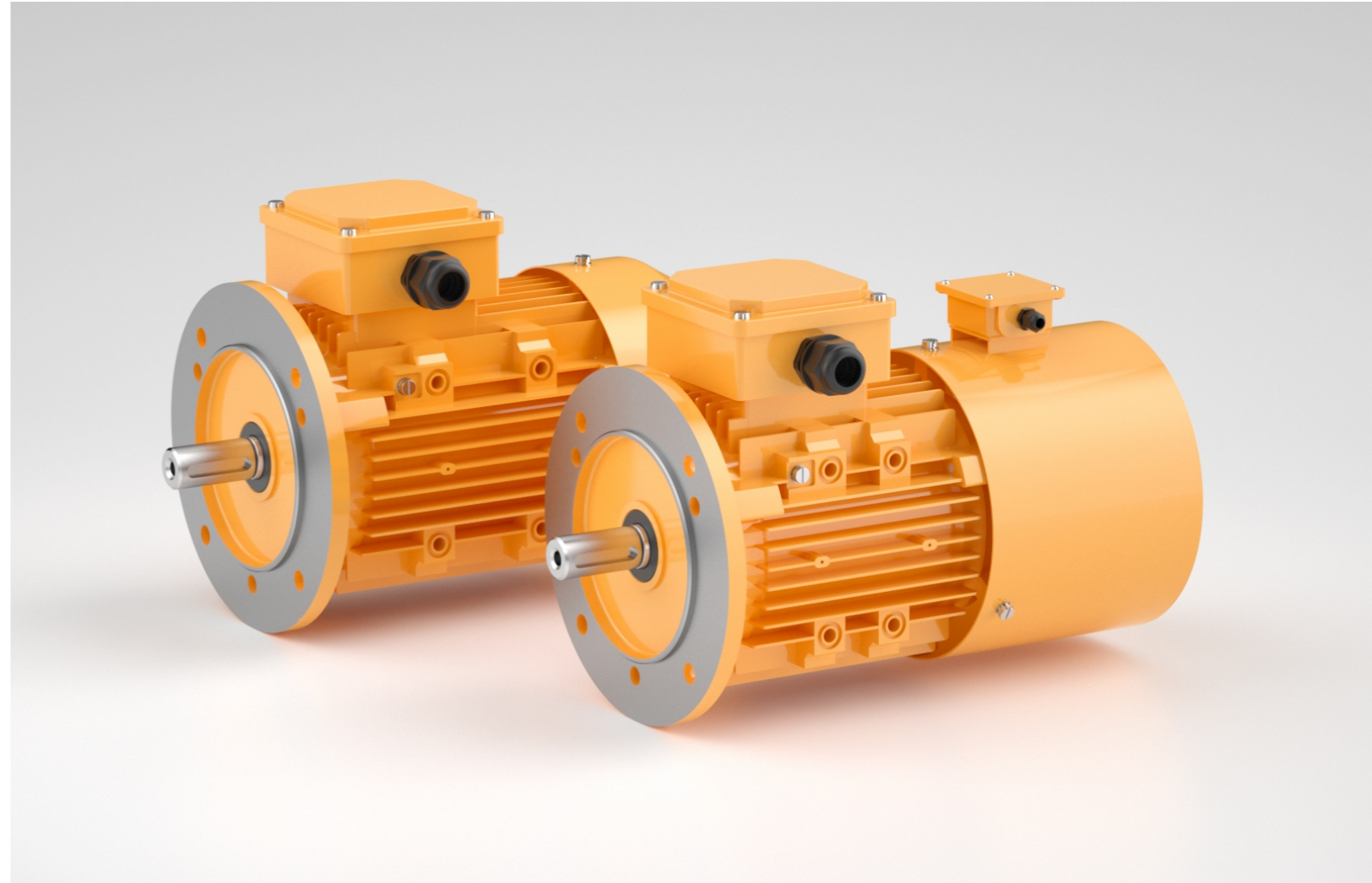


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星光电动机
STARSHINE ELECTRIC MOTOR

动静之间 · 唯简不凡



广东星光传动股份有限公司前身是一家创建于1965年的国有军工企业——国营星光工模具厂，公司在追求全体员工物质和精神双重幸福的同时，以行业领先的减变速机应用技术，驱动全球工业革新为使命，建设觉悟型组织，成为服务全球的幸福企业为愿景。

公司技术力量雄厚，现有员工420余人，其中工程技术人员40多名，和各种先进的加工制造和检测设备，依托省级工程技术研究中心、减速机产品试验室和现代化研发和生产基地，为高端减变速机产品的行业应用开发和服务提供了良好的发展基础。

公司主导产品有：NCJ系列齿轮减速机、R/S/K/F系列高精度齿轮减速机、RV系列蜗杆减速器、SNKG系列齿轮减速机、JWB-X系列机械无级变速器、B/JXJ系列摆线针轮减速机、SCK系列准双曲面齿轮减速机等七大系列产品可供选用，公司广泛服务于陶瓷、纺织、玻璃、木工、高压开关、食品饮料、包装印刷、仓储物流、起重运输等装备制造和应用行业，专为中高端用户提供专业的产品和服务。产品畅销国内，远销欧美、中东、东南亚等20多个国家和地区。

在未来的发展中，星光传动聚焦客户需求，提供有竞争力的传动解决方案，持续为客户创造价值，打造高端制造业和终端用户“替代进口、升级换代”的首选品牌！

动静之间，唯简不凡；携手同行，星光灿烂！

Guangdong Starshine Drive Co.,Ltd, the predecessor was a state-owned military mould enterprise which established in 1965. While pursuing the spiritual and material happiness of all employees, With the Mission" with industry-leading reduction and transmission technology to drive industrial renewal" and Vision" Build a conscious organization, become a happy enterprise serving the world".

Starshine has a strong technical force with over 400 employees at present, including over 40 engineering technicians, and kinds of advanced processing machines and testing equipment. Thanks to the Provincial Engineering Technology Research Center, the speed reducer product laboratory, the modern R&D and production base, that make Starshine has a good foundation to develop and service for high-end speed reducers.

Our main products include: helical geared motor, worm gearboxes, planetary gearboxes, speed variators, cycloidal gearboxes, helical-hypoid gearboxes, which widely used in ceramic industry, glass industry, woodworking machinery, high voltage switch, food & beverage, packaging & printing, Storage & logistics, hoisting & transportation facilities...etc, Starshine technically provide the professional product & service for the medium and high-end customers, and our gearboxes are best-selling in both domestic and abroad market, such as Europe, North America, South America, Middle East, South Asia, Southeast Asia, Africa...etc more than 20 countries and regions.

In future, Starshine will hold the business creed of "serving customer, diligence & simplicity, self-criticism, innovation, honesty, teamwork", and take "authenticity, altruism, openness, innovation, responsibility, collaboration" as core values. Focus on customers' requirements and provide them the competitive transmission solution and create value for them constantly, and create a preferred brand of replacing import products and upgrading continuously for the end users.

Between Dynamic and Static, Simple is Extraordinary, let's go forward hand in hand and make a brilliant future!

主要特点 Main Characteristics

星光电动机，产品具有外观美、低噪音、重量轻、覆盖IEC标准电机、制动电机、变频电机、NEMA电机等全系列产品。

星光电动机，通过完整产品策划与设计 and 全价值链精益生产最优方案实施，推进精益生产、建设智能工厂，实现研产供销服一体化，以满足客户对快速响应的需求。

星光电动机遵循模块化和最优化设计理念，全系列产品包括B3、B5、B35、B14等安装型式，同时支持独立风机、制动器、逆止器、编码器、变频器等的模块化组合与集成。

Starshine motors, products with beautiful appearance, low noise, light weight, covering IEC standard motor, brake motor, frequency conversion motor, NEMA motor and other products.

Starshine motors, through complete product planning and design and full value chain implementation of the optimal plan for lean production, lean production, construction of intelligent plant, to achieve research, production, supply and service integration, to meet customer demand for rapid response.

Starshine motors follow the modular and optimal design concept, the full range of products including B3, B5, B35, B14 and other installation types, at the same time to support independent fans, brakes, inverter, encoder, inverter and other modular combination and integration.

产品性能特点 Characteristic Features

输出功率和转矩 Output Power and Torque

选型表中列出的电机功率供选型使用。然而，与所要求的输出转速相对应的输出转矩在应用时是不可缺少的，并且必须要校核检查。The motor power listed in the selection table is for selection. However, the output torque corresponding to the required outputspeed is indispensable in application and must be checked.

速度 Speed

标出的电机的输出转速是参考值。实际输出速度与电机的负载和电源条件有关。The output speed of the motor marked is a reference value. The actual output speed is related to the motor load and powersupply conditions.

通风和检查 Ventilation

电机/制动电机安装是在轴向和径向应留有足够的空间，便于空气流通及制动器的维护。请参考相关电机尺寸表中的注释。The installation in the axial and radial should have enough spaces to facilitate the flow of air and maintenance. Please refer to the remarks in the motor dimensions.

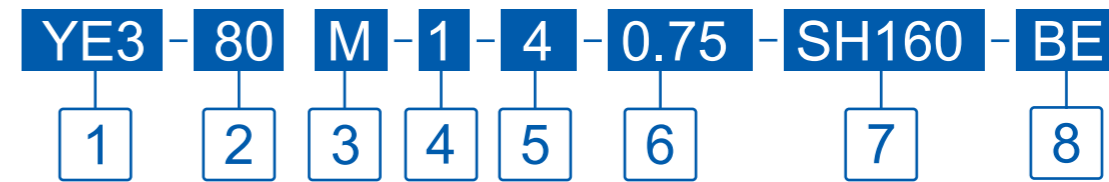
制动电机 Brake motor

根据要求星光传动电机可安装集成式机械制动器。请参考该文档的“制动器及其附件”章节。According to the requirements of Starshine Drive motor integrate mechanical brake. Please refer to the Starshine brake and its accessories manual.

变频控制 Frequency Control

YE3/YVF电机电机可以通过变频器控制。
YE3/YVF motor can be controlled by inverter.

型号说明 Model Designation



1	电机代号: XGY、YE3、YE4、YE5、YD、YVF、YEJ、YPEJ 等 Motor code: XGY、YE3、YE4、YE5、YD、YVF、YEJ、YPEJ and so on
2	中心高 Center height: 56、63、71、80、90、100、112、132、160、180、200
3	机座长 Frame length: S、M、L
4	铁芯长度: 1/2, 对应规格只有一个铁芯长度时不写 Core length: 1/2, Do not write when there is only one iron core degree for the corresponding specification.
5	电机极数 Motor poles: 2、4、6、8
6	额定功率 Rated output: 0.12kW-30kW
7	安装方式 Mounting arrangement: 标准电机: B3、B5、B35、V1、B14、B34等 Standard motor: B3、B5、B35、V1、B14、B34 and so on 无级直联电机: B5-JWB Variator direct-drive motor: B5-JWB 摆线针直联电机: 0#、1#、2#、3#; Cycloid pin wheel direct-drive motor: 0#、1#、2#、3#; NCJ系列直联电机: NCJ★-☆、SCK★-☆; NCJ Series direct-connected motors: NCJ★-☆、SCK★-☆; 四大系列直联电机: SH★ R/F/K/S Series direct-connected motors: SH★ 注: ★表示法兰号; ☆表示轴头直径。 Note: ★ indicates flange number; ☆ indicates shaft end diameter.
8	附件信息 Attachment Information: 电压 Voltage: 220V、380V、400V、415V、440V、460V 频率 Frequency: 50Hz、60Hz 绝缘等级 Insulation grade: B、F、H、C 防护等级 Protection level: IP54、IP55、IP56、IP66 制动器: BE(制动器为无手动释放)、HR(手柄释放制动器)、HF(螺钉释放制动器) Brake: BE(no handle release brake)、HR(handle release brake)、HF(screw release brake) 强制冷风扇: V(三相)、VS(单相)、VR(24V直流) Forced cooling fan: V(three-phase)、VS(single-phase)、VR(24V DC) 高惯量飞轮风扇: Z Additional flywheel Fan: Z 逆止器: RS Backstop: RS 热敏电阻保护装置: TF Thermistor protection device: TF 恒温器保护装置: TH Thermostat protection device: TH PT100温度传感器: PT PT100 temperature sensor: PT 编码器: E Encoder: E 防雨帽: C Protective cowl: C 无风叶: U No fan: U 双出轴: 2W Double output shaft of the motor: 2WE

注: 包含多个附件信息时, 按照表中上到下的顺序排列, 两附件信息之间用“-”隔开; 电压、频率、绝缘等级及防护等级的信息不需要体现在规格型号上。
Note: When multiple attachments are included, they are listed in the order from top to bottom of the table, and two attachments are separated by a “-”.

产品结构 Product Structure

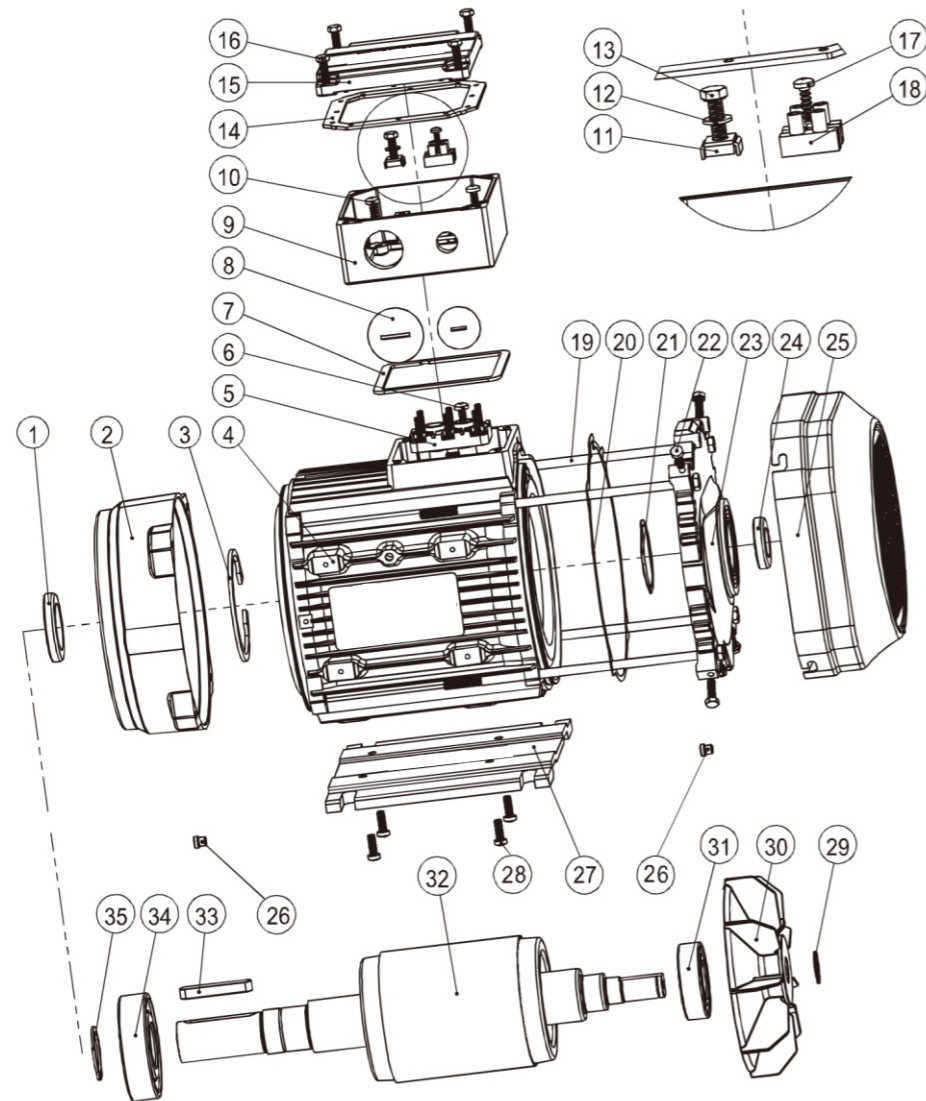


图3 / Chart 3

- | | | | | |
|----------------------------|------------------------------|---------------------------|------------------------|------------------------------|
| 1. 油封/Oil seal | 8. 出线孔盖/Hole cover of outley | 15. 螺栓/Bolt | 22. 螺栓/Bolt | 29. 轴用挡圈/Shaft with a collar |
| 2. A端盖/A endshield | 9. 接线盒座/Terminal box base | 16. 接线盒盖/Terminal box lid | 23. 后端盖/Rear endshield | 30. 风扇/Fan |
| 3. 孔用挡圈/Circlips for holes | 10. 螺钉/Screw | 17. 螺钉/Screw | 24. 油封/Oil seal | 31. 轴承/Bearing |
| 4. 定子/Stator | 11. 接地牌/Ground card | 18. 接线排/Wiring row | 25. 风罩/Fan cowl | 32. 转子/Rotor |
| 5. 接线板/Terminal board | 12. 垫圈/Washer | 19. 螺栓/Bolt | 26. 密封塞/Sealing plug | 33. 键/Key |
| 6. 螺钉/Screw | 13. 螺栓/Bolt | 20. 密封垫/Gasket | 27. 地脚/Feet | 34. 轴承/Bearing |
| 7. 密封胶垫/Gasket | 14. 密封胶垫/Gasket | 21. 波形弹簧/Wave washer | 28. 螺钉/Screw | 35. 轴用挡圈/Shaft with a collar |

选型说明 Selection Descriptoon

1. 星光传动电机产品选型表

使用工况:

应用行业: _____ 设备名称: _____
 环境温度: _____ 环境湿度: _____
 海拔高度: _____ 使用场地: 室内 室外
 起停频率: _____ 运行时间: _____
 负载时间: 15% 25% 40% 60% 75% 100%
 现用品牌: _____ 现用型号: _____
 存在问题: _____ 需改进项: _____

产品信息:

包装附件类:

包装材质: 纸箱 木箱 箱贴唛头: 中文 英文
 相关资料: 合格证 出厂检验报告 中文使用说明书 英文使用说明书
 附件清单: 空心轴编码器ES 实心轴编码器EV 热敏电阻TF 热保护开关TH 铂热电阻PT100
防雨罩C 电加热带STH

外观标识类:

油漆颜色: RAL7031 RAL7004 RAL5010 其他 _____
 铭牌要求: 中文 英文 防腐要求: 标准 JS1 JS2 JS3 JS4

安装尺寸类

电机类型: 普通 变频 制动 变频制动 安装形式: B3 B5 B35 B14
 接线盒角度: 0° 90° 180° 270° 出线位置: N 1 2 3 (见附图)

性能指标类:

额定功率: kW 极数: 2 4 6 8
 额定电压: 220/380V 380/660V 电机频率: 50Hz 60Hz 87Hz
 绝缘等级: F H 防护等级: IP54 IP55 IP56
 工作制: S1 S3-40% S3-75% 冷却方式: IC410 IC411 IC416
 能效等级: 3级 (IE3) 2级 (IE4) 旋转方向: 顺时针 逆时针

风机电压: DC 24V AC 220V (1~) AC 380V (3~) AC 220/380V (3~)

风机频率: 50Hz 60Hz

制动电压: DC 24V AC 220V AC 380V

释放装置: 手柄释放HR 螺钉释放HF 无 制动器响应: 普通 快速

释放装置与接线盒角度 (从轴伸端看顺时针): 0° 90° 180° 270° (见附图)

产品型号: _____

定制信息:

 包装附件类:
 外观标识类:
 安装尺寸类:
 性能指标类:
 售后服务类:

服务信息:

 售前服务:
 培训咨询: 选型培训 应用培训 使用维护
 设计选型: 参与设计 设计校核 产品选型
 需求确认: 工况确认 产品确认 服务确认
 售中服务: 驻厂全检 过程抽检 出厂检验
 售后服务: 安装调试 检测维护 备品备件

商务信息:

 运输方式:
 交付地点:
 交付时间:
 订单数量:
 结算价格:

附图:

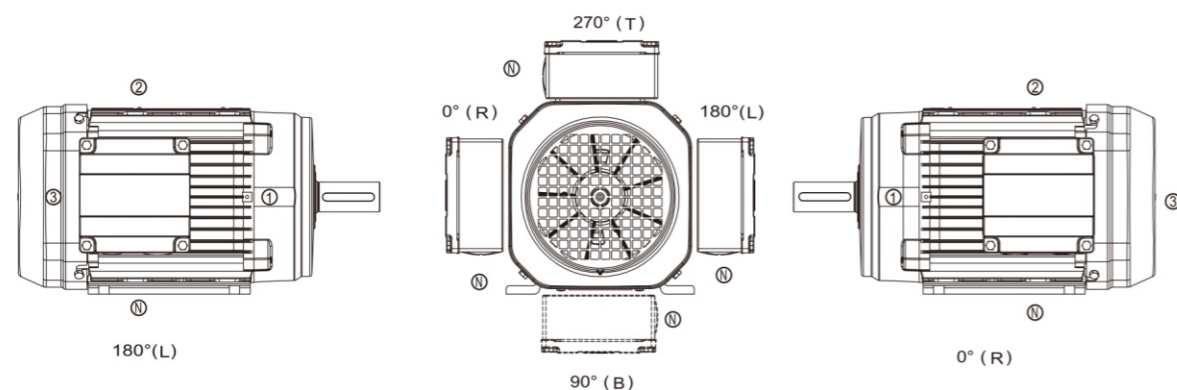
 接线盒角度:
 出线位置:


图4

Conditions of use:

Application industry:	Equipment name:
Ambient temperature:	Ambient humidity:
Altitude:	Site of use: <input type="checkbox"/> indoor <input type="checkbox"/> outdoor
Start-stop frequency:	Running time:
Load time: <input type="checkbox"/> 15% <input type="checkbox"/> 25% <input type="checkbox"/> 40% <input type="checkbox"/> 60% <input type="checkbox"/> 75% <input type="checkbox"/> 100%	
Current brand:	Current model:
Existing problem:	Items needing improvement:

Product information:
Packaging:

 Packaging material: Carton Wooden case Carton + Wooden case Case mark: Chinese English
 Relevant data: Certificate of conformity Ex-factory inspection report Chinese operating instruction
English operating instruction

 List of accessories: Backstop Hollow shaft encoder ES Solid shaft encoder EV Thermistor TF
Thermal protection switch TH Platinum thermal resistance PT100 Rain cover C
Electric heating tape STH

Appearance:

 Paint color: RAL7031 RAL7004 RAL5010 Other_____

 Nameplate requirement: Chinese English Anti-corrosive grade: Standard JS1 JS2 JS3 JS4

Installation:

 Motor Type: Normal Frequency Braking Frequency & braking Type of installation: B3 B5 B35 B14

 Terminal box angle: 0° 90° 180° 270° (see attached figure) Cable entry: N 1 2 3 (see attached figure)

Performance:

 Rated power: kW Pole number: 2 4 6 8

 Rated voltage: 220/380V 380/660V Motor frequency: 50Hz 60Hz 87Hz

 Insulation grade: F H Protection grade: IP54 IP55 IP56

 Working system: S1 S3-40% S3-75% Cooling mode: IC410 IC411 IC416

 Energy efficiency class: IE3 IE4

 Fan voltage: DC 24V AC 220V (1~) AC 380V (3~) AC 220/380V (3~)

 Fan frequency: 50Hz 60Hz

 Braking voltage: DC 24V AC 220V AC 380V

 Release device: Handle release HR Screw release HF None brake response: Ordinary Fast

 Angle between release device and terminal box (clockwise from the end of shaft extension): 0° 90° 180°

270° (see attached figure)

Product model: _____

Customized information: Packing category: Appearance class: Installation dimension: Performance indicators: After-sales service:
Service information: Pre-sales service: Training consulting: <input type="checkbox"/> Type selection training <input type="checkbox"/> Application training <input type="checkbox"/> Use and maintenance Design selection: <input type="checkbox"/> Participate in design <input type="checkbox"/> Design verification <input type="checkbox"/> Product selection Demand confirmation: <input type="checkbox"/> Working condition confirmation <input type="checkbox"/> Product confirmation <input type="checkbox"/> Service confirmation In-sales service: <input type="checkbox"/> On-site full inspection <input type="checkbox"/> Process sampling <input type="checkbox"/> Ex-factory inspection After-sales service: <input type="checkbox"/> Installation and commissioning <input type="checkbox"/> Testing and maintenance <input type="checkbox"/> Spare parts
Business information: Transportation: Delivery place: Delivery time: Order quantity: Settlement price:
Attached figure: Terminal box angle: Out of line position:

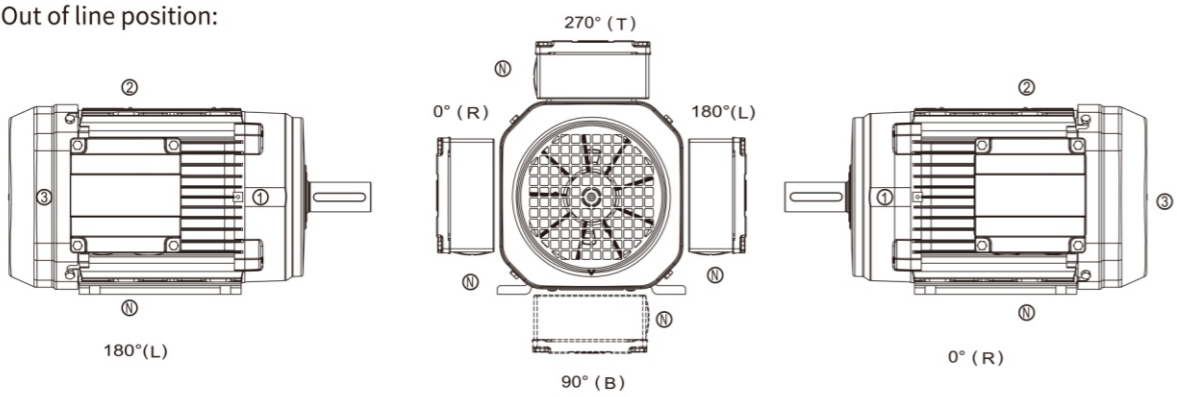


Chart 4

标准与规定 Standards and Regulations

电机执行标准 Execution standard

IEC 60034-1 EN 60034-1

旋转电机定额及性能/Rotating motor quota and performance IEC60034-2-1 EN60034-1

旋转电机通过试验测定旋转电机损耗和效率的标准方法

Standard Method for Determining Rotor Motor Loss and Efficiency by Rotating Motor IEC 60034-9

EN60034-9

旋转电机噪音限制/Rotating motor noise limits IEC60034-14 EN60034-14

旋转电机振动标准/Rotating motor vibration standard IEC 60034-30

旋转电机效率等级 IE3、IE4 等级/Rotary motor efficiency pole IE3、IE4

EN60529、IEC60034-5、EN60034-5

IP 防护等级/Degree of IP protection

额定数据 Rated data

三相异步电动机的具体数据/Three-phase asynchronous motor specific data

·规格/Type

·额定功率/Rated Output

·负载持续率/Cyclic Duration Factor

·额定转速/Rated Speed

·额定电流/Rated Current

·额定电压/Rated Voltage

·功率因数/Cos/Power Factor

·防护等级/Degree of Protection




·绝缘等级/Insulation Class.效率/Efficiency

以上数据在电机铭牌上标出。根据 IEC60034(EN60034) 此铭牌数据是针对环境温度最高在 40°C、海拔最高在 1000 米的情况。

The above data are marked on the motor nameplate. According to IEC 60034(EN 60034) this nameplate data is for ambient temperatures up to 40°C and elevations up to 1000 m above sea level.

星光电动机铭牌
Starshine motors nameplate

举例
Example

 星光传动 STARSHINE DRIVE		三三相异步电动机 THREE PHASE INDUCTION MOTOR			
型号/Type: YE3-90L-4		B5			
功率/P: 1.5 kW	效率/Eff.: IE3-85.3 %	工作制/Duty: S1			
电压/U: 380 V	功率因数/COSΦ: 0.78	绝缘等级/INS.: F			
频率/f: 50 Hz	防护等级: IP 55	编号/No.: XG250800001			
电流/I: 3.65 A	接法/CONN.: Y	重量/Wt: 21.5 kg			
转速/n: 1400 r/min	标准/STD: GB 18613-2020				
广东星光传动股份有限公司/GUANGDONG STARSHINE DRIVE CO.,LTD.					

偏差 Deviation

根据IEC60034(EN 60034)在额定电压时(或额定电压范围内)电机性能的偏差如下: According the IEC60034(EN60034)with the rated voltage(or range of rated voltage),the deviation of motor's performance is as:

表8 /Table 8

序号 serial number	电气性能名称 Electrical performance name	容差 Tolerance
1	效率 Efficiency 额定功率在30kW及以下 The rated power is 30kW and lower 额定功率在30kW以上 The rated power is over 30kW	-0.15(1-η) -0.10(1-η)
2	功率因数, cosφ Power factor cosφ	$-(1-\cos\phi)/6$ 最小绝对值0.02 最大绝对值0.07
3	转差率 Slip Pn<1kW Pn≥1kW	±30% ±20%
4	堵转转矩倍数 Locked rotor torque	保证值的-15% Protection value
5	最大转矩倍数 Maximum torque	保证值的-10% Protection value
6	堵转电流倍数 Locked rotor current multiple	保证值的+20% Protection value
7	转动惯量 Mass moment of inertia	±10%

偏差A, 偏差B Deviation A, Deviation B

偏差A和B区描述的允许偏差范围是在频率和电压允许偏离各自额定点的范围内, 下图描述了这个范围。原点“0”被视为频率和电压各自的额定点。

The bounds of allowable deviation characterized in the Deviations A zones and B zones are the bounds when frequencies and voltages are allowed to deviate from their respective fixed points, please refer to the following figure. The origin "O" is regarded as the respective fixed point of frequency and voltage

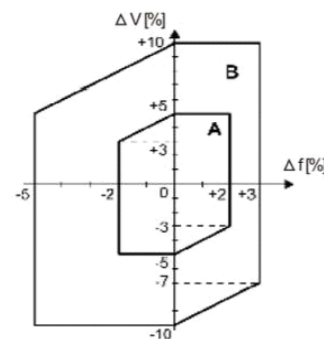


图5/Chart 5

在偏差A范围内, 电机必须能在连续工作制(S1)下输出额定扭矩。其它特性值和温升与额定频率、电压下的值稍有偏差。

在偏差B范围内, 电机在非连续工作制下能输出额定扭矩。温升及额定参数的偏离比A高时应尽量避免电机经常在偏差B范围内运行。In the range of deviation A, the motor must output rated torque in the continuous working (S1). Other characteristic value and temperature rise with the rated frequency, the voltage value have the slight deviation.

The motor can output the rated torque in the discontinuous working in the range of B. when the deviation of temperature rises and the rated parameter is higher than A, the motor should avoid to run in the range of deviation B.

欠电压 Undervoltage

如果出现欠电压或使用不适当的电机电缆, 功率、转矩和转速参数可能达不到样本中所列的数值, 特别是在电机启动时, 启动电流需要额定电流的数倍。

If there is an undervoltage or improper voltage, the motor power, torque and rotational speed parameters may not reach the values listed in the sample book, especially when the motor is started, the starting current is several times than the rated current.

电气性能 Electrical Performance

适用于变频控制 Apply to converter fed control.

星光电动机(制动)采用高性能绕组作为标准配置, 全部可用于变频器控制。Starshine series AC(brake) motors adapt high performance winding as standard configuration for the frequency conversion control.

频率 Frequency

根据需要星光传动的电动机设计为供电频率50Hz 或60Hz。标准设计为50Hz, 在电机参数表中的技术数据是基于供电频率50Hz。有些特殊的YE3 和YE4 电动机可以在50Hz 和60Hz 供电系统下运行。不同电气规则的地区可通用一种电机。

不同国家关于最低效率等级的规范可以用一种合理方法实现。

对于这类特殊电机, 请您联系星光传动公司。

According to the requirement, Starshine Drive motors are designed for 50Hz or 60Hz. 50Hz is the standard design. In the motor parameter table, some special YE3 and Ye4 motor can work on the 50Hz and 60Hz.

One type motor can be used universally in the area with different electricity regulation.

The different countries' different minimum efficiency grade regulations can be realized with an ideal method. About these special motors, please contact to Starshine Drive.

电机电压 Motor voltage

标准电机和能效电机均满足额定电压范围: 220V-690V。

额定功率在3kW 及以下的电机通常按照以下设计:

- 额定电压220VΔ/380VY 50Hz。Y接出厂。

额定功率在4kW 及以上的电机通常按照以下设计:

- 额定电压380VΔ/660VY 50Hz。Δ接出厂。

注: 电机电压使用范围在标准电压的±5%以内。(如220VΔ/380VY 50Hz可在210V~230VΔ/360V~400VY50Hz 范围内正常使用)

Standard motor and high efficiency motor can match rated voltage range: 220V-690V

The motor of 3kW and below will be designed as following:

The rated voltage 220VΔ/380VY 50Hz Y to leave the factory.

The motor of 4kW and above will be designed as following:

Rated voltage 380VΔ/660VY 50Hz Δ to leave the factory.

Remark: the application range of motor voltage is within the ±5%. (for example, 220VΔ/380VY 50Hz can be used within 210V-230VΔ/360V-400VY 50Hz)

强冷风机电压 Forced cooling fan

表9 /Table 9

电源类型 Power type	电源电压 Power voltage	电源频率 Power frequency
三相 Three phase	380VAC	50Hz
	380VAC	60Hz
单相 Single phase	220VAC	50Hz
	220VAC	60Hz

- 风机的外壳防护等级为IP54。

- 风机绝缘等级为F级, 其绕组温升不得超过80K (电阻法)。

- 风机的驱动电机绕组对地应承受历时1分钟的耐压试验而不击穿, 其试验频率为50HZ, 实际波形为正弦波, 电压有效值为1000V+2UN(V)。 (UN: 风机的额定电压)

- 风机的驱动电机绕组对机壳的绝缘电阻在常温下不低于20MΩ。

The IP grade of fan is Ip54

The insulation grade is F,the winding temperature can't rise over 80K(electric-resistivity method)

The coil of fan motor will not be broke down withstanding 1 minute breakdown test to the ground,the test

frequency is 50Hz,the actual waveform is sine wave,and the voltage effective value is 10002UN

(V),(UN:the rated voltage of fan)

Insulation resistance of the fan motor winding to the cover will not be lower than 20M in the normal temperature

制动器参数 Brake data

表10/Table 10

制动器电压: Brake voltage	电机功率4kW以下: 单相AC220V The motor power is lower than 4kW:220V 1~
	电机功率4kW以上(包括4kW):单相AC380V The motor power is over 4kW(include 4kw):380V 1~
整流方式: Mode rectification	半波整流 Half wave rectification
释放装置: Release mode	HR(手柄释放)HF(螺钉释放) HR(handle release)HF(screws release)

绝缘耐热性能 Insulation resistance

根据 (IEC60034-1) 划分的温升等级

所有三相异步(制动)电机是以绝缘等级155(F)级作为设计标准, 根据要求也可采用绝缘等级180(H)级。

下表列出了符合IEC62114 和IEC60034-1(EN60034-1) 要求的温升。

According to the IEC60034-1 temperature rise classification.

All three phase asynchronous motors are based on the insulation level 155(F)as the design standard,and can also be compliant to requirements of the insulation class 180(H).The following table lists the temperature rise in accordance with the requirements of IEC62114 and IEC60034.

表11/Table 11

绝缘等级 Insulation class		绝缘等级 Insulation class
新/New	旧/Old	
155	F	105K
180	H	125K

功率减小 Power Reduction

电机的额定功率Pn取决于环境温度和安装海拔高度。铭牌上的额定功率对应海拔1000m 以下和40℃以内的环境温度。

如果环境温度更高或安装海拔高度更高, 电机额定功率将相应减小, 可用下列公式修正:

The rated power of the motor P depends on the ambient temperature and installation elevation.The normal rated power on the nameplate is measured with condition below 1000m above sea level and the temperature less than 40 degrees.

If the ambient temperature is higher or the installation elevation is higher,the motor rated power will be reduced accordingly.

$$P_{Nred} = p_n \times f_T \times f_H$$

交流电机 AC motor

下表显示了由环境温度和海拔高度变化而引起的功率调整变化。表中对于交流电机列出了系数和:

The following table shows the power regulation variation caused by changes in ambient temperature and altitude. Tables for AC motors are listed in the coefficients and the definition of work in IEC60034 is as follows:

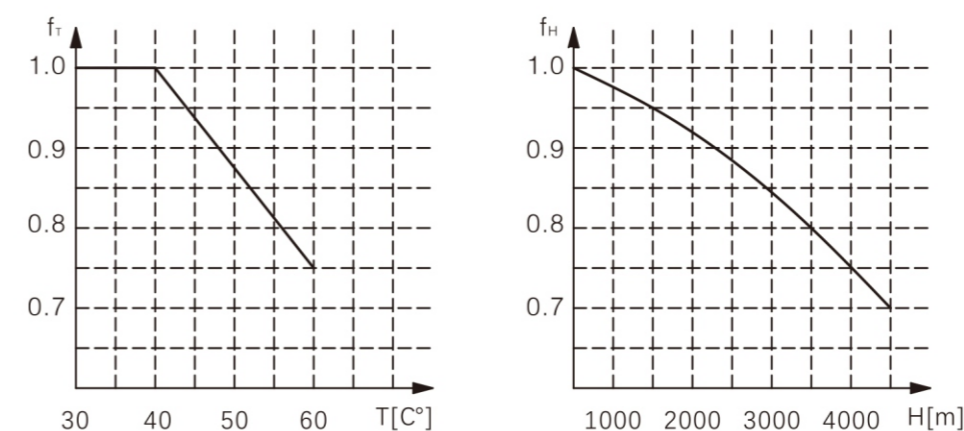


图6/Chart 6


T=环境温度/Ambient temperature

H=海拔高度/Altitude

工作制 Duty cycle

IEC 60034-1 (EN 60034-1) 中定义的工作制如下:

表12/Table 12

工作制 Duty cycle	注释 Annotations
S1	连续工作制: 恒定负荷下运行, 电机达到热稳定状态。 Continuous Duty cycle: Stable operation under constant load.
S2	短时运行工作制: 在规定的有限时间内恒载运行, 随后停机直至电机恢复到环境温度。 Short-time Duty cycle: The motor operates in a limited period of time and then stops until the motor returns to the ambient temperature.
S3	断续周期工作制: 启动过程对温升无影响。按一系列相同的工作周期运行。每一周期包括一段恒定负载时间和停转时间, 以“负载持续率(cdf)”%表征。 Intermittent working system: Motor start-up process has no effect on temperature rise. Each cycle consists of a constant load time and a stop time, expressed in cdf%
S4-S10	断续周期工作制: 启动过程对温升有影响, 运行由一系列相同周期构成, 每个周期内包括恒载段和暂停段。可用“负载持续率(cdf)”%和每小时起停次数来描述。 Intermittent working system: The starting process of motor has influence on temperature rise. The motor operates in a series of identical operating cycles. Each cycle includes a period of constant load and stop time, expressed in cdf%
	提示/Remark
	对于变频器控制S1工作制通常是假定的; 对于每小时很多次循环周期的工况, 必须按S9断续周期工作制考虑。 For the inverter control S1, the operating system is usually assumed. For numerous cycle per hour of the working conditions, it must be in accordance with the S9 cycle system.

50Hz电机用于60Hz电源 50Hz motor can be used to 60Hz power.

设计用50Hz 电源的电机在60Hz 电源运行时额定数据稍有变化。

When the motor with 50Hz power is used in the 60Hz power, the rated data changes slightly.

表13/Table 13

50Hz电机电压 50Hz motor voltage	电机连接方式 Motor connection	60Hz电压 60Hz voltage U[V]	额定数据修正值 Rated data correction value			
			n_N	P_N	M_N	M_A/M_N
AC220/380V/△/△	△	220	+20%	0%	-17%	-17%
AC220/380V/△/△	△	440	+20%	+20%	0%	0%
AC380/660V/△/△	△					

如果您想将50Hz电机用于60Hz电源请联系星光传动。

If you want to use the 50Hz motor for 60Hz power supply please contact Starshine Drive.

起动频率 Start frequency

通常电机是根据其热载荷设计，许多情况下电机按S1 工作制运行 (S1= 连续工作制=100% CDF)。根据负载转矩计算出的功率应等于该电机额定功率。

Usually motor is designed according to the thermal load, in many cases the motor according to S1 work system (S1=continuously work system=100% CDF). Power should be calculated according to the load torque should be equal to the rated power of the motor.

高起动频率 High frequency starting

常遇到采用高起动频率驱动设备如：行走驱动设备。这种情况下选择电机的决定性因素不是所需功率而是电机起 动次数。电机每次接通产生高起动电流导致电机温升过高。如果电机产生的热量大于通风系统排放的热量，绕组 将过热烧毁。提供电机承受热载荷的能力可以通过选择适当的绝缘等级或采用强制冷风扇。

Often use high frequency starting drive equipment such as: walking drive equipment. Under this circumstance, the decisive factor of choosing the motor is the starting times, not the required power. Every time the motor with a high starting current leads to temperature rise too high. If the heat generated by the motor emission of heat winding is greater than the ventilation system, it will overheat and damage. Under thermal load capacity can provide motor through selecting proper insulation class or using the forced air cooling fan.

空载起动频率 Z_0 . No-load start frequency Z_0 .

星光传动规定电机的许用起动频率为50% CDF (负载持续率) 时的空载起动频率 Z_0 。 Z_0 表示在50% CDF 时且没有反向转矩 情况下，每小时允许电机将其转子的转动惯量加速至所需转速的次数。如果加速时有附加转动惯量或存在一个额外的 负载转矩，电机的起动时间将增加。这说明电机由于热载荷增大而允许的起动频率降低。

Starshine Drive stipulate allowable start frequency of the motor is 50% the CDF (duty cycle) at the time of the no-load speed start frequency Z_0 , Z_0 said at 50% CDF and without anti-torque the allowance times of motor moment of inertia of the rotor speed from to the number of rotation per hour. Speed up to see if there are additional rotational inertia or there is an additional load torque of the motor starting time will increase. This suggests that due to the heat load the motor allows less starting frequency.

星光电动机的保护装置 Motor Protective Device

起停操作 Start-stop operation

如果电机在起停转换操作时必须对开关装置采取适当的抗干扰措施。

If the motor is in start-stop operation, it must take appropriate Anti-interference measures.

电机的保护 Motor protection

选择正确的保护装置是确保电机安全运行的重要因素。电流保护和电机温度保护是有区别的，电流保护装置包括熔断器或电机断路器。

温度保护装置包括绕组中的PTC 热敏电阻或TH 双金属片开关(thermostats) 当达到绕组的最大许用温度时PTC 热敏电阻或双金属片开关就会动作。其特点就是直接检测设定的温度。

Right rotating protection device is an important factor to ensure the safe operation of the motor. Motor protection and motor temperature protection are different, as the motor protection device comprises a fuse or a motor circuit breaker.

The temperature protection device comprises a PTC thermistor or a bimetal switch in the winding (thermostats). When the maximum permissible temperature of the winding is reached, the PTC thermistor or bimetal switch will act. It is characterized by the direct detection of the set temperature.

电机保护开关 Motor protective switch

通常电机在起动频率低，起动时间短，起动电流小的工作模式下，其断路器可提供充分的过载保护。电机断路器一般设置在电机的额定电流值。在起动频率(>60次/小时)和高起动惯量场合，仅依靠电机断路器来提供保护是不够的。在这种情况下我们推荐使用(PTC) 热敏电阻保护器TF。

Usually the motor can provide sufficient overload protection when the starting frequency is low and the starting time is short and the starting current is small. Motor short circuit is generally set in the motor rated current value. It is not enough to rely solely on the motor circuit breaker to provide protection at the starting frequency (>60/h) and the high starting inertia. In this case, we recommend the use of (PTC) thermistor protection TF.

TF PTC热敏电阻 TF PTC Thermistor

3个(PTC) 热敏电阻TF(PTC 特性曲线参看DIN 44080)串联在电机内并从接线盒连至变频器的TF/TH输入端或是开关柜内的继电器上。用(PTC) 热敏电阻保护器可为电机提供全面的过热保护。采取这种保护装置，电机可用于高惯量起动转换制动运行和不稳定的供电系统。通常电机断路器也和TF一起配合作用。当用变频器控制时星光建议电机上加装TF。

3(PTC) thermistor TF (PTC characteristic curve see DIN 44080) series are connected in the motor and from the junction box connected to the input of the inverter TF/TH or switch cabinet on the relay. With (PTC) thermistor protection for the motor to provide full protection against overheating. The motor can be used for high inertia starting braking operation and unstable power supply system. Usually motor circuit breaker and TF work together. When using the inverter control Starshine recommend motor installed on the TF.

TH双金属片保护开关 TH bimetallic protection switch

3个双金属片开关TH 串联在电机绕组内并直接从接线盒连至电机检测电路中。

The three bimetallic switch sheets TH are connected in series within the motor windings and directly from the wiring to the motor detection circuit.

触发温度 Trigger temperature

电机的热保护是通过埋在电机绕组里的TF热敏电阻或TH 双金属片开关来实现的。触发温度比电机绝缘等级所能达到的最高保护值要略低一点。TF热敏电阻和TH双金属片开关的触发温度如下表：

The thermal protection of the motor is realized by burying the TF thermistor or TH bimetal switch in the motor winding. The trigger temperature is a little lower than the highest temperature of the motor insulation grade. The trigger temperature of TF thermistor and TH bimetal switch is as follows:

表14 /Table 14

绝缘等级 Insulation Level	触发温度/Trigger temperature TF的额定响应温度/Rated response time of TF TH的额定开关温度/TH rated switching temperature
155(F)	150°
180(H)	170°

电感性绕组的安全转换 Safe conversion of inductive winding

注意以下电感性转换。

Note the following inductive conversion

低速电机绕组转换 Low speed motor winding conversion

如果电缆布线不当，低速电机绕组转换时产生峰值电压。这种峰值电压可以损坏绕组和触点。为了避免这种情况，可以将连接导线与压敏电阻连在一起。

If the cable is not suitable wiring, peak voltage will happen during the low speed motor winding conversion. This peak voltage can damage the windings and contacts. In order to avoid this situation, the connecting wire can be connected with the varistor.

制动线圈的开关 Brake coil switch

盘式制动器直流电路的开关可产生过电压，必须用压敏电阻来消除这种危害。星光制动控制系统标准配置中包含压敏电阻。Disc brake DC circuit switch can produce over voltage, it must be used to eliminate this hazard. The standard configuration of the Starshine brake control system includes a varistor.

开关装置上的保护电路 Protection circuit for switching device

为保护数字或程序逻辑控制器、电机绕组必须要抑制电磁干扰。我们建议在开关装置上安装保护电路以免使电子设备遭到破坏。

In order to protect the digital or program logic controller, the motor winding must suppress the electromagnetic interference. It is recommended that the protective circuit should be installed on the switchgear to avoid damage to the electronic equipment.

变频控制 Frequency control

请根据变频器制造商提供的安装操作说明来进行变频操作。

According to the installation instructions provided by the frequency converter manufacturer for frequency conversion operation.

变频器控制下的制动电机 Frequency conversion motor controlled by frequency converter

制动电机的制动电缆布线应与其它电源电缆分开，并保持至少200mm的距离。除非制动电缆或电源电缆是带屏蔽的才允许共同布线。

Brake motor cable wiring should be separated from other power cables and maintained at least 200mm distance. Common wiring is allowed unless the brake cable or power cable is shielded.

变频器控制测速器的联接 Inverter control the speed of the connection

在联接测速器时请按照以下说明进行

- 只准使用带屏蔽的双绞线电缆。
- 屏蔽两端都通过大的接触面连至PE点位上。
- 信号电缆布线应与电源电缆或制动电缆分开(最短距离为200mm)。

In conjunction with the speedometer,

- Please follow the instructions below.
- Both ends of the shield are connected to the PE point through a large contact surface.
- The signal cable wiring should be separated from the power cable or the brake cable (the shortest distance is 200mm).

变频器控制下热敏电阻保护器(TF)的联接

The connection of thermistor protector (TF) under the control of frequency converter

PTC热敏电阻保护器TF的联接电缆布线应与电源电缆分开，并保持至少200mm的距离。除非TF联接电缆和电源电缆带屏蔽才允许共同布线。

The connection cable wiring of the PTC thermistor protector TF shall be separated from the power cable and maintained at least 200mm distance. Common wiring is not allowed unless the TF connection cable and the power band shield.

技术参数 Technical Parameter

YE3系列, 3级能效 (GB18613-2020)

YE3 series, grade 3 energy efficiency (GB18613-2020)

型号 Type	额定功率 Rated Output		额定转速 Rated Speed rpm	效率 Efficiency η% (Ie3)	效率 75%负载 Efficiency at 75% load	效率 50%负载 Efficiency at 50% load	功率因数 Power factor cos φ	额定电流 Rated current A			额定转矩 Rated Torque Nm	堵转转矩 堵转转矩 Ts/Tn	最大转矩 额定转矩 Tmax/Tn	堵转电流 额定电流 Is/In	重量 Weight kg
	kW	HP						380V	400V	415V					
同步转速 synchronous speed 3000rpm,380V 50Hz 2P															
YE3-63M1-2	0.18	0.25	2730	65.9	65.9	64.6	0.80	0.52	0.49	0.47	0.63	2.2	2.2	5.5	6.1
YE3-63M2-2	0.25	0.37	2730	69.7	69.7	68.3	0.81	0.67	0.64	0.62	0.87	2.2	2.2	5.5	6.4
YE3-71M1-2	0.37	0.5	2750	73.8	73.8	72.3	0.81	0.94	0.89	0.86	1.28	2.2	2.2	6.1	6.8
YE3-71M2-2	0.55	0.75	2750	77.8	77.8	76.2	0.82	1.31	1.24	1.20	1.91	2.3	2.3	6.1	7.9
YE3-80M1-2	0.75	1	2880	80.7	80.7	79.1	0.82	1.72	1.64	1.58	2.49	2.3	2.3	7.0	8.8
YE3-80M2-2	1.1	1.5	2880	82.7	82.7	81.0	0.83	2.43	2.31	2.23	3.65	2.2	2.3	7.3	9
YE3-90S-2	1.5	2	2895	84.2	84.2	82.5	0.84	3.22	3.06	2.95	4.95	2.2	2.3	7.6	13.5
YE3-90L-2	2.2	3	2895	85.9	85.9	84.2	0.85	4.58	4.35	4.19	7.26	2.2	2.3	7.6	17
YE3-100L-2	3	4	2895	87.1	87.1	85.4	0.87	6.02	5.71	5.51	9.90	2.2	2.3	7.8	23.2
YE3-112M-2	4	5.5	2905	88.1	88.1	86.3	0.88	7.84	7.45	7.18	13.1	2.2	2.3	8.3	40
YE3-132S1-2	5.5	7.5	2930	89.2	89.2	87.4	0.88	10.6	10.1	9.75	17.9	2.0	2.3	8.3	42
YE3-132S2-2	7.5	10	2930	90.1	90.1	88.3	0.88	14.4	13.7	13.2	24.4	2.0	2.3	7.9	48
YE3-160M1-2	11	15	2945	91.2	91.2	89.4	0.89	20.6	19.6	18.9	35.7	2.0	2.3	8.1	113
YE3-160M2-2	15	20	2945	91.9	91.9	90.1	0.89	27.9	26.5	25.5	48.6	2.0	2.3	8.1	123
YE3-160L-2	18.5	25	2940	92.4	92.4	90.6	0.89	34.2	32.5	31.3	60.1	2.0	2.3	8.2	142
YE3-180M2-2	22	30	2955	92.7	92.7	90.8	0.89	40.5	38.5	37.1	71.1	2.0	2.3	8.2	182
YE3-200L1-2	30	40	2960	93.3	93.3	91.4	0.89	54.9	52.1	50.3	96.8	2.0	2.3	7.6	246
同步转速 synchronous speed 1500rpm, 380V 50Hz 4P															
YE3-63M1-4	0.12	0.18	1320	64.8	64.8	63.5	0.72	0.39	0.37	0.36	0.87	2.1	2.2	4.4	4.8
YE3-63M2-4	0.18	0.25	1320	69.9	69.9	68.5	0.73	0.54	0.51	0.49	1.30	2.1	2.2	4.4	5.3
YE3-71M1-4	0.25	0.37	1340	73.5	73.5	72.0	0.74	0.70	0.66	0.64	1.78	2.1	2.2	5.2	6.8
YE3-71M2-4	0.37	0.5	1340	77.3	77.3	75.8	0.75	0.97	0.92	0.89	2.64	2.1	2.2	5.2	7.7
YE3-80M1-4	0.55	0.75	1400	80.8	80.8	79.2	0.75	1.38	1.31	1.26	3.75	2.4	2.3	5.2	9.1
YE3-80M2-4	0.75	1	1420	82.5	82.5	80.9	0.75	1.84	1.75	1.69	5.04	2.3	2.3	6.6	11.1
YE3-90S-4	1.1	1.5	1445	84.1	84.1	82.4	0.76	2.61	2.48	2.39	7.27	2.3	2.3	6.8	15
YE3-90L-4	1.5	2	1445	85.3	85.3	83.6	0.77	3.47	3.3	3.18	9.91	2.3	2.3	7.0	19
YE3-100L1-4	2.2	3	1450	86.7	86.7	85.0	0.81	4.76	4.52	4.36	14.6	2.3	2.3	7.6	25.4
YE3-100L2-4	3	4	1450	87.7	87.7	85.9	0.82	6.34	6.02	5.8	20.0	2.3	2.3	7.6	30.5
YE3-112M-4	4	5.5	1450	88.6	88.6	86.8	0.82	8.37	7.95	7.66	26.5	2.2	2.3	7.8	37
YE3-132S-4	5.5	7.5	1460	89.6	89.6	87.8	0.83	11.2	10.7	10.3	36.0	2.0	2.3	7.9	48.5
YE3-132M-4	7.5	10	1460	90.4	90.4	88.6	0.84	15.0	14.3	13.7	49.1	2.0	2.3	7.5	60
YE3-160M-4	11	15	1465	91.4	91.4	89.6	0.85	21.5	20.4	19.7	71.7	2.2	2.3	7.7	121
YE3-160L-4	15	20	1465	92.1	92.1	90.3	0.86	28.8	27.3	26.3	97.8	2.2	2.3	7.8	142
YE3-180M-4	18.5	25	1470	92.6	92.6	90.7	0.86	35.3	33.5	32.3	120.2	2.0	2.3	7.8	181
YE3-180L-4	22	30	1470	93	93	91.1	0.86	41.8	39.7	38.3	142.9	2.0	2.3	7.8	209
YE3-200L-4	30	40	1475	93.6	93.6	91.7	0.86	56.6	53.8	51.8	194.2	2.0	2.3	7.3	284
同步转速 synchronous speed 1000rpm,380V 50Hz 6P															
YE3-63M2-6	0.12	0.18	855	57.7	57.7	56.5	0.6	0.53	0.50	0.48	1.34	1.8	1.9	3.5	6.2
YE3-71M1-6	0.18	0.25	855	63.9	63.9	62.6	0.66	0.65	0.62	0.59	2.01	1.9	2	4.0	9.3
YE3-71M2-6	0.25	0.37	855	68.6	68.6	67.2	0.68	0.81	0.77	0.75	2.79	1.9	2	4.0	9.7
YE3-80M1-6	0.37	0.5	890	73.5	73.5	72	0.7	1.09	1.04	1	3.97	1.9	2	4.7	12.2
YE3-80M2-6	0.55	0.75	890	77.2	77.2	75.7	0.72	1.50	1.43	1.38	5.90	1.9	2.1	4.7	13.2
YE3-90S-6	0.75	1	935	78.9	78.9	77.3	0.71	2.03	1.93	1.86	7.66	2.0	2.1	6.0	14
YE3-90L-6	1.1	1.5	945	81.0	81.0	79.4	0.73	2.83	2.69	2.59	11.1	2.0	2.1	6.0	18
YE3-100L-6	1.5	2	949	82.5	82.5	80.9	0.73	3.78	3.59	3.47	15.1	2.0	2.1	6.5	29.5
YE3-112M-6	2.2	3	955	84.3	84.3	82.6	0.74	5.36	5.09	4.91	22.0	2.0	2.1	6.6	32
YE3-132S-6	3	4	968	85.6	85.6	83.9	0.74	7.20	6.84	6.59	29.6	2.0	2.1	6.8	43
YE3-132M1-6	4	5.5	968	86.8	86.8	85.1	0.74	9.46	8.99	8.66	39.5	2.0	2.1	6.8	49
YE3-132M2-6	5.5	7.5	968	88	88	86.2	0.75	12.7	12.0	11.6	54.3	2.0	2.1	7.0	59
YE3-160M-6	7.5	10	970	89.1	89.1	87.3	0.79	16.2	15.4	14.8	73.8	2.0	2.1	7.0	112
YE3-160L-6	11	15	970	90.3	90.3	88.5	0.8	23.1	22.0	21.2	108.3	2.0	2.1	7.2	134
YE3-180L-6	15	20	978	91.2	91.2	89.4	0.81	30.9	29.3	28.2	146.5	2.0	2.1	7.3	197
YE3-200L1-6	18.5	25	980	91.7	91.7	89.9	0.81	37.8	35.9	34.7	180.3	2.0	2.1	7.3	234
YE3-200L2-6	22	30	980	92.2	92.2	90.4	0.81	44.8	42.5	41.0	214.4	2.0	2.1	7.4	251

注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

Note: In the white bottom part of the table, the motor casing is made of aluminum; in the gray bottom part, the motor casing is made of iron.

技术参数 Technical Parameter

YE4系列, 2级能效 (GB18613-2020)
 YE4 series, grade 2 energy efficiency (GB18613-2020)

型号 Type	额定功率 Rated Output		额定转速 Rated Speed rpm	效率 Efficiency η% (Ie3)	效率 75%负载 Efficiency at 75% load	效率 50%负载 Efficiency at 50% load	功率因数 Power factor cos φ	额定电流 Rated current A			额定转矩 Rated Torque Nm	堵转转矩 堵转转矩 Ts/Tn	最大转矩 额定转矩 Tmax/Tn	堵转电流 额定电流 Is/In	重量 Weight kg
	kW	HP						380V	400V	415V					
同步转速synchronous speed 3000rpm,380V 50Hz 2P															
YE4-63M1-2	0.18	0.25	2745	70.8	70.8	69.4	0.80	0.48	0.46	0.44	0.63	2.2	2.2	5.5	6.5
YE4-63M2-2	0.25	0.37	2745	74.3	74.3	72.8	0.81	0.63	0.60	0.58	0.87	2.2	2.2	5.5	6.8
YE4-71M1-2	0.37	0.5	2765	78.1	78.1	76.5	0.81	0.89	0.84	0.81	1.28	2.2	2.2	6.1	7.3
YE4-71M2-2	0.55	0.75	2765	81.5	81.5	79.9	0.82	1.25	1.19	1.14	1.90	2.3	2.3	6.1	8.5
YE4-80M1-2	0.75	1	2910	83.5	83.5	81.8	0.82	1.66	1.58	1.52	2.46	2.3	2.3	7.0	11
YE4-80M2-2	1.1	1.5	2920	85.2	85.2	83.5	0.83	2.36	2.25	2.16	3.60	2.2	2.3	7.3	11.6
YE4-90S-2	1.5	2	2930	86.5	86.5	84.8	0.84	3.14	2.98	2.87	4.89	2.2	2.3	7.6	16
YE4-90L-2	2.2	3	2930	88.0	88.0	86.2	0.85	4.47	4.25	4.09	7.17	2.2	2.3	7.6	20.6
YE4-100L-2	3	4	2935	89.1	89.1	87.3	0.87	5.88	5.59	5.38	9.76	2.2	2.3	7.8	23.7
YE4-112M-2	4	5.5	2940	90.0	90.0	88.2	0.88	7.67	7.29	7.03	13.0	2.2	2.3	8.3	42
YE4-132S1-2	5.5	7.5	2945	90.9	90.9	89.1	0.88	10.4	9.9	9.57	17.8	2.0	2.3	8.3	46
YE4-132S2-2	7.5	10	2950	91.7	91.7	89.9	0.88	14.1	13.4	12.9	24.3	2.0	2.3	7.9	52
YE4-160M1-2	11	15	2960	92.6	92.6	90.7	0.89	20.3	19.3	18.6	35.5	2.0	2.3	8.1	133
YE4-160M2-2	15	20	2960	93.3	93.3	91.4	0.89	27.4	26.1	25.1	48.4	2.0	2.3	8.1	146
YE4-160L-2	18.5	25	2960	93.7	93.7	91.8	0.89	33.7	32.0	30.9	59.7	2.0	2.3	8.2	160
YE4-180M-2	22	30	2965	94.0	94.0	92.1	0.89	40.0	38.0	36.6	70.9	2.0	2.3	8.2	221
YE3-200L1-2	30	40	2970	94.5	94.5	92.6	0.89	54.2	51.5	49.6	96.5	2.0	2.3	7.6	260
同步转速synchronous speed 1500rpm, 380V 50Hz 4P															
YE4-63M1-4	0.12	0.18	1340	69.8	69.8	68.4	0.72	0.36	0.34	0.33	0.86	2.1	2.2	4.4	5.2
YE4-63M2-4	0.18	0.25	1340	74.7	74.7	73.2	0.73	0.50	0.48	0.46	1.28	2.1	2.2	4.4	5.8
YE4-71M1-4	0.25	0.37	1355	77.9	77.9	76.3	0.74	0.66	0.63	0.6	1.76	2.1	2.2	5.2	7.2
YE4-71M2-4	0.37	0.5	1355	81.1	81.1	79.5	0.75	0.92	0.88	0.85	2.61	2.1	2.2	5.2	8.2
YE4-80M1-4	0.55	0.75	1420	83.9	83.9	82.2	0.75	1.33	1.26	1.22	3.70	2.4	2.3	5.2	10
YE4-80M2-4	0.75	1	1430	85.7	85.7	84.0	0.75	1.77	1.68	1.62	5.01	2.3	2.3	6.6	12.9
YE4-90S-4	1.1	1.5	1445	87.2	87.2	85.5	0.76	2.52	2.40	2.31	7.27	2.3	2.3	6.8	16.8
YE4-90L-4	1.5	2	1450	88.2	88.2	86.4	0.77	3.36	3.19	3.07	9.88	2.3	2.3	7.0	19.7
YE4-100L1-4	2.2	3	1455	89.5	89.5	87.7	0.81	4.61	4.38	4.22	14.4	2.3	2.3	7.6	25.5
YE4-100L2-4	3	4	1455	90.4	90.4	88.6	0.82	6.15	5.84	5.63	19.7	2.3	2.3	7.6	31.3
YE4-112M-4	4	5.5	1460	91.1	91.1	89.3	0.82	8.14	7.73	7.45	26.2	2.2	2.3	7.8	39.2
YE4-132S-4	5.5	7.5	1470	91.9	91.9	90.1	0.83	11.0	10.4	10.0	35.7	2.0	2.3	7.9	51.2
YE4-132M-4	7.5	10	1470	92.6	92.6	90.7	0.84	14.6	13.9	13.4	48.7	2.0	2.3	7.5	65
YE4-160M-4	11	15	1475	93.3	93.3	91.4	0.85	21.1	20.0	19.3	71.2	2.2	2.3	7.7	146
YE4-160L-4	15	20	1475	93.9	93.9	92.0	0.86	28.2	26.8	25.8	97.1	2.2	2.3	7.8	156
YE4-180M-4	18.5	25	1480	94.2	94.2	92.3	0.86	34.7	33.0	31.8	119.4	2.0	2.3	7.8	181
YE4-180L-4	22	30	1480	94.5	94.5	92.6	0.86	41.1	39.1	37.7	142.0	2.0	2.3	7.8	209
YE4-200L-4	30	40	1480	94.9	94.9	93.0	0.86	55.8	53.1	51.1	193.6	2.0	2.3	7.3	280
同步转速synchronous speed 1000rpm,380V 50Hz 6P															
YE4-63M2-6	0.12	0.18	860	64.9	64.9	63.6	0.60	0.47	0.44	0.43	1.33	1.8	1.9	3.5	6.5
YE4-71M1-6	0.18	0.25	860	70.1	70.1	68.7	0.66	0.59	0.56	0.54	2.00	1.9	2.0	4.0	9.8
YE4-71M2-6	0.25	0.37	860	74.1	74.1	72.6	0.68	0.75	0.72	0.69	2.78	1.9	2.0	4.0	10.3
YE4-80M1-6	0.37	0.5	895	78.0	78.0	76.4	0.70	1.03	0.98	0.94	3.95	1.9	2.0	4.7	12.5
YE4-80M2-6	0.55	0.75	895	80.9	80.9	79.3	0.72	1.43	1.36	1.31	5.87	1.9	2.1	4.7	13.6
YE4-90S-6	0.75	1	950	82.7	82.7	81.0	0.71	1.94	1.84	1.78	7.54	2.0	2.1	6.0	17.2
YE4-90L-6	1.1	1.5	955	84.5	84.5	82.8	0.73	2.71	2.57	2.48	11.0	2.0	2.1	6.0	22.4
YE4-100L-6	1.5	2	960	85.9	85.9	84.2	0.73	3.63	3.45	3.33	14.9	2.0	2.1	6.5	33.5
YE4-112M-6	2.2	3	965	87.4	87.4	85.7	0.74	5.17	4.91	4.73	21.8	2.0	2.1	6.6	38.6
YE4-132S-6	3	4	970	88.6	88.6	86.8	0.74	6.95	6.60	6.37	29.5	2.0	2.1	6.8	46
YE4-132M1-6	4	5.5	975	89.5	89.5	87.7	0.74	9.18	8.72	8.40	39.2	2.0	2.1	6.8	54
YE4-132M2-6	5.5	7.5	975	90.5	90.5	88.7	0.75	12.3	11.7	11.3	53.9	2.0	2.1	7.0	61.8
YE4-160M-6	7.5	10	980	91.3	91.3	89.5	0.79	15.8	15.0	14.5	73.1	2.0	2.1	7.0	140
YE4-160L-6	11	15	980	92.3	92.3	90.5	0.80	22.6	21.5	20.7	107.2	2.0	2.1	7.2	160
YE4-180L-6	15	20	985	92.9	92.9	91.0	0.81	30.3	28.8	27.7	145.4	2.0	2.1	7.3	245
YE4-200L1-6	18.5	25	985	93.4	93.4	91.5	0.81	37.2	35.3	34.0	179.4	2.0	2.1	7.3	265
YE4-200L2-6	22	30	985	93.7	93.7	91.8	0.81	44.0	41.8	40.3	213.3	2.0	2.1	7.4	285

注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳
 Note: In the white bottom part of the table, the motor casing is made of aluminum; in the gray bottom part, the motor casing is made of iron.

功率与机座号的对应关系表

OUTPUT AND FRAME SIZE

YVF系列, 变频电机
 YVF series, variable frequency motor

表16 / Table 16

功率 Rated Output	机座号 Frame Size			
	2P	4P	6P	8P
0.25	-	71M1	-	-
0.37	71M1	71M2	80M1	-
0.55	71M2	80M1	80M2	-
0.75	80M1	80M2	90S	100L1
1.1	80M2	90S	90L	100L2
1.5	90S	90L	100L	112M
2.2	90L	100L1	112M	132S
3	100L	100L2	132S	132M
4	112M	112M	312M1	160M1
5.5	132S	132S	312M2	160M2
7.5	132S2	132S2	160M	160L
11	160M1	160M1	160L	180L
15	160M2	160M2	180L	200L
18.5	160L	160L	200L1	225S
22	180M	180L	200L2	225M
30	200L1	200L	225M	250M

额定转矩、标称功率与调频范围的对应关系表

RATED TORQUE, RATING OUTPUT AND FREQUENCY RANGE

表17 / Table 17

功率 Output KW	3000 r/min 额定转矩 Rated torque Nm	恒转矩调频范围 Constant torque frequency-varied range Hz	恒功率调频范围 Constant power frequency-varied range Hz	1500 r/min	1000 r/min	750 r/min
				额定转矩 Rated torque		
0.25		5-50	5-100	1.73	2.65	3.46
0.37	1.26			2.54	3.93	5.12
0.55	1.88			3.78	5.84	7.61
0.75	2.54			5.15	7.87	10.23
1.1	3.72			7.50	11.54	15.00
1.5	5.04			10.23	15.24	20.46
2.2	7.40			14.80	22.35	29.59
3	9.95			20.18	29.84	40.35
4	13.22			26.53	39.79	53.06
5.5	18.11			36.48	54.71	72.59
7.5	24.00	49.74	73.84	99.50		
11	35.85	71.59	108.30	143.90		
15	48.89	98.12	147.68	196.23		
18.5	60.30	142.93	216.60	287.81		
22	71.46	160.96	292.35	382.47		
30	79.12	5-50	5-100	160.96	292.35	382.47

机械特性 Mechanical Properties

电机防护等级 Motor Protection grade

电机外壳防护等级执行标准EN 60034(IEC 60034-5)

星光传动交流电机防护等级以IP55为标配。制动和变频电机以IP54为标配，根据需要还可提供IP55及IP56等级。

Motor shell protection grade standard EN60034(IEC60034-5).

Starshine Drive AC motor protection based on IP55 standard, Brake and variable frequency motor based on IP54 standard, IP55 and IP56 levels can also be provided as required.

表14/Table 14

IP	防异物等级 Foreign body level	防水等级 Waterproof grade
0	无专门防护 No special protection	无专门防护 No special protection
1	防止直径大于50mm的固体异物进入壳体 Prevention of solid foreign body diameter greater than 50mm into the shell	垂直滴水应无有害影响 Vertical drip should be no harmful effects
2	防止直径大于12mm的固体异物进入壳体 Prevention of solid foreign body diameter greater than 12MM into the shell	当电机从正常位置向任何方向倾斜15度以内任何一角时垂直滴水应无有害影响 There is no harmful effect on the vertical drop of water when the motor is tilted from any direction to any angle within 15 degrees
3	防止直径大于2.5mm的固体异物进入壳体 Prevention of solid foreign body diameter greater than 2.5mm into the shell	防止淋水 Prevention of water drenching
4	防止直径大于1mm的固体异物进入壳体 Prevention of solid foreign body diameter greater than 1mm into the shell	防溅水 Splash proof
5	防尘 Dustproof	防喷水 Spray proof
6	尘密 Dust tight	防强烈喷水 Anti strong spray
7	-	防短时浸水 Short time flooding
8	-	防长期潜水 Long term diving

电机振动 Motorvibration

表18/Table 18

振动等级 Vibration level	安装方式 Installation method	56mm≤H≤132mm		H>132mm	
		位移 Displacement/μm	速度 Velocity/(mm/s)	位移 Displacement/μm	速度 Velocity/(mm/s)
A	自由悬置 Free suspension	45	2.8	45	42.8
	刚性安装 Rigid installation	-	-	37	2.3 2.8 ²
B	自由悬置 Free suspension	18	1.1	29	1.8
	刚性安装 Rigid installation	-	-	24	1.5 1.8 ²

注：星光电动机按N级制造，如用户需要也可按R级或S级制造。

Note: the Starshine series motors are manufactured according to N, and can be manufactured to R or S if the user requires.

噪声 Noise

工频电源下电动机空载时测得的A计权声功率级的噪声数值。

噪声数值的容差为+3dB(A)。

Noise value of A-weighted sound power level measured at no-load of motor, under the power frequency power supply

Tolerance of noise value is +3dB(A).

表19/Table 19

机座型号 Motor type	同步转速(r/min) Synchronous speed		
	3000	1500	1000
	噪声(dB(A)) Noise		
63	61	52	-
71	64	55	54
80	62	56	57
90	67	59	57
100	74	64	61
112	77	65	65
132	79	71	69
160	81	73	73
180	83	76	73
200	84	76	73

1. 制动器

Brake

1.1 说明

Description

星光传动电机可根据需要加装电磁式制动器。

电磁式制动器是带直流线圈的励磁盘式制动器结构。制动器原理为断电制动，即通过直流线圈感应的电磁力使制动器释放后，而弹簧产生力使制动器制动。制动器上通过安装手动释放装置来实现机械方式释放，即制动器上可以安装一个释放手柄或释放螺钉。释放手柄会自动复位，而释放螺钉可以使锁紧螺钉来实现机械复位。制动器的接线方式既可直接安装在电机接线柱上也可以安装在开关柜内。

As needed, Our company's electric motor can be equipped with electromagnetic brake as requirement. Electromagnetic brake is a magnetic disc brake structure with DC coil, the brake principle is power off brake, i.e. DC coil induction by the electromagnetic force of the brake release, and spring force to brake. Brake by installing manual release device realize mechanical brake release, which can be mounted on a release handle or release the screw, the release lever will automatically reset and release the screw can be locked screws to achieve reduction. The connection mode of the brake can be directly installed on the motor terminal and can also be installed in the switch cabinet.

1.2 结构图 Construction Diagram

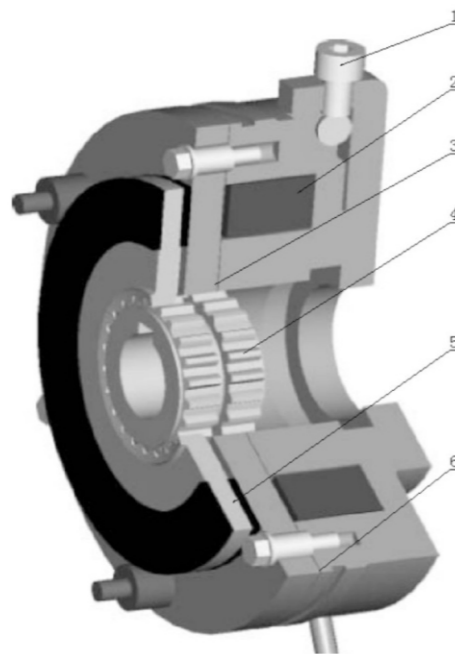


图7/Chart 7

1. 释放螺钉 2. 制动器线圈 3. 压力盘 4. 花键套 5. 摩擦盘 6. 工作间隙
Release screws、Coil of brake、Pressure plate、Spline sleeve、Disc friction、Working clearance

1.3 性能要求 Performance Requirements

电磁式制动器的外壳防护等级为IP23, 制动器的绝缘等级为F级; 其绕组温升不得超过105K (电阻法)。

· 电磁式制动器绕组对地应承受历时1分钟的耐压试验而不击穿, 其试验频率为50Hz, 波形为正弦波, 电压的有效值为 $1000V+2U_n$ 。

· 电磁式制动器的绕组对机壳的绝缘电阻在常温下应不低于200MΩ。

电磁式制动器的环境使用温度:

· 电磁式制动器的环境使用温度: -20°C 到 $+40^{\circ}\text{C}$ 之间, 湿度 $\leq 90\%$;

· 整流块环境使用温度: -20°C 到 $+70^{\circ}\text{C}$ 。

电磁式制动器在常规的使用环境下制动器运行噪声应不大于75dB, 其测试方案按照GB10069.1 规定。

电磁式制动器寿命100万次。YEJ 132 以上(包含YEJ132) 制动频率不超过24次/分钟; 寿命间隙为20万次。YEJ160 以上(包含YEJ160) 制动频率不超过10次/分钟; 寿命间隙10万次。

Electromagnetic brake shell protection class is IP23, the insulation level of the brake is F; The winding temperature rise should not exceed 105K (Electrical resistance).

· The electromagnetic brake winding should withstand 1 minutes of pressure test without breakdown, The test frequency is 50Hz, waveforms is sine wave, voltage effective value is $1000V+2U_n$.

· The insulation resistance of the winding of the electromagnetic brake should not be less than 200MQ. Ambient temperature of electromagnetic brake:

· Temperature: -20°C to $+40^{\circ}\text{C}$, Humidity $\leq 90\%$.

· Rectifier block ambient temperature: -20°C to $+70^{\circ}\text{C}$.

The noise of electromagnetic brake should not be more than 75dB under the normal operating environment, in accordance with the provisions of Gb10069.

Electromagnetic brake life 1 million times, YEJ 132 above (including YEJ 132) braking frequency of not more than 24 times/minute, Life gap is 200 thousand times. YEJ 160 above (including YEJ 160) braking frequency is not more than 10 times/minute; Life gap 100 thousand times.

标准电磁式制动器电机制动响应时间满足表20规定。

The brake response time of the standard electromagnetic brake motor meets the requirements of Table 20.

主要性能参数表

表20 / Table 20

规格	04/04N	D8/08N	15/15N	30/30N	60/60N	80/80N	150/150N	260/260N	400/400N
配套电机机座号	63/71	80	90	100	112	132	160	180	200/225
额定制动力矩(N.m)	4	8	15	30	60	80	150	260	400
励磁功率20°C(W)	20	23	43	63	65	88	109	132	140
释放时间T1(ms)	55	82	81	110	115	150	188	252	303
制动时间T2(ms)	50	49	50	55	55	60	60	210	250
初始工作气隙δ(mm)	0.2	0.25	0.25	0.3	0.3	0.35	0.4	0.45	0.6
最大工作气隙δmax(mm)	0.6	0.8	0.8	0.8	1.0	1.0	1.2	1.2	1.2
励磁电压DCV)	96				170				
允许最高转速n(rpm)	3000								

注: 制动时间为整流器直流侧断开时的时间(快速制动时间)

1.4 控制系统原理图 Control system schematic

电磁式制动器供电电源既可以单独提供，也可以由电机接线端子供电。

只有单速的电机，其制动器控制系统才可以在电机供电系统中引线。为方便客户使用，星光传动在电机出厂时已将制动器控制电源接好，制动器电源直接从电机接线柱上引取，当电机得电时电机运转，制动器也同时释放，当电机断电时电机停转，制动器也同时锁紧。接法见图8,图9,图10。另外，如果制动器是从电机接线端子供电的，那么电机的残余电压会导致延时制动。

变极调速电机和变频器控制的电机，其制动控制器的供电电源必须单独供电。星光传动出厂时均不接线，客户实际使用时具体接线接法见图10。

The power supply of the electromagnetic brake can be supplied separately, or can be supplied by the motor terminal. Only the motor has been factory brake control power supply is connected. Starshine Drive connect the brake control's power before the motors delivered as for the customer's convenience, when the motor is energized when the motor operates, the brake releasing it at the same time, when the motor power when the motor stops, the brake also lock. The specific method is shown in Figure 8,figure 9,figure 10.in addition, if the brake is from the motor terminal power supply, then the motor residual voltage will lead to delay braking. The motor of the variable speed motor and the inverter control, the power supply of the brake controller must be supplied separately. Starshine Drive company does not connect the factory, the actual use of the customer when the connection is shown in Figure 10.

制动器快速制动 Quick brake

通过改变整流块的接线方式，可使制动器变为快速制动运行。具体接法见图8,图9,图10。

备注：客户如未提出快速制动要求，星光传动按照普通制动作为默认的标准接线方式；客户在实际使用快速制动时，客户需将普通制动拆除后，按照快速制动接线方法接线。

客户未提出变频要求，星光传动按照单速电机作为默认的标准接线方式，客户需变频器供电时，客户需将标准接线拆除后，按照图10接线。

By changing the connection mode of the rectifier block, the brake can be changed into a fast braking operation. Referto table 8,table 9,table 10.

Note: When the customer does not make a quick braking requirement, Starshine Drive use the leather brake as the default action of the standard wiring; customers use of fast braking in the actual, customers need to dismantle the ordinary brake.

If customers do not require for of frequency conversion, Starshine Drive company use a single speed motor as the default standard wiring mode, customers need inverter power supply, customers need to remove the standard wiring, and connect wiring in accordance with figure 10.

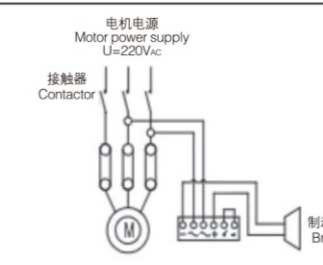
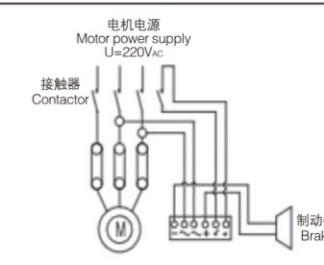
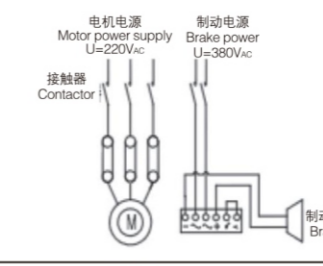
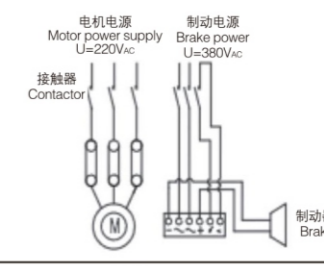
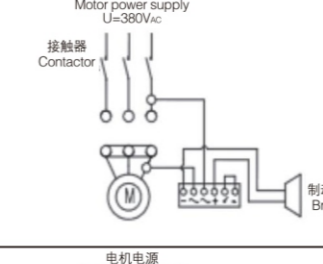
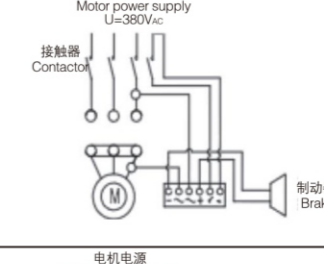
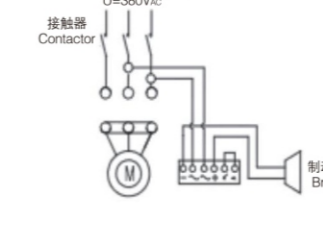
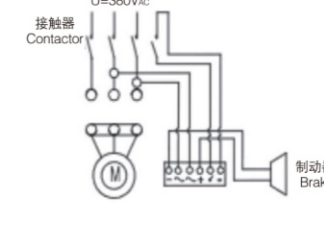
编号 Series number	单速电机电压 及接线 Single - speed motor voltage and wiring	制动器电压 Brake voltage	制动器接法/Brake connection	
			普通制动/Ordinary brake	快速制动/Fast brake
1	220V Δ	220V		
2		380V		
3	380V Y	220V		
4		380V		

图8/Chart 8

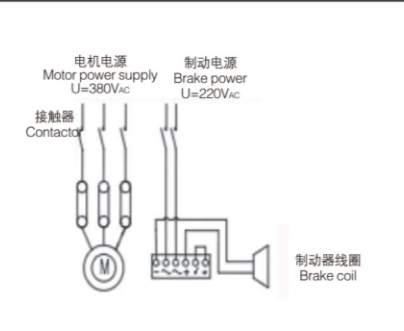
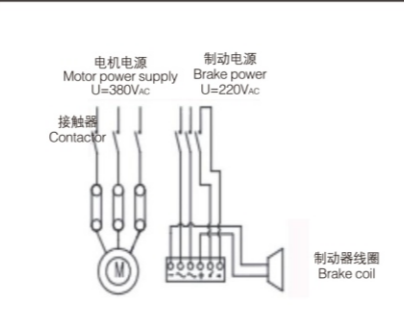
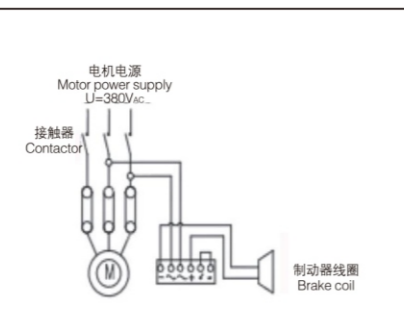
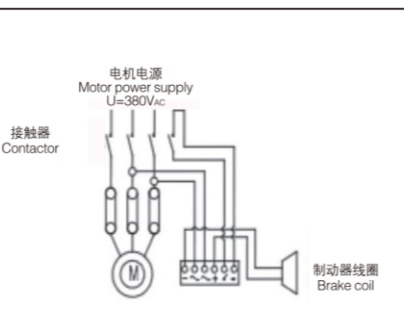
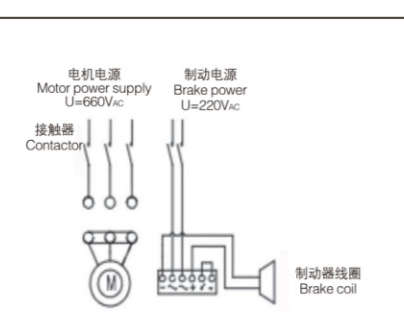
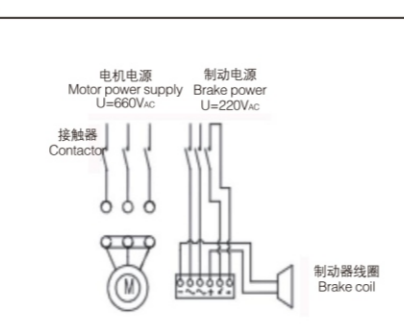
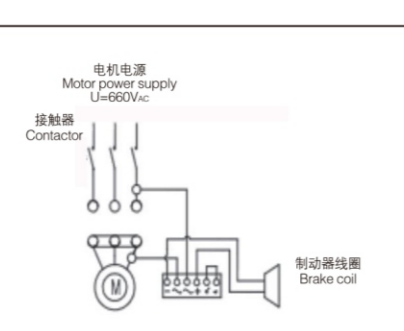
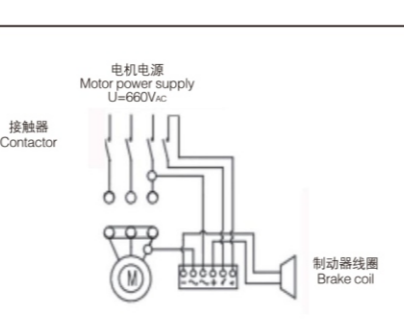
编号 Series number	单速电机电压及接线 Single-speed motor voltage and wiring	制动器电压 Brake voltage	制动器接法/Brake connection	
			普通制动/Ordinary brake	快速制动/Fast brake
1	380V Δ	220V		
		380V		
3	660V Y	220V		
		380V		

图9/Chart 9

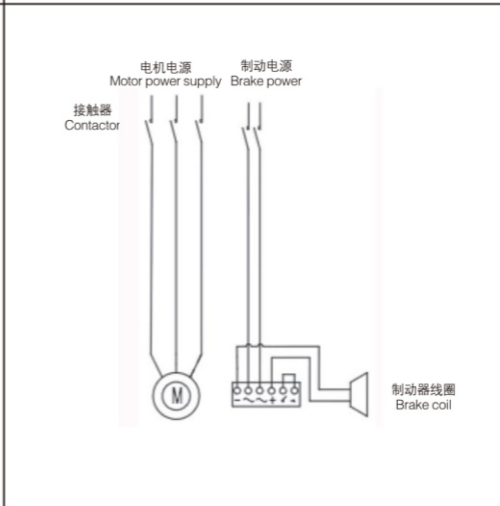
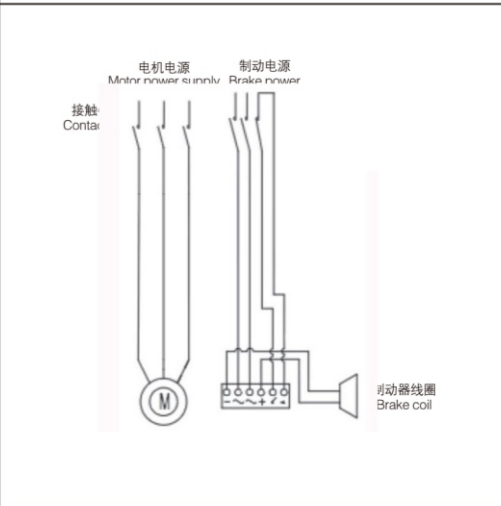
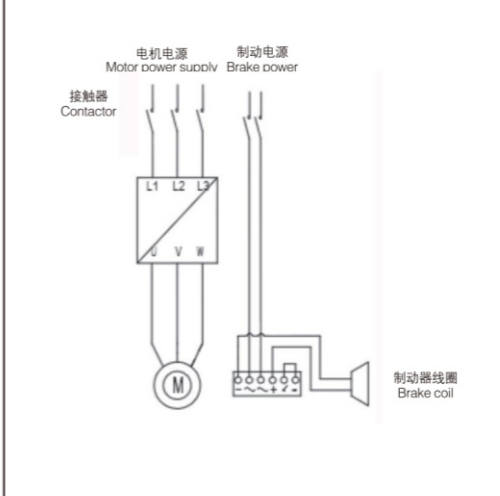
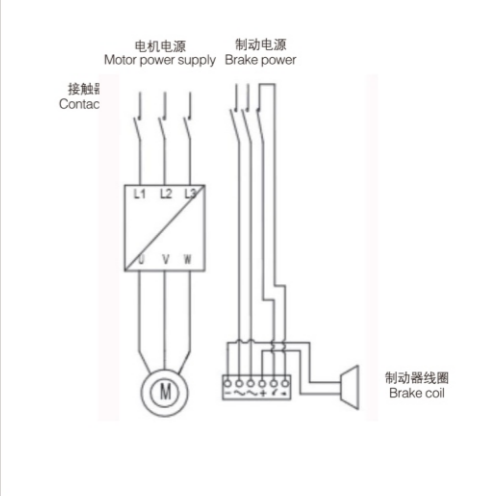
	普通制动/Ordinary brake	快速制动/Fast brake
变极调速电机 Pole changing speed regulating motor		
变频调速电机 Frequency conversion motor		

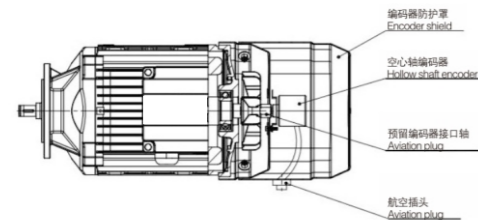
图10/Chart 10

2. 编码器 Encoder

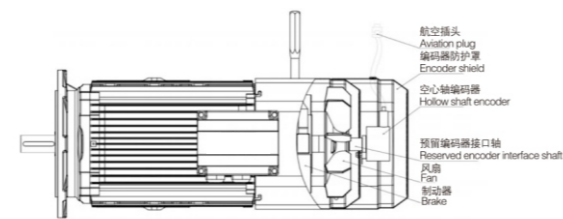
星光传动可根据需要为客户提供带编码器电机，编码器型号由客户指定。我公司提供的编码器电机结构分为以下六种。如有定制，请详询星光传动。

Our company can provide encoder motor to customers as requirement according to need, the encoder model is specified by the customer. Starshine Drive provide the following six kinds of the encoder motor. please refer to Starshine Drive for any customization.

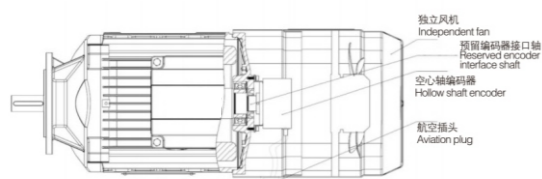
空心轴与标准电机连接结构
Hollow shaft and standard motor connection structure



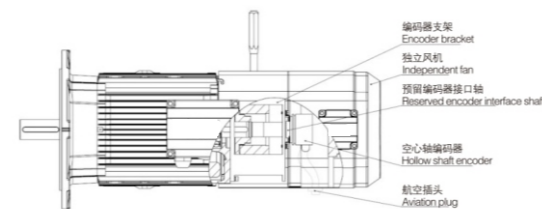
空心轴与带制动电机连接结构
Hollow shaft with brake motor connection structure



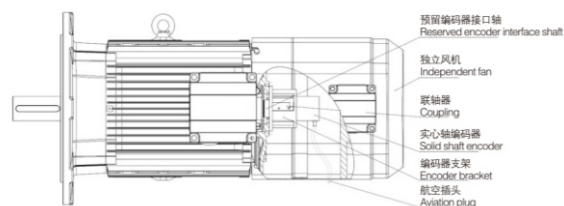
空心轴与带风机电机连接结构
Hollow shaft and belt motor connection structure



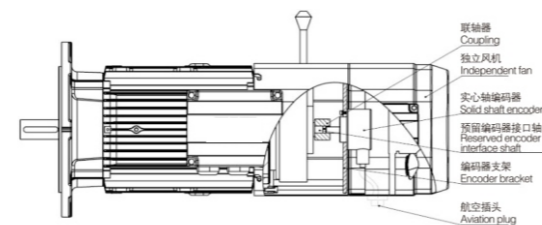
空心轴与带制动及风机电机连接结构
Hollow shaft with brake and fan motor connection structure



实心轴与带风机连接结构
Solid shaft and belt connection structure



实心轴与带风机电机连接结构
Solid shaft and belt motor connection structure



3. 强冷风扇 Forced Cooling Fan

代号 Code

V标准设计
V Standard design

描述 Description

强冷风扇用于确保电机在不同转速时的冷却。即电机可以在低速时满载运行而不会产生电机过热风险。带强冷风扇时原普通 PVC 风扇将从电机上拆除。强冷风扇的长度取决于不同的电机附件选项如制动器或编码器。与以前一样罩子上也允许开孔如制动器手动释放孔等。

Forced cooling fan is used to ensure the cooling of the motor at different speeds. That is, the motor can run at full speed without the risk of overheating. The original PVC fan will be removed from the motor when the forced cooling fan is equipped. The length of the forced cooling fan depends on the different motor attachment options, such as brakes or encoders. Cover as before and also allow openings such as manual brake release hole.

根据需要电机可以安装强冷风扇。工频连续运行工况时不需要加强冷风扇。星光传动建议下述情况时采用强冷风扇：

- 高启动频率时(启动次数≥5次/h)
- 电机带高惯量飞轮Z(飞轮风扇)
- 调速范围在5~35Hz之间
- 变频调速时调速范围≥1:20
- 变频调速时在低速甚至是零速时需输出额定力矩

As needed, the motor can be installed with a forced cooling fan. No need to install the forced cooling fan when continuous operation condition. Starshine Drive suggest in the following situations:

- High startup frequency
- Motor with high inertia flywheel Z(flywheel fan)
- Speed range from 5 to 35Hz
- Frequency control speed range≥1:20
- When the speeds is low or even zero speed ,the output torque is required

下图为典型的动态变频控制速度-转矩特性图

The following is a typical dynamic frequency control speed-The torque characteristic diagram

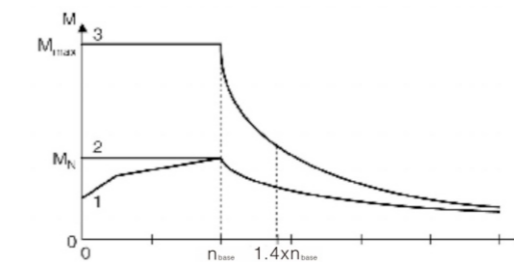


图11/Chart 11

M_N = 电机额定扭矩/Rated torque
 M_{max} = 电机最大扭矩/Maximum torque
 n_{base} = 电机额定转速/Rated speed

1=带自冷风扇/Self cooling fan
2=带强冷风扇/Forced cooling fan
3=最大扭矩/Maximum torque

当转速位于 $0-n_{base}$ 时负载扭矩位于曲线1以上时需加强冷风扇否则电机将过热

When the speed located at $0-n_{base}$, the load torque located in the curve for more than 1 hours, at this time, in order to prevent overheating of the motor, it will be need to install a forst cooling fan.

与编码器组合 ENCODER COMBINATION

强冷风扇能与所有编码器组合使用，请参考编码器信息章节。请注意电机整体尺寸将可能变得更长。

Forced cooling fan can be used in combination with all encoders, Encoder information please see chapter 3. Note that the overall size may be longer

强冷风扇技术参数 Technical datas offorced cooling fan

三相, U=380Vc,f=50Hz

Three phase U=380V, f=50Hz

表21/Table 21

强冷风机 Forced cooling fan	功率 Power (W)	风压 Wind pressure (Pa)	电流 Current (A)	转速 Rotate speed (r/min)	风量 Blowing rate (m/h)
对应电机机座号 The corresponding motor frame size					
63	25	42	0.12	2800	98
71	25	42	0.12	2800	98
80	30	42	0.13	2800	98
90	42	82	0.18	2800	265
100	52	82	0.18	2800	265
112/132	60	110	0.2	2800	306
160	80	110	0.21	2800	485
180	100	130	0.32	1400	660
200	150	65	0.48	1350	1679

单相, U=220V,f=50Hz

Single phase U=220Vc, f=50Hz

表22/Table 22

强冷风机 Forced cooling fan	功率 Power (W)	风压 Wind pressure (Pa)	电流 Current (A)	转速 Rotate speed (r/min)	风量 Blowing rate (m/h)
对应电机机座号 The corresponding motor frame size					
63	25	42	0.16	2800	98
71	25	42	0.16	2800	98
80	30	42	0.18	2800	98
90	42	82	0.3	2800	265
100	52	82	0.35	2800	265
112/132	60	110	0.38	2800	306
160	80	110	0.43	2800	485
180	130	130	0.7	1400	660
200	160	65	1	1350	1679

三相, U=380Vc,f=60Hz

Three phase U=380V, f=60Hz

表23/Table 23

强冷风机 Forced cooling fan	功率 Power (W)	风压 Wind pressure (Pa)	电流 Current (A)	转速 Rotate speed (r/min)	风量 Blowing rate (m/h)
对应电机机座号 The corresponding motor frame size					
63	30	45	0.21	3000	108
71	30	45	0.21	3000	108
80	35	45	0.22	3000	108
90	55	88	0.25	3000	290
100	60	88	0.26	3000	290
112/132	75	120	0.3	3000	335
160	90	120	0.4	3000	530
180	120	130	0.38	1680	660
200	200	65	0.64	1620	1679

单相, U=220V,f=60Hz

Single phase U=220Vc, f=60Hz

表24/Table 24

强冷风机 Forced cooling fan	功率 Power (W)	风压 Wind pressure (Pa)	电流 Current (A)	转速 Rotate speed (r/min)	风量 Blowing rate (m/h)
对应电机机座号 The corresponding motor frame size					
63	30	45	0.16	3000	108
71	30	45	0.16	3000	108
80	35	45	0.21	3000	108
90	55	88	0.32	3000	290
100	60	88	0.35	3000	290
112/132	75	120	0.45	3000	335
160	90	120	0.6	3000	530
180	155	130	0.83	1680	660
200	220	65	1.38	1620	1679

4.高惯量飞轮 High Inertia Flywheel

代号 Code

z高惯量飞轮 Z High Inertia Flywheel

描述 Description

电机安装高惯量飞轮Z(飞轮风扇)从而实现电机在主控制下平滑地起制动。

高惯量飞轮Z使电机转动惯量增加 J_z 。

制动和非制动电机均可安装高惯量飞轮Z。

The motor is installed with high inertia flywheel Z(flywheel fan)so as to realize the smooth braking of the motor under the main control.

High inertia flywheel Z will increase the motor inertia J_z .

High inertia flywheel Z can be installed in both braking and non braking motors.

重要注意事项

- 计算启动频率时,空载许用频率需乘以0.8,或是加强冷风扇。
- 电机转动惯量 $J_{ges}=J_{mot}+J_z$
- 不允许反接制动或反向冲击制动。
- 不允许用于振动级别B的工况。

Important Notices

- When calculating the starting frequency ,No-load allowable frequency is multiplied by 0.8 or install a forced cooling fan;
- Motor moment of inertia $J_{ges}=J_{mot}+J_z$;
- Do not allow reverse or reverse impact braking;
- Do not allow Vibration level B.

表25/Table 25

电机规格 Motorspecifications	J_z [$10^{-4}kgm^2$]	J_{mot} [$10^{-4}kgm^2$]	$J_{mot}+J_z$ [$10^{-4}kgm^2$]	质量/Quality [kg]
71S4	21.3	5.1	26.4	1.3
71M4		7.2	28.5	
80S4	37.9	17.5	55.4	1.8
80M4		24.6	62.5	
90S4	100	54.4	154.4	3.4
90L4		66.9	166.9	
100S4	135	82	217	3.5
100L4		111.6	246.6	
112M4	200	185.4	385.4	4.5
132S4		225.4	425.4	
132M4	300	389.9	689.9	6.4
132L4		456	756	

5.防护罩 Protective Cowl

代号 Code

C 防护罩 C Cowl protect

描述 Description

防护罩用于防止雨水进入风扇罩。主要应用于垂直安装位置时。

The protective cowl is used for preventing rain water from entering the fan cowl. Mainly used in vertical installation position.

当电机出轴垂直向下安装时,液体和固体异物很容易进到电机风扇罩内,星光传动提供保护罩可以对电机很好的加以保护。制动电机出轴垂直向下安装时,必须订购保护罩C,同样在户外的出轴向下的电机必须安装保护罩C。

When the motor is installed vertically down the shaft, the liquid and solid foreign body is easy to enter into the motor fan cowl, and the Starshine Drive provides a protective cowl to protect the motor.

When the motor shaft is installed vertically downwards, it is necessary to order the protective cover C, and the motor must be fitted with a protective cowl C.

6. 2WE 双轴伸电机 2WE Biaxial Extension Motor

代号 Code

2WE 双轴伸电机 2WE Biaxial Extension Motor

描述 Description

星光传动可以根据需要为客户提供2WE 双轴伸电机,具体结构尺寸如下图

If required, Starshine Drive can provide 2WE dual-axes motors with structure sizes below:

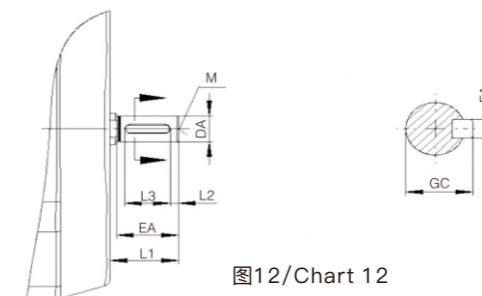


图12/Chart 12

表26/Table 26

机座号 Frame Size	DA	FA	GC	EA	L1	L2	L3	M
63/71/2WE	11	4	12.5	23	25	3.5	16	M4
80/90/100/2WE	14	5	16	30	32	4	22	M5
112/132/2WE	19	6	21.5	40	43.5	4	32	M6
160/2WE	28	8	31	60	64	5	50	M10
180/2WE	48	14	51.5	110	115	10	80	M16
200/2WE	55	16	59	110	115	10	90	M20

7.无风扇设计 Fanless Design

代号 Code

U 无风扇设计 U Without fan design

描述 Description

对于代号U 电机B端端盖封闭无风扇和无风罩。可以防止脏物、水和粉尘等进入电机。此电机转子特殊。对于带制动电机转子轴不是在轴承后截断,而是延伸到花键套配合尺寸后截断。在制动器线圈后端采用封盖密封。普通电机和制动电机有2种不带风扇的冷却方式,仅靠对流冷却的电机必须在减小载荷或断续工作制时使用。

For the U motor B end cover closes without fan and cover.It can prevent dirt,water and dust into the machine.This motor has special rotors.The motor rotor shaft with brake is not cut off behind the bearing,but extends to the fit size of spline.Use end cover seals behind the brake coil.Motor/Break motor has two cooling ways without fans,the motor/break motor can rely on the convection for cooling only when reduce workload or intermittent brake.

自冷电机功率通常为风扇冷却电机的一半,如有问题请与星光传动联系。

The power of the non-ventilated motor is usually half of cooling fan motor,if there is any question,please contact Starshine Drive.

8.带恒温器保护装置 With Thermostat Protection Device

代号 Code

TH 恒温器保护 TH With thermostat protection device

描述 Description

电机热保护用于防止电机过热而引起的电机损坏可选择监测两个温度级别的155 (F) 和180 (H)。TH 为三个一组设计，即电机每相均有一只NC 触电的温度调节开关并串联在一起。

当温度达到额定值时，TH双金属开关组合断开并采用接触器或反馈系统停止电机。当电机开始冷却时，在额定温度时TH不会立即恢复闭合。但是当温度下降到额定温度的40K (重设温度RST)以下时，Th重新闭合。

The motor thermal protection can prevent motor from overheating damage and choose to monitor the two temperature levels of 155(F)and 180 (H).

Three TH for one group,each phase has a NC electric shock temperature control switch and in series together.

When the temperature reaches rating,TH bimetallic switch combination will disconnect and uses the contactor or feedback system to stop the motor.When the motor begins to cool down,TH will not restore closure immediately with the rated temperature.But when the temperature decreases to the rated temperature of 40 k(reset temperature ,RST),the TH closes again.

当绕组温度超过允许温度时，温度金属开关断开，可连接到驱动检测回路中。

When the winding temperature exceed the permitted temperature,the metal temperature switch will disconnect and can be connected in the drive detection circuit.

表27/Table 27

	ACV		DCV	
	电压VoltageU [V]	250	60	24
电流(cosφ=1.0) [A Electric current]	2.5	1.0	1.6	
电流(cos φ=0.6)[A] Electric current	1.6	-	-	
接触电阻最大1ohm为DC5V/1mA The maximum contact resistance 1ohm is DC5V/1mA				

双金属开关“Nc”的开合条件

The conditions of bimetallic switch "NC" opening and closing

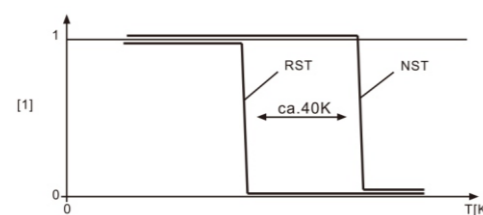


图13/Chart 13

RST 重设温度/Reset temperature

NST 额定开关温度/The rated temperature switch

9.PT100电机热保护 Motor Thermal Protection

代号 Code

PT 热保护 PT Thermal protection

描述 Description

PT 热保护装置可连续检测电机温度，并可在变频器或控制器内进行进一步处理。与KTY半导体传感器不同，Pt100采用铂金属传感器，具有接近线性的特性曲线，并有更高的精度。

/PT附件不能替代标准的电机保护TF 或TH。

仅当变频器具有电机热模型功能时，采用变频器+PT 组合具有电机热保护的功能。

·1 表示定子内预埋1只传感器

·3表示定子内预埋3只传感器(每相1只)

PT thermal protection device can continuously measure the motor temperature,and can be within the inverter or controller for further processing.Unlike KTY semiconductor sensor,PT100 is made by platinum metal,it has the nearly linear characteristic curve,and has a higher precision.PT attachment cannot replace the standard motor protection TF or TH. Only when the inverter has the motor thermal model function,adopting frequency converter +PT has the motor thermal protection function.

·Mean to embed one sensor in the stator.

·Mean to embed 3 sensors in the stator(one piece for one phase).

PT100 温度传感器可连续检测电机温度。根据需要可选择1只或3只PT100 传感器。

Pt100 temperature sensor can test motor temperature continuously.According to the need that it can rotate 1 or 3 pcs 100 pt100 sensors.

表28/Table 28

技术参数 Technical Data	PT100
联接 Connect	红/白 Red/White
20-25°C每个PT100的阻值 the resistance of eachPI100	1072<R<1102
检测电流 The test current	<3mA

PT100特征曲线 PT100 characteristic curve

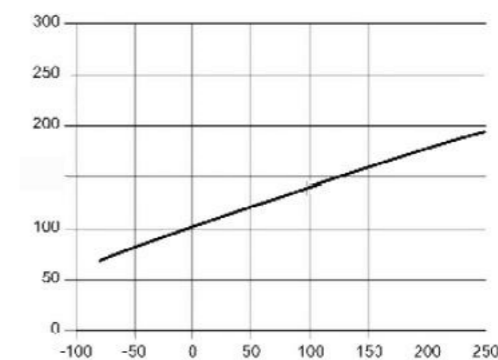


图14/Chart 14

产品尺寸 Product Dimension

星光电动机/制动电机的尺寸表

Starshine motor/brake motor dimensions table

关于尺寸表的注意事项

Notes on the dimensions table

请遵循以下有关4极星光电动机(制动)的尺寸表的注意事项:

- 电机尾部至少余留风扇罩半径的距离以避免阻碍通风。
- 对于制动电机需为拆卸风扇罩预留空间(风扇罩直径)。
- 制动器手动释放有多种角度可选, 如下图所示。
可选四个角度0°、90°、180°或270°。

Please follow the notices about the size of the 4 class Starshine AC motor

·Motor rear should keep a space more than the radius of the fan cover as to avoid hindering the ventilation.

·For brake motors, space is required to remove the fan cowl(diamter of the fan cover).

·Brake manual release has a variety of angles, as shown below. Four Options available.

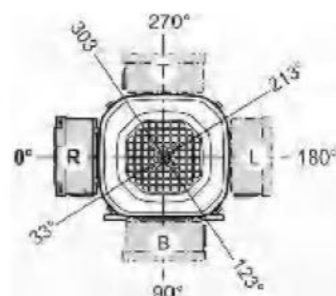


图15/Chart 15

制动器手动释放默认安装角度为相对于电机接线盒270°。若未定义则默认手动释放位置随电机接线盒旋转。手动释放可能会以90°为单位旋转。若带强冷风扇(V), 则手动释放位置会受到强冷风扇的影响。

Brake manual release angle for the motor junction box is installed by default to 270°. If don't define default manual release lever position will be rotating with the motor junction box. Manual release may rotate by 90° With a forced cooling fan(V), the manual release position will be affected.

制动电机带强冷风扇时 Brake motor with forced cooling fan

表29/Table 29

机座号 Motor Frame size	对于不同接线盒角度所允许的手动释放角度 Manual release angle allowed for different junction box angles			
	0° (R)	90° (B)	180° (L)	270° (T)
63	90°, 180°, 270°	90°, 180°, 270°	90°, 180°, 270°	90°, 180°, 270°
71	0°, 90°, 180°, 270°	0°, 90°, 180°, 270°	0°, 90°, 180°, 270°	0°, 90°, 180°, 270°
80				
90				
100				
112				
132				
160				
180				
200				

公差 Tolerance

中心高 Center height

下列公差应用于所给出的尺寸表

The following tolerances applied to the size of the given table

$h \leq 250\text{mm}$ $\rightarrow -0.5\text{mm}$

$h > 250\text{mm}$ $\rightarrow -1\text{mm}$

轴公差 The shafttolerance

直径公差

The diameter tolerance

$\varnothing \leq 28\text{mm}$ $\rightarrow \text{ISO } j6$

$\varnothing \leq 50\text{mm}$ $\rightarrow \text{ISO } k6$

$\varnothing > 50\text{mm}$ $\rightarrow \text{ISO } m6$

中心孔: GB/T145标准C型中心孔

Center hole: GB/T145 standard type C center hole

$\varnothing 7-10\text{mm}$ $\rightarrow \text{M3}$

$\varnothing > 10-13\text{mm}$ $\rightarrow \text{M4}$

$\varnothing > 13-16\text{mm}$ $\rightarrow \text{M5}$

$\varnothing > 16-21\text{mm}$ $\rightarrow \text{M6}$

$\varnothing > 21-24\text{mm}$ $\rightarrow \text{M8}$

$\varnothing > 24-30\text{mm}$ $\rightarrow \text{M10}$

键符合标准GB/T1096-2003

Key: GB/T1096-2003 standard

$\varnothing > 30-38\text{mm}$ $\rightarrow \text{M12}$

$\varnothing > 38-50\text{mm}$ $\rightarrow \text{M16}$

$\varnothing > 50-85\text{mm}$ $\rightarrow \text{M20}$

$\varnothing > 85-130\text{mm}$ $\rightarrow \text{M24}$

$\varnothing > 130\text{mm}$ $\rightarrow \text{M30}$

法兰 Flange

止口公差

The seam allowance tolerance

$\varnothing \leq 230\text{mm}$ (法兰规格A120-A300) $\rightarrow \text{ISO } j6$

$\varnothing > 230\text{mm}$ (法兰规格A350-A660) $\rightarrow \text{ISO } h6$

每个型号的交流(制动)电机都有不同尺寸的法兰可选。每个型号的不同法兰尺寸见相应的尺寸表

Each type of AC motor has a different optional of the flange sizes. See the kinds of flange sizes for the appropriate size of each type.

起吊螺栓及吊耳 Lifting bolt and lug

90机座及以下的电机供货时不提供吊装工具。100机座及以上电机配置可拆卸吊耳。

90 and below the motor does not provide lifting tools. 100 and above motor provide configuration.

电机附件 Motor accessories

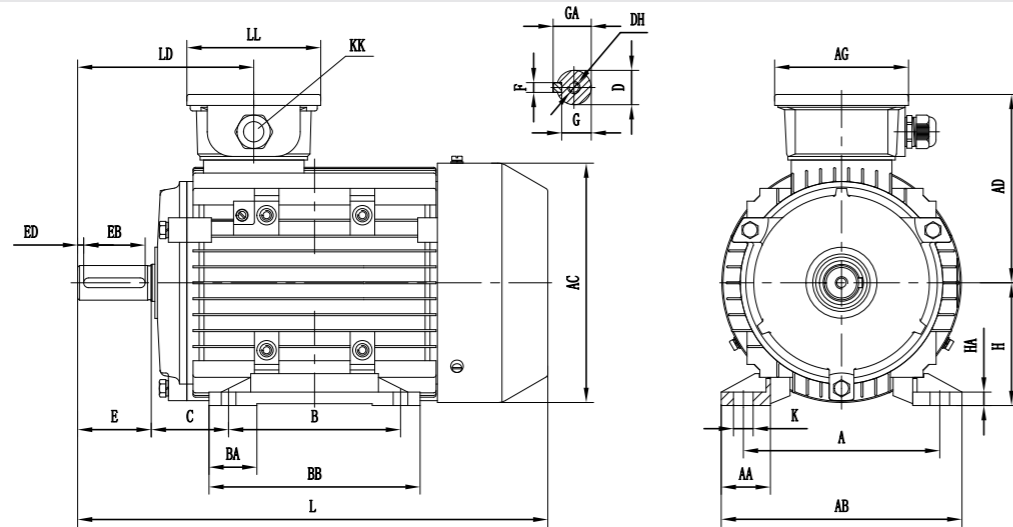
安装附件后电机尺寸可能改变请参考电机附件尺寸图纸

The dimension of the motor may be changed after fitting the attachment. Please refer to the drawing of the motor dimension.

特殊设计 Special design

由于特殊设计或需要预留宽泛的附件接口接线盒尺寸可能与标准尺寸偏差很多。请留意星光传动的订单确认单。

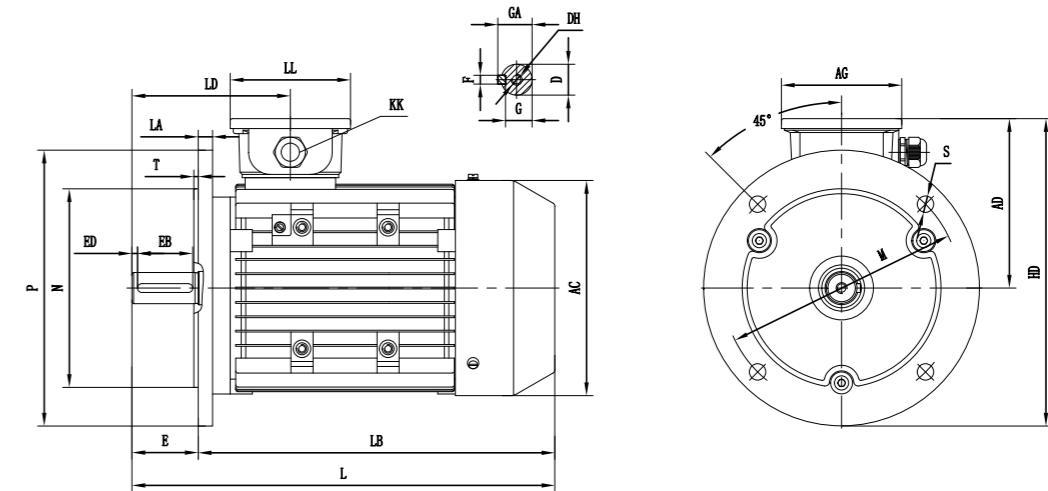
Because of the special design or the need, the size may be a bit deviation from the standard size. Please pay attention to Starshine Drive order confirmation.

安装位置和尺寸图 Mounting position & Dimension
YE3 63-200-B3


型号 TYPE	极数 POLE	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH
63M	2,4,6	100	24	123	120	102	101	80	22.5	100	40	11	M4X12
71M	2,4,6	112	26	138	136	109	101	90	25.5	110	45	14	M5X12
80M	2,4,6,8	125	35	157	158	129	101	100	27.5	125	50	19	M6X16
90S	2,4,6,8	140	37	173	175	140	109	100	31	125	56	24	M8X19
90L	2,4,6,8	140	37	173	175	140	109	125	31.5	150	56	24	M8X19
100L	2,4,6,8	160	40	196	198	156	109	140	31.5	172	63	28	M10X22
112M	2,4,6,8	190	40	227	230	178	117.5	140	39	180	70	28	M10X22
132S	2,4,6,8	216	51	262	258	188	117.5	140	43	186	89	38	M12X28
132M	4,6,8	216	51	262	258	188	117.5	178	46	224	89	38	M12X28
160M	2,4,6,8	254	65	314	314	251	162	210	-	260	108	42	M16X36
160L	2,4,6,8	254	65	314	314	251	162	254	-	304	108	42	M16X36
180M	2,4,8	279	70	349	355	267	162	241	-	311	121	48	M16X36
180L	4,6,8	279	70	349	355	267	162	279	-	349	121	48	M16X36
200L	2,4,6,8	318	70	388	397	299	210	305	-	369	133	55	M20X42

型号 TYPE	E	EB	ED	F	G	GA	H	HA	K	KK	L	LD	LL
63M	23	16	3.5	4	8.5	12.5	63	7	7x9.5	1-M20x1.5	217	95.5	101
71M	30	25	2.5	5	11	16	71	8	7x11	1-M20x1.5	245	110.5	101
80M	40	30	5	6	15.5	21.5	80	8	10x14	1-M20x1.5	290	115	101
90S	50	40	5	8	20	27	90	10	10x14	1-M20x1.5	325	145	109
90L	50	40	5	8	20	27	90	10	10x14	1-M25x1.5	350	145	109
100L	60	50	5	8	24	31	100	11	12x16	1-M32x1.5	398	148.5	109
112M	60	50	5	8	24	31	112	12	12x16	2-M32x1.5	394	154	117.5
132S	80	65	7.5	10	33	41	132	15	12x16	2-M32x1.5	475	180	117.5
132M	80	65	7.5	10	33	41	132	15	12x16	2-M32x1.5	513	180	117.5
160M	110	90	10	12	37	45	160	20	4xΦ14.5	2-M40x1.5	608	256	152
160L	110	90	10	12	37	45	160	20	4xΦ14.5	2-M40x1.5	652	256	152
180M	110	90	10	14	42.5	51.5	180	22	4xΦ14.5	2-M40x1.5	688	271	152
180L	110	90	10	14	42.5	51.5	180	22	4xΦ14.5	2-M40x1.5	726	271	152
200L	110	100	5	16	49	59	200	25	4xΦ18.5	2-M50x1.5	779	296	190

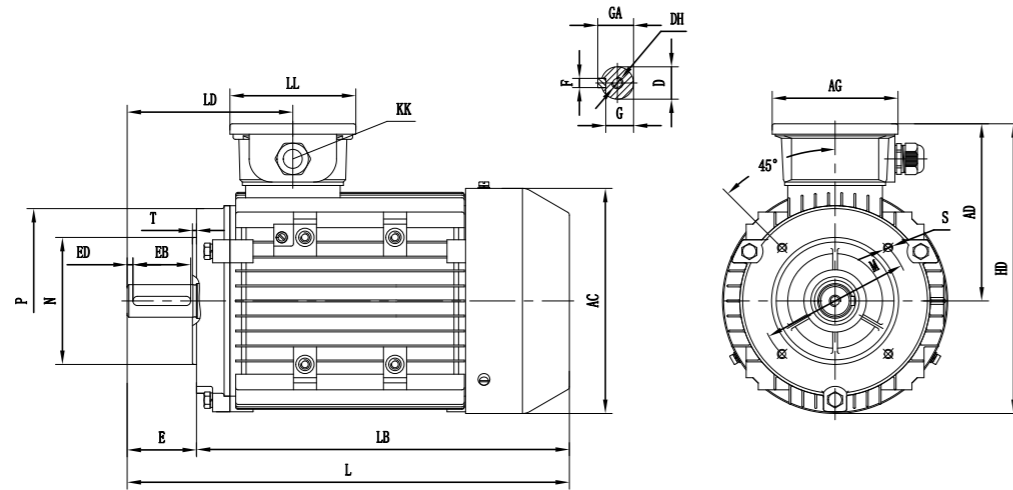
注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

YE3 63-200-B5


型号 TYPE	极数 POLE	AC	AD	AG	D	DH	E	EB	ED	F	G	GA
63M	2,4,6	120	102	101	11	M4x12	23	16	3.5	4	8.5	12.5
71M	2,4,6	136	109	101	14	M5x12	30	25	2.2	5	11	16
80M	2,4,6,8	158	129	101	19	M6x16	40	30	5	6	15.5	21.5
90S	2,4,6,8	175	140	109	24	M8x19	50	40	5	8	20	27
90L	2,4,6,8	175	140	109	24	M8x19	50	40	5	8	20	27
100L	2,4,6,8	198	156	109	28	M10x22	60	50	5	8	24	31
112M	2,4,6,8	230	176	117.5	28	M10x22	60	50	5	8	24	31
132S	2,4,6,8	258	188	117.5	38	M12x28	80	65	7.5	10	33	41
132M	4,6,8	258	188	117.5	38	M12x28	80	65	7.5	10	33	41
160M	2,4,6,8	314	251	162	42	M16x36	110	90	10	12	37	45
160L	2,4,6,8	314	251	162	42	M16x36	110	90	10	12	37	45
180M	2,4,8	355	267	162	48	M16x36	110	90	10	14	42.5	51.5
180L	4,6,8	355	267	162	48	M16x36	110	90	10	14	42.5	51.5
200L	2,4,6,8	397	299	210	55	M20x42	110	100	5	16	49	59

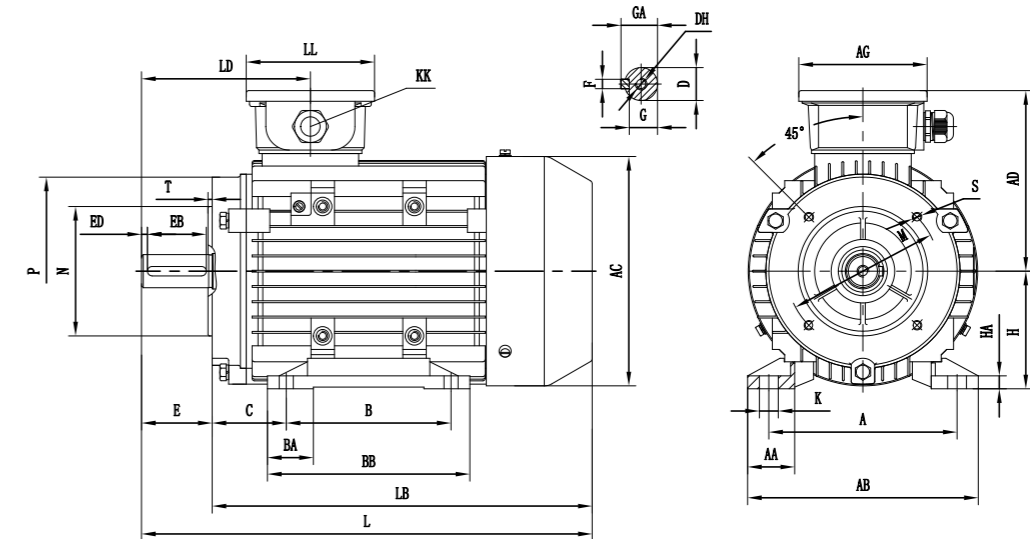
型号 TYPE	HD	KK	L	LA	LB	LD	LL	M	N	P	S	T
63M	172	1-M20x1.5	217	10	194	95.5	101	115	95	140	10	3
71M	189	1-M20x1.5	245	10	215	110.5	101	130	110	160	10	3.5
80M	229	1-M25x1.5	290	12	250	115	101	165	130	200	12	3.5
90S	240	1-M25x1.5	325	12	275	145	109	165	130	200	12	3.5
90L	240	1-M25x1.5	350	12	300	145	109	165	130	200	12	3.5
100L	281	1-M32x1.5	398	13	338	148.5	109	215	180	250	14.5	4
112M	301	2-M32x1.5	394	14	334	154	117.5	215	180	250	14.5	4
132S	338	2-M32x1.5	475	14	395	180	117.5	265	230	300	14.5	4
132M	338	2-M32x1.5	513	14	433	180	117.5	265	230	300	14.5	4
160M	426	2-M40x1.5	608	15	498	256	152	300	250	350	18.5	5
160L	426	2-M40x1.5	652	15	542	256	152	300	250	350	18.5	5
180M	444.5	2-M40x1.5	688	15	578	271	152	300	250	350	18.5	5
180L	444.5	2-M40x1.5	726	15	616	271	152	300	250	350	18.5	5
200L	499	2-M50x1.5	779	17	669	296	190	350	300	400	18.5	5

注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

YE3 63-132-B14


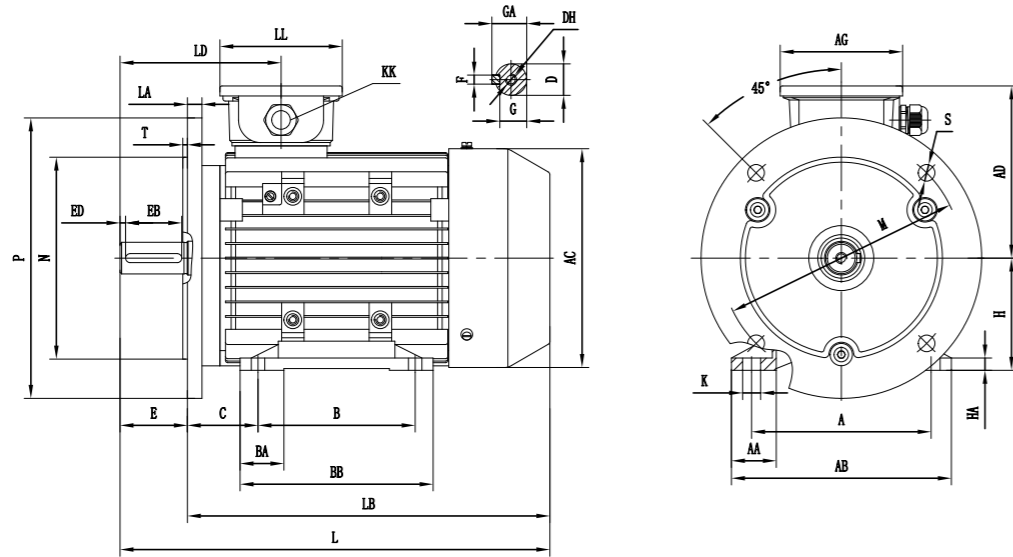
型号 TYPE	AC	AD	AG	D	DH	E	EB	ED	F	G	GA
63M	120	102	101	11	M4X12	23	16	3.5	4	8.5	12.5
71M	136	109	101	14	M5X12	30	25	2.5	5	11	16
80M	158	129	101	19	M6X16	40	30	5	6	15.5	21.5
90S	175	140	109	24	M8X19	50	40	5	8	20	27
90L	175	140	109	24	M8X19	50	40	5	8	20	27
100L	198	156	109	28	M10X22	60	50	5	8	24	31
112M	230	176	117.5	28	M10X22	60	50	5	8	24	31
132S	258	188	117.5	38	M12X28	80	65	7.5	10	33	41
132M	258	188	117.5	38	M12X28	80	65	7.5	10	33	41

型号 TYPE	HD	METRIC	L	LB	LD	LL	M	N	P	S	T
63M	162	1-M20x1.5	217	194	95.5	101	75	60	90	M5	2.5
71M	177	1-M20x1.5	245	215	110.5	101	85	70	105	M6	2.5
80M	208	1-M25x1.5	290	250	115	101	100	80	120	M6	3
90S	227.5	1-M25x1.5	325	275	145	109	115	95	140	M8	3
90L	227.5	1-M25x1.5	350	300	145	109	115	95	140	M8	3
100L	255	1-M32x1.5	398	338	148.5	109	130	110	160	M8	3.5
112M	291	2-M32x1.5	394	334	154	117.5	130	110	160	M8	3.5
132S	317	2-M32x1.5	475	395	180	117.5	165	130	200	M10	3.5
132M	317	2-M32x1.5	513	433	180	117.5	165	130	200	M10	3.5

YE3 63-132-B34


型号 TYPE	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH	E	EB	ED
63M	100	24	123	120	102	101	80	25.5	100	40	11	M4X12	23	16	3.5
71M	112	26	138	136	109	101	90	27.5	110	45	14	M5X12	30	25	2.5
80M	125	35	157	158	129	101	100	31	125	50	19	M6X16	40	30	5
90S	140	37	173	175	140	109	100	31.5	125	56	24	M8X19	50	40	5
90L	140	37	173	175	140	109	125	31.5	150	56	24	M8X19	50	40	5
100L	160	40	196	198	156	109	140	39	172	63	28	M10X22	60	50	5
112M	190	40	227	230	176	117.5	140	43	180	70	28	M10X22	60	50	5
132S	216	51	262	258	188	117.5	140	46	186	89	38	M12X28	80	65	7.5
132M	216	51	262	258	188	117.5	178	46	224	89	38	M12X28	80	65	7.5

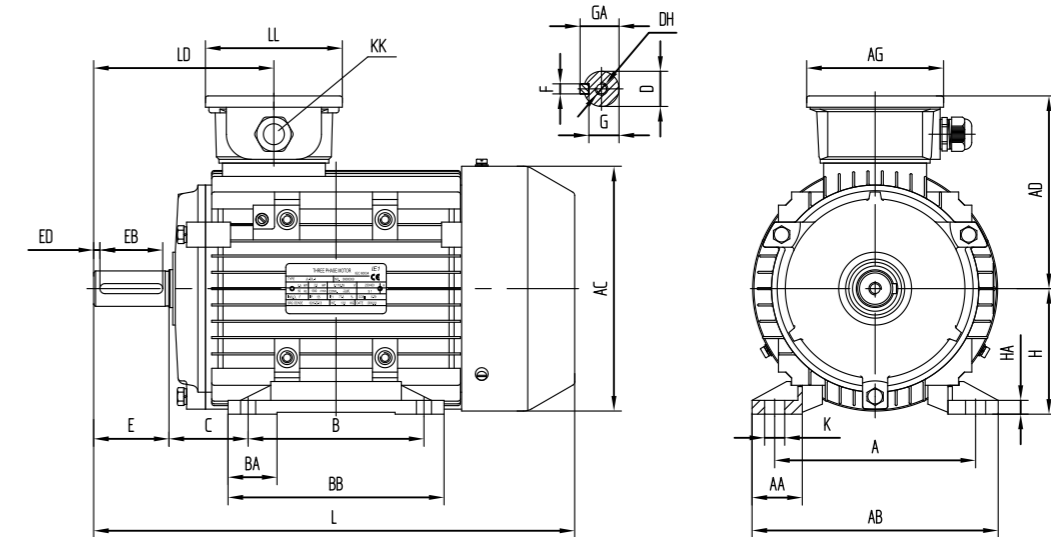
型号 TYPE	F	G	GA	H	HA	K	METRIC	L	LB	LD	LL	M	N	P	S	T
63M	4	8.5	12.5	63	7	7X9.5	1-M20X1.5	217	194	95.5	101	75	60	90	M5	2.5
71M	5	11	16	71	8	7X11	1-M20X1.5	245	215	110.5	101	85	70	105	M6	3
80M	6	15.5	21.5	80	8	10X14	1-M25X1.5	290	250	115	101	100	80	120	M6	3
90S	8	20	27	90	10	10X14	1-M25X1.5	325	275	145	109	115	95	140	M8	3.5
90L	8	20	27	90	10	10X14	1-M25X1.5	350	300	145	109	115	95	140	M8	3.5
100L	8	24	31	100	11	12X16	1-M32X1.5	398	338	148.5	109	130	110	160	M8	3.5
112M	8	24	31	112	12	12X16	2-M32X1.5	394	334	154	117.5	130	110	160	M8	3.5
132S	10	33	41	132	15	12X16	2-M32X1.5	475	395	180	117.5	165	130	200	M8	4
132M	10	33	41	132	15	12X16	2-M32X1.5	513	433	180	117.5	165	130	200	M8	4

YE3 63-200-B35


型号 TYPE	极数 POLE	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH	E	EB	ED
63M	2,4,6	100	24	123	120	102	101	80	25.5	100	40	11	M4×12	23	16	3.5
71M	2,4,6	112	26	138	136	109	101	90	27.5	110	45	14	M5×12	30	25	2.5
80M	2,4,6,8	125	35	157	158	129	101	100	31	125	50	19	M6×16	40	30	5
90S	2,4,6,8	140	37	173	175	140	109	100	31.5	125	56	24	M8×19	50	40	5
90L	2,4,6,8	140	37	173	175	140	109	125	31.5	150	56	24	M8×19	50	40	5
100L	2,4,6,8	160	40	196	198	156	109	140	39	172	63	28	M10×22	60	50	5
112M	2,4,6,8	190	40	227	230	176	117.5	140	43	180	70	28	M10×22	60	50	5
132S	2,4,6,8	216	51	262	258	188	117.5	140	46	186	89	38	M12×28	80	65	7.5
132M	4,6,8	216	51	262	258	188	117.5	178	46	224	89	38	M12×28	80	65	7.5
160M	2,4,6,8	254	65	314	314	251	162	210	-	260	108	42	M16×36	110	90	10
160L	2,4,6,8	254	65	314	314	251	162	254	-	304	108	42	M16×36	110	90	10
180M	2,4,8	279	70	349	355	267	162	241	-	311	121	48	M16×36	110	90	10
180L	4,6,8	279	70	349	355	267	162	279	-	349	121	48	M16×36	110	90	10
200L	2,4,6,8	318	70	388	397	299	210	305	-	369	133	55	M20×42	110	100	5

型号 TYPE	F	G	GA	H	HA	K	KK	L	LA	LB	LD	LL	M	N	P	S	T
63M	4	8.5	12.5	63	7	7×9.5	1-M20×1.5	217	10	194	95.5	101	115	95	140	10	3
71M	5	11	16	71	8	7×11	1-M20×1.5	245	10	215	110.5	101	130	110	160	10	3.5
80M	6	15.5	21.5	80	8	10×14	1-M25×1.5	290	12	250	115	101	165	130	200	12	3.5
90S	8	20	27	90	10	10×14	1-M25×1.5	325	12	275	145	109	165	130	200	12	3.5
90L	8	20	27	90	10	10×14	1-M25×1.5	350	12	300	145	109	165	130	200	12	3.5
100L	8	24	31	100	11	12×16	1-M32×1.5	398	13	338	148.5	109	215	180	250	14.5	4
112M	8	24	31	112	12	12×16	2-M32×1.5	394	14	334	154	117.5	215	180	250	14.5	4
132S	10	33	41	132	15	12×16	2-M32×1.5	475	14	395	180	117.5	265	230	300	14.5	4
132M	10	33	41	132	15	12×16	2-M32×1.5	513	14	433	180	117.5	265	230	300	14.5	4
160M	12	37	45	160	20	4-Φ14.5	2-M40×1.5	589	15	498	256	152	300	250	350	18.5	5
160L	12	37	45	160	20	4-Φ14.5	2-M40×1.5	633	15	542	256	152	300	250	350	18.5	5
180M	14	42.5	51.5	180	22	4-Φ14.5	2-M40×1.5	661	15	578	271	152	300	250	350	18.5	5
180L	14	42.5	51.5	180	22	4-Φ14.5	2-M40×1.5	726	15	616	271	152	300	250	350	18.5	5
200L	16	49	59	200	25	4-Φ18.5	2-M50×1.5	757	17	669	296	190	350	300	400	18.5	5

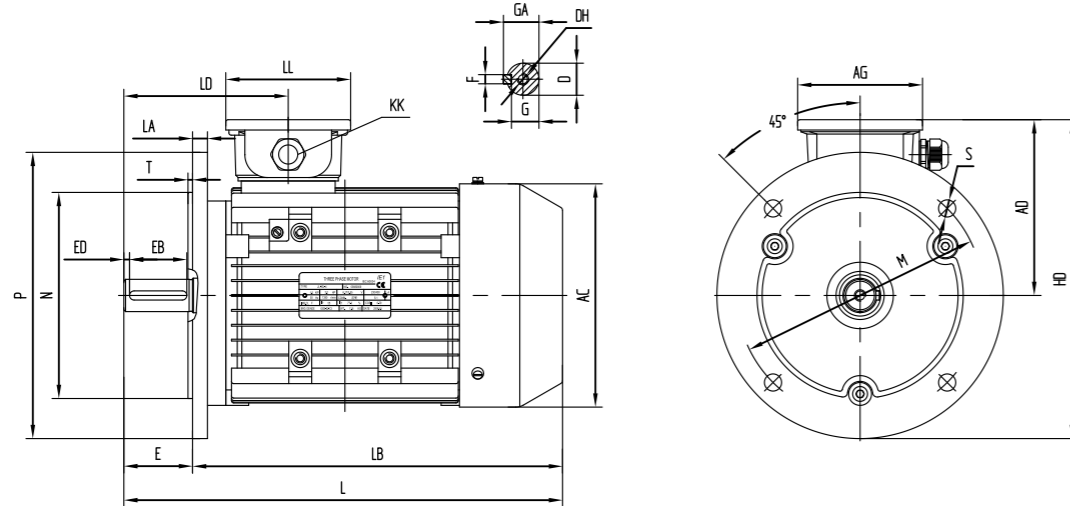
注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

安装位置和尺寸图 Mounting position & Dimension
YE4 63-200-B3


型号 TYPE	极数 POLE	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH
63M	2,4,6,8	100	24	123	120	102	101	80	25.5	100	40	11	M4×12
71M	2,4,6,8	112	26	138	136	109	101	90	27.5	110	45	14	M5×12
80M	2,4,6,8	125	35	157	158	129	101	100	31	125	50	19	M6×16
90S	2,4,6,8	140	37	173	175	140	109	100	31.5	125	56	24	M8×19
90L	2,4,6,8	140	37	173	175	140	109	125	31.5	150	56	24	M8×19
100L	2,4,6,8	160	40	196	198	156	109	140	39	172	63	28	M10×22
112M	2,4,6,8	190	40	227	225	176	117.5	140	43	180	70	28	M10×22
132S	2,4,6,8	216	51	262	258	188	117.5	140	46	186	89	38	M12×28
132M	4,6,8	216	51	262	258	188	117.5	178	46	224	89	38	M12×28
160M	2,4,6,8	254	63	310	335	256	162	210	-	315	108	42	M16×36
160L	2,4,6,8	254	63	310	335	256	162	254	-	355	108	42	M16×36
180M	2,4,8	279	70	349	363	271	162	241	-	359	121	48	M16×36
180L	4,6,8	279	70	349	363	271	162	279	-	360	121	48	M16×36
200L	2,4,6,8	318	70	395	418	312	210	305	-	372	133	55	M20×42

型号 TYPE	E	EB	ED	F	G	GA	H	HA	K	KK	L	LD	LL
63M	23	16	3.5	4	8.5	12.5	63	7	7×9.5	1-M20×1.5	217	95.5	101
71M	30	25	2.5	5	11	16	71	8	7×11	1-M20×1.5	245	110.5	101
80M	40	30	5	6	15.5	21.5	80	8	10×14	1-M25×1.5	290	115	101
90S	50	40	5	8	20	27	90	10	10×14	1-M25×1.5	325	145	109
90L	50	40	5	8	20	27	90	10	10×14	1-M25×1.5	350	145	109
100L	60	50	5	8	24	31	100	11	12×16	1-M32×1.5	398	148.5	109
112M	60	50	5	8	24	31	112	12	12×16	2-M32×1.5	427	162	117.5
132S	80	65	7.5	10	33	41	132	15	12×16	2-M32×1.5	445	180	117.5
132M	80	65	7.5	10	33	41	132	15	12×16	2-M32×1.5	483	180	117.5
160M	110	90	10	12	37	45	160	20	4×Φ14.5	2-M40×1.5	648	248	152
160L	110	90	10	12	37	45	160	20	4×Φ14.5	2-M40×1.5	688	248	152
180M	110	90	10	14	42.5	51.5	180	22	4×Φ14.5	2-M40×1.5	711	271	152
180L	110	90	10	14	42.5	51.5	180	22	4×Φ14.5	2-M40×1.5	746	271	152
200L	110	100	5	16	49	59	200	25	4×Φ18.5	2-M50×1.5	846	296	190

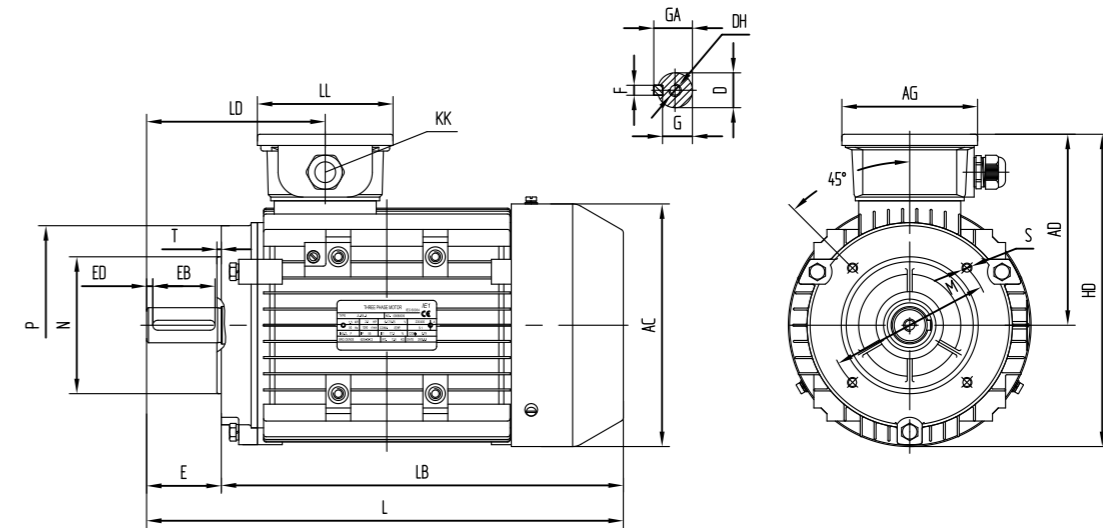
注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

YE4 63-200-B5


型号 TYPE	极数 POLE	AC	AD	AG	D	DH	E	EB	ED	F	G	GA
63M	2,4,6	120	102	101	11	M4×12	23	16	3.5	4	8.5	12.5
71M	2,4,6	136	109	101	14	M5×12	30	25	2.2	5	11	16
80M	2,4,6,8	158	129	101	19	M6×16	40	30	5	6	15.5	21.5
90S	2,4,6,8	175	140	109	24	M8×19	50	40	5	8	20	27
90L	2,4,6,8	175	140	109	24	M8×19	50	40	5	8	20	27
100L	2,4,6,8	198	156	109	28	M10×22	60	50	5	8	24	31
112M	2,4,6,8	225	176	117.5	28	M10×22	60	50	5	8	24	31
132S	2,4,6,8	258	188	117.5	38	M12×28	80	65	7.5	10	33	41
132M	4,6,8	258	188	117.5	38	M12×28	80	65	7.5	10	33	41
160M	2,4,6,8	335	256	162	42	M16×36	110	90	10	12	37	45
160L	2,4,6,8	335	256	162	42	M16×36	110	90	10	12	37	45
180M	2,4,8	363	271	162	48	M16×36	110	90	10	14	42.5	51.5
180L	4,6,8	363	271	162	48	M16×36	110	90	10	14	42.5	51.5
200L	2,4,6,8	418	312	210	55	M20×42	110	100	5	16	49	59

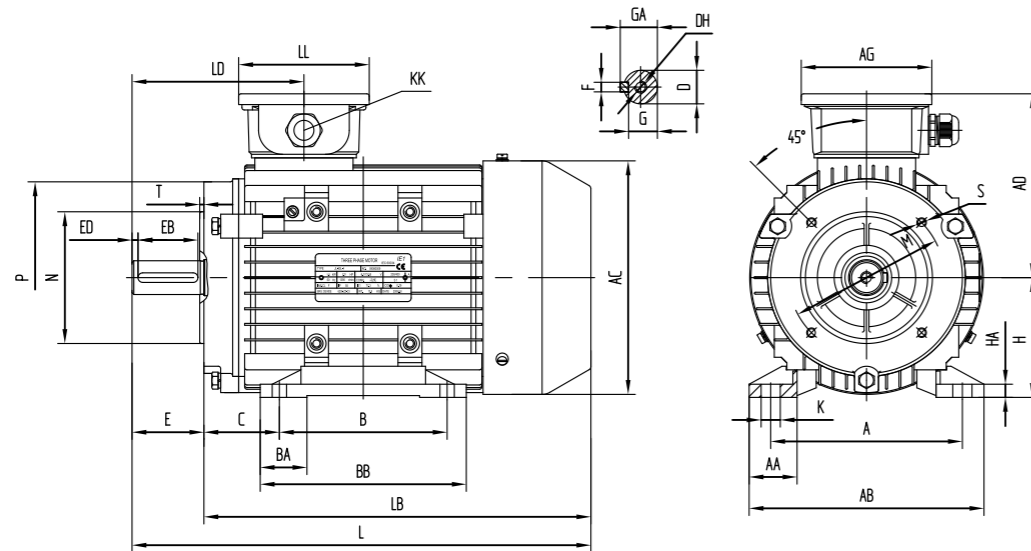
型号 TYPE	HD	KK	L	LA	LB	LD	LL	M	N	P	S	T
63M	172	1-M20×1.5	217	10	194	95.5	101	115	95	140	10	3
71M	189	1-M20×1.5	245	10	215	110.5	101	130	110	160	10	3.5
80M	229	1-M25×1.5	290	12	250	115	101	165	130	200	12	3.5
90S	240	1-M25×1.5	325	12	275	145	109	165	130	200	12	3.5
90L	240	1-M25×1.5	350	12	300	145	109	165	130	200	12	3.5
100L	281	1-M32×1.5	398	13	338	148.5	109	215	180	250	14.5	4
112M	301	2-M32×1.5	427	14	334	162	117.5	215	180	250	14.5	4
132S	338	2-M32×1.5	445	14	365	180	117.5	265	230	300	14.5	4
132M	338	2-M32×1.5	483	14	403	180	117.5	265	230	300	14.5	4
160M	426	2-M40×1.5	648	15	-	248	152	300	250	350	18.5	5
160L	426	2-M40×1.5	688	15	-	248	152	300	250	350	18.5	5
180M	445	2-M40×1.5	711	15	-	271	152	300	250	350	18.5	5
180L	445	2-M40×1.5	746	15	-	271	152	300	250	350	18.5	5
200L	499	2-M50×1.5	846	17	-	296	190	350	300	400	18.5	5

注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

YE4 63-132-B14


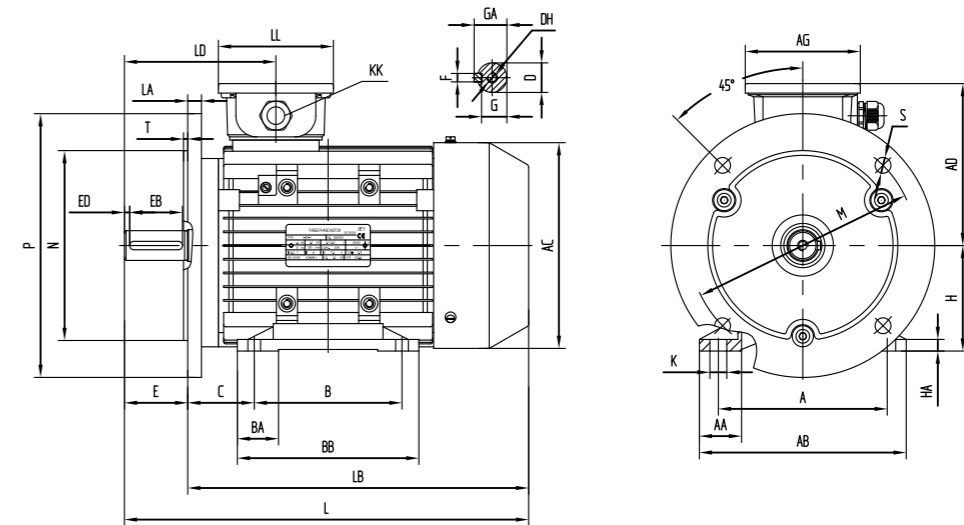
型号 TYPE	AC	AD	AG	D	DH	E	EB	ED	F	G	GA
63M	120	102	101	11	M4×12	23	16	3.5	4	8.5	12.5
71M	136	109	101	14	M5×12	30	25	2.5	5	11	16
80M	158	129	101	19	M6×16	40	30	5	6	15.5	21.5
90S	175	140	109	24	M8×19	50	40	5	8	20	27
90L	175	140	109	24	M8×19	50	40	5	8	20	27
100L	198	156	109	28	M10×22	60	50	5	8	24	31
112M	225	176	117.5	28	M10×22	60	50	5	8	24	31
132S	258	188	117.5	38	M12×28	80	65	7.5	10	33	41
132M	258	188	117.5	38	M12×28	80	65	7.5	10	33	41

型号 TYPE	HD	METRIC	L	LB	LD	LL	M	N	P	S	T
63M	162	1-M20×1.5	217	194	95.5	101	75	60	90	M5	2.5
71M	177	1-M20×1.5	245	215	110.5	101	85	70	105	M6	2.5
80M	208	1-M25×1.5	290	250	115	101	100	80	120	M6	3
90S	227.5	1-M25×1.5	325	275	145	109	115	95	140	M8	3
90L	227.5	1-M25×1.5	350	300	145	109	115	95	140	M8	3
100L	255	1-M32×1.5	398	338	148.5	109	130	110	160	M8	3.5
112M	291	2-M32×1.5	427	334	162	117.5	130	110	160	M8	3.5
132S	317	2-M32×1.5	445	365	180	117.5	165	130	200	M10	3.5
132M	317	2-M32×1.5	483	403	180	117.5	165	130	200	M10	3.5

YE4 63-132-B34


型号 TYPE	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH	E	EB	ED
63M	100	24	123	120	102	101	80	25.5	100	40	11	M4X12	23	16	3.5
71M	112	26	138	136	109	101	90	27.5	110	45	14	M5X12	30	25	2.5
80M	125	35	157	158	129	101	100	31	125	50	19	M6X16	40	30	5
90S	140	37	173	175	140	109	100	31.5	125	56	24	M8X19	50	40	5
90L	140	37	173	175	140	109	125	31.5	150	56	24	M8X19	50	40	5
100L	160	40	196	198	156	109	140	39	172	63	28	M10X22	60	50	5
112M	190	40	227	230	176	117.5	140	43	180	70	28	M10X22	60	50	5
132S	216	51	262	258	188	117.5	140	46	186	89	38	M12X28	80	65	7.5
132M	216	51	262	258	188	117.5	178	46	224	89	38	M12X28	80	65	7.5

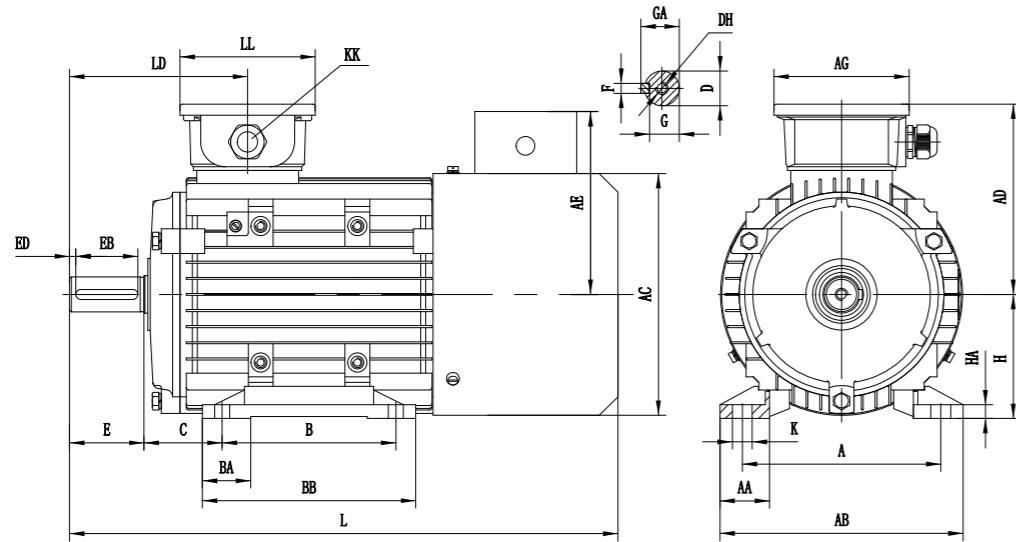
型号 TYPE	F	G	GA	H	HA	K	METRIC	L	LB	LD	LL	M	N	P	S	T
63M	4	8.5	12.5	63	7	7X9.5	1-M20X1.5	217	194	95.5	101	75	60	90	M5	2.5
71M	5	11	16	71	8	7X11	1-M20X1.5	245	215	110.5	101	85	70	105	M6	2.5
80M	6	15.5	21.5	80	8	10X14	1-M25X1.5	290	250	115	101	100	80	120	M6	3
90S	8	20	27	90	10	10X14	1-M25X1.5	325	275	145	109	115	95	140	M8	3
90L	8	20	27	90	10	10X14	1-M25X1.5	350	300	145	109	115	95	140	M8	3
100L	8	24	31	100	11	12X16	1-M32X1.5	398	338	148.5	109	130	110	160	M8	3.5
112M	8	24	31	112	12	12X16	2-M32X1.5	427	334	154	117.5	130	110	160	M8	3.5
132S	10	33	41	132	15	12X16	2-M32X1.5	445	365	180	117.5	165	130	200	M10	3.5
132M	10	33	41	132	15	12X16	2-M32X1.5	483	403	180	117.5	165	130	200	M10	3.5

YE4 63-200-B35


型号 TYPE	极数 POLE	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH	E	EB	ED
63M	2,4,6	100	24	123	120	102	101	80	25.5	100	40	11	M4x12	23	16	3.5
71M	2,4,6	112	26	138	136	109	101	90	27.5	110	45	14	M5x12	30	25	2.5
80M	2,4,6,8	125	35	157	158	129	101	100	31	125	50	19	M6x16	40	30	5
90S	2,4,6,8	140	37	173	175	140	109	100	31.5	125	56	24	M8x19	50	40	5
90L	2,4,6,8	140	37	173	175	140	109	125	31.5	150	56	24	M8x19	50	40	5
100L	2,4,6,8	160	40	196	198	156	109	140	39	172	63	28	M10x22	60	50	5
112M	2,4,6,8	190	40	227	225	176	117.5	140	43	180	70	28	M10x22	60	50	5
132S	2,4,6,8	216	51	262	258	188	117.5	140	46	186	89	38	M12x28	80	65	7.5
132M	4,6,8	216	51	262	258	188	117.5	178	46	224	89	38	M12x28	80	65	7.5
160M	2,4,6,8	254	65	314	335	256	162	210	-	315	108	42	M16x36	110	90	10
160L	2,4,6,8	254	65	314	335	256	162	254	-	355	108	42	M16x36	110	90	10
180M	2,4,8	279	70	349	363	271	162	241	-	359	121	48	M16x36	110	90	10
180L	4,6,8	279	70	349	363	271	162	279	-	360	121	48	M16x36	110	90	10
200L	2,4,6,8	318	70	395	418	312	210	305	-	372	133	55	M20x42	110	100	5

型号 TYPE	F	G	GA	H	HA	K	KK	L	LA	LB	LD	LL	M	N	P	S	T
63M	4	8.5	12.5	63	7	7x9.5	1-M20x1.5	217	10	194	95.5	101	115	95	140	10	3
71M	5	11	16	71	8	7x11	1-M20x1.5	245	10	215	110.5	101	130	110	160	10	3.5
80M	6	15.5	21.5	80	8	10x14	1-M25x1.5	290	12	250	115	101	165	130	200	12	3.5
90S	8	20	27	90	10	10x14	1-M25x1.5	325	12	275	145	109	165	130	200	12	3.5
90L	8	20	27	90	10	10x14	1-M25x1.5	350	12	300	145	109	165	130	200	12	3.5
100L	8	24	31	100	11	12x16	1-M32x1.5	398	13	338	148.5	109	215	180	250	14.5	4
112M	8	24	31	112	12	12x16	2-M32x1.5	427	14	334	154	117.5	215	180	250	14.5	4
132S	10	33	41	132	15	12x16	2-M32x1.5	445	14	395	180	117.5	265	230	300	14.5	4
132M	10	33	41	132	15	12x16	2-M32x1.5	483	14	433	180	117.5	265	230	300	14.5	4
160M	12	37	45	160	20	4-φ14.5	2-M40x1.5	648	15	498	256	152	300	250	350	18.5	5
160L	12	37	45	160	20	4-φ14.5	2-M40x1.5	688	15	542	256	152	300	250	350	18.5	5
180M	14	42.5	51.5	180	22	4-φ14.5	2-M40x1.5	711	15	578	271	152	300	250	350	18.5	5
180L	14	42.5	51.5	180	22	4-φ14.5	2-M40x1.5	746	15	616	271	152	300	250	350	18.5	5
200L	16	49	59	200	25	4-φ18.5	2-M50x1.5	846	17	669	296	190	350	300	400	18.5	5

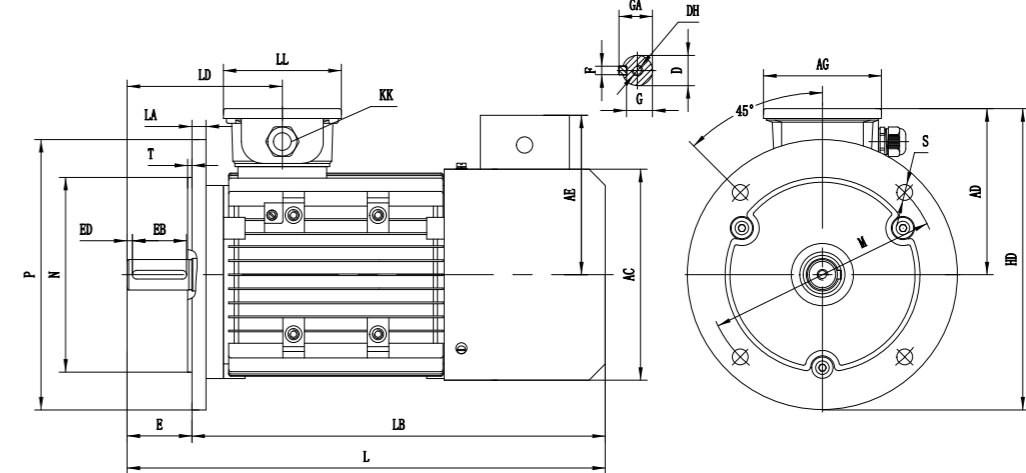
注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

安装位置和尺寸图 Mounting position & Dimension
YVF63-160-B3


型号 TYPE	极数 POLE	A	AA	AB	AC	AD	AE	AG	B	BA	BB	C	D	DH
63M	2,4,6	100	24	123	120	102	110	101	80	22.5	100	40	11	M4X12
71M	2,4,6	112	26	138	136	109	118	101	90	25.5	110	45	14	M5X12
80M	2,4,6,8	125	35	157	158	129	129	101	100	27.5	125	50	19	M6X16
90S	2,4,6,8	140	37	173	175	140	137.5	109	100	31	125	56	24	M8X19
90L	2,4,6,8	140	37	173	175	140	137.5	109	125	31.5	150	56	24	M8X19
100L	2,4,6,8	160	40	196	198	156	149	109	140	31.5	172	63	28	M10X22
112M	2,4,6,8	190	40	227	230	178	165	117.5	140	39	180	70	28	M10X22
132S	2,4,6,8	216	51	262	258	188	179	117.5	140	43	186	89	38	M12X28
132M	4,6,8	216	51	262	258	188	179	117.5	178	46	224	89	38	M12X28
160M	2,4,6,8,1	254	65	314	314	251	207	162	210	-	260	108	42	M16X36
160L	2,4,6,8	254	65	314	314	251	207	162	254	-	304	108	42	M16X36

型号 TYPE	E	EB	ED	F	G	GA	H	HA	K	KK	L	LD	LL
63M	23	16	3.5	4	8.5	12.5	63	7	7×9.5	1-M20×1.5	279.5	95.5	101
71M	30	25	2.5	5	11	16	71	8	7×11	1-M20×1.5	300.5	110.5	101
80M	40	30	5	6	15.5	21.5	80	8	10×14	1-M20×1.5	345.5	115	101
90S	50	40	5	8	20	27	90	10	10×14	1-M20×1.5	388	145	109
90L	50	40	5	8	20	27	90	10	10×14	1-M25×1.5	413	145	109
100L	60	50	5	8	24	31	100	11	12×16	1-M32×1.5	461	148.5	109
112M	60	50	5	8	24	31	112	12	12×16	2-M32×1.5	484	154	117.5
132S	80	65	7.5	10	33	41	132	15	12×16	2-M32×1.5	565	180	117.5
132M	80	65	7.5	10	33	41	132	15	12×16	2-M32×1.5	608.5	180	117.5
160M	110	90	10	12	37	45	160	20	4×Φ14.5	2-M40×1.5	703.5	256	152
160L	110	90	10	12	37	45	160	20	4×Φ14.5	2-M40×1.5	747.5	256	152

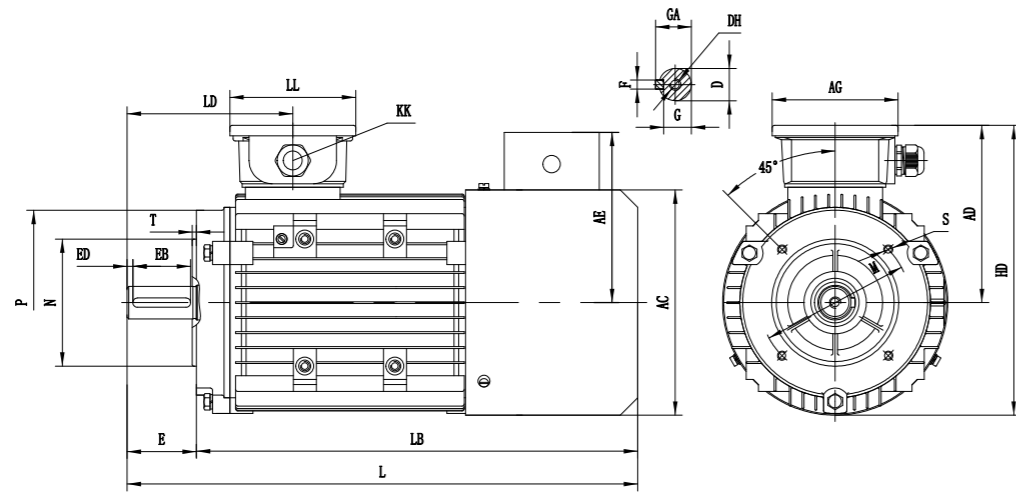
注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

YVF63-160-B5


型号 TYPE	极数 POLE	AC	AD	AE	AG	D	DH	E	EB	ED	F	G
63M	2,4,6	120	102	110	101	11	M4×12	23	16	3.5	4	8.5
71M	2,4,6	136	109	118	101	14	M5×12	30	25	2.2	5	11
80M	2,4,6,8	158	129	129	101	19	M6×16	40	30	5	6	15.5
90S	2,4,6,8	175	140	137.5	109	24	M8×19	50	40	5	8	20
90L	2,4,6,8	175	140	137.5	109	24	M8×19	50	40	5	8	20
100L	2,4,6,8	198	156	149	109	28	M10×22	60	50	5	8	24
112M	2,4,6,8	230	176	165	117.5	28	M10×22	60	50	5	8	24
132S	2,4,6,8	258	188	179	117.5	38	M12×28	80	65	7.5	10	33
132M	4,6,8	258	188	179	117.5	38	M12×28	80	65	7.5	10	33
160M	2,4,6,8	314	251	207	162	42	M16×36	110	90	10	12	37
160L	2,4,6,8	314	251	207	162	42	M16×36	110	90	10	12	37

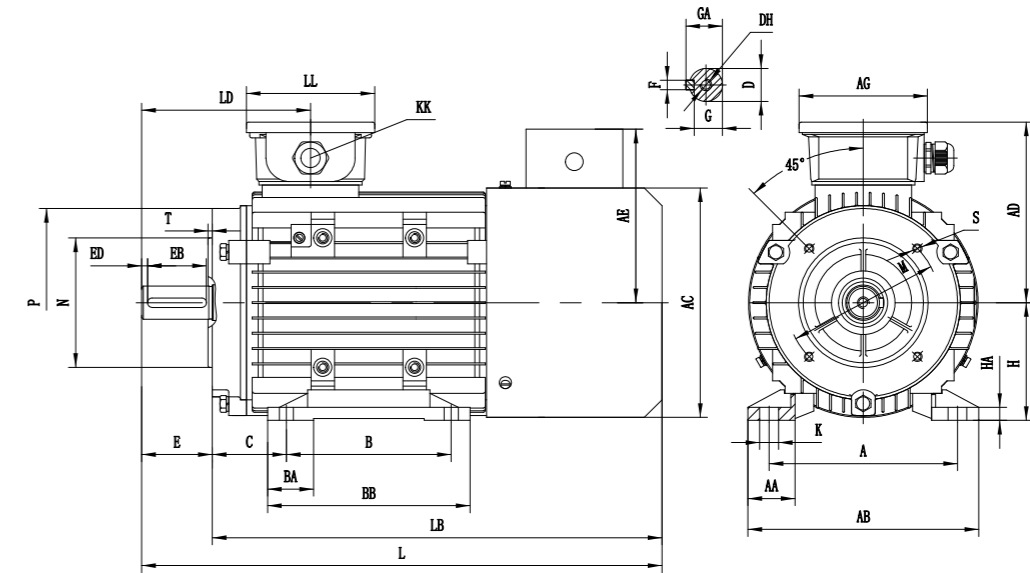
型号 TYPE	GA	HD	KK	L	LA	LB	LD	LL	M	N	P	S	T
63M	12.5	172	1-M20×1.5	279.5	10	194	95.5	101	115	95	140	10	3
71M	16	189	1-M20×1.5	300.5	10	215	110.5	101	130	110	160	10	3.5
80M	21.5	229	1-M25×1.5	345.5	12	250	115	101	165	130	200	12	3.5
90S	27	240	1-M25×1.5	388	12	275	145	109	165	130	200	12	3.5
90L	27	240	1-M25×1.5	413	12	300	145	109	165	130	200	12	3.5
100L	31	281	1-M32×1.5	461	13	338	148.5	109	215	180	250	14.5	4
112M	31	301	2-M32×1.5	484	14	334	154	117.5	215	180	250	14.5	4
132S	41	338	2-M32×1.5	565	14	395	180	117.5	265	230	300	14.5	4
132M	41	338	2-M32×1.5	608.5	14	433	180	117.5	265	230	300	14.5	4
160M	45	426	2-M40×1.5	703.5	15	498	256	152	300	250	350	18.5	5
160L	45	426	2-M40×1.5	747.5	15	542	256	152	300	250	350	18.5	5

注:表格内白底部分电机外壳材质为铝壳, 灰底部分电机外壳材质为铁壳

YVF63-160-B14


型号 TYPE	AC	AD	AE	AG	D	DH	E	EB	ED	F	G
63M	120	102	110	101	11	M4X12	23	16	3.5	4	8.5
71M	136	109	118	101	14	M5X12	30	25	2.5	5	11
80M	158	129	129	101	19	M6X16	40	30	5	6	15.5
90S	175	140	137.5	109	24	M8X19	50	40	5	8	20
90L	175	140	137.5	109	24	M8X19	50	40	5	8	20
100L	198	156	149	109	28	M10X22	60	50	5	8	24
112M	230	176	165	117.5	28	M10X22	60	50	5	8	24
132S	258	188	179	117.5	38	M12X28	80	65	7.5	10	33
132M	258	188	179	117.5	38	M12X28	80	65	7.5	10	33

型号 TYPE	GA	HD	METRIC	L	LB	LD	LL	M	N	P	S	T
63M	12.5	162	1-M20x1.5	279.5	194	95.5	101	75	60	90	M5	2.5
71M	16	177	1-M20x1.5	300.5	215	110.5	101	85	70	105	M6	2.5
80M	21.5	208	1-M25x1.5	345.5	250	115	101	100	80	120	M6	3
90S	27	227.5	1-M25x1.5	388	275	145	109	115	95	140	M8	3
90L	27	227.5	1-M25x1.5	413	300	145	109	115	95	140	M8	3
100L	31	255	1-M32x1.5	461	338	148.5	109	130	110	160	M8	3.5
112M	31	291	2-M32x1.5	484	334	154	117.5	130	110	160	M8	3.5
132S	41	317	2-M32x1.5	565	395	180	117.5	165	130	200	M10	3.5
132M	41	317	2-M32x1.5	608.5	433	180	117.5	165	130	200	M10	3.5

YVF63-160-B34


型号 TYPE	A	AA	AB	AC	AD	AE	AG	B	BA	BB	C	D	DH	E	EB	ED
63M	100	24	123	120	102	110	101	80	25.5	100	40	11	M4X12	23	16	3.5
71M	112	26	138	136	109	118	101	90	27.5	110	45	14	M5X12	30	25	2.5
80M	125	35	157	158	129	129	101	100	31	125	50	19	M6X16	40	30	5
90S	140	37	173	175	140	137.5	109	100	31.5	125	56	24	M8X19	50	40	5
90L	140	37	173	175	140	137.5	109	125	31.5	150	56	24	M8X19	50	40	5
100L	160	40	196	198	156	149	109	140	39	172	63	28	M10X22	60	50	5
112M	190	40	227	230	176	165	117.5	140	43	180	70	28	M10X22	60	50	5
132S	216	51	262	258	188	179	117.5	140	46	186	89	38	M12X28	80	65	7.5
132M	216	51	262	258	188	179	117.5	178	46	224	89	38	M12X28	80	65	7.5

型号 TYPE	F	G	GA	H	HA	K	METRIC	L	LB	LD	LL	M	N	P	S	T
63M	4	8.5	12.5	63	7	7X9.5	1-M20X1.5	279.5	194	95.5	101	75	60	90	M5	2.5
71M	5	11	16	71	8	7X11	1-M20X1.5	300.5	215	110.5	101	85	70	105	M6	3
80M	6	15.5	21.5	80	8	10X14	1-M25X1.5	345.5	250	115	101	100	80	120	M6	3
90S	8	20	27	90	10	10X14	1-M25X1.5	388	275	145	109	115	95	140	M8	3.5
90L	8	20	27	90	10	10X14	1-M25X1.5	413	300	145	109	115	95	140	M8	3.5
100L	8	24	31	100	11	12X16	1-M32X1.5	461	338	148.5	109	130	110	160	M8	3.5
112M	8	24	31	112	12	12X16	2-M32X1.5	484	334	154	117.5	130	110	160	M8	3.5
132S	10	33	41	132	15	12X16	2-M32X1.5	565	395	180	117.5	165	130	200	M8	4
132M	10	33	41	132	15	12X16	2-M32X1.5	608.5	433	180	117.5	165	130	200	M8	4

