Stable quality is fundamental to our survival

Quality service is the premise of our continued development

Customer satisfaction is our only goal

ONKE 欧诺克

Product gallery

Specialising in servo drives, servo motors and automation control systems.

AC Brushless Servo Drive Motor

Shenzhen ONKE Technology Co., Ltd.

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深圳市欧诺克科技有限公司

Shenzhen ONKE Technology Co., Ltd.

匠心制造
Craftsmanship

精益求精
Excellence

Directory

COMPANY PROFILE

Company Prople

Ltd. was founded in 2010, is a professional R & D production and sales of motors and drives of high-tech enterprises, research and development and production of cost-effective various types of motors and drives, keen insight into the market, with the times innovation to meet market demand.

Main business: DC servo drive, DC servo motor, AC servo drive, AC servo motor, linear motor drive, voice coil motor drive, DC brushless drive, DC brushless motor, steering wheel motor drive all-in-one, gearhead motor drive all-in-one, motor drive all-in-one, CANopen bus, EtherCAT bus, dedicated motion control servo system and automation control system. Over the past ten years, we have established mutually beneficial and win-win co-operation with many famous domestic and foreign companies by virtue of our exquisite technology.

Continuously research and develop all kinds of motors and actuators to meet the needs of 'mobile robot (AGV/AMR)' and other industries. Help customers to improve the quality of space and production efficiency. The spirit of customer service, service to society, for customers to solve problems as a responsibility, is the large and medium-sized enterprises preferred partner.

Company culture

Business philosophy: customer-centred! To meet the needs of our customers with honesty, high quality and satisfactory service.

Company goal: to create a first-class servo motor, drive manufacturers.

Company's values: achievement of customers, committed to customer satisfaction and success.

Entrepreneurial innovation: the pursuit of speed and efficiency, focusing on innovation that has an impact on customers and the company.

Precision and truthfulness: Fact-based decision-making and business management.

Honesty and Integrity: Build trust and responsible business.

Enterprise Mission: Continuous commitment to leading technology and service excellence for the enhancement of human manufacturing.

Enterprise Core: Responsibility is the root and integrity is the foundation.

Enterprise Spirit: Innovation changes the world, passion creates the future.

OUR TEAM

Our team

We are a professional team, our members have many years of servo drive, servo motor professional and technical background, from the domestic well-known servo drive, servo motor company's first-line backbone.

We are a young team, our average age is only 30 years old, full of vitality and innovative spirit. We are a dedicated team, we firmly believe that the brand of servo drives and servo motors comes from the trust of customers.

We are a dream team, we come from all over the world, because there is a common dream, to be a really good servo drive, servo motor enterprises, to provide customers with the most reliable servo drive, servo motor products.

Quality Control

Quality control is meticulous

Our mission

Implementing progress of precise transmission,
Help made in China.
Let mankind eijoy a better life and realize more dreams

Rigour is a pursuit, and excellence is an attitude!
With a complete production chain of servo drives and motors, the company has been practising the beauty of transmission for ten years without forgetting its original intention, and has made every effort to control the quality meticulously!

Patents for inventions

- Non-sinusoidal vibration drive control system

Utility model

- A simple economic servo drive
- A servo motor with electronically controlled contacts for easy welding
- A kind of wheel cutting flying shear servo system control component
- A kind of wheel cutting flying shear servo system controller
- A servo motor with controllable magnetic flux
- A DC bus servo drive

Software works

- CNC wire machine control system software V1.0
- CNC Screw Machine Control System Software V1.0
- CNC Wire Cutting Machine Control System Software V1.0
- CNC Shear Chase Control System Software V1.0
- Servo system debugging test software V1.0
- Intelligent Servo Drive Inspection and Maintenance Software V1.0

Servo Drive General Introduction

Servo Drive General Introduction

DH series programmable intelligent servo drive is a general-purpose, high-performance, AC-powered, compact, all-digital servo drive. It is mainly used for position, speed and torque control of linear (DDL), torque (DDR), voice coil, brushed and brushless servo motors. It can be operated in three modes: stand-alone programmable control (Stand-alone), external control, or distributed network CAN (CANopen), RS232, RS485 (plug-in), and control, and it can support incremental quadrature encoder, analogue sine/cosine (Sin/Cos) encoder, resolver (plug-in Resolver), and digital Hall feedback encoder. encoders. The multi-mode encoder ports are used as inputs or outputs depending on the basic setup of the drive, and as inputs for feedback from secondary encoders to create a dual-loop position control system.

Servo Drive Model Description

DH PC -220B 15 -OP E B

A series of
DC/DE/DE2/BC/BN/
BC2/DH/BH/BL

Input order
P:Pulse A:Analog C:CANopen R:RS485

power supply voltage
110:110VAC 220:220VAC 380:380VAC
A:Single-phase (old) B:Three-phase

Rated current
05:5Amps(3.5Arms) 10:10Amps(7Arms)
15:15Amps(10.5Arms)

Attention to:
1.The driver supply voltage must be greater than or equal to the rated voltage of the motor

特殊功能
OP:Pulse output R:Rotary cutting
F:Tracing shears

Feedback
E:Incremental A/B orthogonal encoder
A:Absolute encoder (Tamagawa RS485)
S:Analogue sine-cosine encoder
H:Digital Hall

Brake unit
B:Brake unit

2.The rated current of the driver must be greater than or equal to the rated current of the motor

Servo Driver Model Description

DH Series driver specifications summary table

Model	Service voltage	Rated current Amps(Arms)	Peak current Amps(Arms)6S	Feedback type	Overall dimensions	Weight
DHPC-110B40-OPEB	110VAC	40A(28A)	80A(56A)	Incremental	204*140*80mm	1.9kg
DHPC-110B60-OPEB		60A(42A)	120A(84A)		285*188*114mm	3.8KG
DHPC-220B05-OPEB	220VAC	5A(3.5A)	15A(10.5A)		194*113.5*58mm	0.9kg
DHPC-220B10-OPEB		10A(7A)	20A(14A)			
DHPC-220B15-OPEB		15A(10A)	37.5(26.5A)		204*140*60mm	1.2kg
DHPC-220B20-OPEB		20A(14A)	60A(42A)		204*140*80mm	1.9kg
DHPC-220B25-OPEB		25A(17A)	62.5A(44A)			
DHPC-220B35-OPEB		35A(24.5A)	105A(73.5A)		285*188*114mm	3.8kg
DHPC-220B50-OPEB		50A(35A)	120A(84A)			
DHPC-380B05-OPEB	380VAC	5A(3.5A)	15A(10.5A)		204*140*60mm	1.2kg
DHPC-380B10-OPEB		10A(7A)	30A(21A)		204*140*80mm	1.9kg
DHPC-380B15-OPEB		15A(10A)	37.5A(26.5A)			
DHPC-380B20-OPEB		20A(14A)	60A(42A)		285*188*114mm	3.8kg
DHPC-380B25-OPEB		25A(17A)	62.5A(44A)			
DHPC-380B30-OPEB		30A(21A)	70A(49A)			
DHPC-380B35-OPEB		35A(24.5A)	70A(49A)			
DHPC-380B50-OPEB		50A(35A)	80A(56A)			

BL Series driver specifications summary table

Model	Service voltage	Rated current Arms	Peak current Arms pk10S	Feedback type	Overall dimensions	Weight
BLPC/R-220B03-OPE/AB	220VAC	3.5A	10.5A	Incremental or Absolute	194*113.5*58mm	0.9kg
BLPC/R-220B07-OPE/AB		7A	14A			
BLPC/R-220B10-OPE/AB		10A	26.5A		204*140*60mm	1.2kg
BLPC/R-220B14-OPE/AB		14A	42A		204*140*80mm	1.9kg
BLPC/R-220B17-OPE/AB		17A	44A			
BLPC/R-220B25-OPE/AB		24.5A	73.5A		285*188*114mm	3.8kg
BLPC/R-220B35-OPE/AB		35A	84A			
BLPC/R-380B03-OPE/AB	380VAC	3.5A	10.5A		204*140*60mm	1.2kg
BLPC/R-380B07-OPE/AB		7A	21A		204*140*80mm	1.9kg
BLPC/R-380B10-OPE/AB		10A	26.5A			
BLPC/R-380B14-OPE/AB		14A	42A		285*188*114mm	3.8kg
BLPC/R-380B17-OPE/AB		17A	44A			
BLPC/R-380B20-OPE/AB		21A	49A			
BLPC/R-380B25-OPE/AB		24.5A	49A			
BLPC/R-380B35-OPE/AB		35A	56A			

DH Series Technical Specifications

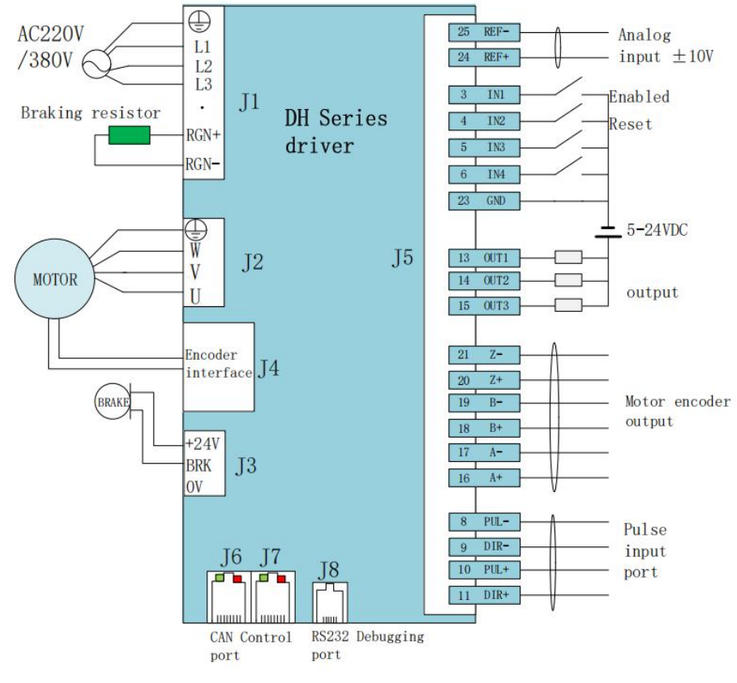
- ◆Control modes: position, speed, torque;
- ◆Sampling frequency (time) Current loop: 15KHz(66.7us) ;Speed/position loop:3KHz(330μs)
- ◆Motion modes: electronic gear, electronic cam, proportional linkage, point-to-point;
- ◆Programmable protection: position error, over-current, over-voltage or under-voltage, I2t , output short-circuit overload and other multi-faceted protection functions;
- ◆Drive motor type: brushless motor, brush motor, linear motor, voice coil motor, etc.;
- ◆Position feedback: incremental quadrature encoder, Hall, scale, analogue sine/cosine (Sin/Cos) encoder, resolver (plus rotary resolver card);
- ◆Impulse response up to 2MHz with digital filtering;
- ◆RS232 serial interface with baud rate up to 115KB;
- ◆CAN2.0 local bus, compatible with CANopen DS-402, baud rate up to 1MHz;
- ◆Power supply voltage: AC110/220V/380V;

Position control	Command control mode			Pulse, ±10V analogue input, CANopen, function generator Trace indexing, software programming
	Input signal	Pulse instruction	Input pulse pattern	The command can be direction + pulse, ORTHOGONAL pulse of A and B phases, and CW/CCW pulse.
			Signal format	Differential input, open collector
			Maximum pulse frequency	Differential input :(Max. 2Mpps); Open collector :(Max. 500Kpps)
		Analog instruction	Voltage range	Input voltage range ±10V
			Input impedance	Differential input impedance=5KΩ
Speed control	Command control mode			PWM, ±10V analog, function generator, software programming
	Input signal	PWM	Polarity	PWM=0∽100%，polarity=1/0
			Nonpolar	PWM=50% +/-50%
			Frequency range	Minimum 1kHz, maximum 100kHz
			Minimum pulse width	220ns
		Analog instruction	Voltage range	Input voltage range ±10V
			Input impedance	Differential input impedance=5KΩ
Current control	Command control mode			PWM, ±10V analog, function generator, software programming
	Input signal	PWM	Polarity	PWM=0∽100%，polarity=1/0
			Nonpolar	PWM=50% +/-50%
			Frequency range	Minimum 1kHz, maximum 100kHz
			Minimum pulse width	220ns
		Analog instruction	Voltage range	Input voltage range ±10V
			Input impedance	Differential input impedance=5KΩ
I/O signal	Digital input IN		Number of Ports	12(IN6, IN7, IN8, IN9 and IN10 are high-speed ports, IN5 is used for motor temperature protection)
			Signal format	NPN(low active)
			Settable function	Servo enable, external reset, positive/reverse limit, motor running stop, high-speed analog acquisition control, PWM synchronous signal input, high-speed pulse input, etc
	Digital Output OUT		Number of Ports	3
			Signal format	NPN(low effective), can withstand a maximum current of 300mAdc, maximum voltage of 30Vdc
			Settable function	Fault signal, brake control, PWM sync signal, custom event track state, position trigger, program control

DH Series Technical Specifications

Function	LED indicator			Drive status indication, communication indication
	Communications functions	RS-232	Baud rate	9600-115200
			Agreement	Full duplex mode, ASCII or binary format
		CAN	Baud rate	20kbit/s-1Mbit/s
			Agreement	Canopen application layer DS-301V4.02
			Equipment	Dsp-402 device driver and motion control
	Protection function			Overvoltage, overcurrent, undervoltage, overload, overheating, abnormal encoder, too large position tracking error and other protection
Use environment	Installation location			Non-corrosive gas, flammable gas, etc
	Altitude			Below 1000 m
	Temperature			-20℃~+50℃
	Humidity			5%~95%RH，No condensation of water droplets
	Resistance to vibration/impact			Less than 4.9m/s2/ less than 19.6m/s2
Feedback	Digital A/B quadrature encoder (-E, max. 5M line/s)			
	Auxiliary encoder input/output (full closed-loop control/-OP)			
	Analogue sin/cos encoder (-S) optional			
	Rotary Transformer(-R/external) Optional			
	Digital Hall (-H (U/V/W, 120 degrees electrical phase difference)			

DH Typical wiring diagram



Description：

1.Input terminals IN1,IN2,IN3,IN4,IN5,IN 11,IN12 are common ports that can receive NPN and PNP signals. The maximum input voltage is 24V;

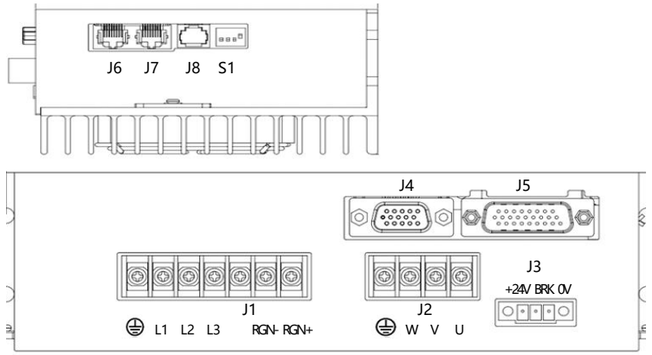
2.IN6, IN7,IN8,IN9,IN10 are high-speed input ports with the highest input voltage of 5V.

DH Series Terminal Definition

DH Series Terminal Definition

J1 Main power input terminal

PIN	Define	Designation
1	⏚	GND
2	L1	110/220/380VAC
3	L2	
4	L3	
5		
6	RGN-	Brake Resistor Interface
7	RGN+	



J2 Motor Terminal

PIN	Define	Designation
1	⏚	Motor cable PE
2	W	Motor cable W
3	V	Motor cable V
4	U	Motor cable U

J3 Internal 24v output terminal

PIN	Define	Designation
1	+24v	24v output 200mA (Do not supply power to the motor lock)
2	BRK	Connect the motor brake cable
3	0V	0V

J6&J7 CAN communication link

PIN	Define	Designation
1	CANH	CANH signal
2	CANL	CANL signal
3/7	GND	Communication power grounding

J8 RS-232 Debugging

PIN	Define	Designation
2	RXD	RS232 communication receiver
3	GND	Communication power grounding
5	TXD	RS232 communication sender

J5 Control signal terminal

Pin	Define	Function	Pin	Define	Function
1	FG	Grounding	14	OUT2	custom
2	IN5	Motor temperature	15	OUT3	custom
3	IN1	Enable	16	EONA+	Motor encoder output signal Z-
4	IN2	custom	17	EONA-	Motor encoder output signal Z+
5	IN3	custom	18	EONB+	Motor encoder output signal B-
6	IN4	custom	19	EONB-	Motor encoder output signal B+
7	IN6	custom	20	EONZ+	Motor encoder output signal A-
8	IN7	custom	21	EONZ-	Motor encoder output signal A+
9	IN8	custom	22	+5V	5V power output(400mA)
10	IN9	custom	23	GND	power ground
11	IN10	custom	24	Ref+	Analog quantity + input
12	IN11	custom	25	Ref-	Analog quantity - input
13	OUT1	custom	26	IN12	custom

DH Series outline dimension drawing

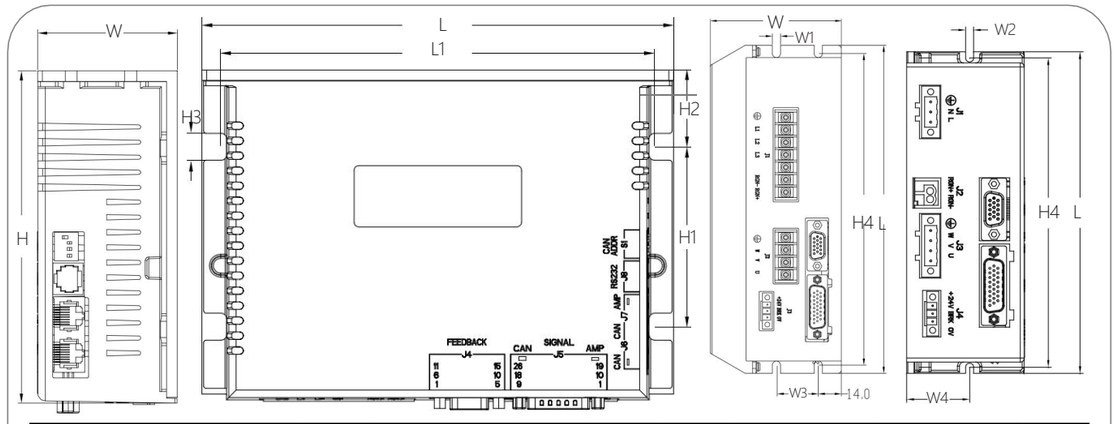
J4 Motor encoder feedback

PIN	Define	PIN	Define	PIN	Define
1	A+	6	Z-	11	W+
2	A-	7	U+	12	SIN-
3	B+	8	SIN+	13	+5V
4	B-	9	V+	14	0V
5	Z+	10	COS+	15	COS-

S1 SW Indicates the station number of the DIP switch

SW switch Number	Corresponding stand no
1	1
2	2
3	4
4	8

DH Series External Dimensions



Model	L	L1	W	W1	W2	W3	W4	H	H1	H2	H3	H4
DHPC-220B05-EB	194	184	58	4-5.0	/	25	/	113.5	60	32	4-4.8	184
DHPC-220B10-EB	194	184	58	4-5.0	/	25	/	113.5	60	32	4-4.8	184
DHPC-110B40-EB	204	190	60	4-5.0	/	25	/	140	60	45	4-4.8	190
DHPC-220B15-EB	204	190	60	4-5.0	/	25	/	140	60	45	4-4.8	190
DHPC-380B05-EB	204	190	60	4-5.0	/	25	/	140	60	45	4-4.8	190
DHPC-220B20-EB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
DHPC-220B25-EB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
DHPC-380B10-EB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
DHPC-380B15-EB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
DHPC-110B60-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
DHPC-220B35-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
DHPC-220B50-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
DHPC-380B20-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
DHPC-380B25-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
DHPC-380B30-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
DHPC-380B35-EB	285	275	114	4-5.0	/	73	/	188	/	/	/	275

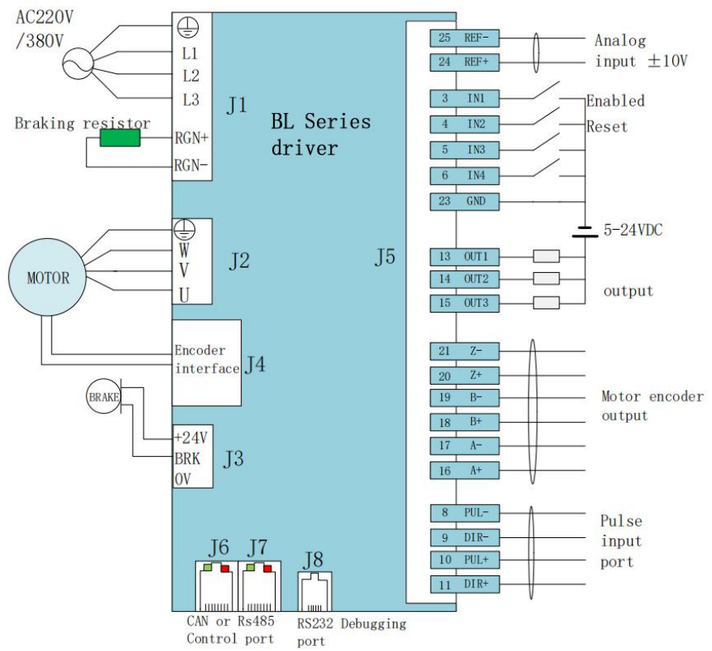
BL Series Technical Specifications

- ◆Control modes: position, speed, torque;
- ◆Sampling frequency(time) Current loop: 16KHz(62.5us) ;Speed/position loop: 2KHz(250μs);
- ◆Bandwidth: 1.5kHz for current loop, varying with parameter adjustment and load inductance;
- ◆Programmable protection: position error, over-current, over-voltage or under-voltage, I^2t, output short-circuit overload and other multi-faceted protection functions;
- ◆Drive motor type: permanent magnet servo motor, brushless motor;
- ◆Position feedback: incremental quadrature encoder, Hall, resolver (plus conversion card); Absolute A protocol;
- ◆Impulse response up to 2MHz with digital filtering;
- ◆RS232 serial interface with baud rates up to 115KB;
- ◆RS485 modbus RTU at baud rates up to 115KB;
- ◆CAN2.0 local bus, compatible with CANopen DS-402, baud rate up to 1MHz;
- ◆Power supply voltage: AC110/220V/380V;

Position control	Command control mode			Pulse, ±10V analogue input, CANopen, RS485 MODBUS RTU
	Input signal	Pulse instruction	Input pulse pattern	Three types of commands are available: 'Direction + Pulse', 'A and B phase quadrature pulse', and 'CW/CCW pulse'
			Signal format	Open collector
			Maximum pulse frequency	Open collector: (max. 500Kpps)
		Analog instruction	Voltage range	Input voltage range ±10V
			Input impedance	Differential input impedance=5KΩ
Speed control	Command control mode			Pulse, ±10V analogue input, CANopen, RS485 MODBUS RTU
	Input signal	PWM	Polarity	PWM=0∽100%，polarity=1/0
			Nonpolar	PWM=50% +/-50%
			Frequency range	Minimum 1kHz, maximum 100kHz
			Minimum pulse width	220ns
		Analog instruction	Voltage range	Input voltage range ±10V
			Input impedance	Differential input impedance=5KΩ
Current control	Command control mode			Pulse, ±10V analogue input, CANopen, RS485 MODBUS RTU
	Input signal	PWM	Polarity	PWM=0∽100%，polarity=1/0
			Nonpolar	PWM=50% +/-50%
			Frequency range	Minimum 1kHz, maximum 100kHz
			Minimum pulse width	220ns
		Analog instruction	Voltage range	Input voltage range ±10V
			Input impedance	Differential input impedance=5KΩ
I/O signal	Digital input IN		Number of Ports	12(IN6, IN7, IN8, IN9 and IN10 are high-speed ports, IN5 is used for motor temperature protection)
			Signal format	NPN (low active)
			Settable function	Servo enable, external reset, forward/reverse limit, motor run stop, high-speed pulse input, etc.
	Digital output OUT		Number of Ports	3
			Signal format	NPN (active low), withstand maximum current 300mAdc, maximum voltage 30Vdc
			Settable function	Fault signal, brake control, PWM sync signal, custom event track state, position trigger, program control

Function	LED indicator			Drive status indication, communication indication
	Communications functions	RS-232	Baud rate	9600-115200
			Agreement	Full duplex mode, ASCII or binary format
		RS-485	Baud rate	9600-115200
			Agreement	modbus RTU
		CAN	Baud rate	20kbit/s-1Mbit/s
			Agreement	Canopen application layer DS-301V4.02
			Equipment	Dsp-402 device driver and motion control
	Protection function			Overvoltage, overcurrent, undervoltage, overload, overheating, abnormal encoder, too large position tracking error and other protection
Use environment	Protection function			Non-corrosive gas, flammable gas, etc
	Altitude			Below 1000 m
	Temperature			-20℃~+50℃
	Humidity			5%~95%RH，No condensation of water droplets
	Resistance to vibration/impact			Less than 4.9m/s2/ less than 19.6m/s2
Feedback	Digital A/B quadrature encoder (-E, max. 5M line/s)			
	Auxiliary encoder input/output (full closed-loop control/-OP)			
	Rotary Transformer(-R/external) Optional			
	Digital Hall (-H (U/V/W, 120 degrees electrical phase difference)			
	Absolute encoder (A17) optional			

BL Typical wiring diagram



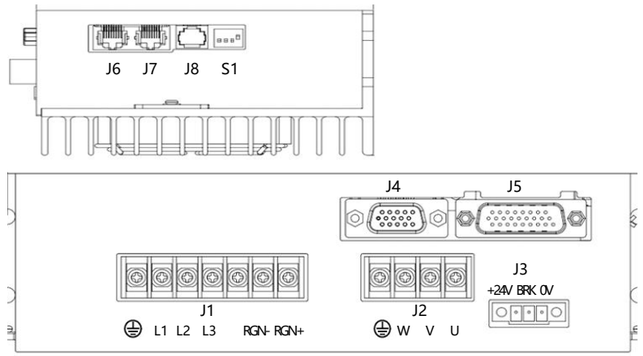
Description：
1.Input terminals IN1,IN2,IN3,IN4,IN5,IN 11,IN12 are common ports that can receive NPN and PNP signals. The maximum input voltage is 24V.
2. IN6, IN7,IN8,IN9,IN10 are high-speed input ports with the highest input voltage of 5V.

BL Series Terminal Definition

BL Series Terminal Definition

J1 Main power input terminal

PIN	Define	Designation
1	⏚	GND
2	L1	220/380VAC
3	L2	
4	L3	
5		
6	RGN-	Brake Resistor Interface
7	RGN+	



J2 Motor Terminal

PIN	Define	Designation
1	⏚	Motor cable PE
2	W	Motor cable W
3	V	Motor cable V
4	U	Motor cable U

J3 Internal 24v output terminal

PIN	Define	Designation
1	+24v	24v output 500ma
2	BRK	Connect the motor brake cable
3	0V	0V

J6&J7 CAN(or RS485)communication link

PIN	Define	Designation
1	CANH(RS485_A)	CANH signal (RS485_A)
2	CANL(RS485_B)	CANL signal (RS485_B)
3/7	GND	Communication power grounding

J8 RS-232 Debugging

PIN	Define	Designation
2	RXD	RS232 communication receiver
3	GND	Communication power grounding
5	TXD	RS232 communication sender

J5 Control signal terminal

Pin	Define	Function	Pin	Define	Function
1	FG	Grounding	14	OUT2	custom
2	IN5	Motor temperature	15	OUT3	custom
3	IN1	Enable	16	EONA+	Motor encoder output signal Z-
4	IN2	custom	17	EONA-	Motor encoder output signal Z+
5	IN3	custom	18	EONB+	Motor encoder output signal B-
6	IN4	custom	19	EONB-	Motor encoder output signal B+
7	IN6	custom	20	EONZ+	Motor encoder output signal A-
8	IN7	custom	21	EONZ-	Motor encoder output signal A+
9	IN8	custom	22	+5V	5V power output(400mA)
10	IN9	custom	23	GND	power ground
11	IN10	custom	24	Ref+	Analog quantity + input
12	IN11	custom	25	Ref-	Analog quantity - input
13	OUT1	custom	26	IN12	custom

BL Series outline dimension drawing

J4 Motor encoder feedback

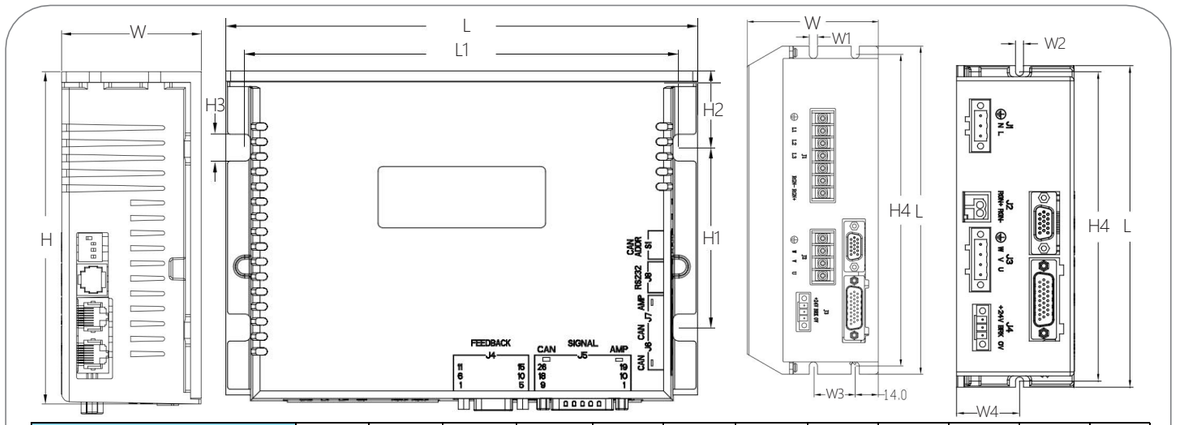
PIN	Define	PIN	Define	PIN	Define
1	A+	6	Z-	11	W+
2	A-	7	U+	12	Temperature switch 2
3	B+(DAT+)	8		13	+5V
4	B-(DAT-)	9	V+	14	0V
5	Z+	10	NTC1 /Temperature switch1	15	NTC2

Note:
1. *If you need NTC resistance temperature sensor input function, connect to the 10-pin position and 15-pin position, please specify when placing an order;
2. *If you need the temperature switch input function, connect to the 10-pin position and 12-pin position, please specify when placing an order.

S1 SW Indicates the station number of the DIP switch

SW switch Number	Corresponding stand no
1	1
2	2
3	4
4	8

BL Series External Dimensions



型号	L	L1	W	W1	W2	W3	W4	H	H1	H2	H3	H4
BLPC/R-220B03-OPE/AB	194	174	58	4-5.0	/	25	/	113.5	60	32	4-4.8	174
BLPC/R-220B07-OPE/AB	194	174	58	4-5.0	/	25	/	113.5	60	32	4-4.8	174
BLPC/R-220B10-OPE/AB	204	190	60	4-5.0	/	25	/	140	60	45	4-4.8	190
BLPC/R-380B03-OPE/AB	204	190	60	4-5.0	/	25	/	140	60	45	4-4.8	190
BLPC/R-220B14-OPE/AB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
BLPC/R-220B17-OPE/AB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
BLPC/R-380B07-OPE/AB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
BLPC/R-380B10-OPE/AB	204	190	80	4-5.0	/	25	/	140	/	/	/	190
BLPC/R-220B25-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
BLPC/R-220B35-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
BLPC/R-380B14-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
BLPC/R-380B17-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
BLPC/R-380B20-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
BLPC/R-380B25-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275
BLPC/R-380B35-OPE/AB	285	275	114	4-5.0	/	73	/	188	/	/	/	275

Driver Application Areas

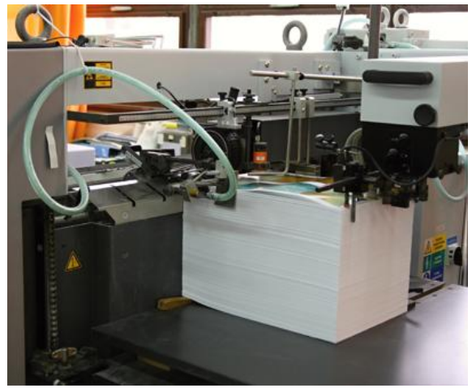
DH and BL Series Application Areas

Servo drive machine used in a variety of servo motors, robotics field, packaging machinery, textile machinery, plastic machinery and glass equipment, handling machinery, transmission machinery and other automation equipment field, control system, can be converted to the input voltage signal to the motor shaft of the mechanical output, dragging the controlled components, so as to achieve the purpose of control.

Robotics field

Packaging machines

Injection molding machine equipment



Printing marking equipment

Fabric Locking Machine

Pillow packing machines

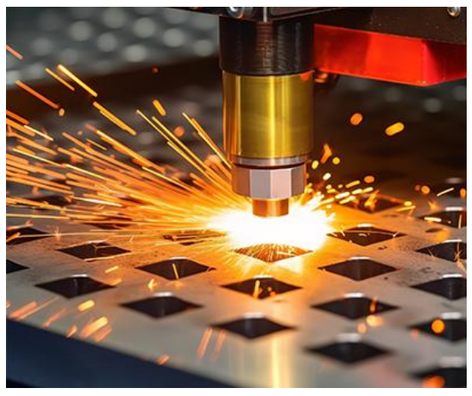
Textile machinery

Glass Cutting Machines

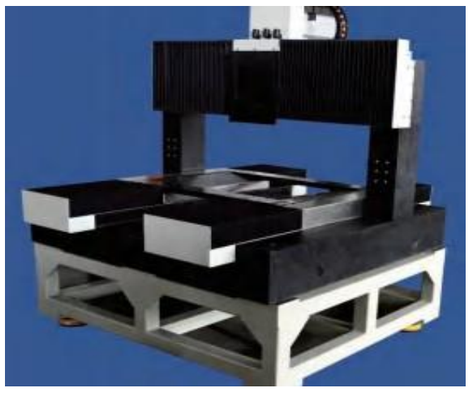
Paper transport equipment

Food Filling Machines

Conveyor systems



Laser processing equipment



Linear motors

Rotary direct-drive torque motors

Servo control system

Peripheral Accessories

CR090-MRTU CAN-485

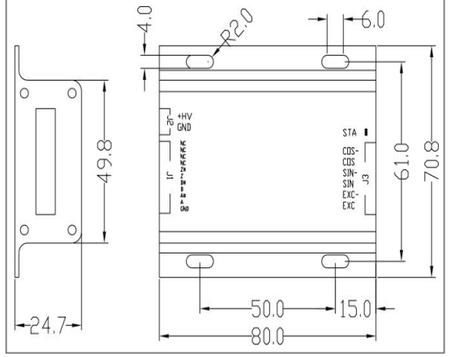
Product Overview:

The CAN-RS485 converter realizes the conversion between the CAN bus interface and the RS485 level serial port. It CAN conveniently connect microcontroller such as single chip microcomputer, ARM and servo driver to CAN bus network to realize data sending and receiving in industrial field. The module can be widely used in industrial control, automotive electronics, security monitoring and other fields.

Model Summary:

Model	Input voltage	Remote Control Terminal
CR090-MRTU	18~90VDC	MRTU
CR180-MRTU	18~180VDC	MRTU

Overall dimensions:



RS10-1003I Rotary card

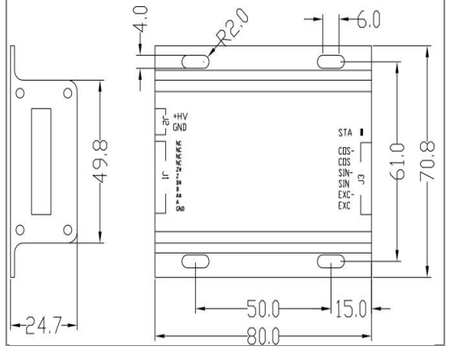
Product Overview:

The rotary decoding board is mainly used for rotary decoding, which can convert the rotary signal into the signal format of the photoelectric encoder (A+, A-, B+, B-, Z+, Z-), and the output digit is 10 bits, corresponding to the simulation incremental encoder is 1024 PPR.

Model Summary:

Model	Input voltage	Encoder accuracy
RS10-1003I09	18~90VDC	1024 PPR
RS10-1003I18	18~180VDC	1024 PPR

Overall dimensions:



Drive Peripheral Accessories

Peripheral Accessories

Braking resistor

Product Overview:

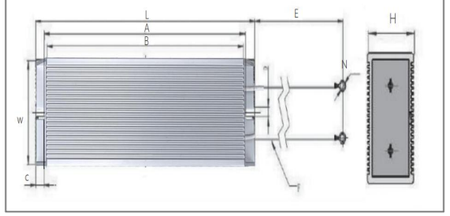
Brake resistance: is a kind of aluminum shell resistance, mainly used in the mechanical system of the servo drive control motor to stop quickly, to help the motor convert the regenerative electric energy generated by the rapid stop into heat energy.

Model Summary:

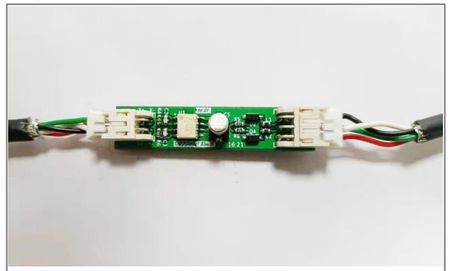
Model	Power	Resistance value
300W 2R	300W	2R
300W 4R	300W	4R
300W 8R	300W	8R
600W 2R	600W	2R
600W 4R	600W	4R
1000W 4R	1000W	4R

Overall dimensions:

Power (W)	Resistance value (Ω)	Rotten length (L)	Breadth (W)	altitude (H)	Length of front (B)	pitch row (A)	groove width (D)	Length of cable (E)
300	2	215	60	30	175	195	5.5	300
300	4	215	60	30	175	195	5.5	300
300	8	215	60	30	175	195	5.5	300
600	4	300	60	30	260	280	5.5	300
600	8	300	60	30	260	280	5.5	300
1000	4	330	60	30	290	310	5.5	300

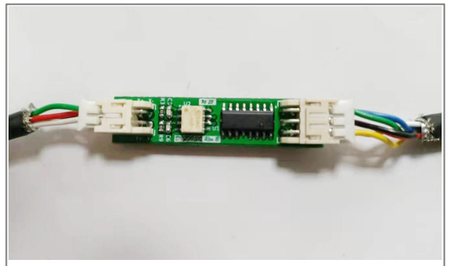


Differential switch set photoelectric isolation card



Differential to photoelectric isolator is the function of electrical isolation between signals. Can be encoder, servo drive and other output differential signal isolation conversion, directly connected to the PLC, motion control cards and other machines that can only receive open set signals, to facilitate the connection between the equipment, while the converter adopts optoelectronic isolation can improve the system's ability to resist interference, saving system resources.

Open set to differential photoisolation card



Differential optoisolator can convert differential/open-collector pulse signals into differential signals, and at the same time achieve the function of electrical isolation between the two signals. The encoder, servo drive and other output signals can be isolated and converted to differential output, extending the signal transmission distance and improving the system anti-interference, convenient for the power supply system is not the same between the equipment connection, saving system resources.

Tuning line

RS-232 serial cable RJ11 to DB9P for SMS modem and various conversion devices, easy to achieve the conversion between the computer USB interface to the general serial port COM. Provides fast access to computers and laptops without serial ports.

Motor introduction and model description

Servo motor comprehensive introduction

AC servo permanent magnet synchronous motor and the corresponding servo drive device supporting the composition of the ONKE servo control system, can be widely used in machine tools, textiles, plastics, printing and dyeing, printing, building materials, packaging, woodworking, chemical industry and other fields.

The motor consists of stator, rotor and high-precision feedback components (e.g. photoelectric encoder, resolver, etc.). It adopts high-performance rare earth permanent magnet material to form air gap magnetic field and has the following characteristics:

- Compact structure, high power density;
- Medium inertia, fast response speed;
- Ultra-high endowment coercivity rare-earth permanent magnet material; strong anti demagnetisation capability;
- Constant torque output over almost the entire speed range;
- Small low-speed torque pulsation; high balance precision, smooth high-speed operation;
- Low noise and vibration; fully sealed design; high cost performance.

Servomotor Model Description

80TM -024 30 F 5 -E B NS

Flange Mounting Size
40/60/80/110/130/180
TM:Surface-mounted
BM:Embedded

Rated torque
R16:0.16NM 013:1.3NM 024:2.4NM
050:5NM 190:19NM 480:48NM

Rated speed
30:3000Rpm 15:1500Rpm 20:2000Rpm

Rated voltage
F:220VAC G:380VAC N:110VAC

Polar logarithm
5:5 pairs of poles 10:10 pairs of poles

Non-standard codes
NS:Non-standard shaft
NC:Non-standard flange
F:With fan

Brake
B:With brake

Encoder Feedback
E:Optical incremental A/B quadrature
C:Magnetic incremental A/B quadrature
A17:Optical absolute 17bit
C17:Magneto absolute 17bit
R:Rotary Transformer
H:Digital Hall

Remarks: 1.E default E25, means 2500PPR photoelectric incremental;

3.A17, denoting the photoelectric absolute value of 17bit;

2.C defaults to C25, indicating 2500PPR magneto incremental;

4.C17, denoting the magneto-electric absolute value of 17bit.

Motor Application Areas

Servomotor Application Areas

AC servo motors are used in various industrial equipment, medical industry, robotics industry, new energy industry, laser industry, automation industry, building materials industry, packaging industry, and control systems, which can convert voltage signals into torque and speed to control mechanical components so as to achieve the purpose of operation.

Logistics automation

Robotics field

New energy field

Laser device

Industrial wire cutters

Lead screw

Medical equipment

Packaging equipment

Servo control system

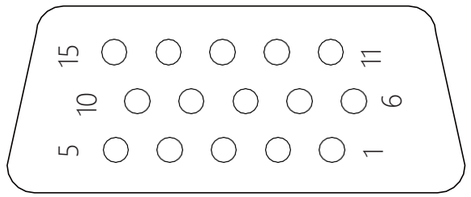
Motor Terminal Definition

Feedback Connector

Socket Numbers	YEGN	RD	BU	BK
Signal leads	PE	U	V	W

Power Line Socket

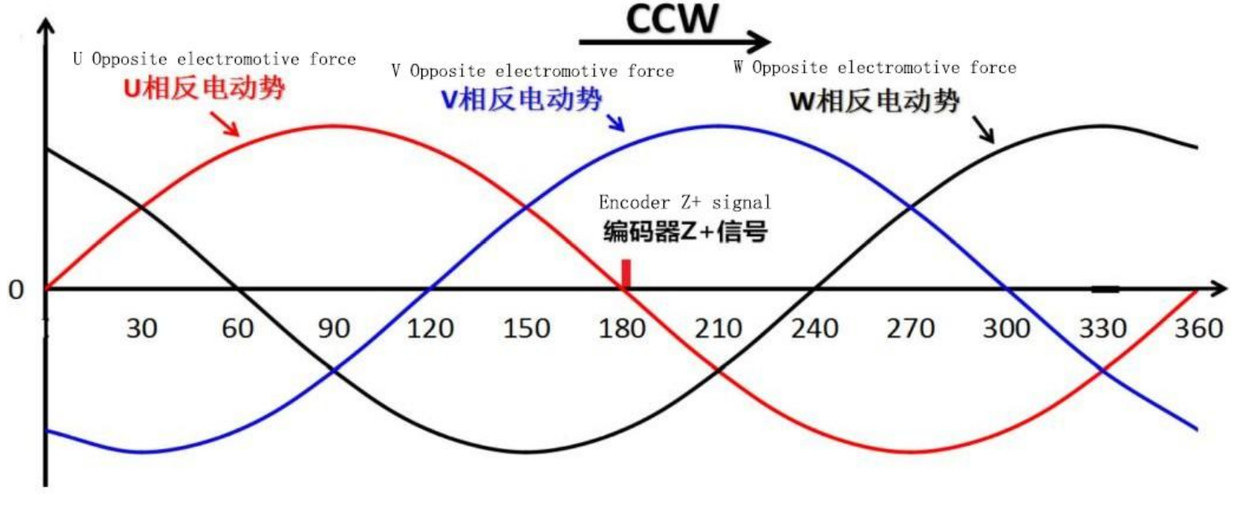
DB15 PIN terminal male



Encoder Socket

AC servo motor																
Socket Numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Signal lead	A+	A-	B+	B-	Z+	Z-	U+		V+		W+		5V	0V		
Color	BU	BU BK	GN	GN BK	YE	YE BK	BN		GY		WH		RD	BK		

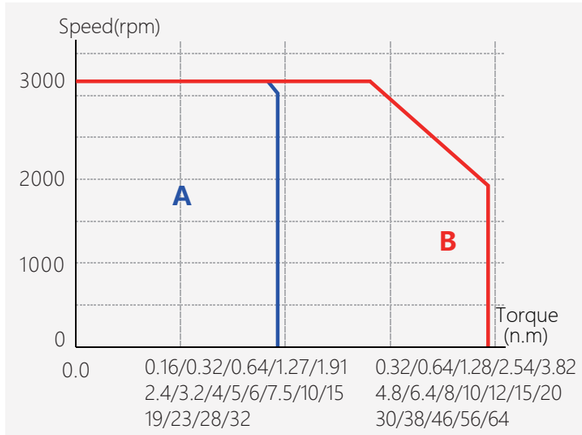
Phase relation between encoder zero and motor



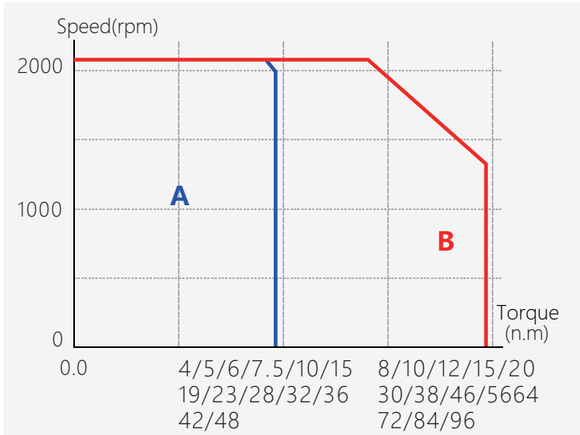
Motor characteristic curve

Torque Characteristic

Torque-speed characteristic curve



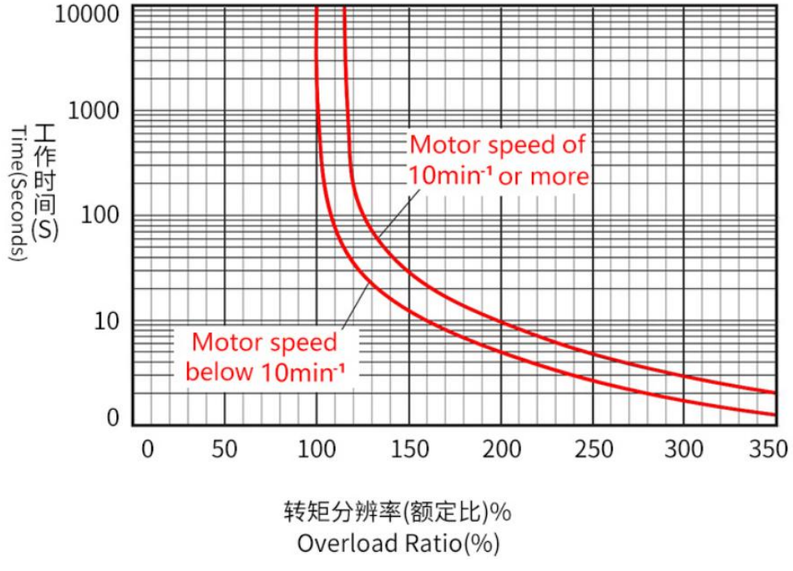
A:Continuous Duty Zone



B:Intermittent Duty Zoue

Overload characteristic curve

The operating time is set at an ambient motor temperature of 40℃ and under hot start conditions.



1.The above overload characteristics do not guarantee continuous use of 100% or more of the output;
2.When using the product, please make sure that the effective torque is within the continuous use range of the 'torque-speed characteristic';
3.Due to product improvement or specification change, we will update the specification in due course, please pay attention to the relevant information without prior notice.

Motor Specification Parameter Table

◆40 series

Motor Model	40TM-R3230F5-X
Power(W)	100
Rated voltage(V)	220VAC
Rated torque(N.M)	0.32
Rated speed(rpm)	3000
Rated current(Arms)	1±10%
Torque coefficient(N.m/A)	0.3±10%
Rotor inertial(kg.m^{2}X10^{-4})	0.06±10%
Line reaction potential(V/krpm)	17.5±10%
Line inductor(mH)	10±20% (20℃)
Line resistance(Ω)	14±10% (20℃)
Motor length L(mm)	82（88）
With brake length LB(mm)	102（108）
Weight(KG)	0.5/0.65
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)
Protection class	IP54（IP65 optional）

◆60 series

Motor Model	60BM-R6430F5-X	60BM-01330F5-X	60BM-01930F5-X
Power(W)	200	400	600
Rated voltage(V)	220VAC	220VAC	220VAC
Rated torque(N.M)	0.64	1.27	1.91
Rated speed(rpm)	3000	3000	3000
Rated current(Arms)	2±10%	2.8±10%	4.2±10%
Torque coefficient(N.m/A)	0.36±10%	0.48±10%	0.46±10%
Rotor inertial(kg.m^{2}X10^{-4})	0.3±10%	0.65±10%	0.85±10%
Line reaction potential(V/krpm)	2.8±10%	28.6±10%	27.8±10%
Line inductor(mH)	11±20% (20℃)	3.8±10% (20℃)	2.8±10% (20℃)
Line resistance(Ω)	4.4±10% (20℃)	2.15±10% (20℃)	1.96±10% (20℃)
Motor length L(mm)	77(89)	98(109)	116(128)
With brake length LB(mm)	116(128)	135(147)	153(165)
Weight(KG)	1/1.35	1.35/1.75	1.75/2.15
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)		
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA		
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)		
Protection class	IP54（IP65 optional）		

Motor Specification Parameter Table

◆80 series

Motor Model	80BM-02430F5-X	80BM-03230F5-X	80BM-02430G5-X	80BM-03230G5-X
Power(W)	750	1000	750	1000
Rated voltage(V)	220VAC	220VAC	380VAC	380VAC
Rated torque(N.M)	2.4	3.2	2.4	3.2
Rated speed(rpm)	3000	3000	3000	3000
Rated current(Arms)	4.5±10%	5.4±10%	2±10%	2.7±10%
Torque coefficient(N.m/A)	0.58±10%	0.66±10%	1.18±10%	1.18±10%
Rotor inertial(kg.m^{2}X10^{-4})	1.72±10%	2.4±10%	1.71±10%	2.15±10%
Line reaction potential(V/krpm)	36.8±10%	41.9±10%	70±10%	75±10%
Line inductor(mH)	7.7±10%(20℃)	7.4±10% (20℃)	94.78±10% (20℃)	16.79±10% (20℃)
Line resistance(Ω)	1.24±10% (20℃)	1.2±10% (20℃)	10.6±10% (20℃)	3.77±10% (20℃)
Motor length L(mm)	106(120)	120(134)	106(120)	120(134)
With brake length LB(mm)	146(160)	160(174)	146(160)	160(174)
Weight(KG)	2.3/3.05	2.95/3.6	2.3/3.05	2.95/3.6
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆110 series

Motor Model	110TM-04020F5-X	110TM-04030F5-X	110TM-04020G5-X	110TM-04030G5-X
Power(W)	850	1250	850	1250
Rated voltage(V)	220VAC	220VAC	380VAC	380VAC
Rated torque(N.M)	4	4	4	4
Rated speed(rpm)	2000	3000	2000	3000
Rated current(Arms)	3.5±10%	4.9±10%	2±10%	2.8±10%
Torque coefficient(N.m/A)	1.16±10%	0.82±10%	2.02±10%	1.44±10%
Rotor inertial(kg.m^{2}X10^{-4})	7.7±10%	7.7±10%	7.7±10%	7.7±10%
Line reaction potential(V/krpm)	70±10%	50±10%	122±10%	87±10%
Line inductor(mH)	±10%	4.49±10%	±10%	±10%
Line resistance(Ω)	±10%	1.11±10%	±10%	±10%
Motor length L(mm)	126（139）	126（139）	126（139）	126（139）
With brake length LB(mm)	171（184）	171（184）	171（184）	171（184）
Weight(KG)	4.14/6.25	4.14/6.25	4.14/6.25	4.14/6.25
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆110 series

Motor Model	110TM-05020F5-X	110TM-05030F5-X	110TM-05020G5-X	110TM-05030G5-X
Power(W)	1050	1550	1050	1550
Rated voltage(V)	220VAC	220VAC	380VAC	380VAC
Rated torque(N.M)	5	5	5	5
Rated speed(rpm)	2000	3000	2000	3000
Rated current(Arms)	4.5±10%	6±10%	2.5±10%	3.5±10%
Torque coefficient(N.m/A)	1.15±10%	0.82±10%	2±10%	1.44±10%
Rotor inertial(kg.m^{2}X10^{-4})	7.7±10%	7.7±10%	7.7±10%	7.7±10%
Line reaction potential(V/krpm)	70±10%	50±10%	122±10%	87±10%
Line inductor(mH)	6.5±10%	4.864±10%	±10%	±10%
Line resistance(Ω)	1.455±10%	1.15±10%	±10%	±10%
Motor length L(mm)	126（139）	126（139）	126（139）	126（139）
With brake length LB(mm)	171（184）	171（184）	171（184）	171（184）
Weight(KG)	4.14/6.25	4.14/6.25	4.14/6.25	4.14/6.25
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆110 series

Motor Model	110TM-06020F5-X	110TM-06030F5-X	110TM-06020G5-X	110TM-06030G5-X
Power(W)	1250	1880	1250	1880
Rated voltage(V)	220VAC	220VAC	380VAC	380VAC
Rated torque(N.M)	6	6	6	6
Rated speed(rpm)	2000	3000	2000	3000
Rated current(Arms)	5.2±10%	7.2±10%	3±10%	4.15±10%
Torque coefficient(N.m/A)	1.15±10%	0.82±10%	2.02±10%	1.44±10%
Rotor inertial(kg.m^{2}X10^{-4})	10.9±10%	10.9±10%	10.9±10%	10.9±10%
Line reaction potential(V/krpm)	70±10%	50±10%	122±10%	87±10%
Line inductor(mH)	6.93±10%	3.49±10%	±10%	±10%
Line resistance(Ω)	1.47±10%	0.738±10%	±10%	±10%
Motor length L(mm)	156(169)	156(169)	156(169)	156(169)
With brake length LB(mm)	193(206)	193(206)	193(206)	193(206)
Weight(KG)	6.36/8.47	6.36/8.47	6.36/8.47	6.36/8.47
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆110 series

Motor Model	110TM-07520F5-X	110TM-07530F5-X	110TM-07520G5-X	110TM-07530G5-X
Power(W)	1550	2350	1550	2350
Rated voltage(V)	220VAC	220VAC	380VAC	380VAC
Rated torque(N.M)	7.5	7.5	7.5	7.5
Rated speed(rpm)	2000	3000	2000	3000
Rated current(Arms)	6.5±10%	9±10%	3.7±10%	5.2±10%
Torque coefficient(N.m/A)	1.15±10%	0.82±10%	2.02±10%	1.44±10%
Rotor inertial(kg.m^{2}X10^{-4})	10.9±10%	10.9±10%	10.9±10%	10.9±10%
Line reaction potential(V/krpm)	70±10%	50±10%	122±10%	97±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	156(169)	156(169)	156(169)	156(169)
With brake length LB(mm)	193(206)	193(206)	193(206)	193(206)
Weight(KG)	6.36/8.47	6.36/8.47	6.36/8.47	6.36/8.47
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆130 series

Motor Model	130TM-05015F5-X	130TM-05015G5-X	130TM-05020F5-X	130TM-05020G5-X
Power(W)	750	750	1000	1000
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	5	5	5	5
Rated speed(rpm)	1500	1500	2000	2000
Rated current(Arms)	3.5±10%	2±10%	4.5±10%	2±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%	1.16±10%	2.02±10%
Rotor inertial(kg.m^{2}X10^{-4})	12±10%	12±10%	12±10%	12±10%
Line reaction potential(V/krpm)	87±10%	152±10%	70±10%	122±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	119(132)	119(132)	119(132)	119(132)
With brake length LB(mm)	166(179)	166(179)	166(179)	166(179)
Weight(KG)	6/7.8	6/7.8	8/9.8	8/9.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆130 series

Motor Model	130TM-05025F5-X	130TM-05025G5-X	130TM-06015F5-X	130TM-06015G5-X
Power(W)	1300	1300	950	950
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	5	5	6	6
Rated speed(rpm)	2500	2500	1500	1500
Rated current(Arms)	5.2±10%	3±10%	4.1±10%	2.4±10%
Torque coefficient(N.m/A)	0.96±10%	1.68±10%	1.45±10%	2.52±10%
Rotor inertial(kg.m^{2}X10^{-4})	12±10%	12±10%	12±10%	12±10%
Line reaction potential(V/krpm)	58±10%	102±10%	87±10%	152±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	119(132)	119(132)	119(132)	119(132)
With brake length LB(mm)	166(179)	166(179)	166(179)	166(179)
Weight(KG)	6/7.8	6/7.8	6/7.8	6/7.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆130 series

Motor Model	130TM-06020F5-X	130TM-06020G5-X	130TM-06025F5-X	130TM-06025G5-X
Power(W)	1250	1250	1550	1550
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	6	6	6	6
Rated speed(rpm)	2000	2000	2500	2500
Rated current(Arms)	5.2±10%	3±10%	6.2±10%	3.5±10%
Torque coefficient(N.m/A)	1.15±10%	2.02±10%	0.96±10%	1.68±10%
Rotor inertial(kg.m^{2}X10^{-4})	12±10%	12±10%	12±10%	12±10%
Line reaction potential(V/krpm)	70±10%	122±10%	58.5±10%	102±10%
Line inductor(mH)	±10%	±10%	5.89±10%	±10%
Line resistance(Ω)	±10%	±10%	1.11±10%	±10%
Motor length L(mm)	119(132)	119(132)	119(132)	119(132)
With brake length LB(mm)	166(179)	166(179)	166(179)	166(179)
Weight(KG)	6/7.8	6/7.8	6/7.8	6/7.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆130 series

Motor Model	130TM-07515F5-X	130TM-07515G5-X	130TM-07520F5-X	130TM-07520G5-X
Power(W)	1200	1200	1550	1550
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	7.5	7.5	7.5	7.5
Rated speed(rpm)	1500	1500	2000	2000
Rated current(Arms)	5.2±10%	3±10%	6.5±10%	3.7±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%	1.16±10%	2.02±10%
Rotor inertial(kg.m^{2}X10^{-4})	12.9±10%	12.9±10%	12.9±10%	12.9±10%
Line reaction potential(V/krpm)	87±10%	152±10%	70±10%	122±10%
Line inductor(mH)	±10%	±10%	4.411±10%	±10%
Line resistance(Ω)	±10%	±10%	0.81±10%	±10%
Motor length L(mm)	134(147)	134(147)	134(147)	134(147)
With brake length LB(mm)	181(194)	181(194)	181(194)	181(194)
Weight(KG)	8/9.8	8/9.8	8/9.8	8/9.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆130 series

Motor Model	130TM-07525F5-X	130TM-07525G5-X	130TM-10015F5-X	130TM-10015G5-X
Power(W)	2000	2000	1550	1550
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	7.5	7.5	10	10
Rated speed(rpm)	2500	2500	1500	1500
Rated current(Arms)	7.8±10%	4.5±10%	6.9±10%	4±10%
Torque coefficient(N.m/A)	0.96±10%	1.68±10%	1.45±10%	2.52±10%
Rotor inertial(kg.m^{2}X10^{-4})	12.9±10%	12.9±10%	12.9±10%	12.9±10%
Line reaction potential(V/krpm)	58.5±10%	102±10%	87±10%	152±10%
Line inductor(mH)	±10%	±10%	5.83±10%	±10%
Line resistance(Ω)	±10%	±10%	0.985±10%	±10%
Motor length L(mm)	134(147)	134(147)	149(162)	149(162)
With brake length LB(mm)	181(194)	181(194)	196(209)	196(209)
Weight(KG)	8/9.8	8/9.8	8/9.8	8/9.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆130 series

Motor Model	130TM-10020F5-X	130TM-10020G5-X	130TM-10025F5-X	130TM-10025G5-X
Power(W)	2000	2000	2600	2600
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	10	10	10	10
Rated speed(rpm)	2000	2000	2500	2500
Rated current(Arms)	8.6±10%	5±10%	10±10%	6±10%
Torque coefficient(N.m/A)	1.15±10%	2.02±10%	0.96±10%	1.68±10%
Rotor inertial(kg.m^{2}X10^{-4})	12.9±10%	12.9±10%	12.9±10%	12.9±10%
Line reaction potential(V/krpm)	70.1±10%	122±10%	59±10%	102±10%
Line inductor(mH)	±10%	±10%	3.17±10%	±10%
Line resistance(Ω)	±10%	±10%	0.5±10%	±10%
Motor length L(mm)	149(162)	149(162)	149(162)	149(162)
With brake length LB(mm)	196(209)	196(209)	196(209)	196(209)
Weight(KG)	8/9.8	8/9.8	8/9.8	8/9.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆130 series

Motor Model	130TM-15015F5-X	130TM-15015G5-X	130TM-15020F5-X	130TM-15020G5-X
Power(W)	2350	2350	3150	3150
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	15	15	15	15
Rated speed(rpm)	1500	1500	2000	2000
Rated current(Arms)	10.3±10%	6±10%	13±10%	7.5±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%	1.15±10%	2±10%
Rotor inertial(kg.m^{2}X10^{-4})	17±10%	17±10%	17±10%	17±10%
Line reaction potential(V/krpm)	87±10%	152±10%	70.1±10%	122±10%
Line inductor(mH)	5.98±10%	±10%	3.3±10%	10.77±10%
Line resistance(Ω)	0.793±10%	±10%	0.583±10%	1.64±10%
Motor length L(mm)	166(179)	166(179)	166(179)	166(179)
With brake length LB(mm)	221(234)	221(234)	221(234)	221(234)
Weight(KG)	11/12.8	11/12.8	11/12.8	11/12.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆130 series

Motor Model	130TM-15025F5-X	130TM-15025G5-X	130TM-19015F5-X	130TM-19015G5-X
Power(W)	3900	3900	3000	3000
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	15	15	19	19
Rated speed(rpm)	2500	2500	1500	1500
Rated current(Arms)	15.7±10%	9±10%	13±10%	7.5±10%
Torque coefficient(N.m/A)	0.95±10%	1.68±10%	1.45±10%	2.52±10%
Rotor inertial(kg.m^{2}X10^{-4})	17±10%	17±10%	25.2±10%	25.2±10%
Line reaction potential(V/krpm)	57.6±10%	102±10%	87±10%	152±10%
Line inductor(mH)	0.112±10%	±10%	3.68±10%	±10%
Line resistance(Ω)	0.04±10%	±10%	0.53±10%	±10%
Motor length L(mm)	166(179)	166(179)	181(194)	181(194)
With brake length LB(mm)	221(234)	221(234)	221(234)	221(234)
Weight(KG)	11/12.8	11/12.8	14/15.8	14/15.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆130 series

Motor Model	130TM-19020F5-X	130TM-19020G5-X
Power(W)	4000	4000
Rated voltage(V)	220VAC	380VAC
Rated torque(N.M)	19	19
Rated speed(rpm)	2000	2000
Rated current(Arms)	16.4±10%	9.5±10%
Torque coefficient(N.m/A)	1.16±10%	2.02±10%
Rotor inertial(kg.m^{2}X10^{-4})	25.2±10%	25.2±10%
Line reaction potential(V/krpm)	70±10%	122±10%
Line inductor(mH)	±10%	±10%
Line resistance(Ω)	±10%	±10%
Motor length L(mm)	181(194)	181(194)
With brake length LB(mm)	221(234)	221(234)
Weight(KG)	14/15.8	14/15.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R)	
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA	
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)	
Protection class	IP54（IP65 optional）	

Motor Specification Parameter Table

◆130 Series with Fan

Motor Model	130TM-07530F5-XF	130TM-07530G5-XF	130TM-10030F5-XF	130TM-10030G5-XF
Power(W)	2350	2350	3150	3150
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	7.5	7.5	10	10
Rated speed(rpm)	3000	3000	3000	3000
Rated current(Arms)	9±10%	5.2±10%	12±10%	6.9±10%
Torque coefficient(N.m/A)	0.83±10%	1.44±10%	0.83±10%	1.44±10%
Rotor inertial($kg.m^2X10^{-4}$)	12.9±10%	12.9±10%	12.9±10%	12.9±10%
Line reaction potential(V/krpm)	50±10%	87±10%	50±10%	87±10%
Line inductor(mH)	0.174±10%	±10%	2.17±10%	±10%
Line resistance(Ω)	0.04±10%	±10%	0.408±10%	±10%
Motor length L(mm)	209(222)	209(222)	209(222)	209(222)
With brake length LB(mm)	224(237)	224(237)	239(252)	239(252)
Weight(KG)	9/10.8	9/10.8	9/10.8	9/10.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆130 Series with Fan

Motor Model	130TM-15030F5-XF	130TM-15030G5-XF	130TM-19020F5-XF	130TM-19020G5-XF
Power(W)	4700	4700	4000	4000
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	15	15	19	19
Rated speed(rpm)	3000	3000	2000	2000
Rated current(Arms)	18±10%	10.4±10%	16.4±10%	9.5±10%
Torque coefficient(N.m/A)	0.83±10%	1.44±10%	1.16±10%	2.02±10%
Rotor inertial($kg.m^2X10^{-4}$)	17±10%	17±10%	25.2±10%	25.2±10%
Line reaction potential(V/krpm)	50±10%	87±10%	70±10%	122±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	209(222)	209(222)	224(237)	224(237)
With brake length LB(mm)	264(277)	264(277)	264(277)	264(277)
Weight(KG)	12/13.8	12/13.8	16/17.8	16/17.8
Feedback element X (optional)	Magneto(-C)/Photoelectric(-E)Incremental Encoder, 2500PPR，Magneto(-C17)/Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆180 Series

Motor Model	180TM-19015F5-X	180TM-19015G5-X	180TM-19020F5-X	180TM-19020G5-X
Power(W)	3000	3000	4000	4000
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	19	19	19	19
Rated speed(rpm)	1500	1500	2000	2000
Rated current(Arms)	13±10%	7.5±10%	16.4±10%	9.5±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%	1.16±10%	2.02±10%
Rotor inertial($kg.m^2X10^{-4}$)	60±10%	60±10%	90±10%	90±10%
Line reaction potential(V/krpm)	87±10%	152±10%	70±10%	122±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	183	183	213	213
With brake length LB(mm)	277	277	277	277
Weight(KG)	14.5/32	14.5/32	18.9/32	18.9/32
Feedback element X (optional)	Photoelectric(-E)Incremental Encoder, 2500PPR，Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆180 Series

Motor Model	180TM-27015F5-X	180TM-27015G5-X	180TM-27020F5-X	180TM-27020G5-X
Power(W)	4250	4250	5650	5650
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	27	27	27	27
Rated speed(rpm)	1500	1500	2000	2000
Rated current(Arms)	18.6±10%	10.7±10%	23.2±10%	13.3±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%	1.16±10%	2.02±10%
Rotor inertial($kg.m^2X10^{-4}$)	90±10%	90±10%	122±10%	122±10%
Line reaction potential(V/krpm)	87±10%	152±10%	70.1±10%	122±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	213	213	239	239
With brake length LB(mm)	277	277	332	332
Weight(KG)	18.9/32	18.9/32	22.7/34	22.7/34
Feedback element X (optional)	Photoelectric(-E)Incremental Encoder, 2500PPR，Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

Motor Specification Parameter Table

◆180 Series

Motor Model	180TM-36015F5-X	180TM-36015G5-X	180TM-36020F5-X	180TM-36020G5-X
Power(W)	5650	5650	7500	7500
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	36	36	36	36
Rated speed(rpm)	1500	1500	2000	2000
Rated current(Arms)	25±10%	14.2±10%	31±10%	17.8±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%	1.16±10%	2.02±10%
Rotor inertial(kg.m^{2}X10^{-4})	122±10%	122±10%	150±10%	150±10%
Line reaction potential(V/krpm)	87±10%	152±10%	70±10%	122±10%
Line inductor(mH)	±10%	±10%	±10%	±10%
Line resistance(Ω)	±10%	±10%	±10%	±10%
Motor length L(mm)	239	239	277	277
With brake length LB(mm)	332	332	332	332
Weight(KG)	22.7/34	22.7/34	32/34	32/34
Feedback element X (optional)	Photoelectric(-E)Incremental Encoder, 2500PPR，Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆180 Series

Motor Model	180TM-48015F5-X	180TM-48015G5-X
Power(W)	7500	7500
Rated voltage(V)	220VAC	380VAC
Rated torque(N.M)	48	48
Rated speed(rpm)	1500	1500
Rated current(Arms)	33±10%	19±10%
Torque coefficient(N.m/A)	1.45±10%	2.52±10%
Rotor inertial(kg.m^{2}X10^{-4})	150±10%	150±10%
Line reaction potential(V/krpm)	87±10%	152±10%
Line inductor(mH)	±10%	±10%
Line resistance(Ω)	±10%	±10%
Motor length L(mm)	277	277
With brake length LB(mm)	332	332
Weight(KG)	32/34	32/34
Feedback element X (optional)	Photoelectric(-E)Incremental Encoder, 2500PPR，Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)	
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA	
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)	
Protection class	IP54（IP65 optional）	

Motor Specification Parameter Table

◆180 Series with Fan

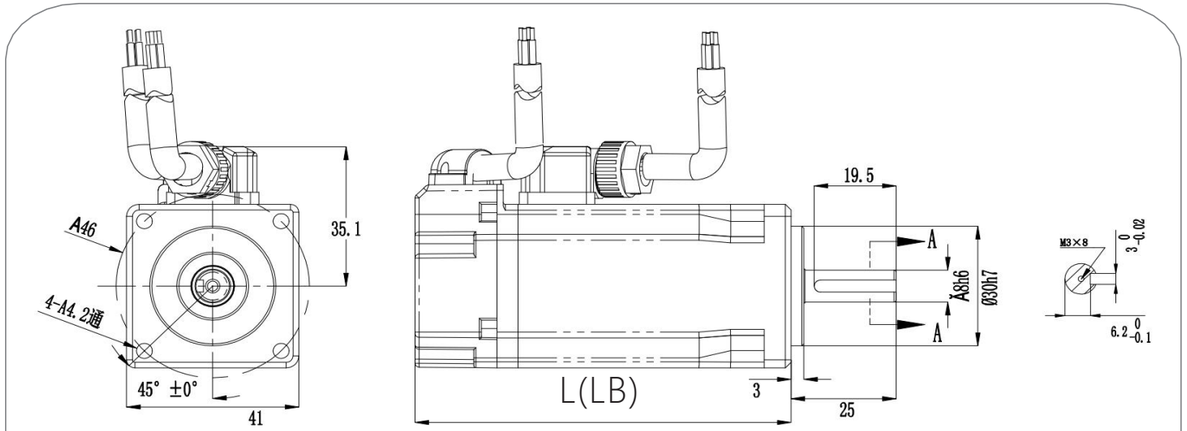
Motor Model	180TM-19025F5-XF	180TM-19025G5-XF	180TM-19030F5-XF	180TM-19030G5-XF
Power(W)	5000	5000	6000	6000
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	19	19	19	19
Rated speed(rpm)	2500	2500	3000	3000
Rated current(Arms)	20±10%	11.3±10%	23±10%	13±10%
Torque coefficient(N.m/A)	0.96±10%	1.68±10%	0.83±10%	1.44±10%
Rotor inertial(kg.m^{2}X10^{-4})	122±10%	122±10%	122±10%	122±10%
Line reaction potential(V/krpm)	58.5±10%	102±10%	50±10%	87±10%
Line inductor(mH)	1.64±10%	±10%	±10%	±10%
Line resistance(Ω)	0.091±10%	±10%	±10%	±10%
Motor length L(mm)	293	293	293	293
With brake length LB(mm)	386	386	386	386
Weight(KG)	24.7/36	24.7/36	24.7/36	24.7/36
Feedback element X (optional)	Photoelectric(-E)Incremental Encoder, 2500PPR，Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

◆180 Series with Fan

Motor Model	180TM-27025F5-XF	180TM-27025G5-XF	180TM-27030F5-XF	180TM-27030G5-XF
Power(W)	7000	7000	8500	8500
Rated voltage(V)	220VAC	380VAC	220VAC	380VAC
Rated torque(N.M)	27	27	27	27
Rated speed(rpm)	2500	2500	3000	3000
Rated current(Arms)	28±10%	16±10%	32.6±10%	19±10%
Torque coefficient(N.m/A)	0.96±10%	1.68±10%	0.83±10%	1.45±10%
Rotor inertial(kg.m^{2}X10^{-4})	150±10%	150±10%	150±10%	150±10%
Line reaction potential(V/krpm)	58±10%	102±10%	50±10%	87±10%
Line inductor(mH)	±10%	±10%	±10%	0.163±10%
Line resistance(Ω)	±10%	±10%	±10%	1±10%
Motor length L(mm)	331	331	331	331
With brake length LB(mm)	386	386	386	386
Weight(KG)	34/36	36/36	36/36	36/36
Feedback element X (optional)	Photoelectric(-E)Incremental Encoder, 2500PPR，Photoelectric(-A17) absolute 17bit，Rotary Transformer (-R); With fan（-F)			
Insulation resistance/ voltage resistance	DC500V,>20MΩ(F) / 1500VAC/1s/5mA			
Usage environment	Temperature -20~40℃(-40~40℃ optional); Humidity 20%~80%RH(non-condensing); Altitude below 1000(over the temperature, altitude range to reduce the rated value to use)			
Protection class	IP54（IP65 optional）			

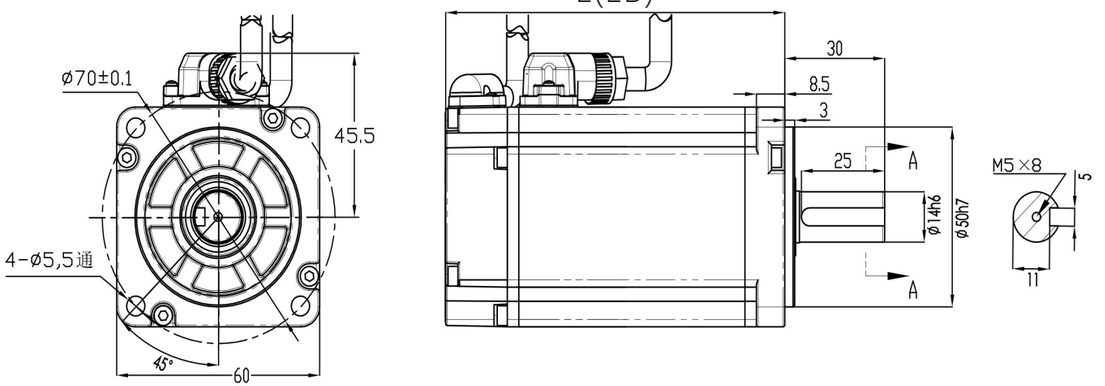
External Dimension

40#



L(mm）	82/88
LB(With brake)mm	102/108
Weight(KG)	0.5/0.65

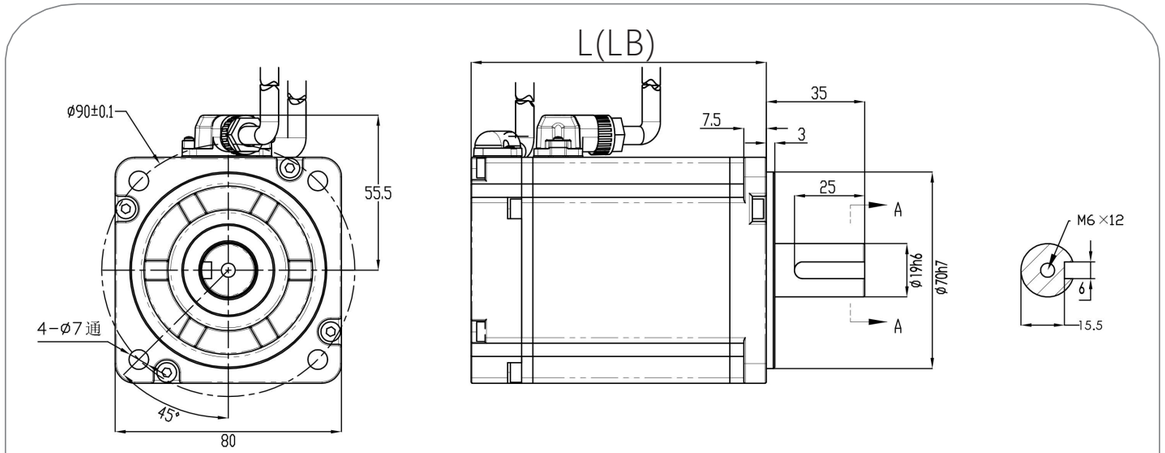
60#



L(mm)	77(89)	98(109)	116(127)
LB(With brake)mm	116(128)	135(147)	153(165)
Weight(KG)	1/1.35	1.35/1.75	1.75/2.15

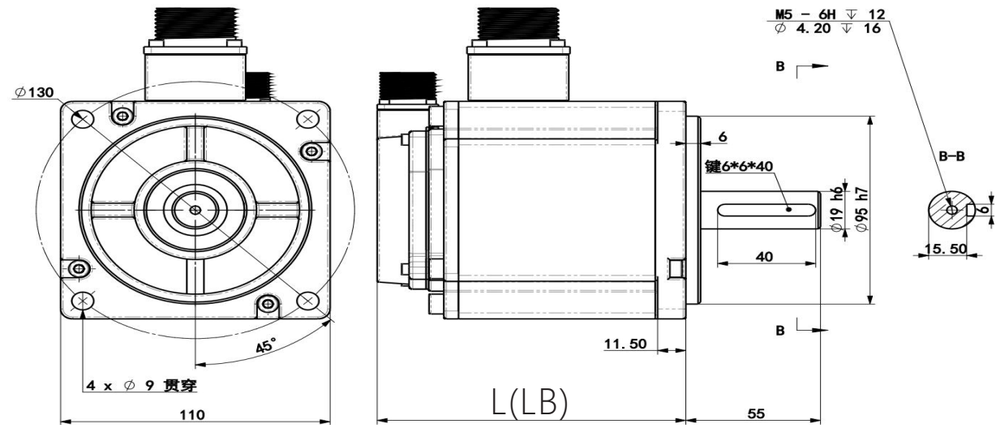
External Dimension

80#



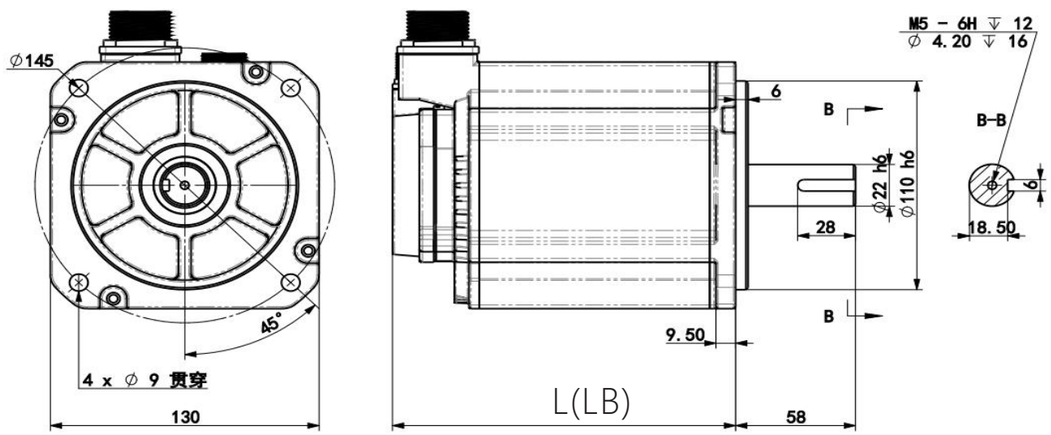
L(mm)	106(120)	120(134)
LB(With brake)mm	146(160)	160(174)
Weight(KG)	2.3/3.05	2.95/3.6

110#



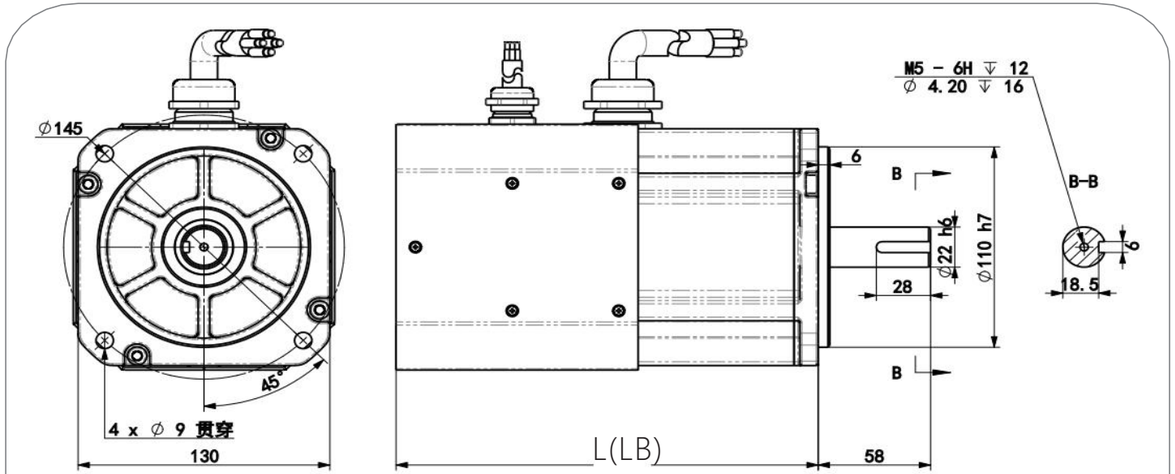
L(mm)	126(139)	156(169)	171(184)
LB(With brake)mm	171(184)	193(206)	/
Weight(KG)	4.14/6.25	6.36/8.47	8.5

External Dimension 130#



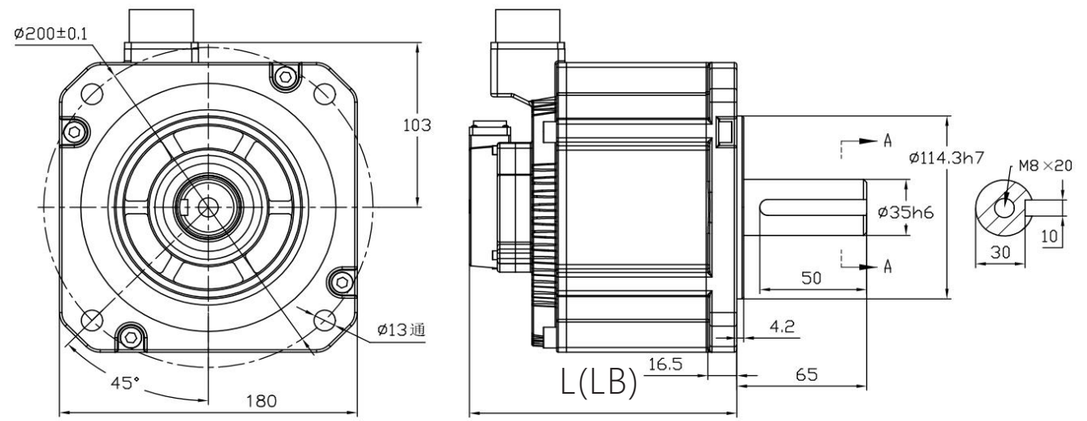
L(mm)	119(132)	134(147)	149(162)	166(179)	181(194)
LB(With brake)mm	166(179)	181(194)	196(209)	221(234)	221(234)
Weight(KG)	6/7.8	8/9.8	8/9.8	11/12.8	14/15.8

130#With fan



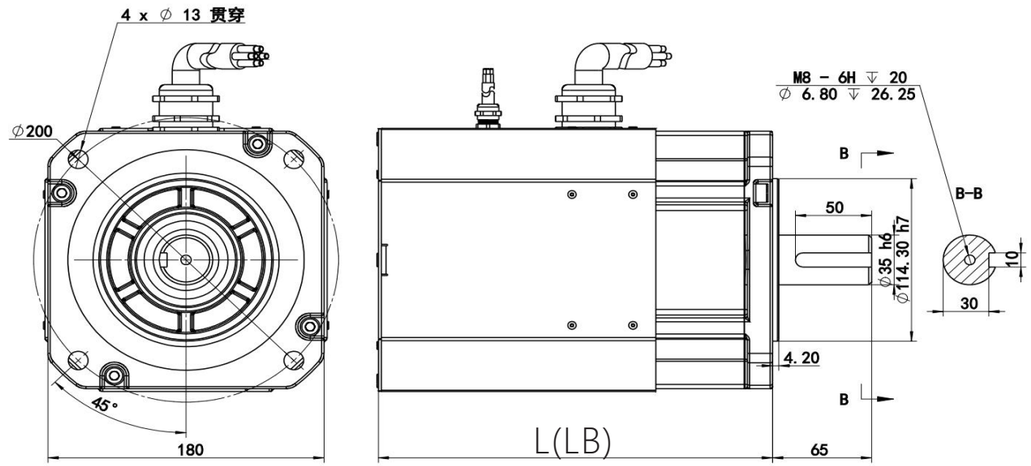
L(mm)	209(222)	209(222)	209(222)	224(237)
LB(With brake)mm	224(237)	239(252)	264(277)	264(277)
Weight(KG)	9/10.8	9/10.8	12/13.8	16/17.8

External Dimension 180#



L(mm)	183	213	239	277
LB(With brake)mm	277	277	332	332
Weight(KG)	14.5/32	18.9/32	22.7/34	32/34

180#With fan



L(mm)	268	293	331
LB(With brake)mm	331	386	386
Weight(KG)	20/34	24.7/36	34/36