

# 伺服电机 / 驱动器 产品手册

## SERVO MOTOR & DRIVE

# WOOLARS

PRECISION MACHINERY



四川省伍勒斯精密机械有限公司  
SICHUAN WOOLARS PRECISION MACHINERY CO., LTD

Add: No. 5500, Zizhou ave, Hi-tech zone, CD, China.

Tel: +86 173 2607 2903 (Whatsapp)

Skype: WOOLARS

Email: info@woolars.com

Web: www.woolars.com

四川省伍勒斯精密机械有限公司  
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## 公司简介 Company Profile

四川省伍勒斯精密机械有限公司是一家专业从事伺服电机、驱动器产品的研发、生产、销售的高新技术企业。产品大量应用于数控机床、铣床、电脑绣花、包装、印刷、纺织、雕刻机以及普通机械自动化改造等自动控制领域。

公司始终坚持在整个经营过程中以质量取胜的方针，为顾客提供高性价比的产品与增值服务为理念，从而实现与顾客共同提升经营业绩的目标。

欢迎来电来函洽谈商务，本公司将竭诚为您服务。

**WOOLARS PRECISION MACHINERY** is a professional engaged in servo motor, drive product R & D, production, sales of high-tech enterprises. A large number of products used in CNC machine tools, milling machine, computer embroidery, packaging, printing, textile, engraving machine and general machinery automation, automatic control field.

We aer always insisted on the whole management process to win the principle of quality, to provide customers with cost-effective products and value-added services for the idea, so as to realize the common customers and improve operational performance goals.

Welcome to our company to negotiate business, we aer happy for your service.

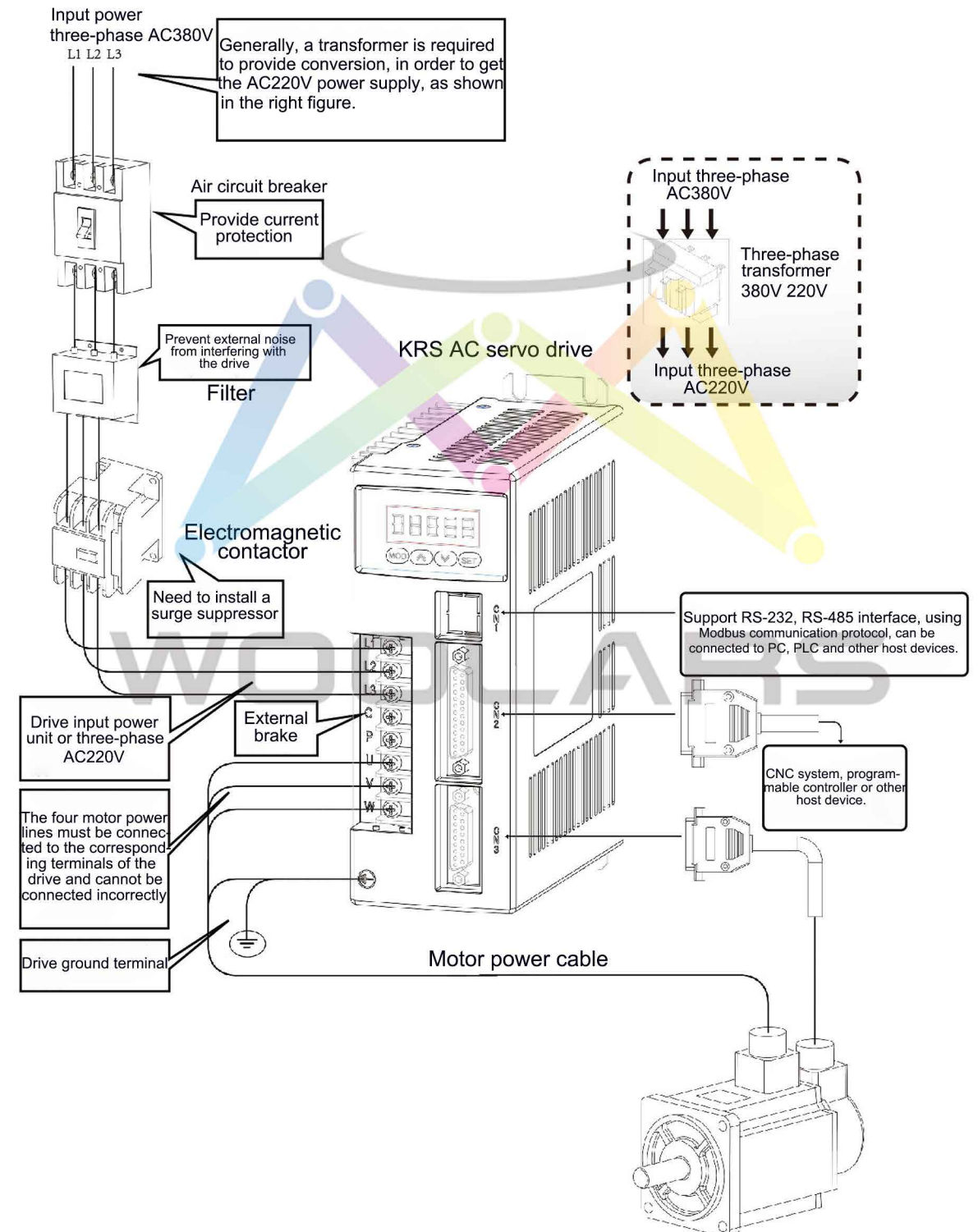
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## Drive specifications

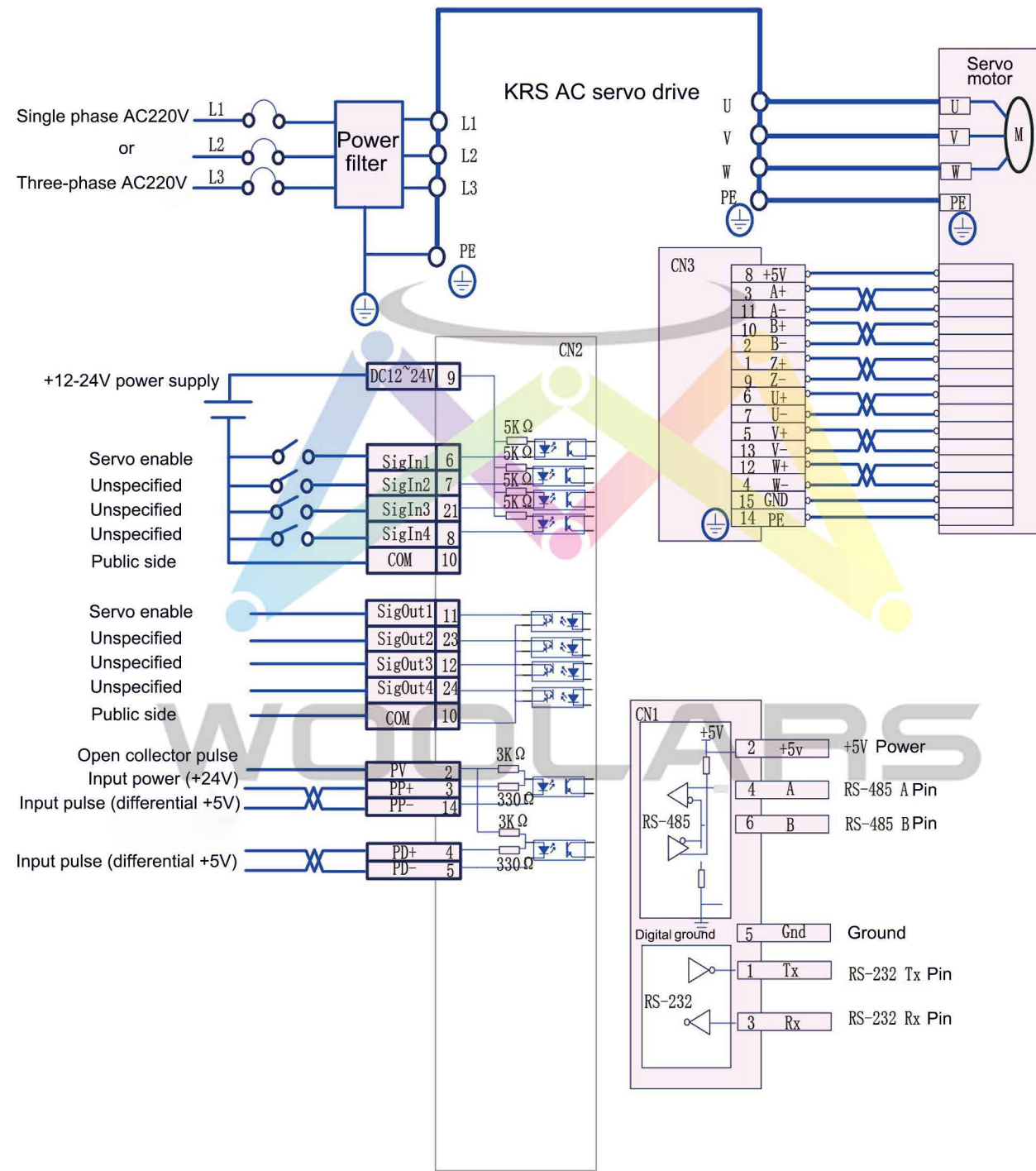
Input power		Single phase / three phase AC220V -15+10% 50/60Hz
Environment	Temperature	Work: 0-55℃ Storage: -20-80℃
	Humidity	<90% (No condensation)
	Vibration	<0.5G (4.9m/s <sup>2</sup> ), 10-60Hz (Non-continuous operation)
Control method		IGBT PWM sine wave control
Control mode		1. Position control (external pulse input or internal position command) 2. Speed control (external analog voltage input or internal speed command) 3. Position / speed control
Control characteristics	Speed frequency response	<400HZ
	Speed volatility	<±0.3 (load 0-100%), <±0.2 (power supply -15+10%) (value corresponds to rated speed)
	Speed ratio	1:5000
	Pulse frequency	<=500KHZ
Control input		1. Servo enable                      2. Alarm reset                      3. Emergency stop 4. Command pulse prohibit      5. Pulse deviation clear          6. Zero speed clamp 7. Forward travel limit          8. Reverse travel limit          9. Internal speed selection 1 10. Internal speed selection 2    11. Position / speed control switching 12. Internal position command selection 1    13. Internal position command selection 2 14. Internal position command trigger        15. Internal position command suspend
Control output		1. The servo is ready              2. Positioning completed          3. Zero deviation 4. Zero speed                      5. Alarm detection                  6. Emergency stop detection
Encoder feedback		2500p/r, 15-wire incremental, differential output.
Communication type		RS-232 / RS-485
Display and operation		5-digit LED display, 4 operation buttons.
Braking method		Dynamic braking with built-in/external brake
Cooling method		Air-cooled (heat transfer mode, high speed forced cooling fan)
Power range		≤7.5KW

## Drive wiring diagram

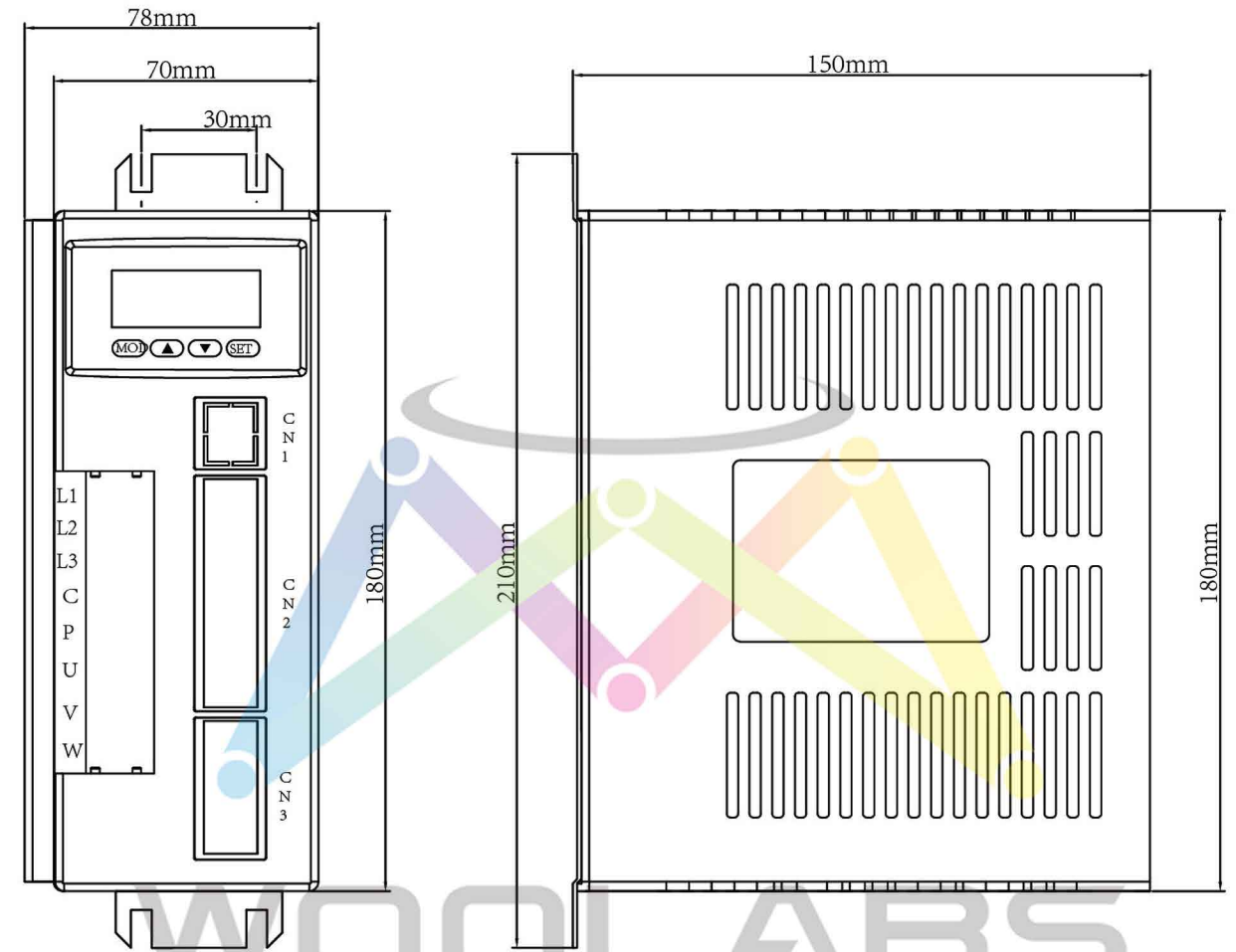




### Drive control wiring diagram



### Drive dimension



### 40A系列伺服电机参数表

Item:KRS 40ASeries



#### 规格 Specifications

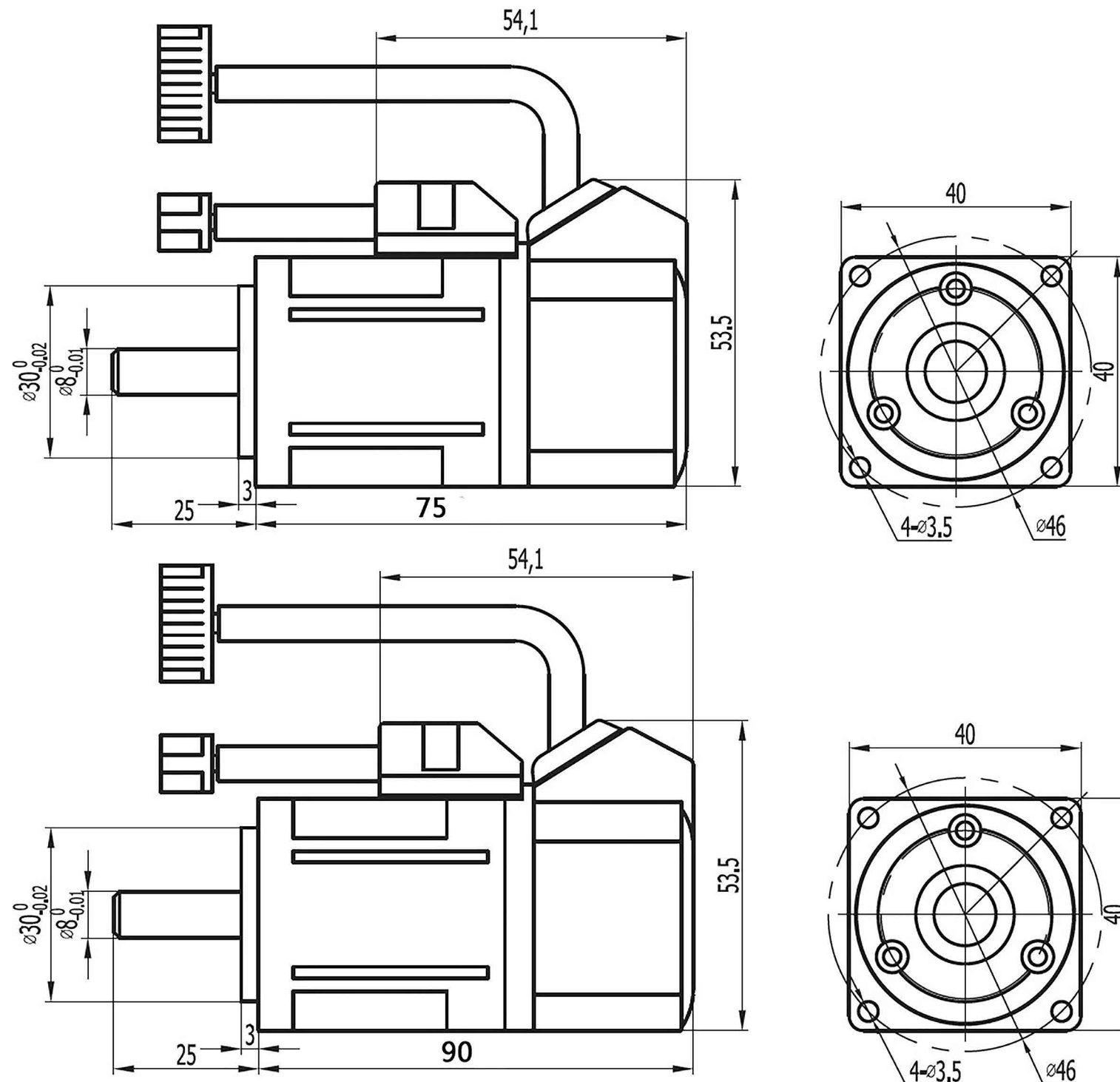
电机型号 Motor model	40ST-M00630A	40ST-M01330A
额定功率 Rated power (W)	50	100
额定线电压 Rated voltage (V)	220	220
额定线电流 Rated current (A)	0.4	0.9
额定转速 Rated speed (rpm)	3000	3000
额定力矩 Rated torque (N.m)	0.16	0.32
峰值力矩 Peak torque (N.m)	0.32	0.64
反电势 Voltage constant (V/1000r/min)	36.8	32.8
力矩系数 Torque coefficient (N.m/A)	0.4	0.36
转子惯量 Rotor inertia (Kg. m <sup>2</sup> )	0.025×10 <sup>-4</sup>	0.051×10 <sup>-4</sup>
绕组(线间)电阻(Ω) Line-Line Resistance	108	34
绕组(线间)电感(mH) Line-Line Inductance (mH)	108	40
电气时间常数 Electrical time Constant (MS)	1.0	1.18
重量 Weight (Kg)	0.32	0.47
编码器线数 (PPR) Encoder line number (PPR)	2500	
电机绝缘等级 Insulation class	Class B (130°C)	
防护等级 Safety class	Ip64	
使用环境 The operating of Environmental Conditions	环境温度: -20°C~+50°C 环境湿度: 相对湿度<90%(不结霜条件) Temperature: -20°C~+50°C Humidity: Below 90%RH NO dewing	
电机绕组插座 Motor winding plue	绕组引线 Winding lead wire 插座编号 Plug serial number	U (Red) 1 V (Yellow) 2 W (Blue) 3 PE (Yellow green/Black) 4
编码器插座 Encoder plug	信号引线 Signal lead wire 插座编号 Plug serial number 颜色 Color	5V 2 0V 3 B+ 4 Z- 5 U+ 6 Z+ 7 U- 8 A+ 9 V+ 10 W+ 11 V- 12 A- 13 B- 14 W- 15 PE 1

其它要求请联系我们的技术部  
Other special requirements please contact the KRS Technology to negotiate

#### 安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
- 2、尽量防止轴座震动, 以防止轴承的损坏。

- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
- 2 Striving to make the best of its shaft to prevent vibration and bearing damage.





### 60A系列伺服电机参数表

Item:KRS 60ASeries



#### 规格 Specifications

电机型号 Motor model	60ST-M00630A	60ST-M01330A	
额定功率 Rated power (KW)	0.2	0.4	
额定线电压 Rated voltage (V)	220	220	
额定线电流 Rated current (A)	1.4	2.5	
额定转速 Rated speed (rpm)	3000	3000	
额定力矩 Rated torque (N.m)	0.637	1.27	
峰值力矩 Peak torque (N.m)	1.91	3.9	
反电势 Voltage constant (V/1000r/min)	32.4	31.4	
力矩系数 Torque coefficient (N.m/A)	0.45	0.5	
转子惯量 Rotor inertia (Kg. m <sup>2</sup> )	0.175×10 <sup>-4</sup>	0.29×10 <sup>-4</sup>	
绕组(线间)电阻(Ω) Line-Line Resistance	6.8	2.6	
绕组(线间)电感(mH) Line-Line Inductance (mH)	30	15	
电气时间常数 Electrical time Constant (MS)	4.4	5.77	
重量 Weight (Kg)	1.2	1.68	
编码器线数 (PPR) Encoder line number (PPR)	2500		
电机绝缘等级 Insulation class	Class B (130°C)		
防护等级 Safety class	Ip64		
使用环境 The operating of Environmental Conditions	环境温度: -20°C~+50°C 环境湿度: 相对湿度<90%(不结霜条件) Temperature: -20°C~+50°C Humidity: Below 90%RH NO dewing		
电机绕组插座 Motor winding plue	绕组引线 Winding lead wire	插座编号 Plug serial number	U (Red) 1 V (Yellow) 2 W (Blue) 3 PE (Yellow green/Black) 4
编码器插座 Encoder plug	信号引线 Signal lead wire	插座编号 Plug serial number	5V 0V B+ Z- U+ Z+ U- A+ V+ W+ V- A- B- W- PE 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1
	颜色 Color		Red Black Green Yellow black Brown Yellow Brown yellow Blue Gray White Gray black Blue black Green black White black

其它要求请联系我们的技术部

Other special requirements please contact the KRS Technology to negotiate

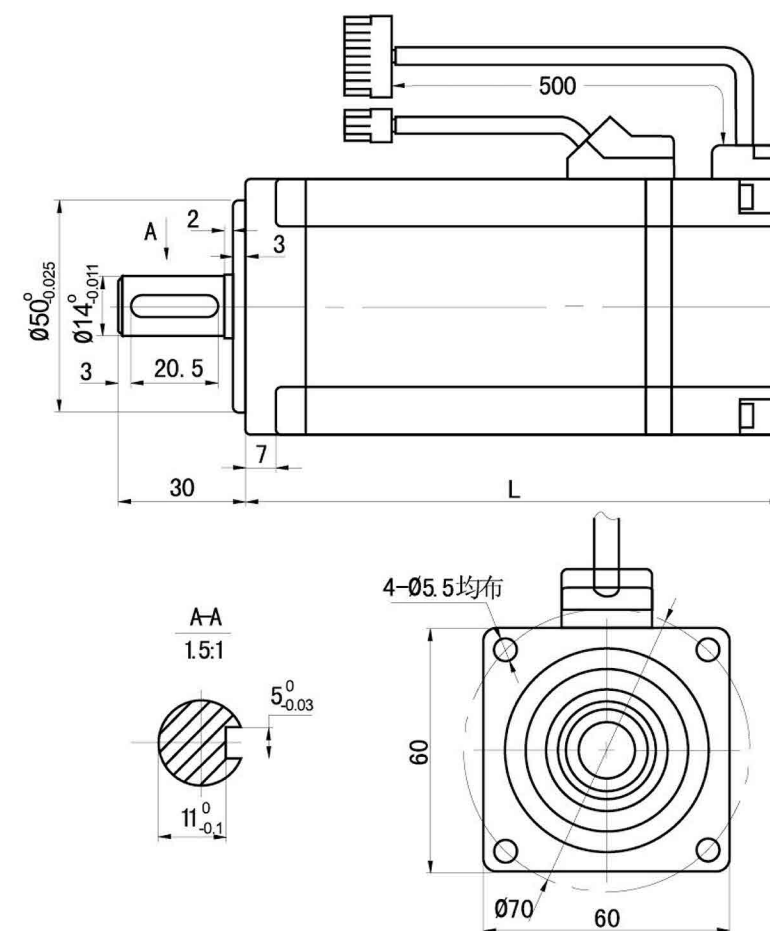
#### 安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
- 2、尽量防止轴座震动, 以防止轴承的损坏。

- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
- 2 Striving to make the best of its shaft to prevent vibration and bearing damage.

#### 外形尺寸图见下页:

型号	尺寸(L)
60ST-M00630A	111
60ST-M01330A	135



### 80系列伺服电机参数表

Item:KRS 80Series



#### 规格 Specifications

电机型号 Motor model	80ST-M01330	80ST-M02430	80ST-M03520	80ST-M04025												
额定功率 Rated power (KW)	0.4	0.75	0.73	1.0												
额定线电压 Rated voltage (V)	220	220	220	220												
额定线电流 Rated current (A)	2	3	3	4.4												
额定转速 Rated speed (rpm)	3000	3000	2000	2500												
额定力矩 Rated torque (N.m)	1.27	2.39	3.5	4												
峰值力矩 Peak torque (N.m)	3.8	7.1	10.5	12												
峰值电流 Peak current (A)	6	9	9	13.2												
反电势 Voltage constant (V/1000r/min)	40	48	71	56												
力矩系数 Torque coefficient (N.m/A)	0.64	0.8	1.17	0.9												
转子惯量 Rotor inertia (Kg.m <sup>2</sup> )	1.05 × 10 <sup>-4</sup>	1.82 × 10 <sup>-4</sup>	2.63 × 10 <sup>-4</sup>	2.97 × 10 <sup>-4</sup>												
绕组(线间)电阻 (Ω) Line-Line Resistance	4.44	2.88	3.65	1.83												
绕组(线间)电感 Line-Line Inductance (mH)	7.93	6.4	8.8	4.72												
电气时间常数 Electrical time Constant (MS)	1.66	2.22	2.4	2.58												
重量 Weight (Kg)	1.78	2.86	3.7	3.8												
编码器线数 (PPR) Encoder line number (PPR)	2500															
电机绝缘等级 Insulation class	Class B (130°C)															
防护等级 Safety class	Ip65															
使用环境 The operating of Environmental Conditions	环境温度: -20°C ~ +50°C    环境湿度: 相对湿度<90%(不结霜条件) Temperature: -20°C ~ +50°C    Humidity: Below 90%RH NO dewing															
电机绕组插座 Motor winding plug	绕组引线 Winding lead wire	U (红) U (red)	V (黄) V (yellow)	W (蓝) W (blue)	PE (黄绿/黑) PE (yellow, green/black)											
	插座编号 Plug serial number	1	2	3	4											
编码器插座 Encoder plug	信号引线 Signal lead wire	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1

其它要求请联系我们的技术部

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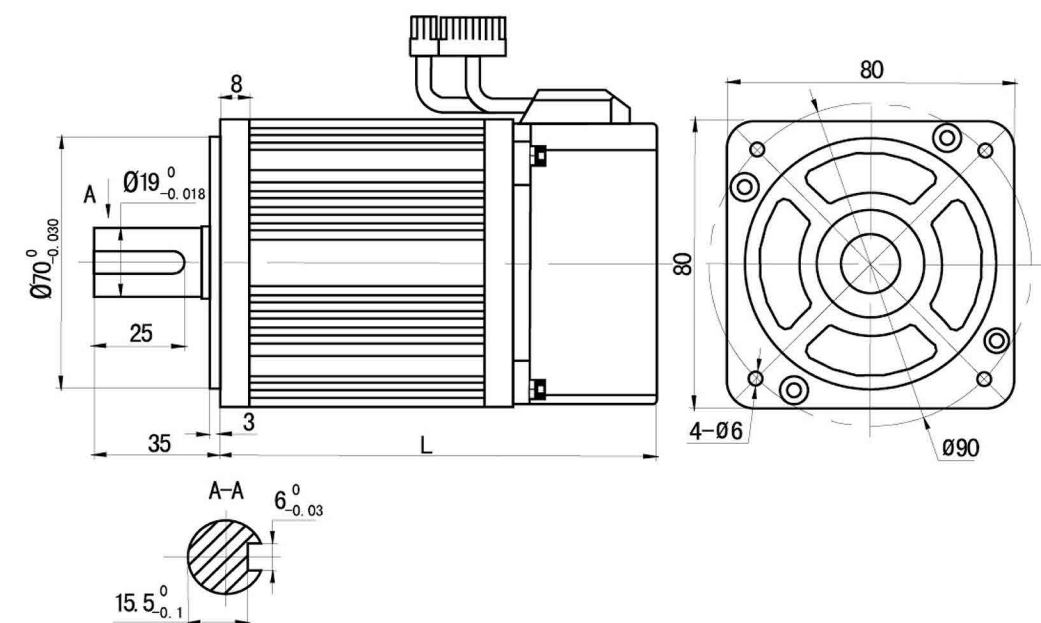
#### 安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
- 2、尽量防止轴座震动, 以防止轴承的损坏。

- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
- 2 Striving to make the best of its shaft to prevent vibration and bearing damage.

#### 安装尺寸 Installation Dimension: unit=mm

型号 Model	(L)
80ST-M01330	123
80ST-M02430	150
80ST-M03520	178
80ST-M04025	190





### 90系列伺服电机参数表

Item:KRS 90Series



#### 规格 Specifications

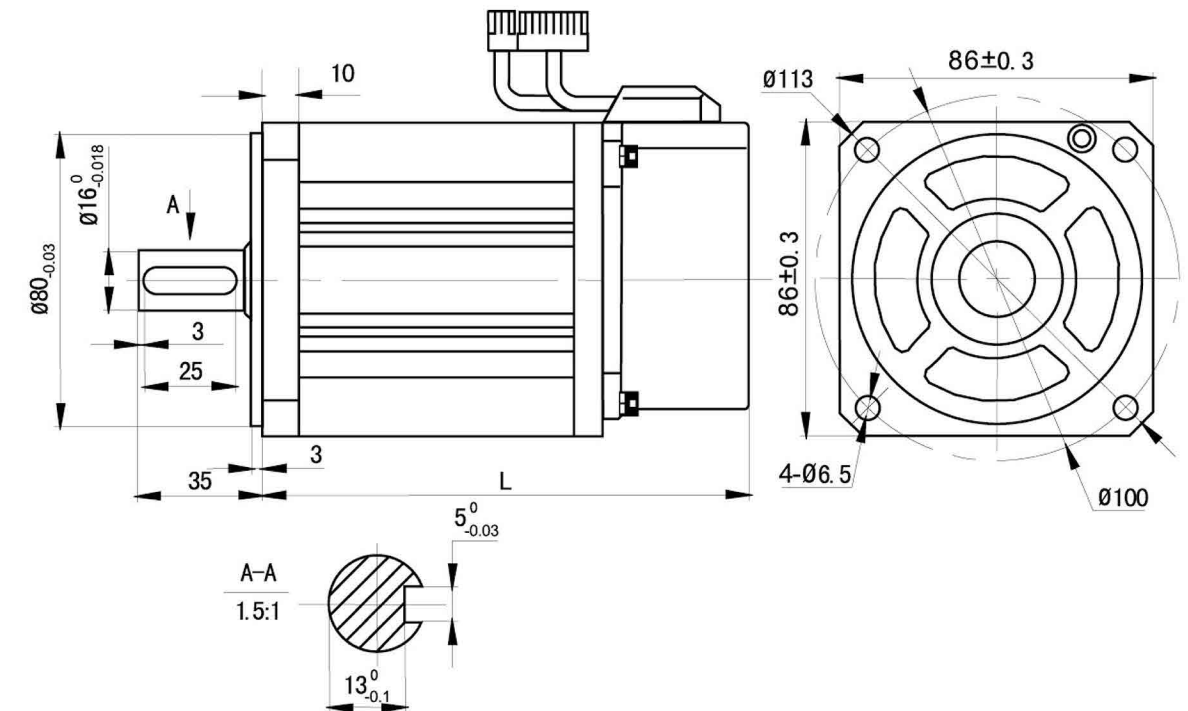
电机型号 Motor model	90ST-M02430	90ST-M03520	90ST-M04025													
额定功率 Rated power (KW)	0.75	0.73	1.0													
额定电压 Rated voltage (V)	220	220	220													
额定电流 Rated current (A)	3	3	4													
额定转速 Rated speed (rpm)	3000	2000	2500													
额定转矩 Rated torque (N.m)	2.4	3.5	4													
峰值转矩 Peak torque (N.m)	7.1	10.5	12													
峰值电流 Peak current (A)	9	9	12													
反电势 Voltage constant (V/1000r/min)	51	67	60													
力矩系数 Torque coefficient (N.m/A)	0.8	1.2	1.0													
转子惯量 Rotor inertia (Kg. m <sup>2</sup> )	2.45 × 10 <sup>-4</sup>	3.4 × 10 <sup>-4</sup>	3.7 × 10 <sup>-4</sup>													
绕组(线间)电阻 (Ω) Line-Line Resistance	3.2	4.06	2.69													
绕组(线间)电感 Line-Line Inductance (mH)	7.0	9.7	6.21													
电气时间常数 Electrical time Constant (MS)	2.2	2.39	2.3													
重量 Weight (Kg)	3.4	3.8	4.13													
编码器线数 (PPR) Encoder line number (PPR)	2500															
电机绝缘等级 Insulation class	Class B (130℃)															
防护等级 Safety class	Ip65															
使用环境 The operating of Environmental Conditions	环境温度: -20℃~+50℃ 环境湿度: 相对湿度<90%(不结霜条件) Temperature: -20℃~+50℃ Humidity: Below 90%RH NO dewing															
电机绕 插座 Motor winding plue	绕 引线 Winding lead wire	U (红) U (red)	V (黄) V (yellow)	W (蓝) W (blue)	PE (黄绿/黑) PE (yellow, green/black)											
	插座编号 Plug serial number	1	2	3	4											
编码器插座 Encoder plug	信号引线 Signal lead wire	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1

#### 安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
  - 2、尽量防止轴座震动, 以防止轴承的损坏。
- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
  - 2 Striving to make the best of its shaft to prevent vibration and bearing damage.

#### 安装尺寸 Installation Dimension: unit=mm

型号 Model	(L)
90ST-M02430	149
90ST-M03520	171
90ST-M04025	181



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### 110系列伺服电机参数表

Item:KRS 110Series



#### 规格 Specifications

电机型号 Motor model	110ST-M02030	110ST-M04020	110ST-M04030	110ST-M05030	110ST-M06020	110ST-M06030										
额定功率 Rated power (KW)	0.6	0.8	1.2	1.5	1.2	1.8										
额定线电压 Rated voltage (V)	220	220	220	220	220	220										
额定线电流 Rated current (A)	2.5	3.5	5.0	6.0	4.5	6.0										
额定转速 Rated speed (rpm)	3000	2000	3000	3000	2000	3000										
额定力矩 Rated torque (N.m)	2	4	4	5	6	6										
峰值力矩 Peak torque (N.m)	6	12	12	15	12	18										
反电势 Voltage constant (V/1000r/min)	56	79	54	62	83	60										
力矩系数 Torque coefficient (N.m/A)	0.8	1.14	0.8	0.83	1.3	1.0										
转子惯量 Rotor inertia (Kg.m <sup>2</sup> )	$0.31 \times 10^{-3}$	$0.54 \times 10^{-3}$	$0.54 \times 10^{-3}$	$0.63 \times 10^{-3}$	$0.76 \times 10^{-3}$	$0.76 \times 10^{-3}$										
绕组(线间)电阻(Ω) Line-Line Resistance	3.6	2.41	1.09	1.03	1.46	0.81										
绕组(线间)电感 Line-Line Inductance (mH)	8.32	7.3	3.3	3.43	4.7	2.59										
电气时间常数 Electrical time Constant (ms)	2.3	3	3.0	3.33	3.2	3.2										
重量 Weight (Kg)	4.5	5.5	5.5	6.1	6.7	6.7										
编码器线数 (PPR) Encoder line number (PPR)	2500															
电机绝缘等级 Insulation class	Class B (130°C)															
防护等级 Safety class	Ip65															
使用环境 The operating of Environmental Conditions	环境温度: -20°C~+50°C 环境湿度: 相对湿度<90% (不结霜条件) Temperature: -20°C~+50°C Humidity: Below 90%RH NO dewing															
电机绕组插座 Motor winding plug	绕组引线 Winding lead wire	U		V		W	PE									
	插座编号 Plug serial number	2		3		4	5									
编码器插座 Encoder plug	信号引线 Signal lead wire	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1

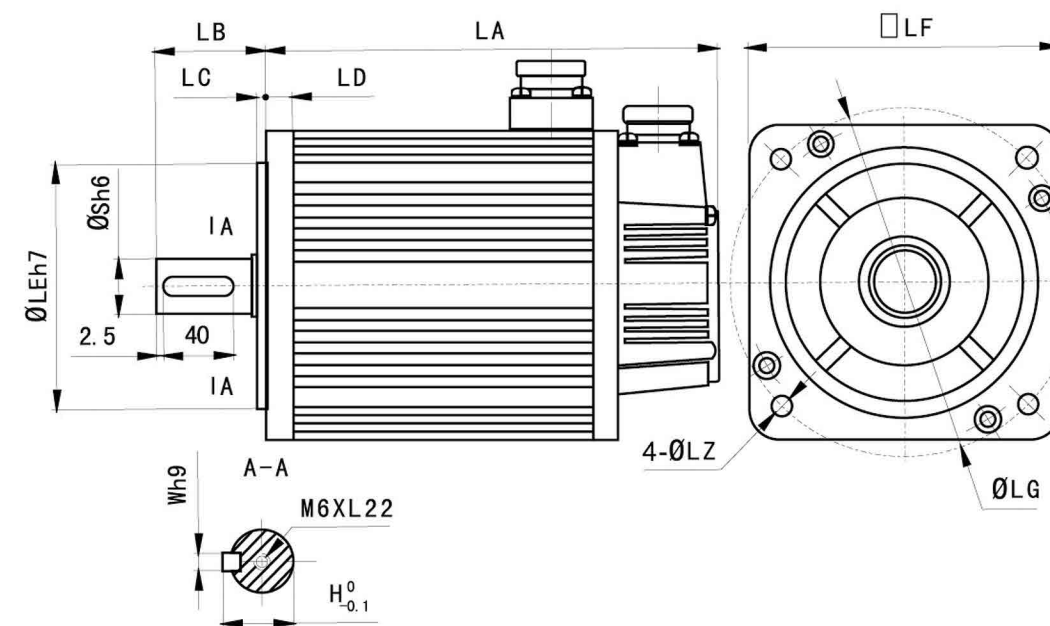
其它要求请联系我们的技术部  
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#### 安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
  - 2、尽量防止轴座震动, 以防止轴承的损坏。
- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
  - 2 Striving to make the best of its shaft to prevent vibration and bearing damage.

#### 安装尺寸 Installation Dimension: unit=mm

	110系列 (series)			
额定转矩 (N.m) Rated torque (N.m)	2	4	5	6
LA	159	189	204	219
LB	55	55	55	55
LC	5	5	5	5
LD	12	12	12	12
LE	95	95	95	95
LF	110	110	110	110
LG	130	130	130	130
LZ	9	9	9	9
S	19	19	19	19
H	21.5	21.5	21.5	21.5
W	6	6	6	6



### 130系列伺服电机参数表

Item:KRS 130Series



### 规格 Specifications

电机型号 Motor model	130ST-M04025	130ST-M05025	130ST-M06015	130ST-M06025	130ST-M07725	130ST-M10010	130ST-M10015	130ST-M10025	130ST-M15015	130ST-M15025						
额定功率 Rated power (KW)	1.0	1.3	0.95	1.5	2.0	1.0	1.5	2.6	2.3	3.8						
额定线电压 Rated voltage (V)	220	220	220	220	220	220	220	220	220	220						
额定线电流 Rated current (A)	4.0	5.0	6.0	6.0	7.5	4.5	6.0	10	9.5	13.5						
额定转速 Rated speed (rpm)	2500	2500	1500	2500	2500	1000	1500	2500	1500	2500						
额定力矩 Rated torque (N.m)	4	5.0	6	6	7.7	10	10	10	15	15						
峰值力矩 Peak torque (N.m)	12	15	18	18	22	20	25	25	30	30						
反电势 Voltage constant (V/1000r/min)	72	68	65	65	68	140	103	70	114	67						
力矩系数 Torque coefficient (N.m/A)	1.0	1.0	1.0	1.0	1.03	2.2	1.67	1.0	1.58	1.11						
转子惯量 Rotor inertia (Kg.m <sup>2</sup> )	0.85 × 10 <sup>-3</sup>	1.06 × 10 <sup>-3</sup>	1.26 × 10 <sup>-3</sup>	1.26 × 10 <sup>-3</sup>	1.53 × 10 <sup>-3</sup>	1.94 × 10 <sup>-3</sup>	1.94 × 10 <sup>-3</sup>	1.94 × 10 <sup>-3</sup>	2.77 × 10 <sup>-3</sup>	2.77 × 10 <sup>-3</sup>						
绕组(线间)电阻 (Ω) Line-Line Resistance	2.76	1.84	1.21	1.21	1.01	2.7	1.29	0.73	1.1	0.49						
绕组(线间)电感 Line-Line Inductance (mH)	6.42	4.9	3.87	3.87	2.94	8.8	5.07	2.45	4.45	1.68						
电气时间常数 Electrical time Constant (MS)	2.32	2.66	3.26	3.26	3.80	3.26	3.93	3.36	4.05	3.43						
重量 Weight (Kg)	7.7	8.2	8.9	8.9	10	11.5	11.5	11.5	14.4	14.4						
编码器线数 (PPR) Encoder line number (PPR)	2500															
电机绝缘等级 Insulation class	Class B (130°C)															
防护等级 Safety class	Ip65															
使用环境 The operating of Environmental Conditions	环境温度: -20°C~+50°C 环境湿度: 相对湿度<90% (不结霜条件) Temperature: -20°C~+50°C Humidity: Below 90%RH NO dewing															
电机绕组插座 Motor winding plug	绕组引线 Winding lead wire	U		V		W		PE								
	插座编号 Plug serial number	2		3		4		5								
编码器插座 Encoder plug	信号引线 Signal lead wire	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1

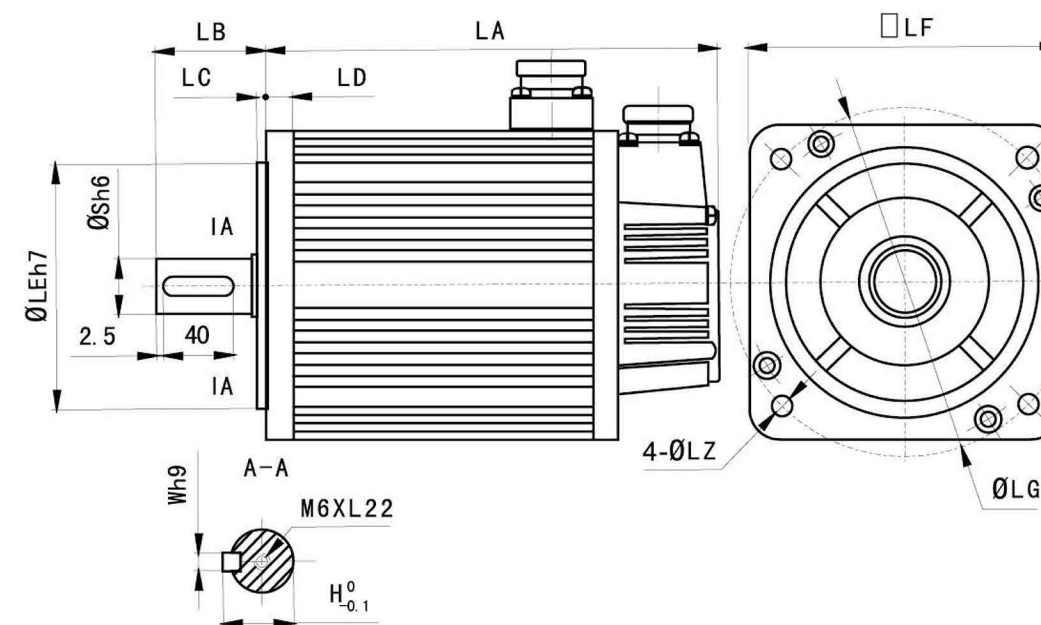
其它要求请联系我们的技术部  
Other special requirements please contact the KRS Technology to negotiate

### 安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
  - 2、尽量防止轴座震动, 以防止轴承的损坏。
- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
  - 2 Striving to make the best of its shaft to prevent vibration and bearing damage.

### 安装尺寸 Installation Dimension: unit=mm

130系列 (series)										
额定转矩 Rated torque (N.m)	4	5	6	7.7	10			15		
					1000rpm	1500rpm	2500rpm	1500rpm	2500rpm	
LA	166	171	179	192	213			209	241	231
LB	57	57	57	57	57			57		
LC	5	5	5	5	5			5		
LD	14	14	14	14	14			14		
LE	110	110	110	110	110			110		
LF	130	130	130	130	130			130		
LG	145	145	145	145	145			145		
LZ	9	9	9	9	9			9		
S	22	22	22	22	22			22		
H	24.5	24.5	24.5	24.5	24.5			24.5		
W	6	6	6	6	6			6		







150系列伺服电机参数表  
150mm servo motors specifications

规格 Specifications

电机型号 Motor model	150ST-M15025	150ST-M15020	150ST-M18020	150ST-M23020	150ST-M27020											
额定功率 Rated power(KW)	3.8	3.0	3.6	4.7	5.5											
额定线电压 Rated voltage(V)	220	220	220	220	220											
额定线电流 Rated current(A)	17	14	17	21	24											
额定转速 Rated speed(rpm)	2500	2000	2000	2000	2000											
额定力矩 Holding torque(N.m)	15	15	18	23	27											
峰值力矩 Peak torque(N.m)	30	30	36	46	54											
反电势 Voltage constant(V/1000r/min)	59	70	71	72	64											
力矩系数 Torque coefficient(N.m/A)	0.88	1.07	1.05	1.09	1.1											
转子惯量 Rotor inertia(Kg.m <sup>2</sup> )	3.88×10 <sup>-3</sup>	3.88×10 <sup>-3</sup>	4.6×10 <sup>-3</sup>	5.8×10 <sup>-3</sup>	6.8×10 <sup>-3</sup>											
绕组(线间)电阻 Line-Line Resistance(Ω)	0.23	0.34	0.255	0.2	0.125											
绕组(线间)电感 Line-Line Inductance(mH)	1.08	1.55	1.3	1.06	0.7											
电气时间常数 Mechanical time-constant(Ms)	4.7	4.56	5.1	5.3	5.6											
重量 Weight(Kg)	15	15	17	20.4	22.7											
编码器线数 Encoder line number(PPR)	2500															
电机绝缘等级 Insulation class	Class F															
防护等级 Safety class	IP65															
使用环境 The operating of Environmental Conditions	环境温度: -20℃ ~ +40℃ 环境湿度: 相对湿度<90% (不结霜条件) Temperature: -20℃~+40℃ Humidity Below 90%RH No dewing															
电机绕组插座 Motor winding plue	绕组引线 Winding lead wire	U		V		W		PE								
	插座编号 Plug serial numberr	2		3		4		1								
光电脉冲编码器插座 (15芯) Photoelectric encoder socket (15 pin)	信号引线 Signal lead wire	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1
绝对值编码器插座 (7芯) Absolute encoder socket (7 pin)	信号引线 Signal lead wire	E-		E+		SD-		0V		SD+		+5V		PE		
	插座编号 Plug serial number	2		3		4		5		6		7		1		

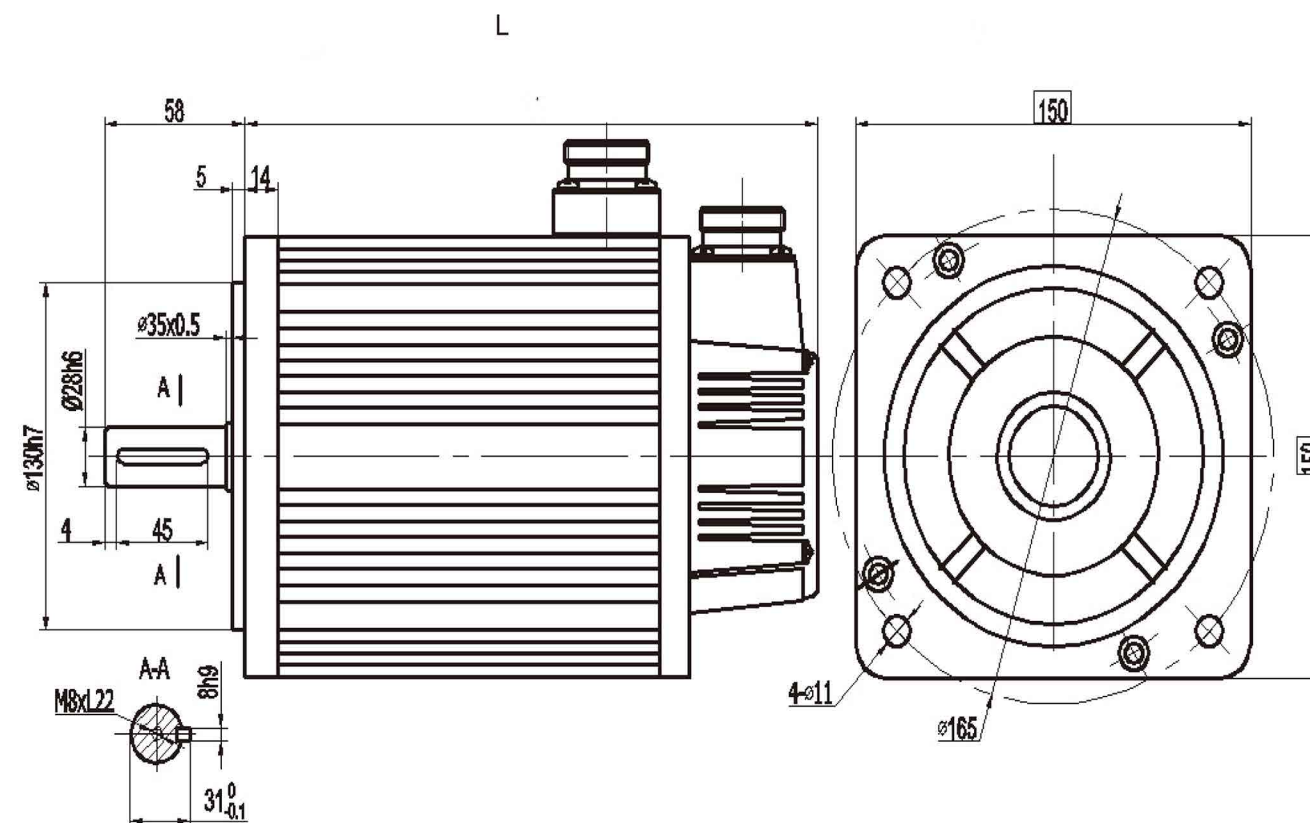
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安装注意 Installation precaution:

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
  - 2、尽量防止轴座振动, 以防止轴承的损坏。
1. Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
  2. Striving to make the best of its shaft to prevent vibration and bearing damage.

安装尺寸 Installation Dimension: unit=mm

电机型号 Motor model	150系列(series)				
额定转矩(N.m) Rated torque(N.m)	15		18	23	27
	2500rpm	2000rpm			
L 不带抱闸 Without brake	230	230	248	278	302
L 带电磁抱闸 With Electromagnetic brake	303	303	321	351	375



180系列伺服电机参数表  
Item:KRS 180Series



规格 Specifications

电机型号 Motor model	180ST-M17215		180ST-M19015		180ST-M21520		180ST-M27010									
额定功率 Rated power (KW)	2.7		3.0		4.5		2.9									
额定线电压 Rated voltage (V)	220	380	220	380	220	380	220	380								
额定线电流 Rated current (A)	10.5	6.5	12	7.5	16	9.5	12	7.5								
额定转速 Rated speed (rpm)	1500		1500		2000		1000									
额定力矩 Rated torque (N.m)	1702		19		21.5		27									
峰值力矩 Peak torque (N.m)	43		47		53		67									
反电势 Voltage constant (V/1000r/min)	112	167	97	158	84	140	138	224								
力矩系数 Torque coefficient (N.m/A)	1.64	2.65	1.58	2.5	1.34	2.26	2.25	3.6								
转子惯量 Rotor inertia (Kg.m <sup>2</sup> )	3.4×10 <sup>-3</sup>		3.8×10 <sup>-3</sup>		4.7×10 <sup>-3</sup>		6.1×10 <sup>-3</sup>									
绕组(线间)电阻(Ω) Line-Line Resistance	0.7	1.47	0.4	1.15	0.24	0.71	0.48	1.37								
绕组(线间)电感 Line-Line Inductance (mH)	3.5	7.8	2.42	6.4	1.45	4	3.26	8.6								
电气时间常数 Electrical time Constant (MS)	5	5.3	6	5.57	6	5.6	6.79	6.27								
重量 Weight (Kg)	19.5		20.5		22.2		25.5									
编码器线数 (PPR) Encoder line number (PPR)	2500															
电机绝缘等级 Insulation class	Class F (130°C)															
防护等级 Safety class	Ip65															
使用环境 The operating of Environmental Conditions	环境温度: -20°C~+50°C 环境湿度: 相对湿度<90%(不结霜条件) Temperature: -20°C~+50°C Humidity: Below 90%RH NO dewing															
电机绕 插座 Motor winding plug	绕组引线 Winding lead wire	U		V		W		PE								
	插座编号 Plug serial number	2		3		4		1								
编码器插座 Encoder plug	信号引线 Signal lead wire	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1

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Other special requirements please contact the KRS Technology to negotiate

安装注意 Installation precaution

- 1、安装/拆卸部位到电机轴末端时, 请不要用力敲打轴, 以防止敲坏轴另一端的编码器。
  - 2、尽量防止轴座震动, 以防止轴承的损坏。
- 1 Installation/disassembly components coupled to the motor shaft end, do not hit shaft hard to prevent the other side of motor shaft encoder was knocked out bad.
- 2 Striving to make the best of its shaft to prevent vibration and bearing damage.

规格 Specifications

电机型号 Motor model	180ST-M027015		180ST-M35010		180ST-M35015		180ST-M48015									
额定功率 Rated power (KW)	4.3		3.7		5.5		7.5									
额定线电压 Rated voltage (V)	220	380	220	380	220	380	220	380								
额定线电流 Rated current (A)	16	10	16	10	24	12	32	20								
额定转速 Rated speed (rpm)	1500		1000		1500		1500									
额定力矩 Rated torque (N.m)	27		35		35		48									
峰值力矩 Peak torque (N.m)	67		70		70		96									
反电势 Voltage constant (V/1000r/min)	103	172	134	223	90	181	94	156								
力矩系数 Torque coefficient (N.m/A)	1.69	2.7	2.2	3.5	1.45	2.9	1.5	2.4								
转子惯量 Rotor inertia (Kg.m <sup>2</sup> )	6.1×10 <sup>-3</sup>		8.6×10 <sup>-3</sup>		8.6×10 <sup>-3</sup>		9.3×10 <sup>-3</sup>									
绕组(线间)电阻(Ω) Line-Line Resistance	0.28	0.796	0.31	0.93	0.14	0.62	0.104	0.273								
绕组(线间)电感 Line-Line Inductance (mH)	1.74	4.83	3.28	9.1	1.0	4	0.77	2.14								
电气时间常数 Electrical time Constant (MS)	6.2	6	10.58	9.78	7.14	6.45	7.4	7.8								
重量 Weight (Kg)	25.5		30.5		30.5		40									
编码器线数 (PPR) Encoder line number (PPR)	2500															
电机绝缘等级 Insulation class	Class F (130°C)															
防护等级 Safety class	Ip65															
使用环境 The operating of Environmental Conditions	环境温度: -20°C~+50°C 环境湿度: 相对湿度<90%(不结霜条件) Temperature: -20°C~+50°C Humidity: Below 90%RH NO dewing															
电机绕 插座 Motor winding plug	绕组引线 Winding lead wire	U		V		W		PE								
	插座编号 Plug serial number	2		3		4		1								
编码器插座 Encoder plug	信号引线 Signal lead wire	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
	插座编号 Plug serial number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1

安装尺寸 Installation Dimension: unit=mm

