

Leading the Way with Intelligent Motion Control

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Leading the Way with Intelligent Motion Control

MOTION CONTROL PRODUCTS CATALOGUE

Servo system | PLC | IO



MOTION CONTROL PRODUCTS CATALOGUE

Shenzhen Rtelligent Technology Co.,Ltd

About Us

Shenzhen Rtelligent Technology Co., Ltd., located in Shenzhen, China, is a national high-tech enterprise dedicated in R & D, marketing and sales of high performance motion control products based on latest control technologies.

Since its establishment in 2015, the management has been focusing on the field of industrial automation. Our main products include servo system, stepper system, motion control card, etc., which are widely used in high-end intelligent manufacturing industries such as 3C electronics, new energy, logistics, semiconductor, medical , CNC laser processing , etc.

Rtelligent adheres to deeply understand and meet customer demand, always takes reliable quality and leading technology as its core competitiveness, attaches great importance to and continuously increases R&D investment. At present, it has more than 60 patents for invention, utility model, copyright, trademark information, etc; The products have passed CE and other product quality & safety certification.



Founded in **2015**



60+

Core Technology
Patents

2 Major production bases



70+

Sales Countries
And Regions



100+

Distributors



10000+

Sales Customers



5million+

Stepper Servo
Sales Volume

30+ Offices in China

Management Idea

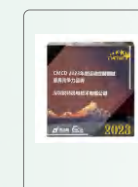
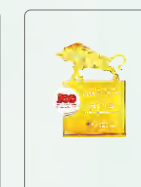
Strive for innovation and excellence

Talent Concept

Great virtue promotes growth, put people first

Quality Policy

Customer first, quality first, full participation,
the pursuit of excellence



P05 ■ AC Servo Drive

P09 R6 Series

P15 R5 Series



P23 ■ AC Servo Motor

P25 RSNA Series Servo Motor

P27 RSDA Series Servo Motor

P29 RSM Series Servo Motor

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D5VC/D5VE Series P36



General Integrated Low-voltage Servo Motor ■ P39
IDV Series P40



P42 ■ Low-voltage DC Servo Motor



P45 ■ Super Short DC Servo Motor Serie

P45 ■ Reducer for Servo Motor



| Motion Control System Solutions Map



AC SERVO SYSTEM

EtherCAT®

CANopen®

Modbus



RTELLIGENT

AC Servo Drive

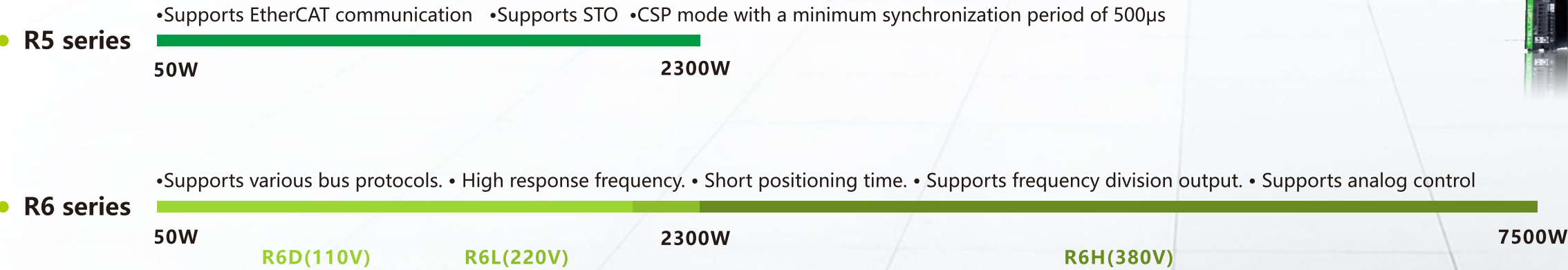
R5 Series Servo Drive Naming Rule

R 5 L 028 E
① ② ③ ④ ⑤

① Product series R: R series servo S: S series servo (economic version) D: D series low voltage DC servo	② Product version 5: 5th generation servo	③ Voltage level L: 220V H: 380V
④ Rated current 028: 2.8A 042: 4.2A 076: 7.6A 120: 12.0A	⑤ Function code Default: Pulse type E: EtherCAT bus type P: Profinet bus type C: CANopen bus type M: RS485 Modbus bus type	

*Model naming rules are only used for model meaning analysis. For specific optional models, please refer to the details page.

More Flexible & Convenient Supporting Solutions



Highlights of the New generation of R6 AC Servo System

■ High Performance

The new generation of servos incorporates a powerful **R-AI** algorithm, with performance **1.5** times higher than the previous generation; Adopting a new high-performance main control chip to improve communication interaction capabilities, the EtherCAT high-speed communication cycle can reach **125us**;

The RS series has more advanced high and low frequency vibration suppression capabilities, supports two-way probe auxiliary functions, latch position function, and has better performance in trajectory control such as interpolation and cam.



■ High Precision

The new generation of servo motor encoders adopt high-speed communication protocols, with optional 17-bit and 23-bit absolute encoders and higher resolution; **high-resolution** encoders bring higher position feedback accuracy.



■ STO

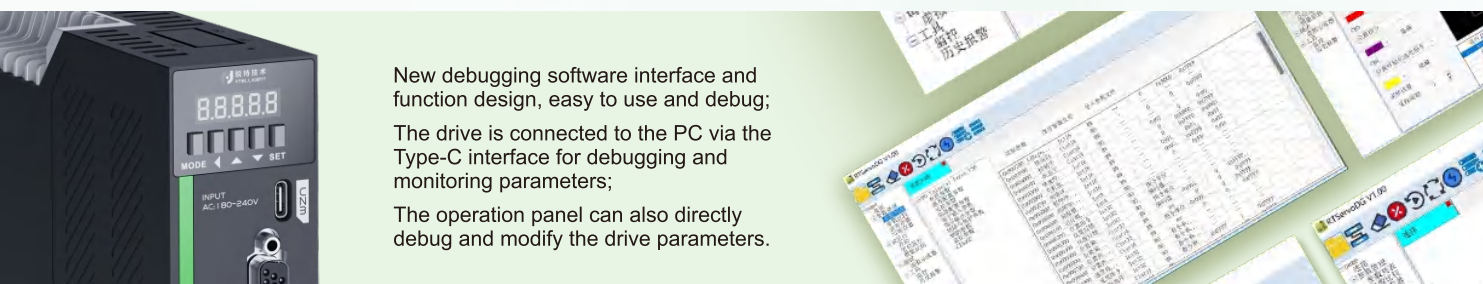
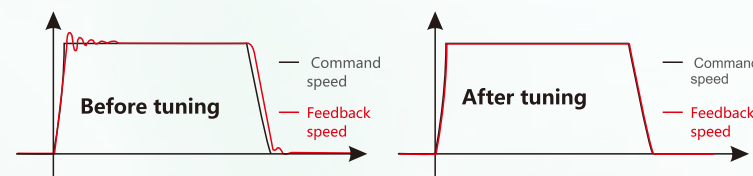
With safe torque off function: no output contactor is required to prevent electric shock or mechanical damage in the event of a fault, **thereby protecting personal and equipment safety.**



■ Easy Configure

Auto-tuning

Based on the powerful **R-AI** algorithm, inertia self-identification can be realized which greatly shortens the system positioning time and supports the selection of rigidity levels.



■ High Rigidity

The **integrated structure design of front flange** effectively avoids resonance, improves structural strength, rigidity and energy efficiency, and ensures motor consistency by optimizing the internal structure.



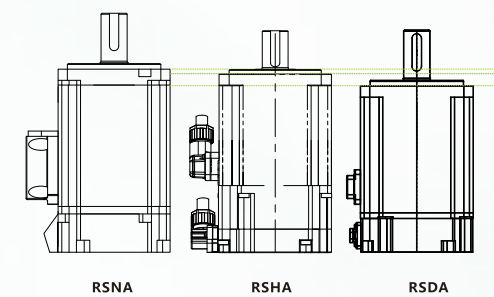
■ Highly Reliable

Lock type connector, greatly improves reliability against water vapor, oil pollution, vibration, etc., protection level up to **IP67**



■ Compact Size

With a shorter body design and smaller installation size, the body length is shortened by about **10%** compared to the previous generation of products.



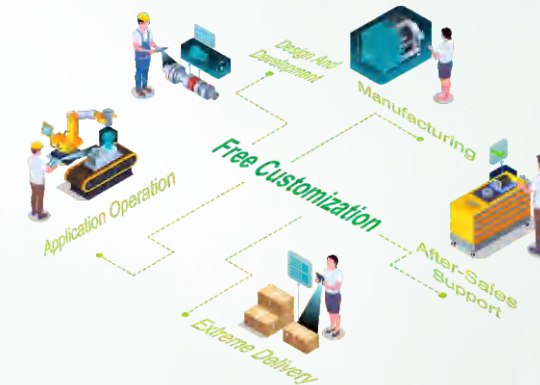
Take 400w as an example

Specifications	RSNA	RSHA	RSDA
Flange	60	60	60
Shaft diameter	14	14	14
Length	98	96	89
	Brake127	Brake123	Brake119

Unit(mm)

■ Customizable

With independent development, design, and manufacturing capabilities, we can **customize** different drive functions and motor requirements according to customer needs.



R6 Series

Rtelligent sixth generation general purpose high-performance AC servo R6 series, based on ARM+FPGA architecture, using powerful R-AI 2.0 algorithm, in a variety of high-end applicationsCombined with better performance. Product standard analog control, frequency division output and other functions, support all kinds of bus protocols, is the best choice for a variety of high-end automation equipment industry.



01

High performance

02

High precision

03

STO

04

Easy to debug

05

Frequency dividing output

06

Analogue control

R6 Servo Drive Specifications

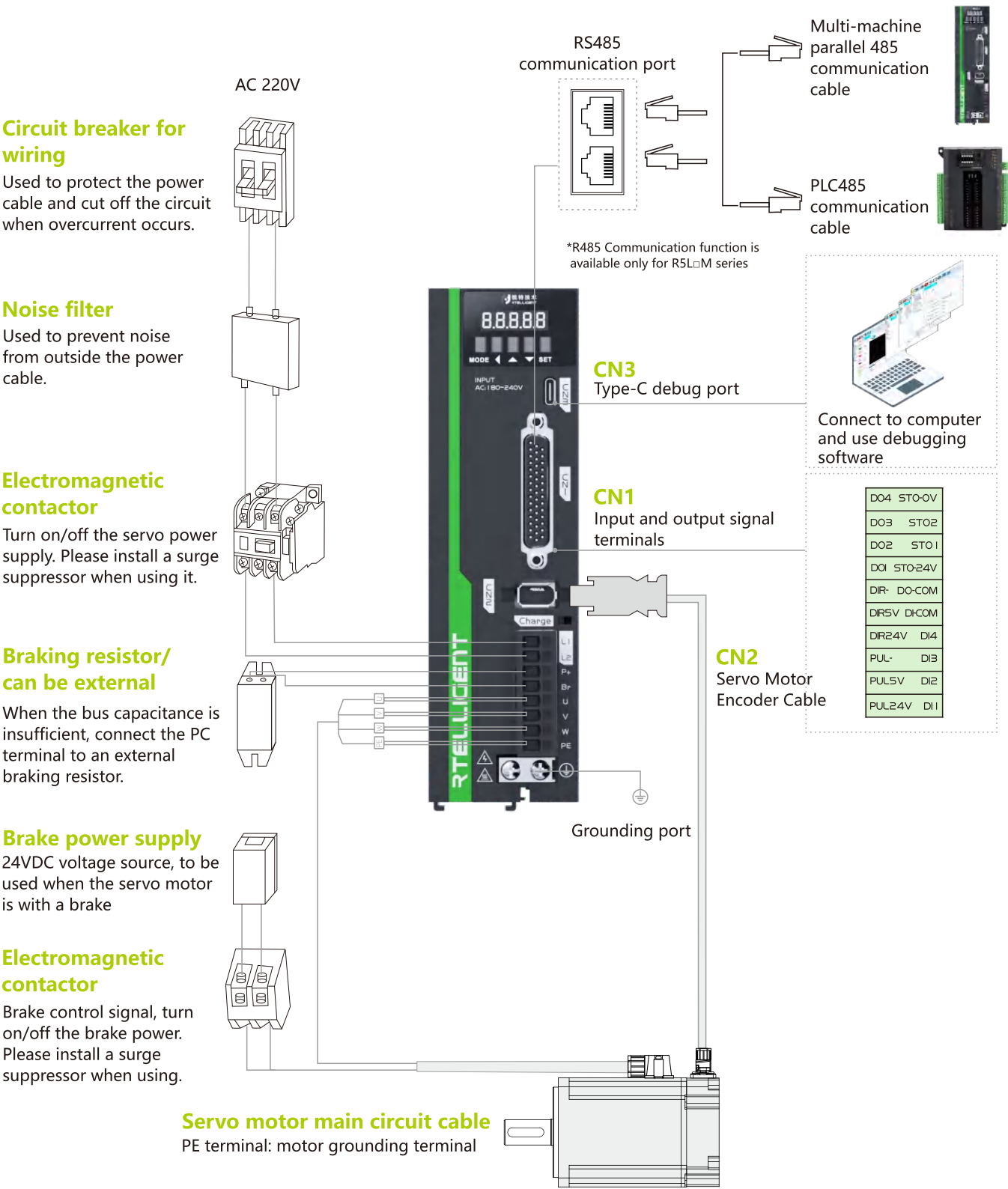
Basic Specifications

Item	R6L028M	R6L028E	R6L042M	R6L042E	R6L076M	R6L076E	R6L120M	R6L120E
Communication function	RS485	EtherCAT	RS485	EtherCAT	RS485	EtherCAT	RS485	EtherCAT
Overload capacity	Support 3 times overload							
Applicable power (W)	100~400		750		1000~2000		2000~3000	
Rated current (A)	2.8		4.2		7.6		12.0	
Maximum current (A)	8.4		12.6		22.8		36.0	
Input power	Single phase 220VAC ± 10%, 50/60Hz						Single phase/3 phase 220VAC±10%, 50/60Hz	
Size code	Type A		Type B		Type B		Type C	
Dimensions (mm)	175*156*40		175*156*51		175*156*51		196*176*72	
Brake resistor function	No brake resistor		With brake resistor (75W, 50Ω)				With brake resistor (100W, 50Ω)	

Technical Specifications

Item	Description
Control mode	IPM PWM control, SVPWM drive mode
Encoder type	Match 17-bit magnetic encoders and 23-bit optical absolute encoders
Pulse input spec.	5V differential pulse /2000KHz 24V single-ended pulse /200KHz
Analog input spec.	2 channels, -10 to +10V analog input channels Note: Only the R6 general servo version has an analog interface
General input	9 channels, supporting 24V common positive or common negative
General output	4 channels of single-ended +2 channels of differential output, single-ended (200mA) supported/differential (200mA) supported
Encoder output	ABZ 3-channel differential output (5V)+ABZ 3-channel single-ended output (5-24V) Note: Only the R6 general servo version has an encoder frequency division output interface

■ R6 Series Pulse Type (Including RS485) Drive Wiring Diagram



■ R6 Series Pulse Type (Including RS485) Drive Port Definition

RS485 modbus communication interface definition

Signal name	Pin number	Function
RS485+	1	RS485 communication port
RS485-	2	
-	3	-
-	4	-
-	5	-
-	6	-
DGND	7	GND signal
-	8	-

Encoder terminal definition

Signal name	Pin number	Function
+5V	1	Power output positive pole: +5V
GND	2	Power output negative pole: 0V
-	3	-
-	4	-
SD+	5	Encoder bus signal
SD-	6	
FG	-	Terminal metal housing

Main circuit interface definition

Terminal marking	Terminal name	Function
L1、L2、	Power supply input terminal	Servo drive power supply input terminal, single-phase 220VAC
P+、Br	Brake resistor terminal	
U、V、W、PE	Servo motor connection terminal	The servo motor connection terminals must be connected to the motor U, V, W, and PE terminals accordingly.

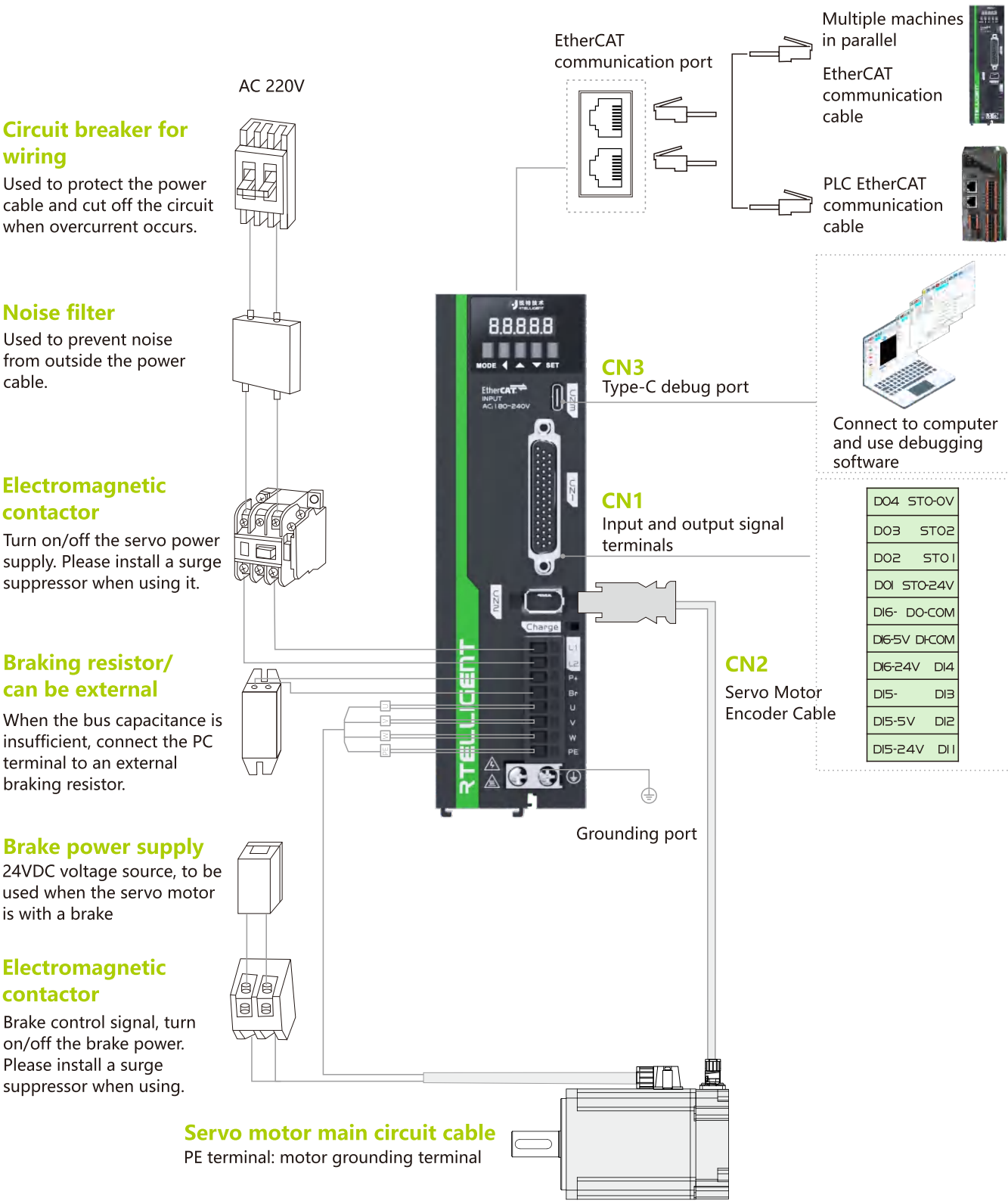
Control signal terminal definition (CN1)

Function	Signal	Pin number	Signal definition	Default Function	Illustration
External pulse interface	PUL+	3	5V pulse +	-	Independent 5V 24V pulse Direction control Signal interface
	PUL-	4	pulse -		
	DIR+	5	5V direction +		
	DIR-	6	direction -		
	24VPUL+	16	24v pulse +		
Universal input interface	24VDIR+	17	24v direction -	Servo enable Positive limit Negative limit Alarm clear Pulse inhibit Origin input Start back to zero Emergency stop Gain switching	Below 24V Support common anode or Common cathode Mixed use of NPN and PNP is not supported
	IN1	2	Input 1		
	IN2	7	Input 2		
	IN3	8	Input 3		
	IN4	9	Input 4		
	IN5	10	Input 5		
	IN6	11	Input 6		
	IN7	12	Input 7		
	IN8	13	Input 8		
	IN9	14	Input 9		
Common cathode universal output interface	INCOM	1	Input common port	Servo ready Positioning completed Alarm output Return to zero complete	Below 24V Common cathode output Current not exceeding 200
	OUT1	32	Output 1		
	OUT2	33	Output 2		
	OUT3	34	Output 3		
	OUT4	35	Output 4		
	OUTCOM-	31	Output common port		



Function	Signal	Pin number	Signal definition	Default Function	Illustration
general differential output interface	DFOUT5+	18	Output 5 +	brake	Below 24V Differential output
	DFOUT5-	19	Output 5 -		
	DFOUT6+	20	Output 6 +	Internal command stop	The current does not exceed 200mA
	DFOUT6-	21	Output 6 -		
encoder output interface	DFEA+	23	Encoder A+	-	5V differential output
	DFEA-	24	Encoder A-		
	DFEB+	25	Encoder B+		
	DFEB-	26	Encoder B-		
	DFEZ+	27	Encoder Z+	-	Collector output
	DFEZ-	28	Encoder Z-		
	EA	36	Single-ended EA		
	EB	37	Single-ended EB		
analog input interface	EZ	29	Single-ended EZ	-	-10V~+10V Analog input
	GND	30	Single-ended GND		
	AN1+	39	Analog channel 1+		
	AN1-	40	Analog channel 1-		
	AN2+	43	Analog channel 2+		
	AN2-	44	Analog channel 2-		
	ANGND	41	Analog quantity GND		

R6 Series EtherCAT Communication Drive Wiring Diagram



R6 Series EtherCAT Communication Drive Port Definition

Communication interface definition

Pin number	Signal name	Function
1	TX +	Data send +
2	TX -	Data send-
3	RX +	Data receive+
4	NULL	-
5	NULL	-
6	RX -	Data receive-
7	NULL	-
8	NULL	-

Encoder terminal definition

Signal name	Pin number	Function
+ 5 V	1	Power output positive pole: +5V
GND	2	Power output negative pole: 0V
BAT+	3	Encoder cell
BAT-	4	
SD+	5	Encoder bus signal
SD -	6	
FG	-	Terminal metal housing

Main circuit interface definition

Terminal marking	Terminal name	Function
L1、L2、P+、Br	Power supply input terminal	Servo drive power supply input terminal, single-phase 220VAC
U、V、W、PE	Servo motor connection terminal	External brake resistor connection terminal
		The servo motor connection terminals must be connected to the motor U, V, W, and PE terminals accordingly.

Control signal terminal definition (CN1)

Function	Signal	Pin number	Signal definition	Default Function	Illustration	Function	Signal	Pin number	Signal definition	Default Function	Illustration
Universal input interface	DI1	2	Input 1	-	Below 24V Support common anode or Common cathode	Encoder output interface	DFEA+	23	Encoder A+	-	5V differential output
	DI2	7	Input 2	-			DFEA-	24	Encoder A-		
	DI3	8	Input 3	Emergency stop			DFEB+	25	Encoder B+		
	DI4	9	Input 4	Positive	Mixed use of NPN and PNP is not supported		DFEB-	26	Encoder B-	-	Collector output
	DI5	10	Input 5	Negative			DFEZ+	27	Encoder Z+		
	DI6	11	Input 6	Origin switch			DFEZ-	28	Encoder Z-		
	DI7	12	Input 7	Probe 1	Below 24V		EA	36	Single-ended EA	-	Collector output
	DI8	13	Input 8	Probe 2			EB	37	Single-ended EB		
	DI9	14	Input 9	No function			EZ	29	Single-ended EZ		
Common cathode universal output interface	DI-COM	1	Input common port	---	Common cathode output	STO Security Interface	GND	30	Single-ended GND	-	Disable STO function: STO is connected to STO-24V; Enable the STO function: STO connects to STO-0V
	DO1	32	Output 1	Servo is ready			STO1	15	Control input of STO1		
	DO2	33	Output 2	Positioning completed	Current not exceeding 50mA		STO2	22	Control input of STO2		
	DO3	34	Output 3	Malfunction			STO-24V	38	STO-0V		
	DO4	35	Output 4	Homing is completed			STO-0V	42	Internal 24V power supply		
Universal differential output interface	DO-COM-	31	Output common port	---	Below 24V Differential output Current not exceeding 200mA						
	DO5+	18	Output 5 +	brake							
	DO5-	19	Output 5 -								
	DO6+	20	Output 6 +	Internal command stop							
DO6-	21	Output 6-									

R5 Series

Rtelligent's 5th-generation high-performance servo R5 series is based on a powerful R-AI algorithm and a new hardware solution. With the rich experience Rtelligent has accumulated in servo development and application over the years, it has created a servo system with the characteristics of high performance, easy application, and low cost. The product has a wide range of applications in various high-end automation equipment industries such as 3C, lithium batteries, photovoltaics, logistics, semiconductors, medical, and lasers.



- EtherCAT
- Pulse command
- RS485
- PROFINET
Stay tuned

- 01

Power range
0.05kw-2.3kw
- 02

High dynamic response
- 03

Auto tuning
- 04

Rich IO interfaces
- 05

STO safety function
- 06

Convenient panel operation

R5 Servo Drive Specifications

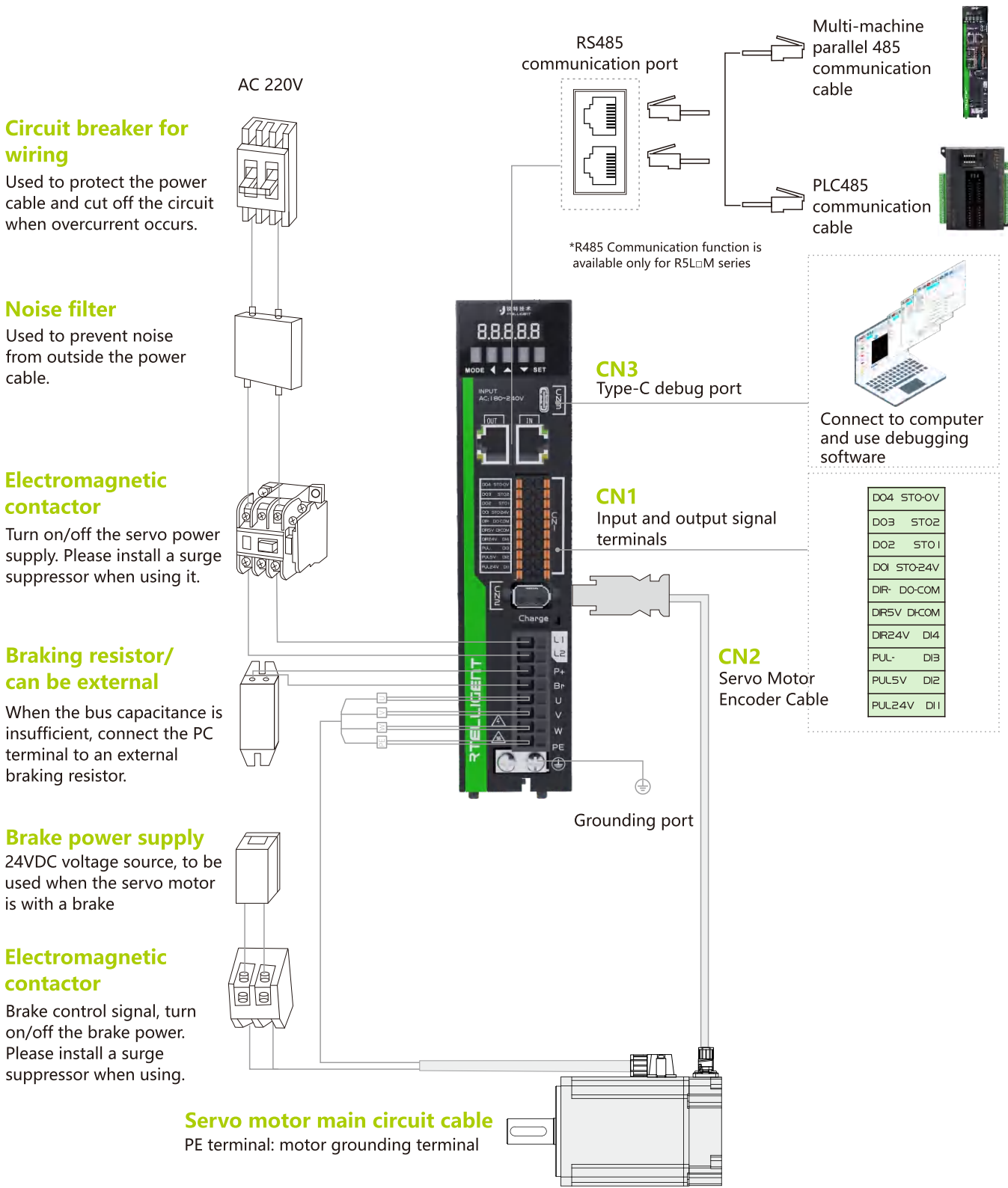
Basic Specifications

Item	R5L028	R5L028M	R5L028E	R5L042	R5L042M	R5L042E	R5L076	R5L076M	R5L076E
Communication function	-	RS485	EtherCAT	-	RS485	EtherCAT	-	RS485	EtherCAT
Overload capacity	Support 3 times overload			Support 3 times overload			Support 3 times overload		
Applicable power (W)	50~400			750			1000~2000		
Rated current (A)	2.8			4.2			7.6		
Maximum current (A)	8.4			12.6			22.8		
Input power	Single phase 220VAC ± 10%, 50/60Hz								
Size code	Type A			Type B			Type B		
Dimensions (mm)	175*156*40			175*156*51			175*156*51		
Brake resistor function	No brake resistor			With brake resistor (75W, 50Ω)			With brake resistor (75W, 50Ω)		

Technical Specifications

Item	Description
Control mode	IPM PWM control, SVPWM drive mode
Encoder feedback	Absolute encoder
Isolation function	Power supply/communication isolation; encoder input isolation; digital input/output isolation
Protection function	Overvoltage, undervoltage, overcurrent, overload, overheating, overspeed, communication abnormality, register abnormality, encoder error, etc.
Display and operation	5-digit LED display, 5-digit key operation DC bus indicator
Parameter setting	Button or RTServoStudioV5
Power-off retention	Keep all optional parameters
Digital input (4 channels DI)	Positive direction travel limit, reverse direction travel limit, latch signal, origin signal, etc. Note: Pin functions can be assigned through software configuration parameters to input valid logic levels
Digital output (4 channels DO)	Servo ready, alarm output, brake release, command completion output, positioning completion output, speed reached, torque limit reached, etc. Note: Pin functions can be assigned through software configuration parameters to output valid logic levels

R5 Series Pulse Type (Including RS485) Drive Wiring Diagram



R5 Series Pulse Type (Including RS485) Drive Port Definition

RS485 modbus communication interface definition

Signal name		Pin number	Function
Communication signal	RS485+	1	RS485 communication port
	RS485-	2	
	-	3	-
	-	4	-
	-	5	-
	-	6	-
	DGND	7	GND signal
-	-	8	-

Encoder terminal definition

Signal name	Pin number	Function
+5V	1	Power output positive pole: +5V
GND	2	Power output negative pole: 0V
-	3	-
-	4	
SD+	5	Encoder bus signal
SD-	6	
FG	-	Terminal metal housing

Main circuit interface definition

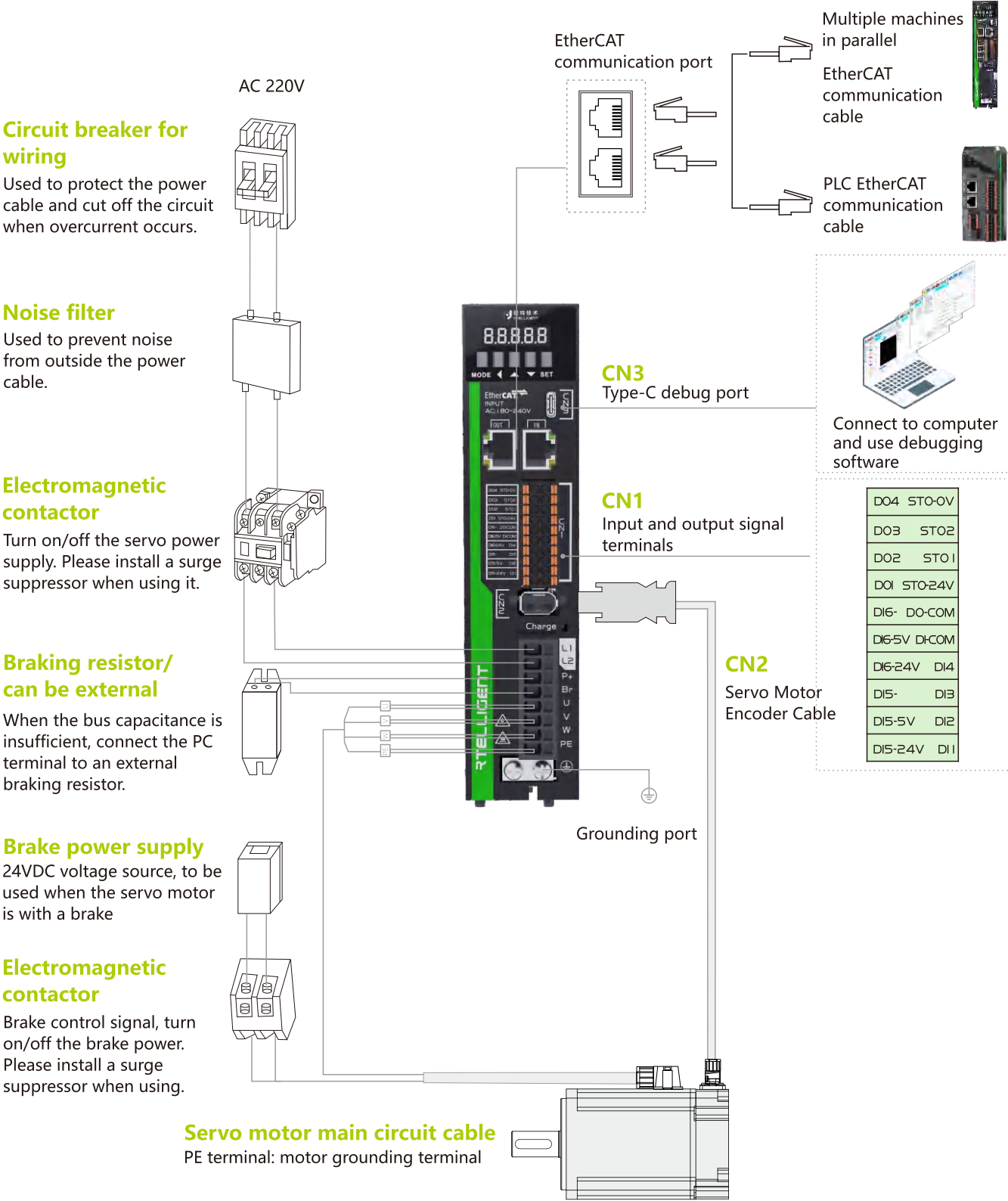
Terminal marking	Terminal name	Function
L1、L2、	Power supply input terminal	Servo drive power supply input terminal, single-phase 220VAC External brake resistor connection terminal
P+、Br	Brake resistor terminal	
U、V、W、PE	Servo motor connection terminal	The servo motor connection terminals must be connected to the motor U, V, W, and PE terminals accordingly.

Control signal terminal definition (CN1)

Functional classification	Signal name	Signal Definition	Default function	Description
External pulse interface	PUL5V	5V pulse +	-	Independent 5V 24V pulse Direction control Signal interface
	PUL-	pulse -		
	DIR5V	5V direction +		
	DIR-	direction -		
	PUL24V	24V pulse positive		
	DIR24V	24V direction positive		
Universal input interface	DI1(SV-ON)	Input 1	Servo enabled	Below 24V, supports common anode or common cathode, does not support mixed use of NPN and PNP
	DI2(POT)	Input 2	Positive limit	
	DI3(NOT)	Input 3	Negative limit	
	DI4(ALMRST)	Input 4	Alarm cleared	
	DI-COM	Input common terminal	-	
Universal common cathode output interface	DO1(ALM)	Output 1	Alarm output	Below 24V, common cathode output, current does not exceed 200mA
	DO2(INP)	Output 2	Positioning completed	
	DO3(ZERODONE)	Output 3	Return to zero completed	
	DO4(BRK)	Output 4	Brake	
	DO-COM	Output common ground	-	
STO safety interface	STO-24V	-	-	Disable STO function: Connect STO to STO-24V Enable STO function: Connect STO to STO-0V
	STO1	-	-	
	STO2	-	-	
	STO-0V	-	-	



R5 Series EtherCAT Communication Drive Wiring Diagram



R5 Series EtherCAT Communication Drive Port Definition

Communication interface definition

Signal name		Pin number	Function
Communication signal	TX+	1	Data send +
	TX -	2	Data send-
	RX+	3	Data receive+
	-	4	-
	-	5	-
	RX -	6	Data receive-
	-	7	-
	-	8	-

Encoder terminal definition

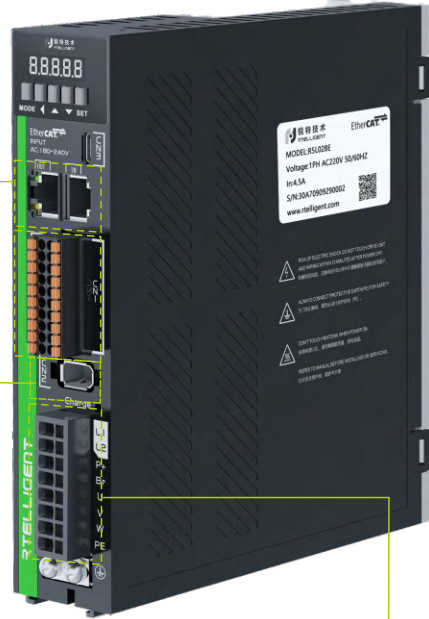
Signal name	Pin number	Function
+5V	1	Power output positive pole: +5V
GND	2	Power output negative pole: 0V
-	3	-
-	4	
SD+	5	Encoder bus signal
SD-	6	
FG	-	Terminal metal housing

Main circuit interface definition

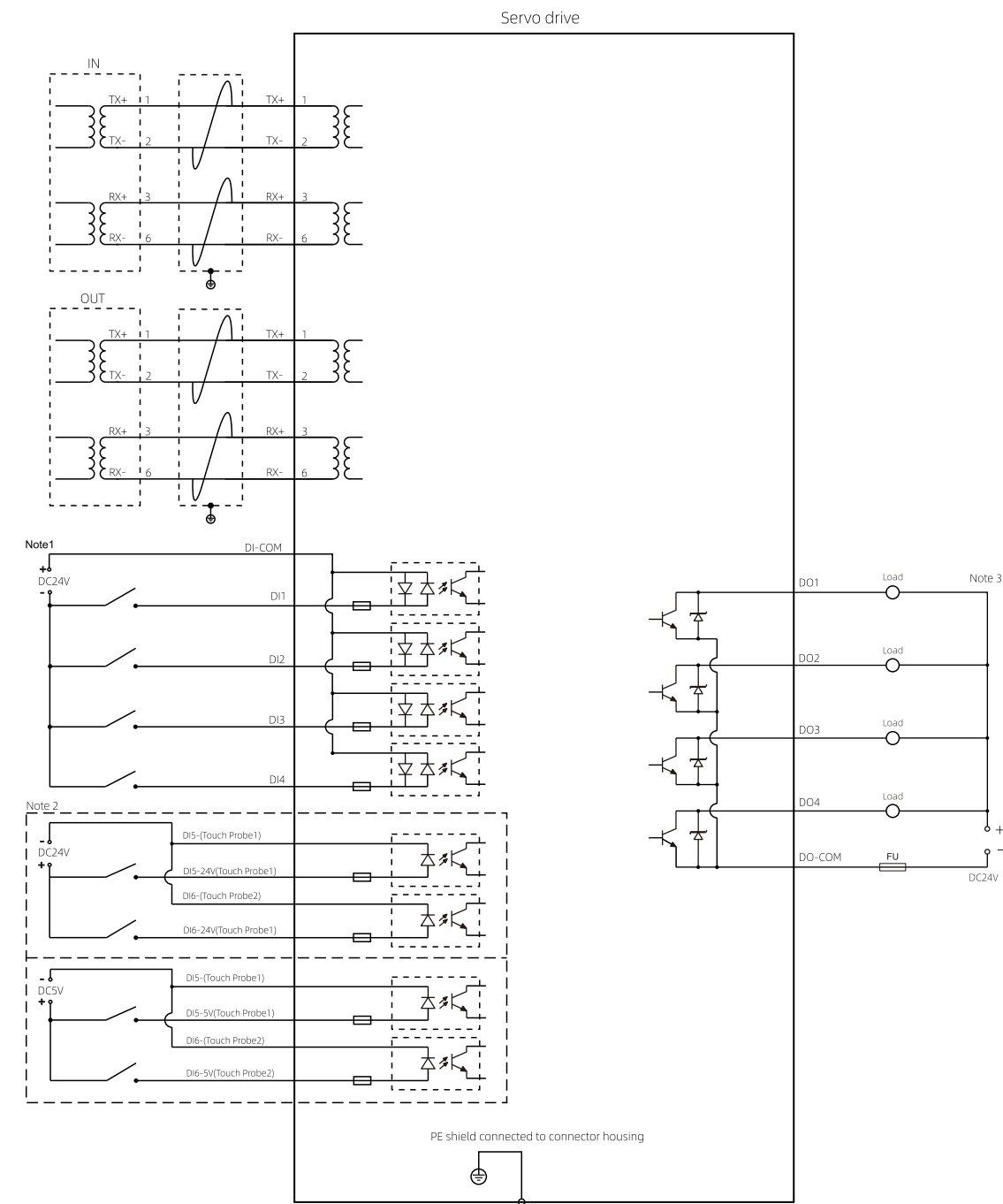
Terminal marking	Terminal name	Function
L1、L2、	Power supply input terminal	Servo drive power supply input terminal, single-phase 220VAC External brake resistor connection terminal
P+、Br	Brake resistor terminal	
U、V、W、PE	Servo motor connection terminal	The servo motor connection terminals must be connected to the motor U, V, W, and PE terminals accordingly.

Control signal terminal definition (CN1)

Functional classification	Signal name	Signal Definition	Default function	Description
Differential interface	DI5-5V	D15 positive	Probe 1	Differential input
	DI5-	D15 negative		
	DI6-5V	D16 positive	Probe 2	
	DI6-	D16 negative		
	DI5-24V	DI5-24V positive	-	
	DI6-24V	DI6-24V positive		
Universal input interface	DI1(SV-ON)	Input 1	Servo enable	Below 24V, supports common anode or common cathode, does not support mixed use of NPN and PNP
	DI2(POT)	Input 2	Positive limit	
	DI3(NOT)	Input 3	Negative limit	
	DI4(HM)	Input 4	Alarm clear	
	DI-COM	Input common terminal	-	
Universal common cathode output interface	DO1(ALM)	Output 1	Alarm output	Below 24V, common cathode output, current does not exceed 200mA
	DO2(INP)	Output 2	Positioning completed	
	DO3(ZERODONE)	Output 3	Return to zero completed	
	DO4(BRK)	Output 4	Brake	
	DO-COM	Output common ground	-	
STO safety interface	STO-24V	-	-	Disable STO function: Connect STO to STO-24V Enable STO function: Connect STO to STO-0V
	STO1	-	-	
	STO2	-	-	
	STO-0V	-	-	



■ R5 Series EtherCAT Communication Type Drive Control Mode Wiring Diagram

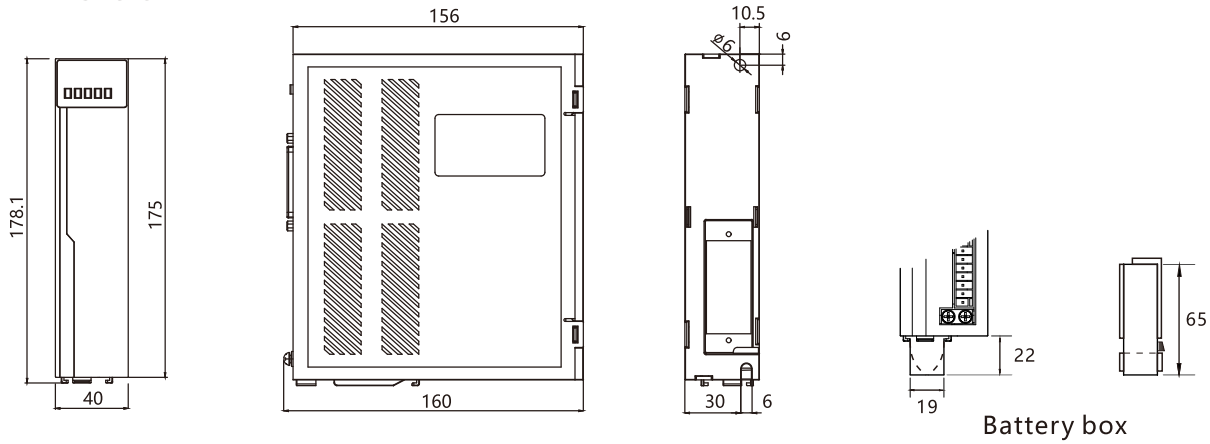


Note 1: Below 24V, common anode or common cathode is supported, and mixing of NPN and PNP is not supported;
Note 2: Differential input, 24V and 5V cannot be used together, choose one;
Note 3: Below 24V, common cathode output, current does not exceed 50mA.

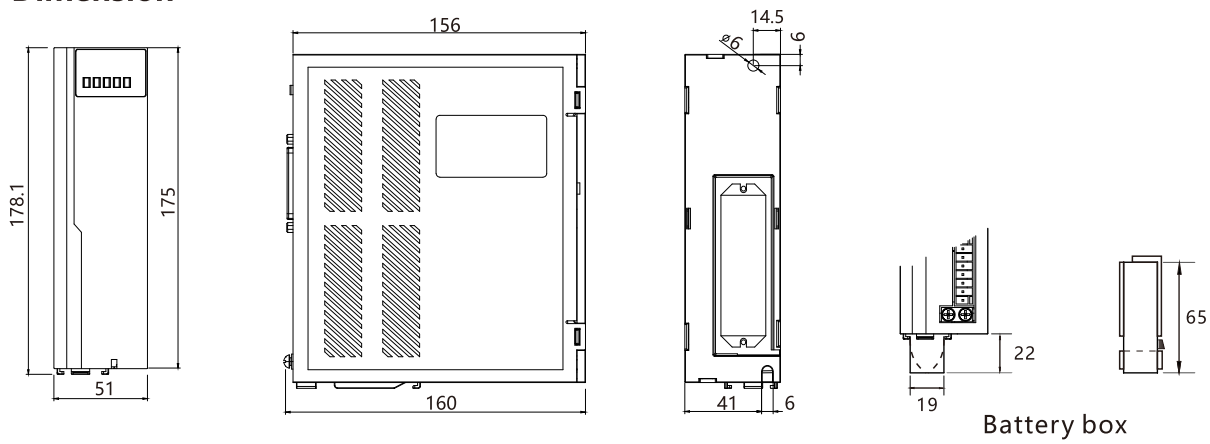
■ R Series Servo Drive Installation Dimensions

Size code	Dimensions (mm)	Mounting hole (mm)	Battery box (mm)
A	175x156x40	Ø6	65x19x22
B	175x156x51	Ø6	65x19x22
C	196*176*72	Ø6	65x19x22

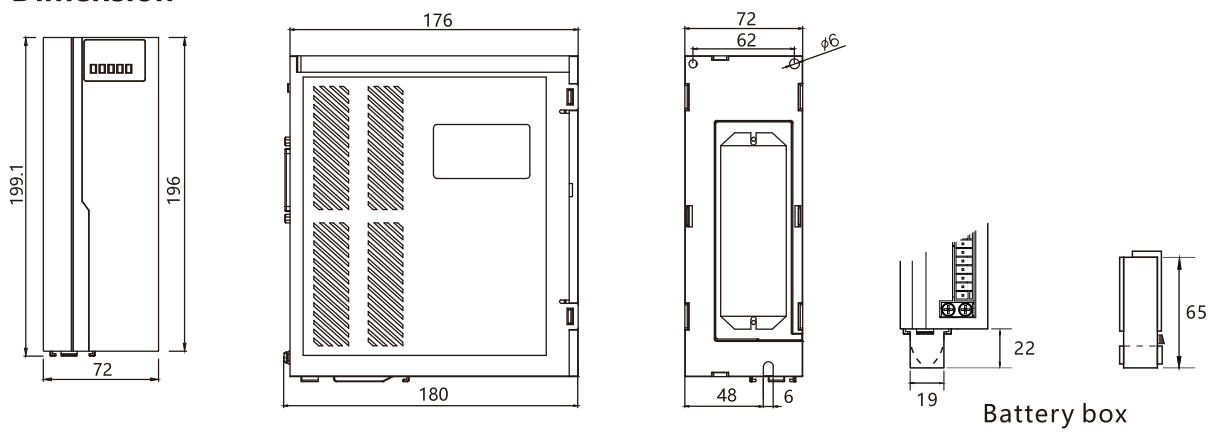
SizeA Drive Dimension



SizeB Drive Dimension



SizeC Drive Dimension



AC Servo Motor

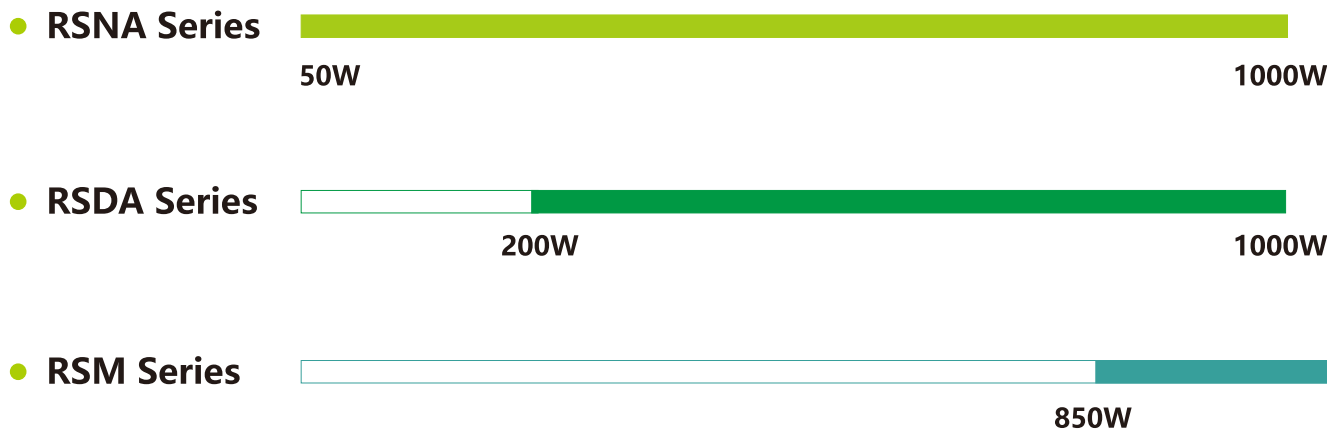
Naming Rule

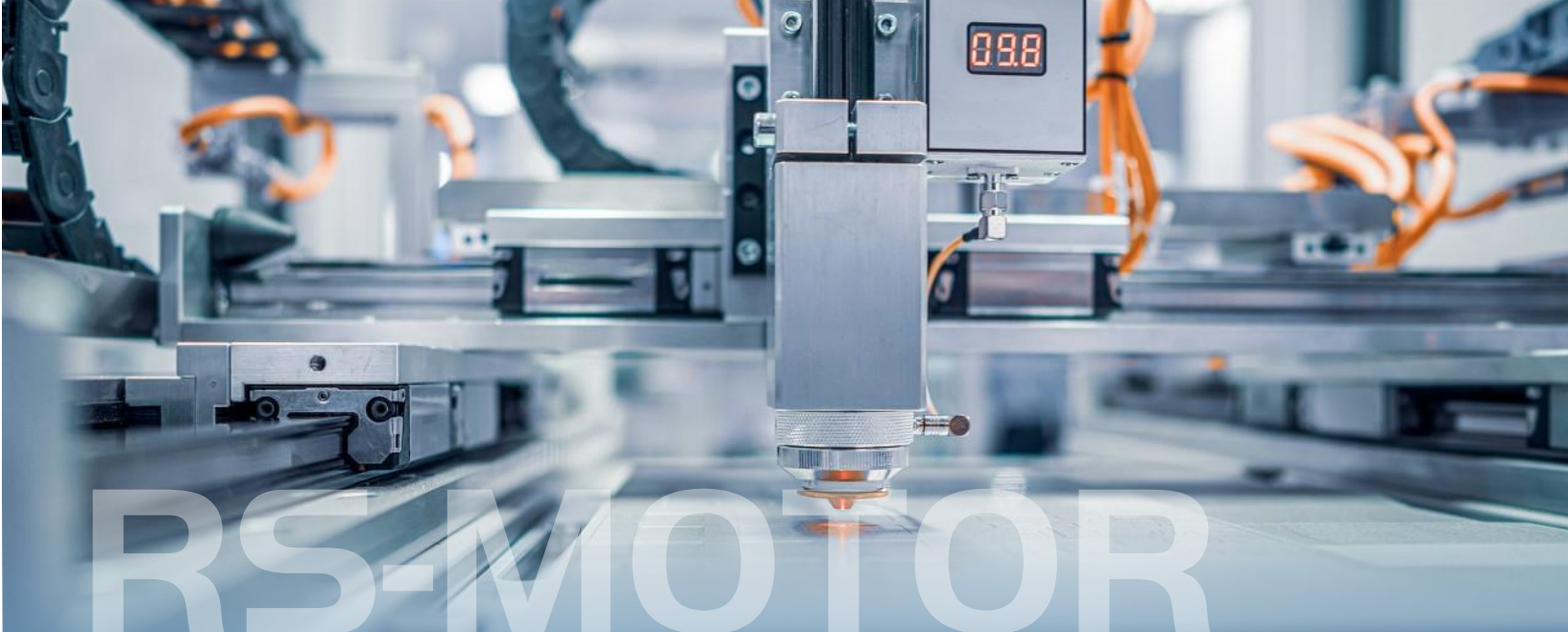
RSNA M 06 J 13 30 A - Z
1 2 3 4 5 6 7 8

1 Product series	4 Encoder resolution J: 17 bits magnetic programmed single figure absolute value G: 17 bits magnetic programmed multi-turn absolute value L: 23-bit optical multi-turn absolute value	6 Motor rated speed 30: 3000rpm
2 Motor inertia code S:small inertia M:medium inertia H:large inertia	7 Output mode A: Wire type C: Connector type	
3 Motor flange size 06: 60mm 13: 130mm	5 Motor rated torque 13: 1.3N·m 150: 15N·m	8 Brake code Z: With brake

*Model naming rules are only used for model meaning analysis. For specific optional models, please refer to the details page.

Wide range of products, flexible matching, to meet the needs of different working conditions





RS-MOTOR

Shorter Body with Super Power

 **Magnetic encoder optical encoder single-turn multi-turn**

Various types of encoders are available. Including Magnetic, Optical, Multiturn Absolute.

 **Permanent magnet brake Z-axis applications**

Fast start/stop, low heat generation.
Suitable for Z-axis application environment, in the event of drive power failure or alarm, holding brake, to protect the workpiece locking, avoiding the free slip

24

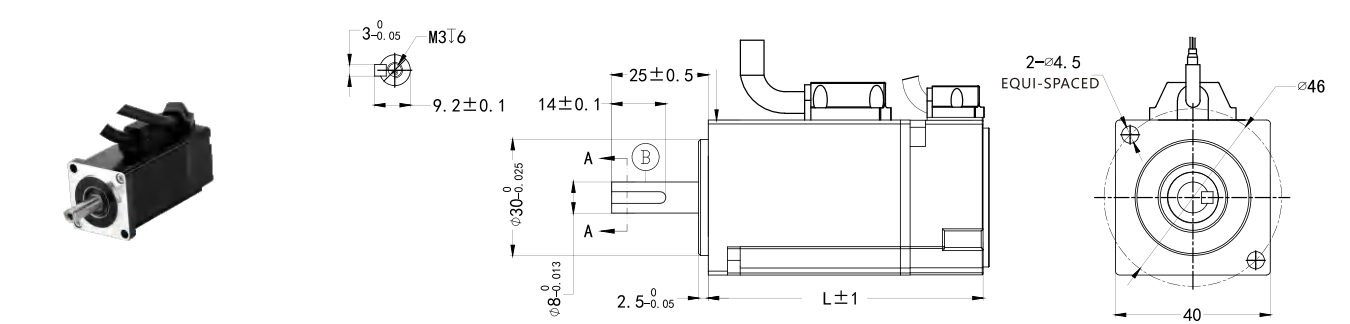
RSNA Series Servo Motor

Motor Specifications

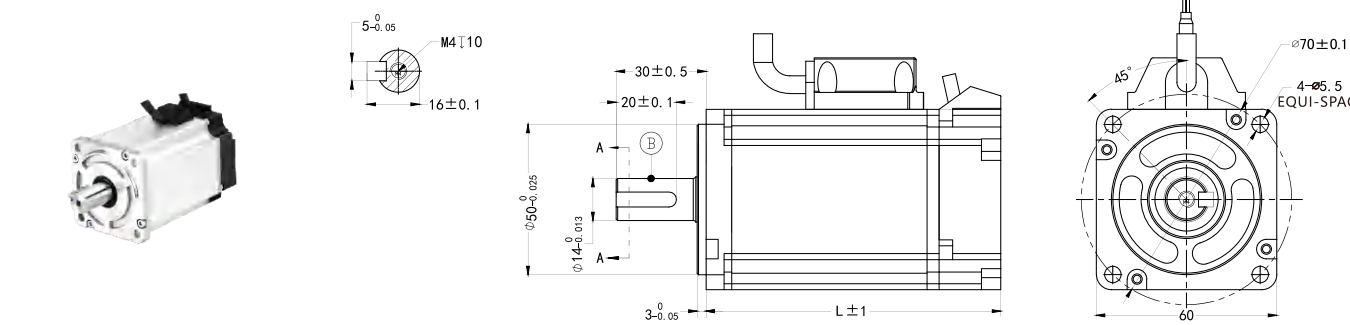
Motor	RS□A-M 04J0130A	RS□A-M 04J0330A	RSNA-M 06J0630A	RSNA-M 06J1330A	RSNA-M 08J2430A	RSNA-M 08J3230A
Rated power (W)	50	100	200	400	750	1000
Rated voltage (V)	220	220	220	220	220	220
Rated current (A)	1.1	1.1	1.9	2.3	4.2	5.6
Rated torque (N·m)	0.16	0.32	0.64	1.27	2.39	3.20
Maximum torque (N·m)	0.48	0.96	1.92	3.81	7.17	9.60
Rated speed (rpm)	3000	3000	3000	3000	3000	3000
Maximum speed (rpm)	6500	6500	6000	6000	6000	6000
Back EMF (V/Krpm)	10.5	18.8	26.6	37.0	35.7	34.6
Torque constant (N·m/A)	0.14	0.29	0.33	0.55	0.57	0.57
Wire resistance (Ω,20°C)	14.30	14.90	10.72	6.60	2.03	1.26
Wire inductance (mH,20°C)	14.80	14.80	21.04	20.56	10.20	6.86
Rotational inertia(X10 ⁻⁴ kg.m ²)	0.036	0.079	0.26	0.61	1.71	2.11
Weight (kg)	0.35	0.46	0.84	1.19	2.27	2.95
		Brake 0.66	Brake 1.21	Brake 1.56	Brake 3.05	Brake 3.73
Length L (mm)	61.5	81.5	80	98	107	127
		Brake 110	Brake 109	Brake 127	Brake 144	Brake 163

*The encoder comes standard with 17bit magnetic encoding, 23bit optical encoding is optional, and multi-turn absolute value specifications are available.

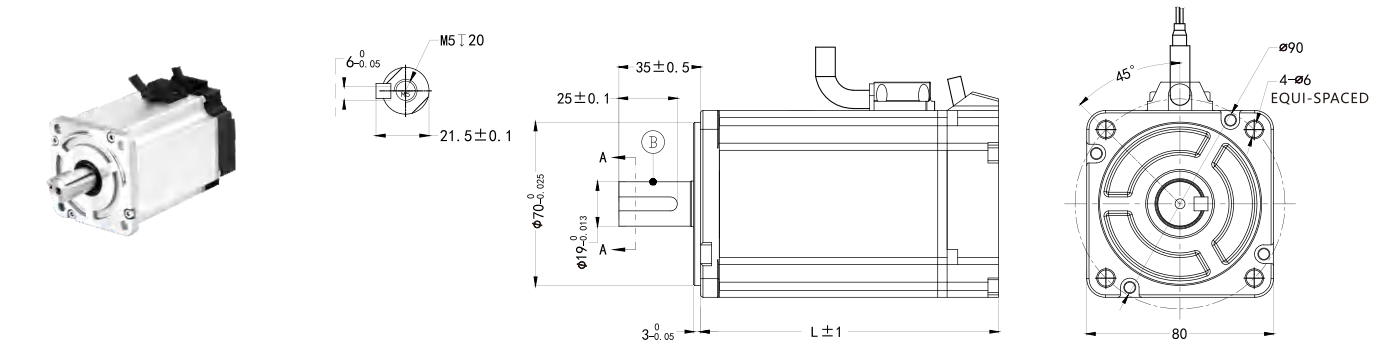
Frame 40 Dimension(mm)



Frame 60 Dimension(mm)

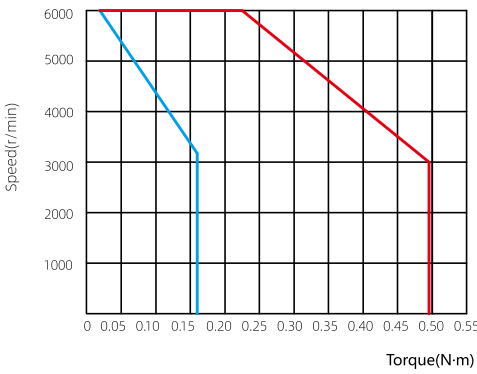


Frame 80 Dimension(mm)

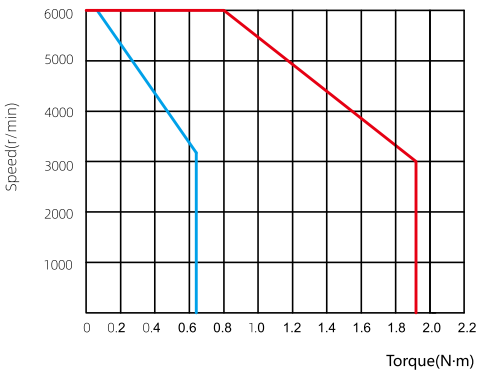


Torque-speed Characteristic Curve

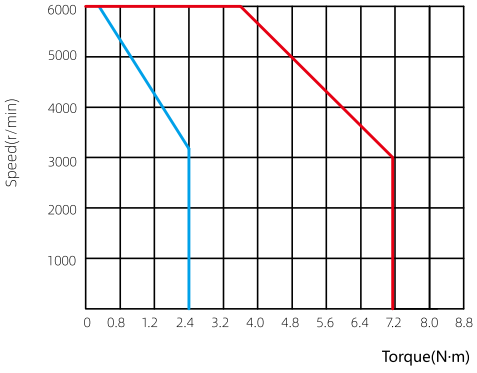
— A Continuous operating region — B Short-time operating region



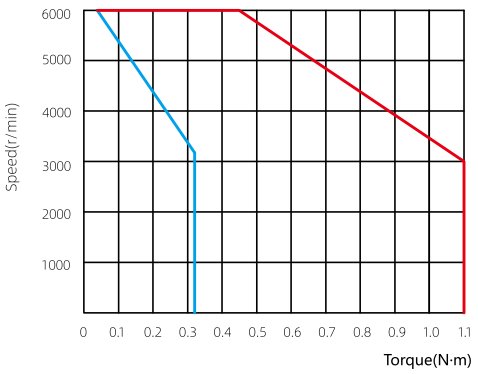
RS□A-M04J0130A



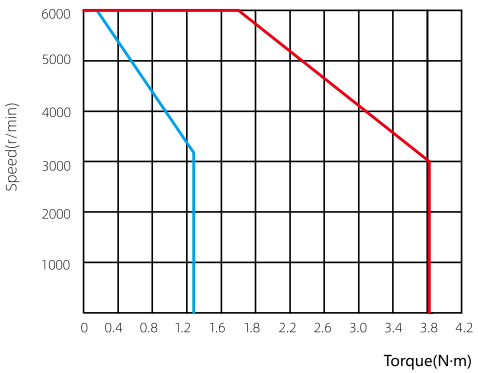
RSNA-M06J0630A



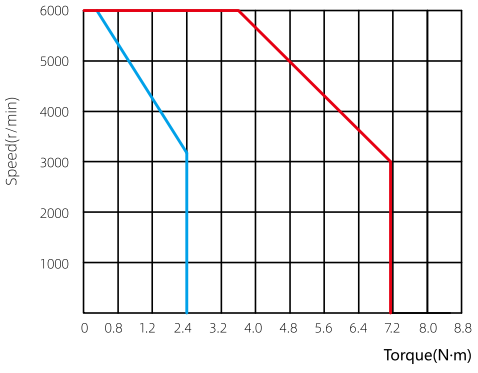
RSNA-M08J2430A



RS□A-M04J0330A



RSNA-M06J1330A



RSNA-M08J3230A

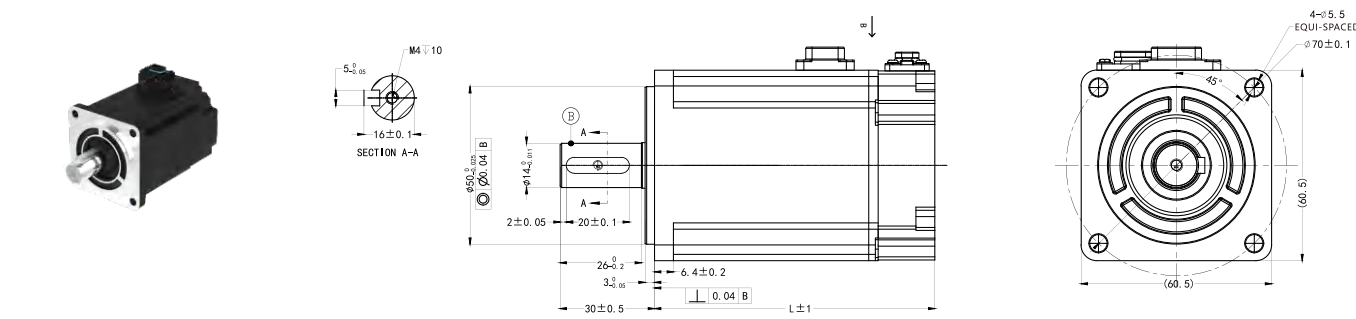
RSDA Series Servo Motor

Motor Specifications

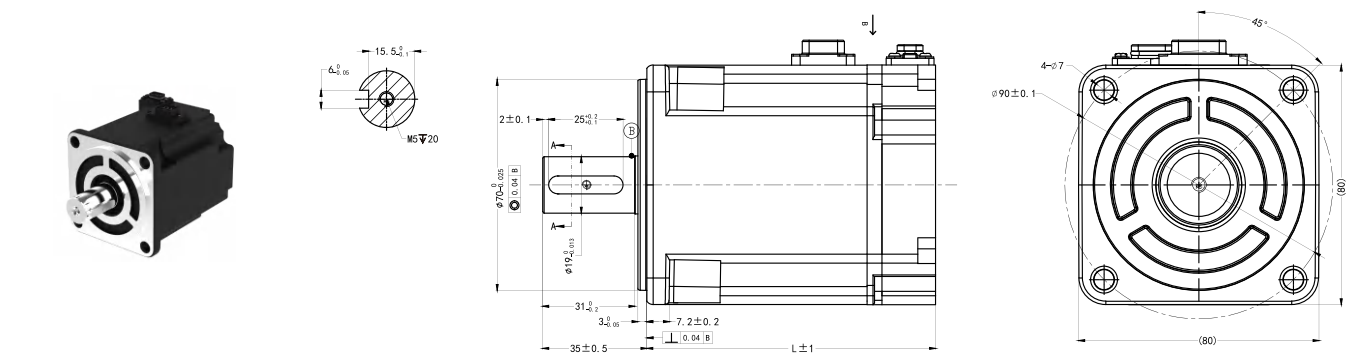
Motor	RSDA-H06J0630C V3.0	RSDA-H06J1330C V3.0	RSDA-H08J2430C V3.0	RSDA-H08J3230C V3.0
Rated power (W)	200	400	750	1000
Rated voltage (V)	220	220	220	220
Rated current (A)	1.9	2.5	4.9	5.0
Rated torque (N·m)	0.64	1.27	2.39	3.2
Maximum torque (N·m)	1.28	2.54	4.78	6.4
Rated speed (rpm)	3000	3000	3000	3000
Maximum speed (rpm)	5000	5000	5000	4000
Back EMF (V/Krpm)	23.5	38.5	34	45
Torque constant (N·m/A)	0.33	0.5	0.49	0.65
Wire resistance (Ω,20°C)	8.4	6.5	1.7	1.5
Wire inductance (mH,20°C)	15	14.6	8.2	5.5
Rotational inertia(X10 ⁻⁴ kg.m²)	0.2	0.5	1.5	1.9
	Brake 0.25	Brake 0.6	Brake 1.7	Brake 2.1
Length L (mm)	70.5 Brake 100.5	89 Brake 119	97 Brake 135	109 Brake 147

*The encoder comes standard with 17bit magnetic encoding, 23bit optical encoding is optional, and multi-turn absolute value specifications are available.

Frame 60 Dimension(mm)

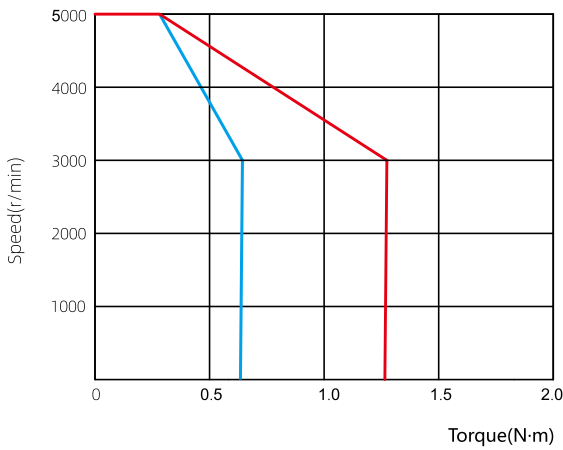


Frame 80 Dimension(mm)

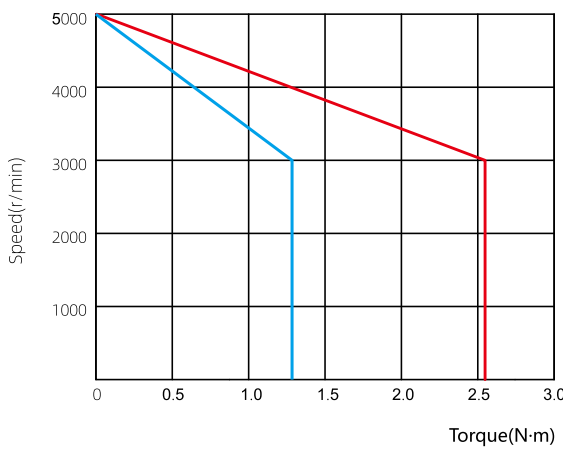


Torque-speed Characteristic Curve

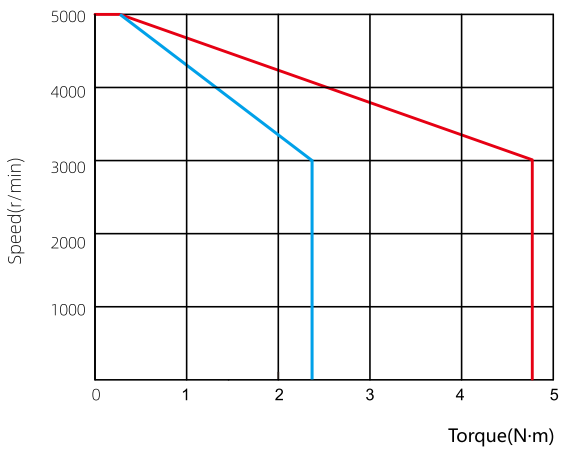
— A Continuous operating region — B Short-time operating region



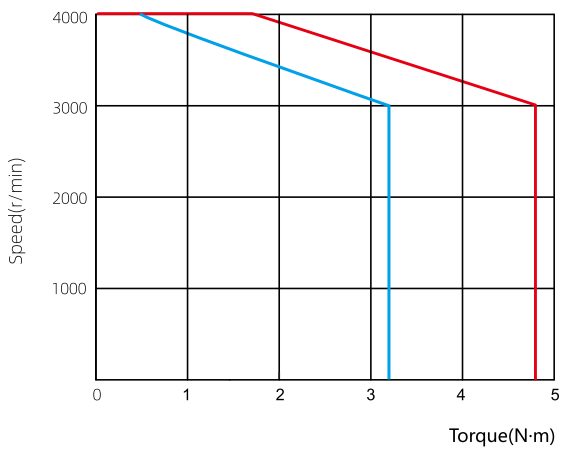
RSDA-H06J0630C V3.0



RSDA-H06J1330C V3.0



RSDA-H08J2430C V3.0



RSDA-H08J3230C V3.0

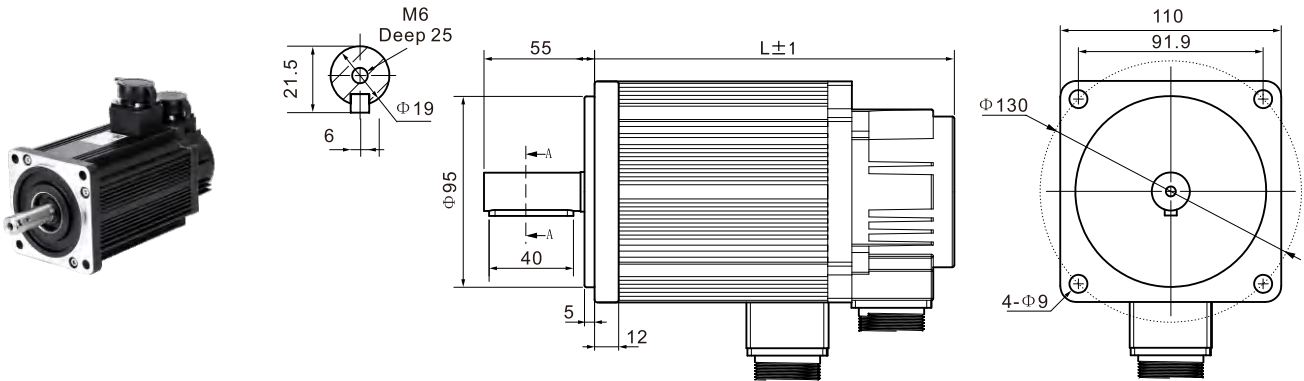
RSM Series Servo Motor

Motor Specifications

Motor	RS□- M11J4030A	RS□-M11J5030A	RS□-M11J6030A
Rated power(kW)	1.2	1.5	1.8
Rated voltage(V)	220	220	220
Rated current(A)	5.0	6.0	7.0
Rated torque(N·m)	4.0	5.0	6.0
Maximum torque(N·m)	12	15	18
Motor pole pair	4	4	4
Encoder specification	17bit	17bit	17bit
Rated speed(rpm)	3000	3000	3000
Maximum speed(rpm)	3500	3500	3500
Reverse potential(V/Krpm)	56.5	58	56.5
Line resistance(Ω,20°C)	1.5	1.0	0.8
Line inductance(mH,20C)	6.9	5.0	3.9
Rotational inertia(X10 ⁻⁴ kg.m ²)	7.8	9.2	10.8
Weight(kg)	5.2	6.0 Brake 7.3	6.7 Brake 8.0
Length L(mm)	189	204 Brake 279	219 Brake 294

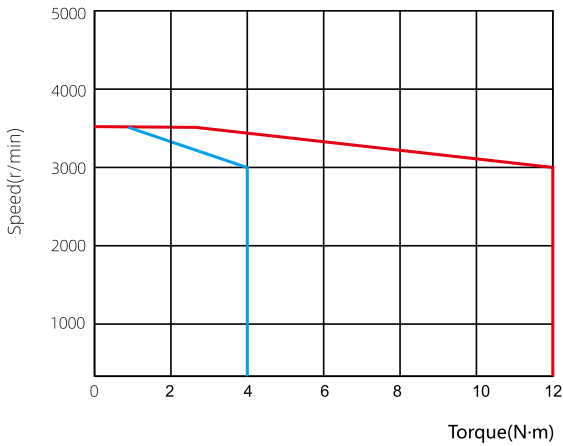
*The encoder comes standard with 17bit magnetic encoding, 23bit optical encoding is optional, and multi-turn absolute value specifications are available.

Frame 110 Dimension(mm)

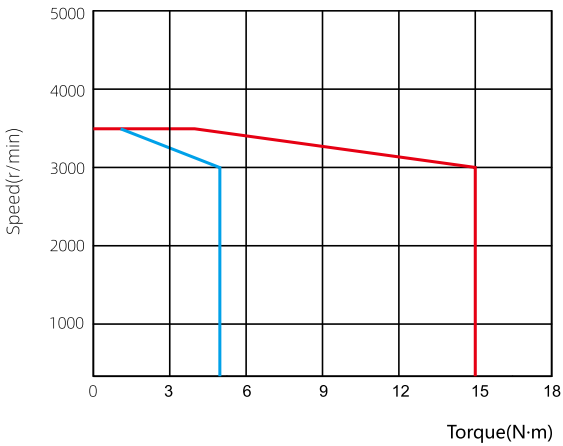


Torque-speed Characteristic Curve

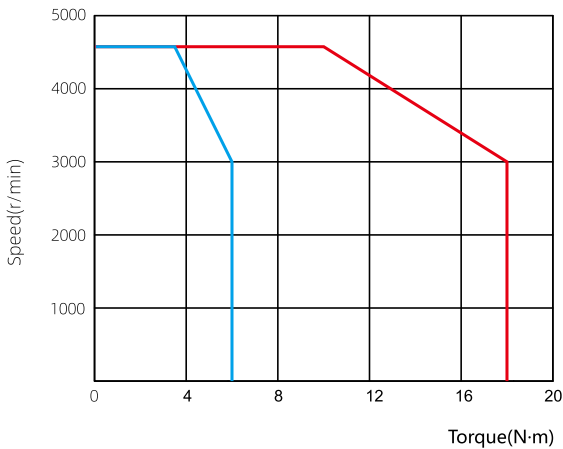
— A Continuous operating region — B Short-time operating region



RS□- M11J4030A



RS□- M11J5030A



RS□-M11J0630A

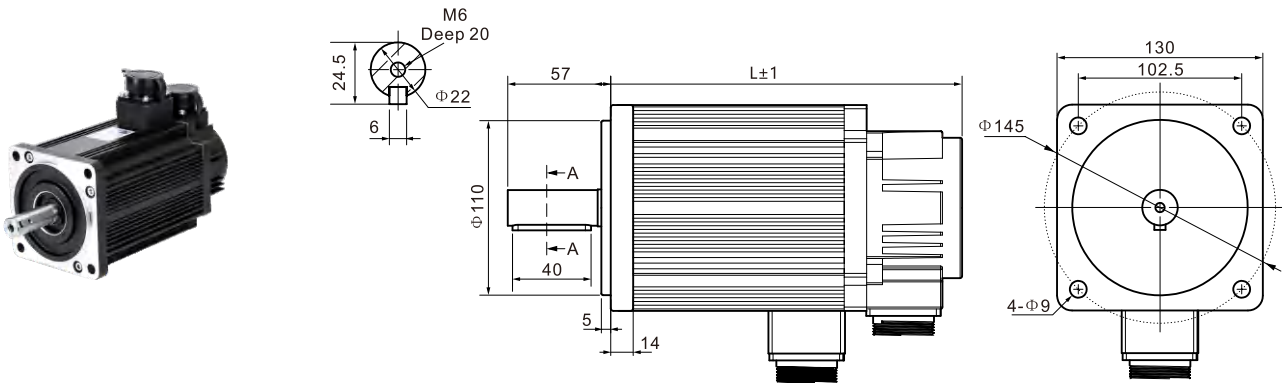
RSM Series Servo Motor

Motor Specifications

Motor	RS□-M 13J4025A	RS□-M 13J6025A	RS□-M 13J7725A	RS□-M 13J10025A	RS□-M 13J15015A	RS□-M 13J15025A
Rated power(kW)	1.0	1.5	2.0	2.6	2.3	3.8
Rated voltage(V)	220	220	220	220	220	220
Rated current(A)	4.0	6.0	7.5	10	9.5	13.5
Rated torque(N·m)	4.0	6.0	7.7	10	15	15
Maximum torque(N·m)	10	18	22	25	30	30
Motor pole pair	4	4	4	4	4	4
Encoder specification	17bit	17bit	17bit	17bit	17bit	17bit
Rated speed(rpm)	2500	2500	2500	2500	1500	2500
Maximum speed(rpm)	3000	4000	3000	3500	3000	3500
Reverse potential(V/Krpm)	67	65	68	70	114	67
Line resistance(Ω,20°C)	2.0	1.21	1.01	0.73	1.1	0.49
Line inductance(mH,20C)	9.5	3.87	2.94	2.45	4.46	1.68
Rotational inertia(X10 ⁻⁴ kg.m²)	9.6	1.25	1.53	1.94	2.77	2.77
Weight(kg)	5.5	7.4 Brake 9.0	8.3 Brake 9.9	9.8 Brake 11.4	12.6 Brake 14.2	11.7 Brake 13.3
Length L(mm)	166	179 Brake 236	192 Brake 249	209 Brake 290	241 Brake 322	231 Brake 303

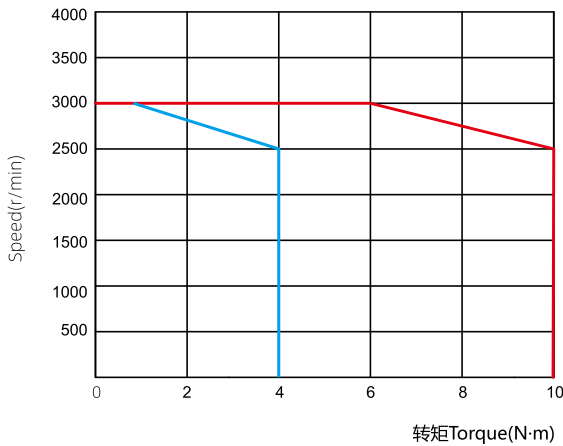
*The encoder comes standard with 17bit magnetic encoding, 23bit optical encoding is optional, and multi-turn absolute value specifications are available.

Frame 130 Dimension(mm)

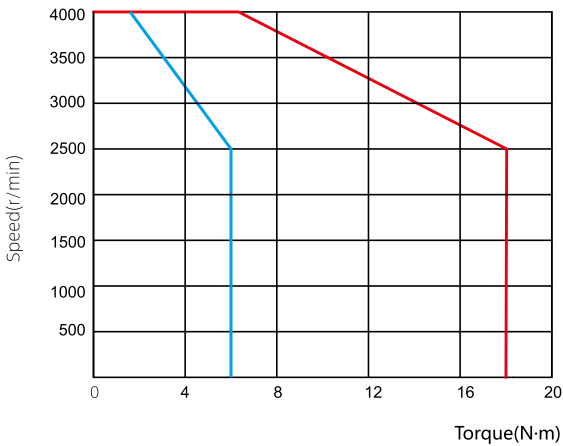


Torque-speed Characteristic Curve

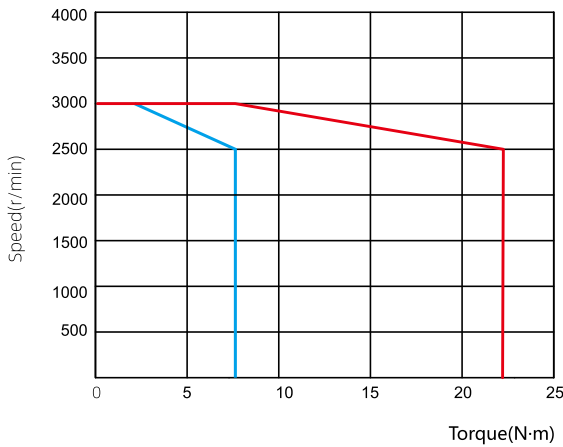
— A Continuous operating region — B Short-time operating region



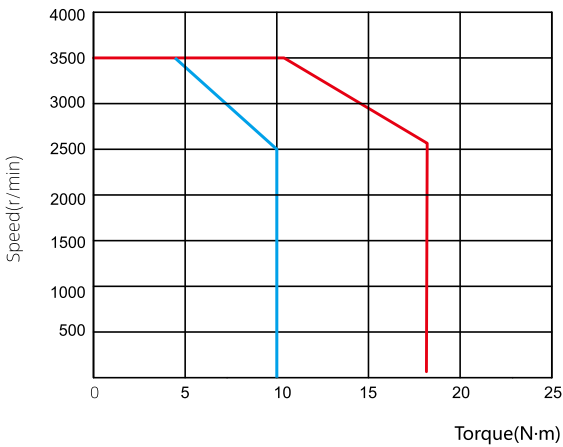
RS□- M13J4025A



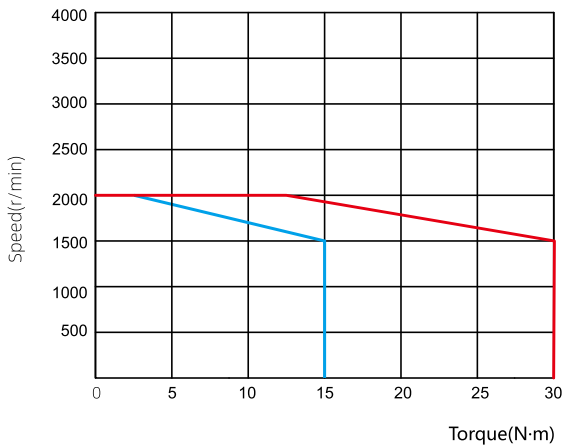
RS□- M13J6025A



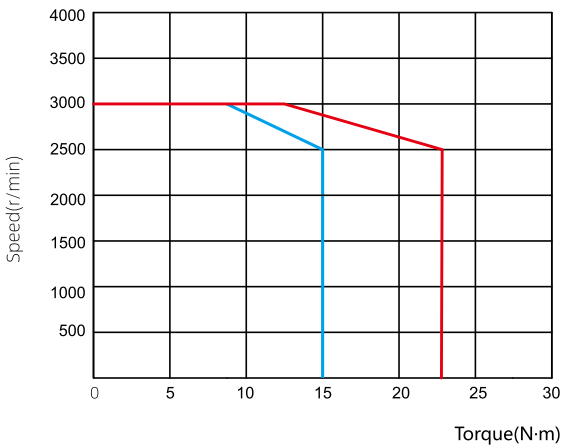
RS□- M13J7725A



RS□- M13J10025A



RS□- M13J15015A



RS□- M13J15025A

LOW-VOLTAGE SERVO SYSTEM

EtherCAT

RS485

CANopen

separate type



Integrated type

compact size



RTS

Low-volatage DC Servo Drive

D5V series low-voltage servo drive is the fifth general-purpose low-voltage servo drive independently developed by Rteelligent. The product uses a new algorithm and hardware platform to support RS485, CANopen, EtherCAT communication, support internal PLC mode, with three basic control modes (position control, speed control, torque controlSystem). The power range of this series of products is 0.1 ~ 1.5KW, suitable for a variety of low voltage and high current servo applications.

D5VC Series



D5VE Series



CANopen RS485
Pulse control type low-voltage servo drive
Power range up to 1.5kw
Encoder resolution up to 23bits
Excellent anti-interference ability
Better hardware and high reliability
With brake output

EtherCAT
Bus type low-voltage servo drive
Power range up to 1.5kw
High speed response frequency, shorter positioning time
Comply with CIA402 standard
Support CSP/CSV/SCT/PP/PT/HM mode
With brake control

D5VC/D5VE Series

Serial Name

D

5

V

120

C

1

2

3

4

5

1

Product Series

R: R series AC servo
S: S series AC servo economic line
D: D series low voltage DC servo

2

Product Version

5: The 5th generation

3

Voltage level

L: 220V AC
H: 380V AC
D: 110V AC
V: 24V~70V DC

4

Rated current

120: 12A
250: 25A
380: 38A

5

Communication type

Default: pulse
E: EtherCAT
C: CANopen + RS485 Modbus

*Model naming rules are only used for model meaning analysis. For specific optional models, please refer to the details page.

Basic specification

Item	D5V120C	D5V250C	D5V380C	D5V120E	D5V250E	D5V380E
Communication function	CANopen & RS485			EtherCAT		
Overload capacity	3times overload					
Adaptive power	400W	750W	1500W	400W	750W	1500W
Rated current	12A	25A	38A	12A	25A	38A
Maximum current	36A	75A	114A	36A	75A	114A
Input power supply	24~70V DC					
Dimension	175*98*33mm					
Brake resistance function	Brake resistor external connection					

Note: The rated current is reachable data without auxiliary heat dissipation

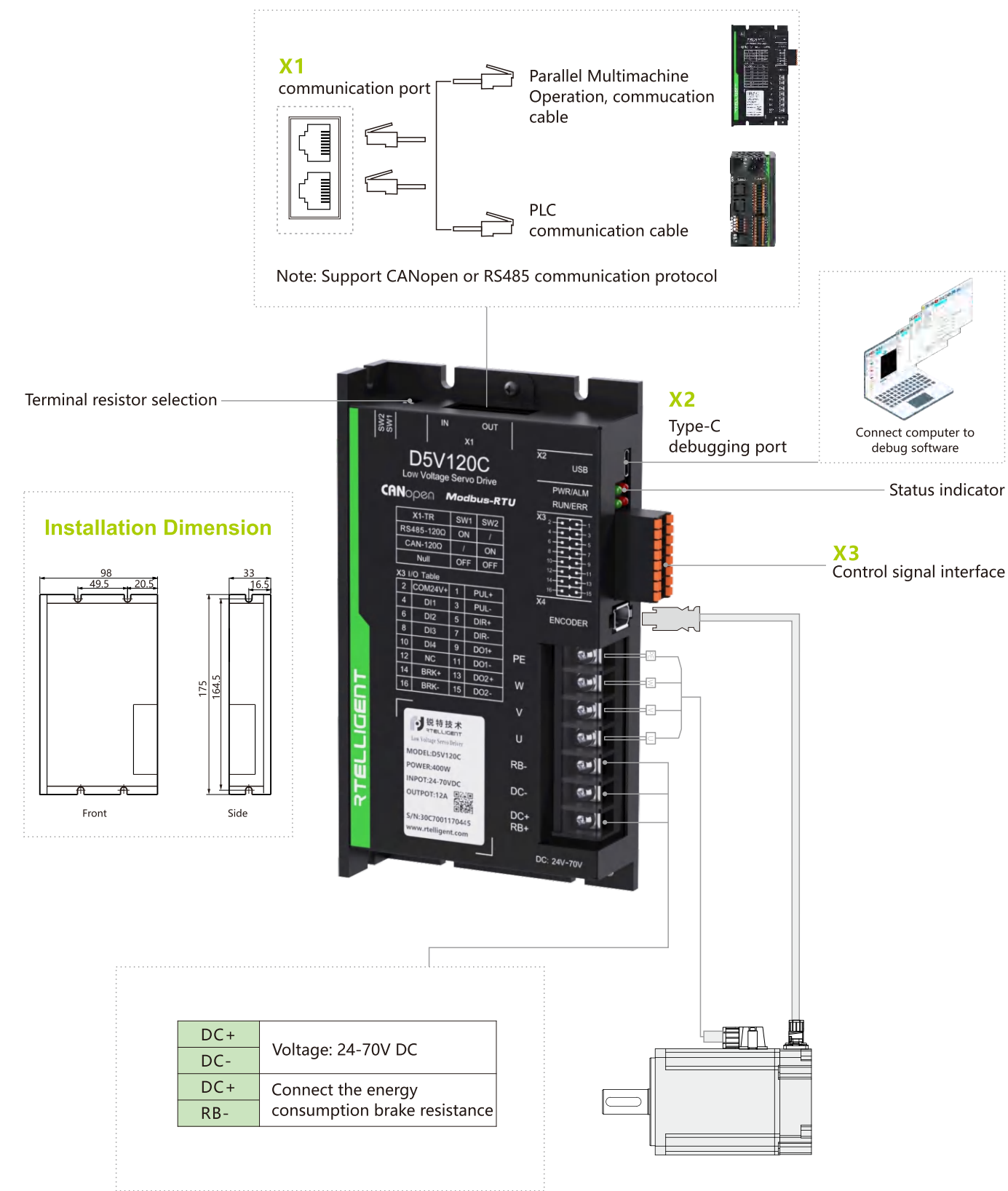
Technical Specifications

Item	Description
Control mode	IPM PWM control, SVPWM drive mode
Encoder feedback	Absolute encoder
Isolation function	Power supply/communication isolation; encoder input isolation; digital input/output isolation
Protection function	Overvoltage, undervoltage, overcurrent, overload, overheating, overspeed, communication abnormality, register abnormality, encoder error, etc
Parameter setting	RTServoStudioV5
Power-off retention	Keep all optional parameters
Digital input (6 DI channels)	Positive travel limit, reverse travel limit, latch signal, origin signal, etc Note: The pin function can be assigned through the software configuration parameters, and the valid logic level can be entered.
Digital output (2 DO)	Servo ready, alarm output, brake release, command complete output, positioning complete output, speed reached, torque limit reached, etc Note: Pin function can be assigned by software configuration parameters, and the output is valid

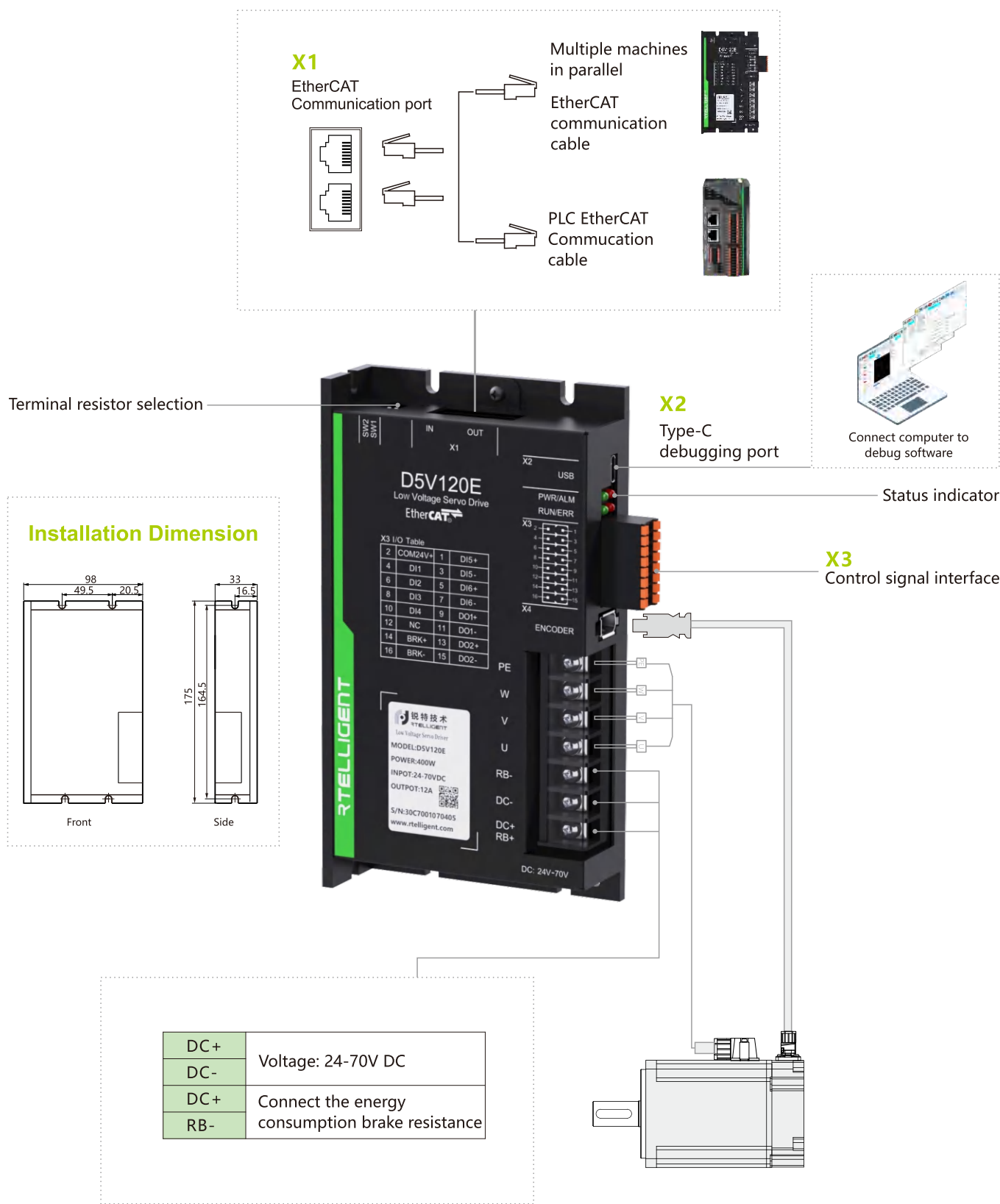
35

36

■ D5V Series Pulse Type (Including CANopen/ RS485) Drive Wiring Diagram



■ D5V Series EtherCAT Communication Drive Wiring Diagram



General Integrated Low-voltage Servo Motor

The IDV series is a general integrated low-voltage servo motor developed by Rtelligent. Equipped with position/speed/torque control mode, support 485 communication to achieve communication control of the integrated motor.

- Working voltage: 18-48VDC, recommended the rated voltage of the motor as working voltage
- 5V dual ended pulse/direction command input, compatible with NPN and PNP input signals.
- The built-in position command smoothing filtering function ensures smoother operation and significantly reduces equipment operating noise.
- Adopting FOC magnetic field positioning technology and SVPWM technology.
- Built-in 17-bit high-resolution magnetic encoder.
- With multiple position/speed/torque command application modes.
- Three digital input interfaces and one digital output interface with configurable functions.



01
Compact size

02
Save space

03
Low heating

04
Simple wiring

05
Low noise

06
Strong anti-interference capability

IDV Series

Serial Name

IDV 400 C - 24
1 2 3 4

1 Rtelligent IDV series low-voltage integrated motor	2 Rated power 50: 50W 200: 200W 400: 400W 750: 750W 1000: 1000W
3 Communication mode C: CANopen None: RS485	4 Rated voltage 24: The rated voltage of the motor is 24V None: The rated voltage of the motor is 48V

*Model naming rules are only used for model meaning analysis. For specific optional models, please refer to the details page.

Connection

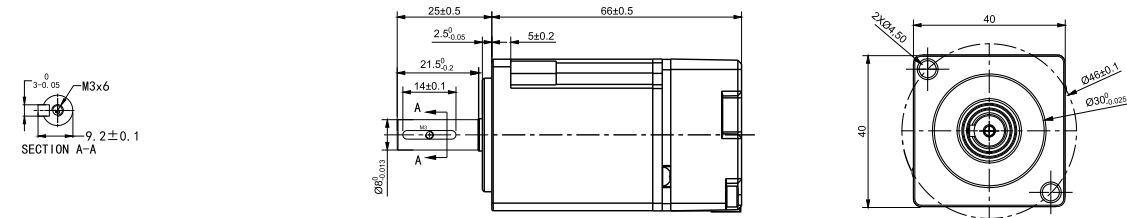


Technical specification

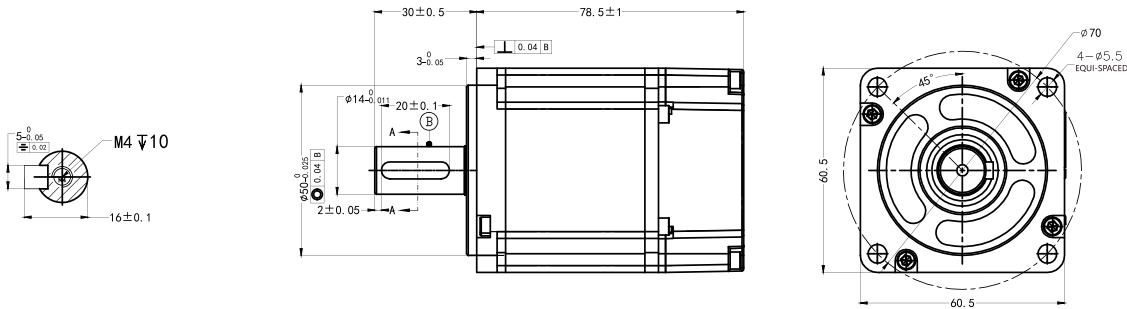
Model No.	IDV50	IDV200	IDV400	IDV750	IDV1000
Rated power (W)	50	200	400	750	1000
Rated voltage (V)	24	48	48	48	48
Rated current (A)	2.7	5.4	10	16.5	31.3
Peak current (A)	3.3	8.1	20	40.7	40.7
Rated torque (N·m)	0.16	0.64	1.27	2.39	3.2
Maximum torque (N·m)	0.19	0.96	2.54	-	4.2
Rated speed (rpm)	3000	3000	3000	3000	3000
Maximum speed (rpm)	4500	4000	5000	5000	5000
Body length L (mm)	66	78.5	96.5	109	134.6

■ Installation Dimension

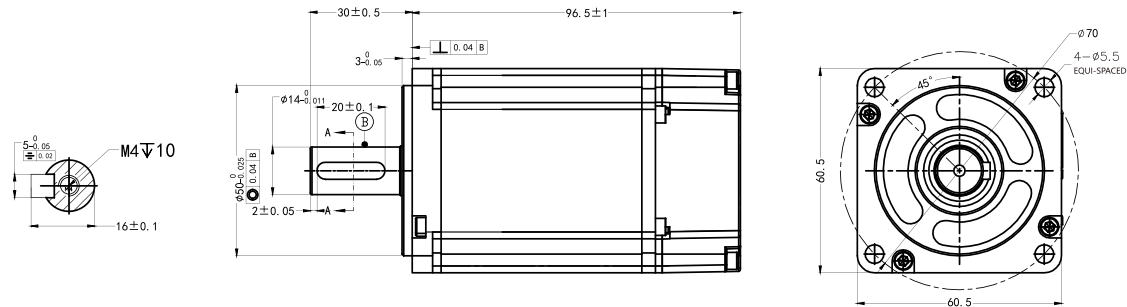
• IDV50



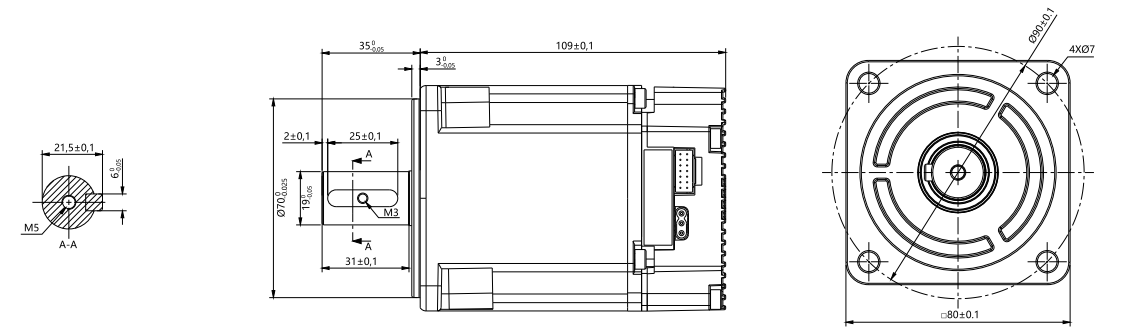
• IDV200



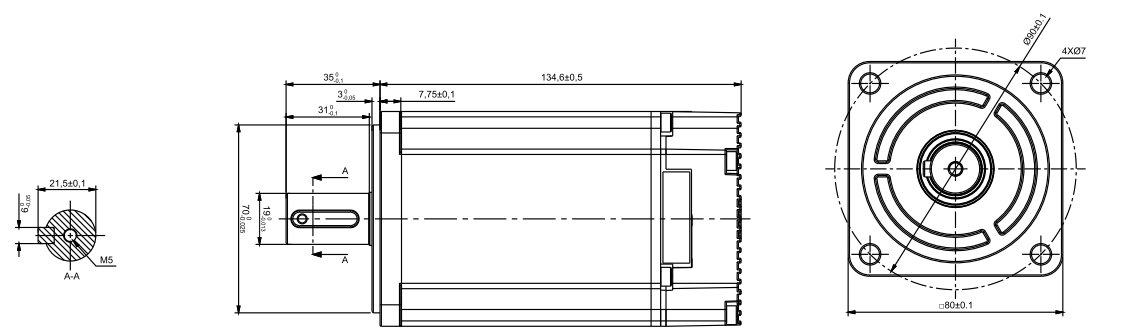
• IDV400



• IDV750



• IDV1000



Low-voltage DC Servo Motor

Rtelligent TSD series low voltage servo motor covers the power range of 0.1~1.5kW, Equipped with communication encoder, higher positioning accuracy. TSD series motor rating Speed 3000rpm, with AC servo of the same specifications of the moment frequency characteristics, can Achieve high performance low voltage servo application requirements

- Five pairs of extremely short body, saving installation space
- Multi-turn absolute encoder with a maximum resolution of 23bit optional
- Permanent magnet lock brake optional for Z-axis applications



■ Naming Rule

TSD A H 06 J 06 30 A - 48 Z
1 2 3 4 5 6 7 8 9 10

1 Serial Name	5 Encoder code J: 17bit magnetic unicyclic absolute encoder G: 17bit magnetic multturn absolute encoder L: 23bit optical multturn absolute encoder	8 Is there an oil seal A: With oil seal inside None: No oil seal inside
2 Number of poles A: Five pairs of poles	6 Motor rated torque 06: 0.6N·m 13: 1.3N·m	9 Motor rated voltage 48: 48V
3 Motor inertia code S:small inertia M:medium inertia H:large inertia	7 Motor rated speed 30: 3000rpm	10 Brake code Z: With brake
4 Motor flange size 06: 60mm 13: 130mm		

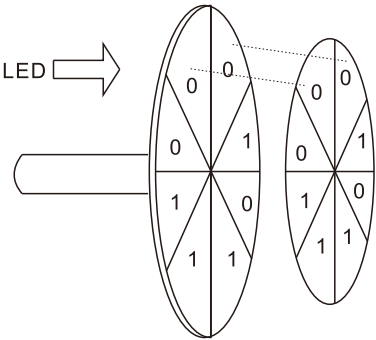
*Model naming rules are only used for model meaning analysis. For specific optional models, please refer to the details page.

■ Motor with Brake



- Servo motor with brake
Suitable for Z-axis application environment,
When the drive is powered off or alarms, the brake will be applied,
Keep the workpiece locked and avoid free fall
- Permanent magnet brake
Fast start and stop, low heating
- 24V DC power supply
Can use drive brake output port control
The output port can directly drive the relay to control the brake on and off

■ Absulote Encoder Low-voltage Servo Motor

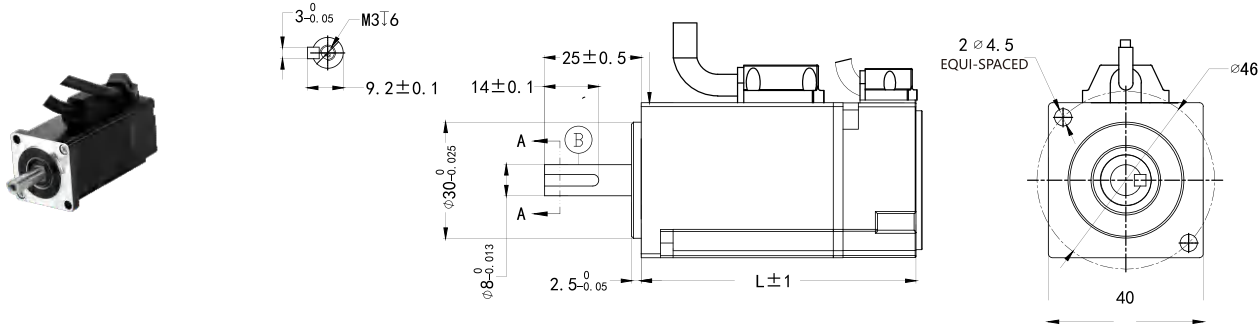


- Absolute encoder servo motor
Suitable for applications that accurately memorize the position after power failure
The relative encoder loses position information due to power failure, causing the mechanical position to be externally affected and not at the initial position.
- Working principle
By encoding each independent position on the encoder, the position is communicated to the drive .
- External power supply battery
Provides working power for the multi-turn absolute encoder
When the drive is powered off, it can still provide working power

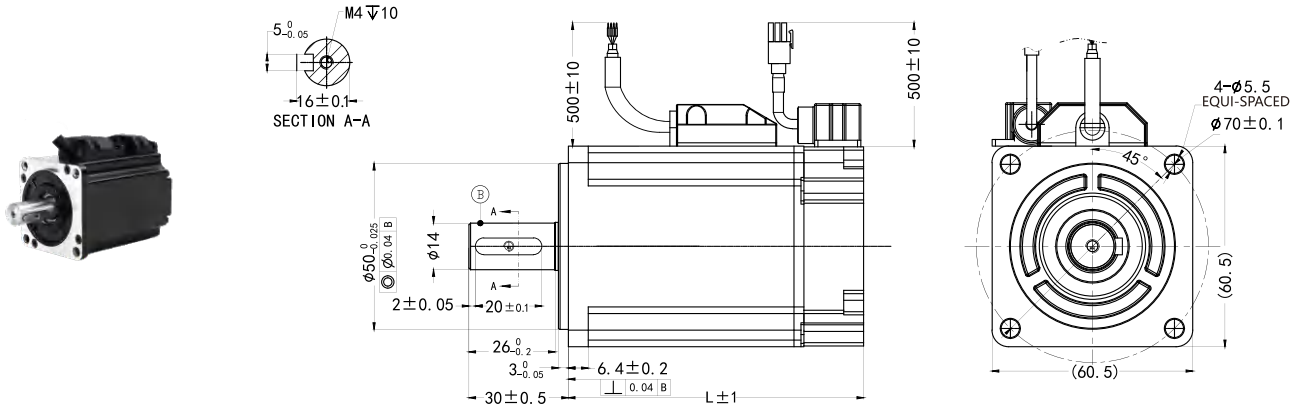
Low Voltage Servo Motor 40/60mm Series Technical Specifications

Model	TST-04J0330A-48	TS□A-H06J0630A-48	TS□A-H06J1330A-48
Rated power (W)	100	200	400
Rated voltage (V)	48	48	48
Rated current (A)	2.90	5.40	10
Rated torque (N.M)	0.32	0.64	1.27
Maximum torque (N.M)	0.95	0.82	1.9
Rated speed (rpm)	3000	3000	3000
Maximum speed (rpm)	6000	4000	5000
Back EMF (V/Krpm)	6.56	6.90	8.4
Torque constant (N.M/A)	0.13	0.12	0.12
Wire resistance (Ω,20°C)	1.41	0.75	0.32
Wire inductance (mH,20°C)	1.60	0.89	0.46
Rotor inertia(X10 ⁻⁴ kg.m ²)	0.046 Brake 0.046	0.20 Brake 0.25	0.5 Brake 0.55
Length L (mm)	79 Brake 109	70.5 Brake 100.5	89 Brake 119

Frame 40 Dimension (mm)



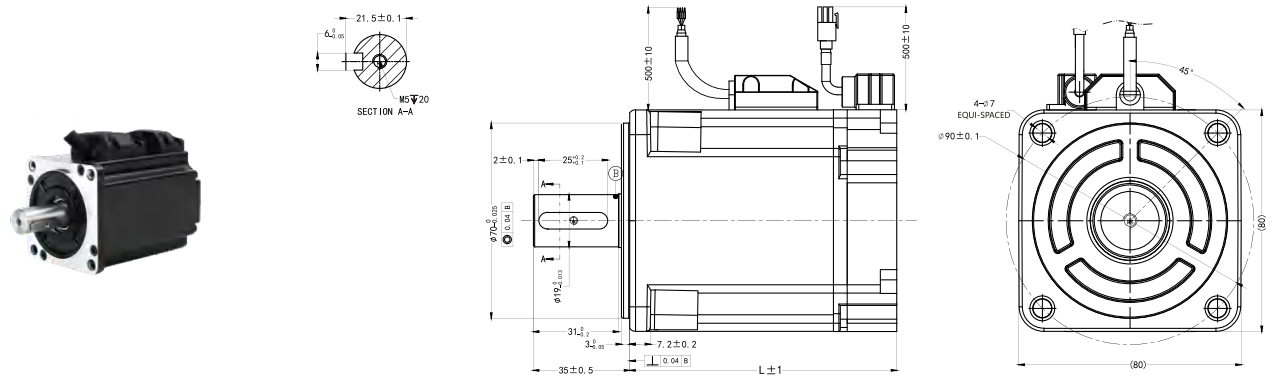
Frame 60 Dimension (mm)



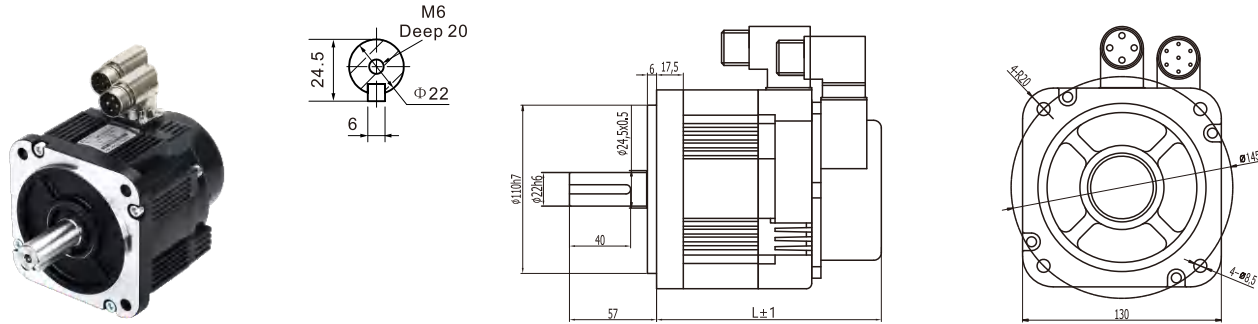
Low Voltage Servo Motor 80/130mm Series Technical Specifications

Model	TS□A-H08J2430A-48	TS□A-H08J3230A-48	TSMA-13J5030A-48
Rated power (W)	750	1000	1500
Rated voltage (V)	48	48	48
Rated current (A)	20.3	31.3	39
Rated torque (N.M)	2.39	3.2	5
Maximum torque (N.M)	3.10	4.2	15
Rated speed (rpm)	3000	3000	3000
Maximum speed (rpm)	5000	5000	—
Back EMF (V/Krpm)	7.40	6.90	8.1
Torque constant (N.M/A)	0.12	0.10	0.13
Wire resistance (Ω,20°C)	0.11	0.06	0.026
Wire inductance (mH,20°C)	0.22	0.13	0.10
Rotor inertia(X10 ⁻⁴ kg.m ²)	1.50 Brake 1.70	1.90 Brake 2.10	1.39 Brake 1.39
Length L (mm)	97 Brake 135	109 Brake 147	148 Brake 172

Frame 80 Dimension (mm)



Frame 130 Dimension (mm)



Super Short DC Servo Motor Series

S01 ultra-short series low-voltage servo motor based on Reiter RSD series short motor magnetic circuit transformation and structure optimization, relative to the traditional motor greatly shorten the body length, suitable in all kinds of space requirements are relatively high occasions. Products can be used with all kinds of Reiter low-voltage servo drives, cost and performance are far ahead of the market.

- Ultra-short body, saving installation space
- The shaft end can be customized to fit the ultra-short reducer
- Permanent magnet lock brake optional for Z-axis applications



01

New 5-pole electromagnetic solution

02

Lower slot torque and fluctuation

03

Less heating

04

High torque output

05

More compact size

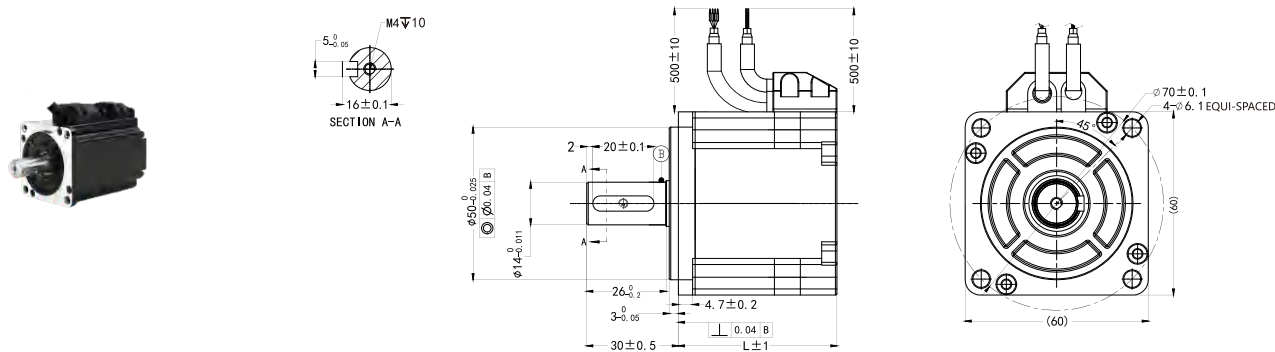
06

More cost effective

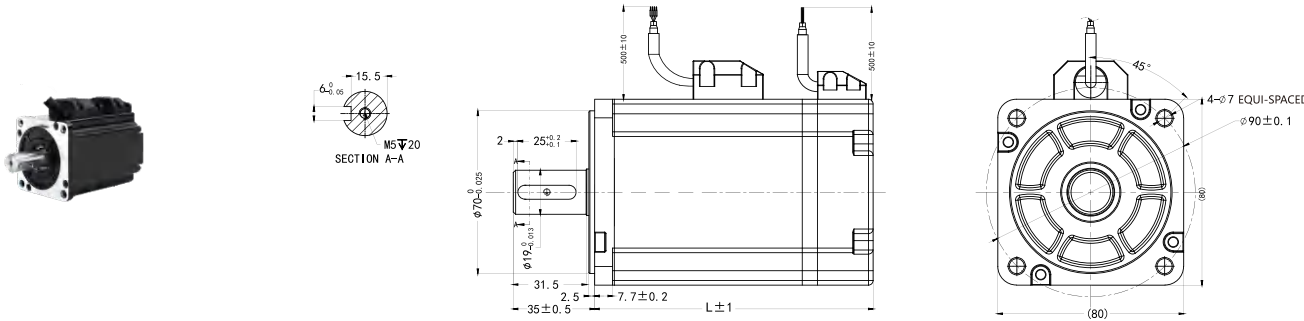
Low Voltage Servo Motor 60/80mm Series Technical Specifications

Model	TSDA-H06J0630-48-S01	TSDA-H06J1330-48-S01	TSDA-H08J2430-48-S01	TSDA-H08J3230-48-S01
Rated power (W)	200	400	750	1000
Rated voltage (V)	48	48	48	48
Rated current (A)	5.40	10	20.3	31.3
Rated torque (N.M)	0.64	1.27	2.39	3.2
Maximum torque (N.M)	0.82	1.9	3.10	4.2
Rated speed (rpm)	3000	3000	3000	3000
Maximum speed (rpm)	4000	5000	5000	5000
Back EMF (V/Krpm)	6.90	8.4	7.40	6.90
Torque constant (N.M/A)	0.12	0.12	0.12	0.10
Wire resistance (Ω,20°C)	0.75	0.32	0.11	0.06
Wire inductance (mH,20°C)	0.89	0.46	0.22	0.13
Rotor inertia(X10 ⁻⁴ kg.m ²)	0.20	0.5	1.50	1.90
	Brake 0.30	Brake 0.6	Brake 1.70	Brake 2.10
Length L (mm)	52	70	108	120
	Brake 86	Brake 104	Brake 125	Brake 137

Frame 60 Dimension (mm)



Frame 80 Dimension (mm)

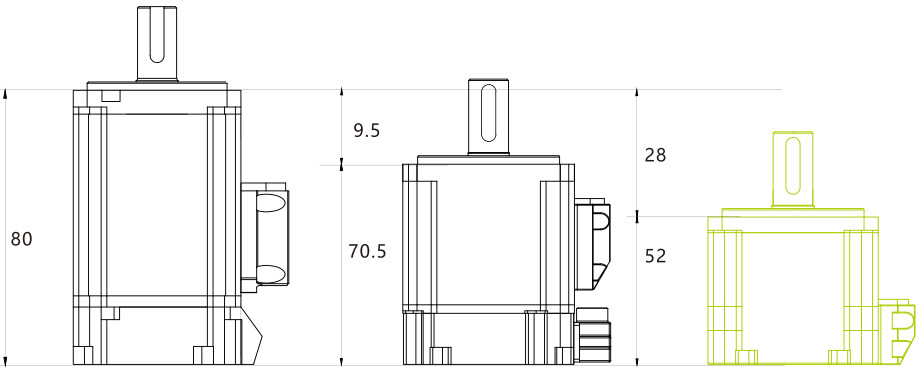


Key advantages

Real product photo



Product drawing spec.



Regular size

Compact size

Super short size

• Take a 200W motor as an example

Industry & Application

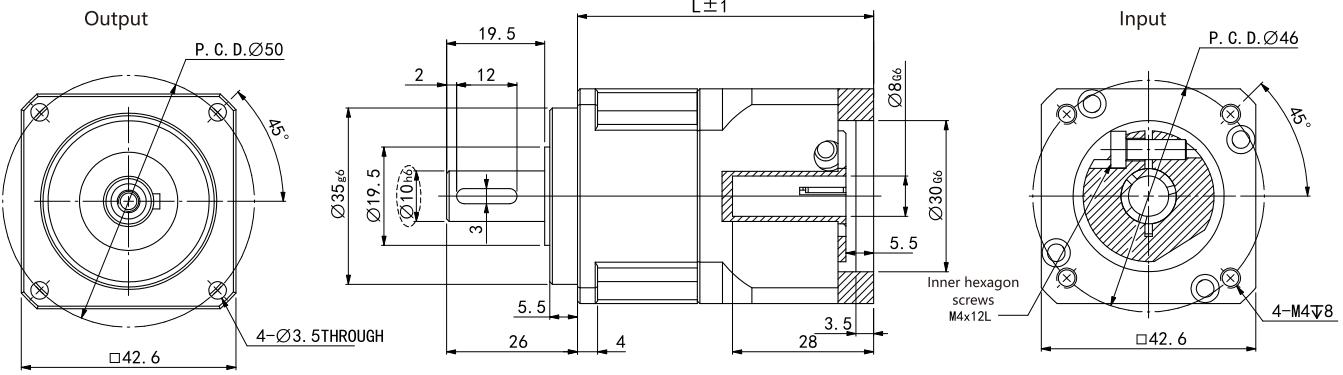


Reducer for Servo Motor

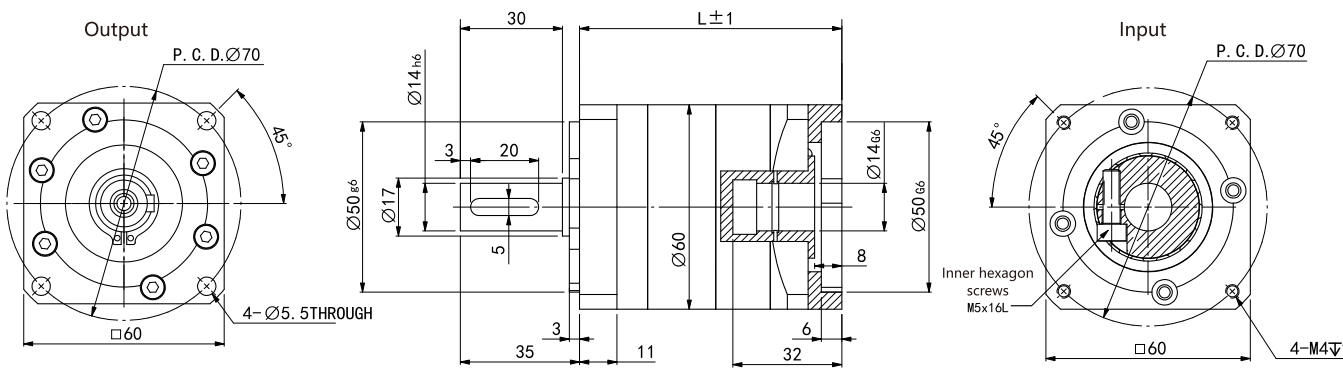
Precision Servo Reducer

Model	Input dimension (Motor insertion end)				Output dimension (Client installation end)				Length	
	Shaft diameter	Boss diameter	Mounting hole distance	Mounting hole size	Shaft diameter	Boss diameter	Mounting hole distance	Mounting hole size	L1	L2
42SPX-□	8	30	P.C.D.46	M4	10	35	P.C.D.50	3.5	59	80
60SPX-□	14	50	P.C.D.70	M4	14	50	P.C.D.70	5.5	77	95
90SPX-□	19	70	P.C.D.90	M5	20	80	P.C.D.100	6.5	110	130

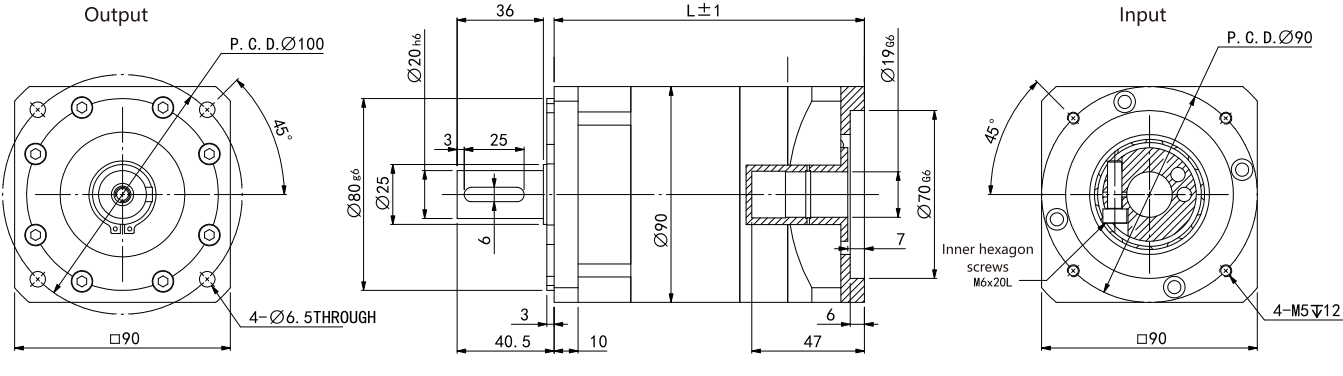
The Size of 42SPX Series (mm)



The Size of 60SPX Series (mm)



The Size of 90SPX Series (mm)



MOTION CONTROL

EtherCAT®

CANopen®

Modbus

EtherNet/IP™



RTELLIGENT

Programmable Logic Controller Series

PLC Products cover medium RM series, small RX series, support logic control and motion control and other functions. Via RS485, Ethernet, EtherCAT and CANOpenAnd other interfaces can realize multi-level network communication. The PLC integrates multi-channel digital input and digital output functions, and supports the expansion of several Rtellgent IO modules. PLC Wide range, suitable for various occasions.

■ Naming Rule

RM Series

RM 510 - 1616 T

1

2

3

4

1 RM series PLC	3 Input and output points 1616: 16 points input 16 points output
2 Type code 5 Medium 500 Series 1: Ethercat type 0: Pulse axis number	4 Output type R: Relay output T: Transistor output

RX Series

RX3U - 32 M R

1

2

3

4

1 Product series RX3U: 3 Axis RX8U: 8 Axis	3 Module type General master controller module
2 Input and output points Input and output points total 32 points	4 Output type R: Relay output T: Transistor output

■ Basic Spec.

Model	RM518	RM510	RM418	RX8U	RX3U
Product picture					
EtherCAT slave devices No.	256	256	256	-	-
Bus-axis control capability	8 axis 1 ms	8 axis 1 ms	-	-	-
Support Ethernet	YES	YES	YES	-	-
Support pulse axis	8 axis 200k	-	8 axis 200k	4 axis 200k+ 4 axis 60k	3 axis 150k
Support encoder axis	8-channel 200K single-phase or 8-channel 200K AB phase	-	8-channel 200K single-phase or 8-channel 200K AB phase	6 channels 60KHz single phase Or 2 channels 30KHz AB phase+ 1 channel 10KHz AB phase	6 channels 60KHz single phaseOr 2 channels 30KHz AB phase
IO expansion	8 RE Modules	8 RE Modules	8 RE Modules	8 RE Modules	-
Performance	★★★★★★	★★★★★★	★★★★	★★★	★★

RM Series Medium PLC with EtherCAT

Rtellgent RM series programmable logic controllers support functions such as logic control and motion control. Using the CODESYS 3.5 SP19 programming environment, the FB/FC function to realize process encapsulation and multiplexing. Multi-level network communication is possible via RS485, Ethernet, EtherCAT and CANOpen interfaces.The PLC body integrates digital inputs and outputs and supports the expansion of 8 Reit IO modules.



01
High efficiency & Accuracy

02
Multiple task management

03
Complete function

04
Easy networking

05
Flexible expansion

06
Easy programming

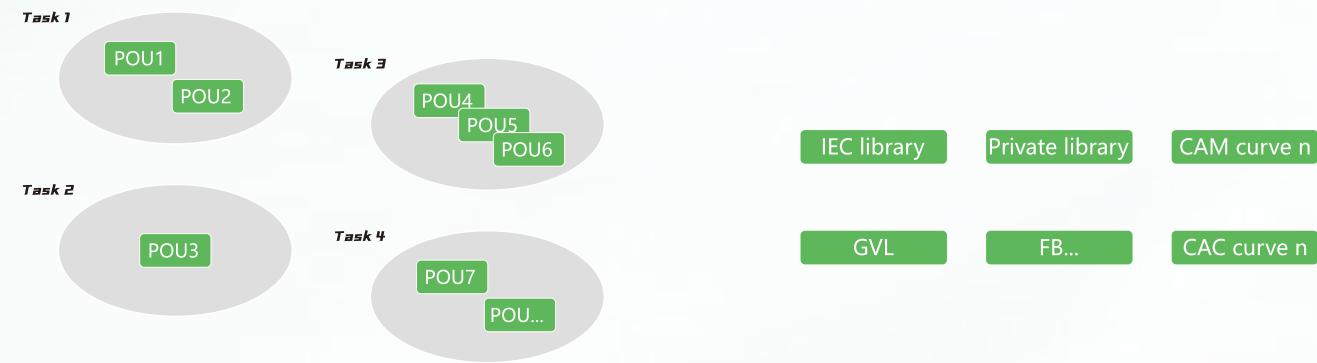
High Efficiency & Accuracy

Multi-core 64-bit processor for precise equipment control



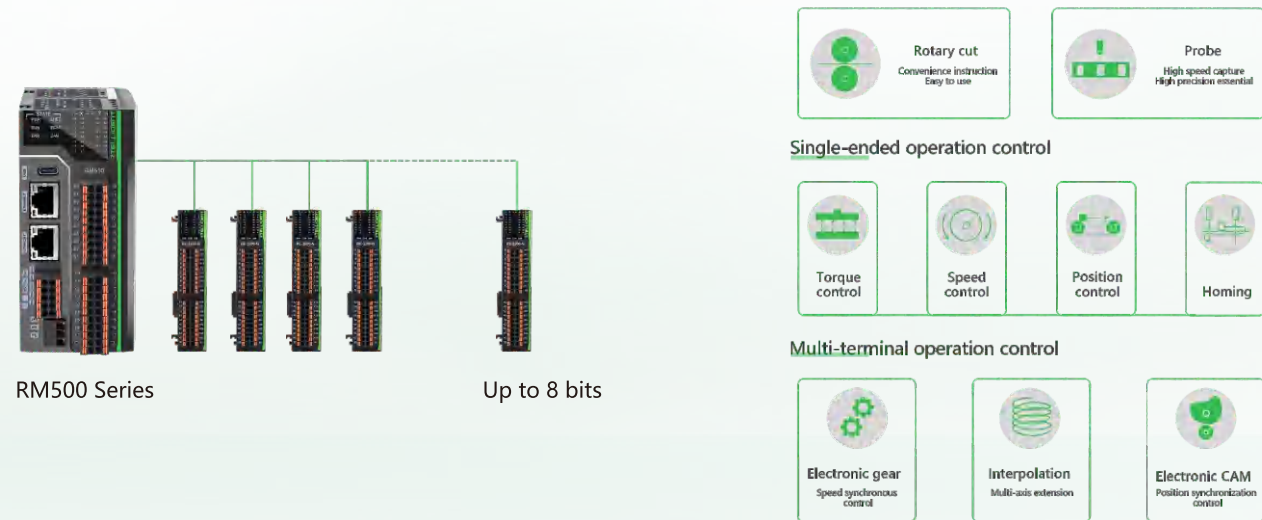
Multitasking Management

Simultaneously handles multiple tasks and executes user commands



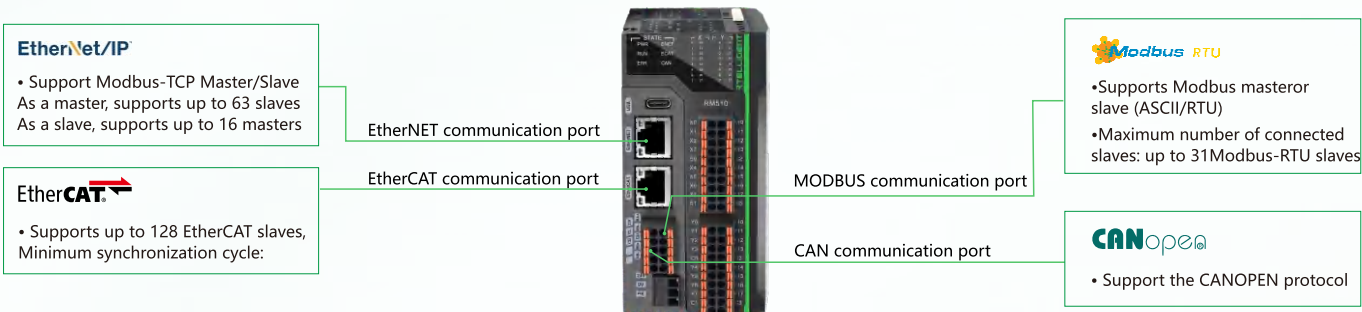
Bus Control

Highly integrated functions suitable for various applications



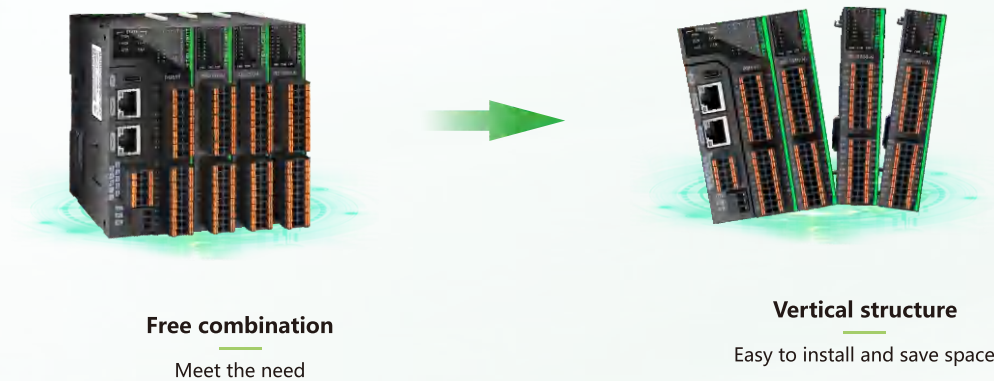
Convenient Networking

Integrated Ethernet port for fast data interaction



Flexible Expansion

Option to expand and accurately adapt to specific application



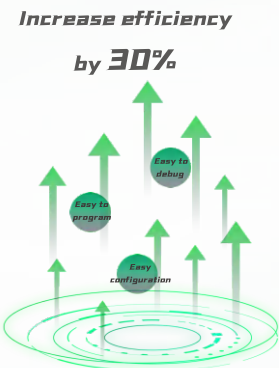
Easy Programming

Enhances development and maintenance with improved quality and efficiency

Programming software



Programming language

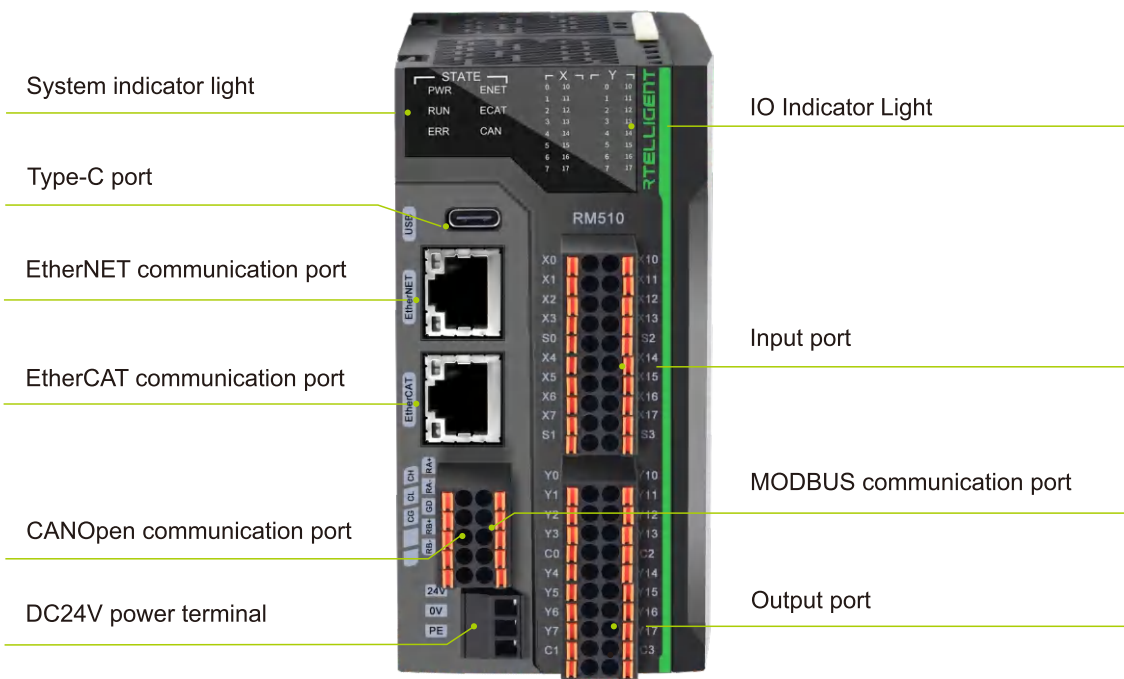


RM500 Series Medium PLC

Rtelligent RM series programmable logic controllers support functions such as logic control and motion control. Using the CODESYS 3.5 SP19 programming environment, the FB/FC function to realize process encapsulation and multiplexing. Multi-level network communication is possible via RS485, Ethernet, EtherCAT and CANOpen interfaces. The PLC body integrates digital inputs and outputs and supports the expansion of 8 Reit IO modules.

- Power input voltage: DC24V
- Number of digital input points: 16 points of bipolar inputs
- Isolation method: photocoupling
- Input filter parameter range: 1ms~1000ms
- Number of digital output points: 16 NPN output points

Connection



Power Wiring

Terminal number	Power wiring
1	DC 24V power positive
2	DC 24V power supply negative
3	PE

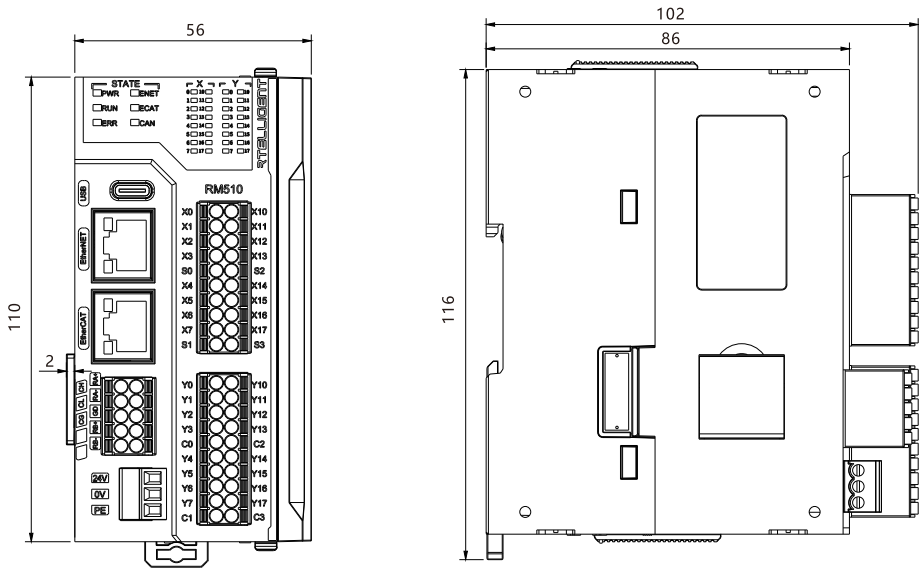
RS485 and CAN Terminal Signal Definition

Left terminal	Left signal	Right signal	Right terminal
1A	CAN-H	485A+	1B
2A	CAN-L	485A-	2B
3A	CGND	GND	3B
4A	retain	485B+	4B
5A	retain	485B-	5B

EtherCAT Communication Specifications

Items	Specifications
Communications protocol	EtherCAT protocol
Support services	CoE(PDO/SDO)
Synchronisation method	DC-distributed clock
Physical layer	100Mbit/s (100base-TX)
Duplex mode	Full duplex
Topological structure	Linear topology
Transmission medium	AWG26 category 5 ultra twisted pair screen
Transmission distance	Less than 100m between nodes
Number of slaves	Up to 128
EtherCAT rframe length	44 bytes ~1498 bytes
Process data	Maximum 1486 bytes for a single ethernet frame

Installation Dimension

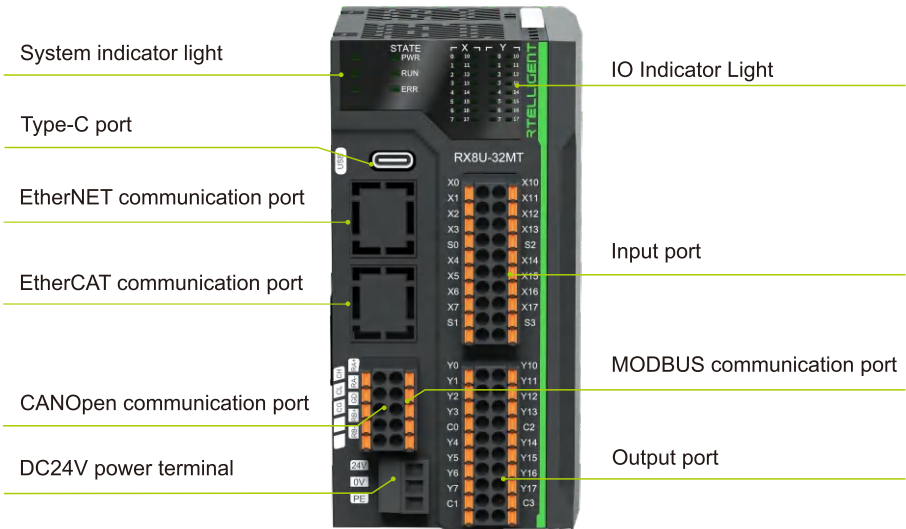


RX Series Pulse-type Small PLC

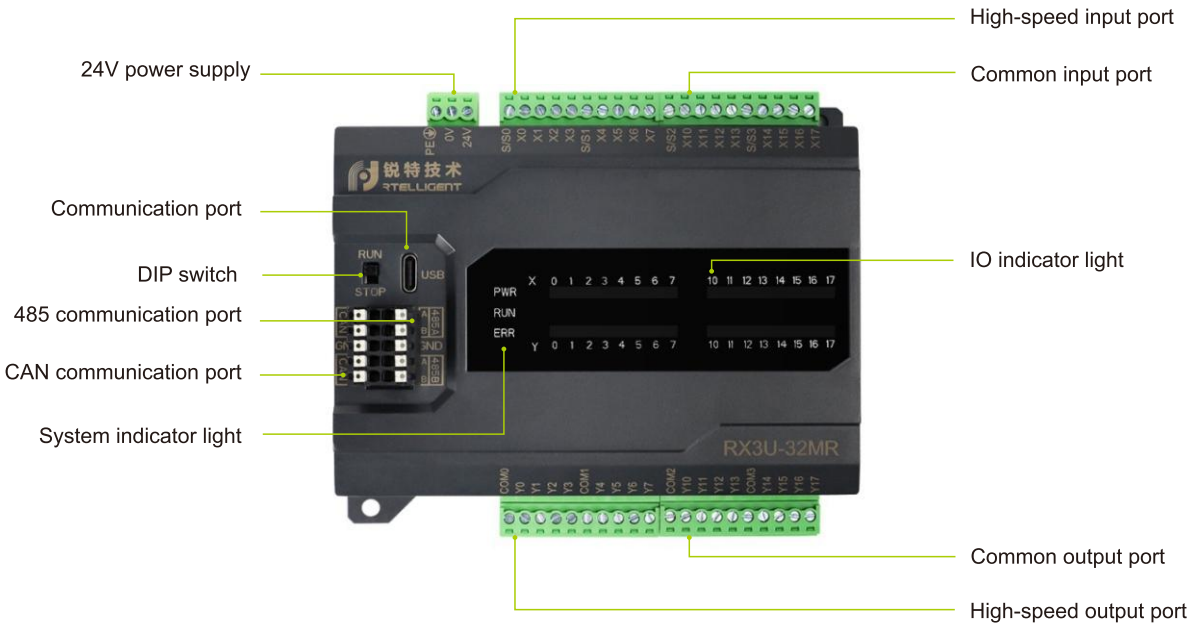
The RX series is the latest pulse PLC developed by Rteligent. The product comes with 16 switching input points and 16 switching output points, optional transistor output type or relay output type. Host computer programming software compatible with GX Developer8.86/GX Works2, instruction specifications compatible with Mitsubishi FX3U series, faster running. Users can connect programming through the Type-C interface that comes with the product.

- Switching quantity up to 16 in and 16 out, output optional transistor or relay output (RX8U series optional transistor only)
- Comes with a Type-C programming interface, commonly equipped with two RS485 interfaces, a CAN interface (RX8U series CAN interface is optional)
- The RX8U series can be extended up to 8 rtelligent series IO modules for flexible IO expansion on demand
- Compatible with Mitsubishi FX3U series

RX8U系列脉冲型PLC示意图



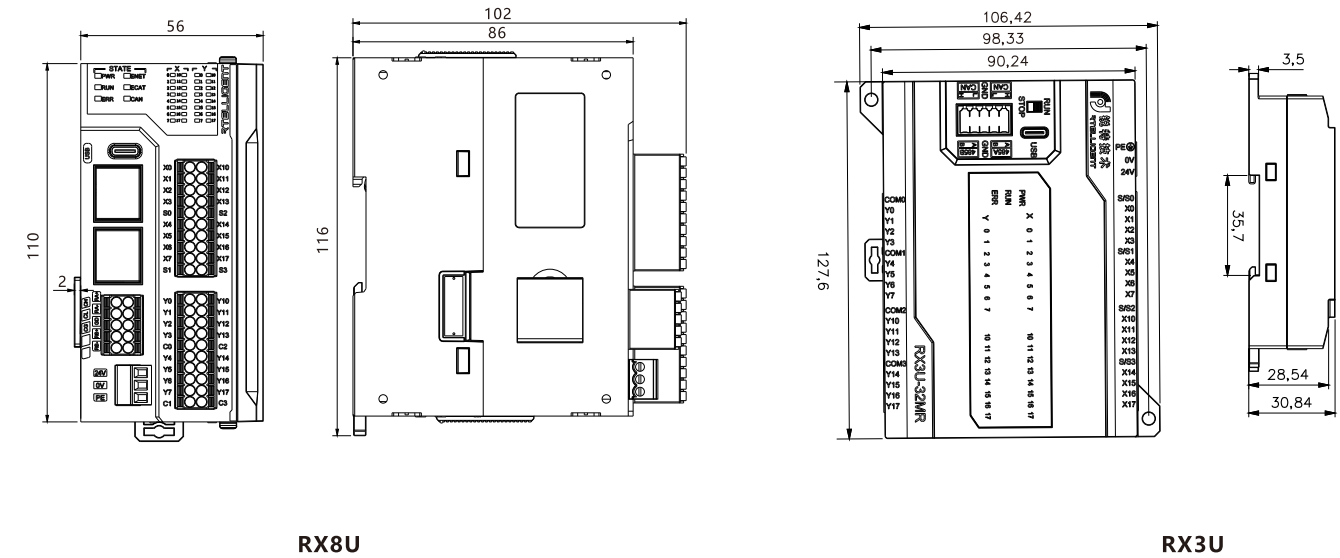
RX3U系列脉冲型PLC示意图



Basic Spec.

Model	RX3U-32MR	RX3U-32MT	RX8U-32MT
Product picture			
Input voltage	DC 24V, voltage range: 20.4 ~ 28.8V		
Pulse output port	3 axis 150k pulse output	3 axis 150k pulse output	4 axes 200k 4 axis 60k pulse output
IO number	16-point bipolar input 16-point relay output	16-point bipolar input (High-speed input points X0, X1, X2, X3, X4, X5, X6, X7 can only be shared positive) 16 point NPN output	
IO extension	-		8 RE Module
Isolation method	photocoupling		
High speed pulse counting	Six single-phase 60K channels or AB phase 2 30K channels. X0/1/3/4 is capable of receiving up to 480K		
Input level	Sink/Source type: NPN mode when S/S is connected to 24V, PNP mode when S/S is connected to GND. High-speed counting only supports S/S connected to 24V.		
Isolation	Isolation (field and logic) Isolation group, 500VAC, 1 min		

Installation Dimension

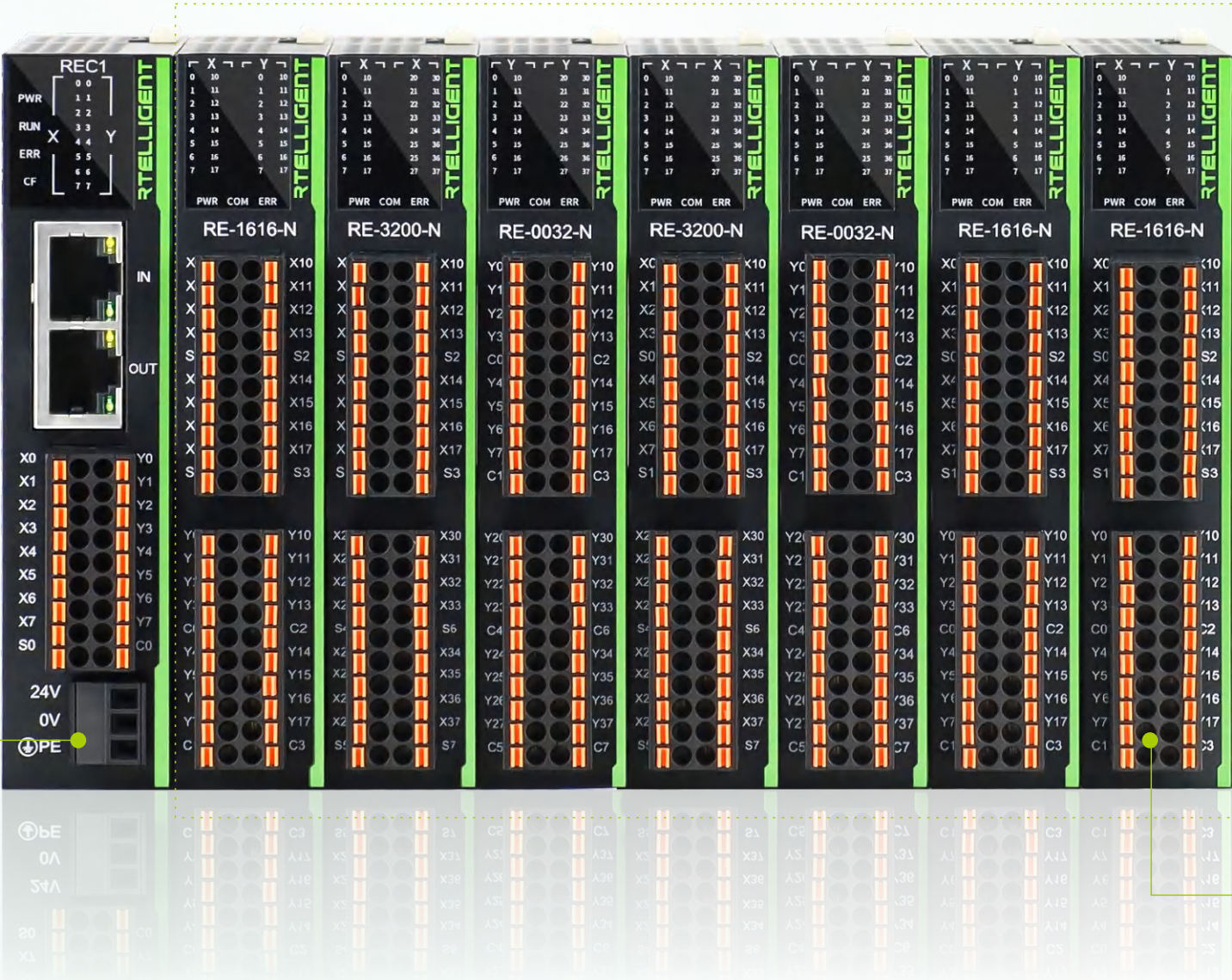


Coupler & IO Modules

Coupler naming rule

R E C1
① ② ③

- ① Remote expansion module
- ② EtherCAT communication
- ③ Coupler 1 Series



Digital I/O module naming rule

RE - 16 16 - N
① ② ③ ④

- ① RE: remote expansion module
- ② Digital output I/O count
16: 16 output 32: 32 output
00: 00 output
- ③ Digital input I/O count
16: 16 input 32: 32 input
00: 00 input
- ④ N: NPN P: PNP

Product information

Model	Specification
RE-1616-N	16-point bipolar digital input 16 point NPN digital output expansion module
RE-3200-N	32-point bipolar digital input expansion module
RE-0032-N	32-point NPN digital output expansion module

| Matching Cables

■ Naming Rule

S E L 4 - 030
① ② ③ ④ ⑤

① High voltage servo extension cable	④ Number of cable cores
② E: Encode cable M: Motor power cable B: Brake cable	⑤ Length 030: 3000mm
③ S: AMPconnector L: connector	

■ Single-turn Absolute Servo Encoder Extension Cable



VCC	GND	SD+	SD-
RED	WHT	BLU	BLU&WHT

Matching products: servo motor below 1kw with single-turn absolute encoder



VCC	GND	SD+	SD-
RED	WHT	BLU	BLU&WHT

Matching products: servo motor above 1kw with single-turn absolute encoder

■ Multi-turn Absolute Servo Encoder Extension Cable



VCC	GND	PS+	PS-	BAT+	BAT-
RED	BLK	BLU	BLU&BLK	GRN	GRN&BLK

Matching products: servo motor below 1kw with multi-turn absolute encoder



VCC	GND	PS+	PS-	BAT+	BAT-
RED	BLK	BLU	BLU&BLK	GRN	GRN&BLK

Matching products: servo motor above 1kw with multi-turn absolute encoder

■ Motor Power Extension Cable



U	V	W	PE
RED	WHT	BLK	YEL&GRN

Matching products: AC servo motor below 1kw



U	V	W	PE
BRN	BLU	BLK	YEL&GRN

Matching products: AC servo motor above 1kw

■ Low-voltage Servo Motor Power Extension Cable

DM□4-030-□

U	V	W	PE
RED	WHT	BLK	YEL&GRN



Matching products: TS series low-voltage servo

Extension cable model No.	Matching motor power
DMS4-030	50W,100W
DMH4-030-10	200W,400W
DMH4-030-15	750W
DMH4-030-30	1kW
DMHM4-030-30	1.2kW,1.5kW

■ Servo Brake Cable

SBS2-030
(for option)

VCC	GND
RED	BLK



Note: High power servo motor select SZH2-030

■ Multi-turn Encoder Battery Box

MR-J3BAT

VCC	GND
RED	BLK



Matching products: servo motor with multi-turn encoder

■ Mini USB Interface Tuning Cable

MINI USB
(for option)

Matching products: RS series



■ Network Cable (Short)

E0035(for option)

Matching products: EtherCAT series



■ RSDA-C Series Motor Special Cable

■ Single-turn Absolute Servo Encoder Extension Cable ■ Multi-turn Absolute Servo Encoder Extension Cable



VCC	GND	NC	NC	SD+	SD-
RED	BLK			BLU	BLU&BLK

Matching products: servo motor below 1kw with single-turn absolute encoder



VCC	GND	NC	NC	SD+	SD-
RED	BLK			BLU	BLU&BLK

Matching products: servo motor below 1kw with multi-turn absolute encoder

■ Motor Power Extension Cable



U	V	W	PE
RED	WHT	BLK	YEL&GNK

Matching products: AC servo motor below 1kw

■ Motor Pwoer Ext.Cable & Brake Cable Set



U	V	W	PE	Brake+	Brake-
RED	WHT	BLK	YEL/GRN	BRN	BLU

Matching products: AC servo motor below 1kw

| Quick Selection Table

■ AC Servo Drive

Model	Matching motor*	Control type	Power supply voltage	External debug interface
R6L028M	400W AC servo motor	Pulse control /RS485	220VAC	Type-C
R6L042M	750W AC servo motor	Pulse control /RS485	220VAC	Type-C
R6L076M	2kW AC servo motor	Pulse control /RS485	220VAC	Type-C
R6120M	3kW AC servo motor	Pulse control /RS485	220VAC	Type-C
R6L028E	400W AC servo motor	EtherCAT	220VAC	Type-C
R6L042E	750W AC servo motor	EtherCAT	220VAC	Type-C
R6L076E	2kW AC servo motor	EtherCAT	220VAC	Type-C
R6120E	3kW AC servo motor	EtherCAT	220VAC	Type-C
R5L028	400W AC servo motor	Pulse control	220VAC	Type-C
R5L042	750W AC servo motor	Pulse control	220VAC	Type-C
R5L076	2kW AC servo motor	Pulse control	220VAC	Type-C
R5L028M	400W AC servo motor	Pulse control /RS485	220VAC	Type-C
R5L042M	750W AC servo motor	Pulse control /RS485	220VAC	Type-C
R5L076M	2kW AC servo motor	Pulse control /RS485	220VAC	Type-C
R5L028E	400W AC servo motor	EtherCAT	220VAC	Type-C
R5L042E	750W AC servo motor	EtherCAT	220VAC	Type-C
R5L076E	2kW AC servo motor	EtherCAT	220VAC	Type-C

The matching motor spec is for reference only, smaller motor is also compatible.

■ AC Servo Motor

Encoder type	Motor base	Rated current (W)	Rated torque (N.M)	Model	Body length (mm)	匹配脉冲型驱动器	匹配总线型驱动器	Extension cable *		
17bit magnetic single-turn absolute encoder	40	50	0.16	RSTA-M04J0130A	61.5	R6L028M R5L028 R5L028M	R6L028E R5L028E	Encoder cable SES4-030		
		100	0.32	RSTA-M04J0330A	81.5					
				RSTA-M04J0330A-Z	110					
	60	200	0.64	RSNA-M06J0630A	80			R6L042M R5L042 R5L042M	R6L042E R5L042E	Motor power cable SMS4-030A
				RSNA-M06J0630A-Z	109					
		400	1.27	RSNA-M06J1330A	98					
				RSNA-M06J1330A-Z	127					
	80	750	2.39	RSNA-M08J2430A	107	R6L120M R6L076M R5L076 R5L076M	R6L120E R6L076E R5L076E			Servo brake cable (for option) SBS2-030
				RSNA-M08J2430A-Z	144					
		1000	3.20	RSNA-M08J3230A	127					
				RSNA-M08J3230A-Z	163					
	17 bit magnetic multi-turn absolute encoder	40	50	0.16	RSTA-M04G0130A	61.5	R6L028M R5L028 R5L028M	R6L028E R5L028E	Encoder cable SES6-030	
100			0.32	RSTA-M04G0330A	81.5					
				RSTA-M04G0330A-Z	110					
60		200	0.64	RSNA-M06G0630A	80	R6L042M R5L042 R5L042M			R6L042E R5L042E	Motor power cable SMS4-030A
				RSNA-M06G0630A-Z	109					
		400	1.27	RSNA-M06G1330A	98					
				RSNA-M06G1330A-Z	127					
80		750	2.39	RSNA-M08G2430A	107		R6L120M R6L076M R5L076 R5L076M	R6L120E R6L076E R5L076E		battery box MR-J3BAT Servo brake cable (for option) SBS2-030
				RSNA-M08G2430A-Z	144					
		1000	3.20	RSNA-M08G3230A	127					
				RSNA-M08G3230A-Z	163					
23bit optical multi-turn absolute encoder		40	50	0.16	RSTA-M04H0130A	61.5	R6L028M R5L028 R5L028M	R6L028E R5L028E	Encoder cable SES6-030	
	100		0.32	RSTA-M04H0330A	81.5					
				RSTA-M04H0330A-Z	110					
	60	200	0.64	RSNA-M06H0630A	80	R6L042M R5L042 R5L042M			R6L042E R5L042E	Motor power cable SMS4-030A
				RSNA-M06H0630A-Z	109					
		400	1.27	RSNA-M06H1330A	98					
				RSNA-M06H1330A-Z	127					
	80	750	2.39	RSNA-M08H2430A	107		R6L120M R6L076M R5L076 R5L076M	R6L120E R6L076E R5L076E		battery box MR-J3BAT Servo brake cable (for option) SBS2-030
				RSNA-M08H2430A-Z	144					
		1000	3.20	RSNA-M08H3230A	127					
				RSNA-M08H3230A-Z	163					

* The standard length of the extention cable is 3 meters, if you need other sizes, pleas specify when ordering.

**For the motor of high power servo motor, please refer to the details page or consult with our engineer.

Low-voltage Servo Motor

Encoder type	Motor base	Rated current (W)	Rated torque (N.M)	Model	Extension cable*	Matching drive	Length (mm)
17bit magnetic single-turn absolute encoder	40	100	0.32	TST-04J0330A-48	Encoder cable SES4-030	DV400 DRV400 DRV400E DRV400C	79
	60	200	0.64	TS□A-H06J0630A-48			70.5
				TSDA-H06J0630-48-S01			52
		400	1.27	TS□A-H06J1330A-48			89
				TSDA-H06J1330-48-S01	Motor power cable		70
	80	750	2.39	TS□A-H08J2430A-48	DM□4-030-□	DRV750 DRV750E DRV750C	97
				TSDA-H08J2430-48-S01			108
		1000	3.20	TS□A-H08J3230A-48	Brake Cable (Optional) SBS2-030		109
				TSDA-H08J3230-48-S01			120
	130	1500	5	TSMA-13J5030A-48			148
17 bit magnetic multi-turn absolute encoder	40	100	0.32	TST-04G0330A-48	Encoder cable SES6-030	DV400 DRV400 DRV400E DRV400C	79
	60	200	0.64	TS□A-H06G0630A-48			70.5
				TSDA-H06G0630-48-S01			52
		400	1.27	TS□A-H06G1330A-48			Motor power cable
				TSDA-H06G1330-48-S01	DM□4-030-□		70
	80	750	2.39	TS□A-H08G2430A-48	Battery box MR-J3BAT	DRV750 DRV750E DRV750C	97
				TSDA-H08G2430-48-S01			108
		1000	3.20	TS□A-H08G3230A-48	Brake Cable (Optional) SBS2-030		109
				TSDA-H08G3230-48-S01			120
	130	1500	5	TSMA-13G5030A-48			148
23bit optical multi-turn absolute encoder	40	100	0.32	TST-04L0330A-48	Encoder cable SES6-030	DV400 DRV400 DRV400E DRV400C	79
	60	200	0.64	TS□A-H06L0630A-48			70.5
				TSDA-H06L0630-48-S01			52
		400	1.27	TS□A-H06L1330A-48			Motor power cable
				TSDA-H06L1330-48-S01	DM□4-030-□		70
	80	750	2.39	TS□A-H08L2430A-48	Battery box MR-J3BAT	DRV750 DRV750E DRV750C	97
				TSDA-H08L2430-48-S01			108
		1000	3.20	TS□A-H08L3230A-48	Brake Cable (Optional) SBS2-030		109
				TSDA-H08L3230-48-S01			120
	130	1500	5	TSMA-13L5030A-48			148

*For the model of the low-voltage servo power extension cable, please refer to the P62.
The standard length of the extension cable is 3 meters,if you need other sizes, please specify when ordering.
**For the model of high-power servo motor, please refer to the details page or consult with our engineer.

Power Supply Series

Rtelligent provides 3 types of power supply, DS series switching power supply series, DL series linear power supply series and AT transformer series.

- DS series switching power supply can output regulated voltage, and is known for the features of voltage stabilization.
- DL series are linear power supplies built upon the AT transformer with attached rectifier filter; it is known for the features of small voltage ripple and strong overload capacity.
- AT series transformer is applicable to stepper system of 86 series and above; it outputs low voltage AC with low cost and long service life.

DS Series Switching Power Supply

Model	Power (W)	Output Power Specifications	Dimensions L×W×H (mm)	Weight (kg)
DS100-24	100	DC24V/4A	160×98×40	0.5
DS150-24	150	DC24V/6A	199×98×40	0.6
DS240-24	240	DC24V/10A	199×110×50	0.8
DS350-24	350	DC24V/14A	215×115×50	0.9
DS350-48	350	DC48V/7A	215×115×50	0.9
DS400-48	400	DC48V/8A	261×103×65	1.1
DS500-48	500	DC48V/10A	250×160×80	1.4

AT Series Transformer

Model	Power (W)	Output Power Specifications	Dimensions L×W×H (mm)	Weight (kg)
AT300-60	300	AC60V/5A	120×120×61	3.2
AT500-48	500	AC48V/10A	110×110×71	4.8
AT500-60	500	AC60V/8A	140×140×71	4.8
AT800-68	800	AC68/12A	160×160×67	7.4
AT1200-60	1200	AC60V/20A	180×180×80	10.1

DL Series Linear Power Supply

Model	Power (W)	Output Power Specifications	Dimensions L×W×H (mm)	Weight (kg)
DL200-36-5	200	DC36V/5A	175×112×68	2.5
DL300-36-12	300	DC36V/8A	230×150×65	3.5
DL500-48-12	500	DC48V/10A	230×150×75	5.2

Series Picture



Switching power supply



Transformer



Linear power supply

| Cooperative Partners



| Industry & Application



| Marketing & Sales network

