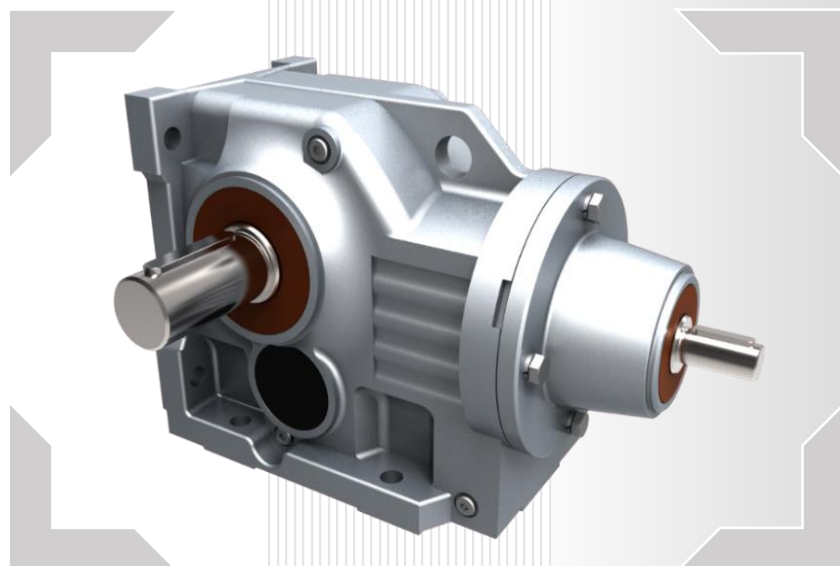


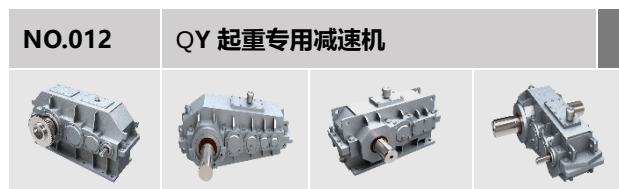
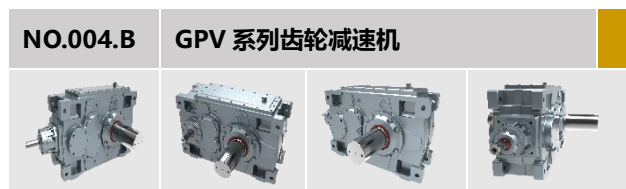
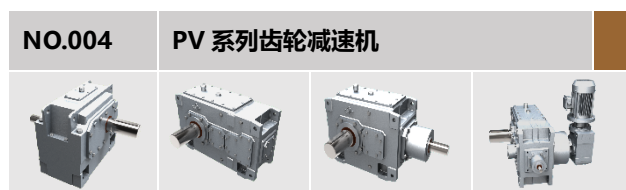
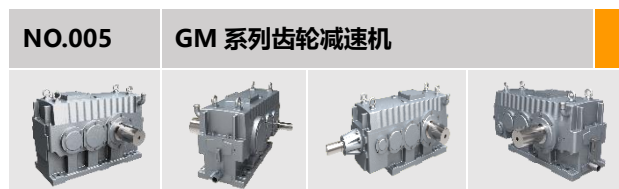


G 系列减速电机

G Series Geared Motor

产品样本 CATALOGUE NO.001
版 本 VERSION V3.3-2020

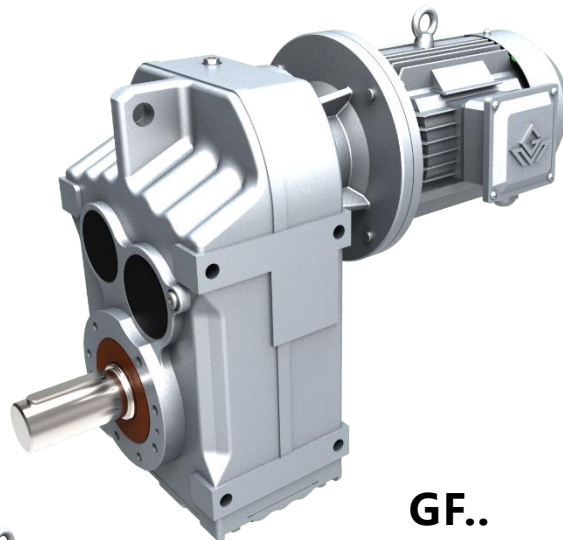
产 品 总 览



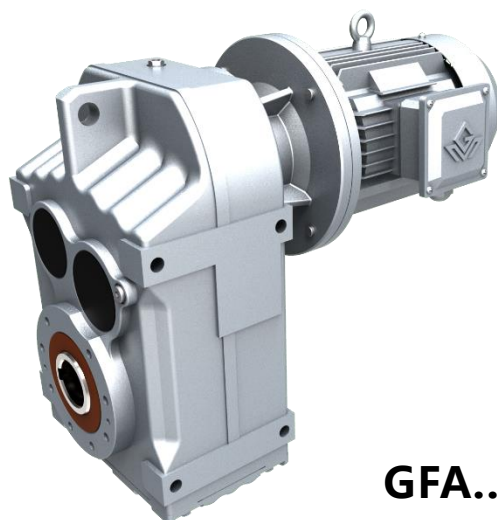
GF Series Parallel-Shaft Helical Geared Motors

GF
系列

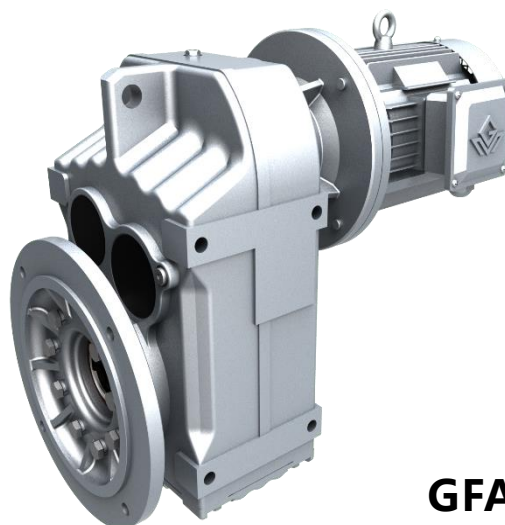
平行轴
—
斜齿
轮减
速电
机



GF..



GFA..



GFAF..

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产 品 概 述

产品特性

- 1、高度模块化设计：**可以方便地配用各种型式的电动机或采用其它动力输入。同种机型可配用多种功率的电动机。容易实现各机型间组合联接。
- 2、传动比：**划分细，范围广。组合机型可以形成很大的传动比，即输出极低的转速。
- 3、安装形式：**安装位置不受限制。
- 4、强度高、体积小：**箱体采用高强度铸铁。齿轮及齿轮轴采用气体渗碳淬火精磨工艺，因而单位体积承载能力高。
- 5、使用寿命长：**在正确选型（包括选用适当的使用系数）和正常使用维护的条件下，减速机（除易损件外）的主要零部件寿命一般不低于 25000 小时。易损件包括润滑油、油封以及轴承。
- 6、噪声低：**减速机主要零部件都经过精密加工，并通过精心组装和测试，因而减速机噪声较低。
- 7、效率高：**单机型齿轮效率不低于 95%，蜗轮蜗杆效率能达到 89%。
- 8、可承受较大的径向载荷。**

场所条件

本减速电机适合在环境温度-10℃到+40℃条件下运行，海拔高度可达 1000 米。

可用于正反转。

无行业限制。

在其它条件下使用时请与技术部联系。

Features of Products

- 1、 Highly Standard Modular Designed:** The products are connected with and driven by different types of motors or other kinds of input power .The same type geared motor can be adapted to optioned powers of motors. It is therefore easy to realize different solutions for varied requirements.
- 2、 Ratio:** Featured many closely divided ratios and wide ranges of them. Very big final ratios can be obtained through combined unites to reach extremely low output speeds.
- 3、 Mounting Arrangement:** No strict limitation to the mounting arrangement.
- 4、 High Strength, Compact Dimension:** Housings are made of high strength cast iron. Gears and shaft gears are finished with gas carburising process and precise grounding to sequentially get high loading capacity of per certain volume.
- 5、 Long Service Life:** Under the conditions of accurately selecting type size and the normal maintenance and use, main components (except those easily-disabled parts) can last as long as up to more than 25,000 hours. Easily-disabled parts include lubricating oil, oil seals, and bearings.
- 6、 Low Noise:** All key components are finished by precisely machining, accurate assembly, and finally tested, and therefore, fairly low noise is reached.
- 7、 Highly Efficiency:** The efficiency of gear unit is more than 95%, The efficiency of worm gear unit can reach 89%.
- 8、 Large Radial Loading Ability.**

Site Conditions

The geared motors are suitable for the operation sites in the ambient temperatures from -10℃ to 40℃ and altitudes up to 1000m above sea level.

They can be used both for clockwise running and anticlockwise running.

There is no limitation to specific application field.

While applied in other aggressive operating atmosphere or environment conditions, please contact our technology department.

选型参数表释义

1、选型参数表 (恒功率):

电机功率 P [kW]: 表中列出的功率是按 GB/T 4772.1

旋转电机输出功率等级。

输出转速 n_a [r/min]: 即输出轴的转速。参考电机满载时的转速和减速机的传动比计算得出, 单位为转/分钟。

输出转矩 M_a [N.m]: 电机满载时, 减速机输出轴上可以产生的转矩。此输出转矩已考虑了减速机内部各种效率。

传动比 i : 减速机从输入到输出间总的实际 (精确) 传动比。

许用径向载荷 F_{Ra} [kN]: 标准实心输出轴轴头长度中点处, 或标准空心轴端部的许用径向载荷。

使用系数 f_B : 减速机额定功率与所配用的电机额定功率的比值。它是选择减速机规格的重要参数。

机型号: 即减速机的机型和规格号。有单机型和组合型两种。组合一般为恒功率条件下的组合。每种机型 (包括某些未列入此表中的同规格变型品种) 都可配备当前栏中所有传动比。其尺寸可查阅对应的安装结构尺寸图表。

电机极数: GB/T 4772.1 旋转电机极数。

2、选型参数表 (恒转矩):

恒转矩条件下较为合理的组合。按表中最大输出转矩计算时, 许用使用系数为 1。其它含义同恒功率。

Description of Selection Tables

1、Selection Table (Constant Power):

Motor Power P [kW]: Power is indicated on the basis of GB/T 4772.1 motor.

Output Speed n_a [r/min]: Output speed is calculated on the basis of motor's fully loading speed and geared motor's ratio. Unit: revolutions per minute.

Output Torque M_a [N.m]: Torque available at output shaft while motor being fully loaded. All internal efficiency factors have already considered.

Ratio i : Exact final total transmission ratio input to output.

Permissible Radial Load F_{Ra} [kN]: Allowable radial load at the midpoint of the shaft head length of a standard solid output shaft, or at the end of a standard hollow shaft.

Service Factor f_B : The ratio of rated power of gear unit to rated power of motor power. It is an important parameter to select the reducer model.

Type Size of Unit: Including type and size. Individual unit and combined units are available. Combination is considered commonly under the constant power condition. Each type (and even some other types not mentioned in the tables) can be assembled or combined to any ratio mentioned in the tables.

For the detailed construction dimension, see the relevant dimensional tables.

Pole Number of Motor: The pole number of GB/T 4772.1 motor.

2、Selection Table(Constant Torque):

Constant torque selection table is suitable for the conditions where the constant torque system is applied appropriately.

If the Max. torque listed in this table is used when calculating, service factor is 1.0 . The meanings of other terms are similar to ones described in Selection Table(Constant Power).

选型步骤

1. 机型的选择

G 系列减速电机由四种不同结构型式及其多种派生型组成。GR、GF 系列及其派生型，用于输入轴与输出轴平行的场合；GS、GK 系列及其派生型，用于输入轴与输出轴垂直的场合。

选型时一般先根据安装要求选择合适的机型系列。如，要求输入轴与输出轴垂直，可选择 GK 或 GS 系列。

2. 总工况系数 f_A 的确定

总工况系数：

$$f_A = f_{Ah} \times f_{Ac} \times f_{At} \times f_{An}$$

总工况系数由工作机的多项因素构成，可根据工作机情况进行取舍或增加项目。

1)、 f_{Ah}

f_{Ah} 由工作机载荷特性和工作时间两个因素决定的工况系数，是最基本、最主要的系数。常用工作机的 f_{Ah} 可参考后述“工况系数 f_{Ah} ”表选定。其它工作机的工况系数，可用类比法确定。

2)、 f_{Ac}

f_{Ac} 由启、停次数决定。可参考后述“工况系数 f_{Ac} ”表确定。注意启、停要各计一次。

3)、 f_{At}

f_{At} 由工作环境温度决定的系数。可参考后述“工况系数 f_{At} ”表确定。

4)、 f_{An}

f_{An} 由转速决定的系数，同时考虑了热功率问题。通常情况下，本系列减速电机不配置循环润滑及冷却装置。若减速电机输出转速较高，特别是立式安装时（M2/M4），或对减速电机温升有严格要求时，为避免热功率的问题，需增加转速工况系数 f_{An} 。可参考后述“工况系数 f_{An} ”表确定。

各项数值不能确定时，请与公司技术部联系。

Selection Steps

1、Type Selection

G series geared motor is composed of four different structural types and various derived types. GR, GF series and their derivations, used in situations where the input shaft is parallel to the output shaft; GS, GK series and their derivations, used for input shaft and output shaft vertical situations.

During the selection process, the appropriate model series is generally selected according to the installation requirements. For example, if the input shaft is perpendicular to the output shaft, you can choose GK or GS series.

2、Selection of Total Service Factor f_A

Total Service Factor:

$$f_A = f_{Ah} \times f_{Ac} \times f_{At} \times f_{An}$$

The total service factor is composed of several factors of the working unit, can choose or add projects according to the working conditions.

1)、 f_{Ah}

f_{Ah} is determined by two factors of working unit load feature and working time, it is the most basic and important factor. f_{Ah} of frequently-used work unit can see the 'service factor f_{Ah} ' below to select.

2)、 f_{Ac}

f_{Ac} —the factor determined by number of starts and stop per hour of working unit. You can see the 'service factor f_{Ah} ' below. Attention: the number should be counted even start or stop.

3)、 f_{At}

f_{At} is a factor determined by the temperature of the working environment. Refer to the "service factor f_{Ah} " table below for determination.

4)、 f_{An}

f_{An} is a factor determined by the rotation speed, and the thermal power problem is taken into account. In general, this series of geared motors are not equipped with circulating lubrication and cooling devices. If the output speed of the geared motor is relatively high, especially under vertical installation (M2/M4), or when the temperature rise of the geared motor is strictly required, in order to avoid the problem of thermal power, the speed service factor f_{An} should be increased. Refer to the "service factor f_{An} " table below for determination.

When you can't select the value of service factor, please contact with us.

3. 型号 (规格) 的确定

须满足条件 $f_B \geq f_A$ (或 $f_B \geq f_{Ah} \times f_{Ac} \times f_{At} \times f_{An}$)

1)、恒功率选型

(1)电机与减速机直联或通过联轴器联接

a、在选型参数表(恒功率)中找到相应的电机功率、极数。

b、在此功率和极数下, 初步选用一个具有相近传动比的机型, 并记录下其使用系数 f_B 。

c、比较, 若满足条件 $f_B \geq f_A$, 则是可用机型。否则, 加大机型, 直到满足条件。

(2)电机与减速器之间具有前置减速联接

若电机与减速机之间通过齿轮、皮带、链轮等减速装置联接, 由于输入转矩的增加, 须把电机功率折算到减速机输入轴上, 即把电机的功率乘以前置减速装置的传动比。用折算的功率 (当量功率), 按前述章节(1)中的方法选取。此时, 电机极数不变。

注意, 采用当量功率仅是为了选型方便, 并无其它物理含义。

2)、恒转矩选型

按电机功率、极数和传动比查选型参数表(恒转矩)。此时, 工作转矩须限制在所选减速机的最大输出转矩范围内。

4、径向载荷检验

须满足条件: $F_{Ra} \geq f_A \times F_r$; (N)

其中:

F_{Ra} ——标准实心输出轴轴头长度中点处, 或标准空心轴端部的许用径向载荷。

若载荷作用点不在规定处, 其许用径向载荷, 须按后述章节“偏离输出轴轴伸中心点的径向载荷校核”进行修订和校核。

f_A ——工作机总工况系数。按前述章节计算得出。

F_r ——减速电机输出轴上工作元件产生的径向载荷。

轴上工作元件为联轴器, 且严格按联轴器对标准安装, 确认无径向载荷时, 可取 $F_r=0$; 轴上工作元件为

3.Selection of Type (Size)

It is essential to meet following: $f_B \geq f_A$ (or $f_B \geq f_{Ah} \times f_{Ac} \times f_{At} \times f_{An}$)

1)、For constant power

(1)The motor is mounted directly into gear unit or with coupling

a、Reach to a relevant power and pole number of motor from selection table (constant power)

b、Select rudely a size with close radio, and recode it's f_B .

c、Compare, if meet this formula: $f_B \geq f_A$, then this size of gear unit is available. Otherwise select a bigger size of gear unit until meet it.

(2)、The gear unit with perfixion deceleration unit

When connecting the motor and gear unit using gears, belts, or chains, etc. Because the torque of input has been increased, so it is essential to convert motor power into input power of gear unit, the input power is to multiply motor power by radio. Select the size according to the power converted from the seletion table. This moment, the number of motor pole is same.

Attention, the equivalent power is used only for selection convenience and has no other physical meaning.

2)、For constant torque

Select the size of gear unit according to the power and pole of motor and radio from selection table (constant torque). It is essential to restrict the working torque under maximal output torque of gear unit selected.

4、Radial Load Checking

It is essential to meet following: $F_{Ra} \geq f_A \times F_r$; (N)
Where:

F_{Ra} ——Allowable radial load at the midpoint of the shaft head length of a standard solid output shaft, or at the end of a standard hollow shaft.

If the loading point is not specified, it allowable radial load shall be revised and checked according to the following chapter "Radial load check deviating from the center point of output shaft extension".

f_A ——total service factor of work units. Calculated according to the preceding section.

F_r ——radial load generated by working elements on output shaft of geared motor.

The working element on the shaft is the coupling, and it is installed strictly in accordance with the coupling standard. When no radial load is confirmed,

齿轮，链轮，皮带轮时，Fr 值由下式求出：

$$Fr = 2 * Mr * fr / d \quad (N)$$

其中：**Mr**—工作元件的工作转矩 (N.m)

d—工作元件节圆直径 (m)

fr—径向载荷系数。可参考如下取值。

单排链轮 $fr = 1$;

一个齿轮或双排链轮 $fr = 1.25$;

V 型带 $fr = 1.5$; 平型带 $fr = 2.5$

对于 GK 和 GS 系列减速机，M1 安装时，侧面与安装固定面连接时，许用径向载荷只有选型表中 F_{Ra} 数值的 50%。

对于 GK169 和 GK189 减速电机在安装位置 M1-M4 时，若安装面与其安装形式图例有所区别，许用径向载荷只有选型表中 F_{Ra} 数值的 50%。

5、安装条件检验

有安装尺寸条件限制时应作此检验。即把所选机型号的结构尺寸和可利用的空间尺寸作比较。

若以上都能满足，则按机型号表示方法书写即可。有特殊要求时，可加文字说明。

普通供货约定：

- 1、无特别说明时电机供货按 IP55 防护等级，F 级绝缘。
- 2、不注明电机接线盒位置时，通常按安装形式图例中的 0°位置供货。
- 3、不特别提出输出轴与输入轴旋向关系时，不在减速机上做出标识。
- 4、减速机出厂已加好润滑油。
- 5、安装结构尺寸图表中已注明不在标准供货范围内的附件不提供。

本样本中如有改进之处，不另作通知，请谅解。

$Fr = 0$ is desirable; When the working elements on the shaft are gears, sprockets and belt wheels, the Fr value can be calculated from the following formula:

$$Fr = 2 * Mr * fr / d \quad (N)$$

Where, **Mr**-working torque of the working unit(N.m)

d-pitch circle radius of the working unit(m)

fr-radial load factor, which can be got refer to the following:

$fr = 1$, for single chain sprocket wheel

$fr = 1.25$, for single gear or for double chain sprocket wheel

$fr = 1.5$, for V-section belt ; $fr = 2.5$, for flat belt

Only 50% of the F_{Ra} value specified in the selection table is permitted in mounting position M1 with wall attachment on the side face for GK and GS gear units.

Helical-bevel geared motors GK169 and GK189 in mounting positions M1 to M4: If the mounting position is different from the position we offered (M1-M4) , The overhung load F_{Ra} lasted in the selection tables.

5、Mounting Dimension Checking

Check the mounting dimension when there is a limitation to site mounting condition.

If the selected type by the above method is appropriate to site mounting condition, this final type is standard and should be written in formal type description.

If any special requirement is requested, please describe it while placing order.

Normal Delivery Condition:

- 1、Motor: motor of protection class IP55 and of insulation class F, while no special request.
- 2、Terminal box: Terminal box is at 0° position if no special request(see description of motor terminal box position)
- 3、Rotation direction: There will be no mark of rotation direction for input shaft or output shaft, if the relationship between input shaft and output shaft is not requested.
- 4、Lubricants: Units are supplied with lubricant oil before delivery.
- 5、Accessories: Generally, accessories excluded in mounting dimension table do not belong to our standard supply.

Design and specifications are subject to change without notice, Please forgive.

工况系数 f_{Ah}

应用	8h/天	16h/天	24h/天
食品工业			
粉碎机	1.75	2	2.25
甜菜切片机 揉面机	1.25	1.5	1.75
碾肉机	1.25	1.5	1.5
填充机	0.8~1*	1	1.25
和面机	1	1.25	1.5
挤压机	1.25	1.5	1.75
甘蔗切碎机	1.75	1.75	1.75
榨糖机	1.75	1.75	1.75
烤面包机	1.25	1.25	1.25
辅助动力、伺服系统			
微动装置, 无载荷	0.8~1*	*	*
普通载荷	1.25	1.25	1.25
压缩机			
离心式	1	1.25	1.5
轴流式	1	1.25	1.5
过滤机	1	1.25	1.5
建筑业			
水泥搅拌机	1.25	1.5	1.75
水泥厂	1.5	1.75	2
灰泥喷射机	0.8~1*	1	1.25
发电机	0.8~1*	1	1.25
水处理、环保			
曝气机	1.75	2	2
普通通风装置	1.5	1.5	1.5
旋转木马式通风装置	1.75	1.75	1.75
条栅式筛子 搜集器	0.8~1*	1	1.25
螺旋泵	1	1.25	1.5
筛 子			
旋转式 (石头, 砂)	1	1.25	1.5
行进式吸水机	0.8~1*	1	1.25
农用机械			
施肥平土机	0.8~1*	1	*
收割机	0.8~1*	1	*
起重机械			
行进运动	1.5	1.75	2
回转机构	1.25	1.5	2
起升机构	1.25	1.5	1.75
转臂式起重机	1.25	1.5	1.75
混合机			
均匀密度	1.25	1.5	1.5
不均匀密度	1.5	1.75	1.75

Service Factor f_{Ah}

Application	8h/d	16h/d	24h/d
Food industry			
Crushers	1.75	2	2.25
Beet slicers, kneaders	1.25	1.5	1.75
Meat grinders	1.25	1.5	1.5
Filling machine	0.8~1*	1	1.25
Dough mixers	1	1.25	1.5
Extruders	1.25	1.5	1.75
Sugar cane knives	1.75	1.75	1.75
Sugar roller mills	1.75	1.75	1.75
Toaster	1.25	1.25	1.25
Auxiliary drives, servicing			
Inching, no load	0.8~1*	*	*
Normal duty	1.25	1.25	1.25
Compressors			
Centrifugal	1	1.25	1.5
Lobe	1	1.25	1.5
Filters	1	1.25	1.5
Construction industry			
Cement mixer	1.25	1.5	1.75
Cement mills	1.5	1.75	2
Mortar spraying machine	0.8~1*	1	1.25
Generators	0.8~1*	1	1.25
Water treatment, environment tools			
Aerators	1.75	2	2
Common aerators	1.5	1.5	1.5
Carrousel aerators	1.75	1.75	1.75
Bar screens, collectors	0.8~1*	1	1.25
Screw pumps	1	1.25	1.5
Screens			
Rotary (for stone, for gravel)	1	1.25	1.5
Traveling water intake	0.8~1*	1	1.25
Agricultural machinery			
Manure scrapers	0.8~1*	1	*
Harvesting machines	0.8~1*	1	*
Cranes and hoists			
Travel motion	1.5	1.75	2
Slewing gears	1.25	1.5	2
Hoisting gears	1.25	1.5	1.75
Derricking jib cranes	1.25	1.5	1.75
Mixer			
Constant density	1.25	1.5	1.5
Variable density	1.5	1.75	1.75

工况系数 f_{Ah}

木材和塑料工业			
电锯的主动力	1.5	1.75	2
电锯的进给动力	1	1.25	1.5
砍木机	1.5	1.75	2
胶合板胶合机	0.8~1*	1	1.25
钻孔机	0.8~1*	1	1.25
挤压机	1.25	1.5	1.75
搅拌机			
纯液体 (均匀密度)	1.5	1.75	1.75
非均匀密度的液体	1.75	2	2.25
液体和固体	1.75	2	2.25
磨 机			
球磨机, 棒磨机	1.75	1.75	1.75
锤磨机, 粉碎机	1.5	1.75	2
印刷和制纸技术			
切割机	1	1.25	1.5
卷筒	0.8~1*	1	1.25
打包进料机	1	1.25	1.25
电梯			
提升机	1.25	1.5	1.75
货运电梯	1.25	1.5	1.75
自动扶梯	1.25	1.25	1.5
纺织工业			
织机	1.25	1.5	1.75
纺纱机	0.8~1*	1	1.25
洗涤机	1	1.25	1.5
输送机			
斗式输送机	1.5	1.75	1.75
平衡加荷或喂料	0.8~1*	1	1.25
重载链和螺旋输送	1.25	1.5	1.5
振动输送机	1.5	1.75	2
卷扬机	1.5	1.75	1.75
皮带输送机	1.25	1.5	1.5
绞车	1.5	1.75	1.75
刮板式输送机			
	1.25	1.25	1.5
风扇			
离心式风扇	0.8~1*	1	1.25
工业风扇	1	1.25	1.5
冷却塔动力	1.75	1.75	1.75
冷却塔风扇	1.75	2	2

Service Factor f_{Ah}

Lumber and plastic industry			
Main drive for saws	1.5	1.75	2
Feed drives for saws	1	1.25	1.5
Chopping machines	1.5	1.75	2
Veneer gluing machine	0.8~1*	1	1.25
Drilling machine	0.8~1*	1	1.25
Extruders	1.25	1.5	1.75
Agitators			
Pure liquids (constant density)	1.5	1.75	1.75
Liquids with variable density	1.75	2	2.25
Liquids and solids	1.75	2	2.25
Mills			
Ball, rod	1.75	1.75	1.75
Hammer, disintegrator	1.5	1.75	2
Printing and paper techniques			
Cutters	1	1.25	1.5
Reels	0.8~1*	1	1.25
Bale feeders	1	1.25	1.25
Elevators			
Bucket elevators	1.25	1.5	1.75
Freight elevators	1.25	1.5	1.75
Escalators	1.25	1.25	1.5
Textile industry			
Looms	1.25	1.5	1.75
Spinners	0.8~1*	1	1.25
Washers	1	1.25	1.5
Conveyors			
Bucket conveyors	1.5	1.75	1.75
Uniformly loaded or fed	0.8~1*	1	1.25
Heavy duty, chain and screw conveyors	1.25	1.5	1.5
Shaker conveyors	1.5	1.75	2
Hoists	1.5	1.75	1.75
Belt conveyors	1.25	1.5	1.5
Hauling winches	1.5	1.75	1.75
Apron conveyors			
	1.25	1.25	1.5
Fans			
Centrifugal	0.8~1*	1	1.25
Industrial fans	1	1.25	1.5
Cooling tower drives	1.75	1.75	1.75
Cooling tower fans	1.75	2	2

工况系数 f_{Ah}

包装机械			
纸板堆叠机械	1.25	1.5	1.75
打包机	0.8~1*	1	1.25
机床设备			
平面刨床, 龙门刨床	1.25	1.5	1.75
弯轧机			
主动力, 进给动力	1	1.25	1.5
进给和辅助动力	0.8~1*	1	1.25
压力机	1.75	2	2
折弯机	1.5	1.75	2
剪板机	1.75	2	2
钢铁工业			
拉线机	1.25	1.5	1.75
绕线机	1.25	1.75	1.75
轧辊辊道: 无回转			
—组合动力	1.25	1.5	1.75
—独立动力	1.5	1.75	2
泵			
离心式	1	1.25	1.5
旋转式, 齿轮型, 叶轮型, 叶片型	0.8~1*	1	1.25
活塞泵: 单缸	1.5	1.75	2
多缸	1.25	1.5	1.75
螺旋泵	1	1.25	1.5

工况系数 f_{Ac}

启停次数/每小时	
< 10	1
< 100	1.15
< 500	1.25

工况系数 f_{At}

环境 温度	+20°C...	+20°C... +30°C	+30°C... +40°C	+40°C... +50°C	+50°C... +60°C
f_{At}	1	1.1	1.25	1.5	1.75

工况系数 f_{An}

输出 转速 (r/min)	≤2	2~10	10~ 50	50~ 100	100~ 150	150~ 200	> 200
f_{An}	0.9	0.95	1.0	1.05	1.15	1.25	1.35

*=0.8 假如运行时间少于 3 小时/天, 并且无径向载荷作用。

这些工况系数是基于我们多年的经验所得。特别适用于电动机作为主要动力的场合。对于特殊应用设计, 例如大的惯性系数, 请与我公司技术部联系。

Service Factor f_{Ah}

Packing machine			
Cardboard stacking machine	1.25	1.5	1.75
Wrapping machine	0.8~1*	1	1.25
Machine tools			
Plate surfacers, plate planers, bending rolls	1.25	1.5	1.75
Main drives, feed drives	1	1.25	1.5
Feed and auxiliary drives	0.8~1*	1	1.25
Presses	1.75	2	2
Folding machines	1.5	1.75	2
Plate shears	1.75	2	2
Iron and steel industry			
Wire drew benches	1.25	1.5	1.75
Winding machine	1.25	1.75	1.75
Rolling mill: non reversing			
—group drives	1.25	1.5	1.75
—individual drives	1.5	1.75	2
Pumps			
Centrifugal	1	1.25	1.5
Rotary, gear type, lobe, vane	0.8~1*	1	1.25
Piston pumps: single cylinder	1.5	1.75	2
multi-cylinder	1.25	1.5	1.75
Screw pumps	1	1.25	1.5

Service Factor f_{Ac}

Number of starts and stop/hour	
< 10	1
< 100	1.15
< 500	1.25

Service Factor f_{At}

Ambient temperature	+20°C...	+20°C... +30°C	+30°C... +40°C	+40°C... +50°C	+50°C... +60°C
f_{At}	1	1.1	1.25	1.5	1.75

Service Factor f_{An}

Output speed (r/min)	≤2	2~10	10~ 50	50~ 100	100~ 150	150~ 200	> 200
f_{An}	0.9	0.95	1.0	1.05	1.15	1.25	1.35

*=0.8, if hours of operation < 3 hours/24 and no radial overhung load is applied.

These service factors are recommended on the basis of AGMA and ISO specifications and our experiences. They apply for electric motors as prime movers preferably. For specially designed applications, e.g. large inertia factor, please contact our technology department.

轴向载荷

如果没有径向载荷，那么轴向载荷 F_A (+表示拉力，-表示压紧力) 依据表中径向负荷的 5% 给定是允许的。

过大的轴向载荷或轴向及径向的合成力，请咨询技术部。

输入轴载荷

输入轴的轴向载荷和径向载荷应用，请咨询技术部

偏离输出轴轴伸中心点的径向载荷校核

对于受力点不在输出轴轴伸中点处的许用径向载荷根据下列公式计算。

F_{XL} 和 F_{XW} 中的较小值，就是在 X 位置的许用径向载荷。

根据轴承寿命计算 F_{XL} (单位 N)

$$F_{XL} = F_{Ra} \times a / (b + X)$$

根据输出轴强度计算 F_{XW} (单位 N)

$$F_{XW} = c / (f + X)$$

F_{Ra} --底脚安装的减速机输出轴轴伸中点处的许用径向载荷，单位[N]

X --从轴肩到受力点的距离，单位[mm]

a, b, f --对径向载荷转化的减速机常数，单位[mm]

c --对径向载荷转化的减速机常数，单位[N·mm]

Axial Loads

If there is no overhung long, then an axial load F_A (tension or compression) amount to 5% of the overhung load given in the selection tables is approved.

if significantly greater axial loads or combinations of overhung load and axial load. Please contact our technology department .

Input Shaft Loads

Please contact technical department for axial and radial loads on input shaft

Overhung Load Conversion for Off-center Force Application

The approved overhung loads given in the selection tables must be calculated by using the following formulae in the event of force application not in the center of the shaft end.

The smaller of the two values F_{XL} and F_{XW} is the approved value for the overhung load at point X .

F_{XL} acc.to bearing service life

$$F_{XL} = F_{Ra} \times a / (b + X)$$

F_{XW} from the shaft strength

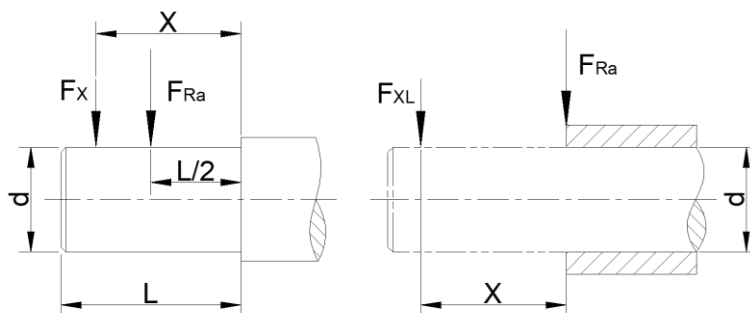
$$F_{XW} = c / (f + X)$$

F_{Ra} --Approved overhung load($X=L/2$) for foot-mounted gear units according to the selection tables in [N]

X --Distance from the shaft shoulder to the force application point in [mm]

a, b, f --Gear unit constants for overhung load conversion [mm]

c --Gear unit constants for overhung load conversion [N·mm]



图：偏离中心点的径向力 F_x

Fig:Overhung load F_x for off-center force application

对径向载荷转化的减速机常数
Gear unit constants for overhung load conversion

机型号 Type size	减速机常数 Reducer constant					
	a(mm)	b(mm)	c(N.mm)	f(mm)	d(mm)	l(mm)
GR19	88.5	68.5	6.527x10 ⁴	17	20	40
GR29	106.5	81.5	1.56 x10 ⁵	11.8	25	50
GR39	118	93	1.24 x10 ⁵	0	25	50
GR49	137	107	2.44 x10 ⁵	15	20	60
GR59	147.5	112.5	3.77 x10 ⁵	18	35	70
GR69	168.5	133.5	2.51 x10 ⁵	0	35	70
GR79	173.7	133.7	3.97 x10 ⁵	0	40	80
GR89	216.7	166.7	8.47 x10 ⁵	0	50	100
GR99	255.5	195.5	1.19 x10 ⁶	0	60	120
GR109	285.5	215.5	2.06 x10 ⁶	0	70	140
GR139	343.5	258.5	6.14 x10 ⁶	30	90	170
GR149	402	297	8.65 x10 ⁶	33	110	210
GR169	450	345	1.26 x10 ⁷	0	120	210
GR179	420	295	1.6 x10 ⁷	0	160	250
GRX59	43.5	23.5	1.51 x10 ⁵	34.2	20	40
GRX69	52.5	27.5	2.42 x10 ⁵	39.7	25	50
GRX79	60.5	30.5	1.95 x10 ⁵	0	30	60
GRX89	73.5	33.5	7.69 x10 ⁵	48.9	40	80
GRX99	86.5	36.5	1.43 x10 ⁶	53.9	50	100
GRX109	102.5	42.5	2.47 x10 ⁶	62.3	60	120
GRX139	133	63	3.55 x10 ⁶	70.1	70	140
GF39	123.5	98.5	1.07 x10 ⁵	0	25	50
GF49	153.5	123.5	1.78 x10 ⁵	0	30	60
GF59	170.7	135.7	5.49 x10 ⁵	32	35	70
GF69	181.3	141.3	4.12 x10 ⁵	0	40	80
GF79	215.8	165.8	7.78 x10 ⁵	0	50	100
GF89	263	203	1.19 x10 ⁶	0	60	120
GF99	350	280	2.09 x10 ⁶	0	70	140
GF109	373.5	288.5	4.23 x10 ⁶	0	90	170
GF129	442.5	337.5	9.49 x10 ⁶	0	110	210
GF159	512	407	1.05 x10 ⁷	0	120	210
GK39	123.5	98.5	1.41 x10 ⁵	0	25	50
GK49	153.5	123.5	1.78 x10 ⁵	0	30	60
GK59	169.7	134.7	6.8 x10 ⁵	31	35	70
GK69	181.3	141.3	4.12 x10 ⁵	0	40	80
GK79	215.8	165.8	7.69 x10 ⁵	0	50	100
GK89	252	192	1.64 x10 ⁶	0	60	120
GK99	319	249	2.8 x10 ⁶	0	70	140
GK109	373.5	288.5	5.53 x10 ⁶	0	90	170
GK129	443.5	338.5	8.31 x10 ⁶	0	110	210
GK159	509	404	1.18 x10 ⁷	0	120	210
GK169	621.5	496.5	1.88 x10 ⁷	0	160	250
GK189	720.5	560.5	3.04 x10 ⁷	0	190	320
GS39	118.5	98.5	6.0 x10 ⁴	0	20	40
GS49	130	105	1.33 x10 ⁵	0	25	50
GS59	150	120	2.14 x10 ⁵	0	30	60
GS69	184	149	3.04 x10 ⁵	0	35	70
GS79	224	179	5.26 x10 ⁵	0	45	90
GS89	281.5	221.5	1.68 x10 ⁶	0	60	120
GS99	326.3	256.3	2.54 x10 ⁶	0	70	140
GS109	453.5	283.5	2.85 x10 ⁶	0	90	170

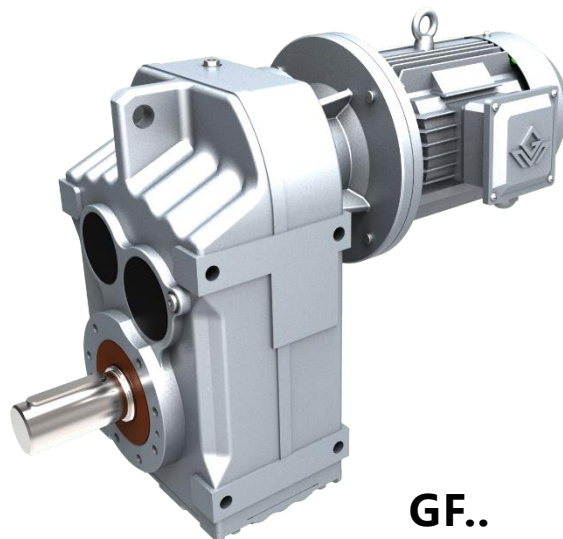
对于没有列出的型号的减速机常数需要另给定。

Values for types not listed are available on request.

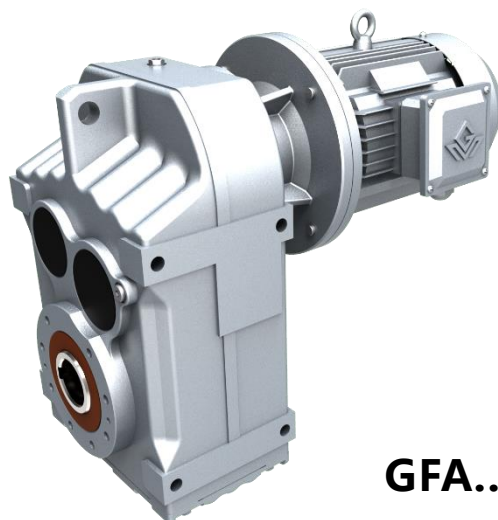
GF Series Parallel-Shaft Helical Geared Motors

GF
系列

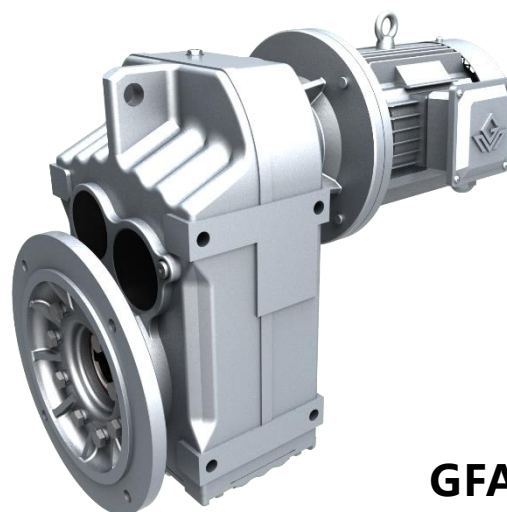
平行轴
—
斜齿轮
减速电机



GF..



GFA..



GFAF..

GF 系列 平行轴-斜齿轮减速电机

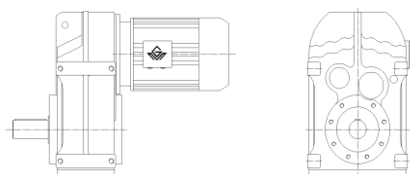
结构形式说明 Dimensional Description

GF 系列各轴之间的几何位置都互为平行关系，因而亦称为平行轴系列。由两级或三级斜齿轮构成。

Shafts of GF series geared motors are all parallel to each other. Units of GF series all consist of two or three stages helical gears.

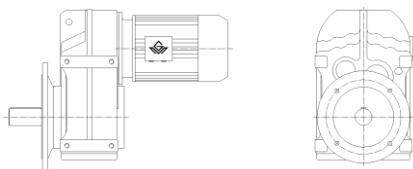
1.GF 型： 底脚安装，输出轴为实心轴。

Type GF: Foot mounted. Solid output shaft.



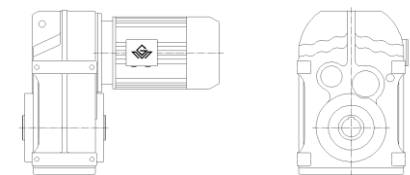
2.GFF 型： B5 法兰安装，输出轴为实心轴。

Type GFF: B5 flange mounted. Solid output shaft.



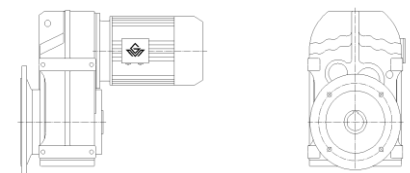
3.GFA 型： 轴装式，输出轴为空心轴。

Type GFA: Shaft mounted. Hollow output shaft.



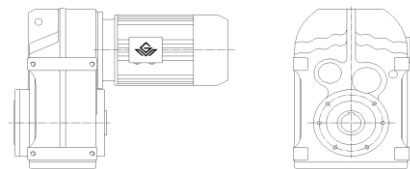
4. GFAF 型： B5 法兰安装，输出轴为空心轴。

Type GFAF: B5 flange mounted. Hollow output shaft.



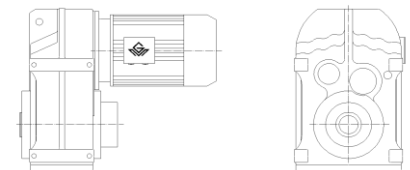
5. GFAZ 型： B14 法兰空心轴安装。

Type GFAZ: B14 flange mounted version with hollow shaft.



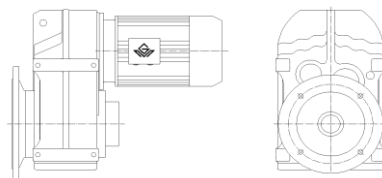
6.GFH 型： 空心轴锁紧盘安装。

Type GFH: Hollow shaft and shrink disk mounted.



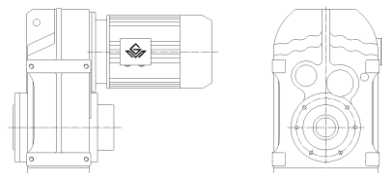
7.GFHF 型： B5 法兰空心轴锁紧盘安装。

Type GFHF: B5 flange mounted version with hollow shaft and shrink disk.



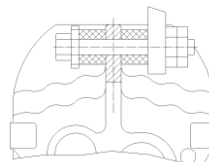
8.GFHZ 型： B14 法兰空心轴锁紧盘安装。

Type GFHZ: B14 flange mounted version with hollow shaft and shrink disk.



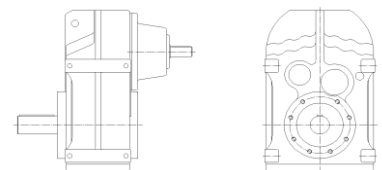
9.GFAT 型/GFHT 型： 即在 GFA/GFH 型上增加防转臂附件后的派生型。

Type GFAT/GFHT: As altered type from type GFA/GFH, this type is added torque arm and other accessories.



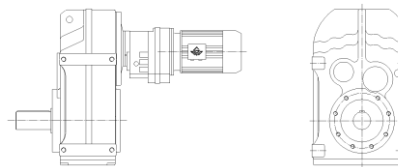
10.GF..AD 型： 轴输入型。

Type GF..AD: Input shaft types .

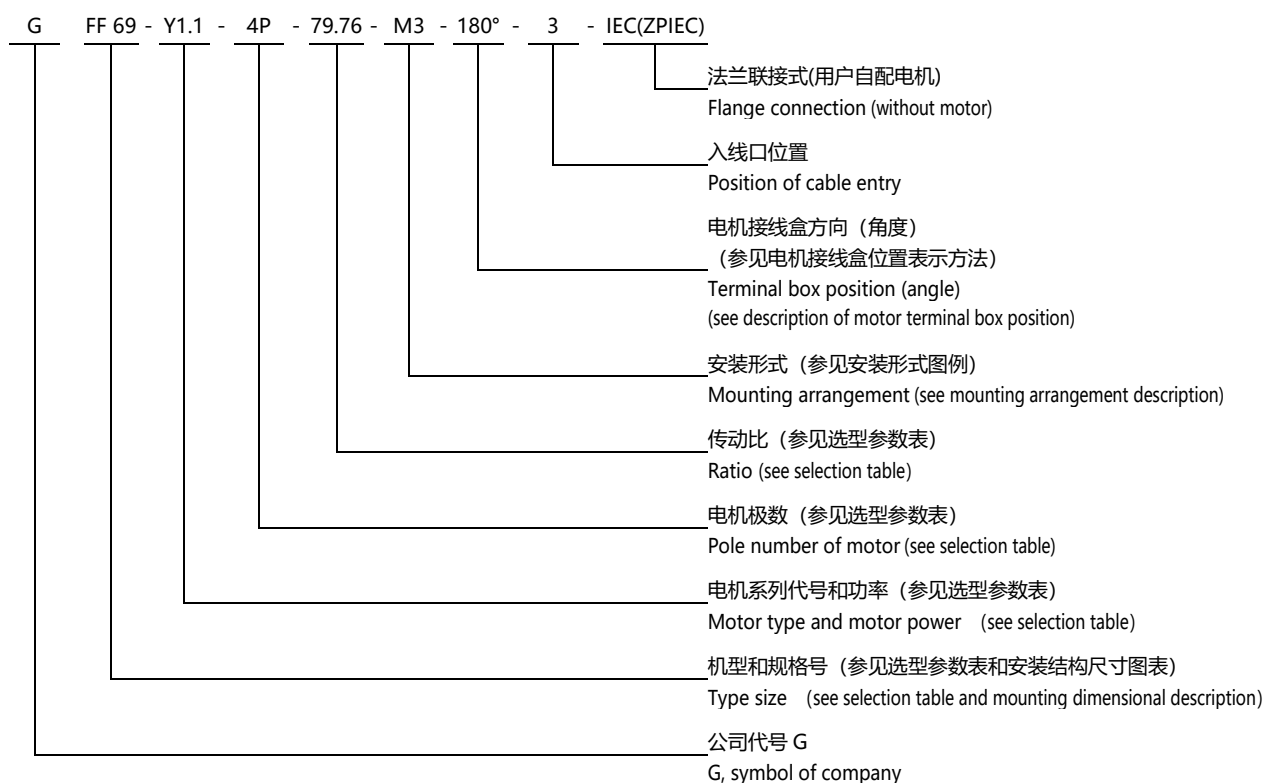


11.GF..R 型： GF 系列和 GR 系列的组合。

Type GF..R: Combined types of type GF and type GR.



GF 系列机型号表示方法 Type Expression of GF Series

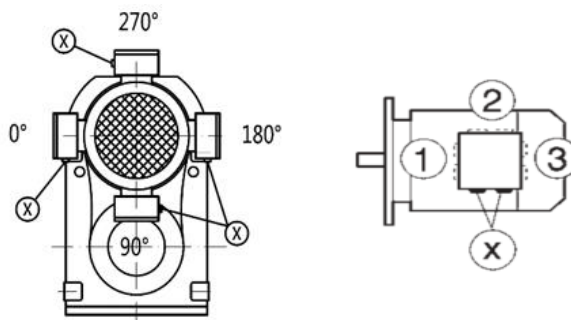


- 注: 1、需带联接法兰时请注明 IEC。
2、输入轴型没有电机各项内容。
3、不注明减速机的安装形式时, 则默认为安装形式中的 M1 位置。不注明接线盒方向时, 则默认为安装形式中的 0 度位置。不注明入线口位置时, 则默认为 X 位置。
4、对输出轴旋转方向和输入轴旋转方向有特别要求的用户, 请与技术部联系, 并在订货时用简图或文字说明。

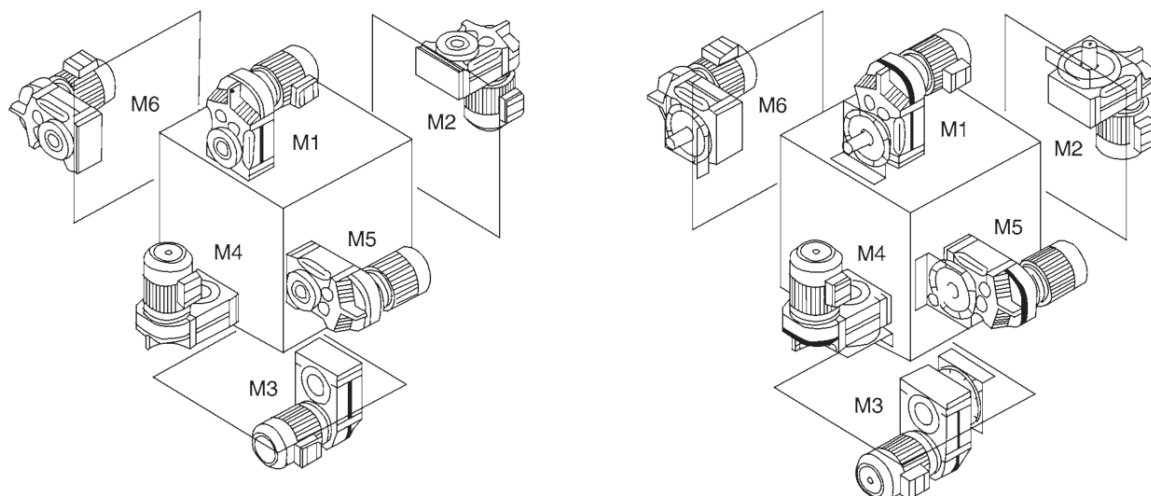
- Note: 1、Please make a note, if it needs connecting flange.
2、Contents of motors for input shaft types are not listed.
3、It is M1, When the mounting arrangement of the reducer is not mentioned. Degree=0°, if terminal box position is not mentioned. It is X, if cable entry position is not mentioned.
4、If specific rotation directions of output shaft or/and input shaft are specially requested, please contact our technology department, and make detailed description while placing order.

电机接线盒位置及入线口位置表示方法

Description of Motor Terminal Box Position and Cable Entry Position



安装形式图例 Mounting Arrangements Description



安装形式定义:

M1—电机水平放置; 减速机底部朝下。

M2—电机居下。

M3—电机水平放置; 减速机底部朝上。

M4—电机居上。

M5—电机水平放置; 当减速机在 M1 安装位置时, 从电机方向看, 减速机的左面旋转到下方位置。

M6—电机水平放置; 当减速机在 M1 安装位置时, 从电机方向看, 减速机的左面旋转到上方位置。

Mounting arrangements are defined as following:

M1—horizontally mounted motor, unit base is at bottom.

M2—motor is vertically mounted downwards.

M3—horizontally mounted motor, unit base is on top.

M4—motor is vertically mounted upwards.

M5—horizontally mounted motor, if placed on M1 position, left side of unit turns to bottom (view point: towards from motor side).

M6—horizontally mounted motor, if placed on M1 position, left side of unit turns to top (view point: towards from motor side).

减速机重量 Gear Unit Weight

机型号 Type size	GF39	GF49	GF59	GF69	GF79	GF89	GF99	GF109	GF129	GF159
重量(kg) Weight	15	20	31	35	67	117	195	305	520	950

注:重量为平均值, 不包括电机、联接法兰, 仅供参考。

(Note: The weights mean values without the motor and IEC flange, only for reference.)

选型参数表注释 Description of Selection Table

恒功率 Constant power

n_a [r/min]	M_a [N.m]	i	F_{Ra} [kN]	f_b	机型号 Type size	极数 Pole
↓	↓	↓	↓	↓		
输出转速 Output speed	输出转矩 Output torque	减速比 Ratio	许用径向载荷 Permissible radial load	使用系数 Service factor		

恒转矩 Constant torque

M_{max} [N.m]	n_a [r/min]	i	F_{Ra} [kN]	机型号 Type size	P [kW]/4P
↓	↓	↓	↓		
最大输出转矩 Max.output torque	输出转速 Output speed	减速比 Ratio	许用径向载荷 Permissible radial load		电机功率 Motor power

**选型参数表
(恒功率)**
**Selection Table
(Constant Power)**

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
0.12kW							0.12kW						
0.06	17605	22298	80	0.80	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P	1.5	672	851	8.9	0.95	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P
0.07	15021	19026	85	0.85			1.8	583	738	9.4	1.10		
0.08	13135	16637	86	0.95			2.0	510	646	10	1.25		
0.09	11610	14705	86	1.10			2.3	441	558	10	1.45		
0.10	10194	12912	86	1.25			2.6	399	506	10	1.60		
0.11	9192	11643	86	1.35			2.9	357	452	11	1.80		
0.13	8037	10180	86	1.55			3.1	336	426	11	1.90		
0.09	11660	14768	42	0.80	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P	3.4	302	382	11	2.10	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P
0.12	8959	11347	48	0.90			4.0	261	330	11	2.45		
0.13	7926	10039	52	1.05			4.4	235	298	11	2.70		
0.15	6749	8548	54	1.25			5.0	207	262	11	3.10		
0.17	6060	7675	54	1.35			2.4	429	543	6.0	1.00	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P
0.19	5343	6768	55	1.55			2.8	375	475	6.5	1.15		
0.22	4701	5954	56	1.75			3.1	331	419	6.9	1.30		
0.25	4124	5223	57	2.00	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P	2.5	414	524	6.1	1.00	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P
0.29	3606	4567	58	2.30			2.7	386	489	6.4	1.10		
0.37	2780	3521	59	3.00			3.1	337	427	6.8	1.25		
0.20	5107	6469	29	0.90			3.4	301	381	7.0	1.40		
0.23	4433	5615	30	1.00			3.9	264	334	7.2	1.60		
0.26	3917	4961	31	1.15			4.5	232	294	7.4	1.80		
0.30	3421	4333	32	1.35			5.2	200	253	7.5	2.10		
0.34	3084	3906	33	1.50	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P	4.1	254	322	3.9	0.80	GFA39R19 GFAF39R19 GF39R19 GFF39R19	4P
0.39	2646	3352	33	1.70			4.7	219	278	4.3	0.95		
0.45	2295	2907	34	2.00			5.4	191	242	4.6	1.10		
0.51	2016	2553	34	2.25			5.9	174	221	4.6	1.20		
0.31	3351	4245	23	0.95	GFA89R59 GFAF89R59 GF89R59 GFF89R59	4P	4.0	257	326	3.7	0.80	GFA39R19 GFAF39R19 GF39R19 GFF39R19	4P
0.35	2938	3721	25	1.10			4.6	225	285	4.2	0.95		
0.40	2561	3244	25	1.25			5.2	197	250	4.4	1.05		
0.45	2275	2881	25	1.40			6.0	173	219	4.6	1.20		
0.51	2033	2575	26	1.55			7.0	147	186	4.8	1.45		
0.60	1736	2199	27	1.85			7.8	132	167	4.9	1.60		
0.68	1524	1930	27	2.10	GFA89R59 GFAF89R59 GF89R59 GFF89R59	4P	3.7	293	228.99	12	2.80	GFA69 GFAF69 GF69 GFF69	6P*
0.77	1349	1709	27	2.35			4.4	250	195.39	12	3.30		
0.88	1179	1493	28	2.70			5.0	219	170.85	12	3.80		
1.0	1026	1300	28	3.10			5.2	208	162.31	12	4.00		
1.1	906	1148	28	3.50			6.0	182	142.40	12	4.50		
0.50	2063	2613	13	0.85			4.3	256	199.70	11	2.40	GFA59 GFAF59 GF59 GFF59	6P*
0.57	1803	2284	15	0.90			4.6	235	183.60	11	2.60		
0.65	1603	2030	16	1.00			5.4	201	157.09	11	3.00		
0.76	1364	1728	17	1.15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	4P	6.2	174	136.16	11	3.50		
0.85	1219	1544	17	1.30			6.7	163	127.27	11	3.70		
0.97	1069	1354	18	1.50			6.6	166	199.70	11	3.60	GFA59 GFAF59 GF59 GFF59	4P
1.1	947	1200	18	1.70			7.1	153	183.60	11	3.90		
1.2	831	1053	18	1.90			8.3	131	157.09	11	4.60		
1.4	718	910	19	2.20			9.6	113	136.16	11	5.30		
1.6	640	810	19	2.50	GFA79R39 GFAF79R39 GF79R39 GFF79R39	4P	4.5	244	190.76	7.1	1.65	GFA49 GFAF49 GF49 GFF49	6P*
1.8	561	710	19	2.85			4.8	225	175.38	7.3	1.80		
0.92	1128	1429	8.8	0.80			5.7	192	150.06	7.4	2.10		
1.0	1003	1271	10	0.85			6.5	167	130.07	7.5	2.40		
1.2	870	1102	11	1.00			7.0	156	121.57	7.6	2.60		
1.4	766	970	11	1.15			8.1	135	105.09	7.7	3.00		
1.5	677	858	12	1.30	GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P	9.5	114	89.29	7.7	3.50		
1.7	596	755	12	1.45			11	102	79.72	7.8	3.90		
2.0	506	641	12	1.70			6.9	159	190.76	7.6	2.50	GFA49 GFAF49 GF49 GFF49	4P
2.3	452	572	12	1.90			7.5	146	175.38	7.6	2.80		
2.6	402	509	12	2.15			8.7	125	150.06	7.7	3.20		
3.0	345	437	12	2.50			10.1	108	130.07	7.7	3.70		
							6.6	165	128.51	4.5	1.20	GFA39 GFAF39 GF39 GFF39	6P*
							7.2	151	117.88	4.6	1.35		
							8.5	129	100.36	4.8	1.55		
							9.8	111	86.53	4.9	1.80		
							11	103	80.65	5.0	1.95		

*0.12kW (6P) 电机需特制。*0.12kW motor of 6 poles needs to be specially requested and then manufactured.

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole		
0.12kW							0.18kW								
10	107	128.51	5.0	1.85	GFA39 GFAF39 GF39 GFF39	4P	1.5	1016	858	8.9	0.85	GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P		
11	98	117.88	5.0	2.00			1.7	894	755	10	0.95				
13	83	100.36	5.1	2.40			2.0	759	641	11	1.15				
15	72	86.53	5.1	2.80			2.3	677	572	11	1.30				
16	67	80.65	5.1	3.00			2.6	603	509	12	1.45				
0.18kW							3.0	518	437	12	1.70	GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P		
						3.4	455	384	12	1.90					
0.10	15291	12912	83	0.80	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P	2.6	592	500	11	1.45			GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P
0.11	13788	11643	86	0.90			2.9	538	454	12	1.60				
0.13	12056	10180	86	1.05			3.3	464	392	12	1.85				
0.15	10448	8822	86	1.20			3.9	394	333	12	2.20				
0.17	9041	7634	86	1.40			4.4	352	297	12	2.50				
0.20	7944	6708	86	1.60	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P	5.0	309	261	12	2.80	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P		
0.15	10123	8548	45	0.80			5.5	282	238	12	3.10				
0.17	9089	7675	46	0.90			6.6	237	200	12	3.65				
0.19	8015	6768	49	1.05			2.3	661	558	8.6	0.95				
0.22	7051	5954	51	1.15			2.6	599	506	9.1	1.05				
0.25	6185	5223	53	1.35	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P	2.9	535	452	10	1.20	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P		
0.29	5409	4567	54	1.55			3.4	457	386	10	1.40				
0.37	4170	3521	56	2.00			3.9	400	338	10	1.60				
0.43	3597	3037	57	2.30			3.1	505	426	10	1.25				
0.48	3264	2756	58	2.55			3.4	452	382	10	1.40				
0.55	2806	2369	58	2.95	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P	4.0	391	330	10	1.60	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P		
0.63	2449	2068	59	3.40			4.4	353	298	10	1.80				
GFA99R59 GFAF99R59 GF99R59 GFF99R59							4P	5.0	310	262	11			2.05	
								5.8	268	226	11			2.40	
								6.6	237	200	11			2.70	
					3.5	438		370	5.6	0.95					
					4.0	384		324	6.1	1.10					
0.30	5131	4333	27	0.90	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P	4.5	341	288	6.6	1.25	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P		
0.34	4626	3906	29	1.00			5.3	295	249	6.9	1.45				
0.39	3970	3352	30	1.15			3.9	396	334	5.9	1.05				
0.45	3443	2907	31	1.30			4.5	348	294	6.4	1.20				
0.51	3023	2553	32	1.50			5.2	300	253	6.9	1.40				
0.58	2659	2245	33	1.70			6.0	257	217	7.1	1.65	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P		
0.66	2333	1970	33	1.95			6.9	225	190	7.3	1.85				
0.76	2041	1723	34	2.20			7.4	211	178	7.4	2.00				
0.86	1810	1528	34	2.50			7.0	220	186	4.0	0.95				
0.99	1572	1327	35	2.90			7.8	198	167	4.2	1.05				
1.1	1387	1171	35	3.30	GFA89R59 GFAF89R59 GF89R59	4P	9.0	172	145	4.5	1.20	GFA39R19 GFAF39R19 GF39R19 GFF39R19	4P		
0.51	3050	2575	22	1.05			10	153	129	4.7	1.40				
0.60	2604	2199	24	1.20			3.0	541	281.71	19	2.70				
0.68	2286	1930	25	1.40			3.2	505	262.93	19	2.90				
0.77	2024	1709	25	1.60			3.8	434	225.79	19	3.40				
0.88	1768	1493	26	1.80			GFA79 GFAF79 GF79 GFF79	6P	3.7	440	228.99	12	1.80		
1.1	1360	1148	27	2.35										GFA69 GFAF69 GF69 GFF69	6P
1.3	1196	1010	27	2.65											
1.5	1050	887	28	3.00											
1.7	924	780	28	3.45											
0.85	1829	1544	13	0.85	GFA79R39 GFAF79R39 GF79R39 GFF79R39	4P	5.7	285	228.99	12	2.80	GFA69 GFAF69 GF69 GFF69	4P		
1.0	1604	1354	15	1.00			6.7	244	195.39	12	3.20				
1.1	1421	1200	16	1.10			7.7	213	170.85	12	3.70				
1.2	1247	1053	17	1.30			4.3	384	199.70	10	1.50				
1.4	1078	910	17	1.50			4.6	353	183.60	10	1.65				
1.6	959	810	18	1.65			5.4	302	157.09	11	1.95	GFA59 GFAF59 GF59 GFF59	6P		
1.8	841	710	18	1.90			6.2	262	136.16	11	2.20				
2.1	728	615	18	2.20			6.7	245	127.27	11	2.40				
							7.7	211	110.01	11	2.80				

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
0.18kW							0.25kW						
6.6	249	199.70	11	2.30	GFA59	4P	1.2	1860	1148	26	1.70	GFA89R59 GFAF89R59 GF89R59 GFF89R59	4P
7.1	229	183.60	11	2.50	GFAF59		1.3	1636	1010	26	1.90		
8.3	196	157.09	11	2.90	GF59		1.5	1437	887	27	2.20		
9.6	170	136.16	11	3.40	GFF59		1.7	1264	780	27	2.50		
10.3	159	127.27	11	3.60			2.0	1092	674	27	2.90		
4.5	366	190.76	5.9	1.05	GFA49	6P	1.3	1706	1053	14	0.90	GFA79R39 GFAF79R39 GF79R39 GFF79R39	4P
4.8	337	175.38	6.3	1.15	GFAF49		1.5	1474	910	15	1.05		
5.7	288	150.06	6.7	1.35	GF49		1.6	1312	810	16	1.20		
6.5	250	130.07	7.0	1.55	GFF49		1.9	1150	710	17	1.35		
7.0	234	121.57	7.2	1.65			2.2	996	615	17	1.55		
6.9	238	190.76	7.1	1.60	GFA49	4P	2.5	872	538	18	1.80	GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P
7.5	219	175.38	7.2	1.75	GFAF49		2.8	778	480	18	2.00		
8.7	187	150.06	7.4	2.00	GF49		3.2	669	413	18	2.35		
10.1	162	130.07	7.5	2.40	GFF49		2.3	927	572	9.0	0.90		
10.8	152	121.57	7.6	2.50			2.6	825	509	10	1.05		
7.2	226	117.88	3.6	0.85	GFA39	6P	3.0	708	437	11	1.20	GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P
8.5	193	100.36	4.1	1.00	GFAF39		2.7	810	500	10	1.05		
10	166	86.53	4.4	1.15	GF39		2.9	736	454	10	1.15		
11	155	80.65	4.6	1.25	GFF39		3.4	635	392	11	1.35		
12	135	70.50	4.7	1.45			4.0	539	333	12	1.60		
10	160	128.51	4.5	1.20	GFA39	4P	4.5	481	297	12	1.75	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P
11	147	117.88	4.6	1.30	GFAF39		5.1	423	261	12	2.00		
13	125	100.36	4.8	1.55	GF39		5.6	386	238	12	2.20		
15	108	86.53	4.9	1.75	GFF39		3.4	625	386	8.7	1.00		
16	101	80.65	5.0	1.90			3.9	548	338	9.3	1.15		
19	88	70.50	5.0	2.20		4P	5.2	413	255	10	1.50	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P
20	82	66.09	5.1	2.30			3.5	619	382	8.3	1.00		
22	73	58.32	5.1	2.60			4.0	535	330	9.2	1.15		
0.25kW							4.5	483	298	10	1.25		
0.15	14292	8822	84	0.85	GFA129R79	4P	5.1	424	262	10	1.45	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P
0.17	12368	7634	86	1.00	GFAF129R79		5.9	366	226	10	1.70		
0.20	10868	6708	86	1.15	GF129R79		6.7	324	200	10	1.90		
0.22	9589	5919	86	1.30	GFF129R79		7.8	275	170	11	2.25		
0.26	8339	5147	86	1.50			5.3	403	249	5.7	1.00		
0.29	7336	4528	86	1.70		4P	6.1	353	218	6.3	1.15	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P
0.22	9646	5954	44	0.85	GFA109R79		6.9	313	193	6.7	1.30		
0.25	8462	5223	47	0.95	GFAF109R79		7.6	284	175	6.9	1.45		
0.29	7399	4567	49	1.10	GF109R79		5.3	410	253	5.6	1.00		
0.38	5704	3521	53	1.40	GFF109R79		6.1	352	217	6.2	1.20		
0.44	4920	3037	54	1.65	GFA109R79	4P	7.0	308	190	6.6	1.35	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P
0.48	4465	2756	55	1.80	GFAF109R79		7.5	288	178	6.8	1.45		
0.56	3838	2369	56	2.10	GF109R79		8.9	241	149	7.1	1.70		
0.64	3350	2068	57	2.40	GFF109R79		10	212	131	7.3	1.95		
0.83	2587	1597	58	3.15			9.2	235	145	3.5	0.85		
0.95	2270	1401	59	3.60		4P	10	209	129	3.9	1.00	GFA39R19 GFAF39R19 GF39R19 GFF39R19	4P
0.46	4710	2907	28	0.95	GFA99R59		11	191	118	4.2	1.10		
0.52	4136	2553	29	1.05	GFAF99R59		14	159	98	4.5	1.30		
0.59	3637	2245	30	1.20	GF99R59		15	141	87	4.7	1.45		
0.68	3192	1970	31	1.40	GFF99R59		3.0	752	281.71	18	1.95		
0.77	2791	1723	32	1.60		4P	3.2	702	262.93	18	2.10	GFA79 GFAF79 GF79 GFF79	6P
0.87	2475	1528	33	1.80			3.8	602	225.79	19	2.50		
1.0	2150	1327	34	2.10			4.3	529	198.31	19	2.80		
1.1	1897	1171	34	2.35			4.5	503	188.40	19	2.90		
1.3	1656	1022	34	2.70									
0.69	3127	1930	17	1.00	GFA89R59	4P							
0.78	2769	1709	23	1.10	GFAF89R59								
0.89	2419	1493	24	1.30	GF89R59								
1.0	2106	1300	25	1.50	GFF89R59								

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole				
0.25kW							0.37kW										
3.7	611	228.99	11	1.30	GFA69 GFAF69 GF69 GFF69	6P	0.44	7282	3037	50	1.10	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P				
4.4	521	195.39	12	1.55			0.48	6608	2756	51	1.25						
5.0	456	170.85	12	1.75			0.56	5680	2369	53	1.45						
5.2	433	162.31	12	1.85			0.64	4959	2068	54	1.65						
6.0	380	142.40	12	2.10			0.83	3829	1597	56	2.10						
5.8	391	228.99	12	1.95	GFA69 GFAF69 GF69 GFF69	4P	0.68	4724	1970	28	0.95	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P				
6.8	333	195.39	12	2.30			0.77	4131	1723	29	1.10						
7.8	291	170.85	12	2.60			0.87	3664	1528	31	1.20						
8.2	277	162.31	12	2.80			1.0	3182	1327	32	1.40						
9.3	243	142.40	12	3.10			1.1	2808	1171	32	1.60						
4.3	533	199.70	9.1	1.10	GFA59 GFAF59 GF59 GFF59	6P	1.3	2450	1022	33	1.85	GFA89R59 GFAF89R59 GF89R59 GFF89R59	4P				
4.6	490	183.60	9.4	1.20			1.5	2153	898	34	2.10						
5.4	419	157.09	10	1.40			1.0	3117	1300	22	1.00						
6.2	363	136.16	10	1.60			1.2	2753	1148	23	1.15						
6.7	340	127.27	10	1.75			1.3	2422	1010	24	1.30						
7.7	294	110.01	11	2.00	1.5	2127	887	25	1.45								
6.7	341	199.70	10	1.65	1.7	1870	780	26	1.65	GFA79R39 GFAF79R39 GF79R39 GFF79R39	4P						
7.2	313	183.60	10	1.80	2.0	1616	674	27	1.95								
8.5	268	157.09	11	2.10	2.2	1460	609	27	2.15								
9.8	232	136.16	11	2.40	2.6	1235	515	27	2.55								
10	217	127.27	11	2.60	2.9	1084	452	28	2.90								
12	188	110.01	11	3.00	1.6	1942	810	13	0.80	GFA69R39 GFAF69R39 GF69R39 GFF69R39	4P						
5.7	400	150.06	5.5	1.00	1.9	1702	710	14	0.90								
6.5	347	130.07	6.2	1.15	2.2	1475	615	16	1.05								
7.0	324	121.57	6.4	1.20	2.5	1290	538	17	1.20								
8.1	280	105.09	6.8	1.40	2.8	1151	480	17	1.35								
7.0	325	190.76	6.2	1.15	GFA49 GFAF49 GF49 GFF49	4P	3.2	990	413	18	1.60	GFA59R39 GFAF59R39 GF59R39 GFF59R39	4P				
7.6	299	175.38	6.5	1.25			3.6	880	367	18	1.80						
8.9	256	150.06	6.9	1.45			4.1	774	323	18	2.00						
10.2	222	130.07	7.2	1.65			3.5	921	384	9.4	0.95						
10.9	207	121.57	7.3	1.80			3.9	810	338	10	1.05						
12.7	179	105.09	7.4	2.10	4.4	731	305	11	1.15	GFA49R19 GFAF49R19 GF49R19 GFF49R19	4P						
14.9	152	89.29	7.6	2.40	5.2	616	257	11	1.40								
10	219	128.51	3.5	0.85	5.8	554	231	12	1.55								
11	201	117.88	3.8	0.90	5.2	611	255	8.9	1.00								
13	171	100.36	4.3	1.10	6.6	482	201	10	1.30								
15	148	86.53	4.6	1.25	7.3	434	181	10	1.45	GFA89 GFAF89 GF89 GFF89	8P						
16	138	80.65	4.7	1.35	5.1	628	262	8.7	1.00								
19	120	70.50	4.8	1.55	5.9	542	226	9.3	1.15								
20	113	66.09	4.9	1.65	6.7	480	200	10	1.30								
23	99	58.32	4.9	1.85	7.8	408	170	10	1.55								
24	93	54.54	5.0	2.00	GFA39 GFAF39 GF39 GFF39	4P	8.8	364	152	10	1.70	GFA89 GFAF89 GF89 GFF89	6P				
26	88	51.70	5.0	2.10			9.9	321	134	11	1.95						
28	80	47.02	5.1	2.30			7.6	420	175	5.7	1.00						
30	75	43.95	5.1	2.50			9.0	352	147	6.4	1.20						
35	65	38.31	5.1	2.80			10	312	130	6.8	1.35						
37	61	35.91	5.1	3.00	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P	2.4	1377	270.68	27	2.10	GFA89 GFAF89 GF89 GFF89	8P				
42	54	31.69	5.2	3.40			2.6	1299	255.37	27	2.30						
0.37kW							2.9	1164	228.93	27	2.50			GFA89 GFAF89 GF89 GFF89	6P		
0.20	16084	6708	81	0.80			3.3	1003	197.20	27	2.90						
0.22	14192	5919	84	0.85			3.3	1021	270.68	27	2.80						
0.26	12341	5147	86	1.00	3.5	963	255.37	28	3.00								
0.29	10857	4528	86	1.15	3.9	863	228.93	28	3.30								
0.34	9404	3922	86	1.35													
0.39	8272	3450	86	1.55													
0.44	7260	3028	86	1.70													

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
0.37kW							0.55kW						
3.9	852	225.79	18	1.70	GFA79	6P	0.57	8277	2427	114	2.30	GFA159R99	4P
4.5	748	198.31	18	1.95	GFAF79		0.83	5709	1674	114	3.30	GFAF159R99	
4.7	711	188.40	18	2.00	GF79		1.1	4461	1308	114	4.30	GF159R99	
5.3	628	166.47	18	2.30	GFF79		1.2	3987	1169	114	4.80	GFF159R99	
6.3	537	142.27	19	2.70									
4.7	711	281.71	18	2.10	GFA79	4P	0.35	13375	3922	84	0.90	GFA129R79	4P
5.1	664	262.93	18	2.20	GFAF79		0.40	11766	3450	86	1.05	GFAF129R79	
5.9	570	225.79	19	2.60	GF79		0.46	10327	3028	86	1.20	GF129R79	
6.7	501	198.31	19	3.00	GFF79							GFF129R79	
4.6	737	195.39	10	1.05	GFA69	6P	0.59	8079	2369	46	0.95	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P
5.2	644	170.85	11	1.20	GFAF69		0.67	7053	2068	49	1.10		
5.5	612	162.31	11	1.30	GF69		0.76	6227	1826	51	1.25		
6.3	537	142.40	11	1.45	GFF69		0.87	5446	1597	53	1.40		
7.4	456	120.79	12	1.75			0.99	4778	1401	54	1.60		
5.8	578	228.99	11	1.40	GFA69 GFAF69 GF69 GFF69	4P	1.1	4239	1243	55	1.85		
6.8	493	195.39	12	1.65			1.3	3707	1087	56	2.10		
7.8	431	170.85	12	1.85			1.5	3240	950	57	2.40		
8.2	410	162.31	12	1.95			1.7	2844	834	58	2.75		
9.3	359	142.40	12	2.20			2.2	2183	640	59	3.55		
11	305	120.79	12	2.70			1.0	4526	1327	28	0.95	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P
5.6	596	157.09	8.6	0.95	GFA59	1.2	3994	1171	29	1.05			
6.5	516	136.16	9.2	1.10	GFAF59	1.4	3485	1022	30	1.20			
7.0	483	127.27	9.4	1.20	GF59	1.5	3062	898	32	1.40			
8.0	417	110.01	10	1.40	GFF59	1.8	2677	785	32	1.60			
6.7	504	199.70	9.4	1.15	GFA59 GFAF59 GF59 GFF59	4P	2.0	2353	690	33	1.85		
7.2	463	183.60	10	1.30			2.3	2063	605	34	2.10		
8.5	396	157.09	10	1.50			2.6	1804	529	34	2.40		
9.8	344	136.16	10	1.70			3.0	1593	467	34	2.70		
10	321	127.27	10	1.85			3.4	1385	406	35	3.10		
12	278	110.01	11	2.10			3.8	1238	363	35	3.45		
14	236	93.47	11	2.50			1.6	3025	887	17	1.00	GFA89R59 GFAF89R59 GF89R59 GFF89R59	4P
16	211	83.46	11	2.80			1.8	2660	780	23	1.10		
8.9	379	150.06	5.8	1.05	2.1	2299	674	24	1.30				
10	328	130.07	6.4	1.20	2.3	2077	609	25	1.45				
13	265	105.09	7.0	1.50	2.7	1756	515	26	1.70				
15	225	89.29	7.2	1.75	3.1	1541	452	26	1.95				
17	201	79.72	7.4	1.95	4.0	1177	345	27	2.55				
20	172	68.09	7.5	2.30		2.9	1637	480	14	0.90	GFA79R39	4P	
20	165	65.36	7.5	2.40		3.4	1408	413	15	1.05	GFAF79R39		
15	218	86.53	3.8	0.90	GFA39 GFAF39 GF39 GFF39	4P	3.8	1252	367	16	1.20		GF79R39
16	204	80.65	4.0	0.95			4.3	1102	323	17	1.35		GFF79R39
19	178	70.50	4.3	1.10			5.4	876	257	9.2	0.90	GFA69R39	4P
20	167	66.09	4.4	1.20			6.0	788	231	10	1.05	GFAF69R39	
23	147	58.32	4.6	1.35			6.8	699	205	11	1.15	GF69R39	
24	138	54.54	4.7	1.45			7.9	597	175	11	1.35	GFF69R39	
26	130	51.70	4.8	1.50			2.4	2092	276.77	33	2.00	GFA99	8P
28	119	47.02	4.9	1.65			2.6	1916	253.41	34	2.20	GFAF99	
30	111	43.95	4.9	1.80			2.9	1693	223.88	34	2.50	GF99	
35	97	38.31	5.0	2.00								GFF99	
37	91	35.91	5.0	2.20			2.4	2046	270.68	25	1.45	GFA89	8P
42	80	31.69	5.0	2.50			2.6	1931	255.37	25	1.50	GFAF89	
47	71	28.10	4.9	2.80			2.9	1731	228.93	26	1.70	GF89	
56	60	23.88	4.7	3.30			3.3	1491	197.20	26	1.95	GFF89	
0.55kW							3.3	1518	270.68	26	1.90	GFA89	6P
0.22	21468	6295	87	0.90	GFA159R99	4P	3.5	1432	255.37	26	2.00	GFAF89	
0.26	18430	5404	97	1.05	GFAF159R99		3.9	1284	228.93	27	2.20	GF89	
0.50	9481	2780	113	2.00	GF159R99		4.5	1106	197.20	27	2.60	GFF89	
					GFF159R99		4.9	1009	179.97	27	2.90		

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole		
0.55kW							0.75kW								
3.9	1266	225.79	16	1.15	GFA79 GFAF79 GF79 GFF79	6P	0.50	12928	2780	108	1.45	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
4.5	1112	198.31	17	1.30											
4.7	1056	188.40	17	1.35											
5.3	933	166.47	17	1.55											
6.3	798	142.27	18	1.80											
6.8	731	130.42	18	1.95	GFA79 GFAF79 GF79 GFF79	4P	0.57	11287	2427	110	1.70	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
6.2	811	225.79	18	1.70			0.83	7785	1674	114	2.40				
7.0	712	198.31	18	1.95			1.1	6083	1308	114	3.10				
7.4	676	188.40	18	2.10			1.2	5436	1169	114	3.50				
8.3	598	166.47	18	2.30			0.46	14082	3028	83	0.85	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P		
9.8	511	142.27	19	2.70											
11	468	130.42	19	3.00											
12	411	114.45	19	3.40											
13	389	108.46	19	3.60			0.52	12412	2669	85	0.95	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P		
15	341	94.93	19	4.10								0.59		10947	2354
7.1	701	195.39	10	1.10	0.68	9464						2035		86	1.25
8.1	613	170.85	11	1.25	0.78	8287						1782		86	1.45
8.6	583	162.31	11	1.30	0.87	7464						1605		86	1.60
9.8	511	142.40	12	1.50	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P	0.76	8492	1826	46	0.90				
12	434	120.79	12	1.75			0.87	7427	1597	48	1.05				
13	391	109.04	12	1.95			0.99	6515	1401	50	1.20				
14	344	95.94	12	2.20			1.1	5781	1243	52	1.35				
15	325	90.59	12	2.30			1.3	5055	1087	53	1.50				
17	286	79.76	12	2.70			1.5	4418	950	55	1.75				
8.8	564	157.09	8.7	1.00			1.7	3878	834	56	2.00				
10	489	136.16	9.3	1.15			2.2	2976	640	57	2.60				
11	457	127.27	9.5	1.20			3.2	2028	436	59	3.85				
13	395	110.01	10	1.40			1.4	4753	1022	22	0.90				
15	336	93.47	10	1.65	1.5	4176	898	29	1.00						
17	300	83.46	10	1.85	1.8	3651	785	30	1.20						
19	262	72.98	11	2.10	2.0	3209	690	31	1.35						
20	245	68.22	11	2.30	2.3	2814	605	32	1.55						
24	212	58.97	11	2.60	2.6	2460	529	33	1.75						
13	377	105.09	5.5	1.00	3.0	2172	467	33	2.00						
16	321	89.29	6.3	1.15	3.4	1888	406	34	2.30						
17	286	79.72	6.6	1.30	3.8	1688	363	34	2.55						
20	244	68.09	7.0	1.50	2.1	3134	674	14	0.95						
21	235	65.36	7.1	1.60	2.3	2832	609	22	1.05						
25	203	56.49	7.3	1.85	2.7	2395	515	24	1.25						
29	172	48.00	7.3	2.20	3.1	2102	452	25	1.45						
32	154	42.86	7.5	2.40	4.0	1604	345	26	1.85						
24	209	58.32	3.7	0.90	GFA79R39 GFAF79R39 GF79R39 GFF79R39	4P	3.8	1707	367	13	0.85				
25	196	54.54	3.9	0.95			4.3	1502	323	15	1.00				
27	186	51.70	4.1	1.00			5.0	1302	280	16	1.15				
30	169	47.02	4.3	1.10			2.7	2509	254.40	58	3.00	GFA109 GFAF109 GF109 GFF109	8P		
32	158	43.95	4.4	1.20											
36	138	38.31	4.7	1.35											
39	129	35.91	4.7	1.45											
44	114	31.69	4.7	1.65			2.5	2729	276.77	32	1.55	GFA99 GFAF99 GF99 GFF99	8P		
49	101	28.10	4.6	1.85	2.7	2499						253.41		32	1.70
58	86	23.88	4.5	2.20	3.1	2208						223.88		33	1.90
59	85	23.63	4.5	2.20	3.3	2070						276.77		33	1.95
68	74	20.57	4.3	2.50			3.6	1895	253.41	34	2.10				
72	69	19.27	4.2	2.70			4.1	1674	223.88	34	2.40				
82	61	17.03	4.1	3.00											
97	51	14.33	3.9	3.60											

**选型参数表
(恒功率)**
**Selection Table
(Constant Power)**

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole		
0.75kW							0.75kW								
3.4	2024	270.68	25	1.40	GFA89 GFAF89 GF89 GFF89	6P	59	112	23.63	4.2	1.65	GFA39 GFAF39 GF39 GFF39	4P		
3.6	1909	255.37	25	1.50			68	98	20.57	4.1	1.85				
4.0	1712	228.93	26	1.65			72	91	19.27	4.0	2.00				
4.6	1475	197.20	26	1.90			82	81	17.03	3.9	2.30				
5.1	1346	179.97	27	2.10			97	68	14.33	3.8	2.70				
5.7	1193	159.61	27	2.40			108	61	12.87	3.7	3.00				
5.1	1325	270.68	27	2.10	GFA89 GFAF89 GF89 GFF89	4P	1.1kW								
5.4	1250	255.37	27	2.30			0.50	18826	2780	95	0.95	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
6.1	1121	228.93	27	2.50											
4.6	1483	198.31	14	0.95	GFA79 GFAF79 GF79 GFF79	6P	0.58	16436	2427	101	1.10	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
4.8	1409	188.40	15	1.00			0.64	14797	2185	104	1.20				
5.5	1245	166.47	16	1.15			0.72	13165	1944	107	1.35				
6.4	1064	142.27	17	1.30			0.84	11336	1674	110	1.60				
7.0	975	130.42	17	1.45			1.1	8858	1308	113	2.00				
6.2	1105	225.79	17	1.30	GFA79 GFAF79 GF79 GFF79	4P	1.2	7916	1169	114	2.25	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
7.0	971	198.31	17	1.45			1.5	6454	953	114	2.75				
7.4	922	188.40	17	1.55			1.7	5722	845	114	3.15				
8.3	815	166.47	18	1.75	GFA79 GFAF79 GF79 GFF79	4P	3.1	3020	446	114	5.95	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P		
9.8	696	142.27	18	2.00			4.6	2045	302	114	8.65				
11	638	130.42	18	2.20			0.69	13781	2035	83	0.85				
12	560	114.45	19	2.50			0.79	12068	1782	86	1.00				
13	531	108.46	19	2.70			0.87	10869	1605	86	1.10				
8.1	810	170.85	9.2	0.90	GFA69 GFAF69 GF69 GFF69	4P	1.0	9406	1389	86	1.25	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P		
8.6	769	162.31	10	0.95			1.1	8255	1219	86	1.45				
9.8	675	142.40	10	1.10			1.3	7280	1075	86	1.65				
12	573	120.79	11	1.30			1.1	8418	1243	46	0.95				
13	517	109.04	11	1.45			1.3	7361	1087	48	1.05				
14	455	95.94	12	1.65	GFA69 GFAF69 GF69 GFF69	4P	1.5	6433	950	50	1.20	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P		
15	429	90.59	12	1.75			1.7	5648	834	52	1.40				
17	378	79.76	12	2.00			1.9	4984	736	54	1.55				
21	321	67.65	12	2.30			2.2	4334	640	55	1.80				
23	290	61.07	12	2.60			2.0	4673	690	26	0.90				
11	603	127.27	5.0	0.90	GFA59 GFAF59 GF59 GFF59	4P	2.3	4097	605	29	1.05	GFA49 GFAF49 GF49 GFF49	4P		
13	522	110.01	8.9	1.05			2.6	3582	529	30	1.20				
15	443	93.47	10	1.25			3.0	3163	467	31	1.35				
17	396	83.46	10	1.40			3.4	2749	406	32	1.55				
19	346	72.98	10	1.60			3.9	2458	363	33	1.75				
20	323	68.22	10	1.70			3.1	3061	452	16	1.00				
24	280	58.97	11	1.95			4.1	2336	345	24	1.30				
28	238	50.10	11	2.30			4.7	2032	300	25	1.50				
31	212	44.73	11	2.60	5.6	1686	249	26	1.80						
17	378	79.72	4.8	0.95	GFA49 GFAF49 GF49 GFF49	4P	2.7	3679	254.40	56	1.95	GFA109 GFAF109 GF109 GFF109	8P		
20	323	68.09	6.2	1.15			3.2	3115	215.37	57	2.30				
21	310	65.36	6.3	1.20			3.5	2883	199.31	57	2.50				
25	268	56.49	6.8	1.35			3.9	2584	178.64	58	2.80				
29	228	48.00	7.1	1.60			3.3	3035	276.77	31	1.35				
32	203	42.86	7.3	1.80	GFA49 GFAF49 GF49 GFF49	4P	3.6	2779	253.41	32	1.50	GFA99 GFAF99 GF99 GFF99	6P		
38	174	36.61	7.4	2.10			4.1	2455	223.88	33	1.70				
41	163	34.29	7.5	2.20			4.8	2083	189.92	33	2.00				
48	137	28.88	7.2	2.70			5.2	1918	174.87	34	2.20				
30	223	47.02	3.4	0.80			GFA39 GFAF39 GF39 GFF39	4P	5.1	1973	276.77			33	2.10
32	208	43.95	3.7	0.90	5.5	1806			253.41	34	2.30				
36	182	38.31	4.1	1.00	6.3	1596			223.88	34	2.60				
39	170	35.91	4.3	1.05											
44	150	31.69	4.4	1.20											
49	133	28.10	4.3	1.35											

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole		
1.1kW							1.1kW								
3.4	2968	270.68	15	0.95	GFA89 GFAF89 GF89 GFF89	6P	44	226	31.69	3.5	0.85	GFA39 GFAF39 GF39 GFF39	4P		
3.6	2801	255.37	22	1.05			50	200	28.10	3.8	0.95				
4.0	2511	228.93	23	1.15			59	170	23.88	3.7	1.10				
4.6	2163	197.20	24	1.35			68	147	20.57	3.7	1.30	GFA39 GFAF39 GF39 GFF39	4P		
5.1	1974	179.97	25	1.45			73	137	19.27	3.6	1.40				
5.7	1750	159.61	26	1.65	82	121	17.03	3.6	1.55						
5.2	1930	270.68	25	1.50	98	102	14.33	3.5	1.85						
5.5	1820	255.37	25	1.55	109	92	12.87	3.4	2.10						
6.1	1632	228.93	26	1.75	GFA89 GFAF89 GF89 GFF89	4P	126	79	11.08	3.3	2.30				
7.1	1406	197.20	27	2.00			134	74	10.42	3.3	2.40				
7.8	1283	179.97	27	2.20			156	64	8.97	3.2	2.60				
8.8	1138	159.61	27	2.50	1.5kW								GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P	
10	956	134.16	28	3.00	0.58	22412	2427	82	0.80						
11	879	123.29	28	3.20	0.64	20177	2185	90	0.90						
7.1	1414	198.31	15	1.00	0.72	17952	1944	97	1.00						
7.4	1343	188.40	15	1.05	0.84	15459	1674	102	1.15						
8.4	1187	166.47	16	1.20	1.1	12079	1308	109	1.50						
9.8	1014	142.27	17	1.40	1.2	10795	1169	111	1.65						
11	930	130.42	17	1.55	1.5	8800	953	113	2.05						
12	816	114.45	18	1.75	1.7	7803	845	114	2.30						
13	773	108.46	18	1.85	3.1	4119	446	114	4.35						
15	677	94.93	18	2.10	4.6	2789	302	114	6.35						
16	610	85.52	18	2.30	0.87	14821	1605	81	0.80	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P				
19	535	75.02	19	2.70	1.0	12827	1389	85	0.95						
12	861	120.79	9.0	0.90	1.1	11257	1219	86	1.05						
13	777	109.04	10	1.00	1.3	9927	1075	86	1.20						
15	684	95.94	11	1.15	1.5	8579	929	86	1.40						
15	646	90.59	11	1.20	1.7	7563	819	86	1.60						
18	569	79.76	11	1.35	1.9	6704	726	86	1.80						
21	482	67.65	12	1.60	2.2	5975	647	86	2.05						
23	435	61.07	12	1.80	1.5	8773	950	45	0.90	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P				
26	383	53.73	12	2.00	1.7	7702	834	47	1.00						
28	362	50.74	12	2.20	1.9	6797	736	50	1.15						
32	308	43.20	12	2.50	2.2	5910	640	52	1.30						
36	280	39.26	12	2.70	2.5	5171	560	53	1.50						
41	242	34.01	12	2.90	2.9	4516	489	55	1.75						
17	595	83.46	8.0	0.95	3.2	4026	436	55	1.95						
19	520	72.98	9.1	1.10	3.8	3417	370	57	2.30						
21	486	68.22	9.3	1.15	2.6	4885	529	19	0.90	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P				
24	420	58.97	10	1.35	3.0	4313	467	28	1.00						
28	357	50.10	10	1.60	3.4	3749	406	30	1.15						
31	319	44.73	10	1.80	3.9	3352	363	31	1.30						
37	272	38.21	10	2.10	GFA89R59 GFAF89R59 GF89R59 GFF89R59	4P	4.7	2770	300	23	1.10				
39	255	35.79	10	2.20			5.6	2299	249	24	1.30				
46	215	30.15	9.3	2.60			2.7	5091	254.40	53	1.50			GFA109 GFAF109 GF109 GFF109	8P
25	403	56.49	3.5	0.95			3.2	4310	215.37	55	1.75				
29	342	48.00	6.1	1.10	3.4	3989	199.31	55	1.90						
33	306	42.86	6.5	1.25	3.8	3575	178.64	56	2.10						
38	261	36.61	6.9	1.45	GFA49 GFAF49 GF49 GFF49	4P	3.7	3683	254.40	56	1.95				
41	244	34.29	6.9	1.55			4.4	3118	215.37	57	2.30				
48	206	28.88	6.7	1.85			4.7	2885	199.31	57	2.50				
45	220	30.86	6.8	1.75			5.3	2586	178.64	58	2.80				
48	209	29.32	6.7	1.80	GFA49 GFAF49 GF49 GFF49	4P									
54	183	25.72	6.5	2.10											
64	156	21.82	6.3	2.40											
71	140	19.70	6.2	2.70											

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole		
1.5kW							1.5kW								
3.4	4007	276.77	28	1.00	GFA99 GFAF99 GF99 GFF99	6P	33	417	42.86	0.5	0.90	GFA49 GFAF49 GF49 GFF49	4P		
3.7	3669	253.41	29	1.10			38	356	36.61	6.0	1.10				
4.2	3241	223.88	30	1.25			41	333	34.29	6.3	1.15				
4.9	2750	189.92	32	1.45			48	281	28.88	6.2	1.35				
5.4	2532	174.87	32	1.60			45	300	30.86	6.2	1.30	GFA49 GFAF49 GF49 GFF49	4P		
5.1	2690	276.77	32	1.55	48	285	29.32	6.2	1.35						
5.5	2463	253.41	33	1.65	54	250	25.72	6.1	1.55						
6.3	2176	223.88	33	1.90	64	212	21.82	5.9	1.80						
7.4	1846	189.92	34	2.20	71	191	19.70	5.8	2.00						
8.0	1700	174.87	34	2.40	81	168	17.33	5.7	2.30						
5.2	2631	270.68	23	1.10	GFA89 GFAF89 GF89 GFF89	4P	86	159	16.36	5.6	2.40	GFA39 GFAF39 GF39 GFF39	4P		
5.5	2482	255.37	23	1.15			101	135	13.93	5.4	2.80				
6.1	2225	228.93	24	1.30			68	200	20.57	3.2	0.95				
7.1	1917	197.20	25	1.50			73	187	19.27	3.2	1.00				
7.8	1749	179.97	26	1.65	GFA89 GFAF89 GF89 GFF89	4P	82	166	17.03	3.2	1.15				
8.8	1551	159.61	26	1.85			98	139	14.33	3.2	1.35				
10	1304	134.16	27	2.20			109	125	12.87	3.1	1.55				
13	1064	109.49	27	2.70			126	108	11.08	3.1	1.70				
14	952	97.89	28	3.00			134	101	10.42	3.1	1.75				
8.4	1618	166.47	14	0.90	GFA79 GFAF79 GF79 GFF79	4P	156	87	8.97	3.0	1.90				
9.8	1383	142.27	15	1.05			174	78	8.03	2.9	2.10				
11	1268	130.42	16	1.15			2.2kW								
12	1113	114.45	17	1.30			0.99	19107	1441	93	0.95	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
13	1054	108.46	17	1.35	GFA79 GFAF79 GF79 GFF79	4P	1.1	17344	1308	96	1.05	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P		
15	923	94.93	17	1.55			1.2	15501	1169	101	1.15				
16	831	85.52	18	1.75			1.5	12637	953	107	1.40				
19	729	75.02	18	1.95			1.7	11205	845	110	1.60				
19	705	72.50	18	2.00			1.9	10130	764	111	1.75				
21	646	66.46	18	2.20			2.1	9017	680	113	1.95				
24	567	58.32	19	2.50			2.5	7638	576	114	2.30				
25	537	55.27	19	2.70			3.2	5914	446	114	3.00				
29	470	48.37	19	3.00			4.7	4004	302	114	4.40				
32	424	43.58	19	3.40			5.2	3620	273	114	4.85				
37	372	38.23	19	3.90			6.2	3076	232	114	5.70				
38	356	36.58	19	3.00	GFA79 GFAF79 GF79 GFF79	4P	7.3	2612	197	114	6.90	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P		
44	306	31.51	19	4.30			1.3	14254	1075	81	0.85				
15	881	90.59	8.8	0.90			1.5	12318	929	85	1.00				
18	775	79.76	10	1.00	GFA69 GFAF69 GF69 GFF69	4P	1.7	10860	819	86	1.10				
21	658	67.65	11	1.20			2.0	9627	726	86	1.25				
23	594	61.07	11	1.30			2.2	8579	647	86	1.40				
26	522	53.73	12	1.50			2.6	7266	548	86	1.65				
28	493	50.74	12	1.60			2.9	6550	494	86	1.80				
32	420	43.20	12	1.85			3.3	5675	428	86	2.10				
36	382	39.26	12	1.95	GFA69 GFAF69 GF69 GFF69	4P	2.2	8486	640	45	0.90	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P		
39	353	36.30	12	2.20			2.6	7425	560	48	1.05				
44	312	32.08	12	2.50			2.9	6484	489	50	1.20				
51	266	27.41	12	2.90			3.3	5781	436	51	1.35				
56	244	25.13	12	3.20			3.9	4906	370	53	1.60				
24	573	58.97	8.7	1.00	GFA59 GFAF59 GF59 GFF59	4P	4.3	4416	333	54	1.75				
28	487	50.10	9.4	1.20			5.0	3779	285	30	1.15	GFA99R59 GFAF99R59 GF99R59 GFF99R59	4P		
31	435	44.73	9.5	1.30			5.8	3249	245	31	1.30				
37	371	38.21	9.3	1.55											
39	348	35.79	9.1	1.65											
46	293	30.15	8.8	1.95											

选型参数表
(恒功率)
Selection Table
(Constant Power)

n_a [r/min]	M_a [N.m]	i	F_{Ra} [kN]	f_B	机型号 Type size	极数 Pole	n_a [r/min]	M_a [N.m]	i	F_{Ra} [kN]	f_B	机型号 Type size	极数 Pole
2.2kW							2.2kW						
2.8	7152	254.40	47	1.00	GFA109	8P	45	448	32.08	12	1.70	GFA69 GFAF69 GF69 GFF69	4P
3.3	6054	215.37	50	1.20	GFAF109		52	383	27.41	12	2.00		
3.6	5603	199.31	51	1.30	GF109		57	351	25.13	12	2.20		
4.0	5022	178.64	53	1.45	GFF109		65	308	22.05	12	2.50		
3.7	5402	254.40	52	1.35	GFA109	6P	68	292	20.90	12	2.60	GFA59 GFAF59 GF59 GFF59	4P
4.4	4573	215.37	54	1.60	GFAF109		78	255	18.29	12	3.00		
4.7	4232	199.31	55	1.70	GF109		32	624	44.73	4.3	0.90		
5.3	3793	178.64	55	1.90	GFF109		37	533	38.21	8.2	1.05		
5.6	3551	254.40	56	2.00	GFA109	4P	40	500	35.79	8.2	1.15	GFA59 GFAF59 GF59 GFF59	4P
6.6	3006	215.37	57	2.40	GFAF109		47	421	30.15	8.0	1.30		
7.2	2782	199.31	57	2.60	GF109		57	348	24.96	7.8	1.55		
8.0	2493	178.64	58	2.90	GFF109		68	295	21.17	7.6	1.90		
4.2	4754	223.88	12	0.85	GFA99	6P	75	267	19.11	7.5	2.10	GFA59 GFAF59 GF59 GFF59	4P
4.9	4033	189.92	29	1.00	GFAF99		85	235	16.81	7.3	2.40		
5.4	3713	174.87	29	1.10	GF99		90	222	15.88	7.2	2.50		
6.0	3319	156.30	30	1.25	GFF99		56	359	25.72	5.3	1.05		
5.2	3863	276.77	29	1.05	GFA99 GFAF99 GF99 GFF99	4P	66	305	21.82	5.2	1.25	GFA49 GFAF49 GF49 GFF49	4P
5.6	3537	253.41	30	1.15			73	275	19.70	5.2	1.35		
6.4	3125	223.88	31	1.30			83	242	17.33	5.1	1.55		
7.5	2651	189.92	32	1.50			87	228	16.36	5.1	1.65		
8.2	2441	174.87	32	1.65			103	194	13.93	5.0	1.95		
9.1	2182	156.30	33	1.85			113	177	12.66	4.9	2.10		
10	1964	140.71	33	2.00			130	153	10.97	4.8	2.50		
11	1778	127.42	34	2.30			159	125	8.97	4.5	2.50		
7.3	2752	197.20	21	1.00	GFA89 GFAF89 GF89 GFF89	4P	100	200	14.33	2.7	0.95	GFA39 GFAF39 GF39 GFF39	4P
7.9	2512	179.97	23	1.10			111	180	12.87	2.7	1.05		
9.0	2228	159.61	24	1.25			129	155	11.08	2.7	1.15		
11	1873	134.16	25	1.50			137	145	10.42	2.7	1.20		
12	1721	123.29	26	1.65			159	125	8.97	2.7	1.30		
13	1528	109.49	26	1.85			178	112	8.03	2.6	1.40		
15	1366	97.89	27	2.10			212	94	6.76	2.5	1.40		
16	1228	88.01	27	2.30			236	85	6.07	2.5	1.50		
19	1066	76.39	26	2.60			273	73	5.23	2.4	1.60		
21	955	68.40	26	2.90			291	69	4.92	2.4	1.65		
25	792	56.75	25	3.50			338	59	4.23	2.3	1.75		
28	703	50.36	24	3.90			378	53	3.78	2.3	1.85		
32	632	45.28	23	4.20	3kW								
12	1597	114.45	13	0.90	GFA79	4P	1.2	22250	1169	83	0.85	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P
13	1514	108.46	14	0.95	GFAF79		1.5	18139	953	96	1.05		
15	1325	94.93	15	1.05	GF79		1.7	16083	845	101	1.15		
17	1194	85.52	16	1.20	GFF79		1.9	14541	764	105	1.30		
19	1047	75.02	17	1.35	GFA79 GFAF79 GF79 GFF79	4P	2.1	12943	680	108	1.45	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P
22	928	66.46	17	1.50			2.5	10963	576	111	1.70		
25	814	58.32	18	1.75			3.2	8489	446	114	2.20		
26	771	55.27	18	1.80			4.7	5748	302	114	3.20		
30	675	48.37	18	2.10	GFA79 GFAF79 GF79 GFF79	4P	5.2	5196	273	114	3.55	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P
33	608	43.58	18	2.30			6.2	4416	232	114	4.20		
39	511	36.58	19	2.00			7.3	3750	197	114	5.05		
45	440	31.51	19	2.90			2.0	13818	726	83	0.90		
50	401	28.75	19	3.30	GFA79 GFAF79 GF79 GFF79	4P	2.2	12314	647	86	1.05	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P
56	356	25.50	19	4.00			2.6	10430	548	86	1.20		
23	852	61.07	8.9	0.90			2.9	9402	494	86	1.35		
27	750	53.73	10	1.00			3.3	8298	436	46	1.00		
28	708	50.74	10	1.10	GFA69 GFAF69 GF69 GFF69	4P	3.9	7042	370	49	1.15	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P
33	603	43.20	11	1.25			4.3	6338	333	51	1.30		
36	548	39.26	11	1.35			4.9	5539	291	53	1.45		
42	475	34.01	12	1.45									

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
3kW							3kW						
3.8	7213	254.40	47	1.00	GFA109	6P	106	257	13.52	6.5	2.20	GFA59	4P
4.5	6106	215.37	50	1.15	GFAF109		116	234	12.29	6.4	2.40	GFAF59	
4.8	5651	199.31	51	1.25	GF109		134	203	10.64	6.3	2.80	GF59	
5.4	5065	178.64	53	1.40	GFF109							GFF59	
5.6	4842	254.40	53	1.50	GFA109	4P	73	375	19.70	4.5	1.00	GFA49 GFAF49 GF49 GFF49	4P
6.6	4099	215.37	55	1.75	GFAF109		83	330	17.33	4.5	1.15		
7.2	3794	199.31	55	1.90	GF109		87	311	16.36	4.5	1.20		
8.0	3400	178.64	56	2.10	GFF109		103	265	13.93	4.5	1.40		
8.9	3070	161.28	57	2.30			113	241	12.66	4.5	1.55	GFA39 GFAF39 GF39 GFF39	4P
6.4	4261	223.88	28	0.95	GFA99 GFAF99 GF99 GFF99	130	209	10.97	4.4	1.80			
7.5	3615	189.92	30	1.10		159	171	8.97	4.2	1.80			
8.2	3328	174.87	30	1.20		129	211	11.08	2.2	0.85			
9.1	2975	156.30	31	1.35		137	198	10.42	2.2	0.85			
10	2678	140.71	32	1.50		159	171	8.97	2.3	0.95	GFA39 GFAF39 GF39 GFF39	4P	
11	2425	127.42	32	1.65		178	153	8.03	2.3	1.05			
13	2151	112.99	33	1.85		212	129	6.76	2.2	1.00			
14	1944	102.16	33	2.10		236	116	6.07	2.2	1.10			
16	1710	89.85	34	2.30		273	100	5.23	2.2	1.15			
11	2553	134.16	23	1.10	GFA89 GFAF89 GF89 GFF89	291	94	4.92	2.2	1.20			
12	2347	123.29	23	1.20		338	81	4.23	2.1	1.25			
13	2084	109.49	24	1.35		378	72	3.78	2.1	1.35			
15	1863	97.89	25	1.50	GFA89 GFAF89 GF89 GFF89	4P	4kW						
16	1675	88.01	26	1.65			1.7	20230	845	87	0.90	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P
19	1454	76.39	25	1.90			1.9	18291	764	93	1.00		
21	1302	68.40	24	2.10			2.1	16280	680	99	1.10		
25	1080	56.75	24	2.60	2.5	13790	576	105	1.30				
28	959	50.36	23	2.80	GFA79 GFAF79 GF79	4P	3.2	10678	446	110	1.70		
17	1628	85.52	13	0.85			4.8	7230	302	114	2.45		
19	1428	75.02	15	1.00			5.3	6536	273	114	2.70		
22	1265	66.46	16	1.10			6.2	5554	232	114	3.20		
25	1110	58.32	17	1.25	GFA79 GFAF79 GF79 GFF79	4P	7.3	4716	197	114	3.85	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P
26	1052	55.27	17	1.35			2.6	13120	548	83	0.90		
30	921	48.37	17	1.50			2.9	11827	494	86	1.00		
33	829	43.58	18	1.70			3.4	10247	428	86	1.15		
37	728	38.23	18	1.90	GFA79 GFAF79 GF79 GFF79	4P	3.8	8978	375	86	1.30	GFA109R79 GFAF109R79 GF109R79 GFF109R79	4P
39	696	36.58	18	1.50			4.3	7972	333	46	1.00		
45	600	31.51	18	2.10			4.9	6967	291	49	1.10		
50	547	28.75	19	2.40			5.6	6105	255	51	1.30		
56	485	25.50	19	2.90	GFA69 GFAF69 GF69 GFF69	4P	4.2	8601	170.64	86	1.30	GFA129 GFAF129 GF129 GFF129	8P
67	408	21.43	19	3.40			4.7	7737	153.50	86	1.45		
33	822	43.20	9	0.95			5.7	6312	125.23	86	1.80		
36	747	39.26	10	0.95									
42	647	34.01	11	1.05	GFA69 GFAF69 GF69 GFF69	4P	5.7	6411	254.40	49	1.10	GFA109 GFAF109 GF109 GFF109	4P
45	611	32.08	11	1.25			6.7	5428	215.37	52	1.35		
52	522	27.41	11	1.45			7.2	5023	199.31	53	1.45		
57	478	25.13	12	1.60			8.1	4502	178.64	54	1.60		
65	420	22.05	12	1.80	GFA69 GFAF69 GF69 GFF69	4P	8.9	4064	161.28	55	1.75		
68	398	20.90	12	1.90			9.8	3692	146.49	56	1.95		
78	348	18.29	12	2.20			11	3275	129.97	56	2.20		
87	314	16.48	12	2.40			12	2972	117.94	57	2.40		
99	275	14.46	12	2.80	GFA59 GFAF59 GF59 GFF59	4P	14	2555	101.38	58	2.80	GFA99 GFAF99 GF99 GFF99	4P
57	475	24.96	7.1	1.15			8.2	4407	174.87	25	0.90		
68	403	21.17	7.0	1.40			9.2	3939	156.30	29	1.00		
75	364	19.11	6.9	1.55			10	3546	140.71	30	1.15		
85	320	16.81	6.8	1.75			11	3211	127.42	31	1.25		
90	302	15.88	6.7	1.85									

选型参数表
(恒功率)
Selection Table
(Constant Power)

n_a [r/min]	M_a [N.m]	i	F_{Ra} [kN]	f_B	机型号 Type size	极数 Pole	n_a [r/min]	M_a [N.m]	i	F_{Ra} [kN]	f_B	机型号 Type size	极数 Pole
4kW							5.5kW						
13	2848	112.99	32	1.40	GFA99 GFAF99 GF99 GFF99	4P	2.5	18962	576	91	0.95	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P
14	2575	102.16	32	1.55			2.9	16558	503	98	1.10		
15	2459	97.58	32	1.65			3.2	14682	446	103	1.25		
16	2264	89.85	33	1.80			4.1	11621	353	109	1.55		
18	2024	80.31	33	2.00			4.8	9942	302	111	1.80		
20	1822	72.30	34	2.20			5.3	8987	273	112	1.95		
22	1650	65.47	34	2.40			6.2	7637	232	114	2.30		
13	2759	109.49	21	1.00	GFA89 GFAF89 GF89 GFF89	4P	7.1	6650	202	114	2.65		
15	2467	97.89	23	1.15			7.3	6485	197	114	2.80		
16	2218	88.01	23	1.25			3.4	13760	418	82	0.85	GFA129R89 GFAF129R89 GF129R89 GFF129R89	4P
19	1925	76.39	23	1.45	GFA89 GFAF89 GF89 GFF89	4P	3.8	12345	375	85	0.95		
21	1724	68.40	23	1.65			4.6	10271	312	86	1.15		
25	1430	56.75	22	1.95			4.9	9645	293	86	1.25		
29	1269	50.36	22	2.20			5.6	8526	259	86	1.40		
32	1141	45.28	21	2.30			6.5	7341	223	86	1.60		
22	1675	66.46	13	0.85	GFA79 GFAF79 GF79 GFF79	4P	3.4	14089	428	81	0.85	GFA129R79 GFAF129R79 GF129R79 GFF129R79	4P
25	1470	58.32	14	0.95			3.8	12345	375	85	0.95		
26	1393	55.27	15	1.00			2.7	18534	267.43	90	0.90	GFA159 GFAF159 GF159 GFF159	8P
30	1219	48.37	16	1.15	GFA79 GFAF79 GF79 GFF79	4P	3.3	15082	217.62	100	1.10		
33	1098	43.58	17	1.30			4.0	12350	178.20	106	1.35		
38	963	38.23	17	1.45			4.4	11294	162.96	108	1.50		
43	850	33.74	18	1.65			5.1	9827	141.80	111	1.70		
48	754	29.91	18	1.85			5.8	8673	125.14	112	1.90		
56	644	25.54	18	2.10			6.6	7519	108.49	114	2.20		
46	794	31.51	18	1.65	GFA79 GFAF79 GF79 GFF79	4P	7.5	6690	96.53	114	2.50		
50	725	28.75	18	1.85			8.4	5946	85.80	114	2.80		
56	643	25.50	18	2.20			9.2	5438	78.46	114	3.10		
67	540	21.43	19	2.60			11	4732	68.28	114	3.60		
73	496	19.70	19	2.80			4.2	11826	170.64	85	0.95	GFA129 GFAF129 GF129 GFF129	8P
53	691	27.41	10	1.10	GFA69 GFAF69 GF69 GFF69	4P	4.7	10638	153.50	86	1.05		
57	633	25.13	11	1.20			5.7	8679	125.23	86	1.30		
65	556	22.05	11	1.40			6.3	7915	114.21	86	1.40	GFA109 GFAF109 GF109 GFF109	4P
69	527	20.90	11	1.45			6.7	7463	215.37	47	0.95		
79	461	18.29	12	1.65			7.2	6906	199.31	48	1.05		
87	415	16.48	12	1.85			8.1	6190	178.64	50	1.15		
100	364	14.46	12	2.10			8.9	5589	161.28	51	1.30		
113	322	12.76	12	2.40			9.8	5076	146.49	53	1.45		
127	285	11.31	12	2.70			11	4504	129.97	54	1.60		
149	243	9.66	12	3.20			12	4087	117.94	55	1.75		
159	229	9.08	12	2.20			14	3513	101.38	56	2.10		
167	217	8.60	12	2.50			16	3204	92.47	57	2.30		
191	190	7.53	12	3.00			16	3066	88.49	57	2.40		
212	171	6.78	11	3.40			17	2910	83.99	57	2.50		
242	150	5.95	11	3.80			11	4415	127.42	26	0.90	GFA99 GFAF99 GF99 GFF99	4P
274	132	5.25	11	4.20			13	3915	112.99	29	1.05		
309	117	4.66	10	4.50			14	3540	102.16	30	1.15		
363	100	3.97	10	4.70			15	3381	97.58	30	1.20	GFA99 GFAF99 GF99 GFF99	4P
68	534	21.17	6.2	1.05	GFA59 GFAF59 GF59 GFF59	4P	16	3113	89.85	31	1.30		
75	482	19.11	6.2	1.15			17	3001	86.59	31	1.35		
86	424	16.81	6.1	1.35			18	2783	80.31	32	1.45		
91	400	15.88	6.1	1.40			19	2621	75.63	32	1.55		
107	341	13.52	6.0	1.65			20	2505	72.30	32	1.60		
117	310	12.29	6.0	1.80			22	2269	65.47	33	1.80		
135	268	10.64	5.8	2.10			25	2012	58.06	33	2.00		
155	235	9.31	5.6	1.70			27	1819	52.49	32	2.20		
176	206	8.19	5.4	1.90									
186	195	7.73	5.4	2.00									
219	166	6.58	5.2	2.40									
241	151	5.98	5.1	2.60									
278	131	5.18	5.0	3.00									

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole				
5.5kW							7.5kW										
16	3050	88.01	5.5	0.95	GFA89	4P	3.3	20566	217.62	83	0.85	GFA159 GFAF159 GF159 GFF159	8P				
19	2647	76.39	20	1.05	GFAF89		4.0	16841	178.20	96	1.00						
21	2370	68.40	20	1.20	GF89		4.4	15401	162.96	100	1.10						
25	1966	56.75	20	1.45	GFF89		5.1	13401	141.80	105	1.30						
29	1745	50.36	20	1.60	GFA89	4P	5.8	11826	125.14	108	1.45			GFA159 GFAF159 GF159 GFF159	8P		
32	1569	45.28	19	1.70	GFAF89		6.6	10253	108.49	110	1.65						
37	1362	39.30	19	1.90	GF89		7.5	9123	96.53	112	1.85						
41	1219	35.19	19	2.00	GFF89		8.4	8109	85.80	113	2.10						
49	1012	29.20	18	2.30	GFA89 GFAF89 GF89 GFF89	4P	9.2	7415	78.46	114	2.30					GFA159 GFAF159 GF159 GFF159	8P
42	1175	33.92	19	2.10			11	6453	68.28	114	2.70						
50	997	28.78	18	2.30			12	5694	60.25	114	3.00						
54	918	26.50	18	3.10			14	4937	52.24	114	3.50						
61	821	23.68	17	3.50	GFA79 GFAF79 GF79 GFF79	4P	15	4393	46.48	114	3.90	GFA159 GFAF159 GF159 GFF159	8P				
30	1676	48.37	13	0.85			18	3786	40.06	114	4.50						
33	1510	43.58	14	0.95			3.6	18760	267.43	89	0.90						
38	1325	38.23	15	1.05			4.5	15266	217.62	100	1.10						
43	1169	33.74	16	1.20	GFA79 GFAF79 GF79 GFF79	4P	5.4	12500	178.20	106	1.35			GFA159 GFAF159 GF159 GFF159	6P		
48	1036	29.91	17	1.35			6.0	11431	162.96	108	1.50						
56	885	25.54	18	1.55			6.8	9947	141.80	111	1.70						
56	884	25.50	18	1.60			7.8	8778	125.14	112	1.95						
67	743	21.43	18	1.90	GFA79 GFAF79 GF79 GFF79	4P	8.9	7610	108.49	114	2.20					GFA159 GFAF159 GF159 GFF159	6P
73	683	19.70	18	2.10			10	6771	96.53	114	2.50						
82	606	17.49	18	2.30			11	6019	85.80	114	2.80						
92	542	15.64	19	2.60			12	5504	78.46	114	3.10						
102	487	14.06	18	2.90	GFA69 GFAF69 GF69 GFF69	4P	14	4790	68.28	114	3.50	GFA159 GFAF159 GF159 GFF159	6P				
118	423	12.21	18	3.30			16	4226	60.25	114	4.00						
65	764	22.05	10	1.00			19	3665	52.24	113	4.60						
69	724	20.90	10	1.05			5.7	11835	125.23	85	0.95						
79	634	18.29	11	1.20	GFA69 GFAF69 GF69 GFF69	4P	6.3	10793	114.21	86	1.05			GFA129 GFAF129 GF129 GFF129	8P		
87	571	16.48	11	1.35			7.3	9341	98.84	86	1.20						
100	501	14.46	12	1.55			8.3	8242	87.21	86	1.40						
113	442	12.76	12	1.75			5.7	11970	170.64	85	0.95						
127	392	11.31	12	1.95	GFA69 GFAF69 GF69 GFF69	4P	6.3	10768	153.50	86	1.05					GFA129 GFAF129 GF129 GFF129	6P
149	335	9.66	12	2.30			7.7	8785	125.23	86	1.30						
159	315	9.08	12	1.60			8.5	8012	114.21	86	1.40						
167	298	8.60	12	1.80			8.4	8063	170.64	86	1.40						
191	261	7.53	11	2.20	GFA129 GFAF129 GF129 GFF129	4P	9.4	7253	153.50	86	1.55	GFA129 GFAF129 GF129 GFF129	4P				
212	235	6.78	11	2.50			11	5917	125.23	86	1.90						
242	206	5.95	11	2.80			8.1	8441	178.64	44	0.85						
274	182	5.25	11	3.10			8.9	7621	161.28	46	0.95						
309	161	4.66	10	3.30	GFA109 GFAF109 GF109 GFF109	4P	9.8	6922	146.49	48	1.05			GFA109 GFAF109 GF109 GFF109	4P		
363	138	3.97	10	3.40			11	6141	129.97	50	1.20						
86	582	16.81	5.2	0.95			12	5573	117.94	51	1.30						
91	550	15.88	5.2	1.05			14	4790	101.38	53	1.50						
107	468	13.52	5.3	1.20	GFA109 GFAF109 GF109 GFF109	4P	16	4369	92.47	54	1.65					GFA109 GFAF109 GF109 GFF109	4P
117	426	12.29	5.3	1.35			16	4181	88.49	55	1.75						
135	369	10.64	5.2	1.55			17	3969	83.99	55	1.85						
176	284	8.19	4.9	1.40			19	3521	74.52	56	2.10						
186	268	7.73	4.9	1.50	GFA129R89 GFAF129R89 GF129R89 GFF129R89	4P	21	3195	67.62	57	2.30	GFA129R89 GFAF129R89 GF129R89 GFF129R89	4P				
219	228	6.58	4.8	1.75			15	4611	97.58	18	0.90						
241	207	5.98	4.8	1.90			16	4246	89.85	28	0.95						
278	179	5.18	4.7	2.20			17	4092	86.59	28	1.00						
7.5kW							7.5kW										
4.6	14006	312	82	0.85	GFA129R89	4P	17	4092	86.59	28	1.00			GFA99 GFAF99 GF99 GFF99	4P		
4.9	13153	293	83	0.90	GFAF129R89		18	3795	80.31	29	1.05						
5.6	11627	259	86	1.05	GF129R89		19	3574	75.63	30	1.15						
6.5	10010	223	86	1.20	GFF129R89		20	3416	72.30	30	1.20						
7.3	8888	198	86	1.40													

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole				
7.5kW							11kW										
22	3094	65.47	31	1.30	GFA99 GFAF99 GF99 GFF99	4P	5.4	18334	178.20	91	0.90	GFA159 GFAF159 GF159 GFF159	6P				
25	2743	58.06	30	1.50			6.0	16766	162.96	96	1.00						
27	2480	52.49	30	1.65			6.8	14589	141.80	102	1.15						
32	2102	44.49	29	1.95			7.8	12875	125.14	105	1.30						
37	1836	38.86	28	2.20			8.9	11162	108.49	109	1.50						
44	1536	32.50	27	2.60			10	9931	96.53	111	1.70						
33	2045	43.28	29	1.40	GFA99 GFAF99 GF99 GFF99	4P	11	8827	85.80	112	1.90	GFA159 GFAF159 GF159 GFF159	4P				
39	1731	36.64	28	1.65			12	8072	78.46	113	2.10						
42	1602	33.91	28	2.50			5.5	18280	267.43	91	0.90						
47	1436	30.39	27	2.80			6.7	14875	217.62	101	1.15						
25	2682	56.75	17	1.05	GFA89 GFAF89 GF89 GFF89	4P	8.2	12181	178.20	107	1.40			GFA159 GFAF159 GF159 GFF159	4P		
29	2380	50.36	17	1.15			9.0	11139	162.96	109	1.50						
32	2140	45.28	17	1.25			10	9693	141.80	111	1.75						
37	1857	39.30	17	1.40			12	8554	125.14	112	1.92						
41	1663	35.19	17	1.50			13	7416	108.49	114	2.30						
49	1380	29.20	17	1.70			15	6598	96.53	114	2.60						
50	1360	28.78	17	1.70	GFA89 GFAF89 GF89 GFF89	4P	17	5865	85.80	112	2.90			GFA129 GFAF129 GF129 GFF129	6P		
54	1252	26.50	17	2.30			19	5363	78.46	110	3.10						
61	1119	23.68	16	2.50			21	4667	68.28	106	3.60						
68	1007	21.32	16	2.80			7.7	12884	125.23	83	0.85						
75	912	19.31	16	3.10			8.5	11750	114.21	85	0.95						
84	809	17.12	15	3.50			9.8	10169	98.84	86	1.10						
93	731	15.48	15	3.90	GFA79 GFAF79 GF79 GFF79	4P	11	8973	87.21	86	1.25	GFA129 GFAF129 GF129 GFF129	4P				
43	1594	33.74	14	0.90			13	7749	75.32	86	1.45						
48	1413	29.91	15	1.00			8.6	11664	170.64	85	0.95						
56	1207	25.54	17	1.15			9.5	10492	153.50	86	1.05						
56	1205	25.50	16	1.15			12	8560	125.23	86	1.30						
67	1013	21.43	17	1.40			13	7807	114.21	86	1.45						
73	931	19.70	17	1.50	GFA79 GFAF79 GF79 GFF79	4P	15	6756	98.84	86	1.65	GFA109 GFAF109 GF109 GFF109	4P				
82	826	17.49	18	1.70			17	5961	87.21	86	1.90						
92	739	15.64	18	1.90			19	5148	75.32	84	2.20						
102	664	14.06	18	2.10			12	8062	117.94	45	0.90						
118	577	12.21	17	2.50			14	6930	101.38	48	1.05						
132	516	10.93	17	2.70			16	6321	92.47	50	1.15						
155	439	9.30	16	2.30			17	5741	83.99	51	1.25						
174	390	8.26	15	2.60			20	5094	74.52	53	1.40						
195	349	7.39	15	2.90			22	4622	67.62	54	1.55						
217	314	6.64	15	3.20			25	3973	58.12	54	1.80						
250	272	5.76	14	3.70			29	3468	50.73	52	2.10						
279	244	5.16	14	4.20			34	2941	43.03	51	2.50						
336	202	4.28	13	4.70	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P	43	2310	33.79	48	3.00	GFA109 GFAF109 GF109 GFF109	4P				
11kW							53	1885	27.57	46	3.90						
4.8	19611	302	88	0.90			58	1718	25.14	45	4.30						
5.3	17728	273	94	1.00			GFA99 GFAF99 GF99 GFF99	4P	22	4475	65.47			23	0.90		
6.3	15065	232	102	1.15					25	3969	58.06			26	1.00		
7.2	13117	202	106	1.35					28	3588	52.49			26	1.10		
7.4	12793	197	106	1.40					33	3041	44.49			26	1.30		
6.5	14481	223	80	0.80			GFA129R89 GFAF129R89 GF129R89 GFF129R89	4P	38	2656	38.86			25	1.50	GFA99 GFAF99 GF99 GFF99	4P
7.4	12857	198	84	0.95					45	2222	32.50			25	1.80		
8.8	10779	166	86	1.10					43	2318	33.91			25	1.75		
5.1	19385	141.80	87	0.85			GFA159 GFAF159 GF159 GFF159	8P	48	2077	30.39			25	1.95	GFA99 GFAF99 GF99 GFF99	4P
5.8	17108	125.14	95	1.00					53	1876	27.44			24	2.20		
6.7	14832	108.49	101	1.15	59	1703			24.92	24	2.40						
7.6	13197	96.53	105	1.30	66	1511			22.11	23	2.70						

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
11kW							15kW						
37	2686	39.30	14	0.95	GFA89 GFAF89 GF89 GFF89	4P	16	8619	92.47	44	0.85	GFA109 GFAF109 GF109 GFF109	4P
41	2405	35.19	14	1.00			16	8248	88.49	45	0.90		
50	1996	29.20	14	1.20			17	7829	83.99	46	0.95		
							20	6946	74.52	48	1.05		
55	1811	26.50	14	1.55	GFA89 GFAF89 GF89 GFF89	4P	22	6303	67.62	50	1.15		
62	1619	23.68	14	1.75			25	5417	58.12	50	1.35		
68	1457	21.32	14	1.95			29	4729	50.73	49	1.55		
76	1320	19.31	14	2.10			34	4011	43.03	48	1.80		
85	1170	17.12	14	2.40			39	3506	37.61	47	2.10		
94	1058	15.48	14	2.70			46	2964	31.80	46	2.50		
111	897	13.12	14	3.10	GFA79 GFAF79 GF79 GFF79	4P	43	3150	33.79	46	2.20	GFA109 GFAF109 GF109 GFF109	4P
74	1347	19.70	15	1.05			53	2570	27.57	44	2.90		
83	1196	17.49	16	1.20			58	2343	25.14	44	3.20		
93	1069	15.64	17	1.30			67	2028	21.76	42	3.70		
104	961	14.06	17	1.45			33	4147	44.49	22	1.00	GFA99 GFAF99 GF99 GFF99	4P
120	835	12.21	16	1.70			38	3622	38.86	22	1.15		
134	747	10.93	16	1.90			45	3029	32.50	22	1.35		
157	636	9.30	15	1.60			43	3161	33.91	22	1.30	GFA99 GFAF99 GF99 GFF99	4P
177	565	8.26	14	1.80			48	2833	30.39	22	1.45		
198	505	7.39	14	2.00			53	2558	27.44	22	1.60		
220	454	6.64	14	2.20			59	2323	24.92	22	1.75		
253	394	5.76	13	2.60			66	2061	22.11	21	2.00		
283	353	5.16	13	2.90			73	1871	20.07	21	2.20		
341	293	4.28	13	3.20			85	1608	17.25	21	2.50		
							97	1404	15.06	20	2.90		
							114	1190	12.77	20	3.40		
							131	1040	11.16	19	3.70		
15kW							55	2470	26.50	12	1.15	GFA89 GFAF89 GF89 GFF89	4P
6.3	20544	232	86	0.85	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P	62	2207	23.68	12	1.30		
7.2	17887	202	95	1.00			68	1987	21.32	12	1.45		
7.4	17444	197	96	1.05			76	1800	19.31	12	1.60		
6.8	19894	141.80	86	0.85	GFA159 GFAF159 GF159 GFF159	6P	85	1596	17.12	12	1.80		
7.8	17557	125.14	94	0.95			94	1443	15.48	12	2.00		
8.9	15221	108.49	100	1.10			111	1223	13.12	12	2.30		
10	13543	96.53	104	1.25			127	1068	11.46	12	2.70		
11	12037	85.80	107	1.40			152	893	9.58	12	3.10		
6.7	20284	217.62	84	0.85	GFA159 GFAF159 GF159 GFF159	4P	176	773	8.29	11	1.90		
8.2	16610	178.20	97	1.05			199	685	7.35	11	2.10		
9.0	15190	162.96	100	1.15			220	620	6.65	11	2.30		
10	13217	141.80	105	1.30			259	525	5.63	10	2.80		
12	11664	125.14	108	1.45			297	459	4.92	10	3.20		
13	10112	108.49	11	1.70			354	384	4.12	10	3.60		
15	8998	96.53	110	1.90			18.5kW						
17	7997	85.80	108	2.10			7.3	21911	202	73	0.80	GFA159R99 GFAF159R99 GF159R99 GFF159R99	4P
19	7313	78.46	106	2.30			7.5	21368	197	82	0.85		
21	6364	68.28	10	2.70			8.2	20346	178.20	84	0.85	GFA159 GFAF159 GF159 GFF159	4P
24	5616	60.25	100	3.00			9.0	18606	162.96	90	0.90		
9.8	13867	98.84	81	0.80	10	16190	141.80	98	1.05				
11	12235	87.21	84	0.95	12	14288	125.14	103	1.20				
13	10567	75.32	84	1.10	14	12387	108.49	106	1.40				
14	9819	69.99	83	1.15	15	11022	96.53	106	1.55				
15	8955	63.83	82	1.25	17	9796	85.80	104	1.75				
12	11673	125.23	85	1.00	19	8958	78.46	102	1.90				
13	10646	114.21	84	1.05	22	7796	68.28	100	2.20				
15	9213	98.84	83	1.25	24	6879	60.25	97	2.50				
17	8129	87.21	81	1.40	28	5965	52.24	94	3.00				
19	7021	75.32	80	1.60									
21	6524	69.99	79	1.75									

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
18.5kW							22kW						
13	13040	114.21	78	0.85	GFA129 GFAF129 GF129 GFF129	4P	24	8181	60.25	95	2.10	GFA159 GFAF159 GF159 GFF159	4P
15	11285	98.84	78	1.00			28	7093	52.24	92	2.40		
17	9957	87.21	77	1.15			32	6311	46.48	90	2.70		
20	8600	75.32	76	1.30			37	5439	40.06	87	3.10		
21	7991	69.99	75	1.40			45	4420	32.55	83	3.90		
23	7288	63.83	74	1.55			15	13420	98.84	73	0.85		
27	6308	55.25	73	1.80			17	11841	87.21	72	0.95		
30	5566	48.75	71	2.00			20	10227	75.32	72	1.10	GFA129 GFAF129 GF129 GFF129	4P
20	8509	74.52	44	0.85	21	9503	69.99	72	1.20				
22	7721	67.62	46	0.95	23	8667	63.83	71	1.30				
25	6636	58.12	46	1.10	27	7502	55.25	70	1.50				
29	5792	50.73	46	1.25	30	6619	48.75	69	1.70				
					35	5716	42.10	67	2.00				
34	4913	43.03	45	1.50	GFA109 GFAF109 GF109 GFF109	4P	25	7891	58.12	43	0.90	GFA109 GFAF109 GF109 GFF109	4P
39	4294	37.61	45	1.70			29	6888	50.73	43	1.05		
46	3631	31.80	44	2.00			34	5843	43.03	43	1.25		
44	3858	33.79	44	1.80	GFA109 GFAF109 GF109 GFF109	4P						GFA109 GFAF109 GF109 GFF109	4P
53	3148	27.57	43	2.40			39	5107	37.61	43	1.40		
58	2870	25.14	42	2.60			46	4318	31.80	42	1.70		
68	2485	21.76	41	3.00									
38	4437	38.86	19	0.90	GFA99 GFAF99 GF99 GFF99	4P	44	4588	33.79	42	1.55	GFA109 GFAF109 GF109 GFF109	4P
45	3711	32.50	20	1.10			53	3743	27.57	41	2.00		
							58	3413	25.14	41	2.20		
54	3133	27.44	20	1.30	68	2955	21.76	40	2.50				
59	2845	24.92	20	1.45	77	2607	19.20	39	2.80				
66	2524	22.11	20	1.60	GFA99 GFAF99 GF99 GFF99	4P	54	3726	27.44	18	1.10	GFA99 GFAF99 GF99 GFF99	4P
73	2292	20.07	20	1.80			59	3384	24.92	18	1.20		
85	1970	17.25	19	2.10			66	3002	22.11	18	1.35		
98	1720	15.06	19	2.40			73	2725	20.07	18	1.50		
115	1458	12.77	19	2.80			85	2342	17.25	18	1.75		
132	1274	11.16	18	3.00			98	2045	15.06	18	2.00		
							115	1734	12.77	18	2.30		
							132	1515	11.16	17	2.60		
69	2434	21.32	10	1.15	GFA89 GFAF89 GF89 GFF89	4P	69	2895	21.32	8.5	1.00		
76	2205	19.31	11	1.30			76	2622	19.31	9.0	1.10		
86	1955	17.12	11	1.45			86	2325	17.12	9.4	1.20		
95	1767	15.48	11	1.60			95	2102	15.48	10	1.35		
112	1498	13.12	11	1.90			112	1781	13.12	10	1.60		
128	1308	11.46	11	2.20			128	1556	11.46	10	1.85		
153	1094	9.58	11	2.50			153	1301	9.58	10	2.10		
177	947	8.29	10	1.55			177	1126	8.29	10	1.30		
200	839	7.35	10	1.75			200	998	7.35	10	1.45		
221	759	6.65	10	1.90			221	903	6.65	10	1.60		
261	643	5.63	10	2.20			261	764	5.63	9.4	1.90		
299	562	4.92	10	2.60			299	668	4.92	9.3	2.20		
357	470	4.12	9.4	2.90			357	559	4.12	9.0	2.50		
22kW							30kW						
10	19863	96.53	86	0.85	GFA159 GFAF159 GF159 GFF159	6P	14	20087	108.49	85	0.85	GFA159 GFAF159 GF159 GFF159	4P
11	17655	85.80	94	0.95			15	17873	96.53	92	0.95		
12	16145	78.46	98	1.05			17	15886	85.80	92	1.10		
14	14050	68.28	102	1.20			19	14527	78.46	91	1.20		
10	19253	141.80	88	0.90	GFA159 GFAF159 GF159 GFF159	4P	22	12642	68.28	90	1.35		
12	16991	125.14	95	1.00			24	11155	60.25	89	1.55		
14	14731	108.49	101	1.15			28	9672	52.24	87	1.75		
15	13107	96.53	102	1.30			32	8606	46.48	85	2.00		
17	11650	85.80	100	1.45			37	7417	40.06	83	2.30		
19	10653	78.46	99	1.60									
22	9271	68.28	97	1.85									

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole
30kW							37kW						
20	13946	75.32	63	0.80	GFA129 GFAF129 GF129 GFF129	4P	91	3706	16.34	49	2.80	GFA129 GFAF129 GF129 GFF129	4P
21	12959	69.99	63	0.90			102	3298	14.54	47	3.10		
23	11818	63.83	64	0.95			118	2842	12.53	45	3.30		
27	10230	55.25	63	1.10			145	2309	10.18	44	3.90		
30	9026	48.75	63	1.25			167	2012	8.87	34	3.30		
35	7795	42.10	62	1.45			188	1790	7.89	34	3.20		
39	6895	37.24	61	1.65			54	6253	27.57	34	1.20	GFA109 GFAF109 GF109 GFF109	4P
47	5793	31.29	60	1.95			59	5702	25.14	34	1.30		
58	4681	25.28	58	2.40			68	4935	21.76	34	1.50		
55	4970	26.84	59	1.60	77	4355	19.20	33	1.70				
60	4544	24.54	58	1.80	89	3761	16.58	33	1.95				
69	3953	21.35	56	2.90	101	3327	14.67	32	2.20				
78	3488	18.84	55	3.00	120	2797	12.33	31	2.40				
34	7967	43.03	37	0.90	149	2259	9.96	30	2.70				
39	6964	37.61	38	1.05	153	2198	9.69	29	2.10				
46	5888	31.80	38	1.25	177	1898	8.37	29	2.40				
53	5105	27.57	38	1.45	200	1678	7.40	77	2.60				
58	4655	25.14	37	1.60	238	1411	6.22	78	3.10				
68	4029	21.76	37	1.85	45kW								
77	3555	19.20	36	2.10	GFA109 GFAF109 GF109 GFF109	4P	22	18835	68.28	77	0.90	GFA159 GFAF159 GF159 GFF159	4P
89	3070	16.58	36	2.40			25	16620	60.25	78	1.00		
100	2716	14.67	35	2.70			28	14411	52.24	77	1.20		
119	2283	12.33	34	2.90			32	12822	46.48	77	1.30		
148	1844	9.96	33	3.30			37	11051	40.06	76	1.55		
66	4094	22.11	14	1.00			45	8979	32.55	74	1.90		
73	3716	20.07	15	1.10			54	7614	27.60	72	2.20		
85	3194	17.25	15	1.30	30	13448	48.75	52	0.85	GFA129 GFAF129 GF129 GFF129	4P		
98	2788	15.06	15	1.45	35	11613	42.10	53	0.95				
115	2364	12.77	16	1.75	40	10273	37.24	53	1.10				
132	2066	11.16	16	1.90	47	8631	31.29	53	1.30				
162	1677	9.06	15	1.35	59	6974	25.28	53	1.60				
179	1522	8.22	15	1.45	55	7404	26.84	53	1.10	GFA129 GFAF129 GF129 GFF129	4P		
208	1307	7.06	14	1.70	60	6769	24.54	53	1.20				
238	1142	6.17	14	1.85	69	5889	21.35	52	1.90				
281	968	5.23	14	2.10	79	5197	18.84	51	2.00				
322	846	4.57	14	2.30	91	4507	16.34	50	2.30				
37kW							102	4011	14.54			49	2.60
17	19461	85.80	84	0.85	GFA159 GFAF159 GF159 GFF159	4P	118	3456	12.53			48	2.70
19	17796	78.46	84	0.95			145	2808	10.18			46	3.20
22	15487	68.28	84	1.10			167	2447	8.87			44	2.70
25	13665	60.25	83	1.25			188	2176	7.89			43	2.60
28	11849	52.24	82	1.45			218	1876	6.80			42	3.50
32	10542	46.48	81	1.60			268	1525	5.53			40	3.70
37	9086	40.06	80	1.85			54	7605	27.57	31	0.95		
45	7383	32.55	77	2.30			59	6935	25.14	31	1.05		
54	6260	27.60	75	2.70			68	6003	21.76	32	1.25		
27	12531	55.25	58	0.90	GFA129 GFAF129 GF129 GFF129	4P	77	5296	19.20	32	1.40		
30	11057	48.75	58	1.00			89	4574	16.58	32	1.60		
35	9549	42.10	57	1.20			101	4047	14.67	31	1.80		
40	8446	37.24	56	1.35			120	3401	12.33	31	1.95		
47	7097	31.29	56	1.60			149	2747	9.96	30	2.20		
59	5734	25.28	55	1.95			153	2673	9.69	29	1.75		
55	6088	26.84	54	1.30			177	2309	8.37	29	1.95		
60	5566	24.54	53	1.45	GFA129 GFAF129 GF129 GFF129	4P	200	2041	7.40	28	2.10		
69	4842	21.35	52	2.30			238	1716	6.22	28	2.50		
79	4273	18.84	51	2.40									

选型参数表
(恒功率)
Selection Table
(Constant Power)

n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	n _a [r/min]	M _a [N.m]	i	F _{Ra} [kN]	f _B	机型号 Type size	极数 Pole	
55kW							90kW							
25	20314	60.25	70	0.85	GFA159 GFAF159 GF159 GFF159	4P	46	17838	32.55	58	0.95	GFA159 GFAF159 GF159 GFF159	4P	
28	17613	52.24	71	0.95			54	15125	27.60	58	1.10			
32	15671	46.48	71	1.10										
37	13506	40.06	71	1.25										
45	10974	32.55	70	1.55										
54	9305	27.60	69	1.85			52	15673	28.60	57	1.00	GFA159 GFAF159 GF159 GFF159	4P	
52	9643	28.60	69	1.65			59	13936	25.43	56	1.00			
58	8574	25.43	68	1.65			67	12144	22.16	56	1.40			
67	7471	22.16	67	2.30			75	10834	19.77	55	1.50			
75	6666	19.77	66	2.40			88	9234	16.85	54	1.85			
88	5681	16.85	64	3.00			107	7650	13.96	53	2.10			
							125	6532	11.92	52	2.30			
40	12556	37.24	49	0.90	GFA129 GFAF129 GF129 GFF129	4P	59	13854	25.28	51	0.80	GFA129 GFAF129 GF129 GFF129	4P	
47	10550	31.29	49	1.10										
59	8523	25.28	49	1.35										
69	7198	21.35	49	1.60	GFA129 GFAF129 GF129 GFF129	4P	70	11700	21.35	49	0.95	GFA129 GFAF129 GF129 GFF129	4P	
79	6352	18.84	48	1.65			79	10324	18.84	47	1.00			
91	5509	16.34	48	1.90			91	8954	16.34	45	1.15			
102	4902	14.54	47	2.10			102	7968	14.54	44	1.30			
118	4225	12.53	46	2.20			119	6866	12.53	34	1.35			
145	3432	10.18	44	2.60			146	5579	10.18	34	1.60			
167	2991	8.87	43	2.20			168	4861	8.87	34	1.35			
188	2660	7.89	42	2.10			189	4324	7.89	34	1.30			
218	2293	6.80	41	2.90			219	3726	6.80	34	1.75			
268	1864	5.53	39	3.00			269	3030	5.53	33	1.85			
316	1581	4.69	38	3.60			318	2570	4.69	33	2.20			
75kW							110kW							
32	21369	46.48	60	0.80	GFA159 GFAF159 GF159 GFF159	4P	54	18486	27.60	32	0.90	GFA159 GFAF159 GF159 GFF159	4P	
37	18418	40.06	61	0.95										
45	14965	32.55	62	1.15										
54	12689	27.60	62	1.35										
52	13149	28.60	62	1.25	GFA159 GFAF159 GF159 GFF159	4P	67	14842	22.16	31	1.15	GFA159 GFAF159 GF159 GFF159	4P	
58	11692	25.43	62	1.20			75	13242	19.77	30	1.20			
67	10188	22.16	62	1.70			88	11286	16.85	29	1.50			
75	9089	19.77	61	1.80			107	9350	13.96	29	1.70			
88	7747	16.85	60	2.20			125	7984	11.92	77	1.90			
106	6418	13.96	59	2.50										
124	5480	11.92	57	2.80										
59	11623	25.28	42	1.00	GFA129 GFAF129 GF129 GFF129	4P								
69	9816	21.35	84	1.15	GFA129 GFAF129 GF129 GFF129		4P							
79	8662	18.84	84	1.20										
91	7512	16.34	84	1.40										
102	6685	14.54	83	1.55										
118	5761	12.53	82	1.65										
145	4680	10.18	81	1.95										
167	4078	8.87	80	1.65										
188	3627	7.89	77	1.55										
218	3126	6.80	75	2.10										
268	2542	5.53	58	2.20										
316	2156	4.69	58	2.70										

Selection Table (Constant Torque)

M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P	M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P															
200	0.16	8193	4.1	GFA39R19 GFAF39R19 GF39R19 GFF39R19	0.12	400	2.1	619	5.6	GFA49R19	0.18															
	0.19	7064	4.1							GFAF49R19																
	0.20	6585	4.1							GF49R19																
	0.23	5756	4.1							GFF49R19																
	0.26	4962	4.1																							
	0.30	4434	4.1				GFA49R19	0.18																		
	0.34	3875	4.1				GFAF49R19																			
	0.39	3392	4.1				GF49R19																			
	0.44	2965	4.1				GFF49R19																			
	0.51	2587	4.1																							
	0.57	2284	4.1	GFA49R19	0.25																					
	0.66	1997	4.1	GFAF49R19																						
	0.68	1929	4.1	GF49R19																						
	0.78	1679	4.1	GFF49R19																						
	0.85	1550	4.1																							
	1.0	1356	4.1	GFA49R19	0.37																					
	1.1	1180	4.1	GFAF49R19																						
	1.3	1044	4.1	GF49R19																						
	1.4	914	4.1	GFF49R19																						
	1.6	808	4.1																							
	1.9	698	4.1	GFA49R19	0.55																					
	2.1	616	4.1	GFAF49R19																						
	2.4	544	4.1	GF49R19																						
	2.8	466	4.1	GFF49R19																						
	3.2	411	4.1																							
	3.6	364	4.1																							
	4.0	326	4.1	GFA39R19	0.12																					
				GFAF39R19																						
				GF39R19																						
				GFE39R19																						
GFA39R19				0.18																						
GFAF39R19																										
GF39R19																										
GFE39R19																										
GFA39R19						0.25																				
GFAF39R19																										
GF39R19																										
GFE39R19																										
GFA39R19																										
4.6	285	4.1	GFA39R19	0.18																						
5.2	250	4.1	GFAF39R19																							
6.0	219	4.1	GF39R19																							
7.0	186	4.1	GFE39R19																							
8.0	167	4.1	GFA39R19																							
9.2	145	4.1	GFAF39R19	0.25																						
10.3	129	4.1	GF39R19																							
400	0.11	12251	5.6	GFA49R19 GFAF49R19 GF49R19 GFF49R19	0.12	600	0.09	14832	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.12															
	0.12	10619	5.6									0.1	13604	8.7												
	0.13	9845	5.6									0.1	12602	8.7												
	0.15	8534	5.6									0.12	11252	8.7												
	0.18	7460	5.6									0.13	9986	8.7												
	0.20	6536	5.6									0.15	8787	8.7												
	0.23	5746	5.6									0.17	7908	8.7												
	0.26	5022	5.6									0.19	6913	8.7												
	0.30	4401	5.6									0.22	6030	8.7												
	0.34	3883	5.6									0.25	5289	8.7												
	0.38	3443	5.6									0.28	4654	8.7												
	0.44	2976	5.6									0.32	4060	8.7												
	0.50	2629	5.6									0.37	3564	8.7												
	0.52	2519	5.6									0.41	3161	8.7												
	0.55	2394	5.6									0.46	2854	8.7												
	0.60	2172	5.6	0.51	2576	8.7																				
	0.65	2025	5.6	0.58	2266	8.7																				
	0.74	1770	5.6	0.65	2012	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.18																		
	0.83	1576	5.6	0.73	1791	8.7																				
	0.96	1363	5.6	0.81	1617	8.7																				
	1.1	1192	5.6	0.92	1422	8.7																				
	1.2	1061	5.6	1.1	1243	8.7																				
	1.4	931	5.6	1.2	1066	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.25																		
	1.6	822	5.6	1.4	949	8.7																				
	1.9	706	5.6	1.5	856	8.7																				
				1.7	749	8.7																				
				2	658	8.7																				
					GFA49R19 GFAF49R19 GF49R19 GFF49R19	0.12		2.4	549	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.25														
													2.8	483	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.25									
																		3.1	426	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.25				
3.5																							382	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.37
								4.5	298	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.37														
													5.1	262	8.7	GFA59R39 GFAF59R39 GF59R39 GFF59R39	0.37									

选型参数表 (恒转矩)

Selection Table (Constant Torque)

M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P	M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P				
600	6.2	226	8.7	GFA59R39	0.55	1550	0.07	19181	15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.12				
	7.0	200	8.7	GFAF59R39			0.07	17593	15						
				GF59R39			0.08	16128	15						
				GFF59R39			0.09	14978	15						
	8.2	170	8.7	GFA59R39	0.75		0.1	13731	15						
	9.1	152	8.7	GFAF59R39			0.11	12049	15						
	10	134	8.7	GF59R39			0.12	11035	15						
				GFF59R39			0.14	9684	15						
	820	0.07	19198	8.7	GFA69R39 GFAF69R39 GF69R39 GFF69R3		0.12	0.15	8465			15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.12	
		0.07	17609	8.7				0.17	7520			15			
0.09		14992	8.7	0.2		6581		15							
0.10		12926	8.7	0.23		5808		15							
0.11		11480	8.7	0.26		5026		15							
0.13		10220	8.7	0.3		4436		15							
0.15		8934	8.7	0.34		3832		15							
0.16		7940	8.7	0.44		2978		15							
0.18		7096	8.7	0.5		2613		15							
0.22		6080	8.7	0.57		2284		15							
0.25		5342	8.7	0.65		2030		15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.18					
0.28		4690	8.7												
0.32		4091	8.7												
0.37		3574	8.7												
0.42		3133	8.7	0.76		1728		15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.18					
0.48		2756	8.7												
0.54		2440	8.7												
0.39		3377	8.7	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.12	1.1	1200	15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.25					
0.45		2912	8.7												
0.48		2714	8.7												
0.55		2373	8.7												
0.62		2126	8.7												
0.80		1631	8.7												
0.91		1438	8.7												
1.0		1257	8.7	1.5	910	15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.37							
1.2		1126	8.7												
1.3		984	8.7												
1.5		864	8.7	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.18	2.3	615	15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.55					
1.8		722	8.7												
2.1		633	8.7												
2.5		539	8.7												
0.70		1884	10	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.12	3.4	413	15	GFA79R39 GFAF79R39 GF79R39 GFF79R39	0.75					
											2.7	500	10	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.37
3.4		392	10	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.55										
						4.2	333	10	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.75					
											4.7	297	10		
5.3		261	10												
				5.8	238	10	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.75							
									7.0	200	10	GFA69R39 GFAF69R39 GF69R39 GFF69R39	0.75		
3000	0.06	23042	19											GFA89R59 GFAF89R59 GF89R59 GFF89R59	0.12
	0.06	20463	19												
	0.07	18237	19												
	0.08	15876	19												
	0.09	14099	19												
	0.11	12204	19												
	0.13	10433	19												
	0.14	9380	19												
	0.16	8142	19												
	0.18	7100	19												
	0.21	6273	19												
	0.24	5510	19												
	0.26	4954	19												

选型参数表
(恒转矩)
Selection Table
(Constant Torque)

M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P	M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P	
3000	0.31	4245	19	GFA89R59	0.18	4300	1.2	1171	28	GFA99R59	0.75	
	0.35	3721	19	GFAF89R59			1.4	1022	28	GFAF99R59		
				GF89R59						GF99R59		
				GFF89R59						GFF99R59		
	0.40	3244	19	GFA89R59	0.18		1.6	898	28	GFA99R59	1.1	
	0.45	2881	19	GFAF89R59			1.8	785	28	GFAF99R59		
				GF89R59			2.0	690	28	GF99R59		
				GFF89R59						GFF99R59		
	0.52	2575	19	GFA89R59	0.25		2.3	605	28	GFA99R59	1.5	
	0.60	2199	19	GFAF89R59			2.6	529	28	GFAF99R59		
	0.69	1930	19	GF89R59			3.0	467	28	GF99R59		
				GFF89R59						GFF99R59		
	0.78	1709	19	GFA89R59	0.37		3.5	406	28	GFA99R59	2.2	
	0.89	1493	19	GFAF89R59			3.9	363	28	GFAF99R59		
				GF89R59						GF99R59		
				GFF89R59						GFF99R59		
	1.1	1300	19	GFA89R59	0.55		5.0	285	28	GFA99R59	3	
	1.2	1148	19	GFAF89R59			5.8	245	28	GFAF99R59		
	1.4	1010	19	GF89R59						GF99R59		
	1.6	887	19	GFF89R59						GFF99R59		
	1.8	780	19	GFA89R59	0.75		8000	0.05	25375	47	GFA109R79	0.12
	2.1	674	19	GFAF89R59			0.06	21652	47	GFAF109R79		
				GF89R59			0.07	18933	47	GF109R79		
				GFF89R59			0.08	16889	47	GFF109R79		
2.3	609	19	GFA89R59	0.09	14768	47		0.18				
2.7	515	19	GFAF89R59	0.12	11347	47	GFA109R79					
3.1	452	19	GF89R59	0.13	10039	47	GFAF109R79					
			GFF89R59	0.15	8548	47	GF109R79					
				0.17	7675	47	GFF109R79					
4.1	345	19	GFA89R59	1.5	0.20	6768	47	GFA109R79	0.25			
			GFAF89R59		0.22	5954	47	GFAF109R79				
			GF89R59		0.25	5223	47	GF109R79				
			GFF89R59					GFF109R79				
4300	0.06	20814	28	GFA99R59 GFAF99R59 GF99R59 GFF99R59	0.12	0.29	4567	47		GFA109R79	0.37	
	0.07	18119	28			0.38	3521	47	GFAF109R79			
	0.08	15472	28						GF109R79			
	0.09	14022	28						GFF109R79			
	0.11	12324	28			0.46	3037	47	GFA109R79	0.55		
	0.12	10839	28			0.50	2756	47	GFAF109R79			
	0.14	9576	28			0.59	2369	47	GF109R79			
	0.16	8318	28						GFF109R79			
	0.18	7327	28									
	0.20	6469	28	GFA99R59	0.18	0.67	2068	47	GFA109R79	0.75		
	0.23	5615	28	GFAF99R59		0.76	1826	47	GFAF109R79			
	0.26	4961	28	GF99R59					GF109R79			
	0.30	4333	28	GFF99R59					GFF109R79			
	0.34	3906	28	GFA99R59	0.25	0.88	1597	47	GFA109R79	1.1		
	0.40	3352	28	GFAF99R59		1.00	1401	47	GFAF109R79			
	0.46	2907	28	GF99R59		1.1	1243	47	GF109R79			
				GFF99R59					GFF109R79			
	0.52	2553	28	GFA99R59	0.37	1.3	1087	47	GFA109R79	1.5		
	0.59	2245	28	GFAF99R59		1.5	950	47	GFAF109R79			
	0.68	1970	28	GF99R59					GF109R79			
				GFF99R59					GFF109R79			
	0.81	1723	28	GFA99R59	0.55	1.7	834	47	GFA109R79	2.2		
	0.91	1528	28	GFAF99R59		1.9	736	47	GFAF109R79			
	1.0	1327	28	GF99R59		2.2	640	47	GF109R79			
			GFF99R59					GFF109R79				

选型参数表
(恒转矩)
Selection Table
(Constant Torque)

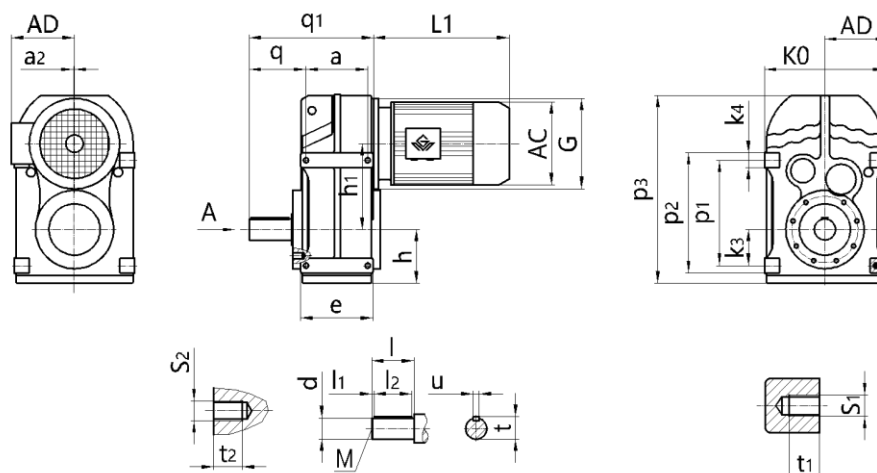
M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P	M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P		
8000	2.6	560	47	GFA109R79	3	13000	3.4	428	86	GFA129R79	5.5		
	2.9	489	47	GFAF109R79			3.8	375	86	GFAF129R79			
	3.3	436	47	GF109R79						GF129R79			
				GFF109R79						GFF129R79			
	3.9	370	47	GFA109R79	4		3.0	485	86	GFA129R89	5.5		
	4.3	333	47	GFAF109R79			3.4	418	86	GFAF129R89			
			GF109R79	3.8		375	86	GF129R89					
			GFF109R79				GFF129R89						
13000	0.05	24450	86	GFA129R79	0.12	18000	4.6	312	86	GFA129R89	7.5		
	0.06	22298	86	GFAF129R79			4.9	293	86	GFAF129R89			
	0.07	19026	86	GF129R79						GF129R89			
				GFF129R79						GFF129R89			
	0.08	16637	86	GFA129R79	0.18		5.6	259	86	GFA129R89	7.5		
	0.09	14705	86	GFAF129R79			6.5	223	86	GFAF129R89			
	0.10	12912	86	GF129R79						GF129R89			
	0.11	11643	86	GFF129R79						GFF129R89			
	0.13	10180	86	GFA129R79	0.25					GFA129R89	11		
	0.15	8822	86	GFAF129R79			7.4	198	86	GFAF129R89			
				GF129R79						GF129R89			
				GFF129R79						GFF129R89			
	0.17	7634	86	GFA129R79	0.37		0.04	31434	95	GFA159R99 GFAF159R99 GF159R99 GFF159R99	0.55		
	0.20	6708	86	GFAF129R79			0.05	26173	95				
	0.22	5919	86	GF129R79			0.06	23464	95				
				GFF129R79			0.07	20212	95				
	0.27	5147	86	GFA129R79	0.55		0.08	17984	95				
	0.31	4528	86	GFAF129R79			0.08	16358	95				
	0.35	3922	86	GF129R79			0.10	13751	95				
				GFF129R79			0.11	12235	95				
	0.40	3450	86	GFA129R79	0.75		0.14	10033	95	GFA159R99	1.1		
	0.46	3028	86	GFAF129R79			0.16	9021	95	GFAF159R99			
				GF129R79			0.17	8026	95	GF159R99			
				GFF129R79						GFF159R99			
	0.52	2669	86	GFA129R79	0.75		0.20	7075	95	GFA159R99	0.55		
				GFAF129R79			0.22	6295	95	GFAF159R99			
				GF129R79						GF159R99			
			GFF129R79					GFF159R99					
0.59	2354	86	GFA129R79	1.1				GFA159R99	0.75				
0.69	2035	86	GFAF129R79		0.26	5404	95	GFAF159R99					
0.79	1782	86	GF129R79					GF159R99					
			GFF129R79					GFF159R99					
0.87	1605	86	GFA129R79	1.5	0.29	4831	95	GFA159R99	1.1				
1.0	1389	86	GFAF129R79		0.34	4130	95	GFAF159R99					
			GF129R79					GF159R99					
			GFF129R79					GFF159R99					
1.2	1219	86	GFA129R79	2.2	0.40	3607	95	GFA159R99	2.2				
1.3	1075	86	GFAF129R79		0.45	3210	95	GFAF159R99					
1.5	929	86	GF129R79					GF159R99					
			GFF129R79					GFF159R99					
1.7	819	86	GFA129R79	3				GFA159R99	1.1				
2.0	726	86	GFAF129R79		0.50	2780	95	GFAF159R99					
2.2	647	86	GF129R79					GF159R99					
			GFF129R79					GFF159R99					
2.6	548	86	GFA129R79	4	0.99	1441	95	GFA159R99	2.2				
2.9	494	86	GFAF129R79					GFAF159R99					
			GF129R79					GF159R99					
			GFF129R79				GFF159R99						

选型参数表
(恒转矩)
Selection Table
(Constant Torque)

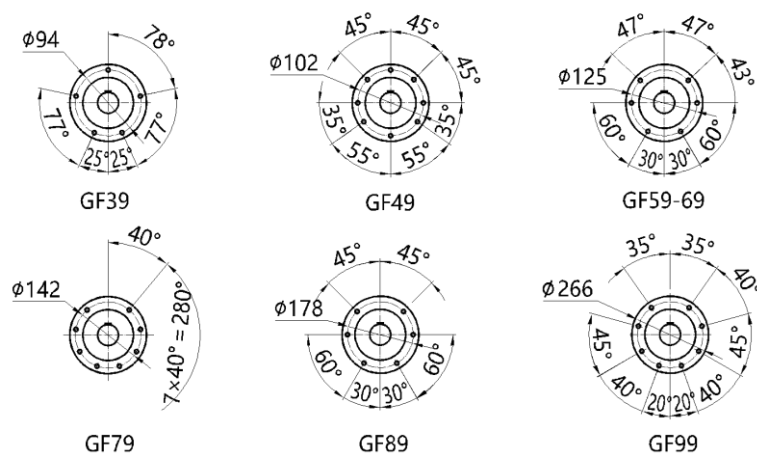
M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P	M _{amax} [N.m]	n _a [r/min]	i	F _{Ra} [kN]	机型号 Type size	P [kW]/4P
18000	0.58 0.64	2427	95	GFA159R99	1.5	18000	2.9 3.3	503	95	GFA159R99	7.5
		2185	95	GFAF159R99				446	95	GFAF159R99	
				GF159R99						GF159R99	
				GFF159R99						GFF159R99	
	0.74 0.85	1944	95	GFA159R99	2.2	4.1	353	95	GFA159R99	7.5	
		1674	95	GFAF159R99				GFAF159R99			
				GF159R99				GF159R99			
				GFF159R99				GFF159R99			
	1.09 1.22	1308	95	GFA159R99	3	4.8 5.3	302 273	95	GFA159R99	11	
		1169	95	GFAF159R99				GFAF159R99			
				GF159R99				GF159R99			
				GFF159R99				GFF159R99			
	1.5 1.7 1.9	953	95	GFA159R99	4	6.3 7.2	232 202	95	GFA159R99	15	
		845		GFAF159R99				GFAF159R99			
		95		GF159R99				GF159R99			
		764		95				GFF159R99	GFF159R99		
2.1 2.5	680	95	GFA159R99	5.5	7.5	197	95	GFA159R99	18.5		
	576	95	GFAF159R99				GFAF159R99				
			GF159R99				GF159R99				
			GFF159R99				GFF159R99				

GF39-159
安装结构尺寸

GF39-159
Mounting Dimensional Description



A向法兰安装结构尺寸 (Fig.A Mounting Dimension)



机 型 号 Type Size	q ₁ S ₁	q t ₁	a u	h ₁ t	h l ₁	e l ₂	p ₃ l	p ₂ d	p ₁ M	k ₃ S ₂	k ₄ t ₂	K0 a ₂	G	电机尺寸 Motor Size			
GF39	160 M8	72.5 15	77 8	112 28	77 5	95 40	256 50	135 Φ25k6	115 M10	31 M8	20 15	165 /	Φ120	见附录 A-2 和 A-3 Please see appendix A-2 and A-3	AC	AD	L1
GF49	193 M10	91 15	93 8	128.1 33	80 3.5	109 50	276 60	170 Φ30k6	145 M10	43 M8	25 14	180 /	Φ120				
GF59	220 M12	104.5 17	102 10	136 38	93 7	127 56	321 70	195 Φ35k6	170 M12	55 M12	25 20	200 /	Φ160				
GF69	242 M12	118.5 17	112 12	159.5 43	97 5	131 70	348 80	215 Φ40k6	190 M16	60 M12	25 22	212 /	Φ160				
GF79	294 M16	137.5 26	140 14	200 53.5	122 10	170 80	430 100	275 Φ50k6	240 M16	70 M12	35 17	270 /	Φ200				
GF89	344 M16	163 26	165 18	246.7 64	150 5	195 110	534 120	350 Φ60m6	310 M20	100 M16	40 29	330 /	Φ250				
GF99	415 M20	189.5 33	205 20	285 74.5	180 7.5	240 125	630 140	400 Φ70m6	350 M20	120 M16	50 28	400 /	Φ300				
GF109	484 M24	241.5 38	220 25	332.4 95	201 5	260 160	723 170	460 Φ90m6	400 M24	125 /	60 /	450 /	Φ350				
GF129	586 M30	292 45	270 28	382.6 116	236 15	316 180	861 210	520 Φ110m6	450 M24	142 /	70 /	530 10	Φ450				
GF159	662 M36	325 55	310 32	447 127	286 5	364 200	1021 210	620 Φ120m6	540 M24	170 /	80 /	660 15	Φ550				

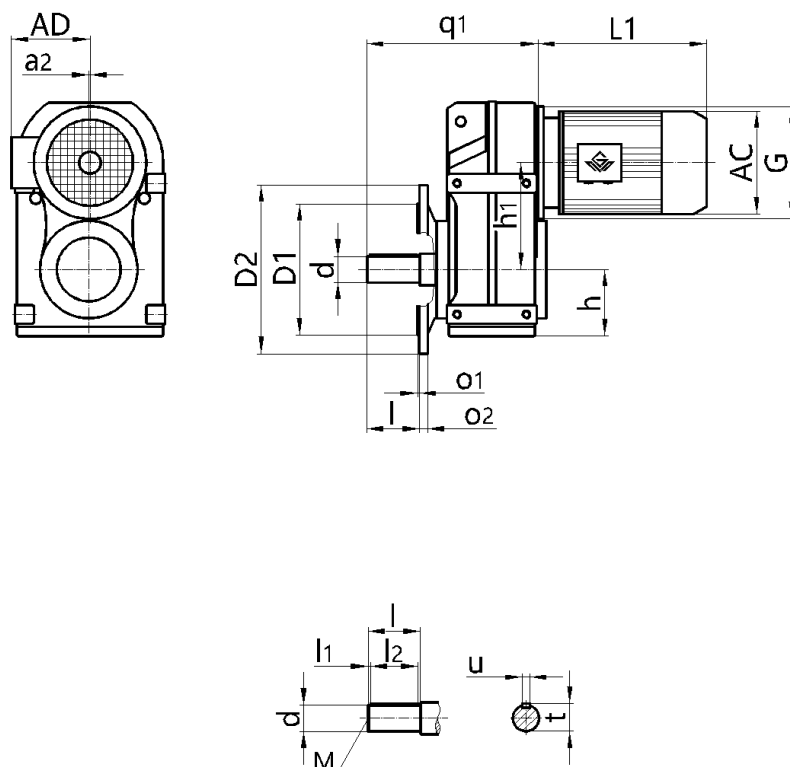
注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

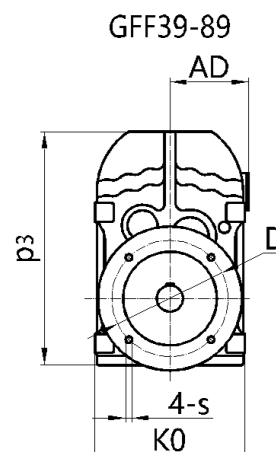
Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

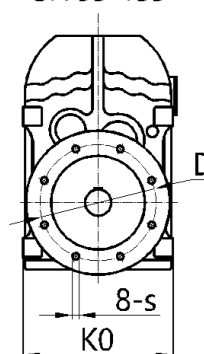
GFF39-159
安装结构尺寸



GFF39-159
Mounting Dimensional Description



GFF99-159



机 型 号 Type Size	q ₁ s	o ₂ D	o ₁ K0	d u	D1 t	D2 l ₁	h ₁ l ₂	h l	p ₃ M	G a ₂	电机尺寸 Motor Size		
											AC	AD	L1
GFF39	184 Φ9	10 Φ130	3.5 165	Φ25k6 8	Φ110j6 28	Φ160 5	112 40	77 50	256 M10	Φ120 /	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
GFF49	218 Φ11	12 Φ165	3.5 180	Φ30k6 8	Φ130j6 33	Φ200 3.5	128.1 50	80 60	276 M10	Φ120 /			
GFF59	243.5 Φ13.5	15 Φ215	4 200	Φ35k6 10	Φ180j6 38	Φ250 7	136 56	93 70	321 M12	Φ160 /			
GFF69	264 Φ13.5	15 Φ215	4 212	Φ40k6 12	Φ180j6 43	Φ250 5	159.5 70	97 80	348 M16	Φ160 /			
GFF79	330 Φ13.5	16 Φ265	4 270	Φ50k6 14	Φ230j6 53.5	Φ300 10	200 80	122 100	430 M16	Φ200 /			
GFF89	374 Φ17.5	18 Φ300	5 330	Φ60m6 18	Φ250h6 64	Φ350 5	246.7 110	150 120	534 M20	Φ250 /			
GFF99	456 Φ17.5	22 Φ400	5 400	Φ70m6 20	Φ350h6 74.5	Φ450 7.5	285 125	180 140	630 M20	Φ300 /			
GFF109	523 Φ17.5	22 Φ400	5 450	Φ90m6 25	Φ350h6 95	Φ450 5	332.4 160	201 170	723 M24	Φ350 /			
GFF129	634 Φ17.5	25 Φ500	5 530	Φ110m6 28	Φ450h6 116	Φ550 15	382.6 180	236 210	861 M24	Φ450 10			
GFF159	725 Φ22	28 Φ600	6 660	Φ120m6 32	Φ550h6 127	Φ660 5	447 200	286 210	1021 M24	Φ550 15			

注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

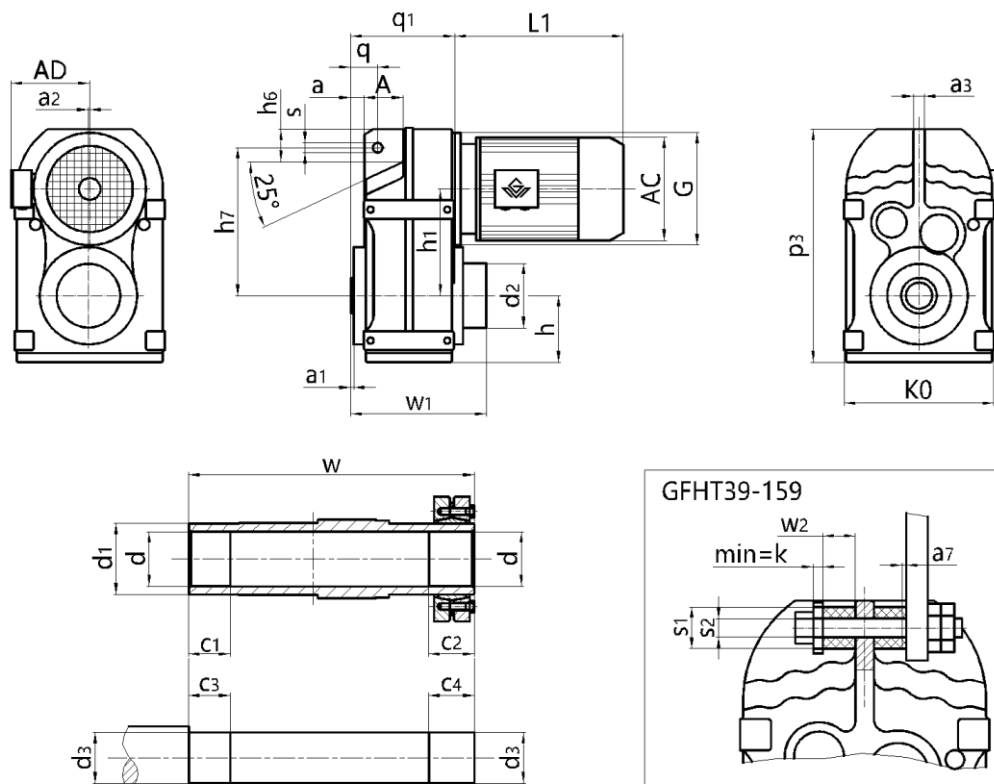
2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GFA39-159
安装结构尺寸

GFA39-159
Mounting Dimensional Description



螺栓、螺母、垫片均不在标准供货范围内

机 型 号 Type Size	q ₁ a ₂	q d	A d ₁	a w	h ₇ c ₁	h ₆ s	h ₁ u	h t	a ₁ s ₁	e s ₂	w ₁ k	p ₃ w ₂	a ₃ a ₇	K0 G	c ₂ M	电机尺寸 Motor Size		
																AC	AD	L1
GFA39	110 /	31.5 Φ30H7	46 Φ45	15 60	158 17	30 Φ14	112 8	77 33.3	2.5 Φ40	95 Φ12.5 ^{+0.5}	123 5	256 20	12 1	165 Φ120	105 M10×25	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
GFA49	133 /	32 Φ35H7	64 Φ50	12 75	170 22	22 Φ14	128.1 10	80 38.3	3 Φ40	109 Φ12.5 ^{+0.5}	153 5	276 20	12 1.8	180 Φ120	132 M12×30			
GFA59	150 /	40.5 Φ40H7	60 Φ55	19.5 83	198 29	31 Φ14	136 12	93 43.3	3 Φ40	127 Φ12.5 ^{+0.5}	170 5	321 20	14 2.4	200 Φ160	142 M16×40			
GFA69	161 /	41 Φ40H7	65 Φ55	21 90	218 29	40 Φ14	159.5 12	97 43.3	3.5 Φ40	131 Φ12.5 ^{+0.5}	184 5	348 20	16 3	212 Φ160	156 M16×40			
GFA79	193 /	50 Φ50H7	69 Φ70	26.5 105	278 32	50 Φ22	200 14	122 53.8	4 Φ60	170 Φ21 ^{+0.5}	213 10	430 30	20 3.2	270 Φ200	183 M16×45			
GFA89	224 /	62 Φ60H7	79 Φ85	32 120	346 36	57 Φ22	246.7 18	150 64.4	4 Φ60	195 Φ21 ^{+0.5}	243 10	534 30	26 4.5	330 Φ250	210 M20×50			
GFA99	274 /	70 Φ70H7	104 Φ95	32 150	395 34	88 Φ26	285 20	180 74.9	4 Φ80	240 Φ25 ^{+0.5}	303 12	630 40	30 5	400 Φ300	270 M20×50			
GFA109	312 /	88 Φ90H7	100 Φ118	57 175	485 40	108 Φ26	332.4 25	201 95.4	2.5 Φ80	260 Φ25 ^{+0.5}	353 12	723 40	36 6	450 Φ350	313 M24×60			
GFA129	373 10	110 Φ100H7	125 Φ135	66 205	550 38	138 Φ33	382.6 28	236 106.4	2.5 Φ100	316 Φ32 ^{+0.5}	413 15	861 60	40 9	530 Φ450	373 M24×60			
GFA159	455 15	150 Φ120H7	140 Φ155	98 250	660 36	170 Φ33	447 32	286 127.4	3 Φ120	364 Φ32 ^{+0.5}	503 15	1021 60	45 9	660 Φ550	460 M24×60			

注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

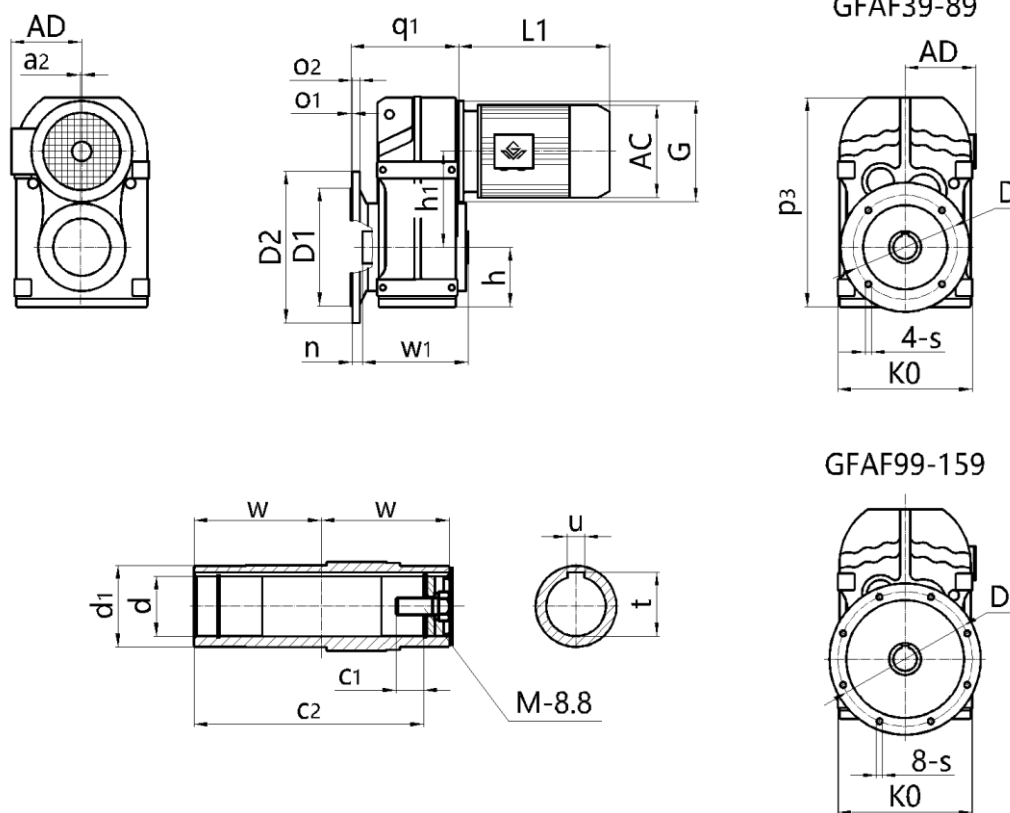
2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GFAF39-159
安装结构尺寸

GFAF39-159
Mounting Dimensional Description



机 型 号 Type Size	q ₁ K0	o ₁ a ₂	o ₂ d	D1 d ₁	D2 w	h ₁ c ₁	h n	w ₁ u	p ₃ t	s D	G c ₂	M	电机尺寸 Motor Size		
													AC	AD	L1
GFAF39	137.5 165	3.5 /	10 Φ30H7	Φ110j6 Φ45	Φ160 60	112 17	77 24	123 8	256 33.3	Φ9 Φ130	Φ120 105	M10×25	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
GFAF49	161.5 180	3.5 /	12 Φ35H7	Φ130j6 Φ50	Φ200 75	128.1 22	80 25	153 10	276 38.3	Φ11 Φ165	Φ120 132	M12×30			
GFAF59	177.5 200	4 /	15 Φ40H7	Φ180j6 Φ55	Φ250 83	136 29	93 23.5	170 12	321 43.3	Φ13.5 Φ215	Φ160 142	M16×40			
GFAF69	188 212	4 /	15 Φ40H7	Φ180j6 Φ55	Φ250 90	159.5 29	97 23	184 12	348 43.3	Φ13.5 Φ215	Φ160 156	M16×40			
GFAF79	234 270	4 /	16 Φ50H7	Φ230j6 Φ70	Φ300 105	200 32	122 37	213 14	430 53.8	Φ13.5 Φ265	Φ200 183	M16×45			
GFAF89	259 330	5 /	18 Φ60H7	Φ250h6 Φ85	Φ350 120	246.7 36	150 30	243 18	534 64.4	Φ17.5 Φ300	Φ250 210	M20×50			
GFAF99	320.5 400	5 /	22 Φ70H7	Φ350h6 Φ95	Φ450 150	285 34	180 41.5	303 20	630 74.9	Φ17.5 Φ400	Φ300 270	M20×50			
GFAF109	358 450	5 /	22 Φ90H7	Φ350h6 Φ118	Φ450 175	332.4 40	201 41	353 25	723 95.4	Φ17.5 Φ400	Φ350 313	M24×60			
GFAF129	429 530	5 10	25 Φ100H7	Φ450h6 Φ135	Φ550 205	382.6 38	236 51	413 28	861 106.4	Φ17.5 Φ500	Φ450 373	M24×60			
GFAF159	521 660	6 15	28 Φ120H7	Φ550h6 Φ155	Φ660 250	447 36	286 60	503 32	1021 127.4	Φ22 Φ600	Φ550 460	M24×60			

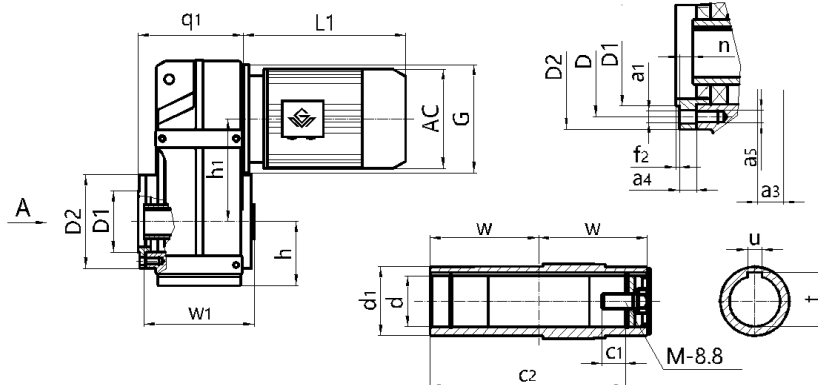
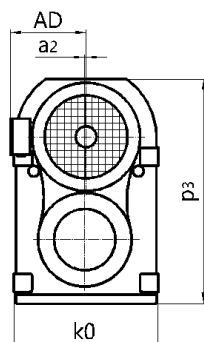
注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

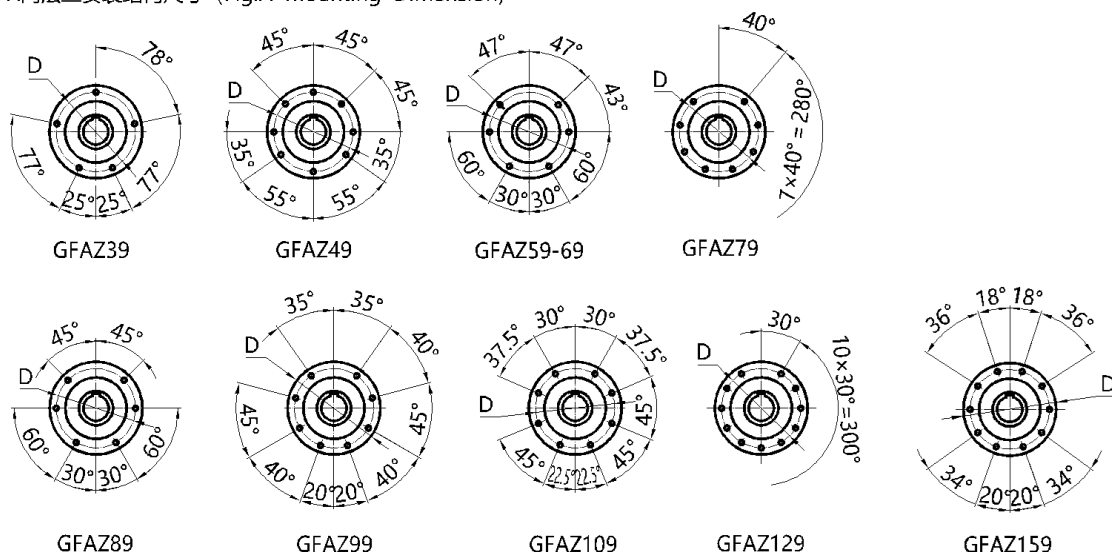
2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GFAZ39-159
安装结构尺寸



GFAZ39-159
Mounting Dimensional Description

A向法兰安装结构尺寸 (Fig.A Mounting Dimension)



机 型 号 Type Size	q ₁ k ₀	h h ₁	t D	D2 D1	p ₃ n	a ₄ a ₃	a ₅ w ₁	w c ₁	c ₂ u	d ₁ d	a ₂ f ₂	a ₁ M	G	电机尺寸 Motor Size		
														AC	AD	L1
GFAZ39	122 165	77 112	Φ110 Φ94	Φ80j6	256 9	11.5 15	M8 123	60 17	105 8	Φ45 Φ30H7	/ 3	Φ9 M10×25	Φ120	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
GFAZ49	144 180	80 128.1	Φ120 Φ102	Φ80j6	276 8	11 14	M8 153	75 22	132 10	Φ50 Φ35H7	/ 3	Φ9 M12×30	Φ120			
GFAZ59	162.5 200	93 136	Φ155 Φ125	Φ105j6	321 9	12 20	M12 170	83 29	142 12	Φ55 Φ40H7	/ 3.5	Φ13.5 M16×40	Φ160			
GFAZ69	173 212	97 159.5	Φ155 Φ125	Φ105j6	348 8.5	12 22	M12 184	90 29	156 12	Φ55 Φ40H7	/ 3.5	Φ13.5 M16×40	Φ160			
GFAZ79	206.5 270	122 200	Φ170 Φ142	Φ125j6	430 10	14 20	M12 213	105 32	183 14	Φ70 Φ50H7	/ 3.5	Φ13.5 M16×45	Φ200			
GFAZ89	239 330	150 246.7	Φ215 Φ178	Φ155j6	534 11	15 29	M16 243	120 36	210 18	Φ85 Φ60H7	/ 4	Φ17.5 M20×50	Φ250			
GFAZ99	292 400	180 285	Φ260 Φ220	Φ180j6	630 14	18 28	M16 303	150 34	270 20	Φ95 Φ70H7	/ 4	Φ17.5 M20×50	Φ300			
GFAZ109	308 450	201 332.4	Φ304 Φ260	Φ210j6	723 -8	22 32	M20 353	175 40	313 25	Φ118 Φ90H7	/ 4	Φ22 M24×60	Φ350			
GFAZ129	378 530	236 382.6	Φ350 Φ300	Φ250h6	861 0	30 36	M20 413	205 38	373 28	Φ135 Φ100H7	10 5	Φ22 M24×60	Φ450			
GFAZ159	455 660	286 447	Φ400 Φ340	Φ290h6	1021 -14	28 48	M24 503	250 36	460 32	Φ155 Φ120H7	15 5	Φ26 M24×60	Φ550			

注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

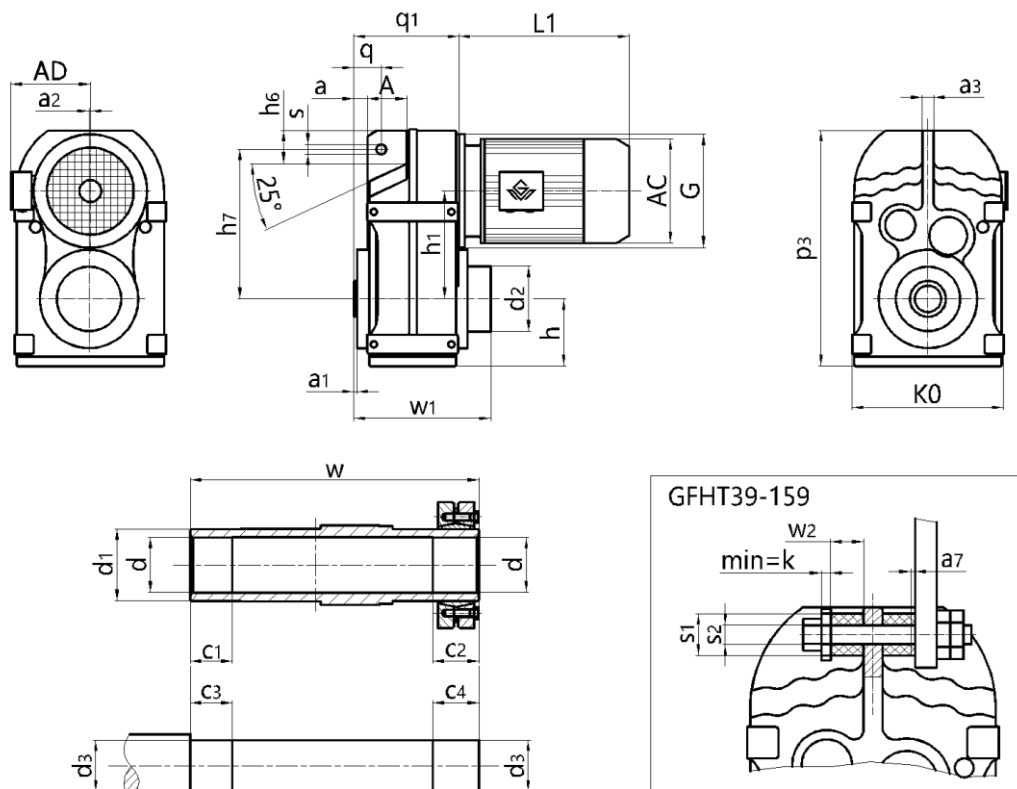
2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GFH39-159
安装结构尺寸

GFH39-159
Mounting Dimensional Description



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机 型 号 Type Size	q ₁ p ₃	h h ₁	h ₇ h ₆	w w ₁	c ₂ c ₁	c ₃ c ₄	q A	d ₂ d ₁	d d ₃	a a ₁	s a ₂	a ₃ K0	s ₁ s ₂	k w ₂	a ₇ G	电机尺寸 Motor Size		
																AC	AD	L1
GFH39	110	77	158	146	31	25	31.5	Φ80	Φ30H7	15	Φ14	12	Φ40	5	1	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
	256	112	30	152.5	20	36	46	Φ45	Φ30h6	2.5	/	165	Φ12.5 ^{+0.5}	20	Φ120			
GFH49	133	80	170	177	32	25	32	Φ88	Φ30H7	12	Φ14	12	Φ40	5	1.8			
	276	128.1	22	183	20	37	64	Φ50	Φ35h6	3	/	180	Φ12.5 ^{+0.5}	20	Φ120			
GFH59	150	93	198	195	26	25	40.5	Φ102	Φ40H7	19.5	Φ14	14	Φ40	5	2.4			
	321	136	31	202	20	31	60	Φ55	Φ40h6	3	/	200	Φ12.5 ^{+0.5}	20	Φ160			
GFH69	161	97	218	208	38	25	41	Φ102	Φ40H7	21	Φ14	16	Φ40	5	3			
	348	159.5	40	215.5	20	43	65	Φ55	Φ40h6	3.5	/	212	Φ12.5 ^{+0.5}	20	Φ160			
GFH79	193	122	278	241	36	35	50	Φ127	Φ50H7	26.5	Φ22	20	Φ60	10	3.2			
	430	200	50	249	30	41	69	Φ70	Φ50h6	4	/	270	Φ21 ^{+0.5}	30	Φ200			
GFH89	224	150	346	281	41	45	62	Φ157	Φ65H7	32	Φ22	26	Φ60	10	4.5			
	534	246.7	57	287	40	46	79	Φ85	Φ65h6	4	/	330	Φ21 ^{+0.5}	30	Φ250			
GFH99	274	180	395	345	55	55	70	Φ171	Φ75H7	34	Φ26	30	Φ80	12	5			
	630	285	88	352	50	60	104	Φ95	Φ75h6	4	/	400	Φ25 ^{+0.5}	40	Φ300			
GFH109	312	201	485	405	65	70	88	Φ234	Φ95H7	57	Φ26	36	Φ80	12	6			
	723	332.4	108	417	60	75	100	Φ118	Φ95h6	2.5	/	450	Φ25 ^{+0.5}	40	Φ350			
GFH129	373	236	550	485	85	80	110	Φ233	Φ105H7	66	Φ33	40	Φ100	15	9			
	861	382.6	138	493	70	95	125	Φ135	Φ105h6	2.5	10	530	Φ32 ^{+0.5}	60	Φ450			
GFH159	455	286	660	580	90	90	150	Φ287	Φ125H7	98	Φ33	45	Φ120	15	9			
	1021	447	170	592	80	100	140	Φ155	Φ125h6	3	15	660	Φ32 ^{+0.5}	60	Φ550			

注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

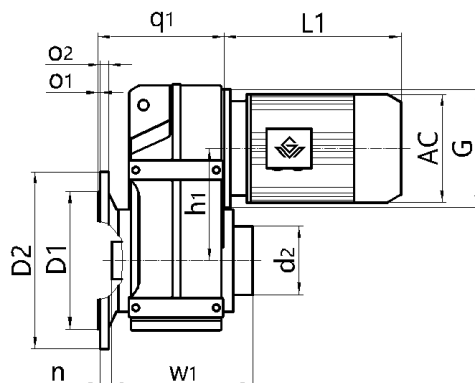
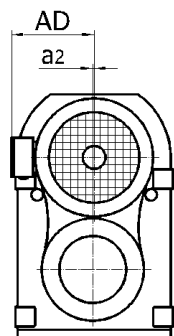
2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

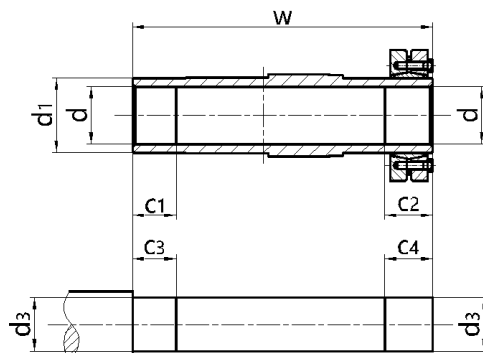
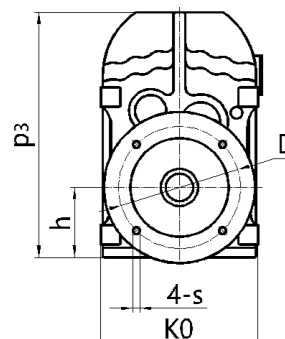
2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GFHF39-159
安装结构尺寸

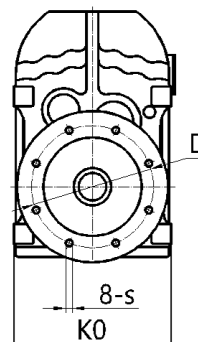
GFHF39-159
Mounting Dimensional Description



GFHF39-89



GFHF99-159



机 型 号 Type Size	q ₁ p ₃	o ₁ o ₂	h h ₁	n s	K0 D	D1 D2	d ₂ d ₁	d d ₃	w w ₁	c ₁ c ₂	c ₃ c ₄	a ₂ G	电机尺寸 Motor Size		
													AC	AD	L1
GFHF39	137.5 256	3.5 10	77 112	24 Φ9	165 Φ130	Φ110j6 Φ160	Φ80 Φ45	Φ30H7 Φ30h6	146 152.5	20 31	25 36	/ Φ120	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
GFHF49	161.5 276	3.5 12	80 128.1	25 Φ11	180 Φ165	Φ130j6 Φ200	Φ88 Φ50	Φ35H7 Φ35h6	177 183	20 32	25 37	/ Φ120			
GFHF59	177.5 321	4 15	93 136	23.5 Φ13.5	200 Φ215	Φ180j6 Φ250	Φ102 Φ55	Φ40H7 Φ40h6	195 202	20 26	25 31	/ Φ160			
GFHF69	188 348	4 15	97 159.5	23 Φ13.5	212 Φ215	Φ180j6 Φ250	Φ102 Φ55	Φ40H7 Φ40h6	208 215.5	20 38	25 43	/ Φ160			
GFHF79	234 430	4 16	122 200	37 Φ13.5	270 Φ265	Φ230j6 Φ300	Φ127 Φ70	Φ50H7 Φ50h6	241 249	30 36	35 41	/ Φ200			
GFHF89	259 534	5 18	150 246.7	30 Φ17.5	330 Φ300	Φ250h6 Φ350	Φ157 Φ85	Φ65H7 Φ65h6	281 287	40 41	45 46	/ Φ250			
GFHF99	320.5 630	5 22	180 285	41.5 Φ17.5	400 Φ400	Φ350h6 Φ450	Φ171 Φ95	Φ75H7 Φ75h6	345 352	50 55	55 60	/ Φ300			
GFHF109	358 723	5 22	201 332.4	41 Φ17.5	450 Φ400	Φ350h6 Φ450	Φ234 Φ118	Φ95H7 Φ95h6	405 417	60 65	70 75	/ Φ350			
GFHF129	429 861	5 25	236 382.6	51 Φ17.5	530 Φ500	Φ450h6 Φ550	Φ233 Φ135	Φ105H7 Φ105h6	485 493	70 85	80 95	10 Φ450			
GFHF159	521 1021	6 28	286 447	60 Φ22	660 Φ600	Φ550h6 Φ660	Φ287 Φ155	Φ125H7 Φ125h6	580 592	80 90	90 100	15 Φ550			

注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

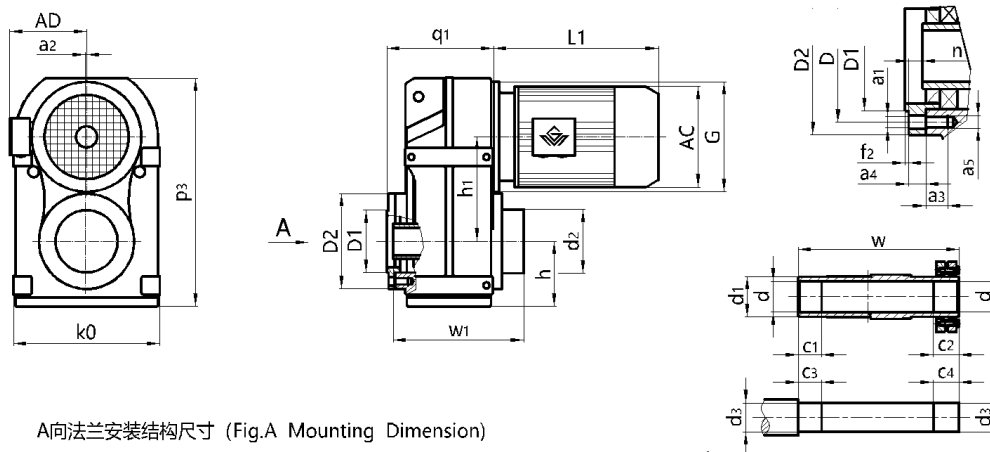
2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

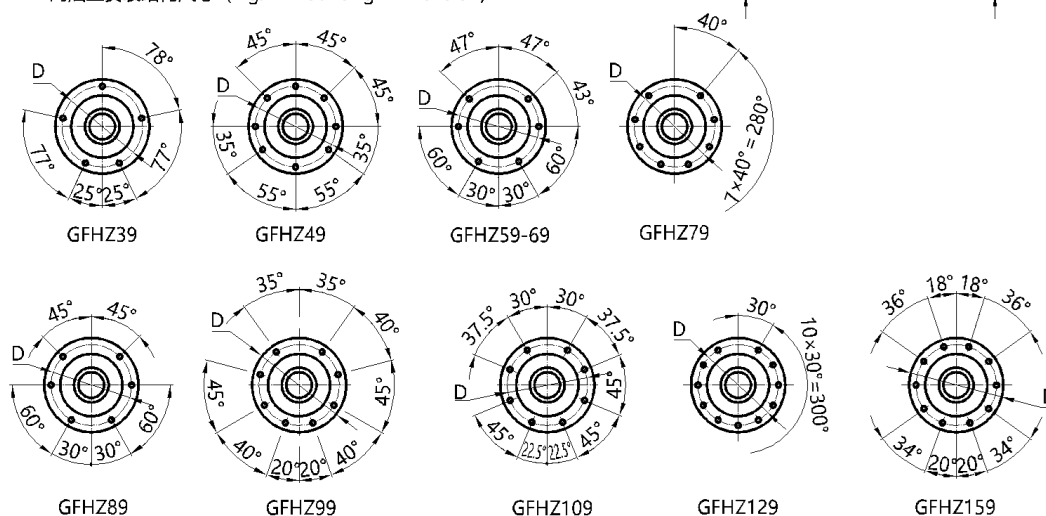
2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GFHZ39-159
安装结构尺寸

GFHZ39-159
Mounting Dimensional Description



A向法兰安装结构尺寸 (Fig.A Mounting Dimension)



机型号 Type Size	q1 K0	h h1	D2 D1	p3 n	a4 a3	a5 G	w w1	c2 c1	c3 c4	d2 d1	d d3	a2 f2	a1 D	电机尺寸 Motor Size		
														AC	AD	L1
GFHZ39	122	77	Φ110	256	11.5	M8	146	31	25	Φ80	Φ30H7	/	Φ9	见附录 A-2 和 A-3 Please see appendix A-2 and A-3		
	165	112	Φ80j6	9	15	Φ120	152.5	20	36	Φ45	Φ30h6	3	Φ94			
GFHZ49	144	80	Φ120	276	11	M8	177	32	25	Φ88	Φ35H7	/	Φ9			
	180	128.1	Φ80j6	8	14	Φ120	183	20	37	Φ50	Φ35h6	3	Φ102			
GFHZ59	162.5	93	Φ155	321	12	M12	195	26	25	Φ102	Φ40H7	/	Φ13.5			
	200	136	Φ105j6	9	20	Φ160	202	20	31	Φ55	Φ40h6	3.5	Φ125			
GFHZ69	173	97	Φ155	348	12	M12	208	38	25	Φ102	Φ40H7	/	Φ13.5			
	212	159.5	Φ105j6	8.5	22	Φ160	215.5	20	43	Φ55	Φ40h6	3.5	Φ125			
GFHZ79	206.5	122	Φ170	430	14	M12	241	36	35	Φ127	Φ50H7	/	Φ13.5			
	270	200	Φ125j6	10	20	Φ200	249	30	41	Φ70	Φ50h6	3.5	Φ142			
GFHZ89	239	150	Φ215	534	15	M16	281	41	45	Φ157	Φ65H7	/	Φ17.5			
	330	246.7	Φ155j6	11	29	Φ250	287	40	46	Φ85	Φ65h6	4	Φ178			
GFHZ99	292	180	Φ260	630	18	M16	345	55	55	Φ171	Φ75H7	/	Φ17.5			
	400	285	Φ180j6	14	28	Φ300	352	50	60	Φ95	Φ75h6	4	Φ220			
GFHZ109	308	201	Φ304	723	22	M20	405	65	70	Φ234	Φ95H7	/	Φ22			
	450	332.4	Φ210j6	-8	32	Φ350	417	60	75	Φ118	Φ95h6	4	Φ260			
GFHZ129	378	236	Φ350	861	30	M20	485	85	80	Φ233	Φ105H7	10	Φ22			
	530	382.6	Φ250h6	0	36	Φ450	493	70	95	Φ135	Φ105h6	5	Φ300			
GFHZ159	455	286	Φ400	1021	28	M24	580	90	90	Φ287	Φ125H7	15	Φ26			
	660	447	Φ290h6	-14	48	Φ550	592	80	100	Φ155	Φ125h6	5	Φ340			

注： 1.减速机部分的外形尺寸，未包含通气帽的高度尺寸。通气帽的高度尺寸为 17。

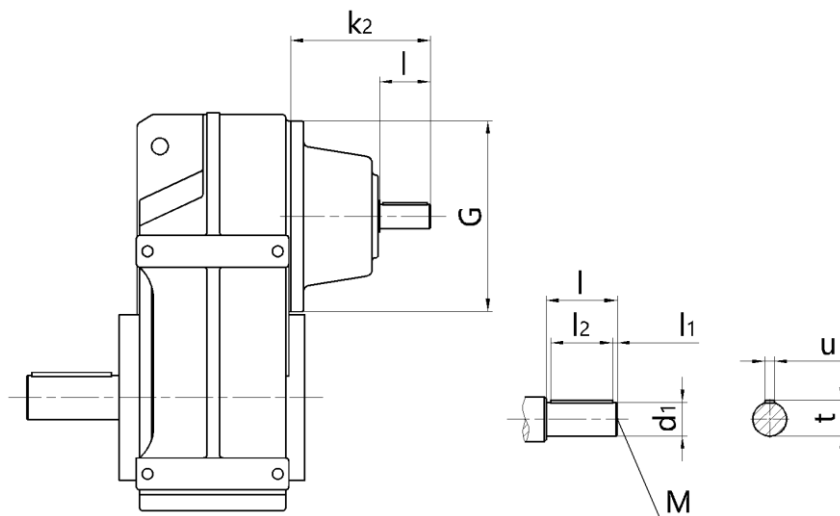
2.电机需方配或配特殊电机时需加联接法兰（见附录 D）

Note: 1.The dimensions don't include the height of the breathe valve.the height of the breathe valve is 17.

2.When equipping the user's motor or the special one, the flange is required to connected. (Please see appendix D)

GF..39-159AD1-8
安装结构尺寸

GF..39-159AD1-8
Mounting Dimensional Description



机 型 号 Type Size	规 格 Specification	适用功率范围(kW)/4P Range Power	d_1	G	k_2	l	M	l_1	l_2	t	u
GF..39/49	AD1	0.12-0.18	16k6	Φ120	130	40	M5	4	32	18	5
	AD2	0.25-3	19k6	Φ120	130	40	M6	4	32	21.5	6
GF..59/69	AD2	0.12-1.5	19k6	Φ160	149	40	M6	4	32	21.5	6
	AD3	2.2-5.5	24k6	Φ160	159	50	M8	5	40	27	8
GF..79	AD2	0.37-1.5	19k6	Φ200	184	40	M6	4	32	21.5	6
	AD3	2.2-4	24k6	Φ200	194	50	M8	5	40	27	8
	AD4	5.5-11	38k6	Φ200	224	80	M12	5	70	41	10
GF..89	AD2	0.75-1.5	19k6	Φ250	136	40	M6	4	32	21.5	6
	AD3	2.2-4	28k6	Φ250	156	60	M10	5	50	31	8
	AD4	5.5-7.5	38k6	Φ250	262	80	M12	5	70	41	10
	AD5	11-22	42k6	Φ250	292	110	M16	10	70	45	12
GF..99	AD3	1.1-4	28k6	Φ300	194	60	M10	5	50	31	8
	AD4	5.5-7.5	38k6	Φ300	214	80	M12	5	70	41	10
	AD5	11-22	42k6	Φ300	327	110	M16	10	70	45	12
	AD6	30	48k6	Φ300	327	110	M16	10	80	51.5	14
GF..109	AD3	2.2-4	28k6	Φ350	188	60	M10	5	50	31	8
	AD4	5.5-7.5	38k6	Φ350	208	80	M12	5	70	41	10
	AD5	11-22	42k6	Φ350	321	110	M16	10	70	45	12
	AD6	30-45	48k6	Φ350	321	110	M16	10	80	51.5	14
GF..129	AD4	7.5	38k6	Φ450	270	80	M12	5	70	41	10
	AD5	11-22	42k6	Φ450	300	110	M16	10	90	45	12
	AD6	30-45	48k6	Φ450	300	110	M16	10	90	51.5	14
	AD7	55	55m6	Φ450	300	110	M20	10	90	59	16
	AD8	75-90	70m6	Φ450	383	140	M20	15	110	74.5	20
GF..159	AD5	11-22	42k6	Φ550	344	110	M16	10	90	45	12
	AD6	30-45	48k6	Φ550	344	110	M16	10	90	51.5	14
	AD7	55-90	55m6	Φ550	344	110	M20	10	90	59	16
	AD8	110-200	70m6	Φ550	374	140	M20	15	110	74.5	20

其它尺寸请参照 GF 型。

注： 1.GFA/GFAF/GFF/GFAZ/GFH/GFHF/GFHF/GFHZ 均可采用双轴型，并分别记为 GFA..AD...、GFAF..AD...、GFF..AD...、GFAZ..AD...、GFH..AD...、GFHF..AD...和 GFHZ..AD...。

2.通过联轴器联接，可直接参考上表功率范围；若电机和减速机之间是通过其他极数电机、齿轮、链轮、皮带轮等传动方式联接，需客户自行转换。

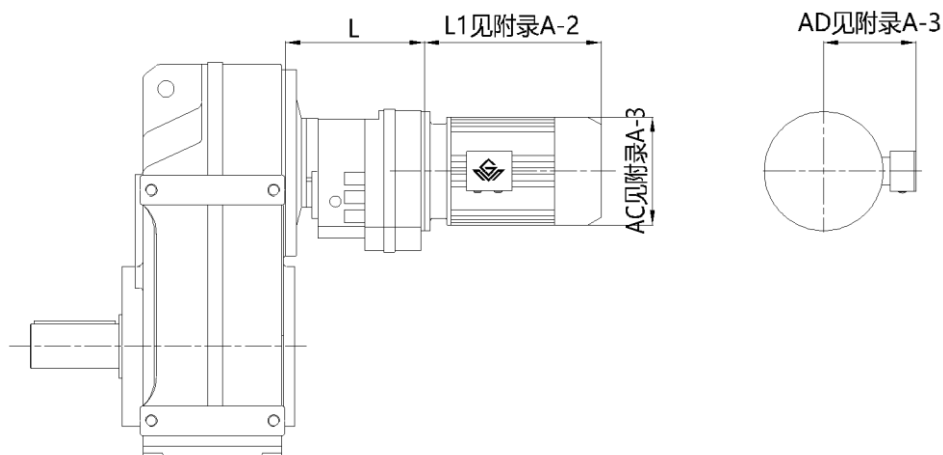
For other dimensions, see the type GF.

Note: 1.Double shafts type is also available for type GFA/GFAF/GFF/GFAZ/GFH/GFHF/GFHZ, and these double shafts types are respectively named type GFA..AD..., GFAF..AD..., GFF..AD..., GFAZ..AD..., GFH..AD..., GFHF..AD... and GFHZ..AD....

2.Applicable power refers to the input torque of 4 pole motor. If the connect way is coupling, can see the power range on the table directly, if the connect way is other pole motor, sprocket, belt pulley, need customers to convert by themselves.

**GF..R..
安装结构尺寸**

**GF..R..
Mounting Dimensional Description**



机 型 号 Type Size	机 座 号 Frame Size	L
GF..39R19 GF..49R19	63	135
	71	
	80	
GF..59R39	63	163
	71	
	80	
GF..69R39	63	163
	71	
	80	
GF..79R39	63	163
	71	
	80	
GF..89R59	63	216
	71	
	80	
GF..99R59	63	216
	71	
	80	
GF..109R79	63	251
	71	
	80	
GF..119R79	63	251
	71	
	80	
GF..129R79	63	241
	71	
	80	
GF..129R89	63	241
	71	
	80	
GF..129R99	63	241
	71	
	80	
GF..129R109	63	241
	71	
	80	
GF..129R119	63	241
	71	
	80	
GF..129R129	63	241
	71	
	80	
GF..129R139	63	241
	71	
	80	
GF..129R149	63	241
	71	
	80	
GF..129R159	63	241
	71	
	80	
GF..129R169	63	241
	71	
	80	
GF..129R179	63	241
	71	
	80	
GF..129R189	63	241
	71	
	80	
GF..129R199	63	241
	71	
	80	
GF..129R209	63	241
	71	
	80	
GF..129R219	63	241
	71	
	80	
GF..129R229	63	241
	71	
	80	
GF..129R239	63	241
	71	
	80	
GF..129R249	63	241
	71	
	80	
GF..129R259	63	241
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	80	
GF..129R269	63	241
	71	
	80	
GF..129R279	63	241
	71	
	80	
GF..129R289	63	241
	71	
	80	
GF..129R299	63	241
	71	
	80	
GF..129R309	63	241
	71	
	80	
GF..129R319	63	241
	71	
	80	
GF..129R329	63	241
	71	
	80	
GF..129R339	63	241
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	80	
GF..129R349	63	241
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	80	
GF..129R359	63	241
	71	
	80	
GF..129R369	63	241
	71	
	80	
GF..129R379	63	241
	71	
	80	
GF..129R389	63	241
	71	
	80	
GF..129R399	63	241
	71	
	80	
GF..129R409	63	241
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	80	
GF..129R419	63	241
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	80	
GF..129R429	63	241
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	80	
GF..129R439	63	241
	71	
	80	
GF..129R449	63	241
	71	
	80	
GF..129R459	63	241
	71	
	80	
GF..129R469	63	241
	71	
	80	
GF..129R479	63	241
	71	
	80	
GF..129R489	63	241
	71	
	80	
GF..129R499	63	241
	71	
	80	
GF..129R509	63	241
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	80	
GF..129R519	63	241
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GF..129R529	63	241
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GF..129R539	63	241
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	80	
GF..129R589	63	241
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GF..129R599	63	241
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GF..129R609	63	241
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GF..129R639	63	241
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GF..129R649	63	241
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	80	
GF..129R659	63	241
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GF..129R669	63	241
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GF..129R679	63	241
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	80	
GF..129R689	63	241
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GF..129R699	63	241
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	80	
GF..129R709	63	241
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	80	
GF..129R719	63	241
	71	
	80	
GF..129R729	63	241
	71	
	80	
GF..129R739	63	241
	71	
	80	
GF..129R749	63	241
	71	
	80	
GF..129R759	63	241
	71	
	80	
GF..129R769	63	241
	71	
	80	
GF..129R779	63	241
	71	
	80	
GF..129R789	63	241
	71	
	80	
GF..129R799	63	241
	71	
	80	
GF..129R809	63	241
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	80	
GF..129R819	63	241
	71	
	80	
GF..129R829	63	241
	71	
	80	
GF..129R839	63	241
	71	
	80	
GF..129R849	63	241
	71	
	80	
GF..129R859	63	241
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	80	
GF..129R869	63	241
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	80	
GF..129R879	63	241
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GF..129R889	63	241
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GF..129R899	63	241
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	80	
GF..129R909	63	241
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	80	
GF..129R919	63	241
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GF..129R929	63	241
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GF..129R939	63	241
	71	
	80	
GF..129R949	63	241
	71	
	80	
GF..129R959	63	241
	71	
	80	
GF..129R969	63	241
	71	
	80	
GF..129R979	63	241
	71	
	80	
GF..129R989	63	241
	71	
	80	
GF..129R999	63	241
	71	
	80	

机 型 号 Type Size	机 座 号 Frame Size	L
GF..129R79	63	241
	71	
	80	
	90	
	100	
	112	
	132	
	160	
GF..129R89	90	280
	100	
	112	
	132	
	160	
	180	
GF..159R99	80	332
	90	
	100	
	112	
	132	
	160	
	180	
	200	

附录 A-1
Appendix A-1
标准普通电机技术参数 (IE2)
Technical Date of Standard Ordinary Motors (IE2)

机座号 Frame size	额定功率 Rated power/kW	满载时 Full load				堵转电流 Blocked current	堵转转矩 Blocked torque	最大转矩 Max torque	转动惯量 Moment of inertia /(kg.m²)	净重 Weight /kg*	
		转速 Speed /(r/min)*	电流 Current /A*	效率 Eff /(%)	功率因数 Power Factor*	额定电流 Rated current	额定转矩 Rated torque	额定转矩 Rated torque			
同步转速 3000r/min 2 极 Synchronous Speed 3000r/min 2P											
631-2	0.18	2720	0.53	65.0	0.80	5.5	2.2	2.2	—	9	
632-2	0.25		0.69	68.0	0.81					10	
711-2	0.37	2740	0.99	70.0	0.81	6.1		2.3		14	
712-2	0.55		1.4	73.0	0.82					15	
801-2	0.75	2830	1.83	75.0	0.83	7.0		2.3	0.00075	16	
802-2	1.1		2.55	77.0	0.84				0.00090	17	
90S-2	1.5	2840	3.4	79.0					0.0012	22	
90L-2	2.2		4.8	81.0	0.85				0.0014	25	
100L-2	3.0	2870	6.31	83.0	0.87	7.5			2.0	0.0029	33
112M-2	4.0	2890	8.23	85.0	0.88					0.0055	45
132S1-2	5.5	2900	11.18	86.0						0.0109	64
132S2-2	7.5		15.06	87.0						0.0126	70
160M1-2	11	2930	21.35	88.0			0.89			0.0377	117
160M2-2	15		28.78	89.0	0.0449					125	
160L-2	18.5		34.72	90.0	0.90		0.055			147	
180M-2	22	2940	41.28	90.5			0.075			180	
200L1-2	30	2950	55.37	91.2			0.124			240	
200L2-2	37		67.92	92.0			0.139			255	
225M-2	45	2970	82.16	92.3	0.91	0.233	309				
250M-2	55		100.1	92.5		0.312	403				
280S-2	75		134.0	93.2		0.597	544				
280M-2	90		160.27	93.8		0.675	620				
315S-2	110	2980	195.46	94.0		7.1	1.8	2.2		1.18	980
315M-2	132		233.3	94.5						1.82	1080
315L1-2	160		279.44	94.6	0.92	1.6				2.08	1160
315L2-2	200		347.83	94.8						2.41	1190
355M-2	250		432.5	95.3		3.56	1760				
355L-2	315		543.25	95.6		4.16	1850				

附录 A-1
Appendix A-1

机座号 Frame size	额定功率 Rated power/kW	满载时 Full load				堵转电流 Blocked current	堵转转矩 Blocked torque	最大转矩 Max torque	转动惯量 Moment of inertia /(kg.m²)	净重 Weight /kg*	
		转速 Speed /(r/min)*	电流 Current /A*	效率 Eff /(%)	功率因数 Power factor*	额定电流 Rated current	额定转矩 Rated torque	额定转矩 Rated torque			
同步转速 1500r/min 4 极 Synchronous Speed 1500r/min 4P											
631-4	0.12	1310	0.44	57.0	0.72	4.4	2.1	2.2	—	9	
632-4	0.18		0.62	60.0	0.73					10	
711-4	0.25	1330	0.79	65.0	0.74	5.2				13	
712-4	0.37		1.12	67.0	0.75					14	
801-4	0.55	1390	1.57	71.0		0.77	6.0	2.4	2.3	0.0018	17
802-4	0.75		2.03	73.0	0.0021					18	
90S-4	1.1	1400	2.82	75.0	7.0	2.3	0.0021	22			
90L-4	1.5		3.7	78.0			0.79	0.0027		27	
100L1-4	2.2	1430	5.16	80.0			0.81	0.0054		34	
100L2-4	3.0		6.78	82.0			0.82	0.0067		38	
112M-4	4.0	1440	8.83	84.0				0.83		0.0095	43
132S-4	5.5		11.7	85.0			0.84	0.0214		68	
132M-4	7.5		15.6	87.0			0.85	0.0296		81	
160M-4	11	1460	22.35	88.0				7.5		0.0747	123
160L-4	15		30.14	89.0						0.0918	144
180M-4	18.5	1470	36.47	90.5				7.2		2.2	0.139
180L-4	22		43.14	91.0	0.158	190					
200L-4	30		57.63	92.0	0.86	0.262	270				
225S-4	37	1480	69.89	92.5	0.87	0.406	284				
225M-4	45		95.54	92.8		0.469	320				
250M-4	55		103.1	93.0		0.66	427				
280S-4	75		139.7	93.8		1.12	562				
280M-4	90	1490	166.93	94.2	0.88	6.9	2.1	2.2	1.46	667	
315S-4	110		201.06	94.5					3.11	1000	
315M-4	132		240.57	94.8					3.62	1100	
315L1-4	160		287.95	94.9	0.89				4.13	1160	
315L2-4	200		358.8	95.0					4.94	1270	
355M-4	250		442.12	95.3	0.90				5.67	1700	
355L-4	315		555.32	95.6					6.66	1850	

附录 A-1
Appendix A-1

机座号 Frame size	额定功率 Rated power/kW	满载时 Full load				堵转电流 Blocked current	堵转转矩 Blocked torque	最大转矩 Max torque	转动惯量 Moment of inertia /(kg.m²)	净重 Weight /kg*
		转速 Speed /(r/min)*	电流 Current /A*	效率 Eff /(%)	功率因数 Power factor*	额定电流 Rated current	额定转矩 Rated torque	额定转矩 Rated torque		
同步转速 1000r/min 6 极 Synchronous Speed 1000r/min 6P										
711-6	0.18	850	0.74	56.0	0.66	4.0	1.9	2.0	—	—
712-6	0.25		0.95	59.0	0.68				—	—
801-6	0.37	890	1.3	62.0	0.70	4.7		2.1	0.00158	17
802-6	0.55		1.79	65.0	0.72		0.0021		19	
90S-6	0.75	910	2.26	69.0		0.73	5.5	2.0	0.0029	23
90L-6	1.1		3.14	72.0	0.0035				25	
100L-6	1.5	940	3.95	76.0	0.75	6.5	2.1	2.1	0.0069	33
112M-6	2.2		5.57	79.0	0.76				0.0138	45
132S-6	3.0	960	7.41	81.0		0.77	2.1	2.1	0.0286	63
132M1-6	4.0		9.64	82.0	0.0357				73	
132M2-6	5.5	970	12.93	84.0	0.78	2.0	2.1	0.0449	84	
160M-6	7.5		17.0	86.0				0.0881	119	
160L-6	11	970	24.23	87.5	0.78	7.0	2.1	2.1	0.116	147
180L-6	15		31.63	89.0	0.81				0.207	195
200L1-6	18.5	970	38.1	90.0		0.83	2.1	2.1	0.315	220
200L2-6	22		44.52	90.0	0.360				250	
225M-6	30	980	58.63	91.5	0.84	7.0	2.0	2.1	0.547	292
250M-6	37		71.08	92.0	0.86				0.834	408
280S-6	45	980	85.98	92.5		0.86	2.1	2.0	1.39	536
280M-6	55		104.75	92.8	1.65				595	
315S-6	75	990	141.77	93.5	0.87	6.7	1.9	2.0	4.11	990
315M-6	90		169.58	93.8					4.28	1080
315L1-6	110	990	206.83	94.0	0.88	6.7	1.9	2.0	5.45	1150
315L2-6	132		244.82	94.2					6.12	1210
355M1-6	160	990	291.52	94.5	0.88	6.7	1.9	2.0	8.85	1600
355M2-6	200		363.64	94.7					9.55	1700
355L-6	250	990	453.60	94.9	0.88	6.7	1.9	2.0	10.63	1800

附录 A-1
Appendix A-1

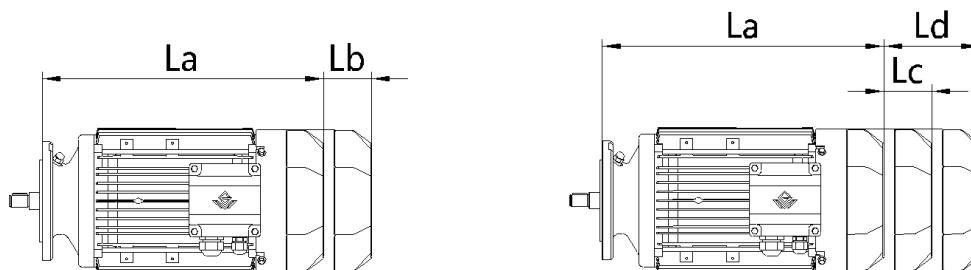
机座号 Frame size	额定功率 Rated power/kW	满载时 Full load				堵转电流 Blocked current	堵转转矩 Blocked torque	最大转矩 Max torque	转动惯量 Moment of inertia /(kg.m²)	净重 Weight /kg*			
		转速 Speed /(r/min)*	电流 Current /A*	效率 Eff /(%)	功率因数 Power factor*	额定电流 Rated current	额定转矩 Rated torque	额定转矩 Rated torque					
同步转速 750r/min 8 极 Synchronous Speed 750r/min 8P													
801-8	0.18	630	0.88	51.0	0.61	3.3	1.8	1.9	0.00158	17			
802-8	0.25	640	1.15	54.0		4.0			0.0021	19			
90S-8	0.37	660	1.49	62.0					0.0029	23			
90L-8	0.55		690	2.18	63.0	5.0	0.0035	25					
100L1-8	0.75	2.43		71.0	0.67		0.0069	33					
100L2-8	1.1	680	3.42	73.0	0.69		0.0107	38					
112M-8	1.5		4.47	75.0		0.0149	50						
132S-8	2.2	710	6.04	78.0		0.71	0.0314	63					
132M-8	3.0		7.9	79.0	0.0395		79						
160M1-8	4.0	720	10.28	81.0	0.73		6.0	1.9	0.0753	118			
160M2-8	5.5		13.61	83.0		0.74	2.0	0.0931	119				
160L-8	7.5		17.88	85.5		0.75		0.126	145				
180L-8	11	730	25.29	87.5	0.76	6.6	2.0	0.203	184				
200L-8	15		34.09	88.0				0.339	250				
225S-8	18.5		40.58	90.0				0.491	266				
225M-8	22	740	47.37	90.5	0.78			0.547	292				
250M-8	30		63.43	91.0				0.79	0.834	405			
280S-8	37		76.83	91.5					1.39	520			
280M-8	45	92.93	92.0	0.81	1.65	592							
315S-8	55	112.97	92.8		0.82	4.79	1000						
315M-8	75	151.33	93.0			6.4	5.58	1100					
315L1-8	90	177.86	93.8	6.37			1160						
315L2-8	110	216.92	94.0	1.8	7.23		1230						
355M1-8	132	260.3	93.7		10.55	1600							
355M2-8	160	310.07	94.2		11.73	1700							
355L-8	200	740	386.36	94.5	0.83	6.4	1.8	12.86	1800				
同步转速 600r/min 10 极 Synchronous Speed 600r/min 10P													
315S-10	45		590	99.67	91.5			0.75	6.2	1.5	2.0	4.79	810
315M-10	55			121.16	92.0			0.75				6.37	930
315L1-10	75			162.16	92.5			0.76				7.0	1045
315L2-10	90			191.03	93.0			0.77				7.15	1115
355M1-10	110			230	93.2			0.78	6.0	1.3		12.55	1500
355M2-10	132	275.11		93.5	13.75	1600							
355L-10	160	333.47		93.5	14.86	1700							

注：表格中带*的参数仅作为参考，具体数值以用户收到的电机铭牌参数数值为准。

Note: The parameters with * in the table are for reference only. The specific values are subject to the nameplate parameters of the actual supplied motor.

附录 A-2

Appendix A-2



G 系列用直联型 IE2 普通电机尺寸 L1=La

G series gearbox connects IE2 ordinary motor directly without flange, the size is L1, L1 is equal to La

GR 系列 GR Series

机型号 Type size	Frame size 机座号	63M	71M	80M	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
GR...19/29/39		257	270	310	333	368	399													
GR...49/59/GRX...59/69		257	264	304	327	362	391	441	447	482										
GR...79/GRX...79		258	258	298	319	354	383	432	435	470	551	595								
GR...89/GRX...89				293	315	350	379	427	430	465	546	590	631	669						
GR...99/GRX...99				284	307	342	373	422	425	460	541	585	626	664	713					
GR...109/GRX...109							367	416	419	454	535	579	620	658	707	721	746			
GR...139/GRX...139									412	447	528	572	613	651	700	714	734	816		
GR...149											520	564	605	643	692	706	731	808	879	930
GR...169/179											520	564	603	641	684	698	718	800	868	919

GS 系列 GS Series

机型号 Type size	Frame size 机座号	63M	71M	80M	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
GS...39/49/59		257	270	310	333	368	399													
GS...69		257	264	304	327	362	391	441	447	482										
GS...79		258	258	298	319	354	383	432	435	470	551	595								
GS...89				293	315	350	379	427	430	465	546	590	631	669						
GS...99				284	307	342	373	422	425	460	541	585	626	664	713					
GS...109							367	416	419	454	535	579	620	658	707					

GK 系列 GK Series

机型号 Type size	Frame size 机座号	63M	71M	80M	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
GK...39		257	270	310	333	368	399													
GK...49/59/69		257	264	304	327	362	391	441	447	482										
GK...79		258	258	298	319	354	383	432	435	470	551	595								
GK...89				293	315	350	379	427	430	465	546	590	631	669						
GK...99				284	307	342	373	422	425	460	541	585	626	664	713					
GK...109							367	416	419	454	535	579	620	658	707	721	746			
GK...129									404	439	520	564	605	643	692	706	731	808	879	930
GK...159/169/189											520	564	603	641	684	698	718	800	868	919

GF 系列 GF Series

机型号 Type size	Frame size 机座号	63M	71M	80M	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
GF...39/49		257	270	310	333	368	399													
GF...59/69		257	264	304	327	362	391	441	447	482										
GF...79		258	258	298	319	354	383	432	435	470	551	595								
GF...89				293	315	350	379	427	430	465	546	590	631	669						
GF...99				284	307	342	373	422	425	460	541	585	626	664	713					
GF...109							367	416	419	454	535	579	620	658	707	721	746			
GF...129									404	439	520	564	605	643	692	706	731	808	879	930
GF...159											520	564	603	641	684	698	718	800	868	919

附录 A-2

Appendix A-2

G 系列用直联型非普通电机尺寸 L1
G series use directly type not ordinary motor size L1

电机类型 Motor type 机座号 Frame size	变频直联电机 variable frequency directly motor	制动直联电机 brake directly motor	变频制动直联电机 variable frequency brake directly motor
	L1=La+Lb	L1=La+Lc	L1=La+Ld
63M	La+67	La+57	La+112
71M	La+67	La+57	La+112
80M	La+59	La+60	La+106
90S	La+74	La+70	La+122
90L	La+74	La+70	La+119
100L	La+77	La+68	La+108
112M	La+83	La+74	La+102
132S	La+73	La+82	La+129
132M	La+73	La+82	La+109
160M	La+65	La+91	La+155
160L	La+68	La+94	La+158
180M	La+112	La+125	La+212
180L	La+112	La+125	La+212
200L	La+73	La+148	La+213
225S	La+92	La+167	La+236
225M	La+92	La+167	La+236
250M	La+100	La+183	La+260
280S	La+127	La+201	La+293
280M	La+127	La+201	La+293

注：La 尺寸见上表。

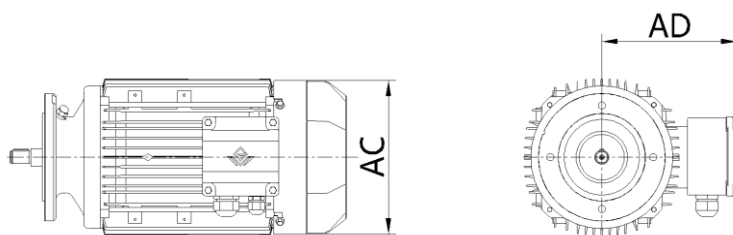
Note: La size are shown in the above table.

注：G 系列直联电机安装尺寸及形位公差要求按图纸。

Note: The installation dimension and form and position tolerance of G series direct motor shall be in accordance with the drawing.

附录 A-3

Appendix A-3



G 系列用直联型 IE2 电机外壳尺寸 AC 和接线盒高度尺寸 AD
G series use directly type IE2 motor shell size AC and terminal box height size AD

电机尺寸 Frame size Motor size	63M	71M	80M	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
AC	163	163	179	198	198	228	249	295	295	337	337	376	376	405	451	451	490	552	552
AD	138	138	149	166	166	181	187	210	210	260	260	285	285	310	340	340	375	415	415

注：以上尺寸仅适用于普通直联电机，变频直联电机，制动直联电机，变频制动直联电机。

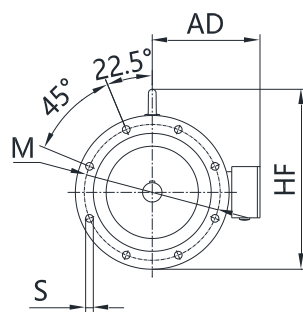
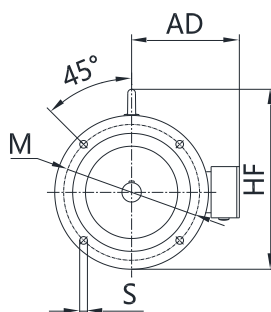
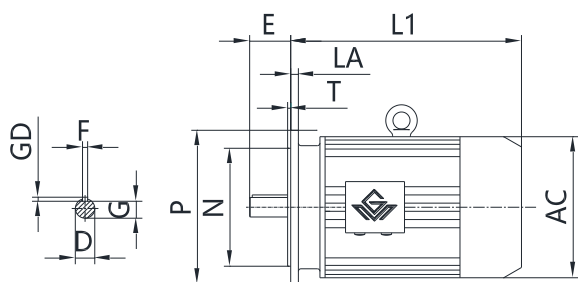
Note: The above size just apply to common directly motor, variable frequency directly motor, brake directly motor, variable frequency brake directly motor.

注：所有直联型电机的重量参考 IEC 标准电机重量。

Note: The weight of all direct connection motors refer to the weight of IEC standard ordinary motors.

附录 A-4

Appendix A-4



机座号63-200

机座号225-315

标准普通电机外形及安装尺寸 (IE2)

Dimensions of Standary Ordinary Motors(IE2)

机座号 Frame size	安装尺寸及外形尺寸																Mounting Dimensions				联接处螺栓的规格 Specification of bolts in connection	
	D		E		F×GD		G		M	N	P	S	T	AC	AD	LA	HF	L1				
	2P	4-10P	2P	4-10P	2P	4-10P	2P	4-10P										2P	4-10P			
63M	11		23		4×4		8.5		115	95	140	10	3	130	70	10	130	207		M8×25		
71M	14		30		5×5		11		130	110	160			12	3.5	145	80	10	145	225		M8×25
80M	19		40		6×6		15.5		165	130	200	12	4			175	145	12	185	255		M10×30
90S	24		50		8×7		20							215	180	250	15	4	195	155	12	195
90L									12	12	295		M10×30									
100L	28		60				24		265	230	300	19	5	215	180	14	245	325		M12×35		
112M														240	190	14	265	340		M12×35		
132S	38		80		10×8		33		265	230	300	19	5	275	210	14	315	390		M12×35		
132M														14	14	430		M12×35				
160M	42		110		12×8		37		300	250	350	19	5	330	255	16	385	505		M16×40		
160L														16	16	560		M16×40				
180M	48				14×9		42.5		380	280	18	430	590		M16×45							
180L											18	18	630		M16×45							
200L	55				16×10		49		350	300	400	19	5	420	305	18	480	660		M16×45		
225S		60		140	16×10		18×11			53	400			350	450	470	335	20	535	675		M16×50
225M	55	60	110	140					49	53		20	20					710	705	M16×50		
250M	60	65	140		18×11		53	58	500	450	550	19	5	510	370	22	595	770		M16×55		
280S	65	75			18×11		20×12							58	67.5	580	410	22	650	845		M16×55
280M					22	22	895							M16×55								
315S	65	80	140	170	18×11	22×14	58	71	600	550	660	24	6	645	530	25	845	1020	1100	M20×60		
315M																25		1050	1130	M20×60		
315L1	65	80	140	170	18×11	22×14	58	71	600	550	660	24	6	645	530	25	845	1020	1100	M20×60		
315L2																25		1050	1130	M20×60		

附录 B
Appendix B

YEJ 系列电机外形及安装尺寸
Dimensions of YEJ Series Motors

机座号 Frame size	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
L1	350	370	395	420	450	505	545	610	655	715	765	790	860	890

注：图形参照附录 A，其余尺寸同标准普通电机。

Note: See appendix A for dimensional drawings. Other dimensions are same as standary ordinary motors.

附录 C
Appendix C

G 系列减速电机最大输出转矩表
Max. Output Torque Table, G Series Geared Motors

GRX 系列 GRX Series

机型号 Type size	GRX..59	GRX..69	GRX..79	GRX..89	GRX..99	GRX..109	GRX..139							
最大输出转矩 Max.output torque(N.m)	70	135	215	400	600	830	1500							

GR 系列 GR Series

机型号 Type size	GR..19	GR..29	GR..39	GR..49	GR..59	GR..69	GR..79	GR..89	GR..99	GR..109	GR..139	GR..149	GR..169	GR..179
最大输出转矩 Max.output torque(N.m)	85	130	200	300	450	600	820	1550	3000	4300	8000	13000	18000	36600

GS 系列 GS Series

机型号 Type size	GS..39	GS..49	GS..59	GS..69	GS..79	GS..89	GS..99	GS..109						
最大输出转矩 Max.output torque(N.m)	87	170	300	520	1220	2300	4000	6500						

GK 系列 GK Series

机型号 Type size	GK..39	GK..49	GK..59	GK..69	GK..79	GK..89	GK..99	GK..109	GK..129	GK..159	GK..169	GK..189		
最大输出转矩 Max.output torque(N.m)	200	400	600	820	1550	2700	4300	8000	13000	18000	32000	50000		

GF 系列 GF Series

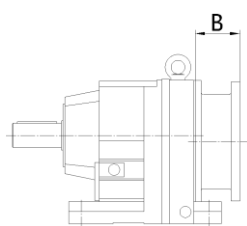
机型号 Type size	GF..39	GF..49	GF..59	GF..69	GF..79	GF..89	GF..99	GF..109	GF..129	GF..159				
最大输出转矩 Max.output torque(N.m)	200	400	600	820	1550	2700	4300	8000	13000	18000				

注：表中所列为减速电机最大负载转矩。实际上，同一规格的减速电机在不同传动比时，其最大承载转矩有可能不同。必要时，此值可按“选型参数表”中的输出转矩 M_o 乘以使用系数 f_o 求得。瞬间过载能力可达最大转矩的 1.8 倍。

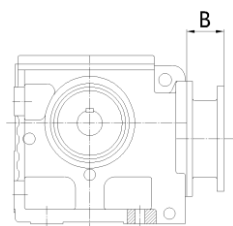
Note: List date is gearmotor's max. output torque. In fact the torque see selection table, the value equal the rate torque and service factor product. On request, please contact us.

附录 D

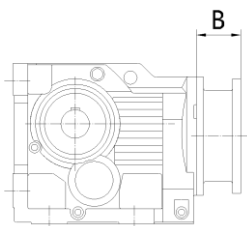
Appendix D



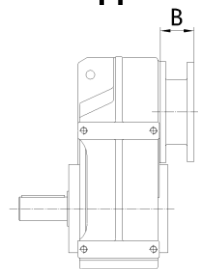
GR 系列 GR Series



GS 系列 GS Series



GK 系列 GK Series



GF 系列 GF Series

联接法兰尺寸 B (联接 IEC 标准电机)

The dimension B of the flange for IEC series motors

GR 系列 GR Series

机型号 Type size	Frame size 机座号	63	71	80	90	100	112	132	160	180	200	225	250	280	315
GR...19/29/39		50	70.5	99.5	99.5	119									
GR...49/59/69/GRX...59/69		44.5	65	94	94	111	111	150							
GR...79/GRX...79		36.5	59	88	88	103	103	138	179						
GR...89/GRX...89				83	83	99	99	133	174	174					
GR...99/GRX...99				73.5	73.5	93	93	128	169	169	165.5				
GR...109/GRX...109						87	87	122	163	163	159.5	193			
GR...139/GRX...139								115	156	156	152.5	186	185		
GR...149									148	148	144.5	178	177	189	
GR...169/179									140/132	140/132	136.5/128.5	170/162	166/158	178/170	253/245

GS 系列 GS Series

机型号 Type size	Frame size 机座号	63	71	80	90	100	112	132	160	180	200				
GS...39/49/59		50	70.5	99.5	99.5	119									
GS...69		44.5	65	94	94	111	111	150							
GS...79		36.5	59	88	88	103	103	138	179						
GS...89				83	83	99	99	133	174	174					
GS...99				73.5	73.5	93	93	128	169	169					
GS...109						87	87	122	163	163	159.5				

GK 系列 GK Series

机型号 Type size	Frame size 机座号	63	71	80	90	100	112	132	160	180	200	225	250	280	315
GK...39		50	70.5	99.5	99.5	119									
GK...49/59/69		44.5	65	94	94	111	111	150							
GK...79		36.5	59	88	88	103	103	138	179						
GK...89				83	83	99	99	133	174	174					
GK...99					73.5	93	93	128	169	169	165.5				
GK...109						87	87	122	163	163	159.5	193			
GK...129								107	148	148	144.5	178	177	189	
GK...159/169									140	140	136.5	170	166	178	253
GK...189									132	132	128.5	162	158	170	245

GF 系列 GF Series

机型号 Type size	Frame size 机座号	63	71	80	90	100	112	132	160	180	200	225	250	280	315
GF...39/49		50	70.5	99.5	99.5	119									
GF...59/69		44.5	65	94	94	111	111	150							
GF...79		36.5	59	88	88	103	103	138	179						
GF...89				83	83	99	99	133	174	174					
GF...99					73.5	93	93	128	169	169	165.5				
GF...109						87	87	122	163	163	159.5	193			
GF...129								107	148	148	144.5	178	177	189	
GF...159									140	140	136.5	170	166	178	253

所配联接法兰的最大重量(kg) Maximum weight of coupling flange(kg)

机座号 Frame size	63	71	80	90	100	112	132	160	180	200	225	250	280	315
重量(kg) weight(kg)	4.1	5.1	12	12	20.2	20.2	36.7	68.3	68.3	64.5	79.5	105.3	118.8	196.4

附录 E

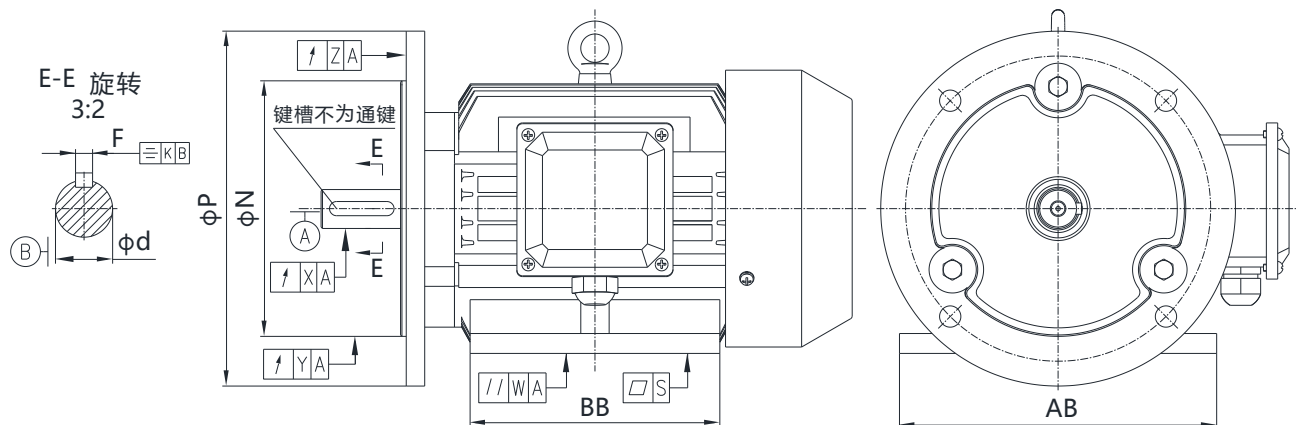
IEC 电动机形位公差要求

用户自配或自备电机，须达到以下形位公差要求

The user-equipped or self-supplied motor must meet the following geometric tolerance requirements.

Appendix E

IEC motor shape and position tolerance requirements



电动机安装面各项跳动 (B5、B35)

Motor mounting surface runout (B5, B35)

机座号 Frame size	轴伸跳动 (X) Shaft extension runout (X)		止口跳动 (Y) Lip runout(Y)		端面跳动 (Z) Face runout (Z)	
	轴伸直径 (d) Shaft extension diameter (d)	9 级 (轴伸一半处) Grade 9 (half shaft extension)	凸缘止口直 (N) Flange lip diameter (N)	9 级 Grade 9	外圆直径 (P) Outer diameter (P)	9 级 Grade 9
63 ~ 315	10 ~ 18	0.04	60 ~ 95	0.08	60 ~ 95	0.08
	18 ~ 30	0.04	> 95 ~ 230	0.1	> 95 ~ 230	0.1
	> 30 ~ 50	0.05	> 230 ~ 450	0.125	> 230 ~ 450	0.125
	> 50 ~ 80	0.06	> 450 ~ 680	0.16	> 450 ~ 680	0.16

电动机轴伸上键槽对称度公差 (B5、B35)

Symmetry tolerance of keyway on motor shaft extension (B5, B35)

键槽宽度 (F) Keyway width (F)	对称度公差 (K) Symmetry tolerance (K)
4	0.018
5	
6	
8	0.022
10	
12	
14	0.030
16	
18	
20	0.037
22	

电动机轴线对底脚支承面的平行度公差 (B35)
Parallelism tolerance of motor axis to foot supporting surface (B35)

机座号 Frame size	平行度公差 (W) Parallelism tolerance (W)
63 ~ 250	0.40
> 250 ~ 315	0.75

电动机底脚支承面的平面度公差 (B35)
Flatness tolerance of motor foot bearing surface (B35)

AB 或 BB 中最大尺寸 Maximum dimension in AB or BB	平面度公差 (S) Flatness tolerance (S)
> 100 ~ 160	0.12
> 160 ~ 250	0.15
> 250 ~ 400	0.20
> 400 ~ 630	0.25
> 630 ~ 1000	0.30