	5180	0.90	**MS 47**	**Y..71M_1-6**
5.50	173	158.12	5320	1.00	**MSF 47**	**AM71**
6.40	153	137.05	5420	1.10	**MSA 47**	**AD1**
6.80	144	128.10	5460	1.20	**MSAF 47**	
6.60	149	201.00	5440	1.15		
7.10	138	184.80	5490	1.25	**MS 47**	**Y..63M_2-4**
8.40	121	158.12	5570	1.40	**MSF 47**	**AM63**
9.60	106	137.05	5630	1.60	**MSA 47**	**AD1**
10.0	100	128.10	5660	1.65	**MSAF 47**	
12.0	88	110.73	5700	1.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.18kw						
14.0	77	94.08	5750	2.20	**MS 47**	
16.0	69	84.00	5770	2.40	**MSF 47**	**Y..63M_2-4**
18.0	60	71.75	5800	2.80	**MSA 47**	**AM63**
19.0	69	69.39	5750	2.20	**MSAF 47**	**AD1**
8.40	115	157.43	3000	0.80		
9.10	107	144.40	3000	0.85		
11.0	93	122.94	3000	1.00	**MS 37**	**Y..63M_2-4**
12.0	82	106.00	3000	1.10	**MSF 37**	**AM63**
13.0	77	98.80	3000	1.15	**MSA 37**	**AD1**
15.0	68	86.36	3000	1.25	**MSAF 37**	
16.0	64	80.96	3000	1.30		
18.0	58	71.44	3000	1.45		
21.0	52	63.33	3000	1.60		
24.0	55	55.93	3000	1.45		
26.0	51	51.30	3000	1.60		
30.0	44	43.68	3000	1.85		
35.0	38	37.66	3000	2.10	**MS 37**	**Y..63M_2-4**
38.0	36	35.10	3000	2.20	**MSF 37**	**AM63**
43.0	32	30.68	3000	2.40	**MSA 37**	**AD1**
46.0	30	28.76	3000	2.50	**MSAF 37**	
52.0	26	25.38	3000	2.80		
59.0	24	22.50	3000	3.10		
66.0	22	19.89	3000	2.30		
72.0	21	18.24	2940	2.50		
85.0	18	15.53	2810	2.80		
99.0	15	13.39	2700	3.20	**MS 37**	**Y..63M_2-4**
106	14	12.48	2650	3.40	**MSF 37**	**AM63**
121	13	10.91	2550	3.80	**MSA 37**	**AD2**
129	12	10.23	2500	4.00	**MSAF 37**	
P_1=0.25kw						
0.45	2930	2905	22200	0.85		
0.50	2560	2586	27400	1.00	**MS 87 MRF57**	**Y..71M_1-4**
0.56	2290	2335	27900	1.10	**MSF 87 MRF57**	**AM71**
0.63	1990	2054	28400	1.25	**MSA 87 MRF57**	**AD2**
0.71	1770	1824	28800	1.40	**MSAF 87 MRF57**	
0.80	1580	1631	29100	1.60	**MS 87 MRF57**	**Y..71M_1-4**
1.40	930	930	29700	2.70	**MSF 87 MRF57**	**AM71**
					MSA 87 MRF57	**AD3**
					MSAF 87 MRF57	
1.40	1250	954	11800	1.00		
1.60	1100	837	13100	1.10	**MS 77 MRF37**	**Y..71M_1-4**
1.80	920	714	14200	1.35	**MSF 77 MRF37**	**AM71**
2.00	820	637	14800	1.50	**MSA 77 MRF37**	**AD2**
2.30	745	574	15200	1.65	**MSAF 77 MRF37**	
2.60	635	499	15600	1.95		
2.40	650	543	6280	0.85		
2.80	550	469	8390	1.05	**MS 67 MRF37**	**Y..71M_1-4**
3.10	495	424	8880	1.15	**MSF 67 MRF37**	**AM71**
3.60	440	365	9320	1.30	**MSA 67 MRF37**	**AD2**
4.10	380	319	9700	1.50	**MSAF 67 MRF37**	
4.60	335	281	9960	1.70		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
4.40	340	340	6640	0.85		
4.80	320	320	6870	0.95		
5.70	275	275	7280	1.10	**MS 57 MRF17**	**Y..71M_1-4**
6.40	245	245	7490	1.20	**MSF 57 MRF17**	**AM71**
6.90	225	187	7630	1.30	**MSA 57 MRF17**	**-**
7.90	200	165	7780	1.50	**MSAF 57 MRF17**	
9.90	162	131	7980	1.85		
4.10	340	217.41	9920	1.65	**MS 67**	**Y..71M_2-6**
4.70	300	190.11	10100	1.85	**MSF 67**	**AM71**
5.00	290	180.60	10200	1.90	**MSA 67**	**AD2**
5.60	255	158.45	10300	2.10	**MSAF 67**	
6.00	245	217.41	10300	2.10		
6.80	215	190.11	10400	2.40		
7.20	205	180.60	10500	2.50	**MS 67**	**Y..71M_1-4**
8.20	187	158.45	10500	2.80	**MSF 67**	**AM71**
9.70	161	134.40	10600	3.20	**MSA 67**	**AD2**
11.0	147	121.33	10600	3.50	**MSAF 67**	
12.0	131	106.75	10700	4.00		
4.40	300	201.00	7080	1.00		
4.80	275	184.80	7270	1.10	**MS 57**	**Y..71M_2-6**
5.70	240	158.12	7530	1.20	**MSF 57**	**AM71**
6.50	210	137.05	7710	1.35	**MSA 57**	**AD1**
7.00	200	128.10	7780	1.45	**MSAF 57**	
6.50	215	201.00	7700	1.35		
7.00	200	184.80	7790	1.45		
8.20	176	158.12	7920	1.70	**MS 57**	**Y..71M_1-4**
9.50	155	137.05	8010	1.90	**MSF 57**	**AM71**
10.0	146	128.10	8040	2.00	**MSA 57**	**AD1**
12.0	128	110.73	8110	2.30	**MSAF 57**	
14.0	111	94.08	8160	2.60		
15.0	100	84.00	8190	2.90		
6.50	205	201.00	5120	0.80		
7.00	194	184.80	5210	0.85		
8.20	170	158.12	5340	1.00		
9.50	150	137.05	5440	1.10		
10.0	141	128.10	5480	1.20		
12.0	124	110.73	5560	1.35	**MS 47**	**Y..71M_1-4**
14.0	108	94.08	5630	1.55	**MSF 47**	**AM71**
15.0	98	84.00	5670	1.70	**MSA 47**	**AD1**
18.0	85	71.75	5720	1.95	**MSAF 47**	
19.0	97	69.39	5640	1.60		
19.0	80	67.20	5740	2.10		
20.0	90	63.80	5670	1.70		
24.0	78	54.59	5720	2.00		
27.0	68	47.32	5760	2.30		
13.0	108	98.80	3000	0.80		
15.0	96	86.36	3000	0.90		
16.0	91	80.96	3000	0.95	**MS 37**	**Y..71M_1-4**
18.0	81	71.44	3000	1.05	**MSF 37**	**AM71**
21.0	73	63.33	3000	1.10	**MSA 37**	**AD1**
23.0	78	55.93	3000	1.05	**MSAF 37**	
25.0	72	51.30	3000	1.15		
30.0	62	43.68	3000	1.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.25kw						
35.0	54	37.66	3000	1.45	**MS 37**	**Y..71M_1-4**
37.0	51	35.10	3000	1.55	**MSF 37**	**AM71**
					MSA 37	**AD1**
					MSAF 37	
42.0	45	30.68	3000	1.70		
45.0	42	28.76	3000	1.80		
51.0	37	25.38	3000	2.00	**MS 37**	**Y..71M_1-4**
58.0	33	22.50	3000	2.20	**MSF 37**	**AM71**
65.0	32	19.89	2870	1.65	**MSA 37**	**AD1**
71.0	29	18.24	2820	1.80	**MSAF 37**	
84.0	25	15.53	2710	2.00		
97.0	22	13.39	2620	2.30		
104	20	12.48	2570	2.40		
119	18	10.91	2480	2.70		
127	17	10.23	2440	2.80		
144	15	9.02	2360	3.10	**MS 37**	**Y..71M_1-4**
162	13	8.00	2280	3.40	**MSF 37**	**AM71**
191	191	6.80	2180	3.80	**MSA 37**	**AD2**
205	205	6.33	2130	3.30	**MSAF 37**	
241	241	5.38	2030	3.80		
267	267	4.86	1980	4.10		
328	328	3.97	1860	4.80		
92.0	21	28.76	2740	3.00		
105	19	25.38	2650	3.30	**MS 37**	**Y..63M_2-2**
118	17	22.50	2560	3.40	**MSF 37**	**AM63**
134	16	19.89	2410	2.80	**MSA 37**	**AD1**
146	15	18.24	2350	3.00	**MSAF 37**	
171	12	15.53	2250	3.40		
199	11	13.39	2160	3.80	**MS 37**	**Y..63M_2-2**
213	10	12.48	2120	4.00	**MSF 37**	**AM63**
					MSA 37	**AD2**
					MSAF 37	
P_1=0.37kw						
0.67	2850	2054	24500	0.90	**MS 87 MRF57**	**Y..71M_2-4**
0.76	2530	1824	27400	1.00	**MSF 87 MRF57**	**AM71**
					MSA 87 MRF57	**AD2**
					MSAF 87 MRF57	
0.85	2260	1631	28000	1.10	**MS 87 MRF57**	**Y..71M_2-4**
1.50	1340	930	29400	1.85	**MSF 87 MRF57**	**AM71**
1.70	1210	831	29500	2.10	**MSA 87 MRF57**	**AD3**
					MSAF 87 MRF57	
1.90	1310	714	11300	0.95		
2.20	1160	637	12600	1.05	**MS 77 MRF37**	**Y..71M_2-4**
2.40	1050	574	13400	1.15	**MSF 77 MRF37**	**AM71**
2.80	900	499	14300	1.35	**MSA 77 MRF37**	**AD2**
3.20	795	438	14900	1.55	**MSAF 77 MRF37**	
3.60	705	389	15300	1.75		
3.80	620	365	7560	0.90	**MS 67 MRF37**	**Y..71M_2-4**
4.30	540	319	8450	1.05	**MSF 67 MRF37**	**AM71**
4.90	475	281	9030	1.20	**MSA 67 MRF37**	**AD2**
5.60	430	246	9380	1.30	**MSAF 67 MRF37**	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
3.50	635	256.47	15600	2.00	**MS 77**	**Y..80M$_1$-6**
4.00	565	225.26	15800	2.20	**MSF 77**	**AM80**
4.20	540	214.00	15900	2.30	**MSA 77**	**AD2**
					MSAF 77	
4.20	500	217.41	8830	1.10	**MS 67**	**Y..80M$_1$-6**
4.80	445	190.11	9280	1.25	**MSF 67**	**AM80**
5.00	425	180.60	9410	1.30	**MSA 67**	**AD2**
5.70	380	158.45	9710	1.45	**MSAF 67**	
6.40	345	217.41	9900	1.50	**MS 67**	**Y..71M$_2$-4**
7.30	305	190.11	10100	1.70	**MSF 67**	**AM71**
7.60	290	180.60	10200	1.75	**MSA 67**	**AD2**
8.70	260	158.45	10300	2.00	**MSAF 67**	
10.0	225	134.40	10400	2.30		
11.0	205	121.33	10500	2.50		
5.70	355	158.12	6510	0.85	**MS 57**	**Y..80M$_1$-6**
6.60	310	137.05	6950	0.95	**MSF 57**	**AM80**
7.10	295	128.10	7110	1.00	**MSA 57**	**AD1**
8.20	260	110.73	7400	1.15	**MSAF 57**	
9.60	225	94.08	7640	1.30		
11.0	205	84.00	7770	1.45		
6.90	300	201.00	7050	0.95	**MS 57**	**Y..71M$_2$-4**
7.50	280	184.80	7230	1.05	**MSF 57**	**AM71**
8.70	245	158.12	7510	1.20	**MSA 57**	**AD1**
10.0	215	137.05	7690	1.35	**MSAF 57**	
11.0	205	128.10	7770	1.45		
12.0	180	110.73	7900	1.65		
15.0	156	94.08	8000	1.90		
16.0	141	84.00	8060	2.10		
19.0	122	71.75	8130	2.40	**MS 57**	**Y..71M$_2$-4**
20.0	139	69.39	8070	1.75	**MSF 57**	**AM71**
21.0	115	67.20	8150	2.50	**MSA 57**	**AD2**
22.0	128	63.80	8110	1.90	**MSAF 57**	
10.0	210	137.05	5110	0.80	**MS 47**	**Y..71M$_2$-4**
11.0	198	128.10	5180	0.85	**MSF 47**	**AM71**
12.0	175	110.73	5320	0.95	**MSA 47**	**AD1**
15.0	151	94.08	5430	1.10	**MSAF 47**	
16.0	137	84.00	5500	1.20		
19.0	119	71.75	5580	1.40		
20.0	136	69.39	5460	1.15		
21.0	112	67.20	5610	1.50		
22.0	126	63.80	5510	1.25		
25.0	109	54.59	5590	1.40		
29.0	96	47.32	5410	1.60		
31.0	90	44.22	5330	1.75		
36.0	78	38.23	5140	2.00		
42.0	67	32.48	4930	2.30	**MS 47**	**Y..71M$_2$-4**
48.0	60	29.00	4790	2.60	**MSF 47**	**AM71**
56.0	52	24.77	4590	3.00	**MSA 47**	**AD2**
59.0	49	23.20	4510	3.10	**MSAF 47**	
68.0	46	20.33	4180	2.40		
78.0	40	17.62	4030	2.80		
84.0	37	16.47	3960	3.00		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.37kw						
22.0	103	63.33	3000	0.80	**MS 37**	**Y..71M$_2$-4**
27.0	101	51.30	3000	0.80	**MSF 37**	**AM71**
32.0	87	43.68	3000	0.95	**MSA 37**	**AD1**
37.0	76	37.66	3000	1.05	**MSAF 37**	
39.0	71	35.10	3000	1.10		
45.0	62	30.68	3000	1.20		
48.0	59	28.76	3000	1.30		
54.0	52	25.38	2940	1.40		
61.0	47	22.50	2870	1.55		
69.0	44	19.89	2610	1.20		
76.0	41	18.24	2570	1.30		
89.0	35	15.53	2500	1.45		
103	30	13.39	2420	1.60		
111	28	12.48	2390	1.70	**MS 37**	**Y..71M$_2$-4**
126	25	10.91	2320	1.95	**MSF 37**	**AM71**
135	23	10.23	2280	2.00	**MSA 37**	**AD2**
153	21	9.02	2220	2.20	**MSAF 37**	
172	18	8.00	2150	2.40		
203	16	6.80	2070	2.70		
218	15	6.33	2020	2.40		
256	12	5.38	1930	2.70		
284	11	4.86	1880	2.90		
348	9.3	3.97	1780	3.40		
104	28	25.38	2540	2.20	**MS 37**	**Y..71M$_1$-2**
118	25	22.50	2460	2.30	**MSF 37**	**AM71**
133	24	19.89	2290	1.85	**MSA 37**	**AD1**
145	22	18.24	2240	2.00	**MSAF 37**	
171	19	15.53	2160	2.30		
198	16	13.39	2080	2.60	**MS 37**	**Y..71M$_1$-2**
212	15	12.48	2040	2.70	**MSF 37**	**AM71**
243	13	10.91	1970	3.00	**MSA 37**	**AD2**
259	12	10.23	1940	3.10	**MSAF 37**	
294	11	9.02	1870	3.30		
P_1=0.55kw						
1.00	2800	1332	25400	0.90	**MS 87 MRF57**	**Y..80M$_1$-4**
1.20	2530	1191	27400	1.00	**MSF 87 MRF57**	**AM80**
1.30	2200	1032	28100	1.15	**MSA 87 MRF57**	**AD3**
1.50	2030	930	28400	1.25	**MSAF 87 MRF57**	
1.70	1840	831	28700	1.35		
1.90	1600	719	29000	1.55		
2.20	1390	624	29300	1.80		
2.50	1260	558	29400	2.00		
3.20	1010	435	29700	2.40		
3.20	1200	438	12300	1.05	**MS 77 MRF37**	**Y..80M$_1$-4**
3.60	1070	389	13300	1.15	**MSF 77 MRF37**	**AM80**
4.20	900	327	14400	1.35	**MSA 77 MRF37**	**AD2**
4.80	810	289	14800	1.50	**MSAF 77 MRF37**	
5.50	705	250	15300	1.75		
5.60	645	246	6520	0.90	**MS 67 MRF37**	**Y..80M$_1$-4**
6.20	580	221	8080	1.00	**MSF 67 MRF37**	**AM80**
7.00	525	198	8590	1.10	**MSA 67 MRF37**	**AD2**
8.20	450	168	9220	1.25	**MSAF 67 MRF37**	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
3.20	1110	288.00	29600	2.20	**MS 87**	**Y..80M$_2$-6**
3.50	1000	258.18	29700	2.40	**MSF 87**	**AM80**
4.10	880	222.40	29800	2.70	**MSA 87**	**AD2**
4.50	810	202.96	29800	2.90	**MSAF 87**	
3.60	940	256.47	14200	1.35	**MS 77**	**Y..80M$_2$-6**
4.10	830	225.26	14700	1.50	**MSF 77**	**AM80**
4.30	800	214.00	14900	1.60	**MSA 77**	**AD2**
4.80	715	189.09	15300	1.75	**MSAF 77**	
5.70	620	161.60	15600	2.00		
5.40	650	256.47	15500	1.95	**MS 77**	**Y..80M$_1$-4**
6.10	580	225.26	15800	2.20	**MSF 77**	**AM80**
6.40	550	214.00	15900	2.30	**MSA 77**	**AD2**
7.30	495	189.09	16000	2.60	**MSAF 77**	
6.40	515	217.41	8720	1.00	**MS 67**	**Y..80M$_1$-4**
7.30	455	190.11	9190	1.15	**MSF 67**	**AM80**
7.60	435	180.60	9340	1.20	**MSA 67**	**AD2**
8.70	385	158.45	9650	1.35	**MSAF 67**	
10.0	335	134.40	9950	1.55		
11.0	305	121.33	10100	1.70		
13.0	270	106.75	10200	1.90		
14.0	255	100.80	10300	2.00		
16.0	220	85.83	10400	2.30		
18.0	225	75.06	10400	2.10		
21.0	200	65.63	10500	2.40		
9.70	330	94.08	6760	0.90	**MS 57**	**Y..80M$_2$-6**
11.0	300	84.00	7070	1.00	**MSF 57**	**AM80**
					MSA 57	**AD1**
					MSAF 57	
13.0	260	71.75	7390	1.10	**MS 57**	**Y..80M$_2$-6**
14.0	245	67.20	7500	1.20	**MSF 57**	**AM80**
17.0	240	54.59	7540	1.10	**MSA 57**	**AD2**
19.0	210	47.32	7730	1.30	**MSAF 57**	
21.0	199	44.22	7800	1.35		
24.0	173	38.23	7930	1.55		
8.70	365	158.12	6390	0.80	**MS 57**	**Y..80M$_1$-4**
10.0	320	137.05	6860	0.90	**MSF 57**	**AM80**
11.0	300	128.10	7040	0.95	**MSA 57**	**AD1**
12.0	265	110.73	7350	1.10	**MSAF 57**	
15.0	230	94.08	7600	1.25		
16.0	205	84.00	7740	1.40		
19.0	182	71.75	7890	1.60	**MS 57**	**Y..80M$_1$-4**
21.0	172	67.20	7940	1.65	**MSF 57**	**AM80**
25.0	165	54.59	7970	1.50	**MSA 57**	**AD2**
29.0	144	47.32	8050	1.70	**MSAF 57**	
31.0	135	44.22	8080	1.80		
36.0	118	38.23	8140	2.10		
42.0	101	32.48	7940	2.40		
48.0	91	29.00	7690	2.70		
56.0	78	24.77	7360	3.10		
59.0	74	23.20	7220	3.30		
68.0	68	20.33	6740	2.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.55kw						
16.0	200	84.00	5160	0.80	**MS 47**	**Y..80M$_1$-4**
19.0	177	71.75	5310	0.95	**MSF 47**	**AM80**
21.0	167	67.20	5360	1.00	**MSA 47**	**AD1**
25.0	162	54.59	5120	0.95	**MSAF 47**	
29.0	142	47.32	5000	1.10		
31.0	133	44.22	4940	1.15		
36.0	116	38.23	4800	1.35	**MS 47**	**Y..80M$_1$-4**
42.0	100	32.48	4640	1.55	**MSF 47**	**AM80**
48.0	90	29.00	4530	1.75	**MSA 47**	**AD2**
56.0	77	24.77	4360	2.00	**MSAF 47**	
59.0	73	23.20	4300	2.10		
68.0	68	20.33	3910	1.60		
78.0	59	17.62	3790	1.85		
84.0	56	16.47	3740	2.00		
97.0	48	14.24	3620	2.30		
114	41	12.10	3480	2.60		
128	37	10.80	3390	3.00		
150	32	9.23	3260	3.40		
45.0	93	30.68	2680	0.80	**MS 37**	**Y..80M$_1$-4**
48.0	87	28.76	2660	0.85	**MSF 37**	**AM80**
54.0	78	25.38	2630	0.95	**MSA 37**	**AD1**
61.0	69	22.50	2590	1.05	**MSAF 37**	
89.0	52	15.53	2230	0.95		
103	45	13.39	2190	1.10		
72.0	60	19.13	2530	1.20	**MS 37**	**Y..80M$_1$-4**
111	42	12.48	2170	1.15	**MSF 37**	**AM80**
126	37	10.91	2130	1.30	**MSA 37**	**AD2**
135	35	10.23	2110	1.35	**MSAF 37**	
153	31	9.02	2060	1.50		
172	27	8.00	2010	1.65		
203	23	6.80	1950	1.85		
218	22	6.33	1900	1.60		
256	19	5.38	1830	1.85		
284	17	4.86	1790	1.95		
348	14	3.97	1700	2.30		
98.0	45	28.76	2400	1.45	**MS 37**	**Y..71M$_2$-2**
111	40	25.38	2340	1.55	**MSF 37**	**AM71**
125	35	22.50	2290	1.60	**MSA 37**	**AD1**
141	33	19.89	2090	1.35	**MSAF 37**	
154	30	18.24	2060	1.45		
181	26	15.53	2000	1.60		
210	23	13.39	1930	1.80		
225	21	12.48	1900	1.90		
258	18	10.91	1850	2.10		
275	17	10.23	1820	2.20		
311	15	9.02	1770	2.30		
351	14	8.00	1710	2.60		
413	12	6.80	1640	2.50		
P_1=0.75kw						
1.20	4710	1223	23400	0.90	**MS 97 MRF57**	**Y..80M$_2$-4**
1.30	4130	1070	32200	1.00	**MSF 97 MRF57**	**AM80**
1.60	3550	928	34000	1.20	**MSA 97 MRF57**	**AD2**
1.70	3140	824	34700	1.35	**MSAF 97 MRF57**	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
2.00	2240	714	35900	1.85	**MS 97 MRF57**	**Y..80M$_2$-4 AM80 AD3**
2.30	2380	626	35800	1.75	**MSF 97 MRF57**	
2.70	2040	538	36100	2.00	**MSA 97 MRF57**	
3.00	1850	484	36300	2.30	**MSAF 97 MRF57**	
1.40	2940	1032	21700	0.85	**MS 87 MRF57**	**Y..80M$_2$-4 AM80 AD3**
1.50	2710	930	27000	0.90	**MSF 87 MRF57**	
1.70	2450	831	27600	1.00	**MSA 87 MRF57**	
2.00	2130	719	28200	1.15	**MSAF 87 MRF57**	
2.30	1860	624	28700	1.35		
2.60	1680	558	28900	1.50		
3.30	1340	435	29300	1.80		
4.40	1030	323	29700	2.30		
4.40	1200	327	12300	1.05	**MS 77 MRF37**	**Y..80M$_2$-4 AM80 AD2**
5.00	1080	289	13200	1.15	**MSF 77 MRF37**	
5.70	930	250	14200	1.30	**MSA 77 MRF37**	
6.60	820	219	14800	1.50	**MSAF 77 MRF37**	
3.30	1480	288.00	29200	1.65	**MS 87**	**Y..90S-6 AM90 AD2**
3.60	1340	258.18	29400	1.80	**MSF 87**	
4.20	1170	222.40	29500	2.00	**MSA 87**	
4.60	1080	202.96	29600	2.20	**MSAF 87**	
5.00	1010	288.00	29700	2.20	**MS 87**	**Y..80M$_2$-4 AM80 AD2**
5.60	910	258.18	29800	2.50	**MSF 87**	
6.40	800	222.40	29800	2.80	**MSA 87**	
7.10	735	202.96	29900	3.10	**MSAF 87**	
4.20	1110	225.26	13000	1.15	**MS 77**	**Y..90S-6 AM90 AD2**
4.40	1060	214.00	13400	1.20	**MSF 77**	
5.00	950	189.09	14100	1.35	**MSA 77**	
5.80	820	161.60	14800	1.55	**MSAF 77**	
5.60	850	256.47	14600	1.50	**MS 77**	**Y..80M$_2$-4 AM80 AD2**
6.40	760	225.26	15100	1.65	**MSF 77**	
6.70	730	214.00	15200	1.75	**MSA 77**	
7.60	650	189.09	15500	1.95	**MSAF 77**	
8.90	565	161.60	15800	2.20		
9.70	520	148.15	16000	2.40		
11.0	460	130.00	16000	2.60		
12.0	440	123.20	16000	2.70		
13.0	390	107.83	16000	3.00		
7.60	600	190.11	7820	0.85	**MS 67**	**Y..80M$_2$-4 AM80 AD2**
8.00	575	180.60	8120	0.90	**MSF 67**	
9.10	510	158.45	8740	1.00	**MSA 67**	
11.0	440	134.40	9300	1.15	**MSAF 67**	
12.0	400	121.33	9560	1.30		
13.0	360	106.75	9820	1.45		
14.0	340	100.80	9920	1.50		
17.0	295	85.83	10100	1.75		
19.0	300	75.06	10100	1.60		
22.0	260	65.63	10300	1.80		
23.0	250	62.35	10300	1.90		
26.0	220	54.70	10200	2.20		
31.0	191	46.40	9740	2.50		

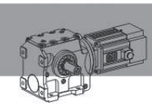
n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
13.0	345	71.75	6590	0.85	**MS 57**	**Y..90S-6 AM90 AD2**
14.0	330	67.20	6800	0.90	**MSF 57**	
17.0	280	56.61	7230	1.05	**MSA 57**	
20.0	280	47.32	7250	0.95	**MSAF 57**	
21.0	260	44.22	7380	1.00		
13.0	350	110.73	6550	0.85	**MS 57**	**Y..80M$_2$-4 AM80 AD1**
15.0	305	94.08	7040	0.95	**MSF 57**	
17.0	275	84.00	7290	1.05	**MSA 57**	
					MSAF 57	
20.0	235	71.75	7560	1.20	**MS 57**	**Y..80M$_2$-4 AM80 AD2**
21.0	225	67.20	7640	1.25	**MSF 57**	
26.0	215	54.59	7700	1.15	**MSA 57**	
30.0	190	47.32	7850	1.30	**MSAF 57**	
32.0	178	44.22	7910	1.40		
38.0	155	38.23	7910	1.60		
44.0	133	32.48	7590	1.85		
49.0	119	29.00	7380	2.00		
58.0	103	24.77	7080	2.40		
62.0	96	23.20	6950	2.50		
71.0	90	20.33	6420	1.90		
81.0	78	17.62	6200	2.20		
87.0	73	16.47	6100	2.30		
101	64	14.24	5870	2.70		
30.0	187	47.32	4510	0.85	**MS 47**	**Y..80M$_2$-4 AM80 AD1**
32.0	175	44.22	4480	0.90	**MSF 47**	
					MSA 47	
					MSAF 47	
38.0	153	38.23	4400	1.00	**MS 47**	**Y..80M$_2$-4 AM80 AD2**
44.0	131	32.48	4290	1.20	**MSF 47**	
49.0	118	29.00	4200	1.30	**MSA 47**	
58.0	102	24.77	4080	1.55	**MSAF 47**	
62.0	96	23.20	4030	1.60		
71.0	89	20.33	3590	1.25		
81.0	78	17.62	3510	1.40		
87.0	73	16.47	3470	1.50		
101	63	14.24	3380	1.75		
119	54	12.10	3280	2.00		
133	48	10.80	3200	2.20		
156	42	9.23	3090	2.60	**MS 47**	**Y..80M$_2$-4 AM80 AD2**
166	39	8.64	3040	2.80	**MSF 47**	
197	33	7.28	2920	3.10	**MSA 47**	
224	29	6.40	2810	2.60	**MSAF 47**	
266	25	5.39	2690	3.00		
301	22	4.76	2610	3.30		
359	18	4.00	2490	3.30		
75.0	78	19.13	2260	0.90	**MS 37**	**Y..80M$_2$-4 AM80 AD2**
115	55	12.48	1930	0.85	**MSF 37**	
132	48	10.91	1910	1.00	**MSA 37**	
140	46	10.23	1900	1.05	**MSAF 37**	
159	40	9.02	1880	1.15		
179	36	8.00	1850	1.25		
211	31	6.80	1800	1.40		
227	29	6.33	1760	1.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=0.75kw						
267	24	5.38	1710	1.40	**MS 37**	**Y..80M$_2$-4 AM80 AD2**
295	22	4.86	1680	1.50	**MSF 37**	
362	18	3.97	1610	1.75	**MSA 37**	
					MSAF 37	
151	40	19.13	2060	1.10	**MS 37**	**Y..80M$_1$-2 AM80 AD2**
216	30	13.39	1800	1.35	**MSF 37**	
232	28	12.48	1780	1.45	**MSA 37**	
265	24	10.91	1730	1.60	**MSAF 37**	
283	23	10.23	1710	1.65		
320	20	9.02	1670	1.75		
361	18	8.00	1630	1.95		
425	16	6.80	1570	1.85		
186	35	15.53	1840	1.20	**MS 37**	**Y..80M$_1$-2 AM80 AD1**
					MSF 37	
					MSA 37	
					MSAF 37	
P_1=1.10kw						
1.70	4700	824	23500	0.90	**MS 97 MRF57**	**Y..90S-4 AM90 AD2**
					MSF 97 MRF57	
					MSA 97 MRF57	
					MSAF 97 MRF57	
2.00	3360	714	34400	1.25	**MS 97 MRF57**	**Y..90S-4 AM90 AD3**
2.30	3570	626	34000	1.15	**MSF 97 MRF57**	
2.60	3070	538	34800	1.35	**MSA 97 MRF57**	
2.90	2780	484	35300	1.50	**MSAF 97 MRF57**	
3.40	2410	420	35700	1.75		
2.30	2800	624	25500	0.90	**MS 87 MRF57**	**Y..90S-4 AM90 AD3**
2.60	2530	558	27400	1.00	**MSF 87 MRF57**	
2.90	2230	485	28000	1.10	**MSA 87 MRF57**	
3.30	2030	435	28400	1.20	**MSAF 87 MRF57**	
3.80	1780	378	28800	1.35		
4.40	1550	323	29100	1.55		
5.00	1360	281	29300	1.75		
5.60	1450	255	29200	1.35		
6.40	1270	222	29400	1.55		
6.90	1190	205	29500	1.65		
6.50	1230	219	12000	1.00	**MS 77 MRF37**	**Y..90S-4 AM90 AD2**
					MSF 77 MRF37	
					MSA 77 MRF37	
					MSAF 77 MRF37	
3.30	2260	286.40	35900	1.85	**MS 97**	**Y..90L-6 AM90 AD3**
3.60	2080	262.22	36100	2.00	**MSF 97**	
4.10	1860	231.67	36300	2.20	**MSA 97**	
					MSAF 97	
3.60	1970	258.18	28500	1.25	**MS 87**	**Y..90L-6 AM90 AD2**
4.20	1720	222.40	28900	1.40	**MSF 87**	
4.60	1580	202.96	29100	1.50	**MSA 87**	
					MSAF 87	

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
4.90	1490	288.00	29200	1.50	**MS 87**	**Y..90S-4 AM90 AD2**
5.50	1350	258.18	29300	1.70	**MSF 87**	
6.40	1180	222.40	29500	1.90	**MSA 87**	
7.00	1080	202.96	29600	2.10	**MSAF 87**	
7.90	970	180.00	29700	2.30		
9.40	830	151.30	29800	2.60		
6.30	1130	225.26	12900	1.10	**MS 77**	**Y..90S-4 AM90 AD2**
6.60	1080	214.00	13300	1.15	**MSF 77**	
7.50	960	189.09	14000	1.30	**MSA 77**	
8.80	830	161.60	14700	1.50	**MSAF 77**	
9.60	775	148.15	15000	1.60		
11.0	685	130.00	15400	1.75		
12.0	655	123.20	15500	1.85		
13.0	575	107.83	15800	2.00		
15.0	525	97.14	15900	2.20		
17.0	465	85.22	16000	2.40		
12.0	595	121.33	7880	0.85	**MS 67**	**Y..90S-4 AM90 AD2**
13.0	530	106.75	8550	0.95	**MSF 67**	
14.0	505	100.80	8800	1.05	**MSA 67**	
17.0	435	85.83	9340	1.20	**MSAF 67**	
18.0	400	78.00	9580	1.30		
22.0	390	65.63	9640	1.20		
23.0	370	62.35	9750	1.30		
26.0	330	54.70	9540	1.45		
31.0	280	46.40	9210	1.70		
34.0	255	41.89	9010	1.85		
39.0	225	36.85	8750	2.10		
41.0	215	34.80	8630	2.20		
48.0	185	29.63	8300	2.60		
20.0	350	71.75	6530	0.80	**MS 57**	**Y..90S-4 AM90 AD2**
21.0	330	67.20	6750	0.85	**MSF 57**	
25.0	285	56.61	7210	0.95	**MSA 57**	
30.0	280	47.32	7250	0.85	**MSAF 57**	
32.0	260	44.22	7390	0.95	**MS 57**	**Y..90S-4 AM90 AD2**
37.0	225	38.23	7390	1.05	**MSF 57**	
44.0	197	32.48	7150	1.25	**MSA 57**	
49.0	177	29.00	6980	1.40	**MSAF 57**	
57.0	152	24.77	6740	1.60		
61.0	143	23.20	6640	1.70		
73.0	121	19.54	6370	1.75		
81.0	116	17.62	5850	1.45		
86.0	108	16.47	5770	1.55		
100	94	14.24	5590	1.80		
117	80	12.10	5380	2.10		
131	72	10.80	5240	2.40		
154	62	9.23	5040	2.70		
49.0	175	29.00	3720	0.90	**MS 47**	**Y..90S-4 AM90 AD2**
57.0	151	24.77	3660	1.05	**MSF 47**	
61.0	142	23.20	3640	1.05	**MSA 47**	
73.0	120	19.54	3560	1.20	**MSAF 47**	
81.0	115	17.62	3070	0.95		
86.0	108	16.47	3060	1.00		
100	94	14.24	3030	1.15		
117	80	12.10	2980	1.35		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.10kw						
131	72	10.80	2930	1.50		
154	62	9.23	2860	1.75		
164	58	8.64	2830	1.90	**MS 47**	
195	49	7.28	2740	2.10	**MSF 47**	**Y..90S-4**
222	44	6.40	2650	1.75	**MSA 47**	**AM90**
263	37	5.39	2560	2.00	**MSAF 47**	**AD2**
298	32	4.76	2490	2.20		
355	27	4.00	2390	2.20		
178	53	8.00	1580	0.85		
209	45	6.80	1580	0.95	**MS 37**	
224	42	6.33	1540	0.80	**MSF 37**	**Y..90S-4**
264	36	5.38	1520	0.95	**MSA 37**	**AM90**
292	33	4.86	1510	1.00	**MSAF 37**	**AD2**
358	27	3.97	1470	1.20		
214	44	13.39	1580	0.95		
230	41	12.48	1570	0.95	**MS 37**	
263	36	10.91	1560	1.10	**MSF 37**	**Y..80M$_2$-2**
281	34	10.23	1550	1.10	**MSA 37**	**AM80**
318	30	9.02	1520	1.20	**MSAF 37**	**AD2**
359	27	8.00	1500	1.30		
422	23	6.80	1460	1.25		
P_1=1.50kw						
2.00	4580	714	29300	0.90		
2.30	4870	626	19700	0.85	**MS 97 MRF57**	
2.70	4200	538	31300	1.00	**MSF 97 MRF57**	**Y..90L-4**
3.00	3790	484	33600	1.10	**MSA 97 MRF57**	**AM90**
3.40	3300	420	34500	1.25	**MSAF 97 MRF57**	**AD3**
3.80	2980	376	35000	1.40		
4.40	2610	327	35500	1.60		
3.00	3050	485	17700	0.80		
3.30	2770	435	26100	0.90		
3.80	2440	378	27600	1.00	**MS 87 MRF57**	
4.40	2120	323	28200	1.15	**MSF 87 MRF57**	**Y..90L-4**
5.10	1860	281	28700	1.30	**MSA 87 MRF57**	**AM90**
5.60	1990	255	28400	1.00	**MSAF 87 MRF57**	**AD3**
6.40	1740	222	28800	1.15		
7.00	1620	205	29000	1.20		
3.30	3080	286.40	34800	1.35	**MS 97**	
3.60	2840	262.22	35200	1.45	**MSF 97**	**Y..100L-6**
4.10	2540	231.67	35600	1.65	**MSA 97**	**AM100**
4.80	2190	196.52	36000	1.90	**MSAF 97**	**AD3**
5.00	2100	286.40	36100	1.90	**MS 97**	
5.40	1940	262.22	36200	2.10	**MSF 97**	**Y..90L-4**
6.20	1730	231.67	36400	2.30	**MSA 97**	**AM90**
7.30	1480	196.52	36600	2.70	**MSAF 97**	**AD3**
3.60	2680	258.18	27100	0.90	**MS 87**	
4.20	2340	222.40	27800	1.00	**MSF 87**	**Y..100L-6**
4.60	2160	202.96	28200	1.10	**MSA 87**	**AM100**
5.20	1930	180.00	28500	1.20	**MSAF 87**	**AD2**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
5.00	2030	288.00	28400	1.10		
5.50	1830	258.18	28700	1.25		
6.40	1600	222.40	29000	1.40		
7.00	1470	202.96	29200	1.55	**MS 87**	
7.90	1320	180.00	29400	1.65	**MSF 87**	**Y..90L-4**
9.40	1120	151.30	29600	1.90	**MSA 87**	**AM90**
10.0	1040	139.05	29700	2.00	**MSAF 87**	**AD2**
12.0	930	123.48	29700	2.20		
13.0	840	110.40	29800	2.40		
14.0	760	99.26	29900	2.60		
7.60	1310	189.09	11300	0.95		
8.80	1130	161.60	12800	1.10		
9.60	1050	148.15	13500	1.20		
11.0	930	130.00	14200	1.30		
12.0	880	123.20	14500	1.35		
13.0	785	107.83	15000	1.50		
15.0	710	97.14	15300	1.60	**MS 77**	
17.0	630	85.22	15400	1.75	**MSF 77**	**Y..90L-4**
19.0	635	75.09	14100	1.70	**MSA 77**	**AM90**
20.0	605	71.33	14000	1.80	**MSAF 77**	**AD2**
21.0	500	66.67	14500	2.10		
23.0	540	63.03	13600	2.00		
25.0	430	56.92	14000	2.30		
27.0	465	53.87	13200	2.40		
29.0	425	49.38	12900	2.60		
33.0	375	43.33	12500	2.90		
17.0	590	85.83	7940	0.90		
18.0	540	78.00	8460	0.95		
22.0	530	65.63	8570	0.90		
23.0	505	62.35	8800	0.95		
26.0	445	54.70	8790	1.05		
31.0	380	46.40	8570	1.25		
34.0	345	41.89	8420	1.40		
39.0	305	36.85	8230	1.55	**MS 67**	
41.0	290	34.80	8140	1.65	**MSF 67**	**Y..90L-4**
48.0	250	29.63	7880	1.90	**MSA 67**	**AM90**
53.0	225	26.93	7720	2.10	**MSAF 67**	**AD2**
59.0	215	24.44	6990	1.55		
62.0	205	23.22	6930	1.65		
70.0	184	20.37	6770	1.85		
83.0	157	17.28	6560	2.20		
92.0	142	15.60	6420	2.40		
104	125	13.73	6240	2.70		
44.0	265	32.48	6620	0.90		
49.0	235	29.00	6500	1.00		
58.0	205	24.77	6330	1.20		
62.0	194	23.20	6250	1.25		
73.0	164	19.54	6040	1.30	**MS 57**	
81.0	157	17.62	5420	1.05	**MSF 57**	**Y..90L-4**
87.0	147	16.47	5360	1.15	**MSA 57**	**AM90**
100	128	14.24	5240	1.35	**MSAF 57**	**AD2**
118	109	12.10	5080	1.55		
132	98	10.80	4970	1.75		
155	84	9.23	4800	2.00		



n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=1.50kw						
100	127	14.24	2620	0.85		
118	108	12.10	2620	1.00	**MS 47**	
132	97	10.80	2620	1.10	**MSF 47**	**Y..90L-4**
155	83	9.23	2590	1.30	**MSA 47**	**AM90**
166	78	8.64	2580	1.40	**MSAF 47**	**AD2**
196	66	7.28	2530	1.55		
223	59	6.40	2450	1.30	**MS 47**	
265	50	5.39	2390	1.50	**MSF 47**	**Y..90L-4**
300	44	4.76	2340	1.65	**MSA 47**	**AM90**
358	37	4.00	2260	1.65	**MSAF 47**	**AD2**
314	42	9.02	1350	0.85	**MS 47**	
354	37	8.00	1350	0.95	**MSF 47**	**Y..90S-2**
416	32	6.80	1330	0.90	**MSA 47**	**AM90**
					MSAF 47	**AD2**
P_1=2.20kw						
3.40	4890	420	19000	0.85		
3.80	4410	376	28300	0.95	**MS 97 MRF57**	
4.40	3870	327	33400	1.10	**MSF 97 MRF57**	**Y..100L$_1$-4**
5.00	3420	287	34300	1.25	**MSA 97 MRF57**	**AM100**
5.70	2990	252	35000	1.40	**MSAF 97 MRF57**	**AD3**
3.30	4460	286.40	31100	0.95	**MS 97**	
3.60	4110	262.22	32900	1.00	**MSF 97**	**Y..112M-6**
4.10	3670	231.67	33800	1.15	**MSA 97**	**AM112**
4.90	3160	196.52	34700	1.35	**MSAF 97**	**AD3**
5.00	3090	286.40	34800	1.30		
5.40	2850	262.22	35200	1.40		
6.20	2540	231.67	35600	1.55		
7.20	2180	196.52	36000	1.85	**MS 97**	
7.90	2020	180.95	36100	1.95	**MSF 97**	**Y..100L$_1$-4**
8.80	1820	161.74	36300	2.10	**MSA 97**	**AM100**
9.80	1650	145.60	36500	2.20	**MSAF 97**	**AD3**
11.0	1500	131.85	36600	2.40		
12.0	1340	116.92	36700	2.60		
13.0	1220	105.71	36800	2.80		
16.0	1040	89.60	36900	3.10		
5.50	2700	258.18	27000	0.85		
6.40	2360	222.40	27800	0.95	**MS 87**	
7.00	2170	202.96	28100	1.05	**MSF 87**	**Y..100L$_1$-4**
7.90	1940	180.00	28500	1.15	**MSA 87**	**AM100**
9.40	1650	151.30	29000	1.30	**MSAF 87**	**AD2**
10.0	1530	139.05	29100	1.35		
12.0	1370	123.48	29300	1.50		
13.0	1230	110.40	29500	1.60		
14.0	1120	99.26	29600	1.75	**MS 87**	
17.0	980	86.15	29700	1.90	**MSF 87**	**Y..100L$_1$-4**
17.0	1050	81.76	29600	1.50	**MSA 87**	**AM100**
18.0	880	77.14	29800	2.10	**MSAF 87**	**AD2**
20.0	910	70.43	29800	1.75		
22.0	830	64.27	29800	1.90		
25.0	740	57.00	29900	2.20		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=2.20kw						
11.0	1370	130.00	7440	0.90		
12.0	1300	123.20	11300	0.90		
13.0	1150	107.83	12700	1.00		
15.0	1040	97.14	13500	1.10		
17.0	920	85.22	14100	1.20		
19.0	820	75.20	13800	1.30	**MS 77**	
21.0	735	66.67	13500	1.40	**MSF 77**	**Y..100L$_1$-4**
23.0	795	63.03	12400	1.40	**MSA 77**	**AM100**
25.0	635	56.92	13100	1.55	**MSAF 77**	**AD2**
26.0	685	53.87	12100	1.60		
29.0	630	49.38	11900	1.75		
33.0	555	43.33	11700	2.00		
35.0	525	41.07	11500	2.10		
40.0	460	35.94	11300	2.40		
44.0	420	32.38	11000	2.60	**MS 77**	
50.0	370	28.41	10700	2.80	**MSF 77**	**Y..100L$_1$-4**
57.0	325	25.07	10400	3.10	**MSA 77**	**AM100**
62.0	305	22.89	9470	2.30	**MSAF 77**	**AD3**
68.0	280	20.99	9320	2.50		
31.0	560	46.40	7470	0.85		
34.0	510	41.89	7430	0.95	**MS 67**	
39.0	450	36.85	7350	1.05	**MSF 67**	**Y..100L$_1$-4**
41.0	425	34.80	7310	1.10	**MSA 67**	**AM100**
48.0	365	29.63	7170	1.30	**MSAF 67**	**AD2**
53.0	335	26.93	7070	1.45		
61.0	290	23.33	6910	1.65	**MS 67**	
70.0	270	20.37	6060	1.25	**MSF 67**	**Y..100L$_1$-4**
82.0	230	17.28	5950	1.50	**MSA 67**	**AM100**
91.0	205	15.60	5870	1.65	**MSAF 67**	**AD2**
104	184	13.73	5760	1.85		
110	174	12.96	5700	1.95		
129	149	11.03	5540	2.30	**MS 67**	
142	136	10.03	5440	2.50	**MSF 67**	**Y..100L$_1$-4**
164	118	8.69	5280	2.80	**MSA 67**	**AM100**
					MSAF 67	**AD3**
100	188	14.24	4640	0.90		
118	160	12.10	4570	1.05		
132	144	10.80	4520	1.20		
154	123	9.23	4420	1.35	**MS 57**	
165	116	8.64	4370	1.45	**MSF 57**	**Y..100L$_1$-4**
196	98	7.28	4240	1.50	**MSA 57**	**AM100**
223	87	6.40	4090	1.15	**MSAF 57**	**AD2**
264	73	5.39	3960	1.30		
299	65	4.76	3850	1.45		
356	55	4.00	3710	1.60		
P_1=3.00kw						
5.10	4580	287	25700	0.90	**MS 97 MRF57**	
5.80	4020	252	33100	1.05	**MSF 97 MRF57**	**Y..100L$_2$-4**
6.60	3510	219	34100	1.20	**MSA 97 MRF57**	**AM100**
7.10	3300	205	34500	1.25	**MSAF 97 MRF57**	**AD3**

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
5.10	4140	286.40	32900	0.95	MS 97 MSF 97 MSA 97 MSAF 97	Y..100L$_2$-4 AM100 AD3
5.60	3820	262.22	33600	1.05		
6.30	3410	231.67	34300	1.15		
7.40	2920	196.52	35100	1.35		
8.00	2710	180.95	35400	1.45		
9.00	2440	161.74	35700	1.55		
10.0	2210	145.60	36000	1.70		
11.0	2010	131.85	36200	1.80	MS 97 MSF 97 MSA 97 MSAF 97	Y..100L$_2$-4 AM100 AD3
12.0	1800	116.92	36300	1.95		
14.0	1630	105.71	36500	2.10		
16.0	1390	89.60	36700	2.30		
18.0	1410	80.85	36600	2.30		
8.10	2600	180.00	27300	0.85	MS 87 MSF 87 MSA 87 MSAF 87	Y..100L$_2$-4 AM100 AD2
9.60	2210	151.30	28100	0.95		
10.0	2050	139.05	28400	1.00		
12.0	1830	123.48	28700	1.10		
13.0	1650	110.40	29000	1.20		
15.0	1490	99.26	29200	1.30		
17.0	1310	86.15	29400	1.45		
18.0	1400	81.76	29300	1.15		
19.0	1180	77.14	29500	1.55		
21.0	1210	70.43	29500	1.30		
23.0	1110	64.27	29600	1.45		
26.0	990	57.00	29700	1.60		
30.0	830	47.91	29800	1.90	MS 87 MSF 87 MSA 87 MSAF 87	Y..100L$_2$-4 AM100 AD3
33.0	770	44.03	29900	2.10		
37.0	685	39.10	29900	2.30		
42.0	615	34.96	29900	2.60		
17.0	1240	85.22	11900	0.90	MS 77 MSF 77 MSA 77 MSAF 77	Y..100L$_2$-4 AM100 AD2
19.0	1100	75.20	12500	0.95		
22.0	980	66.67	12300	1.05		
23.0	1060	63.03	10900	1.05		
26.0	850	56.92	12000	1.15		
27.0	910	53.87	10800	1.20		
29.0	840	49.38	10800	1.30		
34.0	740	43.33	10600	1.50		
35.0	705	41.07	10600	1.55		
40.0	620	35.94	10400	1.75	MS 77 MSF 77 MSA 77 MSAF 77	Y..100L$_2$-4 AM100 AD3
45.0	560	32.38	10200	1.95		
51.0	490	28.41	10000	2.10		
58.0	435	25.07	9770	2.30		
64.0	410	22.89	8640	1.70		
69.0	375	20.99	8550	1.85		
79.0	330	18.42	8400	2.10		
83.0	315	17.45	8340	2.20		
95.0	275	15.28	8160	2.60		
106	250	13.76	8010	2.80		
121	220	12.07	7810	3.30		
137	195	10.65	7610	3.70		
42.0	570	34.80	6350	0.85	MS 67 MSF 67 MSA 67 MSAF 67	Y..100L$_2$-4 AM100 AD2
49.0	490	29.63	6340	1.00		
54.0	445	26.93	6320	1.05		
62.0	390	23.33	6250	1.25		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=3.00kw						
71.0	360	20.37	5240	0.95	MS 67 MSF 67 MSA 67 MSAF 67	Y..100L$_2$-4 AM100 AD2
84.0	305	17.28	5250	1.10		
93.0	275	15.60	5230	1.20		
106	245	13.73	5190	1.40		
112	230	12.96	5170	1.45		
132	199	11.03	5080	1.70	MS 67 MSF 67 MSA 67 MSAF 67	Y..100L$_2$-4 AM100 AD3
145	181	10.03	5020	1.90		
167	157	8.69	4910	2.10		
192	137	7.56	4800	2.20		
135	192	10.80	3990	0.90	MS 57 MSF 57 MSA 57 MSAF 57	Y..100L$_2$-4 AM100 AD2
158	164	9.23	3960	1.05		
168	154	8.64	3950	1.10		
200	130	7.28	3880	1.10		
227	116	6.40	3760	0.85		
270	98	5.39	3670	0.95		
306	87	4.76	3600	1.05		
364	73	4.00	3480	1.20		
P_1=4.00kw						
6.70	4690	219	24100	0.90	MS 97 MRF57 MSF 97 MRF57 MSA 97 MRF57 MSAF 97 MRF57	Y..112M-4 AM112 AD3
7.10	4410	205	28500	0.95		
6.30	4530	231.67	30200	0.90	MS 97 MSF 97 MSA 97 MSAF 97	Y..112M-4 AM112 AD3
7.40	3890	196.52	33400	1.05		
8.10	3600	180.95	34000	1.10		
9.00	3240	161.74	34600	1.20		
10.0	2940	145.60	35000	1.25		
11.0	2680	131.85	35400	1.35		
12.0	2390	116.92	35800	1.45		
14.0	2170	105.71	36000	1.60		
16.0	1850	89.60	36300	1.75		
18.0	1880	80.85	36300	1.70		
20.0	1670	71.43	36400	1.95	MS 97 MSF 97 MSA 97 MSAF 97	Y..112M-4 AM112 AD4
24.0	1420	60.59	36600	2.30		
26.0	1310	55.79	36700	2.50		
12.0	2440	123.48	27600	0.85	MS 87 MSF 87 MSA 87 MSAF 87	Y..112M-4 AM112 AD2
13.0	2200	110.40	28100	0.90		
15.0	1990	99.26	28500	1.00		
17.0	1740	86.15	28800	1.10		
19.0	1570	77.14	29100	1.15		
21.0	1610	70.43	29000	1.00		
23.0	1480	64.27	29200	1.10		
26.0	1310	57.00	29400	1.20		
30.0	1110	47.91	29600	1.45	MS 87 MSF 87 MSA 87 MSAF 87	Y..112M-4 AM112 AD3
33.0	1020	44.03	29700	1.55		
37.0	910	39.10	29700	1.75		
42.0	820	34.96	29700	1.95		
46.0	740	31.43	28900	2.20		
54.0	645	27.28	28000	2.50		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=4.00kw						
57.0	615	25.50	26400	2.00	MS 87 MSF 87 MSA 87 MSAF 87	Y..112M-4 AM112 AD4
26.0	1130	56.92	10800	0.85	MS 77 MSF 77 MSA 77 MSAF 77	Y..112M-4 AM112 AD2
27.0	1210	53.87	9280	0.90		
30.0	1120	49.38	9330	1.00		
34.0	980	43.33	9370	1.10		
36.0	930	41.07	9370	1.15		
41.0	820	35.94	9330	1.35	MS 77 MSF 77 MSA 77 MSAF 77	Y..112M-4 AM112 AD3
45.0	745	32.38	9270	1.45		
51.0	655	28.41	9160	1.60		
58.0	580	25.07	9040	1.75		
64.0	545	22.89	7650	1.30		
70.0	500	20.99	7640	1.40		
79.0	440	18.42	7600	1.60		
84.0	420	17.45	7580	1.70		
96.0	365	15.28	7490	1.90		
106	330	13.76	7400	2.10		
121	290	12.07	7280	2.40		
137	255	10.65	7140	2.80	MS 77 MSF 77 MSA 77 MSAF 77	Y..112M-4 AM112 AD4
155	230	9.44	6990	3.20		
181	197	8.06	6790	3.40		
84.0	405	17.28	3910	0.85	MS 67 MSF 67 MSA 67 MSAF 67	Y..112M-4 AM112 AD2
94.0	370	15.60	4270	0.90		
106	325	13.73	4510	1.05		
113	305	12.96	4520	1.10		
132	260	11.03	4530	1.30	MS 67 MSF 67 MSA 67 MSAF 67	Y..112M-4 AM112 AD3
146	240	10.03	4520	1.40		
168	205	8.69	4480	1.60		
193	182	7.56	4420	1.60		
P_1=5.50kw						
9.00	4470	161.74	31000	0.85	MS 97 MSF 97 MSA 97 MSAF 97	Y..132S-4 AM132 AD3
10.0	4050	145.60	33100	0.90		
11.0	3690	131.85	33800	1.00		
12.0	3300	116.92	34500	1.05		
14.0	3000	105.71	35000	1.15		
16.0	2560	89.60	35500	1.25		
19.0	2250	78.26	35900	1.35		
22.0	1900	65.45	36300	1.55		
20.0	2300	71.43	35800	1.45	MS 97 MSF 97 MSA 97 MSAF 97	Y..132S-4 AM132 AD4
24.0	1960	60.59	36200	1.70		
26.0	1810	55.79	36300	1.80		
29.0	1620	49.87	36500	2.00		
32.0	1470	44.89	36600	2.20		
36.0	1330	40.65	36700	2.50		
19.0	2160	77.14	28200	0.85	MS 87 MSF 87 MSA 87 MSAF 87	Y..132S-4 AM132 AD2
26.0	1810	57.00	28700	0.90		
30.0	1530	47.91	29100	1.05		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=5.50kw						
23.0	1810	64.00	28700	0.95	MS 87 MSF 87 MSA 87 MSAF 87	Y..132S-4 AM132 AD3
33.0	1410	44.03	29200	1.15		
37.0	1260	39.10	29100	1.25		
42.0	1130	34.96	28500	1.40		
46.0	1020	31.43	27900	1.55		
53.0	890	27.28	27100	1.80		
57.0	850	25.50	25200	1.45	MS 87 MSF 87 MSA 87 MSAF 87	Y..132S-4 AM132 AD4
68.0	715	21.43	24400	1.70		
74.0	660	19.70	24000	1.85		
83.0	585	17.49	23400	2.10		
93.0	525	15.64	22900	2.40		
103	475	14.06	22400	2.60		
119	410	12.21	21700	3.00		
133	370	10.93	21100	3.30		
35.0	1290	41.07	7590	0.85	MS 77 MSF 77 MSA 77 MSAF 77	Y..132S-4 AM132 AD2
40.0	1130	35.94	7770	0.95	MS 77 MSF 77 MSA 77 MSAF 77	Y..132S-4 AM132 AD3
45.0	1020	32.38	7860	1.05		
51.0	900	28.41	7920	1.15		
58.0	800	25.07	7940	1.25		
65.0	710	22.22	7920	1.35		
79.0	610	18.42	6000	1.15		
83.0	580	17.45	6240	1.20		
95.0	505	15.28	6500	1.40		
106	460	13.76	6510	1.55		
121	400	12.07	6490	1.80		
137	355	10.65	6440	2.00		
154	315	9.44	6380	2.30		
180	270	8.06	6260	2.50		
132	360	11.03	2990	0.95	MS 67 MSF 67 MSA 67 MSAF 67	Y..132S-4 AM132 AD3
145	330	10.03	3310	1.00		
167	285	8.69	3720	1.15		
192	250	7.56	3850	1.15		
P_1=7.50kw						
14.0	4050	105.71	33100	0.85	MS 97 MSF 97 MSA 97 MSAF 97	Y..132M-4 AM132 AD3
16.0	3460	89.60	34200	0.95		
19.0	3040	78.26	34900	1.00		
22.0	2560	65.45	35500	1.15		
21.0	3110	71.43	34800	1.05	MS 97 MSF 97 MSA 97 MSAF 97	Y..132M-4 AM132 AD4
24.0	2650	60.59	35400	1.25		
26.0	2450	55.79	35700	1.35		
29.0	2190	49.87	36000	1.50		
33.0	1980	44.89	36200	1.65		
36.0	1800	40.65	36300	1.85		
41.0	1600	36.05	36000	2.10		
45.0	1450	32.60	35300	2.20		
56.0	1200	26.39	31900	2.20		
62.0	1080	23.59	31200	2.40	MS 97 MSF 97 MSA 97 MSAF 97	Y..132M-4 AM132 AD5
69.0	970	21.23	30600	2.70		
76.0	880	19.23	30000	2.90		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=7.50kw						
33.0	1910	44.03	27700	0.85	**MS 87** **MSF 87** **MSA 87** **MSAF 87**	**Y..132M-4** **AM132** **AD3**
38.0	1700	39.10	27300	0.95		
42.0	1520	34.96	26900	1.05		
47.0	1370	31.43	26400	1.15		
54.0	1200	27.28	25800	1.35		
58.0	1150	25.50	23400	1.10	**MS 87** **MSF 87** **MSA 87** **MSAF 87**	**Y..132M-4** **AM132** **AD4**
69.0	970	21.43	22900	1.30		
75.0	890	19.70	22600	1.40		
84.0	795	17.49	22200	1.55		
94.0	710	15.64	21800	1.75		
105	640	14.06	21400	1.95		
120	555	12.21	20800	2.20		
135	500	10.93	20400	2.50		
162	415	9.07	19600	2.70		
186	360	7.88	19000	2.80		
52.0	1220	28.41	6290	0.85	**MS 77** **MSF 77** **MSA 77** **MSAF 77**	**Y..132M-4** **AM132** **AD3**
59.0	1080	25.07	6490	0.95		
66.0	960	22.22	6620	1.00		
80.0	820	18.42	2080	0.85		
84.0	780	17.45	2500	0.90		
96.0	685	15.28	3420	1.05		
107	620	13.76	4040	1.15		
122	545	12.07	4690	1.30		
138	480	10.65	5210	1.50	**MS 77** **MSF 77** **MSA 77** **MSAF 77**	**Y..132M-4** **AM132** **AD4**
156	425	9.44	5560	1.70		
182	365	8.06	5560	1.85		
P_1=11.0kw						
26.0	3580	55.79	34000	0.90	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..160M-4** **AM160** **AD4**
30.0	3210	49.87	34600	1.05		
33.0	2900	44.89	34700	1.15		
36.0	2630	40.65	34200	1.25		
41.0	2340	36.05	33700	1.40		
45.0	2120	32.60	33100	1.50		
56.0	1760	26.39	29300	1.45		
63.0	1580	23.59	28900	1.65	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..160M-4** **AM160** **AD5**
69.0	1420	21.23	28500	1.80		
77.0	1290	19.23	28100	2.00		
86.0	1140	17.05	27500	2.20		
96.0	1040	15.42	27100	2.40		
113	880	13.07	26200	2.60		
129	770	11.41	25500	2.90		
54.0	1750	27.28	23600	0.90	**MS 87** **MSF 87** **MSA 87** **MSAF 87**	**Y..160M-4** **AM160** **AD3**
60.0	1570	24.43	23300	1.00	**MS 87** **MSF 87** **MSA 87** **MSAF 87**	**Y..160M-4** **AM160** **AD4**
73.0	1310	20.27	22700	1.20		
75.0	1300	19.70	20300	0.95		
84.0	1160	17.49	20200	1.05		
94.0	1040	15.64	20000	1.20		
105	930	14.06	19700	1.30		

n_2 [1/min]	M_2 [Nm]	i	Fr [N]	K	Frame size	Input Configuration
P_1=11.0kw						
121	810	12.21	19400	1.50	**MS 87** **MSF 87** **MSA 87** **MSAF 87**	**Y..160M-4** **AM160** **AD4**
135	730	10.93	19100	1.70		
163	605	9.07	18500	1.85		
187	530	7.88	18000	1.90		
P_1=15.0kw						
33.0	3980	44.89	31400	0.85	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..160L-4** **AM160** **AD4**
36.0	3610	40.65	31300	0.90		
41.0	3210	36.05	31000	1.05		
45.0	2910	32.60	30700	1.10		
56.0	2420	26.39	26400	1.05		
62.0	2170	23.59	26300	1.20	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..160L-4** **AM160** **AD5**
69.0	1950	21.23	26200	1.35		
76.0	1770	19.23	26000	1.45		
86.0	1570	17.05	25700	1.65		
95.0	1420	15.42	25400	1.75		
112	1210	13.07	24800	1.90		
128	1060	11.41	24300	2.10		
153	880	9.55	23600	2.30		
177	770	8.26	22900	2.30		
94.0	1430	15.64	16800	0.85	**MS 87** **MSF 87** **MSA 87** **MSAF 87**	**Y..160L-4** **AM160** **AD4**
104	1280	14.06	17900	0.95		
120	1120	12.21	17800	1.10		
134	1000	10.93	17600	1.25		
162	830	9.07	17300	1.35		
186	725	7.88	17000	1.40		
P_1=18.5kw						
41.0	3960	36.05	28700	0.85	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..180M-4** **AM180** **AD4**
45.0	3590	32.60	28600	0.90		
53.0	3050	27.63	28400	1.00	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..180M-4** **AM180** **AD5**
61.0	2670	24.13	28100	1.05		
69.0	2410	21.23	24100	1.10		
76.0	2190	19.23	24100	1.20		
86.0	1940	17.05	24000	1.30		
95.0	1760	15.42	23900	1.40		
112	1490	13.07	23500	1.55		
128	1300	11.41	23200	1.70		
153	1090	9.55	22600	1.85		
177	950	8.26	22100	1.85		
P_1=22.0kw						
53.0	3610	27.63	26600	0.85	**MS 97** **MSF 97** **MSA 97** **MSAF 97**	**Y..180L-4** **AM180** **AD5**
61.0	3160	24.13	26500	0.90		
69.0	2850	21.23	18600	0.90		
77.0	2580	19.23	20500	1.00		
86.0	2290	17.05	22300	1.10		
96.0	2080	15.42	22400	1.20		
113	1760	13.07	22300	1.30		
129	1540	11.41	22100	1.45		
155	1290	9.55	21700	1.60		
178	1120	8.26	21300	1.60		

5. 8 **MS../MRF..性能参数** / MS../MRF.. Performance Parameters

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=92Nm				
0.14	10037	3000	**MS 37 MRF17** **MSF 37 MRF17** **MSA 37 MRF17** **MSAF 37 MRF17**	**Y..63M$_1$-4**
0.16	8654	3000		
0.17	8066	3000		
0.20	7051	3000		
0.23	6079	3000		
0.25	5431	3000		
0.29	4747	3000		
0.33	4155	3000		
0.38	3632	3000		
0.48	2866	3000		
0.56	2471	3000		
0.64	2160	3000		
0.73	1887	3000		
0.83	1665	3000		
0.95	1456	3000		
1.10	1271	3000		
1.20	1121	3000		
1.40	994	3000		
1.60	869	3000		
1.80	774	3000	**MS 37 MRF17** **MSF 37 MRF17** **MSA 37 MRF17** **MSAF 37 MRF17**	**Y..63M$_1$-4**
2.10	666	3000		
2.30	596	3000		
2.60	521	3000		
3.00	456	3000		
3.50	398	3000		
3.90	351	3000		
4.60	303	3000		
5.20	265	3000		
6.00	232	3000		
6.80	202	3000		
7.40	179	3000	**MS 37 MRF17** **MSF 37 MRF17** **MSA 37 MRF17** **MSAF 37 MRF17**	**Y..63M$_2$-4**
8.30	158	3000		
9.10	144	3000		
11.0	118	3000		
12.0	110	3000		
M_{2max}=185Nm				
0.11	12909	5250		
0.12	11189	5250		
0.13	10374	5250		
0.15	8992	5250		
0.18	7860	5250		
0.20	6887	5250		
0.23	6055	5250		
0.26	5292	5250	**MS 47 MRF17** **MSF 47 MRF17** **MSA 47 MRF17** **MSAF 47 MRF17**	**Y..63M$_1$-4**
0.30	4637	5250		
0.34	4092	5250		
0.39	3582	5200		
0.44	3131	5200		
0.51	2714	5200		
0.57	2412	5200		
0.65	2131	5200		
0.74	1863	5200		
0.83	1663	5200		
0.96	1435	5200		

n_2 [1/min]	i	Fr [N]	Frame size	Motor
M_{2max}=185Nm				
1.10	1254	5200	**MS 47 MRF17** **MSF 47 MRF17** **MSA 47 MRF17** **MSAF 47 MRF17**	**Y..63M$_1$-4**
1.20	1120	5200		
1.30	1083	5200		
1.40	965	5200		
1.60	865	5200		
1.80	750	5200		
2.10	655	5200		
2.40	574	5200		
2.70	506	5200		
3.20	438	5200		
3.60	388	5200		
3.90	336	5200	**MS 47 MRF17** **MSF 47 MRF17** **MSA 47 MRF17** **MSAF 47 MRF17**	**Y..63M$_2$-4**
4.50	294	5200		
5.80	229	5200		
5.00	257	5260	**MS 47 MRF17** **MSF 47 MRF17** **MSA 47 MRF17** **MSAF 47 MRF17**	**Y..71M$_1$-4**
6.50	200	5200		
6.90	187	5200		
7.90	165	5200		
9.40	148	5200	**MS 47 MRF17** **MSF 47 MRF17** **MSA 47 MRF17** **MSAF 47 MRF17**	**Y..71M$_2$-4**
11.0	131	5200		
M_{2max}=330Nm				
0.11	12909	6800	**MS 57 MRF17** **MSF 57 MRF17** **MSA 57 MRF17** **MSAF 57 MRF17**	**Y..63M$_1$-4**
0.12	11189	6800		
0.13	10374	6800		
0.15	8992	6800		
0.18	7860	6800		
0.20	6887	6800		
0.23	6055	6800		
0.26	5292	6800		
0.30	4637	6800		
0.34	4092	6800		
0.38	3628	6800		
M_{2max}=300Nm				
0.44	3131	7080	**MS 57 MRF17** **MSF 57 MRF17** **MSA 57 MRF17** **MSAF 57 MRF17**	**Y..63M$_1$-4**
0.51	2714	7080		
0.57	2412	7080		
0.65	2131	7080		
0.74	1863	7080		
0.83	1663	7080		
0.96	1435	7080		
1.10	1254	7080		
1.30	1083	7080		
1.40	965	7080		
1.60	865	7080		
1.80	750	7080		
2.10	655	7080		

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=300Nm					
2.30	574	7080	**MS**	**57 MRF17**	**Y..63M$_2$-4**
2.60	506	7080	**MSF**	**57 MRF17**	**Y..63M$_2$-4**
3.00	438	7080	**MSA**	**57 MRF17**	**Y..63M$_2$-4**
3.40	388	7080	**MSAF**	**57 MRF17**	**Y..63M$_2$-4**
3.90	336	7080	**MS**	**57 MRF17**	**Y..71M$_1$-4**
4.40	294	7080	**MSF**	**57 MRF17**	**Y..71M$_1$-4**
4.80	269	7080	**MSA**	**57 MRF17**	**Y..71M$_1$-4**
			MSAF	**57 MRF17**	**Y..71M$_1$-4**
6.00	229	7080	**MS**	**57 MRF17**	**Y..71M$_2$-4**
6.80	204	7080	**MSF**	**57 MRF17**	**Y..71M$_2$-4**
7.40	187	7080	**MSA**	**57 MRF17**	**Y..71M$_2$-4**
			MSAF	**57 MRF17**	**Y..71M$_2$-4**
8.40	165	7080	**MS**	**57 MRF17**	**Y..80M$_1$-4**
11.0	131	7080	**MSF**	**57 MRF17**	**Y..80M$_1$-4**
			MSA	**57 MRF17**	**Y..80M$_1$-4**
			MSAF	**57 MRF17**	**Y..80M$_1$-4**
M_{2max}=570Nm					
0.06	21362	8190			
0.07	19594	8190			
0.08	18120	8190			
0.08	16682	8190			
0.10	14383	8190			
0.11	12774	8190			
0.13	11013	8190			
0.14	9694	8190			
0.16	8529	8190			
0.19	7455	8190			
0.21	6531	8190	**MS**	**67 MRF37**	**Y..63M$_1$-4**
0.24	5759	8190	**MSF**	**67 MRF37**	**Y..63M$_1$-4**
0.28	4965	8190	**MSA**	**67 MRF37**	**Y..63M$_1$-4**
0.31	4410	8190	**MSAF**	**67 MRF37**	**Y..63M$_1$-4**
0.36	3880	8190			
0.40	3432	8190			
0.47	2944	8190			
0.52	2630	8190			
0.61	2279	8190			
0.69	2014	8190			
0.78	1772	8190			
0.88	1559	8190			
1.00	1363	8190			
1.20	1194	8190			
1.30	1045	8190	**MS**	**67 MRF37**	**Y..63M$_2$-4**
1.40	914	8190	**MSF**	**67 MRF37**	**Y..63M$_2$-4**
1.60	809	8190	**MSA**	**67 MRF37**	**Y..63M$_2$-4**
1.90	712	8190	**MSAF**	**67 MRF37**	**Y..63M$_2$-4**
			MS	**67 MRF37**	**Y..71M$_1$-4**
2.10	615	8190	**MSF**	**67 MRF37**	**Y..71M$_1$-4**
2.40	543	8190	**MSA**	**67 MRF37**	**Y..71M$_1$-4**
			MSAF	**67 MRF37**	**Y..71M$_1$-4**

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=570Nm					
2.90	469	8190	**MS**	**67 MRF37**	**Y..71M$_2$-4**
3.30	424	8190	**MSF**	**67 MRF37**	**Y..71M$_2$-4**
3.80	365	8190	**MSA**	**67 MRF37**	**Y..71M$_2$-4**
			MSAF	**67 MRF37**	**Y..71M$_2$-4**
4.30	319	8190	**MS**	**67 MRF37**	**Y..80M$_1$-4**
4.90	281	8190	**MSF**	**67 MRF37**	**Y..80M$_1$-4**
5.60	246	8190	**MSA**	**67 MRF37**	**Y..80M$_1$-4**
6.20	221	8190	**MSAF**	**67 MRF37**	**Y..80M$_1$-4**
7.30	198	8190	**MS**	**67 MRF37**	**Y..80M$_2$-4**
			MSF	**67 MRF37**	**Y..80M$_2$-4**
			MSA	**67 MRF37**	**Y..80M$_2$-4**
			MSAF	**67 MRF37**	**Y..80M$_2$-4**
M_{2max}=1270Nm					
0.05	25493	11700			
0.06	21787	11700			
0.07	19907	11700			
0.08	17013	11700			
0.09	14668	11700			
0.11	13110	11700			
0.12	11569	11700	**MS**	**77 MRF37**	**Y..63M$_1$-4**
0.14	9887	11700	**MSF**	**77 MRF37**	**Y..63M$_1$-4**
0.16	8817	11700	**MSA**	**77 MRF37**	**Y..63M$_1$-4**
0.18	7735	11700	**MSAF**	**77 MRF37**	**Y..63M$_1$-4**
0.20	6735	11700			
0.23	5943	11700			
0.26	5214	11700			
0.30	4618	11700			
0.35	3992	11700			
0.39	3540	11700			
0.43	3098	11700	**MS**	**77 MRF37**	**Y..63M$_2$-4**
			MSF	**77 MRF37**	**Y..63M$_2$-4**
			MSA	**77 MRF37**	**Y..63M$_2$-4**
			MSAF	**77 MRF37**	**Y..63M$_2$-4**
M_{2max}=1240Nm					
0.50	2753	12000	**MS**	**77 MRF37**	**Y..63M$_1$-4**
0.58	2374	12000	**MSF**	**77 MRF37**	**Y..63M$_1$-4**
			MSA	**77 MRF37**	**Y..63M$_1$-4**
			MSAF	**77 MRF37**	**Y..63M$_1$-4**
0.63	2083	12000	**MS**	**77 MRF37**	**Y..63M$_2$-4**
0.73	1813	12000	**MSF**	**77 MRF37**	**Y..63M$_2$-4**
0.76	1745	12000	**MSA**	**77 MRF37**	**Y..63M$_2$-4**
0.82	1600	12000	**MSAF**	**77 MRF37**	**Y..63M$_2$-4**
0.94	1404	12000			
1.00	1245	12000	**MS**	**77 MRF37**	**Y..71M$_1$-4**
1.20	1100	12000	**MSF**	**77 MRF37**	**Y..71M$_1$-4**
1.40	954	12000	**MSA**	**77 MRF37**	**Y..71M$_1$-4**
			MSAF	**77 MRF37**	**Y..71M$_1$-4**

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=1240Nm					
1.60	837	12000	**MS**	**77 MRF37**	**Y..71M$_2$-4**
1.90	714	12000	**MSF**	**77 MRF37**	**Y..71M$_2$-4**
			MSA	**77 MRF37**	**Y..71M$_2$-4**
			MSAF	**77 MRF37**	**Y..71M$_2$-4**
2.20	637	12000	**MS**	**77 MRF37**	**Y..80M$_1$-4**
2.40	574	12000	**MSF**	**77 MRF37**	**Y..80M$_1$-4**
2.80	499	12000	**MSA**	**77 MRF37**	**Y..80M$_1$-4**
			MSAF	**77 MRF37**	**Y..80M$_1$-4**
3.30	438	12000	**MS**	**77 MRF37**	**Y..80M$_2$-4**
3.70	389	12000	**MSF**	**77 MRF37**	**Y..80M$_2$-4**
			MSA	**77 MRF37**	**Y..80M$_2$-4**
			MSAF	**77 MRF37**	**Y..80M$_2$-4**
4.30	327	12000	**MS**	**77 MRF37**	**Y..90S-4**
4.90	289	12000	**MSF**	**77 MRF37**	**Y..90S-4**
5.70	250	12000	**MSA**	**77 MRF37**	**Y..90S-4**
			MSAF	**77 MRF37**	**Y..90S-4**
6.50	219	12000	**MS**	**77 MRF37**	**Y..90L-4**
			MSF	**77 MRF37**	**Y..90L-4**
			MSA	**77 MRF37**	**Y..90L-4**
			MSAF	**77 MRF37**	**Y..90L-4**
M_{2max}=2500Nm					
0.05	25987	27500			
0.06	23940	27500			
0.07	20568	27500			
0.08	18265	27500			
0.08	16774	27500	**MS**	**87 MRF57**	**Y..63M$_1$-4**
0.09	14820	27500	**MSF**	**87 MRF57**	**Y..63M$_1$-4**
0.10	13160	27500	**MSA**	**87 MRF57**	**Y..63M$_1$-4**
0.12	11200	27500	**MSAF**	**87 MRF57**	**Y..63M$_1$-4**
0.14	9904	27500			
0.16	8549	27500			
0.18	7643	27500			
0.21	6706	27500			
0.22	5875	27500	**MS**	**87 MRF57**	**Y..63M$_2$-4**
0.25	5187	27500	**MSF**	**87 MRF57**	**Y..63M$_2$-4**
0.29	4606	27500	**MSA**	**87 MRF57**	**Y..63M$_2$-4**
0.34	3872	27500	**MSAF**	**87 MRF57**	**Y..63M$_2$-4**
0.37	3475	27500	**MS**	**87 MRF57**	**Y..71M$_1$-4**
0.45	2905	27500	**MSF**	**87 MRF57**	**Y..71M$_1$-4**
0.50	2586	27500	**MSA**	**87 MRF57**	**Y..71M$_1$-4**
			MSAF	**87 MRF57**	**Y..71M$_1$-4**
0.59	2335	27500	**MS**	**87 MRF57**	**Y..71M$_2$-4**
0.67	2054	27500	**MSF**	**87 MRF57**	**Y..71M$_2$-4**
0.76	1824	27500	**MSA**	**87 MRF57**	**Y..71M$_2$-4**
			MSAF	**87 MRF57**	**Y..71M$_2$-4**
0.85	1631	27500	**MS**	**87 MRF57**	**Y..80M$_1$-4**
1.00	1332	27500	**MSF**	**87 MRF57**	**Y..80M$_1$-4**
1.20	1191	27500	**MSA**	**87 MRF57**	**Y..80M$_1$-4**
			MSAF	**87 MRF57**	**Y..80M$_1$-4**

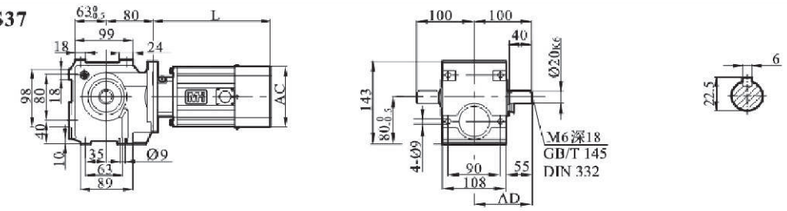
n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=2500Nm					
1.40	1032	27500	**MS**	**87 MRF57**	**Y..80M$_2$-4**
1.50	930	27500	**MSF**	**87 MRF57**	**Y..80M$_2$-4**
			MSA	**87 MRF57**	**Y..80M$_2$-4**
			MSAF	**87 MRF57**	**Y..80M$_2$-4**
1.70	831	27500	**MS**	**87 MRF57**	**Y..90S-4**
2.00	719	27500	**MSF**	**87 MRF57**	**Y..90S-4**
2.30	624	27500	**MSA**	**87 MRF57**	**Y..90S-4**
2.60	558	27500	**MSAF**	**87 MRF57**	**Y..90S-4**
3.00	485	27500	**MS**	**87 MRF57**	**Y..90L-4**
			MSF	**87 MRF57**	**Y..90L-4**
			MSA	**87 MRF57**	**Y..90L-4**
			MSAF	**87 MRF57**	**Y..90L-4**
M_{2max}=2450Nm					
3.30	435	27600	**MS**	**87 MRF57**	**Y..90L-4**
			MSF	**87 MRF57**	**Y..90L-4**
			MSA	**87 MRF57**	**Y..90L-4**
			MSAF	**87 MRF57**	**Y..90L-4**
3.80	378	27600	**MS**	**87 MRF57**	**Y..100L$_1$-4**
			MSF	**87 MRF57**	**Y..100L$_1$-4**
			MSA	**87 MRF57**	**Y..100L$_1$-4**
			MSAF	**87 MRF57**	**Y..100L$_1$-4**
M_{2max}=2400Nm					
4.40	323	27700	**MS**	**87 MRF57**	**Y..100L$_1$-4**
5.10	281	27700	**MSF**	**87 MRF57**	**Y..100L$_1$-4**
			MSA	**87 MRF57**	**Y..100L$_1$-4**
			MSAF	**87 MRF57**	**Y..100L$_1$-4**
M_{2max}=4200Nm					
0.04	33818	32800			
0.04	31154	32800	**MS**	**97 MRF57**	**Y..63M$_1$-4**
0.05	27847	32800	**MSF**	**97 MRF57**	**Y..63M$_1$-4**
0.06	24641	32800	**MSA**	**97 MRF57**	**Y..63M$_1$-4**
0.06	21537	32800	**MSAF**	**97 MRF57**	**Y..63M$_1$-4**
0.07	18749	32800			
0.09	16233	32800	**MS**	**97 MRF57**	**Y..63M$_1$-4**
0.09	14576	32800	**MSF**	**97 MRF57**	**Y..63M$_1$-4**
0.11	12752	32800	**MSA**	**97 MRF57**	**Y..63M$_1$-4**
0.12	11267	32800	**MSAF**	**97 MRF57**	**Y..63M$_1$-4**
0.14	10078	32800			
0.15	8608	32800	**MS**	**97 MRF57**	**Y..63M$_2$-4**
0.17	7554	32800	**MSF**	**97 MRF57**	**Y..63M$_2$-4**
0.20	6640	31300	**MSA**	**97 MRF57**	**Y..63M$_2$-4**
0.23	5780	31300	**MSAF**	**97 MRF57**	**Y..63M$_2$-4**
0.27	4937	31300			
0.29	4444	31300	**MS**	**97 MRF57**	**Y..71M$_1$-4**
0.32	4017	31300	**MSF**	**97 MRF57**	**Y..71M$_1$-4**
0.38	3453	31300	**MSA**	**97 MRF57**	**Y..71M$_1$-4**
0.42	3108	31300	**MSAF**	**97 MRF57**	**Y..71M$_1$-4**

n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=4200Nm					
0.52	2654	31300	MS	97 MRF57	Y..71M$_2$-4
0.59	2329	31300	MSF	97 MRF57	Y..71M$_2$-4
			MSA	97 MRF57	Y..71M$_2$-4
			MSAF	97 MRF57	Y..71M$_2$-4
0.66	2081	31300	MS	97 MRF57	Y..80M$_1$-4
0.74	1860	31300	MSF	97 MRF57	Y..80M$_1$-4
0.88	1574	31300	MSA	97 MRF57	Y..80M$_1$-4
			MSAF	97 MRF57	Y..80M$_1$-4
1.00	1394	31300	MS	97 MRF57	Y..80M$_2$-4
1.20	1223	31300	MSF	97 MRF57	Y..80M$_2$-4
			MSA	97 MRF57	Y..80M$_2$-4
			MSAF	97 MRF57	Y..80M$_2$-4
1.30	1070	31300	MS	97 MRF57	Y..90S-4
1.50	928	31300	MSF	97 MRF57	Y..90S-4
1.70	824	31300	MSA	97 MRF57	Y..90S-4
			MSAF	97 MRF57	Y..90S-4

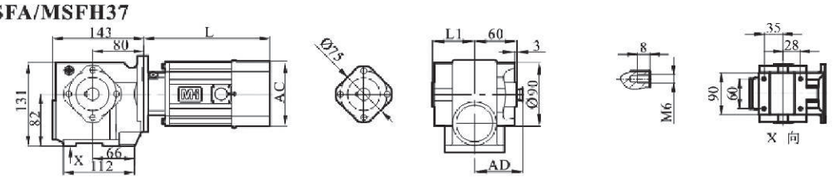
n_2 [1/min]	i	Fr [N]	Frame size		Motor
M_{2max}=4200Nm					
2.00	714	32800	MS	97 MRF57	Y..90L-4
2.30	626	31300	MSF	97 MRF57	Y..90L-4
2.70	538	31300	MSA	97 MRF57	Y..90L-4
			MSAF	97 MRF57	Y..90L-4
2.90	484	31400	MS	97 MRF57	Y..100L$_1$-4
3.40	420	31400	MSF	97 MRF57	Y..100L$_1$-4
3.80	376	31400	MSA	97 MRF57	Y..100L$_1$-4
			MSAF	97 MRF57	Y..100L$_1$-4
4.40	327	31500	MS	97 MRF57	Y..100L$_2$-4
5.10	287	31500	MSF	97 MRF57	Y..100L$_2$-4
			MSA	97 MRF57	Y..100L$_2$-4
			MSAF	97 MRF57	Y..100L$_2$-4
5.80	252	31500	MS	97 MRF57	Y..112M-4
6.70	219	31600	MSF	97 MRF57	Y..112M-4
			MSA	97 MRF57	Y..112M-4
			MSAF	97 MRF57	Y..112M-4

5. 9 外形尺寸 / Dimensions

MS37

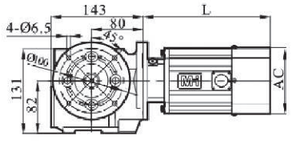


MSFA/MSFH37

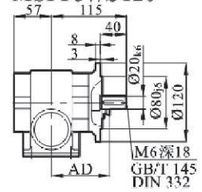


型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	60	79

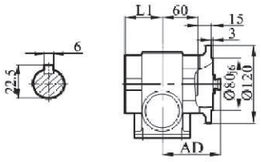
MSFF/MSFAF/MSFHF37-Ø120



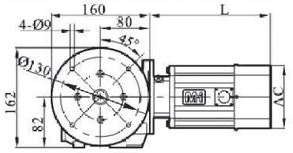
MSFF37/Ø120



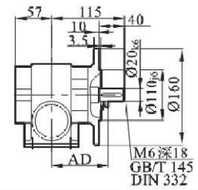
MSFAF/MSFHF37/Ø120



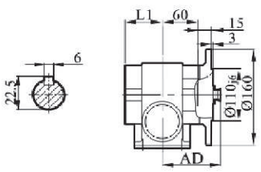
MSFF/MSFAF/MSFHF37-Ø160



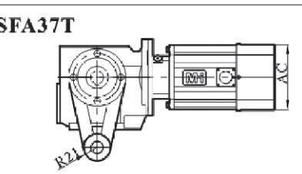
MSFF37/Ø160



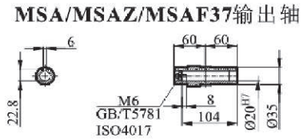
MSFAF/MSFHF37/Ø160



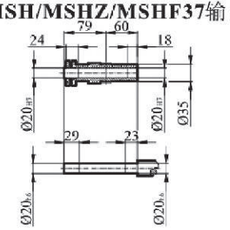
MSFA37T



MSA/MSAZ/MSAF37输出轴

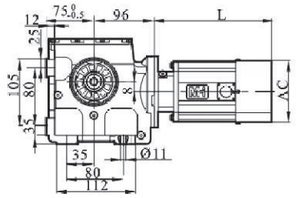


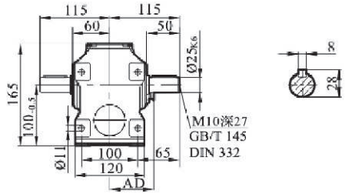
MSH/MSHZ/MSHF37输出轴

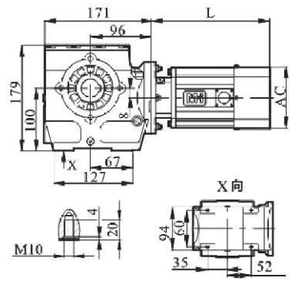


YE2电机机座号 Motor Size	63	71	80	90S	90L
L	225	260	290	300	330
AC	120	145	170	190	190
AD	110	130	135	145	145

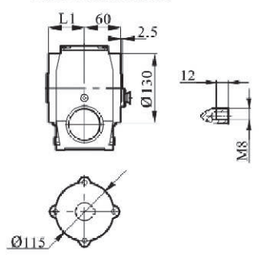
MS47



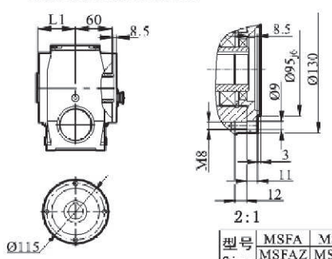




MSFA/MSFH47

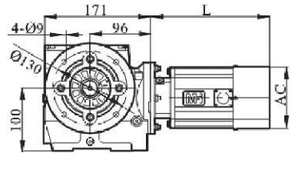


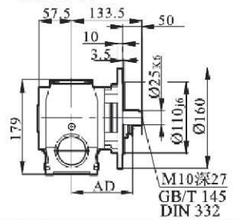
MSFAZ/MSFHZ47

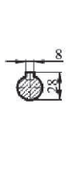


型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	60	86

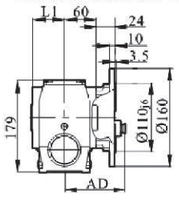
MSFF47



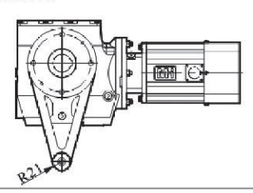


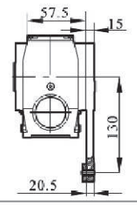


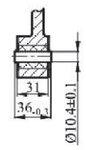
MSFAF/MSFHF47



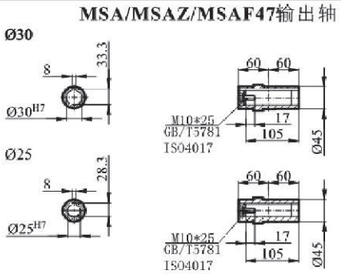
MSFA47T



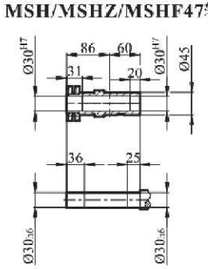




MSA/MSAZ/MSAF47输出轴

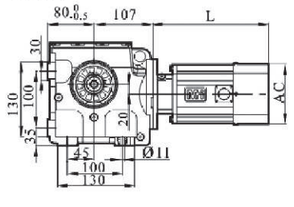


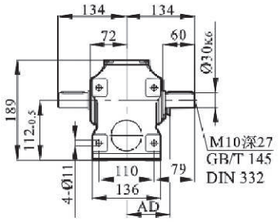
MSH/MSHZ/MSHF47输出轴



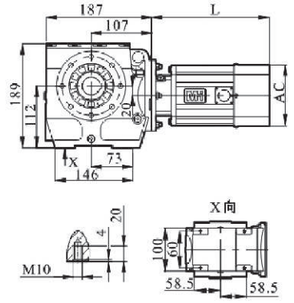
YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	205	260	290	300	330	340
AC	120	145	170	190	190	195
AD	110	130	135	145	145	180

MS57

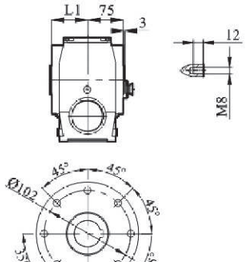




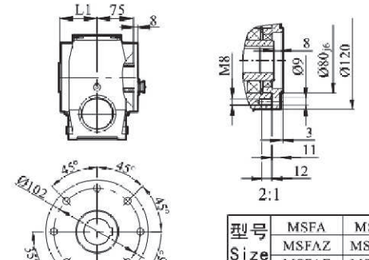




MSFA/MSFH57

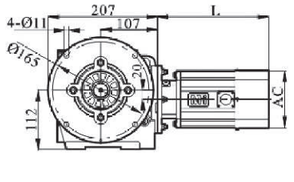


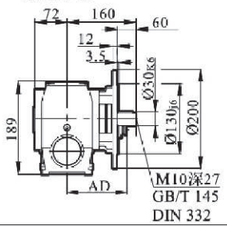
MSFAZ/MSFHZ57

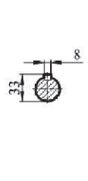


型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	75	105

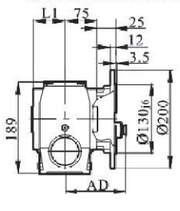
MSFF57



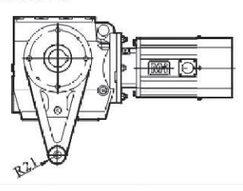


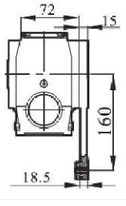


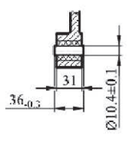
MSFAF/MSFHF57



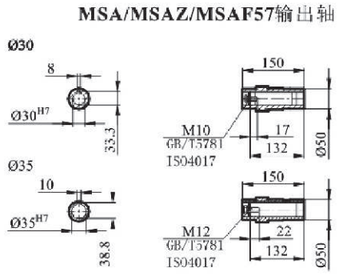
MSFA57T



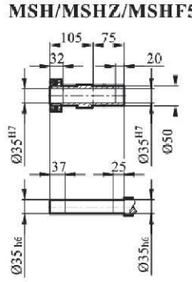




MSA/MSAZ/MSAF57输出轴

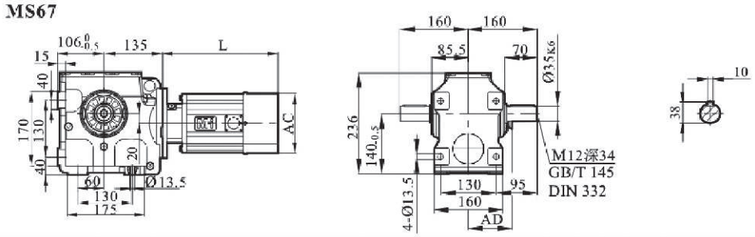


MSH/MSHZ/MSHF57输出轴

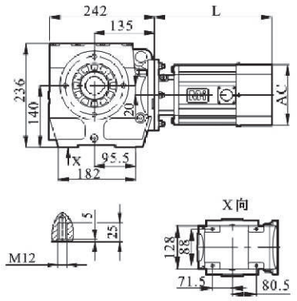


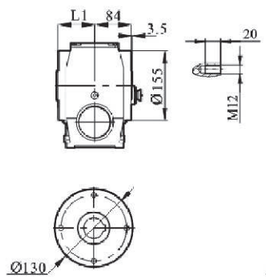
YE2电机机座号 Motor Size	63	71	80	90S	90L	100
L	205	260	290	300	330	330
AC	120	145	170	190	190	210
AD	110	130	135	145	145	160

MS67

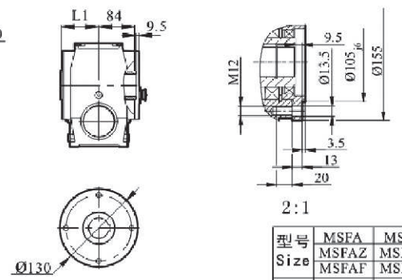


MSFA/MSFH67



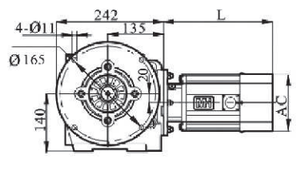


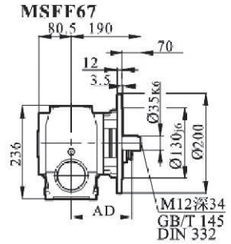
MSFAZ/MSFHZ67

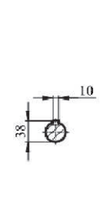


型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	84	120

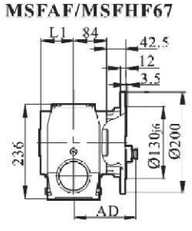
MSFF67



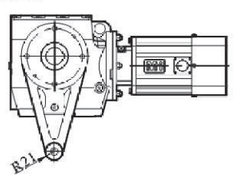


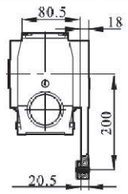


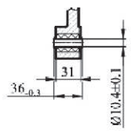
MSFAF/MSFHF67



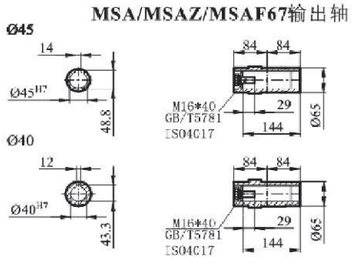
MSFA67T



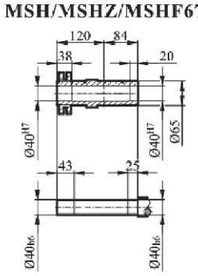




MSA/MSAZ/MSAF67输出轴

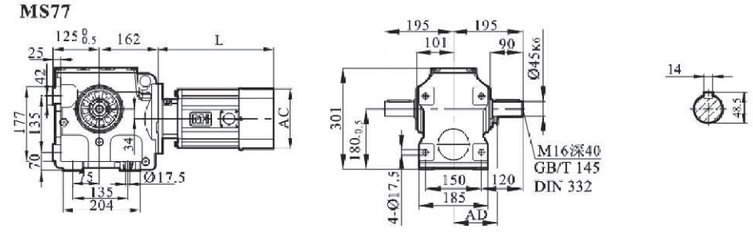


MSH/MSHZ/MSHF67输出轴

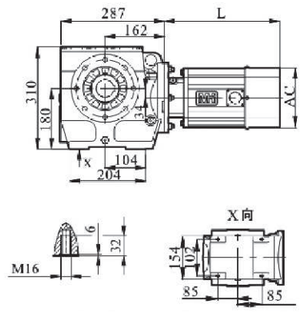


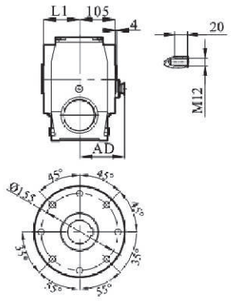
YE2电机机座号 Motor Size	63	71	80	90S	90L	100	112M	132S
L	205	260	290	300	330	330	380	430
AC	120	145	170	190	190	210	230	280
AD	110	130	135	145	145	160	215	215

MS77

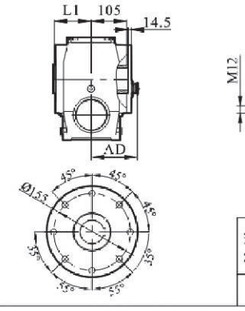


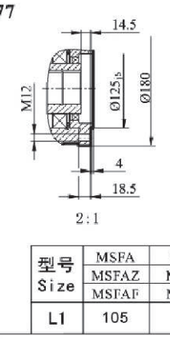
MSFA/MSFH77





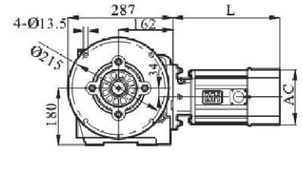
MSFAZ/MSFHZ77

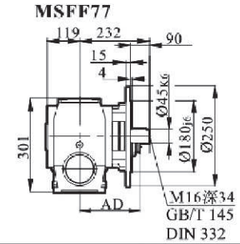


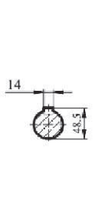


型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	105	139

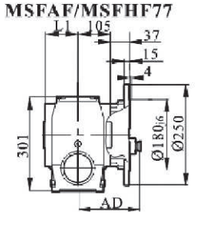
MSFF77



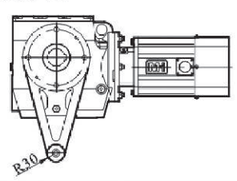


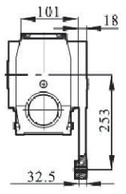


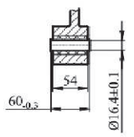
MSFAF/MSFHF77



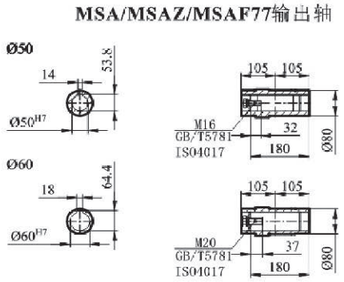
MSFA77T



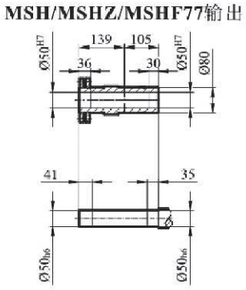




MSA/MSAZ/MSAF77输出轴

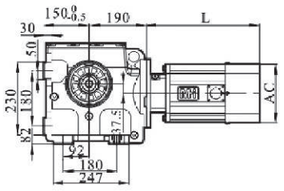


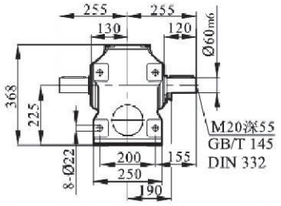
MSH/MSHZ/MSHF77输出轴



YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M
L	284	292	322	322	370	418	457	524
AC	170	190	190	210	230	280	280	315
AD	135	145	145	160	215	215	215	255

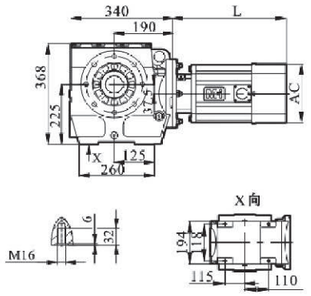
MS87

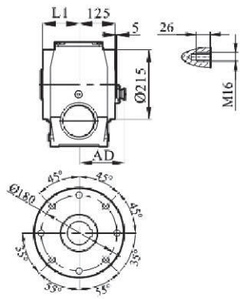




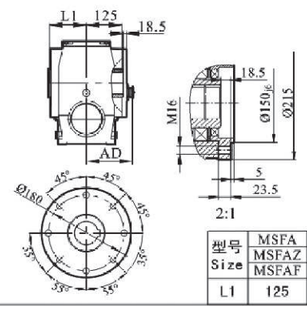


MSFA/MSFH87



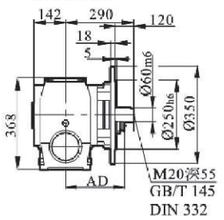


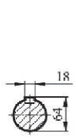
MSFAZ/MSFHZ87



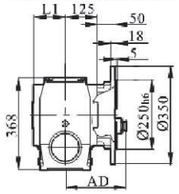
型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	125	165

MSFF87

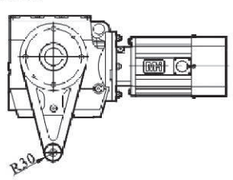


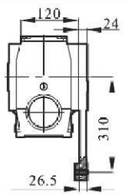


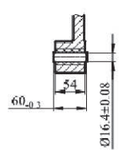
MSFAF/MSFHF87



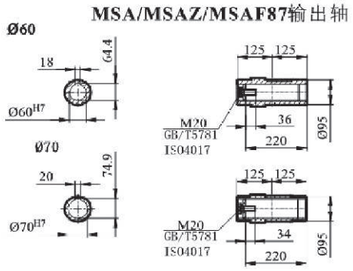
MSFA87T



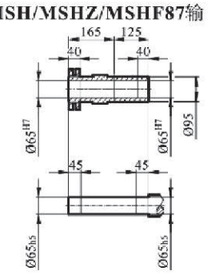




MSA/MSAZ/MSAF87输出轴

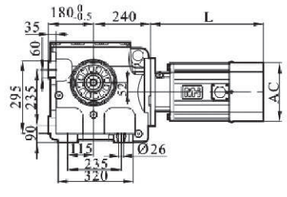


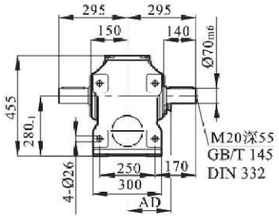
MSH/MSHZ/MSHF87输出轴



YE2电机机座号 Motor Size	80	90S	90L	100	112M	132S	132M	160M	160L
L	280	288	318	318	365	413	452	524	547
AC	170	190	190	210	230	280	280	315	315
AD	135	145	145	160	215	215	215	255	255

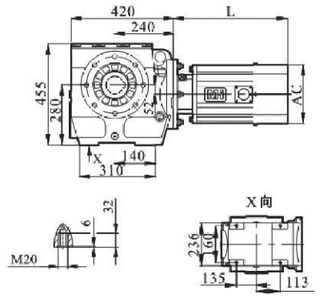
MS97

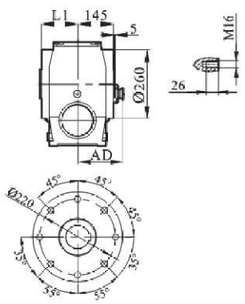




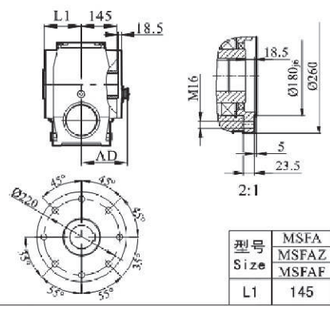


MSFA/MSFH97



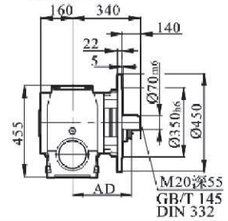


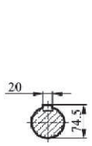
MSFAZ/MSFHZ97



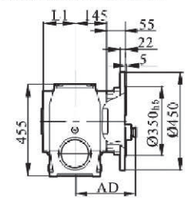
型号 Size	MSFA	MSFH
	MSFAZ	MSFHZ
	MSFAF	MSFHF
L1	145	200

MSFF97

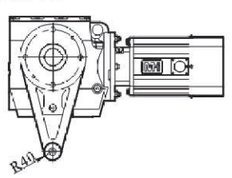


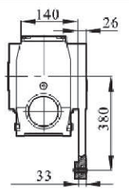


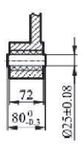
MSFAF/MSFHF97



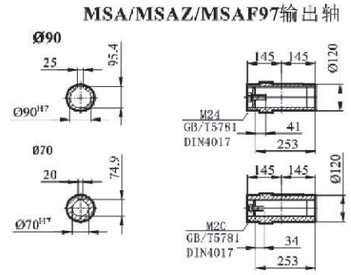
MSFA97T



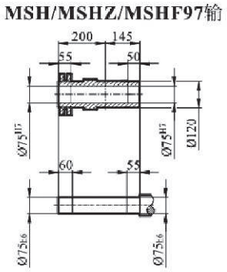




MSA/MSAZ/MSAF97输出轴



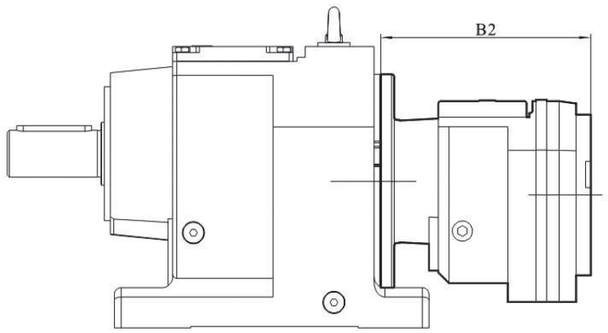
MSH/MSHZ/MSHF97输出轴



YE2电机机座号 Motor Size	90S	90L	100	112M	132S	132M	160M	160L	180M	180L
L	280	310	312	360	408	487	524	519	555	588
AC	190	190	210	230	280	280	315	315	350	350
AD	145	145	160	215	215	215	255	255	280	280

6. 输入模块外形尺寸/ Dimensions of Input Module

6. 1 MRF..外形尺寸/ MRF.. Dimensions



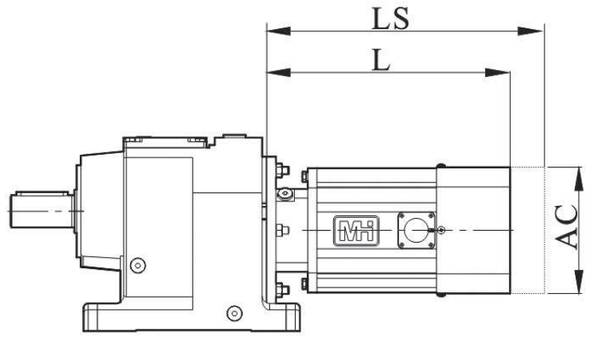
机座号/Frame size	B2
MR..27MRF17	139
MR..37MRF17	139
MR..47MRF37	157
MR..57MRF37	157
MR..67MRF37	157
MR..77MRF37	157
MR..87MRF57	187
MR..97MRF57	187
MR..107MRF77	220
MR..137MRF77	220
MR..147MRF77	220
MR..147MRF87	272
MR..167MRF97	320
MR..167MRF107	355

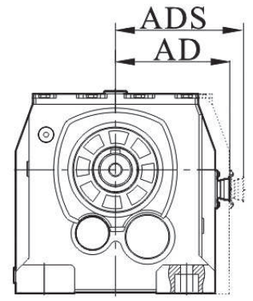
机座号/Frame size	B2
MF..27MRF17	139
MF..37MRF17	139
MF..47MRF17	139
MF..57MRF37	157
MF..67MRF37	157
MF..77MRF37	157
MF..87MRF57	187
MF..97MRF57	187
MF..107MRF77	220
MF..127MRF77	220
MF..127MRF87	272
MF..157MRF97	320

机座号/Frame size	B2
MK..37MRF17	139
MK..47MRF37	157
MK..57MRF37	157
MK..67MRF37	157
MK..77MRF37	157
MK..87MRF57	187
MK..97MRF57	187
MK..107MRF77	220
MK..127MRF77	220
MK..127MRF87	272
MK..157MRF97	320
MK..157MRF107	355
MK..167MRF97	320
MK..167MRF107	355
MK..187MRF97	320
MK..187MRF107	355

机座号/Frame size	B2
MS..37MRF17	139
MS..47MRF17	139
MS..57MRF17	139
MS..67MRF37	157
MS..77MRF37	157
MS..87MRF57	187
MS..97MRF57	187

6. 2 电机外形尺寸/ Dimensions of Geared Motors



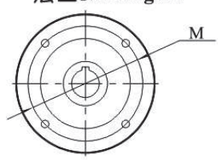


机座号/Frame size	L	AD	AC
$Y_2$63M	182	108	120
$Y_2$71M	208	105	130
$Y_2$80M	225	110	145
$Y_2$90S	230	106	177
$Y_2$90L	230	106	177
$Y_2$100L	288	136	197
$Y_2$112M	301	145	221
$Y_2$132S	402	163	263
$Y_2$132M	432	163	263
$Y_2$160M	505	210	330
$Y_2$160L	560	210	330
$Y_2$180M	590	255	380
$Y_2$180L	630	255	380
$Y_2$200L	660	280	420
$Y_2$225S	675	310	470
$Y_2$225M	705	310	470
$Y_2$250M	770	320	510
$Y_2$280S	845	375	580
$Y_2$280M	895	375	580
$Y_2$315S	1100	-	645
$Y_2$315M	1130	-	645
$Y_2$315L	1130	-	645

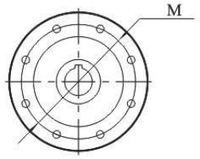
机座号/Frame size	LS	ADS	AC
YEJ63M	277	70	130
YEJ71M	295	80	145
YEJ80M	320	150	175
YEJ90S	340	160	195
YEJ90L	365	160	195
YEJ100L	375	180	215
YEJ112M	420	190	240
YEJ132S	495	210	275
YEJ132M	530	210	275
YEJ160M	610	265	235
YEJ160L	655	265	235
YEJ180M	690	285	380
YEJ180L	730	285	380
YEJ200L	790	315	420

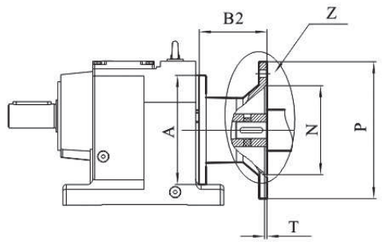
6.3 **AM(IEC)..外形尺寸/AM（IEC）.. Dimensions**

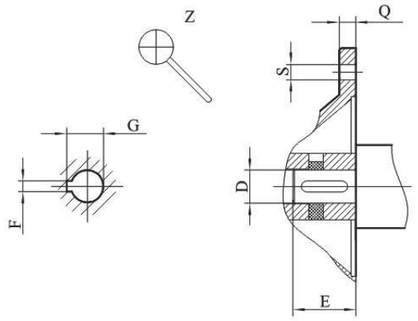
法兰1/Flange.1



法兰2/Flange.2





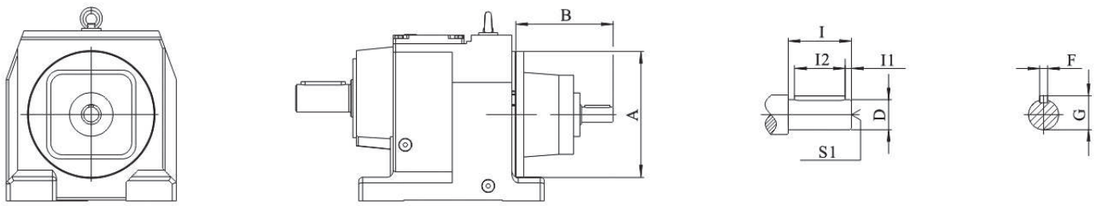


型号 Frame size	AM	Flange	A	B2	D	E	F	G	M	N	P	Q	S	T
MR..27/37 MF..27/37/47 MS..37/47/57 MK..37	AM63	1	120	72	11	23	4	12.8	115	95	140	10	4-Φ9	3.5
	AM71				14	30	5	16.3	130	110	160			
	AM80			106	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100			142	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
MR..47/57/67 MF..57/67 MS..67 MK..47/57/67	AM63	1	160	66	11	23	4	12.8	115	95	140	10	4-Φ9	3.5
	AM71				14	30	5	16.3	130	110	160			
	AM80			99	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100			134	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			191	38	80	10	41.3	265	230	300	16		
MR..77 MF..77 MS..77 MK..77	AM63	1	200	60	11	23	4	12.8	115	95	140	10	4-Φ9	3.5
	AM71				14	30	5	16.3	130	110	160			
	AM80			92	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100			126	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			179	38	80	10	41.3	265	230	300	16		
	AM132ML													
	AM160			237	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
MR..87 MF..87 MS..87 MK..87	AM80	1	250	87	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100			121	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			174	38	80	10	41.3	265	230	300	16		
	AM132ML													
	AM160			232	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						

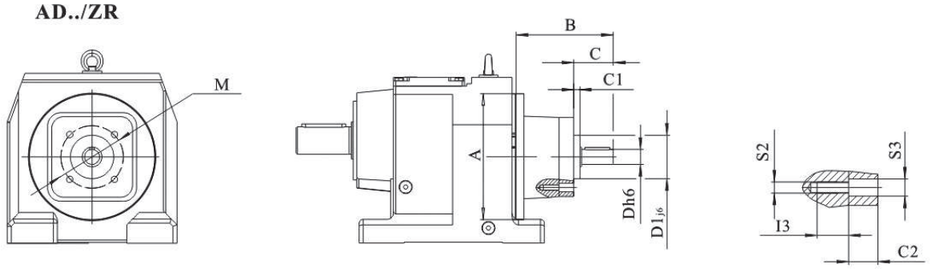
型号 Frame size	AM	Flange	A	B2	D	E	F	G	M	N	P	Q	S	T
MR..97 MF..97 MS..97 MK..97	AM90	1	300	82	24	50	8	27.3	165	130	200	12	4-Φ11	4.5
	AM100			116	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			169	38	80	10	41.3	265	230	300	16		
	AM132ML													
	AM160			227	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						
	AM200			268	55		16	59.3	350	300	400	20		7
MR..107 MF..107 MK..107	AM100	1	350	110	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			163	38	80	10	41.3	265	230	300	16		
	AM132ML													
	AM160			221	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						
	AM200			262	55		16	59.3	350	300	400	20		7
	AM225	2		277	60	140	18	64.4	400	350	450	22	8-Φ17.5	
MR..137	AM132S/M	1	400	148	38	80	10	41.3	265	230	300	16	4-Φ13.5	5
	AM132ML													
	AM160			206	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						
	AM200			247	55		16	59.3	350	300	400	20		7
	AM225	2		262	60	140	18	64.4	400	350	450	22	8-Φ17.5	
	AM250			345	65			69.4	500	450	550	25		
MR..147 MF..127 MK..127	AM132S/M	1	450	148	38	80	10	41.3	265	230	300	16	4-Φ13.5	5
	AM132ML													
	AM160			206	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						
	AM200			247	55		16	59.3	350	300	400	20		7
	AM225	2		262	60	140	18	64.4	400	350	450	22	8-Φ17.5	
	AM250			336	65			69.4	500	450	550	25		
	AM280				75		20	79.9						
MR..167 MF..157 MK..157 MK..167 MK..187	AM160	1	550	198	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						
	AM200			239	55		16	59.3	350	300	400	20		7
	AM225	2		254	60	140	18	64.4	400	350	450	22	8-Φ17.5	
	AM250			328	65			69.4	500	450	550	25		
	AM280				75		20	79.9						

6.4 AD..外形尺寸/AD.. Dimensions

AD..



AD../ZR



型号 Frame size	AD..	A	B	C	C1	C2	D	D1	F	M	I	I1	I2	I3	M1	S1	S2	S3
MR..27	AD1	120	102	-	-	-	16	-	5	18	40	4	32	-	-	M5*12.5	-	-
MF..27	AD2，AD2/ZR		130	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MR/MF..37	AD1		102	-	-	-	16	-	5	18	40	4	32	-	-	M5*12.5	-	-
MK/MS..37	AD2，AD2/ZR		130	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MF..47	AD1		102	-	-	-	16	-	5	18	40	4	32	-	-	M5*12.5	-	-
MS..47	AD2，AD2/ZR		130	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MS..57	AD1		102	-	-	-	16	-	5	18	40	4	32	-	-	M5*12.5	-	-
	AD2，AD2/ZR		130	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MR..47	AD2，AD2/ZR	160	123	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MK..47	AD3，AD3/ZR		159	60	8	15.5	24	70	8	27	50	5	40	16	105	M8*19	M10	11
MR/MF..57	AD2，AD2/ZR		123	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MK..57	AD3，AD3/ZR		159	60	8	15.5	24	70	8	27	50	5	40	16	105	M8*19	M10	11
MR/MF..67	AD2，AD2/ZR		123	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MK/MS..67	AD3，AD3/ZR		159	60	8	15.5	24	70	8	27	50	5	40	16	105	M8*19	M10	11
MR/MF..77	AD2，AD2/ZR	200	116	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MK/MS..77	AD3，AD3/ZR		151	60	8	15.5	24	70	8	27	50	5	40	16	105	M8*19	M10	11
	AD4，AD4/ZR		224	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
MR/MF..87	AD2，AD2/ZR	250	111	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6*16	M8	9
MK/MS..87	AD3，AD3/ZR		156	70	8	15.5	28	70	8	31	60	5	50	16	105	M8*19	M10	11
	AD4，AD4/ZR		219	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
	AD5，AD5/ZR		292	126	11	24	42	120	12	45	110	10	70	20	180	M16*36	M12	13.5

型号 Frame size	AD..	A	B	C	C1	C2	D	D1	F	G	I	I1	I2	I3	M1	S1	S2	S3
MR/MF..97	AD3，AD3/ZR	300	151	70	8	15.5	28	70	8	31	60	5	50	16	105	M8*19	M10	11
MK/MS..97	AD4，AD4/ZR		214	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
	AD5，AD5/ZR		287	126	11	24	42	120	12	45	110	10	70	20	180	M16*36	M12	13.5
	AD6，AD6/ZR		327	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
MR..107	AD3，AD3/ZR	350	145	70	8	15.5	28	70	8	31	60	5	50	16	105	M8*19	M10	11
MF..107	AD4，AD4/ZR		208	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
MK..107	AD5，AD5/ZR		281	126	11	24	42	120	12	45	110	10	70	20	180	M16*36	M12	13.5
	AD6，AD6/ZR		321	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
MF..127	AD4，AD4/ZR	450	193	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
MK..127	AD5，AD5/ZR		266	126	11	24	42	120	12	45	110	10	70	20	180	M12*28	M12	13.5
	AD6，AD6/ZR		306	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
	AD7，AD7/ZR		300	133	13	19	55	125	16	59	110	10	90	30	190	M20*42	M20	22
	AD8，AD8/ZR		383	155	15	22.5	70	120	20	74.5	140	15	110	19.5	210	M20*12	M12	13.5
MR..137	AD4，AD4/ZR	400	201	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
	AD5，AD5/ZR		274	126	11	24	42	120	12	45	110	10	70	20	180	M16*36	M12	13.5
	AD6，AD6/ZR		314	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
	AD7，AD7/ZR		308	133	13	19	55	125	16	59	110	10	90	30	190	M20*42	M20	22
Mr147	AD4，AD4/ZR	450	193	95.5	13	16	38	100	10	41	80	5	70	20	130	M12*28	M12	13.5
	AD5，AD5/ZR		266	126	11	24	42	120	12	45	110	10	70	20	180	M12*28	M12	13.5
	AD6，AD6/ZR		306	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
	AD7，AD7/ZR		300	133	13	19	55	125	16	59	110	10	90	30	190	M20*42	M20	22
	AD8，AD8/ZR		383	155	5	22.5	70	120	20	74.5	140	15	110	19.5	210	M12*28	M12	13.5
MF..157	AD5，AD5/ZR	550	258	126	11	24	42	120	12	45	110	10	70	20	180	M12*28	M12	13.5
MK..157	AD6，AD6/ZR		298	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
	AD7，AD7/ZR		292	133	13	19	55	125	16	59	110	10	90	30	190	M20*42	M20	22
	AD8，AD8/ZR		374	155	5	22.5	70	120	20	74.5	140	15	110	19.5	210	M12*28	M12	13.5
MR..167	AD5，AD5/ZR	550	258	126	11	24	42	120	12	45	110	10	70	20	180	M16*36	M12	13.5
MK..167	AD6，AD6/ZR		298	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
	AD7，AD7/ZR		292	133	13	19	55	125	16	59	110	10	90	30	190	M20*42	M20	22
	AD8，AD8/ZR		374	155	5	22.5	70	120	20	74.5	140	15	110	19.5	210	M20*42	M12	13.5
MK..187	AD5，AD5/ZR	550	258	126	11	24	42	120	12	45	110	10	70	20	180	M16*36	M12	13.5
	AD6，AD6/ZR		298	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16*36	M16	17.5
	AD7，AD7/ZR		292	133	13	19	55	125	16	59	110	10	90	30	190	M20*42	M20	22
	AD8，AD8/ZR		374	155	5	22.5	70	120	20	74.5	140	15	110	19.5	210	M20*42	M12	13.5

7. 选型指南 / Selection Guide

减速机通常是根据恒转矩、起停不频繁及常温的情况设计。在按选型参数表选择减速器机型号前，先根据负载要求确定需要的输出扭矩，然后根据工况确定使用系数及减速机型号。

The gear units are designed under the condition as follows: constant torque, low start up frequency, normal atmospheric temperature. Before choosing a gear unit in the performance parameter table, first determine the output torque according to the load type, then determine the service factor and gear unit type according to the working condition.

7.1 选型相关参数 / Relevant Parameter

参数名称 Parameter	符号 Code	计算公式 Calculation formula	说明 Note
功率 Power	P	$P_1=P_2/\eta$ [Nm] $P_{1n}\geq P_1\times K$ [Nm]	P_1-输入功率 -Input power P_2-输出功率 -Out Power P_{1n}-电机额定功率 -Rated power of driving motor η-传动效率 -Transmission efficiency K-使用系数 -Service factor
传动比 Ratio	I	$I=n_1/n_2$	n_1-输入转速 -Input speed n_2-输出转速 -Output speed
扭矩 Torque	M	$M_2=9550\times P_1\times \eta / n_2$ [Nm] $M_{2n}\geq M_2\times K$ [Nm]	M_2-输出扭矩 -Output torque M_{2n}-选用输出扭矩 -Selected output torque

说明:

1. MR,MF,MK减速器的传动效率 η 为94%；
2. 为了优化工作条件和提高使用寿命，建议使用1400 r/min或更低转速；
3. 传动比通常为小数，在选型表中保留两位小数。

Notes:

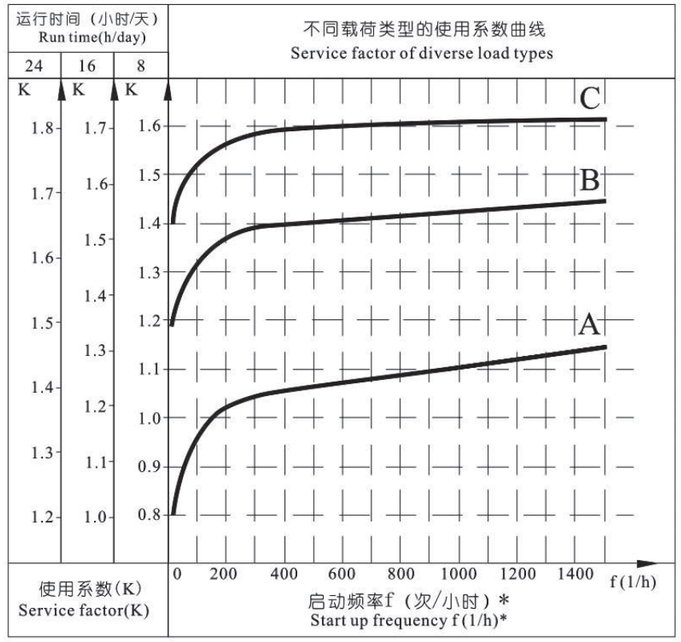
1. MR,MF,MK gear units' transmission efficiency η=94%.
2. To optimize the working conditions and prolong the service life, 1400 r/min or lower rotation speed is suggested.
3. Usually transmission ratio is decimal fraction with 2 radix point tagged in selection table.

7.2 使用系数(K) / Service Factor (K)

减速机的运行与载荷类型、运行时间、启动频次及环境温度等因素有关。为了正确选择减速机的型号，我们将这些影响因素综合为一个使用系数K。

The running of gear unit is related to load type, daily operation time, start up frequency and ambient temperature. Service factory, K, is determined by these factors.

(1) 使用系数(K)选择图 / Service Factor Selection Figure



说明:

(1).图中的A、B、C为载荷类型
- -A: 均匀载荷;
- -B: 中等冲击载荷;
- -C: 重冲击载荷。

(2). * 启动频率f，包括每小时所有启动、制动的次数，及变速电机高低速切换时的次数。

(3).环境温度对使用系数的影响:
- -环境温度30/40℃ : K*(1.15-1.35)
- -环境温度40/50℃ : K*(1.35-1.65)
- -环境温度50/60℃ : K*(1.65-1.85)

Notes:

1. A, B, C in above figure is load type.
   - -A: Uniform Load.
   - -B: Moderate Load.
   - -C: Heavy Load.
2. * Start up frequency, including all the starts, brakes and speed switching when using variable speed motor.
3. Effect of ambient temperature on service factor:
   - -Ambient Temperature30/40℃:K*(1.15-1.35).
   - -Ambient Temperature40/50℃:K*(1.35-1.65).
   - -Ambient Temperature50/60℃:K*(1.65-1.85).

（2）载荷类型表 / Load Type Table

用途 Application		载荷类型 Load type	用途 Application		载荷类型 Load type	用途 Application		载荷类型 Load type
钢铁工业 Iron and steel industry	链式传送机 Chain conveyer	B	运输 Transmission	皮带式输送机（散状物） Ribbon conveyer (bulk)	B	食品工业 Food industry	粉碎机 Kibbler	C
	绕线机(带材或线材) Winding machine (strip or wire)	B		皮带式输送机（块状物） Ribbon conveyer (nubby)	C		甘蔗切碎机 Cane chopper	B
	拉丝机 Draw bench machine	B		斗士提升机 Bucket lifter	B		甜菜切碎机 Beet chopper	B
	辊道(重的) Roller table (heavy)	C		链式提升机 Chain lifter	C		甜菜清洗机 Beet washer	B
	辊道(轻的) Roller table (light)	B		螺旋输送机 Worm conveyer	B		搅拌机(液状物) Mixer(liquid)	A
	横向移动设备 Horizontal mobile device	B		运货升降机 Lifter	B		搅拌机(半液状物) Mixer(semi-liquid)	B
	连续铸造设备 Continuous casting equipment	C		回旋输送机 Whirl conveyer	C	木工及建筑工业 Carpentry & construction industry	剥皮机 Barker	C
	铸锭装卸机械 Ingot handling equipment	C		冷却或干燥滚筒 Cooling or dryness rolling drum	B		刨床 Planer	B
	滚轮调整传动装置 Roller adjust device	B		搅拌机(块状物) Mixer(nubby)	B		木工机床 Wood processing machine	A
	辊式拉伸矫直机 Tension roller straightening	B		离心机 Centrifuge	B		筑路机械 Road building machine	B
运输 Transmission	板式输送机 Plate conveyer	B		压延或挤压机 Calender/extruder	B			
	压载升降机 Ballast lifter	B		搅拌机 Mixer	C		混凝土搅拌机 Concrete mixer	B
	斗士输送机 Bucket conveyer	B		滚轧机 Roller machine	C			

7.3 径向载荷 / Radial Loads

当减速机输出轴承受径向载荷时，须根据下面的公式对减速机输出轴的受力进行计算，并将此计算结果 F_{ra} 与性能参数表中的许可径向力 F_r 进行比较。

减速机输出轴的实际径向力 F_{ra} 不允许大于性能参数表中的数值 F_r 。

The radial load on the output bearing is calculated as follow: compare the calculation result Frawith the permitted radial loads given in theselection table.

F_{ra} has to be smaller than or equal to F_r.

$$F_{ra}=2000*M*f_z/d_0\ [N]$$

F_{ra}：作用在输出轴中点的径向力[N]

M：作用在输出轴上的扭矩[Nm]

f_z：传动附加系数（见下表）

d_0：输出轴上传动件平均直径[mm]

F_{ra}: Radial force application in the centre of the output shaft.

M: Torque on the output shaft.

f_z: Transmission element factor (following table)

d_0: Average diameter of the mounted transmission element .

传动件 Transmission element	传动附加系数f_z Transmission element factor f_z	注释 comments
齿轮 Gears	1.00	=17齿 teeth
	1.15	＜17齿 teeth
链轮 Chain sprockets	1.00	=20齿 teeth
	1.25	＜20 齿 teeth
	1.4	＜13 齿 teeth
V带轮 Narrow V-belt pulleys	1.75	有预紧力作用 Influence of the tensile force
平带轮 Flat-belt pulleys	2.5	有预紧力作用 Influence of the tensile force
齿带轮 Toothed belt pulleys	2.5	有预紧力作用 Influence of the tensile force

当径向载荷作用点不在输出轴的中点时，必须根据下面的公式重新计算减速机允许的最大径向力 F_r'。

F_{xL} 是基于轴承使用寿命的；

F_{xW} 是基于输出轴强度的。

将 F_{xL} 和 F_{xW} 中的较小者作为减速机允许的最大径向力 Fr'。

The radial loads must calculated using the following formula in the event of force application not in the centre of the shaft end.

The smaller of the two values F_{xL} (according to the bearing service lift) and F_{xW} (according to the shaft strength) is the permitted value for the radial load F_r'.

$$F_{xL}=Fr*a/(b+x)\ [N]$$

$$F_{xw}=c/(f+x)\ [N]$$

F_r：性能参数表中列出的许可径向力[N]

x：轴肩到实际作用点的距离[mm]

a,b,f：减速机径向转换常数[mm]（见下表）

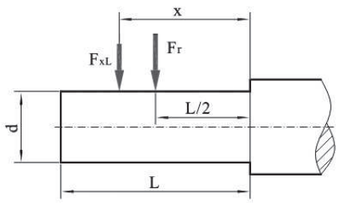
c：减速机径向转换常数[N.mm]（见下表）

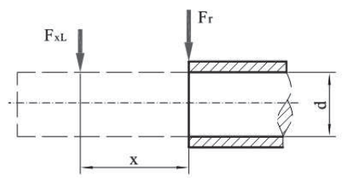
F_r: Permitted overhung load according to the selection table[N]

x: Distance from the shaft shoulder to the force application point[mm]

a,b,f: Gear unit constant for overhung load conversion[mm](see below table)

c: Gear unit constant for overhung load conversion[N.mm]





减速机型号 Gear unit type	a [mm]	b [mm]	c [mm]	f [mm]	d [mm]	L [mm]
MRX57	43.5	23.5	$1.51x10^5$	34.2	20	40
MRX67	52.5	27.5	$2.42x10^5$	39.7	25	50
MRX77	60.5	30.5	$1.95x10^5$	0	30	60
MRX87	73.5	33.5	$7.69x10^5$	48.9	40	80
MRX97	86.5	36.5	$1.43x10^6$	53.9	50	100
MRX107	102.5	42.5	$2.47x10^6$	62.3	60	120
MR07	72.0	52.0	$4.67x10^4$	11	20	40
MR17	88.5	68.5	$6.527x10^4$	17	20	40
MR27	106.5	81.5	$1.56x10^5$	11.8	25	50
MR37	118	93	$1.24x10^5$	0	25	50
MR47	137	107	$2.44x10^5$	15	30	60
MR57	147.5	112.5	$3.77x10^5$	18	35	70
MR67	168.5	133.5	$2.51x10^5$	0	35	70
MR77	173.7	133.7	$3.97x10^5$	0	40	80
MR87	216.7	166.7	$8.47x10^5$	0	50	100
MR97	255.5	195.5	$1.19x10^6$	0	60	120
MR107	285.5	215.5	$2.06x10^6$	0	70	140
MR137	343.5	285.5	$6.14x10^6$	30	90	170
MR147	402	297	$8.65x10^6$	33	110	210
MR167	450	345	$1.26x10^7$	0	120	210
MF..27	109.5	84.50	$1.13x10^5$	0	25	50
MF..37	123.5	98.50	$1.07x10^5$	0	25	50
MF..47	153.5	123.5	$1.40x10^5$	0	30	60
MF..57	170.7	135.7	$2.70x10^5$	0	35	70
MF..67	181.3	141.3	$4.12x10^5$	0	40	80

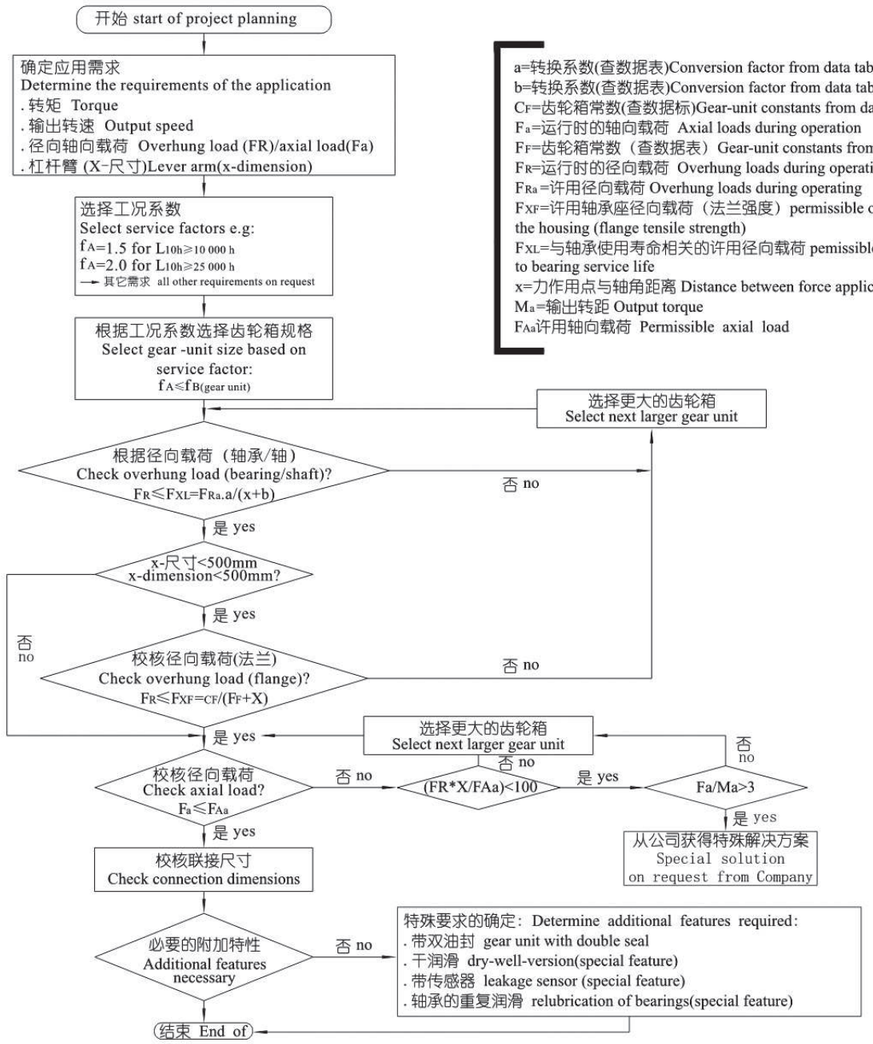
减速机型号 Gear unit type	a [mm]	b [mm]	c [mm]	f [mm]	d [mm]	L [mm]
MF..77	215.8	165.8	$7.87x10^5$	0	50	100
MF..87	263.0	203.0	$1.06x10^6$	0	60	120
MF..97	350.0	280.0	$2.09x10^6$	0	70	140
MF..107	373.5	288.5	$4.23x10^6$	0	90	170
MF..127	442.5	337.5	$9.45x10^6$	0	110	210
MF..157	512.0	407.0	$1.05x10^7$	0	120	210
MK..37	123.5	98.50	$1.41x10^5$	0	25	50
MK..47	153.5	123.5	$1.78x10^5$	0	30	60
MK..57	169.7	134.7	$6.8x10^5$	32	35	70
MK..67	181.3	141.3	$4.12x10^5$	0	40	80
MK..77	215.8	165.8	$7.69x10^5$	0	50	100
MK..87	252.0	192.0	$1.64x10^6$	0	60	120
MK..97	319.0	249.0	$2.8x10^6$	0	70	140
MK..107	373.5	288.5	$5.53x10^6$	0	90	170
MK..127	443.5	338.5	$8.31x10^6$	0	110	210
MK..157	509.0	404.0	$1.18x10^7$	0	120	210
MK..167	621.5	496.5	$1.88x10^7$	0	160	250
MK..187	720.5	560.5	$3.04x10^7$	0	190	320
MS..37	118.5	98.50	$6.00x10^4$	0	20	40
MS..47	130.0	105.0	$1.33x10^5$	0	25	50
MS..57	150.0	120.0	$2.14x10^5$	0	30	60
MS..67	184.0	149.0	$3.04x10^5$	0	35	70
MS..77	224.0	179.0	$5.26x10^5$	0	45	90
MS..87	281.5	221.5	$1.68x10^6$	0	60	120
MS..97	326.3	256.3	$2.54x10^6$	0	70	140

7.4 MRM. .选型 / Selection procedure of MRM..

7．4．1 MRM齿轮减速电机 /MRM geared motors

MRM齿轮减速电机是一种带有扩展输出轴承座的特种齿轮减速电机，可用于大悬挂载荷，大轴向载荷和大变化载荷的场合。其主要性能参数同R系列标准齿轮减速电机.

MRM geared motors are a special type of helical geared motor with an extended output bearing housing. They are specially designed for agitator aplications and can be used in applications subject to high overhung and axial loads as well as flexural torque. The remaining data correspond to the standard helical geared motors.



7.4.2 许用径向和轴向载荷 / Permitted overhung and axial loads

根据不同的服务系数fB和不同的标称轴承使用寿命LH10提供下述的许用径向载荷FRa和轴向载荷FAa

The permitted overhung loads FRa and axial loads FAa are specified for various service factors fB and nominal bearing service life LH10

fA=1.5/L10h=10000h

		na[rpm]							
		<16	16-25	26-40	41-60	61-100	101-160	161-250	251-400
MRM57	FRA[N]	400	400	400	400	400	405	410	415
	FAa[N]	18800	15000	11500	9700	7100	5650	4450	3800
MRM67	FRA[N]	575	575	575	580	575	585	590	600
	FAa[N]	19000	18900	15300	11900	9210	7470	5870	5050
MRM77	FRA[N]	1200	1200	1200	1200	1200	1210	1210	1220
	FAa[N]	22000	22000	19400	15100	11400	9220	7200	6710
MRM87	FRA[N]	1970	1970	1970	1970	1980	1990	2000	2010
	FAa[N]	30000	30000	23600	18000	14300	11000	8940	8030
MRM97	FRA[N]	2980	2980	2990	3010	3050	3060	3060	3080
	FAa[N]	40000	36100	27300	20300	15900	12600	9640	7810
MRM107	FRA[N]	4230	4230	4230	4230	4230	4230	3580	3580
	FAa[N]	48000	41000	30300	23000	18000	13100	9550	9030
MRM137	FRA[N]	8710	8710	8710	8710	7220	5060	3980	6750
	FAa[N]	70000	70000	70000	57600	46900	44000	35600	32400
MRM147	FRA[N]	11100	11100	11100	11100	10600	10600	8640	10800
	FAa[N]	70000	70000	69700	58400	45600	38000	32800	30800
MRM167	FRA[N]	14600	14600	14600	14600	14600	14700	—	—
	FAa[N]	70000	70000	70000	60300	45300	36900	—	—

fA=2.0/L10h=25000h

		na[rpm]							
		<16	16-25	26-40	41-60	61-100	101-160	161-250	251-400
MRM57	FRA[N]	410	410	410	410	410	415	415	420
	FAa[N]	12100	9600	7350	6050	4300	3350	2600	2200
MRM67	FRA[N]	590	590	590	595	590	595	600	605
	FAa[N]	15800	12000	9580	7330	5580	4460	3460	2930
MRM77	FRA[N]	1210	1210	1210	1210	1210	1220	1220	1220
	FAa[N]	20000	15400	11900	9070	6670	5280	4010	3700
MRM87	FRA[N]	2000	2000	2000	2000	2000	1720	1690	1710
	FAa[N]	24600	19200	14300	10600	8190	6100	5490	4860
MRM97	FRA[N]	3040	3040	3040	3050	3070	3080	2540	2430
	FAa[N]	28400	22000	16200	11600	8850	6840	5830	4760
MRM107	FRA[N]	4330	4330	4330	4330	4330	4230	3580	3580
	FAa[N]	32300	24800	17800	13000	9780	8170	5950	5620
MRM137	FRA[N]	8850	8850	8850	8830	5660	4020	3200	5240

		na[rpm]							
		<16	16-25	26-40	41-60	61-100	101-160	161-250	251-400
	FAa[N]	70000	59900	48000	37900	33800	31700	25600	23300
MRM147	FRA[N]	11400	11400	11400	11400	11400	8320	6850	8440
	FAa[N]	70000	60600	45900	39900	33500	27900	24100	22600
MRM167	FRA[N]	15100	15100	15100	15100	15100	13100	—	—
	FAa[N]	70000	63500	51600	37800	26800	23600	—	—

7.4.3 转换系数和齿轮箱常数 / Conversion factors and gear unit constants

计算MRM齿轮减速电机额定径向载荷FXL(X≠1000mm)的转换系数

The following conversion factors and gear unit constants apply to calculating the approved overhung load FXL atpoint x≠1000 mm forMRM geared motors:

齿轮箱型号 Gear unit type	a	b	CF(FB=1.5)	CF(FB=2.0)	FF
MRM57	1047	47	1220600	1260400	277
MRM67	1047	47	2047600	2100000	297.5
MRM77	1050	50	2512800	2574700	340.5
MRM87	1056.5	56.5	4917800	5029000	414
MRM97	1061	61	10911600	11124100	481
MRM107	1069	69	15367000	15652000	554.5
MRM137	1088	88	25291700	25993600	650
MRM147	1091	91	30038700	31173900	756
MRM167	1089.5	89.5	42096100	43654300	869

MRM减速箱的增加重量 / Additional Weights of MRM gear units

型号 Type	用GRF系列最小的法兰所增加的重量表 Additional weight in addition to RF ,related to the smallest GRF flange △m[kg]
MRM57	12.0
MRM67	15.8
MRM77	25.0
MRM87	29.7
MRM97	51.3
MRM107	88.0
MRM137	111.1
MRM147	167.4
MRM167	195.4

8. 存放与维护 / Storage And Maintenance

8.1 存放 / Storage

(1) 减速机应存放在防雨雪、无震动、温度和湿度无骤然变化、无污染和粉尘、无腐蚀性蒸汽的环境中。
(2) 减速机与地面之间应放置合适的间隔材料。
(3) 开箱后暂不使用的减速机，应在各加工面上涂防锈油，并及时放回包装箱内。

1. Under roof, protected against rain and snow, no shock loads, Temperature and humidity without sudden change, no pollution and dust, no corrosive vapor environment.
2. Underlay the block and other material between the ground and equipment
3. The opened but not used gear units should be added with the anti-corrosive oil on its surface and then return to the packing containers timely.

8.2 维护 / Maintenance

注意：在对减速机进行检查或维护前，请务必切断减速机驱动电机的电源，防止触电！等待减速机冷却！

(1) 首次换油应在减速机工作300小时后进行。换油时须用合适的清洁剂冲洗齿轮箱，不得将合成油与矿物油混合。
(2) 每隔6个月或工作3000小时后，检查润滑油及油位。当采用 AM 输入时，还应检查弹性体，必要时进行更换。
(3) 如果减速机加注了矿物润滑油，应根据油池稳态温度的不同，最长三年检查一次润滑油的品质是否改变。
(4) 如果减速机加注了合成润滑油，应根据油池稳态温度的不同，最长五年检查一次润滑油的品质是否改变。
(5) 根据减速机工作环境的不同，更换输出轴上的油封。
(6) 产品出现故障时，不要拆卸部件，与本公司售后服务部门联系（需提供减速器规格，铭牌编号，已使用时间，和故障类型）后再采取合理的措施。

Attention: Before inspection or maintenance, please be sure to cut off the reducer drive motor power, prevent electric shock! And wait until the reducer cooled down.

1. For gear units, first oil change should be after about 300 hours (run-in-period). The right lotion is required to clean the gear units with care. Never mix the synthetic oil and mineral oil together.
2. Every 3000 working time or six months, you have to check the oil and oil level. For AM input gear units, the elastomer should be tested or replaced if necessary.
3. For mineral oil, at least every 3 years inspection is needed. Then change the mineral oil and replace the bearing grease.
4. For Synthetic oil, at least every 5 years inspection is needed. Then change the synthetic oil and rep-lace the bearing grease.
5. Depending on the operating conditions, change the Oil seal on output shaft.
6. Once the malfunctions appear, stop disassembling The parts, and firstly please contact the customer service (the information about specification,series number, timed used and malfunction problem), then take the reasonable measures.

9. 订货需知 / Notice For Order

订购减速机时请提供以下信息：

(1) 减速机型号（传动比、输入配置、输出配置、功率和安装方式）。
(2) 订购数量。
(3) 其他特殊要求。
(4) 单位名称、联系人、联系电话。

Please provide the following information when place the orders:
1. The model mark of the gear ung positionnit(type, Ratio,power and mounti).
2. Quantity.
3. Other special requirements.
4. company, contact and telephone.

10. 故障及排除 / Malfunction and Remedy

故障	可能的原因	解决办法
异常、均匀的运转噪声。	1. 滚动/碾压噪声：轴承损坏。 2. 冲击型噪声：齿轮啮合不均匀。	1. 检查润滑油，更换轴承。 2. 请向客户服务部咨询。
异常、不均匀的运转噪声。	润滑油中有异物。	1. 停机向客户服务部咨询 。 2. 检查润滑油。
机油泄漏 * 1. 在减速机盖板上。 2. 在电机法兰上。 3. 在电机轴密封圈上。 4. 在减速器法兰上。 5. 在输出轴密封圈上。	1. 减速机密封垫发生泄漏。 2. 轴上的油封损坏。 3. 减速机没有排气。	1. 在密封垫上涂密封胶并拧紧螺栓。 2. 更换油封。 3. 给减速机排气（参见“安装方式”）。
机油从排气阀旁渗出	1. 机油太多。 2. 传动装置安装方式错误。 3. 频繁冷起动（润滑油起泡沫）。	1. 修正油量（参见“润滑油”）。 2. 正确安装排气阀并且矫正油位（参见“安装方式”）。
减速机输入端驱动正常，但是输出轴不转动。	减速机中的轴与轮毂联接失效。	请向客户服务部咨询。
AM（IEC）连接器弹性体过早磨损或失效	1. 接触腐蚀性物质（液体或气体）。 2. 过高的环境温度。最大的环境温度允许－20℃到+80℃。 3. 过大的负载。	请向客户服务部咨询。

*：在磨合试运转阶段（24小时的运转时间内），轴密封圈有可能出现短暂、少量的渗油现象。

Problem	Possible Cause	Remedy
Unusual, regular running noise.	1. Meshing/grinding noise; Bearing damage. 2. Knocking noise; Irregularity in the gearings.	1. Check the oil, change bearings. 2. Contact customer service.
Unusual, irregular running noise.	Foreign bodies in the oil.	1. Check the oil. 2. Stop the drive and contact customer service.
Oil leaking: 1. from the gear cover plate. 2. from the motor flange. 3. from the motor oil seal. 4. from the gear unit flange. 5. from the output end oil seal.	1. Rubber seal on the gear cover leaking . 2. Seal defective. 3. Gear unit not vented.	1. Tighten the bolts on the gear cover plate and observe the gear unit. 2. Change the seals. 3. Vent the gear unit (see “ Mounting Posi tions”). 4. Contact customer service.
Oil leaking from breathing valve.	1. Two much oil. 2. Drive operated in incorrect mounting position. 3. Frequent cold starts(oil foams) and/or high oil level.	1. Correct the oil level (see sec. “inspection and maintenance”) 2. Mount the breather valve correctly (see sec. “Mounting Positions”) and correct the oil level (s “Lubricants”).
Output shaft does not turn although the motor is running or the input shaft is rotated.	Connection between shaft and hub in gear unit interrupted.	Contact customer service.
Premature wear or failure in AM(IEC) coupling elastomer.	1. Contacted with aggressive fluids/oil; 2. Impermissibly high ambient/contact temperature. Maximum permitted temperature-20℃ to +80℃.	Contact customer service.

Note: Short-term oil/grease leakage at the oil seal is possible in the run-in phase (24 hour running time).