



# **MBF** 系列特高扭矩 - 三相交流刹车电机

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THREE-PHASE VERY HIGH-TORQUE A.C. BRAKE MOTOR



# 公司简介

## Company profile

Marali srl是总公司，总部位于意大利博洛尼亚，是一家世界领先动力传动领域知名跨国企业，精心致力于减速机、电机等高质量产品的开发和生产

东莞市马拉力减速机有限公司是Marali集团在中国成立的第一家销售组装厂；地址位于美丽的松山湖高新区，厂内种有荔枝芒果龙眼等果树，面朝湖海春暖花开。

公司秉持专业化的经营理念，基于集团同一标准，将欧洲原装品质和迅捷的服务奉献给中国的广大客户。在中国生产基地，通过三个工程师团队管理并开发中国的生产活动，尤其注重质量管控。集团主要可分为三个区域，在中国，意大利、美国和各设一个区域中心进行管理。在这样的地域划分下，让全球客户了解了马拉力并提供全球联保的售后服务。

我们的产品高精度、同轴斜齿轮减速电机，平行轴斜齿轮减速电机，螺旋伞齿轮减速机，斜齿轮蜗轮蜗杆减速电机，蜗轮蜗杆减速器，行星式减速机，转角转向器，游星式减速机，机械无级调速器，圆柱圆锥减速器，谐波减速机，硬齿轮减速机，挂轴式减速机大型工业减速机，大功率重型重载齿轮箱；各类铝壳，铸铁三相电机，刹车制动电机，变频电机等产品。

Marali srl is the head office, located in Bologna of Italy, as a famous world-leading transnational enterprise engaged in the power drive field, and dedicated to the development and production of high-quality reducers and motors.

Dongguan Marali Reducer Co., Ltd. is the first sales assembly factory of Marali Group in China, located in the beautiful Songshan Lake High-tech Zone. In the factory, there are various fruit trees, such as litchi, mango and longan trees.

By adhering to professional operation principle, the company is dedicated to offer the original quality and convenient services to Chinese customers based on the same standard of the group. In Chinese production base, three engineering teams are responsible for managing and developing the production activities in China, and paying special attention to the quality control. The group is located in three regions, China, Italy and America, and each place is equipped with a regional center for management. Such regional division allows customers from the world to know Marali and provides international warranty services.

Our products boast high precision, for instance large-scale industrial reducers, like ILH gear reducer, parallel shaft helical gear reducer, spiral bevel gear reducer, helical worm and gear reducer, worm gear reducer, planetary reducer, angle steering gear, plary reducer, stepless speed adjusting gear, cylinder-cone gear reducer, harmonic drive reducer, hard gear reducer, and scroll hanging reducer, etc. high-power heavy-duty gear case, all kinds of aluminum case, cast iron three-phase machine, brake motor, variable frequency motor, etc.



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# TECHNICAL DESCRIPTION

## 技术说明..

Asynchronous three-phase brake motor with very high-torque a.c. brake  
特高刹车扭矩的交流制动器的三相交流异步刹车电机

Frame sizes: 63...200..

机座号:63...200..

output range:0.12..30kw..

输出 ( 功率 ) 范围:0.12...30kw..

Polarity: 2, 4, 6, 8 (pole changing on request)..

极数:2,4,6,8..

Insulation class F..

绝缘等级 : F..

IP 55 as standard degree of protection(IP 55 on request)..

标准保护等级IP 55..

Electromagnetically spring-loaded brake with release in case of power supply interruption..

电磁弹簧加载的制动器, 在失电时释放弹簧刹住电机..

Standard brake supply: 230/400V-50 Hz with separate terminal block (brake supplied directly from the motor terminal block available on request)

标准制动器供应 : 230/400V-50Hz 配有独立的接线端子..

DC brake available on request (same braking torque features of ac version)..

需要时可用直流刹车器 ( 刹车力矩与交流刹车器相同 )..

Double braking surface..

双制动面..

Asbestos-free friction surfaces..

无石棉摩擦表面..

Very high braking torque ( $M_b > 2MN$ )..

特高的制动力矩..

Standard braking torque setted at 70%  $M_b$  max (on request 30%  $M_b$  max... 100%  $M_b$  max)..

标准刹车扭矩设置为最大值的70%(根据需要可以设置为最大值的30%-100%)..

Continuous braking torque adjustment in the range 30%  $M_b$  max... 100%  $M_b$  max..

连续刹车力矩可调范围最大值的30%-100%..

Very high connection/disconnection speed..

闭合和分开迅速..

High number of starts/ hour..

每小时内可频繁起动..

Typical applications: Heavy duty, lifting, cranes/ bridge cranes ( lifting, rotation and traverse) and wherever a very high intervention frequency and a powerful and precise braking is required...

典型应用 : 吊重、提升、起重机/龙门起重机 ( 起重、旋转 ) 和无论在需要高频率介入 ( 动作 ) 和强大而精准定位情况下的刹车..



# TECHNICAL DESCRIPTION

## 技术说明

Asynchronous three-phase brake motor with very high-torque a.c. brake  
特高刹车扭矩的交流制动器的三相交流异步刹车电机

Table of the main brake features  
制动特性表

Brake size	Motor size	$M_b^{1)}$ [Nm] / H braking spring [mm]			Air gap [mm]	Brake absorption [A] @230/400V 50HZ
		min	std	max		
60	63	1.5Nm / 13.2mm	3.5Nm / 10.8mm	5Nm / 9.1mm	0.25...0.5	0.16/0.09
70	71	3Nm / 14.8mm	7Nm / 12mm	10Nm / 9.6mm	0.25...0.5	0.19/0.11
80	80	6Nm / 14.3mm	12.6Nm / 12.5mm	18Nm / 11mm	0.3...0.6	0.28/0.16
90	90	11Nm / 18.9mm	24.5Nm / 17.5mm	35Nm / 16.5mm	0.3...0.6	0.47/0.27
100	100	15Nm / 19mm	35Nm / 17.8mm	50Nm / 17mm	0.35...0.65	0.57/0.33
110	112	23Nm / 19.1mm	52.5Nm / 17.9mm	75Nm / 17mm	0.35...0.65	0.68/0.39
140	132	45Nm / 26.7mm	105Nm / 25.1mm	150Nm / 23.8mm	0.4...0.8	1.3/0.76
160	160	75Nm / 26.4mm	175Nm / 24.2mm	250Nm / 22.5mm	0.6...1	1.9/1.1

<sup>1)</sup> Rated values  $\pm 20\%$  额定值  $\pm 20\%$

For delays of release/braking consult us 如需延迟释放/刹车, 请咨询我们

For max friction work for each braking consult us 如需更大制动力矩, 请咨询我们

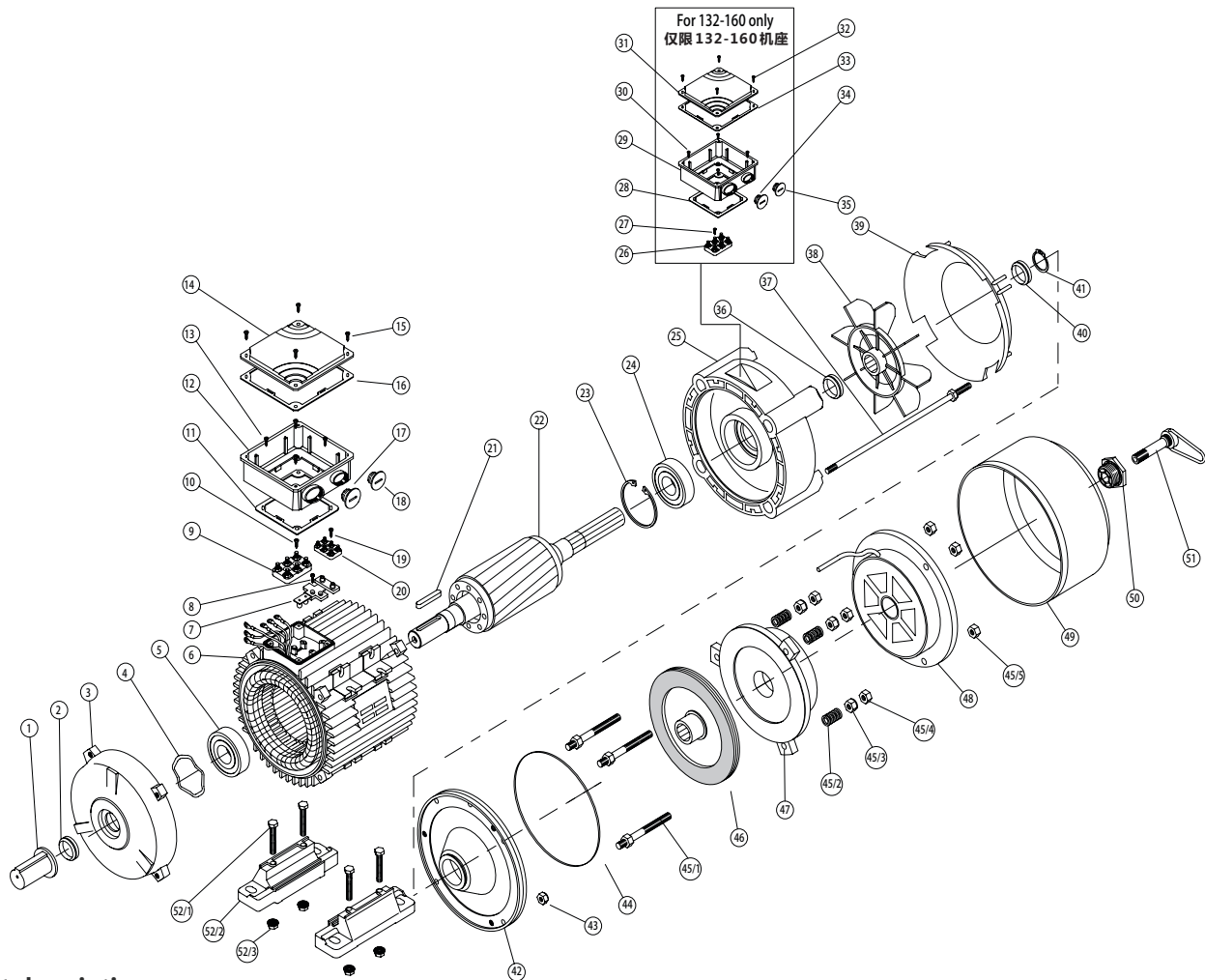


**钢制刹车片保用5年!**  
**Steel brake pads are guaranteed for 5 years!**



# SPARE PARTS FOR MBF MOTORS

## MBF刹车电机零件清单



### Part description 零件描述

- 1 Shaft protection 保护轴套
- 2 Dust seal drive end 防尘密封盖
- 3 Endshield drive end 前端盖
- 4 Pre-load washer 波纹垫
- 5 Bearing drive end 轴承
- 6 Stator frame 定子壳架
- 7 Terminal board support (for sizes 63...112) 电路板支架
- 8 Fixing screw terminal board support (for sizes 63...112) 电路板螺钉
- 9 Motor terminal board 电机接线端子板
- 10 Fixing screw motor terminal board 电机接线端子螺钉
- 11 Gasket terminal box 接线盒垫片
- 12 Terminal box 接线盒
- 13 Fixing screw terminal box 接线盒固定螺钉
- 14 Terminal box lid 接线盒盖
- 15 Fixing screw terminal box lid 接线盒盖固定螺丝
- 16 Gasket terminal box lid 接线盒盖垫片
- 17 Blank gland plug 堵塞
- 18 Blank gland plug 堵塞
- 19 Fixing screw brake terminal board (for sizes 63...112) 刹车端子螺钉
- 20 Brake terminal board (for sizes 63...112) 刹车接线端子板
- 21 Motor key 电机键
- 22 Rotor complete 转子
- 23 Circlip 卡簧
- 24 Bearing non-drive end 轴承
- 25 Endshield non-drive end 尾端盖
- 26 Brake terminal board (for size 132) 刹车接线端子板
- 27 Fixing screw brake terminal board (for size 132) 刹车端子螺钉
- 28 Gasket brake terminal box (for size 132) 刹车线盒垫片
- 29 Brake terminal box (for size 132) 刹车器接线盒
- 30 Fixing screw brake terminal box (for size 132) 刹车线盒固定螺钉
- 31 Brake terminal box lid (for size 132) 刹车线盒盖
- 32 Fixing screw brake terminal board (for size 132) 刹车线盒盖螺钉

- 33 Gasket brake terminal box lid (for size 132) 制动接线盒垫片
  - 34 Blank gland plug (for size 132) 堵塞
  - 35 Blank gland plug (for size 132) 堵塞
  - 36 Dust sea 防尘盖
  - 37 Tie rod 拉杆
  - 38 Fan 风叶
  - 39 Fan cover 风罩
  - 40 Dust seal (for IP55 only) 防尘盖
  - 41 Circlip for fan locking 锁定风扇卡簧
  - 42 Brake support flange 刹车支撑法兰
  - 43 Tie rod fixing nut 拉杆固定螺母
  - 44 O-ring (for IP55 only) O形圈
  - 45 Brake adjusting/fixing kit: 刹车调整/固定套件:
    - 45/1 guiding column 导杆
    - 45/2 braking spring 刹车弹簧
    - 45/3 self locking nut 自锁螺母
    - 45/4 electromagnet locking nut 电磁锁螺母
    - 45/5 electromagnet locking nut 电磁锁螺母
  - 46 Brake disk 刹车片
  - 47 Brake anchor 刹车锚
  - 48 Electromagnet 电磁铁
  - 49 Brake cover 刹车器盖
  - 50 Nipple 螺纹接头
  - 51 Hand release 手柄
  - 52 Foot kit (1 foot) (for sizes 71... 132 a) 底脚套装
    - 52/1 fixing screw 固定螺丝
    - 52/2 foot 底脚
    - 52/3 fixing nut b) 固定螺母
- a) for size 63 feet integral with the case 63机座底脚与箱体一体  
b) for size 132-160 washer and nut 132-160机座为垫圈和螺母

# ELECTRICAL DESIGN

## 接线

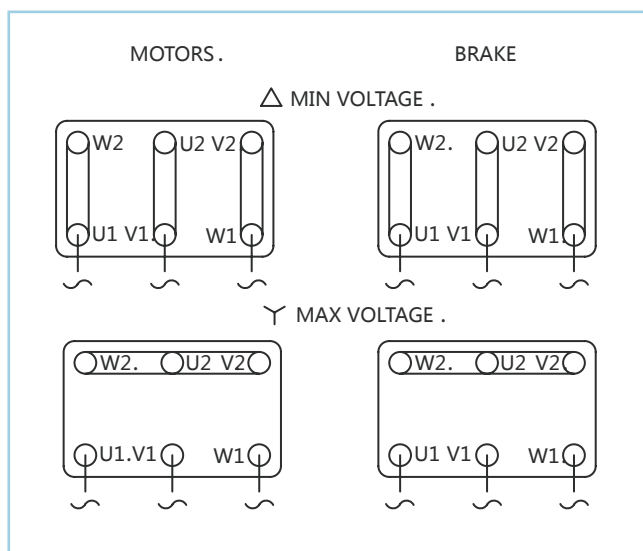
### Terminal boxes 接线盒

Brake motors MBF 132 -200 have an additional terminal box (same dimension of 56-71. frame size motor terminal box) only for brake supplying placed on the N-end endshield; for other features see three phase motors section.  
MBF系列132-200机座的刹车电机有多一接线盒, (以56-71机座同等规格的电机接线盒)他限应用于. 刹车加强接地, 对于其他特征请看三相电机部份.

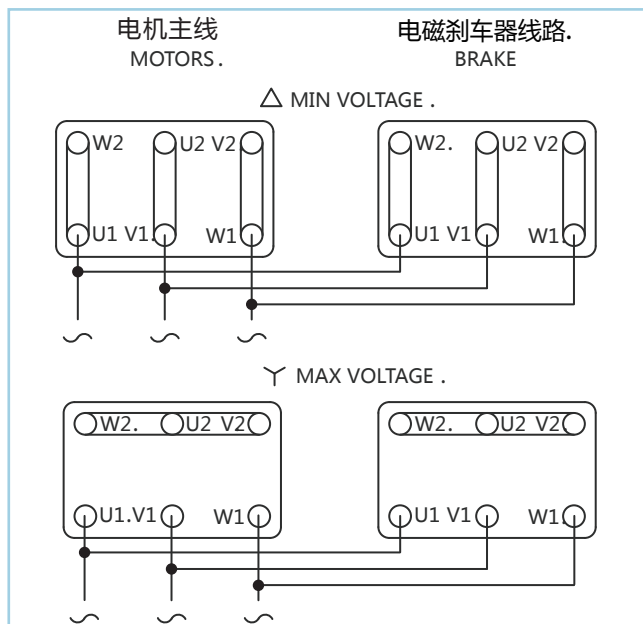
### Connection diagrams. 接线图.

Every brake motors has got, inside the terminal box, the connection diagram both for the motor and for the brake/rectifier.  
当你拿到刹车电机时, 在接线盒内都附有电机及刹车器的接线图.

For brake motors with ac brakes (MBF type) the connection diagram is  
以下是配交流刹车器的刹车电机 ( MBF系列 ) 的接线图.



注意:此刹车电机为失电制动, 所以在接线时电机主线与电磁刹车器线路要一并按上, (考虑到某些场合要分开控制, 这是允许的), 要保证电机与刹车器通/断电同步, 否则如果只接电机主线可能会烧毁电机! 一般接线方法如下:



# TYPE DESIGNATION

## 型号定义

Apart from other information, it is necessary to specify the exact type designation in all enquiries, when ordering spare parts or replacement motors or when asking for documentary information.

除其他信息在配件或更换电机或询问文献信息时都需要举例说明指定的型号名称。

The type designation of our brake motors comprises 9 points of reference, each of which may consist of several letters and/or numerals. The meaning of each symbol can be seen from the following table. For motors not included in our standard range, special symbols may be used which are not listed here.

刹车电机的型号名称包含9点,每一个都可若干字母或数字组成,每个定义的描述可从以下列表查看. 没用列出的特殊的标志 不包括我们标准电机范围内.

Meaning of the symbols.

代码定义.

Ref. point	Meaning	Description of symbols used for our motors	
1	Type of motor 电机型号	M	Elettrici induction motor 铝壳异步电机
2	Type of motor 电机型号	B	three-phase motors with very high-torque ac brake 配特高扭矩的交流刹车器的三相马达
3	Cooling 冷却方式	F	Surface cooled with external fan, cooling fins 壳体外表散热片及风叶冷切
4	Shaft centre height 轴中心高(机座)	63, 71, 80, 90, 100, 112, 132,160,200	
5	Frame length 机座长度代码	S M L	mechanical dimension (short) 短 mechanical dimension (medium) 中 mechanical dimension (long) 长
6	Number of poles 极数	2 4 6 8	(pole-changing on request)
7	Special features 特殊功能	R3	High resistance rotor 高电阻转子

Examples .  
例子.

M
B
F
80
B
4
 

1    2    3    4    5    6





# Brake motors designed for range of rated voltage 380-420 V ±5% - 50 Hz 刹车电机额定使用电压为380-420V±5% - 50 Hz

3000 min<sup>-1</sup> (2 poles)

型号 Type	极数	功率 P <sub>N</sub> kW	转速 n <sub>N</sub> min <sup>-1</sup>	扭矩 M <sub>N</sub> Nm	效率 η %	功率因数 cos φ	电流 I <sub>N</sub>		堵转电流 额定电流 I <sub>A</sub> /I <sub>N</sub>	堵转转矩 额定扭矩 M <sub>A</sub> /M <sub>N</sub>	最大扭矩 额定扭矩 M <sub>K</sub> /M <sub>N</sub>	惯量 J 10 <sup>-3</sup> kgm <sup>2</sup>	最大制 车扭矩 M <sub>D max</sub> Nm	最大循环 启动次数 Z <sub>L</sub> <sup>(1)</sup> c/h	重量 kg
							400V	380-420V							
MBF 63A2	2	0.18	2790	0.64	63	0.73	0.6	0.65	3.7	3.0	3.1	0.28	5	5000	5.9
MBF 63B2	2	0.25	2790	0.87	68	0.70	0.8	0.75	4.5	3.2	3.3	0.31	5	4500	6.4
MBF 63C2	2*	0.37	2800	1.30	65	0.70	1.2	1.25	4.6	3.4	3.4	0.33	5	4500	6.7
MBF 71A2	2	0.37	2820	1.29	70	0.78	1	1.2	4.7	3.6	3.6	0.64	10	4500	9.0
MBF 71B2	2	0.55	2830	1.99	71	0.77	1.5	1.6	4.8	3.2	3.3	0.70	10	4500	9.4
MBF 71C2	2*	0.75	2800	2.59	74	0.77	1.9	2	5.2	3.1	3.1	0.79	10	4000	10.4
MBF 80A2	2	0.75	2840	2.52	74.5	0.78	1.9	2	5	2.8	2.9	1.13	18	3000	12.7
MBF 80B2	2	1.1	2810	3.74	77.6	0.82	2.5	2.6	4.6	2.4	2.9	1.29	18	3000	13.8
MBF 80C2	2*	1.5	2825	5.1	79.1	0.83	3.3	3.4	5	2.9	3.3	1.45	18	2500	15.4
MBF 90S2	2	1.5	2830	5.1	78.6	0.82	3.4	3.5	5	3.1	3	2.24	35	2500	19.3
MBF 90SB2	2*	1.8	2805	6.1	78.5	0.8	4.2	4.3	4.5	2.6	2.5	2.24	35	2500	19.3
MBF 90LA2	2	2.2	2860	7.3	81.8	0.81	4.9	4.9	7.1	4.1	4	2.69	35	2000	22.6
MBF 90LB2	2*	3	2860	10.0	82.3	0.8	6.5	6.8	7.2	3.9	3.8	2.98	35	2000	24.8
MBF 100LA2	2	3	2860	10.0	82.6	0.85	6.4	6.7	6	3.1	3.3	4.34	50	2000	28.1
MBF 100LB2	2*	4	2835	13.5	83	0.88	8	8.1	6.2	2.9	2.9	4.86	50	1800	31.2
MBF 100LC2	2*	5.5	2865	18.3	85	0.85	10.8	11	7.2	3.5	4.1	5.9	50	1800	34.3
MBF 112M2	2	4	2880	13.3	85	0.82	8.3	8.7	8	3.4	3.6	7.8	75	900	35.6
MBF 112MB2	2*	5.5	2900	18.1	87	0.85	10.8	11.2	7.7	3.5	3.6	8.9	75	750	38.7
MBF 112MC2	2*	7.5	2900	24.7	88	0.87	14.3	14.8	8.7	4	4	11.1	75	670	44.9
MBF 132S2	2	5.5	2890	18.2	85.7	0.82	11.3	11.4	6	2.2	2.3	17.0	150	600	63
MBF 132SB2	2	7.5	2880	24.9	87	0.87	14.3	14.9	6.4	2.9	3.1	19.8	150	600	68
MBF 132S22	2*	9.2	2900	30.4	86.7	0.74	18.4	19.5	7	2.8	3.2	20.8	150	500	72
MBF 132MA2	2*	11	2880	36.5	88.7	0.84	21.3	21.7	6.9	3.2	3.8	23.6	150	500	77
MBF 132MB2	2*	15	2920	49.1	89.5	0.82	29.5	30.5	7	3.2	3.7	27.3	150	450	86
MBF 160SA2	2	11	2940	35.7	88.4	0.82	21.9	22.7	7.4	2.5	3.1	43.8	250	335	123
MBF 160SB2	2	15	2940	48.7	89.4	0.85	28.5	29.6	8.1	3.1	3.7	55	250	315	134
MBF 160L2	2	18.5	2950	60	90	0.87	34.1	34.8	8.5	3.6	4.2	68	250	300	153
MBF 160LR2	2*	22	2940	71	90.5	0.9	39	39.1	8.4	2.1	3.4	68	250	280	153

\* Higher output (progressive motor) 更大输出 (改进电机)

For maximum friction work per stop consult us 如需更大制动力矩, 请咨询我们

2 and 4 pole motors with P<sub>n</sub> ≥ 1.1 kW 400 V-50 Hz, IC 411 electrically comply with IE1 efficiency requirements.  
P<sub>n</sub> ≥ 1.1 kW 400 V-50 Hz, IC 411 电力的2极和4极电机遵守IE1功率要求

1) Max. Number of no-load starts/hour with cyclic duration factor 50% 在50%的循环持续基数下的最大空载一小时启动次数

# IE1



Brake motors designed for range of rated voltage 380-420 V  $\pm$ 5% - 50 Hz  
 刹车电机额定使用电压为.. 380-420V  $\pm$ 5% - 50 Hz..

1500 min<sup>-1</sup> (4 poles)

型号 Type	极数	功率 P <sub>N</sub> kW	转速 n <sub>N</sub> min <sup>-1</sup>	扭矩 M <sub>N</sub> Nm	效率 $\eta$ %	功率因数 cos $\varphi$	电流.. I <sub>N</sub>		堵转电流 额定电流 I <sub>A</sub> /I <sub>N</sub>	堵转扭矩 额定扭矩 M <sub>A</sub> /M <sub>N</sub>	最大扭矩 额定扭矩 M <sub>K</sub> /M <sub>N</sub>	惯量.. J 10 <sup>-3</sup> kgm <sup>2</sup>	最大刹 车扭矩.. M <sub>b max</sub> Nm	最大循环 启动次数 Z <sub>L</sub> <sup>(1)</sup> c/h	重量 kg
							400V	380-420V							
MBF 63 A	4	0.12	1350	0.84	57	0.65	0.50	0.55	2.4	2	2..	0.40	5	10000	5.6
MBF 63 B	4	0.18	1330	1.30	58	0.70	0.65	0.70	2.3	1.9	1.9..	0.44	5	10000	6.4
MBF 63 C	4*	0.25	1360	1.91	58	0.74	0.85	0.90	2.7	2.2	2.1	0.47	5	9000	6.5
MBF 71 A	4	0.25	1340	1.80	64	0.66	0.9	1.00	3.2	1.9	2..	0.96	10	7100	8.9
MBF 71 B	4	0.37	1370	2.60	67	0.67	1.2	1.25	3.3	2.2	2.2..	1.08	10	7100	9.2
MBF 71 C	4*	0.55	1380	3.81	69	0.68	1.7	1.80	3.6	2.4	2.4..	1.33	10	6700	10.5
MBF 80 A	4	0.55	1400	3.75	70	0.72	1.6	1.7	3.6	2.6	2.6..	1.92	18	6300	12.5
MBF 80 B	4	0.75	1410	5.1	70.6	0.71	2.2	2.3	4.4	2.8	2.8..	2.31	18	6000	13.6
MBF 80 C	4*	1.1	1385	7.6	75.9	0.77	2.8	2.9	4.4	2.5	2.6..	2.71	18	5600	14.9
MBF 90S A	4	1.1	1400	7.5	76.5	0.78	2.7	2.9	5.2	2.5	2.8..	3.21	35	4500	19.1
MBF 90L B	4	1.5	1400	10.2	78.6	0.77	3.6	3.7	5.7	2.8	3..	3.78	35	4500	19.9
MBF 90L C	4*	1.8	1380	12.5	77.3	0.8	4.2	4.3	5.5	2.7	2.9..	4.35	35	4500	20.7
MBF 90L D	4*	2.2	1400	15.0	79.3	0.75	5.3	5.5	4.8	2.9	3.2..	4.64	35	4000	21.1
MBF 100L A	4	2.2	1435	14.6	81	0.74	5.4	5.6	5.3	2.5	2.7..	6.5	50	4000	27.9
MBF 100L B	4	3	1425	20.1	82.8	0.76	6.8	6.9	4.6	2.4	2.5..	7.7	50	4000	30.9
MBF 100L C	4*	4	1400	27.3	81.6	0.78	9.2	9.3	6	2.6	2.9..	8.3	50	3550	32.4
MBF 112M A	4	4	1430	26.7	83.9	0.81	8.5	8.8	6.3	2.2	2.8..	13.9	75	2240	40.8
MBF 112M B	4*	5.5	1430	36.7	85.2	0.83	11.4	11.7	6.5	2.2	2.9..	16.7	75	2000	45.3
MBF 132S4	4	5.5	1430	36.7	85.7	0.82	11.3	11.7	5.8	3	3..	28.7	150	1800	68
MBF 132M4	4	7.5	1440	49.7	87.4	0.82	15.1	15.5	6.8	3.1	3.1..	35.4	150	1500	77
MBF 132MB4	4*	9.2	1440	61	87.2	0.86	17.7	17.8	8	3.5	3.5..	38.7	150	1400	91
MBF 132MC4	4*	11	1440	73	88.5	0.85	21.1	21.5	8.3	3.1	3.3..	38.7	150	1400	91
MBF 160M4	4	11	1460	72	88.6	0.8	22.4	22.7	7.5	2.3	3.1..	84	250	600	135
MBF 160L4	4	15	1460	98	89.5..	0.84	28.8	29.6	6.7	2.2	3.5	107	250	560	153
MBF 180M	4	18.5	1465	120	90.2	0.87	37	36	7.0	2.5	3.6	130	260	630	156
MBF 180 L4	4	22	1465	143	90.1	0.88	42	41	7.2	2.5	3.7	160	300	500	158
MBF 200 L4	4	30	1465	195	90.0	0.89	58	57	7.5	2.8	3.8	200	400	400	182

\* Higher output (progressive motor) 更大输出 (改进电机)

For maximum friction work per stop consult us 如需更大制动力矩, 请咨询我们..

2 and 4 pole motors with P<sub>N</sub>  $\geq$  1.1 kW 400 V-50 Hz, IC 411 electrically comply with IE1 efficiency requirements.  
 P<sub>N</sub>  $\geq$  1.1 kW 400 V-50 Hz, IC 411 电机的2极和4极电机遵守IE1功率要求

1) Max. Number of no-load starts/hour with cyclic duration factor 50%在50%的循环持续基数下的最大空载一小时启动次数

IE1



# Brake motors designed for range of rated voltage 380-420 V $\pm 5\%$ - 50 Hz

## 刹车电机额定使用电压为380-420V $\pm 5\%$ - 50 Hz

1000 min<sup>-1</sup> (6 poles)

型号 Type	极数	功率 P <sub>N</sub> kW	转速 n <sub>N</sub> min <sup>-1</sup>	扭矩 M <sub>N</sub> Nm	效率 $\eta$ %	功率因数 cos $\varphi$	电流 I <sub>N</sub>		堵转电流 额定电流 I <sub>A</sub> /I <sub>N</sub>	堵转扭矩 额定扭矩 M <sub>A</sub> /M <sub>N</sub>	最大扭矩 额定扭矩 M <sub>K</sub> /M <sub>N</sub>	惯量 J 10 <sup>-3</sup> kgm <sup>2</sup>	最大刹 车扭矩 M <sub>b max</sub> Nm	最大循环 启动次数 Z <sub>L</sub> <sup>1)</sup> c/h	重量 kg
							400V	380-420V							
MBF 71A6	6	0.18	880	1.95	53	0.60	0.85	0.90	2.2	1.6	1.6	1.36	10	15000	9.3
MBF 71B6	6	0.25	870	2.81	54	0.64	1.1	1.2	2.5	1.7	1.7	1.51	10	14000	9.8
MBF 80A6	6	0.37	910	3.88	60	0.72	1.2	1.25	2.7	1.6	2.1	2.36	18	8500	12.3
MBF 80B6	6	0.55	910	5.8	68	0.67	1.8	1.8	2.9	2.2	2.1	2.89	18	8000	13.7
MBF 90SA6	6	0.75	910	7.9	72	0.63	2.4	2.5	2.9	1.7	1.7	3.93	35	6300	18.2
MBF 90LB6	6	1.1	908	11.6	72	0.63	3.5	3.6	3	1.7	1.7	5.4	35	6000	21.6
MBF 100LA6	6	1.5	930	15.4	72	0.71	4.2	4.4	3.7	1.8	2.3	8.3	50	5300	25.9
MBF 100LB6	6*	1.8	940	18.3	76	0.67	5.1	5.3	4.2	2.4	2.8	11.0	50	4500	30.4
MBF 112MA6	6	2.2	940	2.4	82	0.72	5.3	5.4	4.4	2.4	2.6	16.0	75	3000	37.3
MBF 112MC6	6*	3	940	30.5	84	0.75	7	7.2	5.3	2.9	2.9	21.0	75	2800	50
MBF 132SA6	6	3	950	30.2	83.5	0.71	7.5	7.9	4.9	1.9	2.4	29.0	150	1800	63
MBF 132MY6	6	4	950	40.2	84.5	0.69	9.9	10.2	4.5	2.2	2.5	36.5	150	1700	68
MBF 132MB6	6	5.5	950	55	85.2	0.69	13.5	13.5	4.1	1.9	2.2	45.0	150	1600	81
MBF 160M6	6	7.5	970	74	88.0	0.80	15.6	16.2	6.2	2.8	3.2	114	250	1000	137
MBF 160L6	6	11	960	109	88.3	0.81	22.2	22.5	6	2.7	3.5	147	250	900	158

\* Higher output (progressive motor) 更大输出 (改进电机)

For maximum friction work per stop consult us 如需更大制动力矩, 请咨询我们

1) Max. Number of no-load starts/hour with cyclic duration factor 50% 在50%的循环持续基数下的最大空载一小时启动次数



# Brake motors designed for range of rated voltage 380-420 V $\pm 5\%$ - 50 Hz

## 刹车电机额定使用电压为380-420V $\pm 5\%$ - 50 Hz

750 min<sup>-1</sup> (8 poles)

型号 Type	极数	功率 P <sub>N</sub> kW	转速 n <sub>N</sub> min <sup>-1</sup>	扭矩 M <sub>N</sub> Nm	效率 $\eta$ %	功率因数 cos $\varphi$	电流 I <sub>N</sub>		堵转电流 额定电流 I <sub>A</sub> /I <sub>N</sub>	堵转扭矩 额定扭矩 M <sub>A</sub> /M <sub>N</sub>	最大扭矩 额定扭矩 M <sub>K</sub> /M <sub>N</sub>	惯量 J 10 <sup>-3</sup> kgm <sup>2</sup>	最大刹 车扭矩 M <sub>b max</sub> Nm	最大循环 启动次数 Z <sub>L</sub> <sup>1)</sup> c/h	重量 kg
							400V	380-420V							
MBF 71A8	8	0.12	670	1.82	50	0.55	0.65	0.70	2.4	2.5	2.5	1.08	10	16000	9.2
MBF 80A8	8	0.25	680	3.51	51	0.62	1.1	1.2	2.2	1.8	2	2.36	18	13200	12.3
MBF 90SA8	8	0.37	680	5.2	59	0.53	1.7	1.8	2.1	1.4	1.6	3.93	35	7500	18.2
MBF 90LB8	8	0.55	680	7.7	59	0.54	2.5	2.7	2.1	1.4	1.6	5.4	35	7100	21.6
MBF 100LA8	8	0.75	690	10.4	65	0.65	2.6	2.8	3	1.6	1.7	8.3	50	6300	25.9
MBF 100LB8	8	1.1	690	15.2	68	0.62	3.9	4	3	1.9	1.8	11.0	50	5600	30.4
MBF 112MA8	8	1.5	695	20.6	70	0.66	4.6	4.8	4	1.8	2.4	18.5	75	3550	43.8
MBF 132S8	8	2.2	710	29.6	78.8	0.63	6.4	6.6	3.4	1.4	1.7	36.5	150	2240	68
MBF 132M8	8	3	710	40.4	79.8	0.67	8.1	8.4	3.6	1.4	1.9	45.0	150	2000	81
MBF 160M8	8	4	700	55	84.4	0.72	9.5	9.7	4.5	1.7	2.5	87	250	1120	126
MBF 160M8	8	5.5	720	73	85	0.73	12.8	13.3	4	1.5	2.6	114	250	1000	137
MBF 160L8	8	7.5	710	101	85.5	0.74	17.1	17.8	4	1.5	2.7	147	250	900	158

1) Max. Number of no-load starts/hour with cyclic duration factor 50% 在50%的循环持续基数下的最大空载一小时启动次数

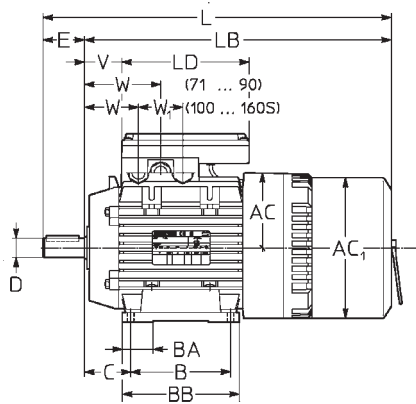
For maximum friction work per stop consult us 如需更大制动力矩, 请咨询我们



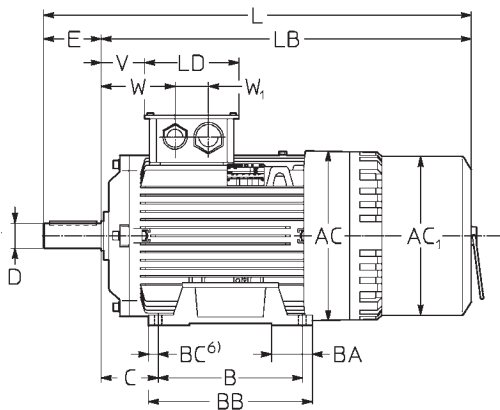
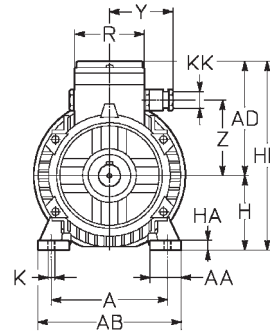
# BRAKE MOTORS MBF FRAME SIZE 63-160 IM B3

## MBF系列刹车电机63-160机座B3卧式安装尺寸

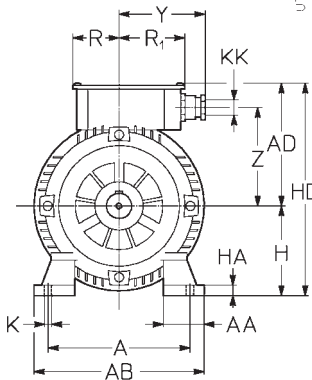
63 ... 160S



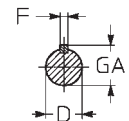
UT C 697A



UT C 698



160 ... 200



Grand. motore Motor size	Estremità d' albero Shaft end													Piedi - Feet														
	AC φ	AC <sub>1</sub> φ	AD	L	LB	LD	KK 2)	R R <sub>1</sub>	V	W	W <sub>1</sub>	Y	Z	D φ	E	F h9	GA	A	AB	B	C	BB	BA	AA	K	HA H <sup>4)</sup>	HD	
63 B3	132	125	104	293	270	142	2 x M16	77	31	78	—	66	54	11 j6 M4	23	4	12,5	100	120	80	40	100	21	27	7	9	63	167
71 B3	150	140	114	334	304		2 x M20	—	39	85		68	66	14 j6 M5	30	5	16	112	138	90	45	110	22	28	10	71	185	
80 B3	170	159	129	380	340	154		102	37	87		80	19 j6 M6	40	6	21,5	125	152	100	50	125	26		9	80	209		
90S B3			390					—				71	91	24 j6 M8	50	8	27	140	174		56		37	11	90	219		
90L B3	190	179	144	430	380		2 x M25		42	93									125		150		35			234		
100 B3	212	199	152	485	425		4 x M25		44	75	40	84	120	28 j6 M10	60	8	31	160	196	140	63	185	40	37	12	12	100	252
112M ... MB B3																		190	226		70		50		15	112	264	
112MC B3				511	451																							
132S B3	268	253	195	624	544	206	4 x M32	116	46	80	45	100	152	38 k6 M12	80	10	41	216	257	140 <sup>3)</sup>	89	210	32	52	14	16	132	327
132M B3								—																				
132MA...MC B3				662	582																							
160S B3				727	617				81	115				42 k6 M16	110	12	45	254	294	210	108	247	45	52		20	160	355
160M <sup>6)</sup> B3	314	295	258	805	695	180	M40+M50	90	79	141	60	177	207						296			296	90	55			418	
160L B3								127												254								
180M <sup>6)</sup> B3														48 k6 M16		14	51,5	279	321	241	121	283	60	60		22	180	438
180L	356	335	278	910	800				96	159			227								320	279	320	80	58			458
200														55 m6 M20		16	59	318	360	305	133	347	70	74	18	24	200	478

1) Foro filettato in testa.

2) Grand. 63 ... 90: 1 bocchettone pressacavo + 1 tappo filettato (un foro per parte); grand. 100 ... 160S: 1 bocchettone pressacavo + 3 tappi filettati (due fori per parte); grand. 160 ... 200: 2 bocchettoni pressacavo M40 + M50.

3) Il piede del 132S riporta anche un interasse di 178 mm e quello del 132M riporta anche un interasse di 140 mm.

4) Tolleranza  $\pm 0,5$ .

5) Disponibile anche forma costruttiva IM B5A (flangia come IM B5R, estremità d' albero come IM B5) con ingombri generali uguali alla forma costruttiva IM B5R (cambia solo la quota L).

6) Per la grand. 160M la quota BC non è più deducibile dalle quote BB e B, ma vale 21 mm.

1) Tapped butt-end hole.

2) Sizes 63 ... 90: 1 cable gland + 1 threaded plug (one hole per side); sizes 100 ... 160S: 1 cable gland + 3 threaded plugs (two holes per side); sizes 160 ... 200: 2 cable glands M40 + M50.

3) Foot of 132S also has a centre distance of 178 mm and the one of size 132 M has a centre distance of 140 mm.

4) Tolerance  $\pm 0,5$ .

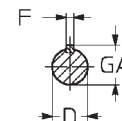
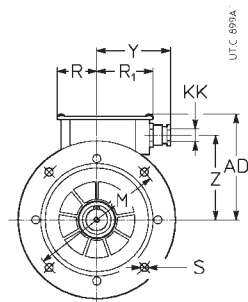
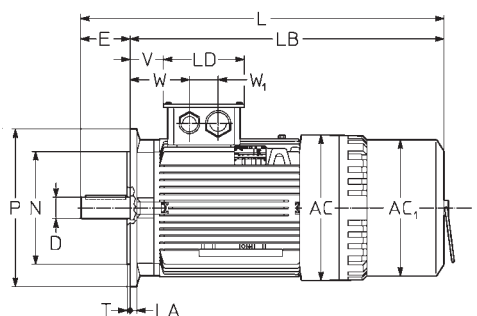
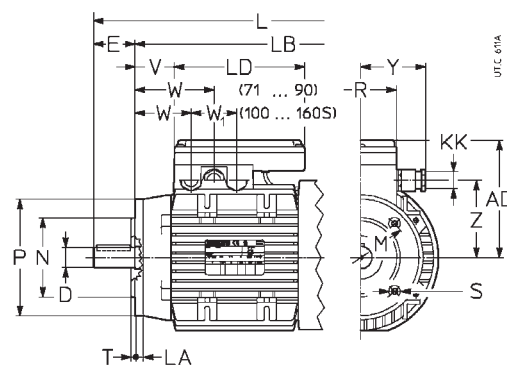
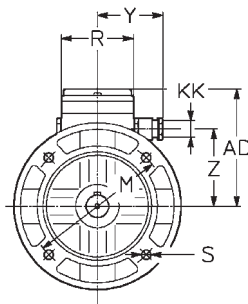
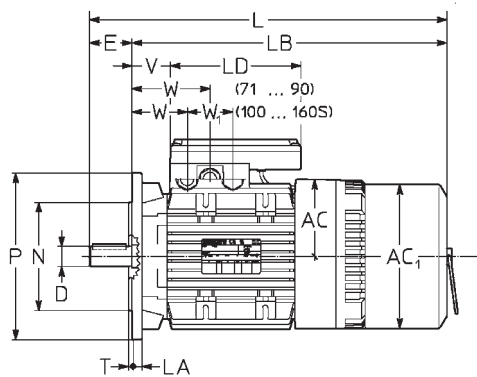
5) Also available with IM B5A mounting position (flange as IM B5R, shaft end as IM B5) with general overall dimensions equal to IM B5R mounting position (L dimension only changes).

6) For size 160M, BC dimension cannot be deduced anymore from BB and B dimensions, but it is 21 mm.



# BRAKE MOTORS MBF FRAME SIZE 63-160 IM B14, IM B5 MBF系列刹车电机63-160机座B14、B5安装尺寸

63 ... 160S



160 ... 200

Grand. motore Motor size	Main dimensions														Estremità d' albero Shaft end				Flangia - Flange					
	AC	AC <sub>1</sub>	AD	L	LB	LD	KK <sup>2)</sup>	R	R <sub>1</sub>	V	W	W <sub>1</sub>	Y	Z	D <sub>φ</sub> <sup>1)</sup>	E	F	GA	M <sub>φ</sub>	N <sub>φ</sub>	P <sub>φ</sub>	LA	S <sub>φ</sub>	T
63 B14	132	125	104	293	270	142	2 x M16	77	31	78	—	66	54	11 j6 M4	23	4	12,5	75	60 j6	90	8	M5	2,5	
B5								—											115	95 j6	140	10	9	3
71 B5R <sup>5)</sup>	150	140	114	340	317		2 x M20		52	98		68	66	14 j6 M5	30	5	16	85	70 j6	105	8	M6	2,5	
B14				334	304				39	85								130	110 j6	160	10	9	3,5	
B5																								
80 B5R <sup>5)</sup>	170	159	129	388	358	154		102	55	105			80	19 j6 M6	40	6	21,5	100	80 j6	120	8	M6	3	
B14				380	340			—	37	87								165	130 j6	200	12	11	3,5	
B5																								
90S B14				390										24 j6 M8	50	8	27	115	95 j6	140	10	M8	3	
B5																		165	130 j6	200	12	11	3,5	
90L B5R <sup>5)</sup>	190	179	144	420	380		2 x M25		42	93		71	91	19 j6 M6	40	6	21,5	115	95 j6	140	10	M8	3	
B14				430										24 j6 M8	50	8	27	115	95 j6	140	10	M8	3	
B5																		165	130 j6	200	12	11	3,5	
100, 112M ... MB B5R <sup>5)</sup>	212	199	152	497	447		4 x M25		66	97	40	84	120	28 j6 M10	60	8	31	130	110 j6	160	10	M8	3,5	
B14				485	425				44	75								215	180 j6	250	14	14	4	
B5																		130	110 j6	160	10	M8	3,5	
112MC B14				511	451													215	180 j6	250	14	14	4	
B5																								
132S, 132M B5R <sup>5)</sup>	268	253	195	633	573	206	4 x M32	116	75	109	45	100	152	38 k6 M12	80	10	41	165	130 j6	200	13	M10	3,5	
B14				624	544			—	46	80								265	230 j6	300	14	14	4	
B5																								
132MA...MC B5R <sup>5)</sup>				671	611				75	109				28 j6 M10	60	8	31	215	180 j6	250	14	14	4	
B14				662	582				46	80				38 k6 M12	80	10	41	165	130 j6	200	13	M10	3,5	
B5																		265	230 j6	300	14	14	4	
160S B5				727	617				81	115				42 k6 M16	110	12	45	300	250 h6	350	15	18	5	
160 B5R <sup>5)</sup>	314	295	258	775	695	180	M40 + M50	90	79	141	60	177	207	38 k6 M12	80	10	41	265	230 j6	300	14	14	4	
B5				805				127						42 k6 M16	110	12	45	300	250 h6	350	15	18	5	
180M B5														48 k6 M16		14	51,5							
180L B5	356	335	278	910	800				96	159			227											
200 B5R <sup>5)</sup>																								
B5														55m6 M20		16	59	350	300 h6	400				