RD5 Series Servo motor & drivers

Empowering the Upgrade of Industrial Automation Industry

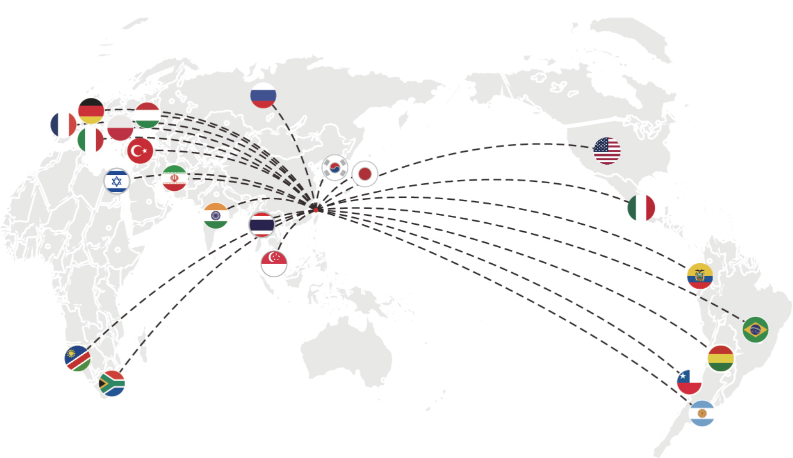
Limon

Pioneering Smart Manufacturing in China

Established in 2013, Limon headquartered in the port city of Ningbo, China, specializes in smart manufacturing. With robust independent research and development capabilities, Limon has successfully introduced automation system solutions widely applied in key sectors such as new energy batteries, new energy vehicles, photovoltaics, 3C electronics, semiconductors, LCD panels, biomedicine, and engineering machinery, demonstrating strong market competitiveness.

Global Business Deployment

Limon adheres to a customer-centric service philosophy, establishing service points nationwide to provide customers with prompt and professional technical support and services. Moreover, Limon actively expands into international markets, with business operations covering over 30 countries and regions globally, delivering more than 2300 innovative solutions to customers worldwide and earning extensive international acclaim.



Gathering Elite Talent in the Intelligent Equipment Industry

Driven by innovation, Limon has assembled a core technical team composed of renowned experts from both domestic and international arenas, focusing on underlying automation technologies, continually innovating and iterating to deliver products with outstanding performance, excellent quality, and high cost-effectiveness to customers.

"Full-Cycle, Full-Process, All-Around" Service

○ Project Manager Service System

Limon implements a project manager service system, taking full responsibility for pre-sales consultations, product selection, order processing, logistics, and other aspects to ensure on-time delivery.

○ Professional After-Sales Customer Service Team

Limon boasts a professional customer service team, promptly responding to customers' after-sales needs to ensure efficient and high-quality service.

○ 30-Day Free Sample Loan

Customers interested in showcasing and testing products can consult Limon's sales engineers for complimentary sample loans.

○ Exhibitions/Networking Events

Limon regularly participates in industry exhibitions and hosts peer networking events, actively engaging in industry technical discussions and knowledge sharing.

Content

General AC Servo drives

Product Introduction

A new generation high-performance Servo drives capable of achieving sub-micron level position control accuracy, significantly enhancing the precision, speed, efficiency, and stability of industrial automation equipment. It features universality and platformization, supporting communications such as RS485, CANopen, EtherCAT, PROFINET, etc. The power range covers from 100W to 7.5kW.

Typical Application Scenarios

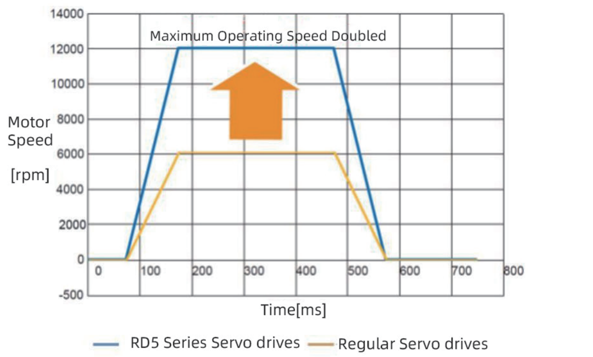
Widely used in industrial automation scenes such as laser cutting, printing, semiconductor, etc.

AC Servo Application Scenario one:
Laser cutting

AC Servo Application Scenario two:
Printing Equipment

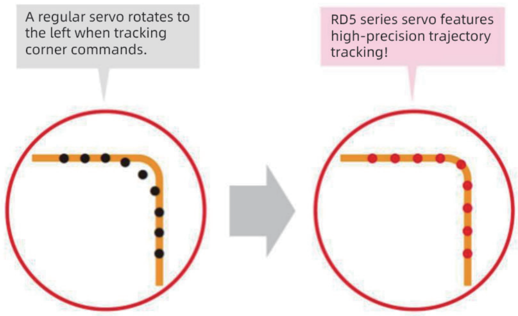
One、Basic Features of Servo drives

1 High Speed



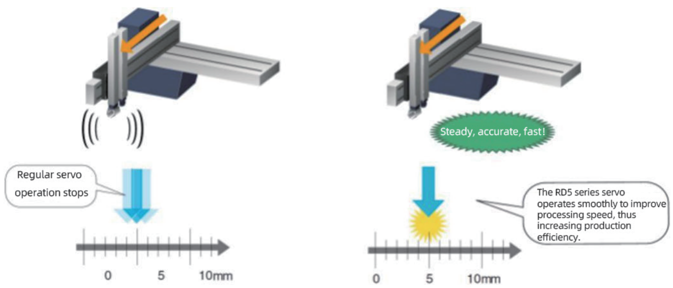
The maximum operating speed can reach 12,000 rpm, which is double the speed of a regular servo.

2 High Precision



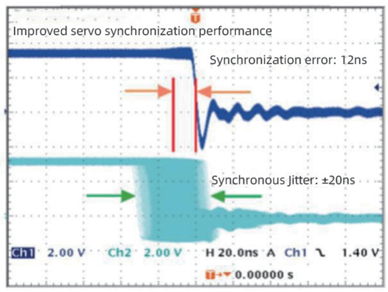
With built-in high-precision trajectory tracking algorithms, it offers high dynamic response and significantly enhances trajectory tracking performance. It supports 17-bit to 23-bit single-turn/multi-turn absolute encoders, greatly improving equipment positioning accuracy.

3 High Efficiency



Smooth operation enhances processing speed, increasing production efficiency.

4 High Synchronization



With high synchronization characteristics, it comes with a distributed clock module. Its synchronization jitter is in the sub-microsecond level, with jitter error within 1 μs, meeting the requirements of various on-site multi-axis synchronous control.

5 High-speed communication

EtherCAT Operating Modes	Min synchronization period
Profile Position Mode (pp)	1ms
Cyclic Synchronous Position Mode (csp)	1ms
Homing Mode (hm)	1ms
Profile Velocity Mode (pv)	500μs
Profile Torque Mode (pt)	125μs
Cyclic Synchronous Velocity Mode (csv)	500μs
Cyclic Synchronous Torque Mode (cst)	525μs

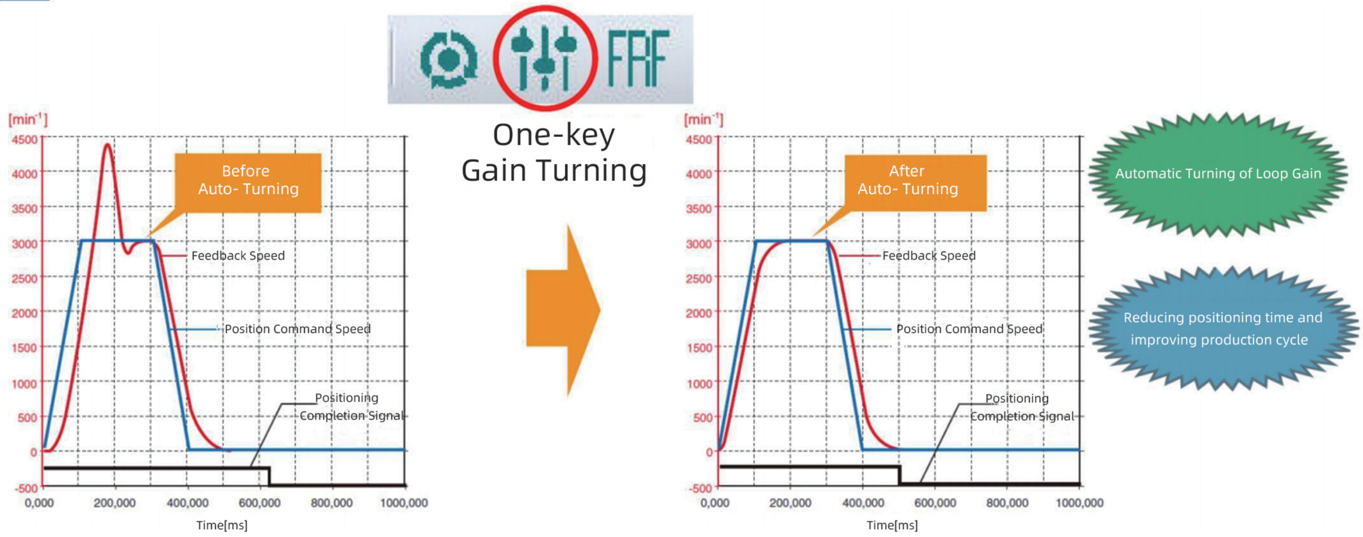
The entire series adopts higher-performance main control chips, further enhancing communication and interaction capabilities.

6 Control Performance

Specifications	Refresh Frequency
Carrier Frequency	8kHz
Current Loop Frequency	16kHz
Speed Loop Frequency	16kHz
Position Loop Frequency	4kHz

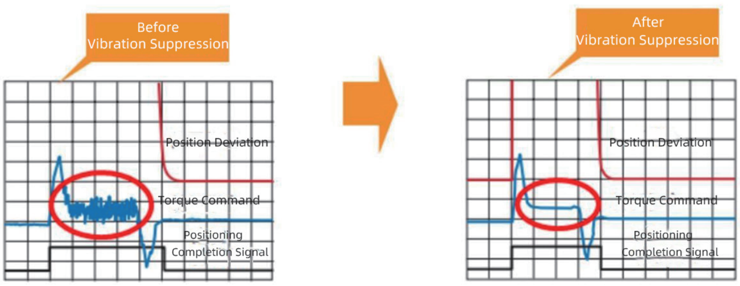
Using a new ARM+FPGA architecture, the control delay is minimized, the current loop response bandwidth reaches up to 3KHz, achieving faster command following, and effectively shortens the setting time for accurate positioning.The servo drive performance featuring ultra-high speed and ultra-precision control will give greater play to the mechanical equipment performance.

7 Automatic Gain Turning



Equipped with two automatic tuning loop parameter functions, "Single Parameter" and "Auto- Turning ", greatly reducing servo tuning time and significantly improving usability.

8 Enhanced Vibration Suppression



Equipped with enhanced vibration suppression function, incorporating four resonance suppression filters, second-order torque low-pass filters, input shaping filters, and position notch filters, capable of perfectly addressing vibration issues across low-frequency, mid-frequency, and high-frequency bands.

Two、Servo drives Model Specifications

1、Servo drives Naming Rules

RD5 - 5D5 S2 R E S C

① ② ③ ④ ⑤ ⑥ ⑦

①: Product Series Number
RD5: RD5 Series

③: Rated Output
S2: Single-phase/three-phase 220V
T2: Three-phase 220v
T3: Three-phase 380v

⑤: Command Type
P: Pulse command
E:EtherCAT
R:RS485
C:CANopen
F:PROFINET

⑥: Safety function
Blank: standard motor
S:Safety function(STO)*
*CANopen, RS485 models do not support STO function

⑦: Optional functions
Blank: standard motor
C: Fully closed-loop
G: Gantry
A: Analog interface*
*CANopen, RS485 model options

④: servo motor type
R: general servo motor

②: Rated Output

Single-phase/three-phase 220V model	001	1D6	2D8	5D5	7D6	012	014*
Rated Current	1.0A	1.6A	2.8A	5.5A	7.6A	11.6A	14.0A
Rated Power	100W	200W	400W	750W	1kW	1.5kW	2kW

three-phase 220v model	018*	022*	027*
Rated Current	18.0A	22.0A	27.0A
Rated Power	4kW	4.5kW	5.5kW

380V model	3D5	5D4	8D4	012	017	021	026
Rated Current	3.5A	5.4A	8.4A	11.9A	16.5A	20.8A	26.0A
Rated Power	1kW	1.5kW	2kW	3kW	5kW	6kW	7.5kW

Note: Models 014s2, 018T2, 022T2, and 027T2 will be launched soon.

2、Servo drives Electrical Specifications

220V model Servo drives electrical specifications

Structural Dimensions	SIZE-A MODEL			SIZE-B MODEL	SIZE-C MODEL			SIZE-D MODEL		
Model RD5-XX	001S2	1D6S2	2D8S2	5D5S2	7D6S2	012S2	014S2[2]	018T2[2]	022T2[2]	022T2[2]
Rated Output Current (Arms)	1.0	1.6	2.8	5.5	7.6	11.6	14.0	18.0	22.0	27.0
Maximum Rated Output Current (Arms)	3.9	5.8	10.1	16.9	23.0	32.0	42.0	45.0	55.0	72.0
Rated Input Current (Arms)	Single-phase 1.3/ Three-phase 0.8	Single-phase 2.3/ Three-phase 1.4	Single-phase 4.0/ Three-phase 2.6	Single-phase 7.9/ Three-phase 4.4	Single-phase 9.6/ Three-phase 5.6	Single-phase 12.8/ Three-phase 8.0	Single-phase 16.0/ Three-phase 10.2	18.7	20.7	24.4
Internal regenerative resistor specifications[1]	Nointernal regenerative resistor			50Ω/50W	25Ω/80W			20Ω/100W		
Control circuit power supply	Single-phase AC200V-240V,-10%~+10%,50/60Hz									
Main circuit power supply	Single-phase/three-phase AC200V~240V,-10%~+10%,50/60Hz							Three-phaseAC200V~240V, -10%~+10%,50/60Hz		

Note 1: All models support external regenerative resistors Note2: Models 014S2, 018T2, 022T2, and 027T2 will be launched soon.

380V model Servo drives electrical specifications

Structural Dimensions	SIZE-C MODEL				SIZE-D MODEL		
Model RD5-XX	3D5T3	5D4T3	8D4T3	012T3	017T3	021T3	026T3
Rated Output Current (Arms)	3.5	5.4	8.4	11.9	16.5	20.8	26.0
Maximum Rated Output Current (Arms)	11.0	14.0	20.0	29.8	41.3	52.1	65.0
Rated Input Current (Arms)	2.4	3.6	6.6	8.0	12.0	16.0	21.0
Internal regenerative resistor specifications[1]	100Ω/80W		50Ω/80W		35Ω/100W		
Control circuit power supply	Single-phase AC380V-440V,-10%~+10%,50/60Hz						
Main circuit power supply	Three-phase AC380V-440V,-10%~+10%,50/60Hz						

Note 1: All models support external regenerative resistors

3、Servo drives General Specifications

Item			Description
Basic Specifications	Control Method		IGBT PWM control, sine wave current drive mode 220 V, 380 V: Single-phase/Three-phase full bridge rectification
	Operating Conditions	Ambient/ Storage temperature[1]	0~+40°C/-20~+70°C
		Ambient/Storage humidity	Below 90% RH (without condensation)
		Vibration/Impact Resistance	$4.9m/s^2/19.6m/s^2$
		IP rating	IP20
		Pollution Level	PD2
		Altitude	Up to an altitude of 5000m, there is no need for derating at 1000m and below. Beyond 1000m,derate 1% for every additional 100 m. For altitudes exceeding 2000m, please contact LIMON.
Position Control Mode	Performance	Feedforward Compensation	Supports speed feedforward (0-100.0%) setting to eliminate tracking deviation
		Instruction Shaping	Position command filtering, averaging filtering.
	Frequency Division Output	Output Form	A phase, B phase, C phase: Differential output.
		Frequency Range	Motor can output any pulse in the range of 140 to 104857 per cycle of rotation.
Speed -Torque Control Mode	Performance	Current Loop Dynamic Characteristics	Step response:187.5us(0~100%) Frequency response: -3dB amplitude attenuation bandwidth, 2000Hz (command signal: ±25%); -90° phase shift bandwidth, 3500Hz (command signal: ±25%)
		Speed Control Range	0~12000rpm, with a requirement for speeds exceeding 6000rpm, please contact LIMON.
		Speed Loop Dynamic Characteristics	Step response: 562.5us (0~1000rpm) Frequency response: -3dB amplitude attenuation bandwidth, 1000Hz (command signal: ±500rpm); -90°phase shift bandwidth, 630Hz (command signal: ±500rpm)
		Torque Control Accuracy	±2%
Input-Output	Digital Input Signals		Configurable Functions: Positive limit switch, Negative limit switch, home switch, etc.
	Digital Output Signals		Configurable Functions: Servo ready, zero speed signal, speed reached, position reached, positioning approach signal, torque limit engaged, warning, servo fault, etc.
Supported function	Electronic Gear Ratio		Built-in two sets of electronic gear ratios, supporting gear ratio switching function
	Limit Protection		Emergency stop when positive limit switch or negative limit switch is triggered.
	Fault Monitoring		Including protections against overcurrent, overvoltage, undervoltage, overload, main circuit detection error, heatsink overheat, overspeed, encoder error, parameter error
	Display Function		5-digit LED display and power indicator CHARGE
	Vibration Suppression		4 notches (including four adaptive notches) available, 50 Hz to 5000 Hz
	Usability		Auto-tuning, speed observer, model tracking USB
	Debugging Interface		USB
	Others		Status display, alarm recording, JOG operation, etc.

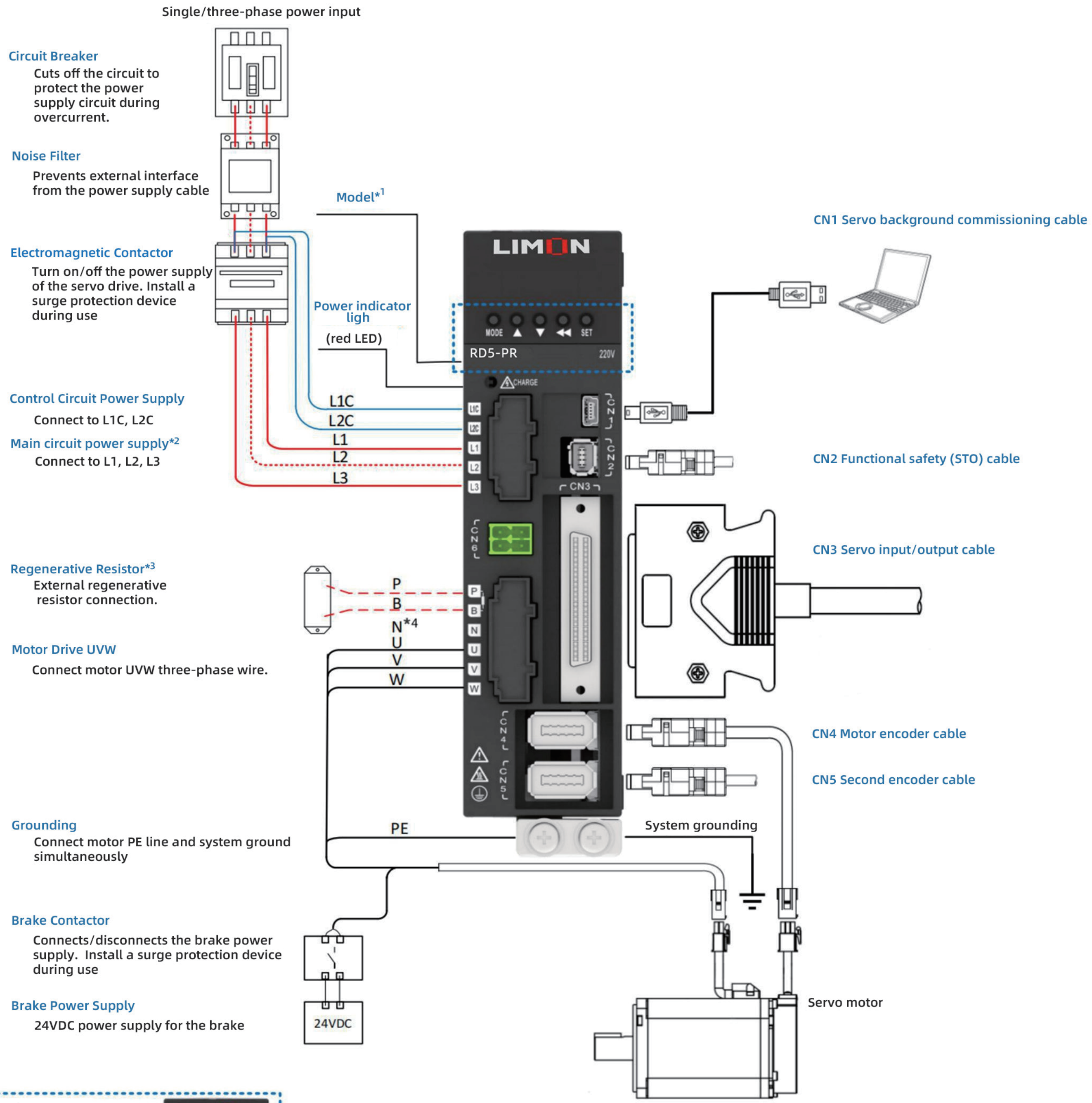
⚠ Attention

Note 1: Please install or store the Servo drives within this temperature range.

Three、Wiring and Port Definition of Servo drives

Pulse

1、Wiring for Pulse Type



Note 1:
Model Types:
RD5 - General flagship type
P - Pulse type
R - General servo motor

Note 2: This diagram is for single-phase/three-phase 220V SIZE-A. For three-phase 380V drive, the main circuit power terminal marking are R, S, T.

Note3:SIZE-A does not have a built-in regenerative resistor. When the bus capacitor is insufficient, connect an external regenerative resistor between terminals P and B.
For SIZE-B/C/D, the regenerative resistor connection terminal marking are P, RB, B.
Internal regenerative resistor connection method: P and RB are externally short-circuited by default.
External regenerative resistor connection method: Remove the short circuit between P and RB, and connect the resistor between P and B.

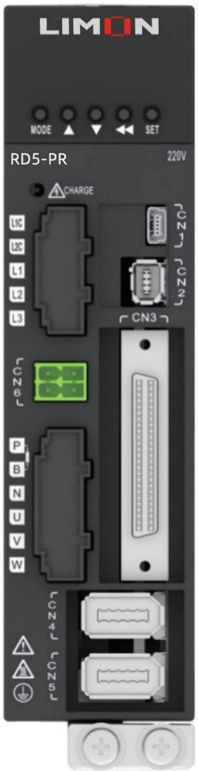
Note4:For SIZE-A/B/C servo bus terminals, connect to P, N. For SIZE-D servo bus terminals, connect to P, N2. N1 and N2 are short-circuited by default. When using an external reactance resistor, remove the shorting piece and connect the resistor between N1 and N2.

2、Port Definitions for Pulse Type

CN1	Pin number	Signal name
MINI USB	1	VBUS
	2	D-
	3	D+
	4	-
	5	GND

CN4	Pin number	Signal name
Motor encoder Connector 1394-10P	1	5V
	2	GND
	3	-
	4	-
	5	-
	6	-
	7	-
	8	-
	9	SD+
	10	SD-

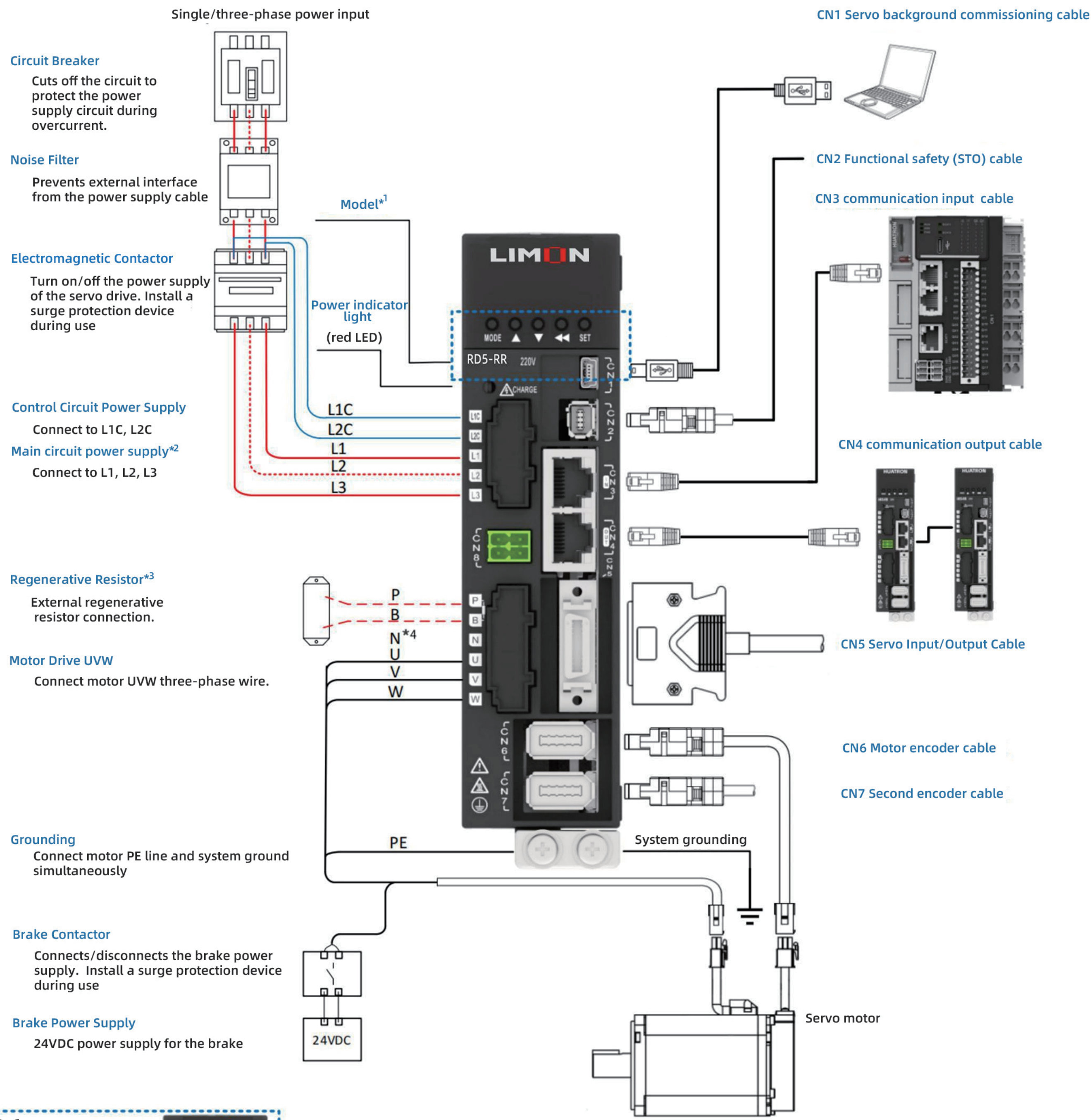
CN2	Pin number	Signal name
STO Connector TE:2013595-1	1	Internal power supply negative
	2	Internal power supply positive
	3	STO1-
	4	STO1+
	5	STO2-
	6	STO2+
	7	STO_OUT-
	8	STO_OUT+



CN5	Pin number	Signal name	
		Standard model	Gantry model
Second Encoder Connector 1394-10P	1	5V	5V
	2	GND	GND
	3	SEC_A+	RS485A+
	4	SEC_A-	RS485A-
	5	SEC_B+	RS485B+
	6	SEC_B-	RS485B-
	7	SEC_Z+	-
	8	SEC_Z-	-
	9	-	-
	10	-	-

CN3	Pin number	Signal name	Pin number	Signal name
IO Connector SCSI-50P	1	DI1	28	PBO-
	2	DI2	29	PBO+
	3	DI3	30	PAO-
	4	DI_COM	31	PAO+
	5	DI4	32	OCZ
	6	DI5	33	GND
	7	DI6	34	PULSE+
	8	DI7	35	PULSE-
	9	HDI1	36	SIGN+
	10	HDI2	37	SIGN-
	11	DO1-	38	PULLHI
	12	DO1+	39	GND
	13	DO2-	40	HPULSE+
	14	DO2+	41	HPULSE-
	15	DO3-	42	HSIGN+
	16	DO3+	43	HSIGN-
	17	DO4-	44	GND
	18	DO4+	45	AI1
	19	DO5-	46	AI2
	20	DO5+	47	AO2
	26	PZO-	48	AO1
	27	PZO+	49	GND

3、Wiring forRS485 Type



Note 1:
Model Types:
RD5 - General flagship type
R-RS485 type
R - General servo motor

Note 2: This diagram is for single-phase/three-phase 220V SIZE-A. For three-phase 380V drive, the main circuit power terminal marking are R, S, T.

Note3:SIZE-A does not have a built-in regenerative resistor. When the bus capacitor is insufficient, connect an external regenerative resistor between terminals P and B.
For SIZE-B/C/D, the regenerative resistor connection terminal marking are P, RB, B. Internal regenerative resistor connection method: P and RB are externally short-circuited by default. External regenerative resistor connection method: Remove the short circuit between P and RB, and connect the resistor between P and B.

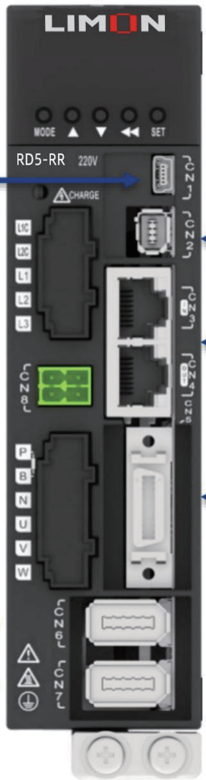
Note4:For SIZE-A/B/C servo bus terminals, connect to P, N. For SIZE-D servo bus terminals, connect to P, N2. N1 and N2 are short-circuited by default. When using an external reactance resistor, remove the shorting piece and connect the resistor between N1 and N2.

4、Port Definitions for RS485 Type

CN1	Pin number	Signal name
MINI USB	1	VBUS
	2	D-
	3	D+
	4	-
	5	GND

CN6	Pin number	Signal name
Motor encoder Connector 1394-10P	1	5V
	2	GND
	3	-
	4	-
	5	-
	6	-
	7	-
	8	-
	9	SD+
	10	SD-

CN7	Pin number	Signal name
Second Encoder Connector Connector 1394-10P	1	5V
	2	GND
	3	SEC_A+
	4	SEC_A-
	5	SEC_B+
	6	SEC_B-
	7	SEC_Z+
	8	SEC_Z-
	9	-
	10	-

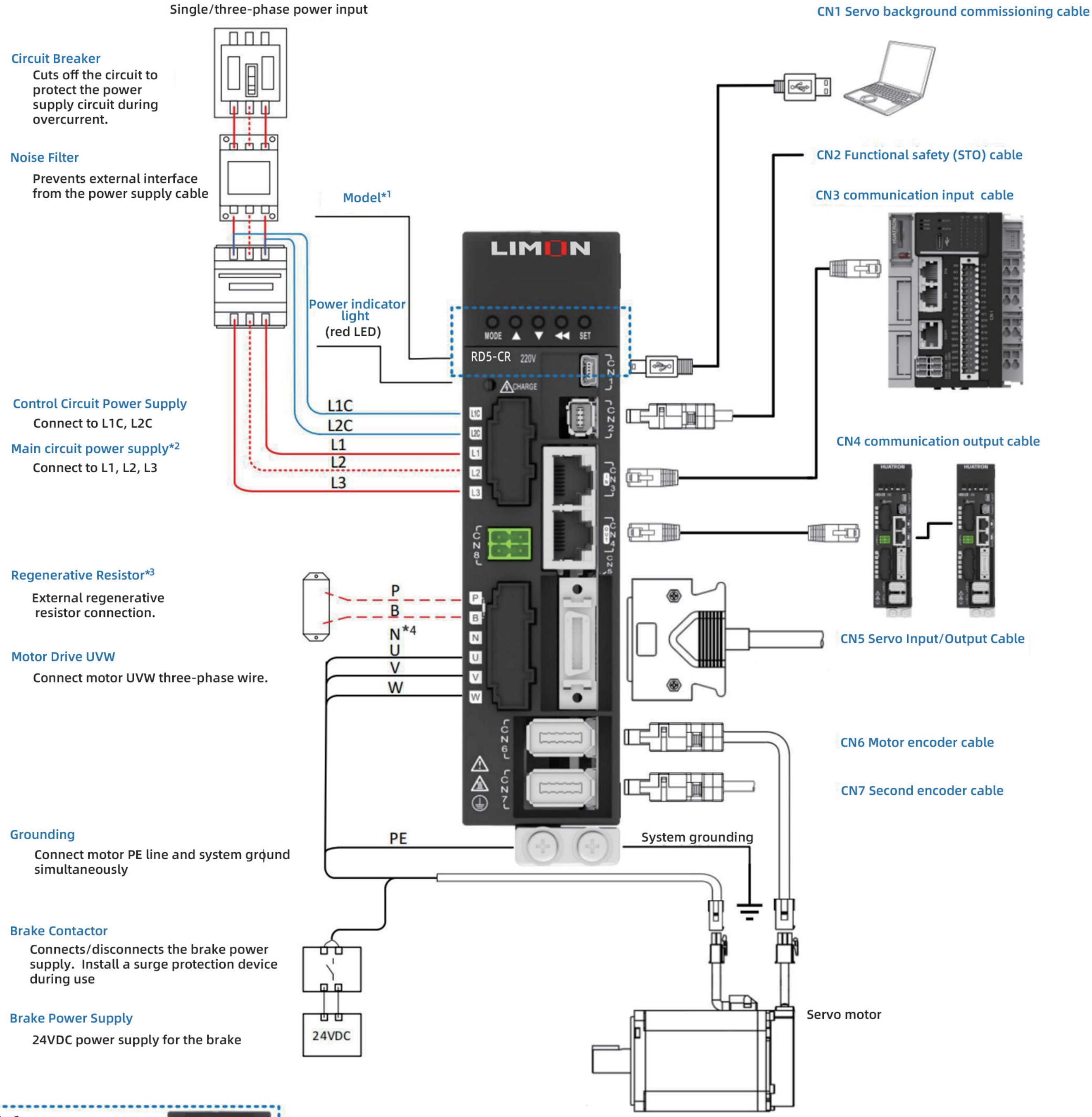


CN2	Pin number	Signal name
Analog Connector TE:2013595-1	1	GND
	2	AI1
	3	AI2
	4	GND
	5	AO1
	6	AO2
	7	GND
	8	-

	CN3(IN)		CN4(OUT)	
	Pin number	Signal name	Pin number	Signal name
RS485 Communication Terminal	1	-	1	-
	2	-	2	-
	3	-	3	-
	4	RS485+	4	RS485+
	5	RS485-	5	RS485-
	6	-	6	-
	7	-	7	-
	8	GND	8	GND

CN5	Pin number	Signal name	Pin number	Signal name
IO Connector SCSI-20P	1	DO1+	11	DI6
	2	DO1-	12	HDI1
	3	DO3+	13	HDI2
	4	DO3-	14	DO2+
	5	DI1	15	DO2-
	6	DI_COM	16	GND
	7	DI2	17	PAO+
	8	DI3	18	PAO-
	9	DI4	19	PBO+
	10	DI5	20	PBO-

5、Wiring for CANopen Type



Note 1:
Model Types:
RD5 - General flagship type
C-CANopen type
R - General servo motor

Note 2: This diagram is for single-phase/three-phase 220V SIZE-A.
For three-phase 380V drive, the main circuit power terminal marking are R, S, T.

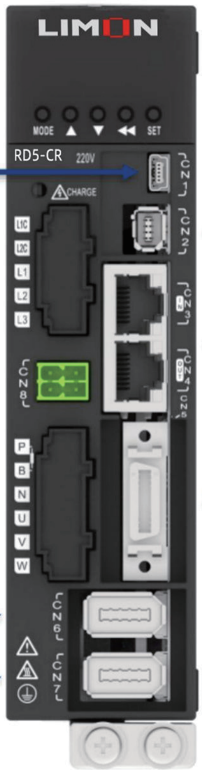
Note3:SIZE-A does not have a built-in regenerative resistor. When the bus capacitor is insufficient, connect an external regenerative resistor between terminals P and B.
For SIZE-B/C/D, the regenerative resistor connection terminal marking are P, RB, B.
Internal regenerative resistor connection method: P and RB are externally short-circuited by default.
External regenerative resistor connection method: Remove the short circuit between P and RB, and connect the resistor between P and B.

Note4:For SIZE-A/B/C servo bus terminals, connect to P, N. For SIZE-D servo bus terminals, connect to P, N2. N1 and N2 are short-circuited by default. When using an external reactance resistor, remove the shorting piece and connect the resistor between N1 and N2.

6、Port Definitions for CANopen Type

CN1	Pin number	Signal name
MINI USB	1	VBUS
	2	D-
	3	D+
	4	-
	5	GND

CN2	Pin number	Signal name
Analog Connector TE:2013595-1	1	GND
	2	-
	3	-
	4	GND
	5	AO1
	6	AO2
	7	GND
	8	-



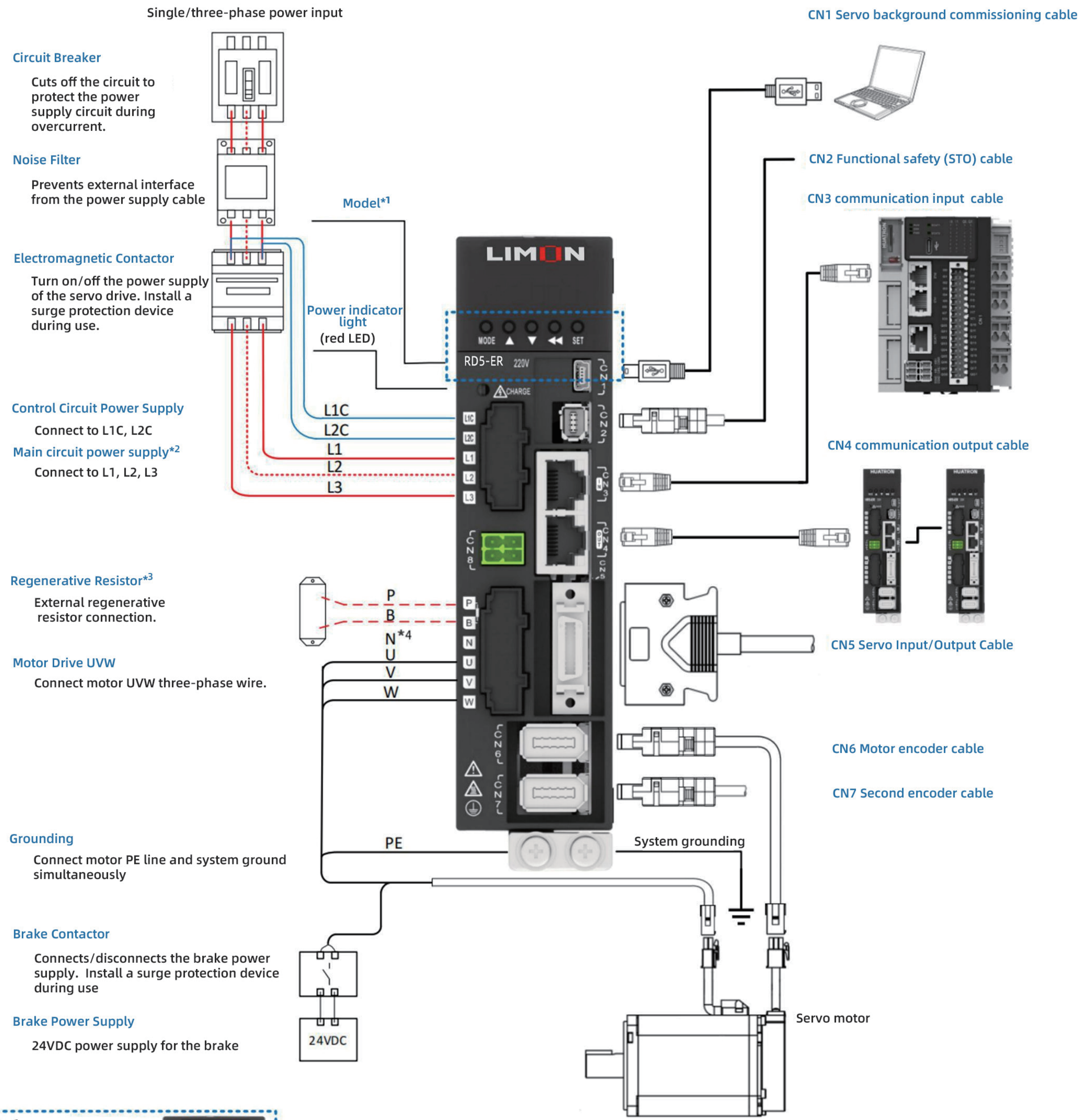
CN6	Pin number	Signal name
Motor encoder Connector 1394-10P	1	5V
	2	GND
	3	-
	4	-
	5	-
	6	-
	7	-
	8	-
	9	SD+
	10	SD-

	CN3(IN)		CN4(OUT)	
	Pin number	Signal name	Pin number	Signal name
CANopen Communication Terminal	1	CANH	1	CANH
	2	CANL	2	CANL
	3	C_GND	3	C_GND
	4	-	4	-
	5	-	5	-
	6	-	6	-
	7	-	7	-
	8	-	8	-

CN7	Pin number	Signal name
Second Encoder Connector 1394-10P	1	5V
	2	GND
	3	SEC_A+
	4	SEC_A-
	5	SEC_B+
	6	SEC_B-
	7	SEC_Z+
	8	SEC_Z-
	9	-
	10	-

CN5	Pin number	Signal name	Pin number	Signal name
IO Connector SCSI-20P	1	DO1+	11	DI6
	2	DO1-	12	HDI1
	3	DO3+	13	HDI2
	4	DO3-	14	DO2+
	5	DI1	15	DO2-
	6	DI_COM	16	GND
	7	DI2	17	PAO+
	8	DI3	18	PAO-
	9	DI4	19	PBO+
	10	DI5	20	PBO-

7、Wiring for EtherCAT Type



Note 1:
Model Types:
RD5 - General flagship type
E-EtherCAT type
R - General servo motor

Note 2: This diagram is for single-phase/three-phase 220V SIZE-A.
For three-phase 380V drive, the main circuit power terminal marking are R, S, T.

Note3:SIZE-A does not have a built-in regenerative resistor. When the bus capacitor is insufficient, connect an external regenerative resistor between terminals P and B.
For SIZE-B/C/D, the regenerative resistor connection terminal marking are P, RB, B.
Internal regenerative resistor connection method: P and RB are externally short-circuited by default.
External regenerative resistor connection method: Remove the short circuit between P and RB, and connect the resistor between P and B.

Note4:For SIZE-A/B/C servo bus terminals, connect to P, N. For SIZE-D servo bus terminals, connect to P, N2. N1 and N2 are short-circuited by default. When using an external reactance resistor, remove the shorting piece and connect the resistor between N1 and N2.

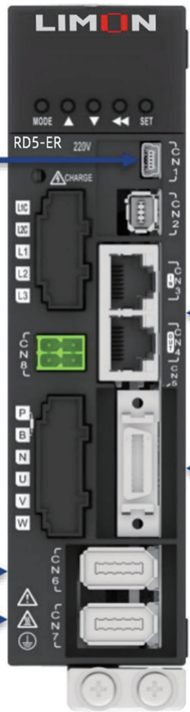
8、Port Definitions for EtherCAT Type

EtherCAT

CN1	Pin number	Signal name
MINI USB	1	VBUS
	2	D-
	3	D+
	4	-
	5	GND

CN6	Pin number	Signal name
Motor encoder Connector 1394-10P	1	5V
	2	GND
	3	-
	4	-
	5	-
	6	-
	7	-
	8	-
	9	SD+
	10	SD-

CN7	Pin number	Signal name	
		Standard model	Gantry model
Second Encoder Connector 1394-10P	1	5V	5V
	2	GND	GND
	3	SEC_A+	RS485A+
	4	SEC_A-	RS485A-
	5	SEC_B+	RS485B+
	6	SEC_B-	RS485B-
	7	SEC_Z+	-
	8	SEC_Z-	-
	9	-	-
	10	-	-

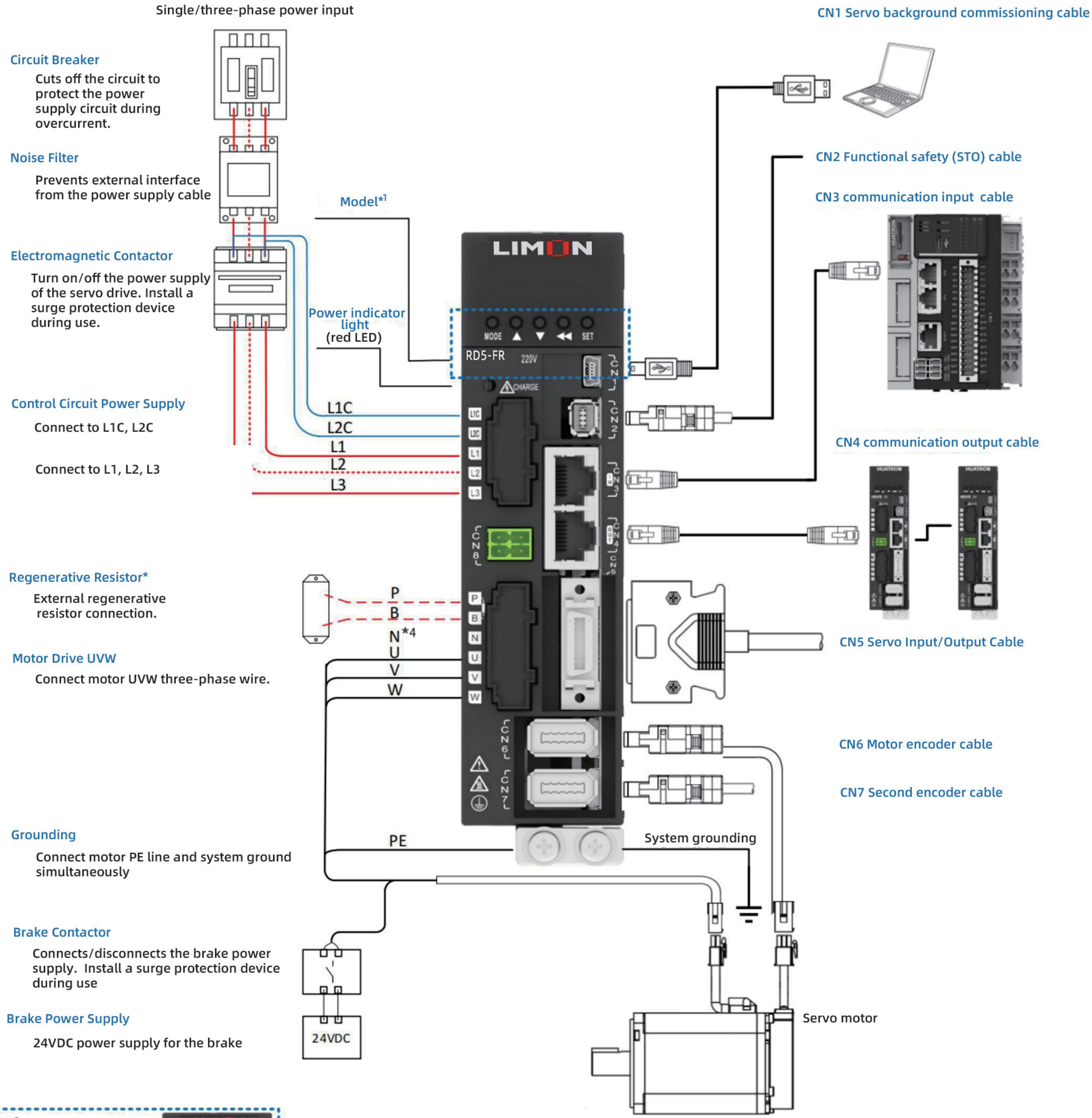


CN2	Pin number	Signal name
STO Connector TE:2013595-1	1	Internal power supply negative
	2	Internal power supply positive
	3	STO1-
	4	STO1+
	5	STO2-
	6	STO2+
	7	STO_OUT-
	8	STO_OUT+

	CN3(IN)		CN4(OUT)	
	Pin number	Signal name	Pin number	Signal name
EtherCAT Communication Terminal	1	TX+	1	TX+
	2	TX-	2	TX-
	3	RX+	3	RX+
	4	-	4	-
	5	-	5	-
	6	RX-	6	RX-
	7	-	7	-
	8	-	8	-

CN5	Pin number	Signal name	Pin number	Signal name
IO Connector SCSI-50P	1	DO1+	11	DI6
	2	DO1-	12	HDI1
	3	DO3+	13	HDI2
	4	DO3-	14	DO2+
	5	DI1	15	DO2-
	6	DI_COM	16	GND
	7	DI2	17	PAO+
	8	DI3	18	PAO-
	9	DI4	19	PBO+
	10	DI5	20	PBO-

9、Wiring for PROFINET Type



Note 1:
Model Types:
RD5 - General flagship type
F-PROFINET communication
R - General servo motor

Note 2: This diagram is for single-phase/three-phase 220V SIZE-A.
For three-phase 380V drive, the main circuit power terminal marking are R, S, T.

Note3:SIZE-A does not have a built-in regenerative resistor. When the bus capacitor is insufficient, connect an external regenerative resistor between terminals P and B.
For SIZE-B/C/D, the regenerative resistor connection terminal marking are P, RB, B.
Internal regenerative resistor connection method: P and RB are externally short-circuited by default.
External regenerative resistor connection method: Remove the short circuit between P and RB, and connect the resistor between P and B.

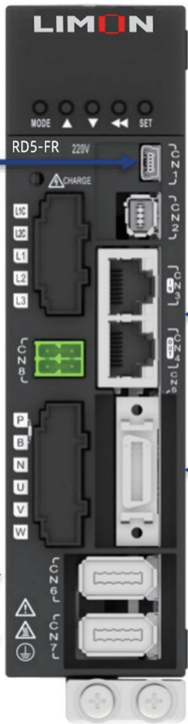
Note4:For SIZE-A/B/C servo bus terminals, connect to P, N. For SIZE-D servo bus terminals, connect to P, N2. N1 and N2 are short-circuited by default. When using an external reactance resistor, remove the shorting piece and connect the resistor between N1 and N2.

10、Port Definitions for PROFNET Type

CN1	Pin number	Signal name
MINI USB	1	VBUS
	2	D-
	3	D+
	4	-
	5	GND

CN2	Pin number	Signal name
STO Connector TE:2013595-1	1	Internal power supply negative
	2	Internal power supply positive
	3	STO1-
	4	STO1+
	5	STO2-
	6	STO2+
	7	STO_OUT-
	8	STO_OUT+

CN6	Pin number	Signal name
Motor encoder Connector 1394-10P	1	5V
	2	GND
	3	-
	4	-
	5	-
	6	-
	7	-
	8	-
	9	SD+
	10	SD-



	CN3(IN)		CN4(OUT)	
	Pin number	Signal name	Pin number	Signal name
PROFINET Communication Terminal	1	TX+	1	TX+
	2	TX-	2	TX-
	3	RX+	3	RX+
	4	-	4	-
	5	-	5	-
	6	RX-	6	RX-
	7	-	7	-
	8	-	8	-

CN7	Pin number	Signal name
Second Encoder Connector 1394-10P	1	5V
	2	GND
	3	SEC_A+
	4	SEC_A-
	5	SEC_B+
	6	SEC_B-
	7	SEC_Z+
	8	SEC_Z-
	9	-
	10	-

CN5	Pin number	Signal name	Pin number	Signal name
IO Connector SCSI-20P	1	DO1+	11	DI6
	2	DO1-	12	HDI1
	3	DO3+	13	HDI2
	4	DO3-	14	DO2+
	5	DI1	15	DO2-
	6	DI_COM	16	GND
	7	DI2	17	PAO+
	8	DI3	18	PAO-
	9	DI4	19	PBO+
	10	DI5	20	PBO-

11、Port Definitions for Servo drives power

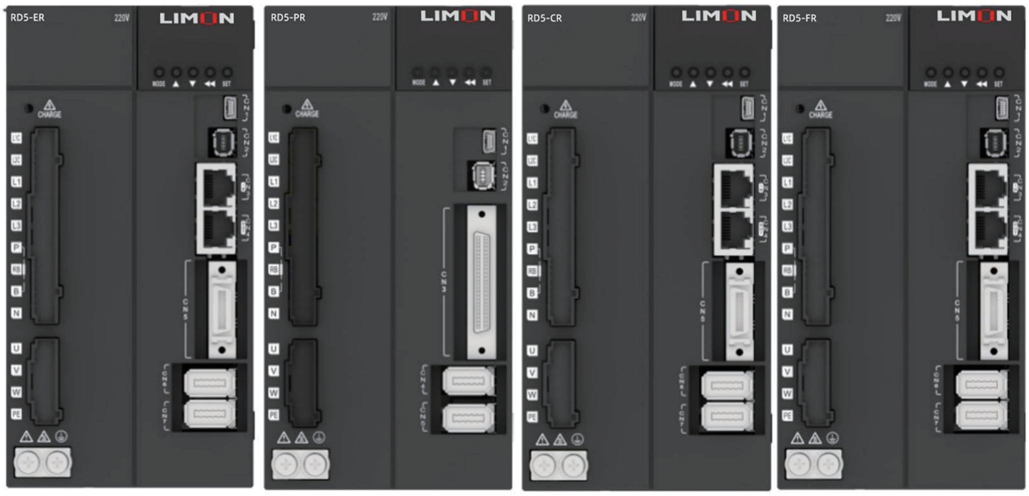
Port definitions of SIZE-A series power

Terminal marking	Terminal name
L1C、L2C	Control circuit power supply input terminal
L1、L2、L3	Main circuit power supply input terminal
P、N	Servo bus terminal
P、B	Regenerative resistor connection terminal
U、V、W	Servo motor connection terminal

Port definitions of SIZE-B series power

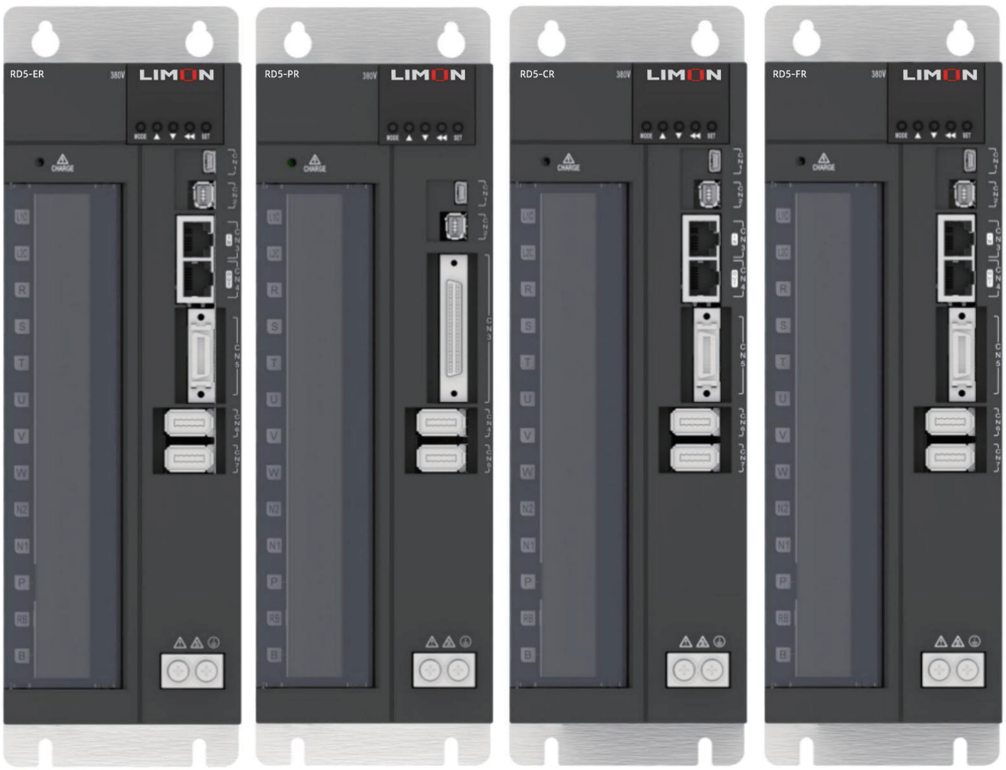
Terminal marking	Terminal name
L1C、L2C	Control circuit power supply input terminal
L1、L2、L3	Main circuit power supply input terminal
P、N	Servo bus terminal
P、RB、B	Regenerative resistor connection terminal
U、V、W	Servo motor connection terminal

Port definitions of SIZE-C series power



Terminal marking	Terminal name
L1C、L2C	Control circuit power supply input terminal
L1、L2、L3	Main circuit power supply input terminal
P、N	Servo bus terminal
P、RB、B	Regenerative resistor connection terminal
U、V、W	Servo motor connection terminal
PE	Ground terminal

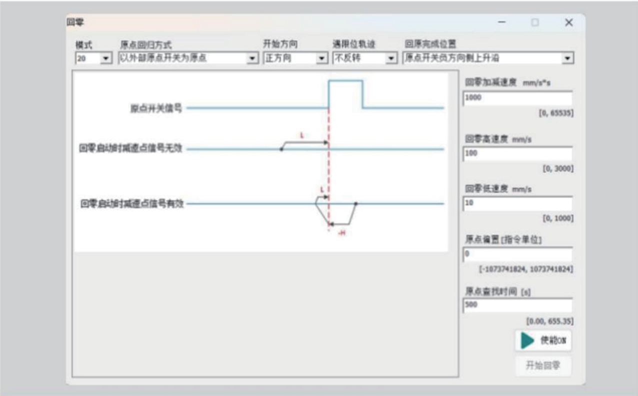
Port definitions of SIZE-D series power



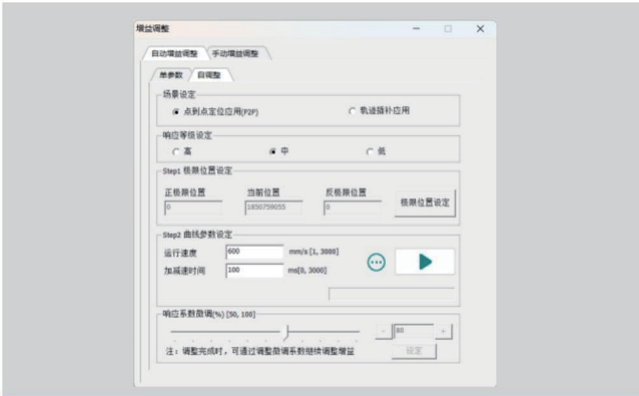
Terminal marking	Terminal name
L1C、L2C	Control circuit power supply input terminal
R、S、T	Main circuit power supply input terminal
P、N2	Servo bus terminal
P、RB、B	Regenerative resistor connection terminal
U、V、W	Servo motor connection terminal
N2、N1	External reactor connection terminal

Four、Commissioning software

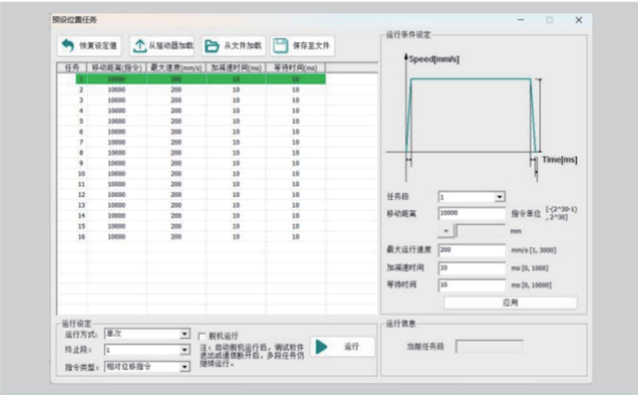
1 Visualization



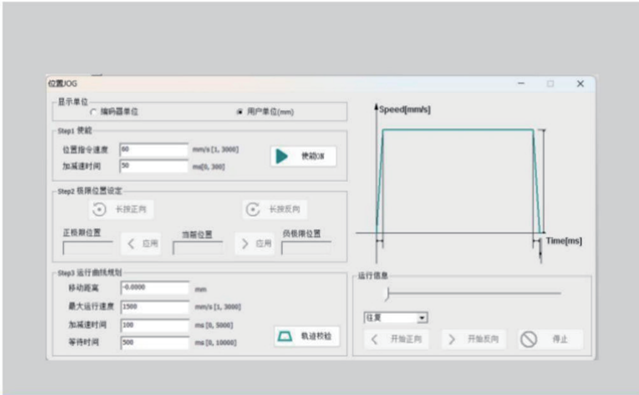
Configurable Homing Trajectory



Matching Tuning Scene



Multi-Segment Trajectory Planning

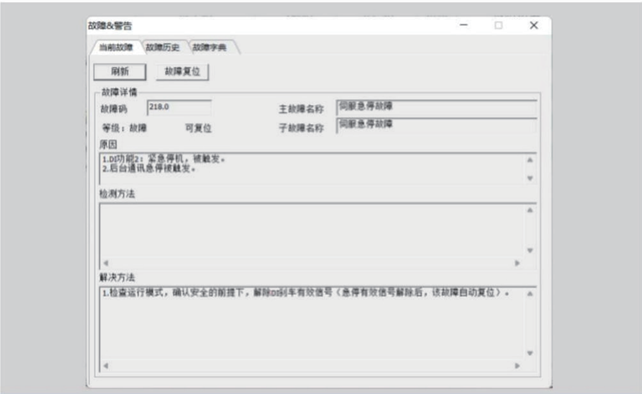


Position JOG visualization

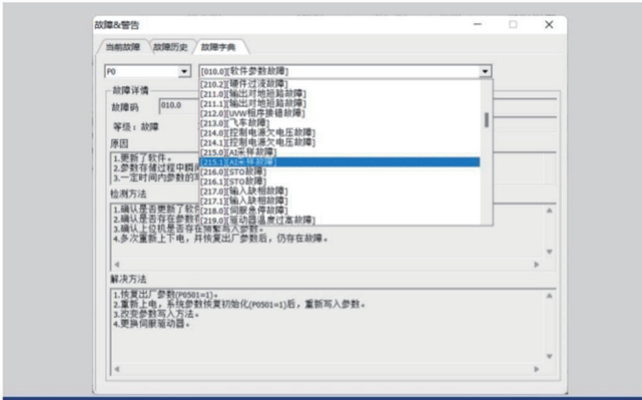
2 Fault Diagnosis

- Real-time Alerting of Fault Information, and Providing Fault Troubleshooting Methods
- Historical fault tracing, supports viewing parameter information from up to 10 past fault occurrences, to help locate faults.
- Fault dictionary covering all RD5 series fault information, enabling quick fault queries.

Historical fault tracing



Real-time Fault Diagnosis

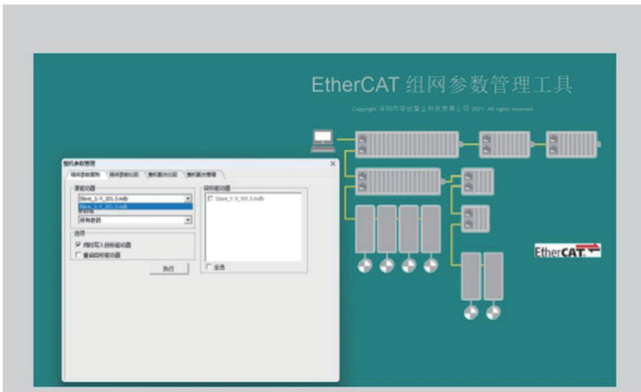


Fault Dictionary Query

3 Multi-axis recipe

In the context of multi-axis EtherCAT servo networking:

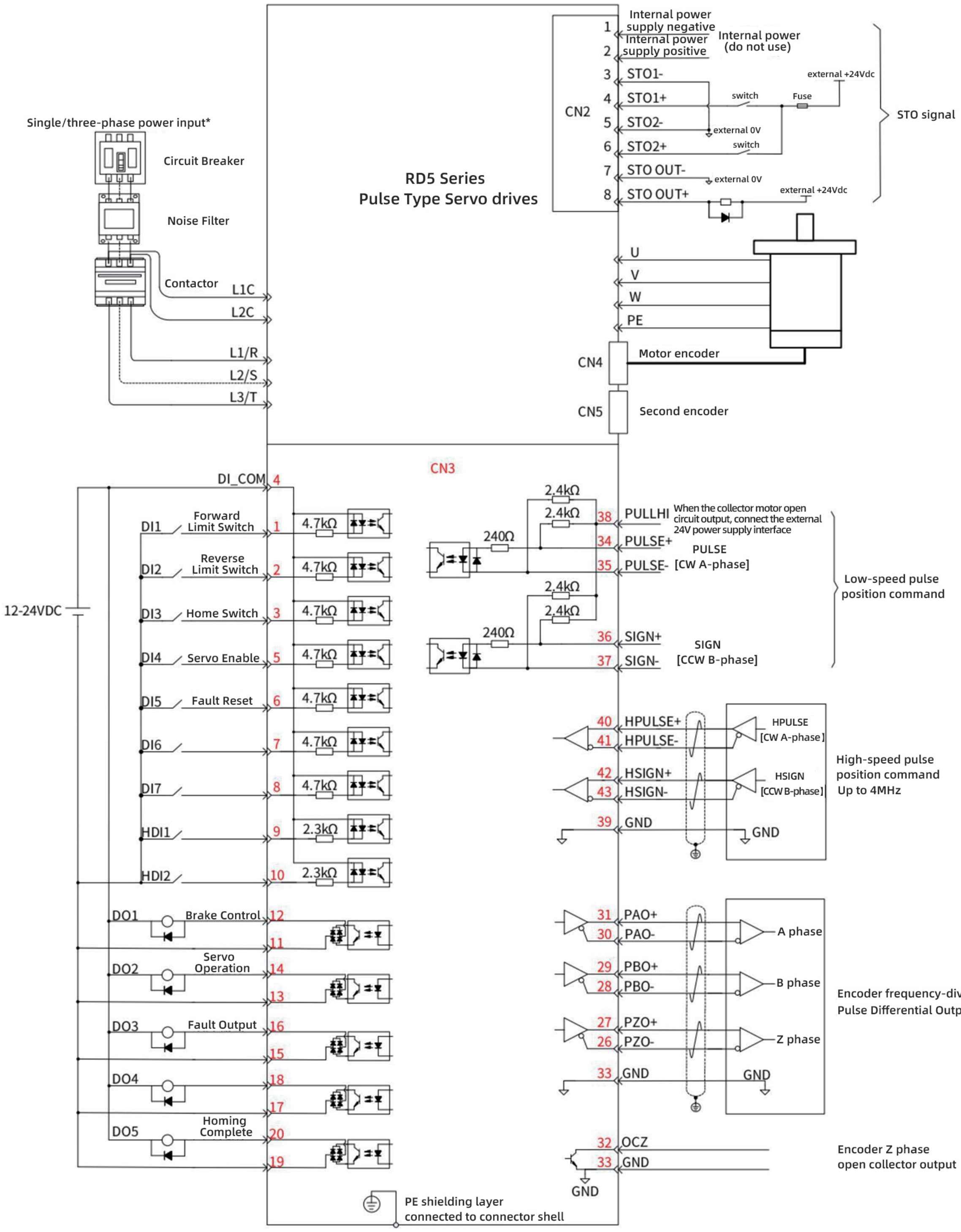
- Support multi-axis parameter modification
- Multi-axis recipe saving.
- Axis parameter comparison
- Axis parameter copying.



Special Function

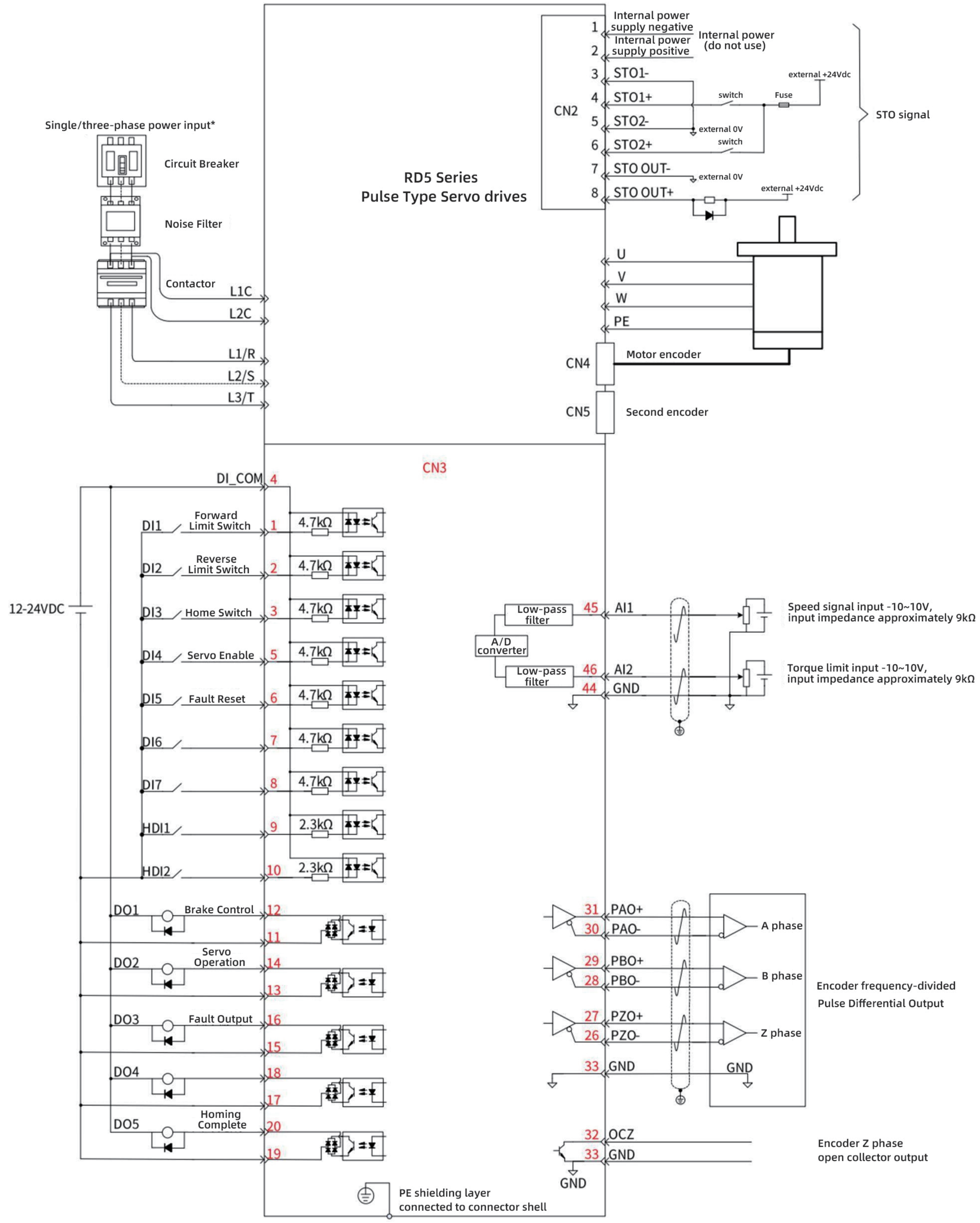
Five、Wiring Diagrams for Servo drives

1、Wiring Diagram for Position Control Mode



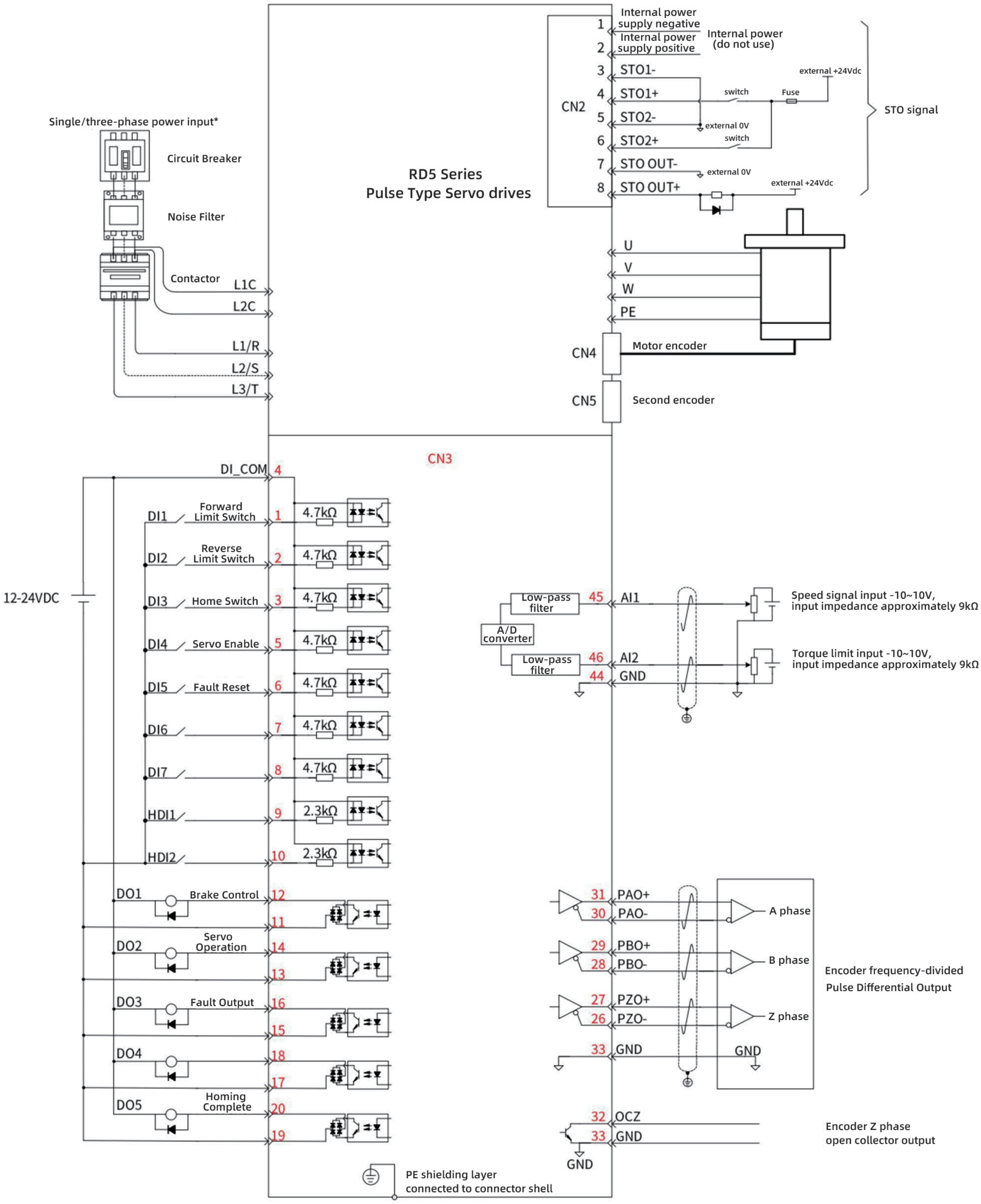
*Control circuit power terminal markings are L1C, L2C
Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3;
three-phase 380V terminal marking are R, S, T

2、Wiring Diagram for Speed Control Mode



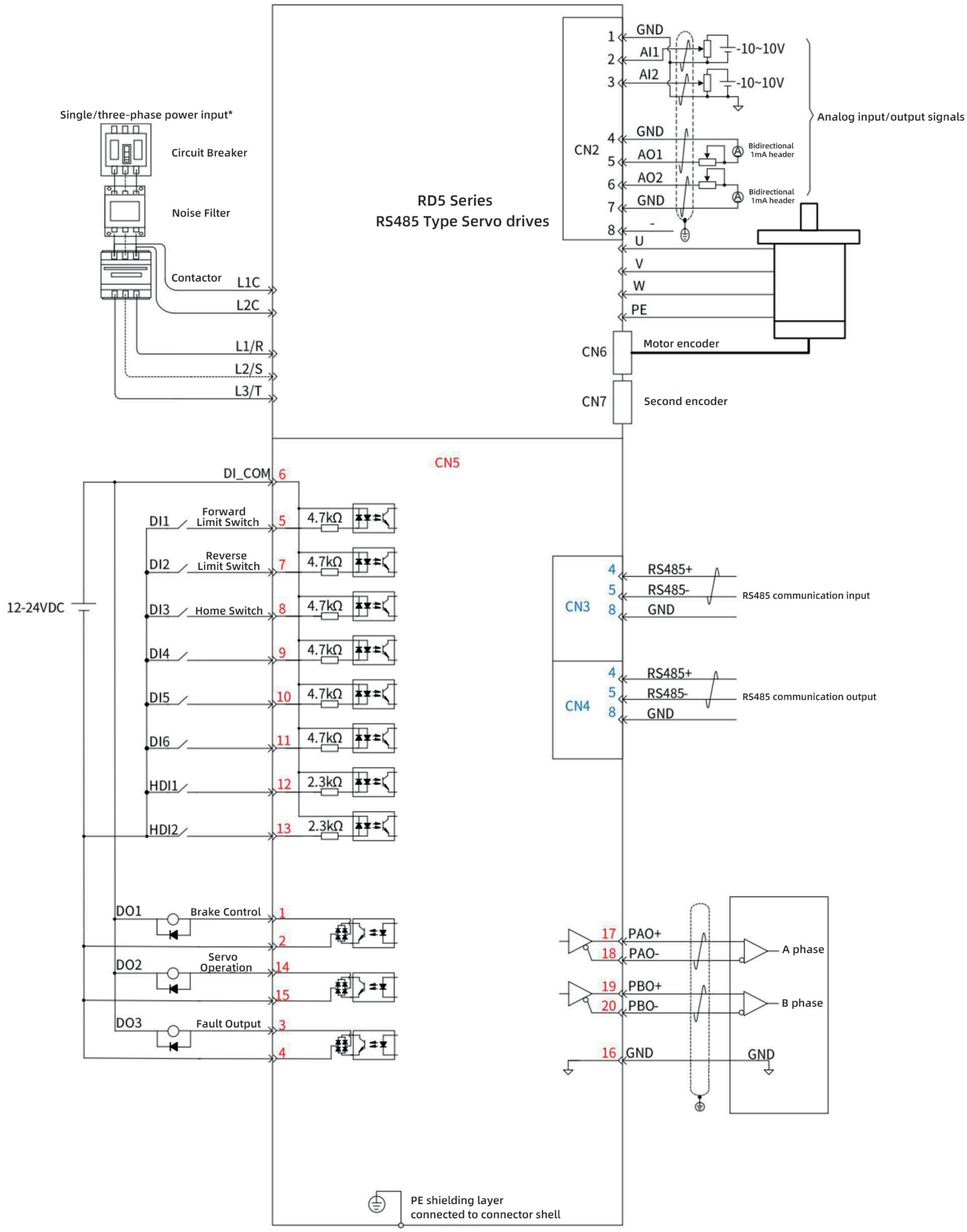
*Control circuit power terminal markings are L1C, L2C
Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3;
three-phase 380V terminal marking are R, S, T

3、Wiring Diagram for Torque Control Mode



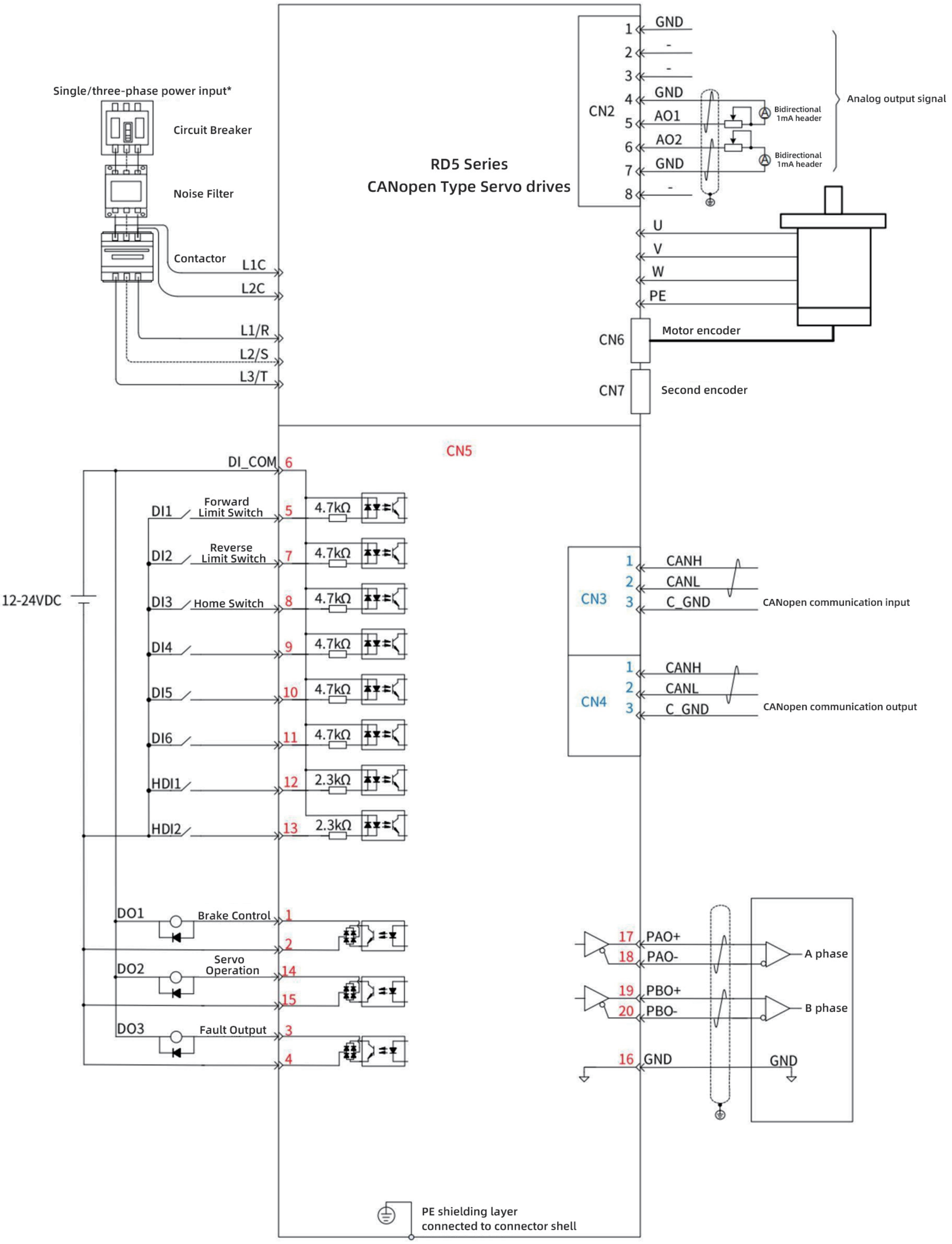
*Control circuit power terminal markings are L1C, L2C
Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3; three-phase 380V terminal marking are R, S, T

4、Wiring Diagram forRS485 type Control



*Control circuit power terminal markings are L1C, L2C
Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3;
three-phase 380V terminal marking are R, S, T

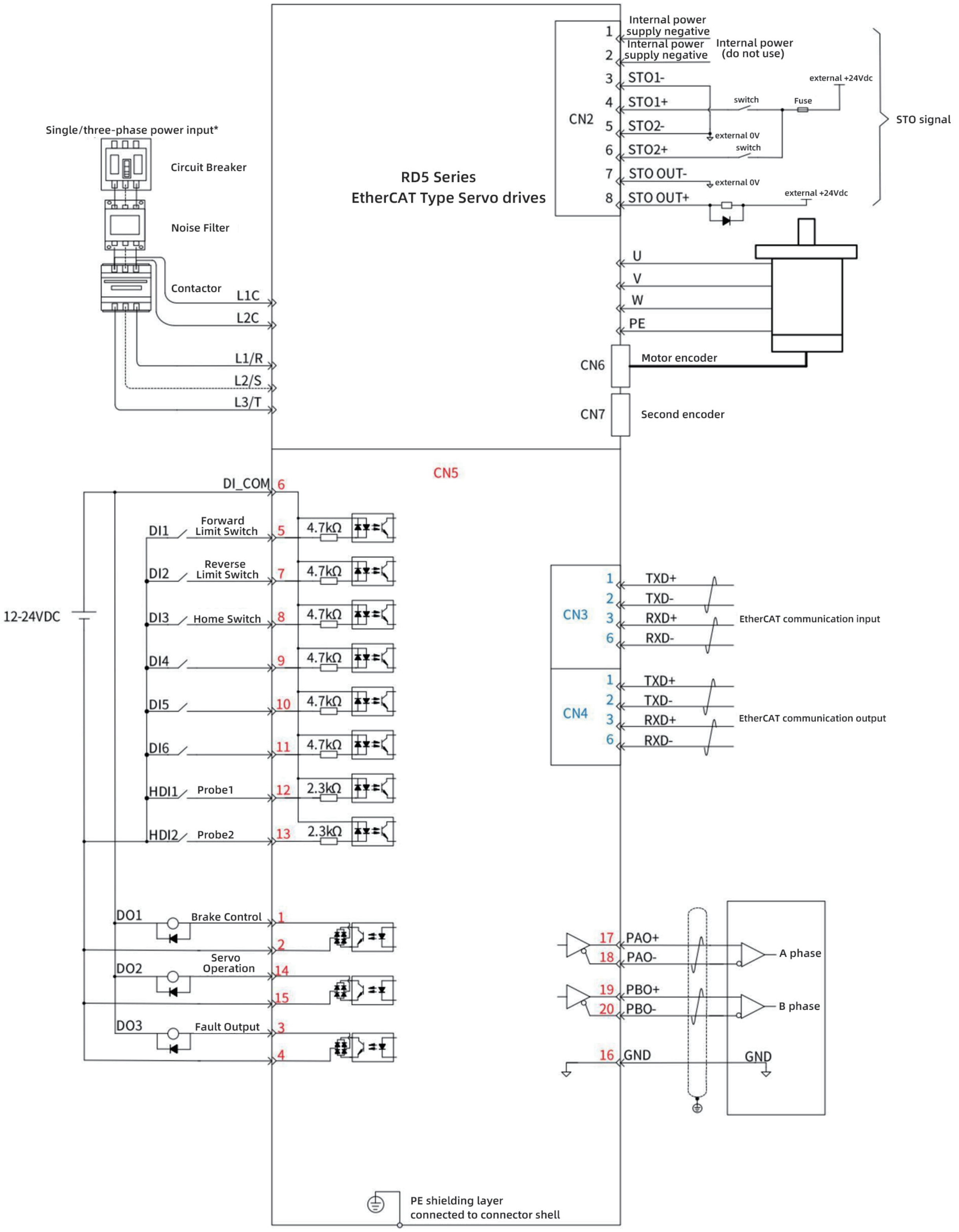
5、Wiring Diagram for CANopen type Control



*Control circuit power terminal markings are L1C, L2C

Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3;
three-phase 380V terminal marking are R, S, T

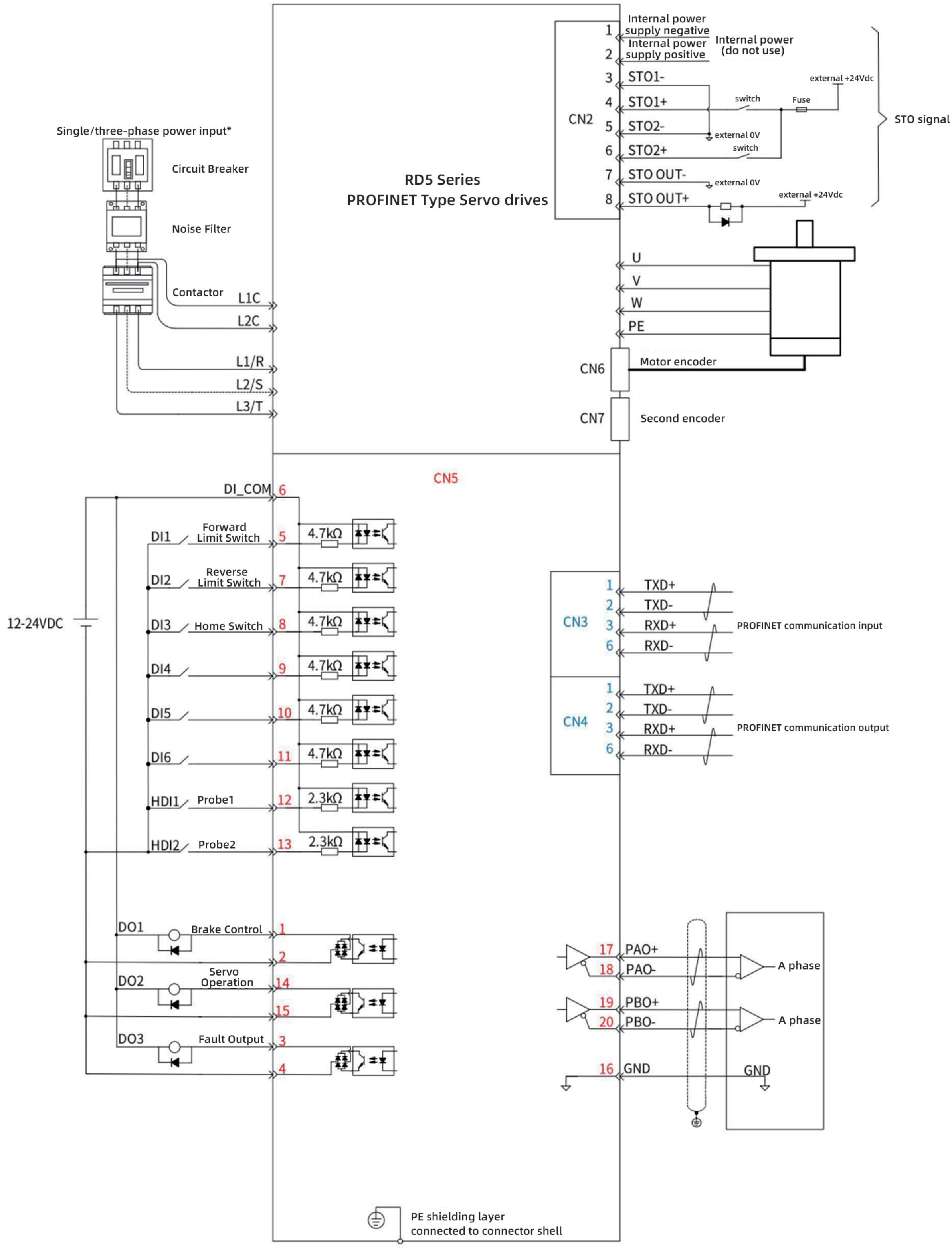
6、Wiring Diagram for EtherCAT type Control



*Control circuit power terminal markings are L1C, L2C

Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3;
three-phase 380V terminal marking are R, S, T

7、Wiring Diagram for PROFINET type Control

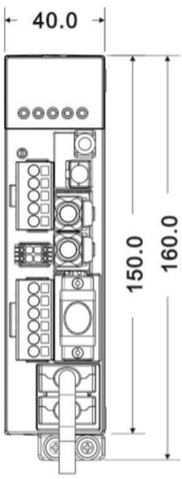


*Control circuit power terminal markings are L1C, L2C
Main circuit power terminals: single/three-phase 220V terminal marking are L1, L2, L3;
three-phase 380V terminal marking are R, S, T

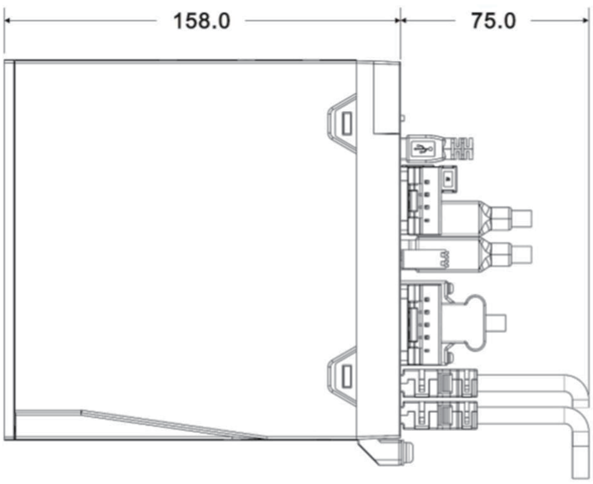
Six、Installation Dimensions of Servo drives

SIZE-A

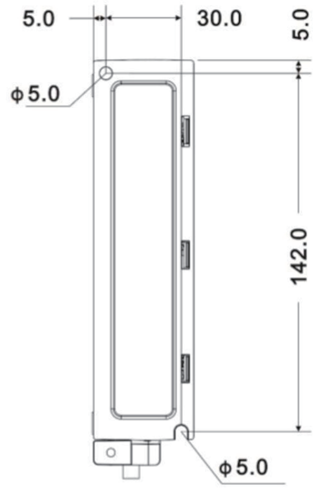
Front view



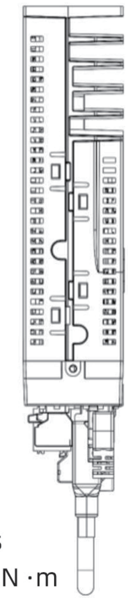
Left view



Rear view



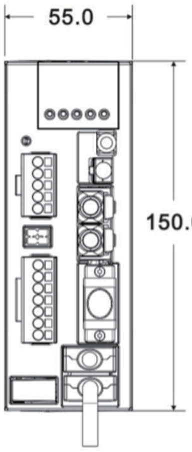
Top view



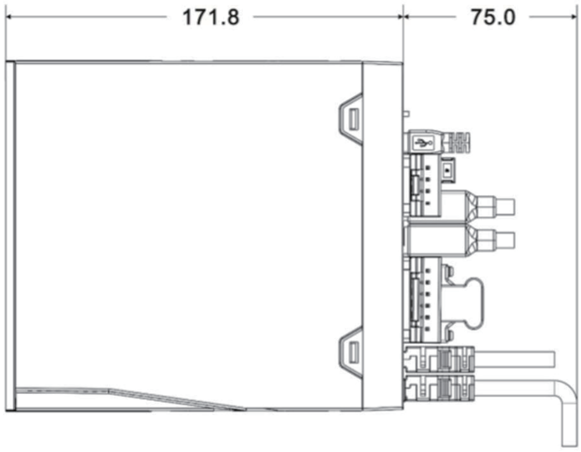
Mounting screws:M4*2pcs
Recommended torque:1.2N ·m

SIZE-B

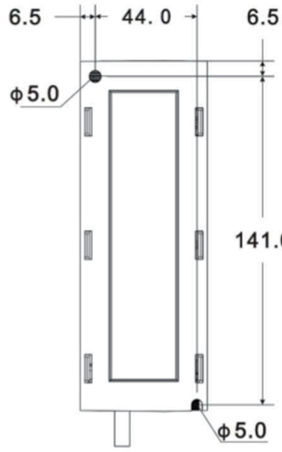
Front view



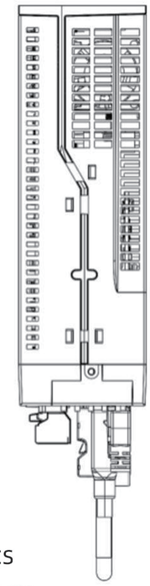
Left view



Rear view



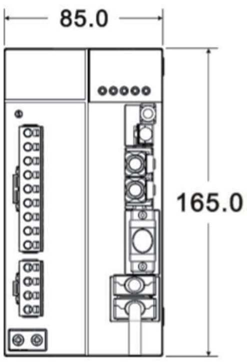
Top view



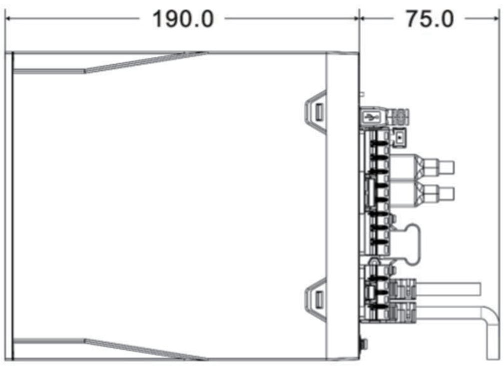
Mounting screws:M4*2pcs
Recommended torque:1.2N ·m

SIZE-C

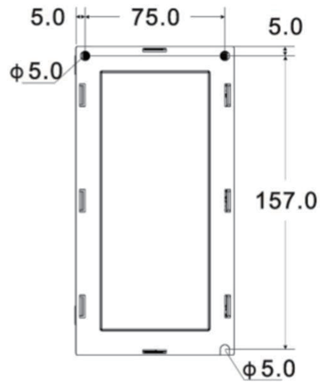
Front view



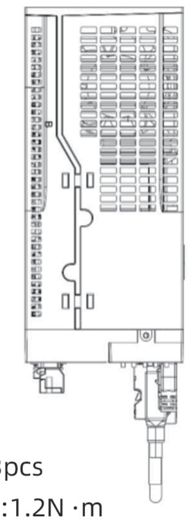
Left view



Rear view



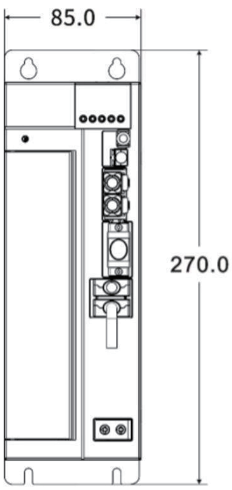
Top view



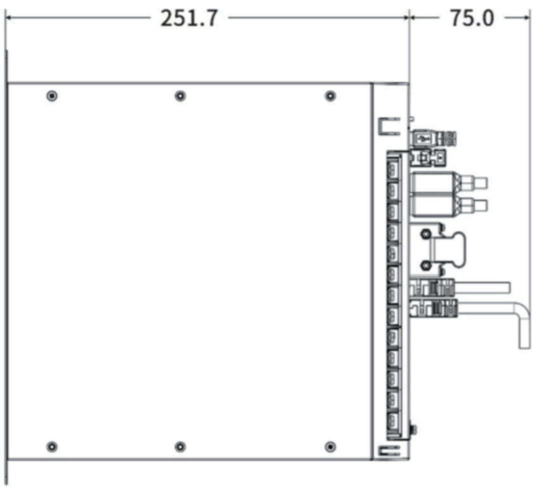
Mounting screws:M4*3pcs
Recommended torque:1.2N ·m

SIZE-D

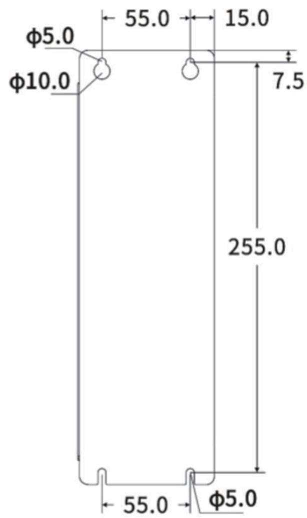
Front view



Left view



Rear view



Top view

Mounting screws:M4*4pcs
Recommended torque:1.2N ·m

Seven、Servo Motor Products

1、Naming Rules of R2 Series Servo Motors

R2	H	080	-	S	75B	30C	-	M	C	1	N	1
①	②	③		④	⑤	⑥		⑦	⑧	⑨	⑩	⑪

①: Product Series Number

R2: R2 Series Servo Motor

②: Inertia Capacity

A: Low Inertia

M:Medium Inertia

H:High Inertia

③: Motor Flange

040:40 Flange

060:60 Flange

060:60 Flange

130:130 Flange

180:180 Flange

④: Rated Voltage

S:AC 220V

T:AC 380V

⑤: Rated Power

05B:50W

10B:100W

20B:200W

40B:400W

75B:750W

80B:800W

85B；850W

10C:1.0KW

12C:1.2KW

13C:1.3KW

15C:1.5KW

18C:1.8KW

20C:2.0KW

22C:2.2KW

29C:2.9KW

30C:3.0KW

44C:4.4KW

55C:5.5KW

75C:7.5KW

⑥: Rated Speed

15C:1500RPM

20C:2000RPM

30C:3000RPM

⑦: Encoder Type

M:17bit Single-turn Absolute type

N:17bit Multi-turn Absolute type

O:23bit Single-turn Absolute type

P:23bit Multi-turn Absolute type

⑧: Interface Type

C: Wire Type

H: Aviation Plug Type

⑨: Shaft Connection Method

0: Shaft output

1: Shaft output (keyed)

⑩: Brake

N: With Brake

B: Without Brake

⑪ : Oil Seal

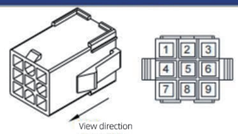
0:With Oil Seal

1:Without Oil Seal

2、Connector Wiring Standards for R2 Series Servo

40、60、80 Flange

Encoder connector

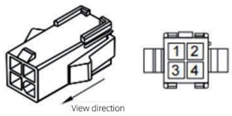


AMP 9P

Cable side

Pin number	Function
1	SD+
2	SD-
3	E+
4	-
5	-
6	+5V
7	GND
8	E-
9	PE

Power connector

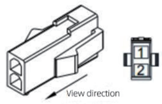


AMP 4P

Cable side

Pin number	Function
1	U
2	V
3	W
4	PE

Brake connector



AMP 2P

Cable side

Pin number	Function
1	BK+
2	BK-

130 Flange

Encoder connector

YDB28K7TSLa

Cable side

Pin number	Function
1	PE
2	E-
3	E+
4	SD-
5	GND
6	SD+
7	+5V

Power connector(Without brake)

YD28K4TSL

Cable side

Pin number	Function
1	PE
2	U
3	V
4	W

Power connector(With brake)

YD28K7TSL

Cable side

Pin number	Function
1	PE
2	U
3	V
4	W
5	BK+
6	BK-
7	-

180 Flange

Encoder connector

YDB28K7TSLa

Cable side

Pin number	Function
1	PE
2	E-
3	E+
4	SD-
5	GND
6	SD+
7	+5V

Power connector(Without brake)

YD32K4TSL

Cable side

Pin number	Function
1	PE
2	U
3	V
4	W

Brake connector

XS16K4TM

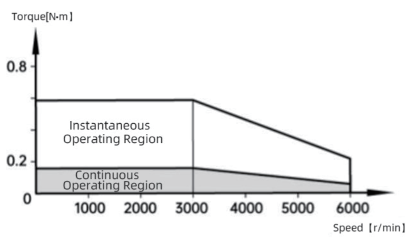
Cable side

Pin number	Function
1	BK+
2	BK-
3	-
4	-

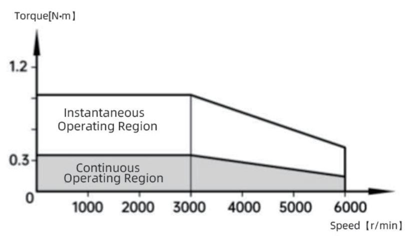
3、Technical Parameters of R2H040 Servo Motors 220V (50W-100W)

Motor Specifications	R2H040-S05B30C-xxxxx	R2H040-S10B30C-xxxxx
Rated Power(W)	50	100
Rated voltage(V)	220	220
Rated current(A)	0.6	1.0
Rated torque(N.m)	0.16	0.32
Rated Speed(r/min)	3000	3000
Instantaneous Maximum Current(A)	1.8	3.0
Instantaneous Maximum Torque(N.m)	0.48	0.96
Instantaneous Maximum Speed(r/min)	6000	6000
Back Electromotive Force(V/1000r/min)	18	19
Torque Coefficient (N.m/A)	0.27	0.32
Phase Resistance(Ω)	13	7.25
Q-axis Inductance (mH)	10	6.85
D-axis Inductance(mH)	10	6.85
Electrical Time Constant(ms)	0.77	0.94
Rotor Inertia($kg.m^2 X10^{-4}$)	0.035 (0.038)	0.05 (0.053)
Weight (kg)	0.4 (0.9)	0.5 (1.0)
Number of Poles	5-pole	
Motor Insulation Class	F	
Protection Level	IP65	
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (non-condensing conditions)	
Note: Parameters in () are for motors with brake.		

■ Torque Characteristics Chart:



R2H040-S05B30C-xxxxx



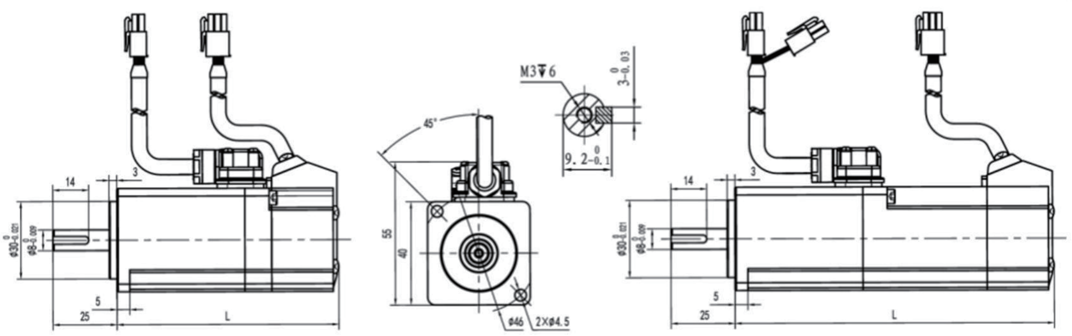
R2H040-S10B30C-xxxxx

■ Outline Dimensions Diagram:

Outline Dimensions Diagram	50W	100W
L Without Brake	68.5	79.5
L With Brake	101.5	112.5

<Without Brake>

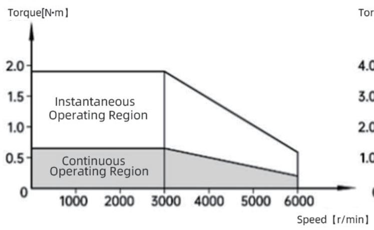
<With Brake>



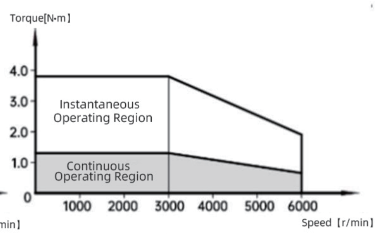
4、Technical Parameters of R2H060 Servo Motors 220V (200W-400W)

Motor Specifications	R2H060-S20B30C-xxxxx	R2H060-S40B30C-xxxxx
Rated Power(W)	200	400
Rated voltage(V)	220	220
Rated current(A)	1.4	2.8
Rated torque(N.m)	0.64	1.27
Rated Speed(r/min)	3000	3000
Instantaneous Maximum Current(A)	4.2	8.4
Instantaneous Maximum Torque(N.m)	1.92	3.81
Instantaneous Maximum Speed(r/min)	6000	6000
Back Electromotive Force(V/1000r/min)	31.7	31.4
Torque Coefficient (N.m/A)	0.46	0.45
Phase Resistance(Ω)	4	1.85
Q-axis Inductance (mH)	7.5	3.8
D-axis Inductance(mH)	7.5	3.8
Electrical Time Constant(ms)	1.88	2.05
Rotor Inertia(kg.m²X10⁻⁴)	0.29 (0.32)	0.53 (0.56)
Weight (kg)	1.0(1.4)	1.3 (1.7)
Number of Poles	5-pole	
Motor Insulation Class	F	
Protection Level	IP65	
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (non-condensing conditions)	
Note: Parameters in () are for motors with brake.		

Torque Characteristics Chart:



R2H060-S20B30C-xxxxx

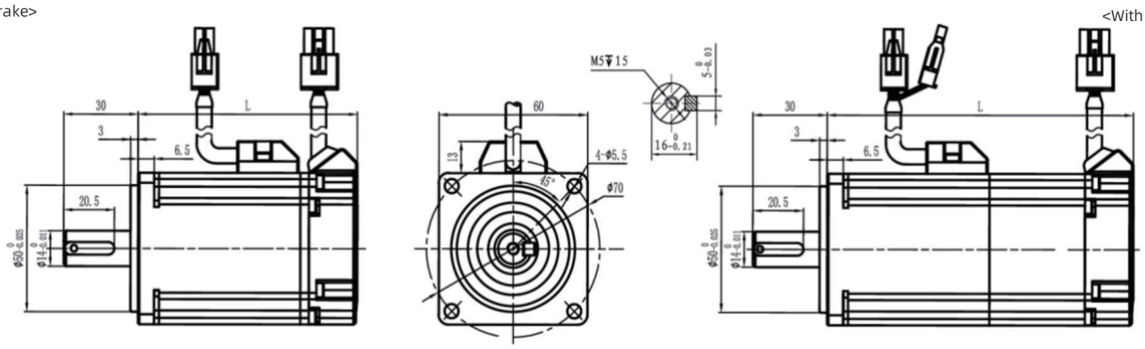


R2H060-S40B30C-xxxxx

Outline Dimensions Diagram:

Outline Dimensions Diagram	200W	400W
L Without Brake	77.2	93.7
L With Brake	109.2	125.7

<Without Brake> <With Brake>

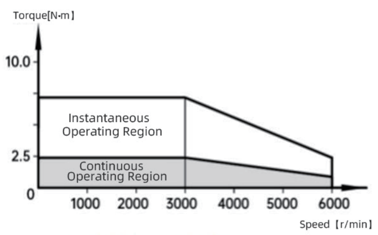


5、Technical Parameters of R2H080 Servo Motors 220V (750W-1000W)

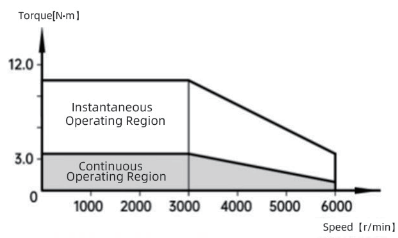
Motor Specifications	R2H080-S75B30C-xxxxx	R2H080-S10C30C-xxxxx
Rated Power(W)	750	1000
Rated voltage(V)	220	220
Rated current(A)	3.8	5.5
Rated torque(N.m)	2.4	3.2
Rated Speed(r/min)	3000	3000
Instantaneous Maximum Current(A)	11.4	16.5
Instantaneous Maximum Torque(N.m)	7.2	9.6
Instantaneous Maximum Speed(r/min)	6000	6000
Back Electromotive Force(V/1000r/min)	38	38
Torque Coefficient (N.m/A)	0.63	0.6
Phase Resistance(Ω)	0.665	0.55
Q-axis Inductance (mH)	2.8	2.4
D-axis Inductance(mH)	2.8	2.4
Electrical Time Constant(ms)	4.2	4.4
Rotor Inertia($kg.m^2 X10^{-4}$)	1.62 (1.72)	2.1 (2.2)
Weight (kg)	2.5 (3.5)	3.2 (4.2)
Number of Poles	5-pole	
Motor Insulation Class	F	
Protection Level	IP65	
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (non-condensing conditions)	

Note: Parameters in () are for motors with brake.

Torque Characteristics Chart:



R2H040-S75B30C-XXXXX



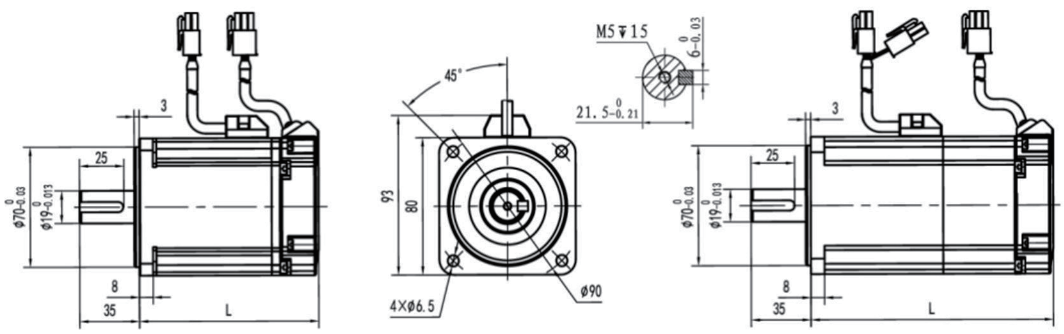
R2H040-S10C30C-XXXXX

Outline Dimensions Diagram:

Outline Dimensions Diagram	750W	1000W
L Without Brake	105	119
L With Brake	142	156

<Without Brake>

<With Brake>

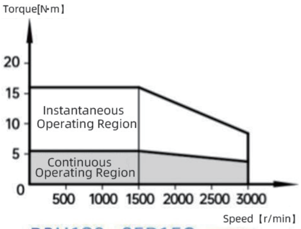


6、Technical Parameters of R2H130 Servo Motors 220V/380 V/(850W-2200W)

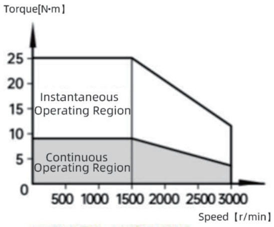
Motor Specifications	R2H130-x 85B15C-xxxxx		R2H130-x 13C15C-xxxxx		R2H130-x 18C15C-xxxxx		R2H130-x 22C15C-xxxxx	
Rated Power(W)	850		1300		1800		2200	
Rated voltage(V)	220	380	220	380	220	380	220	380
Rated current(A)	6.9	4	10.7	6	13.8	8.5	14.5	11
Rated torque(N.m)	5.39	5.39	8.34	8.34	11.5	11.5	14.3	14.3
Rated Speed(r/min)	1500	1500	1500	1500	1500	1500	1500	1500
Instantaneous Maximum Current(A)	20.7	12	32.1	18	41.4	25.5	40.6	30.7
Instantaneous Maximum Torque(N.m)	16.17	16.17	25.02	25.02	34.5	34.5	40	40
Instantaneous Maximum Speed(r/min)	3000	3000	3000	3000	3000	3000	3000	3000
Back Electromotive Force(V/1000r/min)	50	85	52	92	52	90	67	90
Torque Coefficient（N.m/A)	0.78	1.35	0.78	1.39	0.83	1.35	0.98	1.3
Phase Resistance(Ω)	0.5	1.3	0.25	0.77	0.175	0.6	0.6	0.425
Q-axis Inductance（mH)	2.5	8.1	1.6	5.25	1.25	4.15	1.75	2.8
D-axis Inductance(mH)	2.5	8.1	1.6	5.25	1.25	4.15	1.75	2.8
Electrical Time Constant(ms)	5	6.2	6.4	6.8	7.14	6.9	5.8	6.5
Rotor Inertia($kg.m^2X10^4$)	10.9 (12.13)		16.9 (18.13)		21.4 (22.63)		27.1 (28.33)	
Weight（kg)	5.7 (7.4)		8.0 (9.1)		9.3 (11.3)		10.5 (12.7)	
Number of Poles	5-pole							
Motor Insulation Class	F							
Protection Level	IP65							
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (non-condensing conditions)							

Note: Parameters in () are for motors with brake.

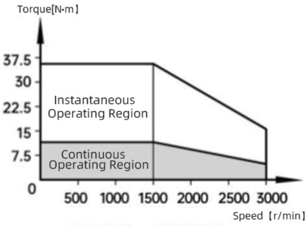
■ Torque Characteristics Chart:



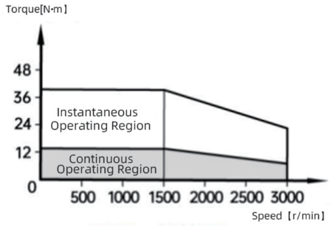
R2H130-x85B15C-xxxxx



R2H130-x13C15C-xxxxx



R2H130-x18C15C-xxxxx



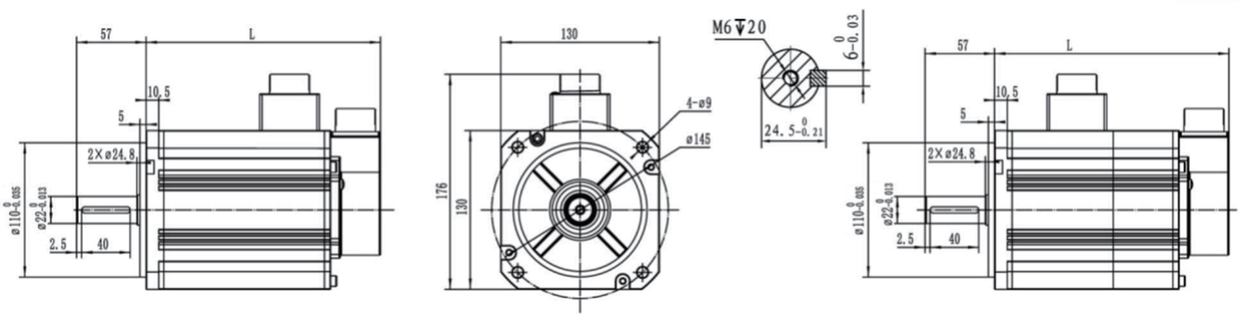
R2H130-x22C15C-xxxxx

■ Outline Dimensions Diagram:

Outline Dimensions Diagram	850W	1300W	1800W	2200W
L Without Brake	135	152.5	170	200
L With Brake	187	204.5	222	252

<Without Brake>

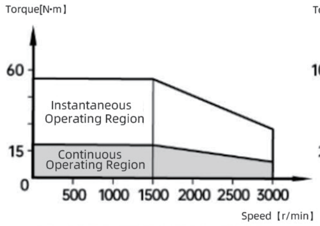
<With Brake>



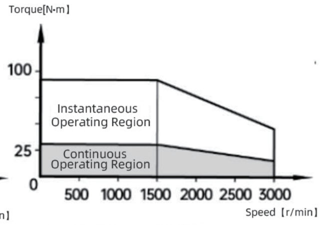
7、Technical Parameters of R2H180 Servo Motors 380V (2.9kW-4.4kW)

Motor Specifications	R2H180-T29C15C-xxxxx	R2H180-T44C15C-xxxxx
Rated Power(kW)	2.9	4.4
Rated voltage(V)	380	380
Rated current(A)	11.9	16.5
Rated torque(N.m)	18.6	28.4
Rated Speed(r/min)	1500	1500
Instantaneous Maximum Current(A)	35.7	49.5
Instantaneous Maximum Torque(N.m)	55.8	85.2
Instantaneous Maximum Speed(r/min)	3000	3000
Back Electromotive Force(V/1000r/min)	100	104
Torque Coefficient（N.m/A)	1.56	1.72
Phase Resistance(Ω)	0.175	0.155
Q-axis Inductance（mH)	2.15	1.85
D-axis Inductance(mH)	2.15	1.85
Electrical Time Constant(ms)	12.3	11.9
Rotor Inertia(kg.m²X10⁻⁴)	63.5 (69.5)	88.5 (94.5)
Weight（kg)	16.7 (21.2)	21.1 (25.6)
Number of Poles	5-pole	
Motor Insulation Class	F	
Protection Level	IP65	
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (no frost conditions)	
Note: Parameters in () are for motors with brake.		

Torque Characteristics Chart:



R2H180-T29C15C-xxxxx



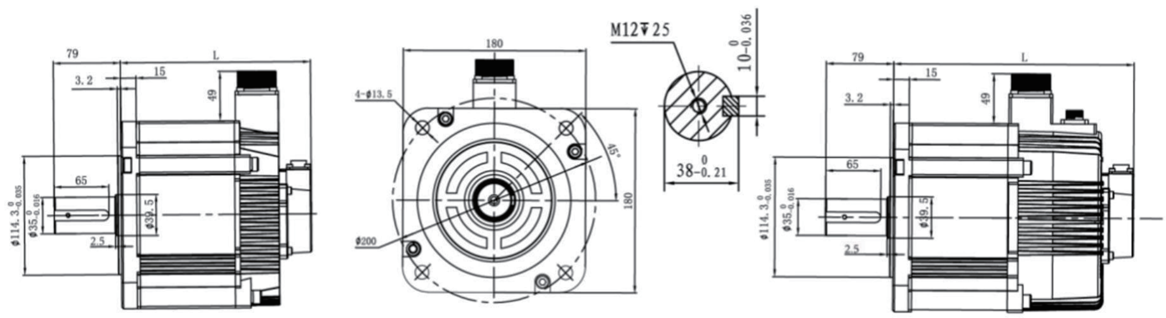
R2H180-T44C15C-xxxxx

Outline Dimensions Diagram:

Outline Dimensions Diagram	2.9KW	4.4KW
L Without Brake	205	232
L With Brake	252	279

<Without Brake>

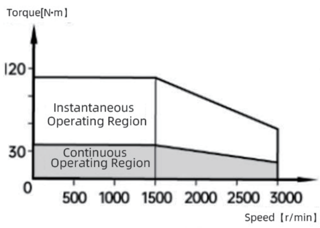
<With Brake>



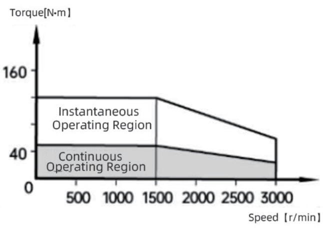
8、Technical Parameters of R2H180 Servo Motors 380V (5.5kW-7.5kW)

Motor Specifications	R2H180-T55C15C-xxxxx	R2H180-T75C15C-xxxxx
Rated Power(kW)	5.5	7.5
Rated voltage(V)	380	380
Rated current(A)	20.8	26
Rated torque(N.m)	35	48
Rated Speed(r/min)	1500	1500
Instantaneous Maximum Current(A)	62.4	65
Instantaneous Maximum Torque(N.m)	105	120
Instantaneous Maximum Speed(r/min)	3000	3000
Back Electromotive Force(V/1000r/min)	100	106
Torque Coefficient（N.m/A)	1.68	1.85
Phase Resistance(Ω)	0.09	0.095
Q-axis Inductance（mH)	1.15	1.15
D-axis Inductance(mH)	1.15	1.15
Electrical Time Constant(ms)	11.9	12.1
Rotor Inertia(kg.m²X10⁻⁴)	114.4 (120.4)	136.6 (142.6)
Weight（kg)	25.6 (30.1)	30.8 (35.3)
Number of Poles	5-pole	
Motor Insulation Class	F	
Protection Level	IP65	
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (no frost conditions)	
Note: Parameters in () are for motors with brake.		

Torque Characteristics Chart:



R2H180-T55C15C-xxxxx



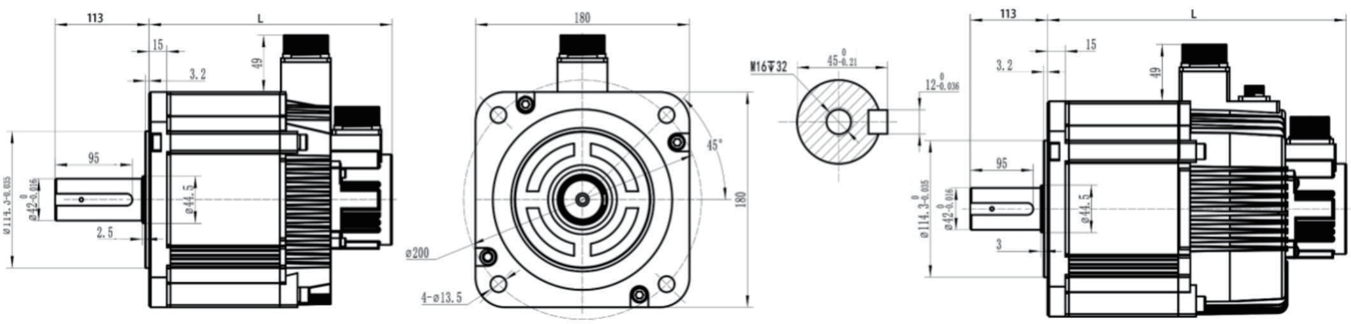
R2H180-T75C15C-xxxxx

Outline Dimensions Diagram:

Outline Dimensions Diagram	5.5KW	7.5KW
L Without Brake	260	284
L With Brake	307	331

<Without Brake>

<With Brake>

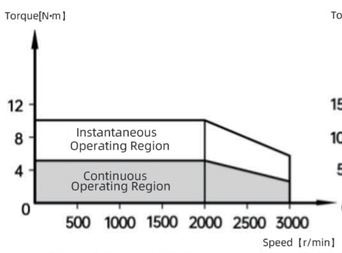


9、Technical Parameters of R2A130 Servo Motors 220V (1KW-3KW)

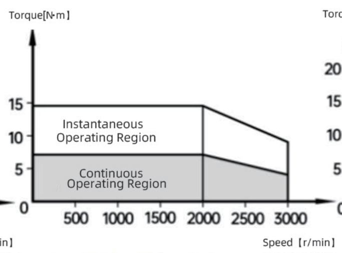
Motor Specifications	R2A130-x 10C20C-xxxxx		R2A130-x 15C20C-xxxxx		R2A130-x 20C20C-xxxxx		R2A130-x 30C20C-xxxxx	
Rated Power(kW)	1		1.5		2		3	
Rated voltage(V)	220	380	220	380	220	380	220	380
Rated current(A)	5.8	3.5	8.0	4.7	10.2	6.2	16.5	11
Rated torque(N.m)	4.77	4.77	7.16	7.16	9.55	9.55	14.3	14.3
Rated Speed(r/min)	2000	2000	2000	2000	2000	2000	2000	2000
Instantaneous Maximum Current(A)	11.6	7	16.0	9.4	20.4	12.4	33.0	22
Instantaneous Maximum Torque(N.m)	9.6	9.6	14.32	14.32	19.1	19.1	28.6	28.6
Instantaneous Maximum Speed(r/min)	3000	3000	3000	3000	3000	3000	3000	3000
Back Electromotive Force(V/1000r/min)	53	89	58.5	98	60	100	55	89
Torque Coefficient (N.m/A)	0.82	1.36	0.92	1.52	0.94	1.54	0.87	1.3
Phase Resistance(Ω)	0.425	1.2	0.325	0.92	0.29	0.645	0.15	0.4
Q-axis Inductance (mH)	6.25	17.75	4.75	14.75	3.75	11.75	1.585	7
D-axis Inductance(mH)	6.25	17.75	4.75	14.75	3.75	11.75	1.585	7
Electrical Time Constant(ms)	14.7	10.5	14.6	12	12.9	12.5	10.56	16.09
Rotor Inertia($kg.m^2X10^{-4}$)	6.2 (7.41)		9.16 (10.39)		12.3 (13.33)		18.6 (19.83)	
Weight (kg)	5.4 (7.4)		7.1 (9.1)		8.3 (10.3)		10.7 (12.7)	
Number of Poles	5-pole							
Motor Insulation Class	F							
Protection Level	IP65							
Operating Environment	Operating Temperature: -20°C to 40°C; Operating Humidity: Relative humidity less than 90% (no frost conditions)							

Note: Parameters in () are for motors with brake.

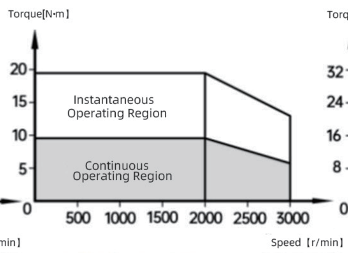
Torque Characteristics Chart:



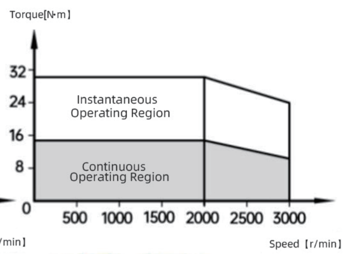
R2A130-x10C20C-xxxxx



R2A130-x15C20C-xxxxx



R2A130-x20C20C-xxxxx

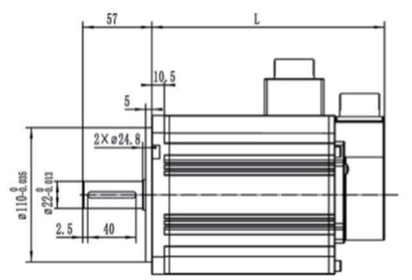


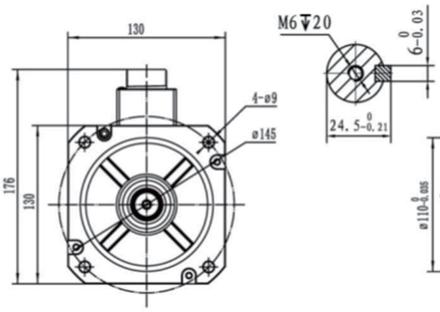
R2A130-x30C20C-xxxxx

Outline Dimensions Diagram:

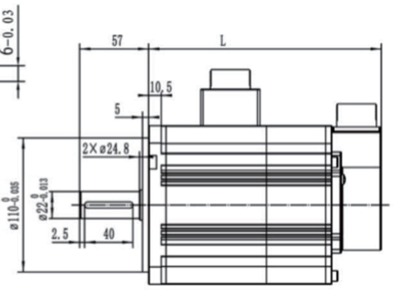
Outline Dimensions Diagram	1kW	1.5kW	2kW	3kW
L Without Brake	135	152.5	170	200
L With Brake	187	204.5	222	252

<Without Brake>





<With Brake>



10、R2H040servo motor configuration specification 220V/(50W-100W)

Motor Power	Inertia	Model	23bit Single-Turn	23bit Multi-Turn	17bit Single-Turn	17bit Multi-Turn	With Brake Yes	With Brake No	Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
50W	High Inertia	R2H040-S05B30C-MC1N0			●			●		40	ф8	Wire Type	AC220V
		R2H040-S05B30C-NC1N0				●							
		R2H040-S05B30C-OC1N0	●										
		R2H040-S05B30V-PC1N0		●									
		R2H040-S05B30C-MC1B0			●		●						
		R2H040-S05B30C-MC1B0				●							
		R2H040-S05B30C-OC1N0	●										
		R2H040-S05B30V-PC1N0		●									
100W	High Inertia	R2H040-S05B30C-MC1B0			●			●		40	ф8	Wire Type	AC220V
		R2H040-S05B30C-MC1B0				●							
		R2H040-S05B30C-OC1N0	●										
		R2H040-S05B30V-PC1N0		●									
		R2H040-S05B30C-MC1B0			●		●						
		R2H040-S05B30C-MC1B0				●							
		R2H040-S05B30C-OC1N0	●										
		R2H040-S05B30V-PC1N0		●									

11、Selection Comparison Table of R2H040 and RD5 Servo drives 220V/(50W-100W)

Motor Power	Inertia	Model	Servo drives model: Pulse	EtherCAT	PROFINET	CANopen	RS485	Power supply specification
50W	High Inertia	R2H040-S05B30C-MC1N1	standard type: RD5-PR001S2 Optional Second Encoder: RD5-PR001S2C Second encoder+STO: RD5-PR001S2SC	standard type: RD5-ER001S2 Optional Second Encoder: RD5-ER001S2C Second encoder+STO: RD5-ER001S2SC	standard type: RD5-FR001S2 Optional Second Encoder: RD5-FR001S2C Second encoder+STO: RD5-FR001S2SC	standard type: RD5-CR001S2 Optional Second Encoder: RD5-CR001S2C Second encoder+ Analog: RD5-CR001S2AC	standard type: RD5-RR001S2 Optional Second Encoder: RD5-RR001S2C Second encoder+ Analog: RD5-RR001S2AC	Single/ three-phase AC220V
		R2H040-S05B30C-NC1N1						
		R2H040-S05B30C-OC1N1						
		R2H040-S05B30C-PC1N1						
		R2H040-S05B30C-MC1B1						
		R2H040-S05B30C-NC1B1						
		R2H040-S05B30C-OC1B1						
		R2H040-S05B30C-PC1B1						
100W	High Inertia	R2H040-S10B30C-MC1N1	standard type: RD5-PR001S2 Optional Second Encoder: RD5-PR001S2C Second encoder+STO: RD5-PR001S2SC	standard type: RD5-ER001S2 Optional Second Encoder: RD5-ER001S2C Second encoder+STO: RD5-ER001S2SC	standard type: RD5-FR001S2 Optional Second Encoder: RD5-FR001S2C Second encoder+STO: RD5-FR001S2SC	standard type: RD5-CR001S2 Optional Second Encoder: RD5-CR001S2C Second encoder+ Analog: RD5-CR001S2AC	standard type: RD5-RR001S2 Optional Second Encoder: RD5-RR001S2C Second encoder+ Analog: RD5-RR001S2AC	Single/ three-phase AC220V
		R2H040-S10B30C-NC1N1						
		R2H040-S10B30C-OC1N1						
		R2H040-S10B30C-PC1N1						
		R2H040-S10B30C-MC1B1						
		R2H040-S10B30C-NC1B1						
		R2H040-S10B30C-OC1B1						
		R2H040-S10B30C-PC1B1						

12、R2H060 servo motor configuration specification 220V/(200 W-400W)

Motor Power	Inertia	Model	23bit Single-Turn	23bit Multi-Turn	17bit Single-Turn	17bit Multi-Turn	With Brake Yes	With Brake No	Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
200W	High Inertia	R2H060-S20B30C-MC1N1			●			●	●	60	ϕ14	Wire Type	AC220V
		R2H060-S20B30C-NC1N1				●							
		R2H060-S20B30C-OC1N1	●										
		R2H060-S20B30C-PC1N1		●									
		R2H060-S20B30C-MC1B1			●		●						
		R2H060-S20B30C-NC1B1				●							
		R2H060-S20B30C-OC1B1	●										
		R2H060-S20B30C-PC1B1		●									
400W	High Inertia	R2H060-S40B30C-MC1N1			●			●	●	60	ϕ14	Wire Type	AC220V
		R2H060-S40B30C-NC1N1				●							
		R2H060-S40B30C-OC1N1	●										
		R2H060-S40B30C-PC1N1		●									
		R2H060-S40B30C-MC1B1			●		●						
		R2H060-S40B30C-NC1B1				●							
		R2H060-S40B30C-OC1B1	●										
		R2H060-S40B30C-PC1B1		●									

13、Selection Comparison Table of R2H060 and RD5 Servo drives 220V/(220W-400W)

Motor Power	Inertia	Model	Servo drives model: Pulse	EtherCAT	PROFINET	CANopen	RS485	Power supply specification
200W	High Inertia	R2H060-S20B30C-MC1N1	standard type: RD5-PR1R6S2 Optional Second Encoder: RD5-PR1R6S2C Second encoder+STO: RD5-PR1R6S2SC	standard type: RD5-ER1R6S2 Optional Second Encoder: RD5-ER1R6S2C Second encoder+STO: RD5-ER1R6S2SC	standard type: RD5-FR1R6S2 Optional Second Encoder: RD5-FR1R6S2C Second encoder+STO: RD5-FR1R6S2SC	standard type: RD5-CR1R6S2 Optional Second Encoder: RD5-CR1R6S2C Second encoder+ Analog: RD5-CR1R6S2AC	standard type: RD5-RR1R6S2 Optional Second Encoder: RD5-RR1R6S2C Second encoder+ Analog: RD5-RR1R6S2AC	Single/ three-phase AC220V
		R2H060-S20B30C-NC1N1						
		R2H060-S20B30C-OC1N1						
		R2H060-S20B30C-PC1N1						
		R2H060-S20B30C-MC1N1						
		R2H060-S20B30C-NC1N1						
		R2H060-S20B30C-OC1N1						
		R2H060-S20B30C-PC1B1						
400W	High Inertia	R2H060-S40B30C-MC1B1	standard type: RD5-PR2R8S2 Optional Second Encoder: RD5-PR2R8S2C Second encoder+STO: RD5-PR2R8S2SC	standard type: RD5-ER2R8S2 Optional Second Encoder: RD5-ER2R8S2C Second encoder+STO: RD5-ER2R8S2SC	standard type: RD5-FR2R8S2 Optional Second Encoder: RD5-FR2R8S2C Second encoder+STO: RD5-FR2R8S2SC	standard type: RD5-CR2R8S2 Optional Second Encoder: RD5-CR2R8S2C Second encoder+ Analog: RD5-CR2R8S2AC	standard type: RD5-RR2R8S2 Optional Second Encoder: RD5-RR2R8S2C Second encoder+ Analog: RD5-RR2R8S2AC	Single/ three-phase AC220V
		R2H060-S40B30C-NC1N1						
		R2H060-S40B30C-OC1N1						
		R2H060-S40B30C-PC1N1						
		R2H060-S40B30C-MC1B1						
		R2H060-S40B30C-NC1B1						
		R2H060-S40B30C-OC1B1						
		R2H060-S40B30C-PC1B1						

14、R2H080 servo motor configuration specification 220V/(750W-1000W)

Motor Power	Inertia	Model	23bit		17bit		With Brake		Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
			Single-Turn	Multi-Turn	Single-Turn	Multi-Turn	Yes	No					
750W	High Inertia	R2H080-S75B30C-MC1N1			●			●	●	80	ϕ19	Wire Type	AC220V
		R2H080-S75B30C-NC1N1				●							
		R2H080-S75B30C-OC1N1	●										
		R2H080-S75B30C-PC1N1		●									
		R2H080-S75B30C-MC1B1			●		●						
		R2H080-S75B30C-NC1B1				●							
		R2H080-S75B30C-OC1B1	●										
		R2H080-S75B30C-PC1B1		●									
1000W	High Inertia	R2H080-S10C30C-MC1N1			●			●	●	80	ϕ19	Wire Type	AC220V
		R2H080-S10C30C-NC1N1				●							
		R2H080-S10C30C-OC1N1	●										
		R2H080-S10C30C-PC1N1		●									
		R2H080-S10C30C-MC1B1			●		●						
		R2H080-S10C30C-NC1B1				●							
		R2H080-S10C30C-OC1B1	●										
		R2H080-S10C30C-PC1B1		●									

15、Selection Comparison Table of R2H080 and RD5 Servo drives 220V/(750W-1000W)

Motor Power	Inertia	Model	Servo drives model					
			Pulse	EtherCAT	PROFINET	CANopen	RS485	Power supply specification
750W	High Inertia	R2H080-S75B30C-MC1N1	standard type: RD5-PR5R5S2 Optional Second Encoder: RD5-PR5R5S2C Second encoder+STO: RD5-PR5R5S2SC	standard type: RD5-ER5R5S2 Optional Second Encoder: RD5-ER5R5S2C Second encoder+STO: RD5-ER5R5S2SC	standard type: RD5-FR5R5S2 Optional Second Encoder: RD5-FR5R5S2C Second encoder+STO: RD5-FR5R5S2SC	standard type: RD5-CR5R5S2 Optional Second Encoder: RD5-CR5R5S2C Second encoder+ Analog: RD5-CR5R5S2AC	standard type: RD5-RR5R5S2 Optional Second Encoder: RD5-RR5R5S2C Second encoder+ Analog: RD5-RR5R5S2AC	Single/ three-phase AC220V
		R2H080-S75B30C-NC1N1						
		R2H080-S75B30C-OC1N1						
		R2H080-S75B30C-PC1N1						
		R2H080-S75B30C-MC1B1						
		R2H080-S75B30C-NC1B1						
		R2H080-S75B30C-OC1B1						
		R2H080-S75B30C-PC1B1						
1000W	High Inertia	R2H080-S10C30C-MC1N1	standard type: RD5-PR7R6S2 Optional Second Encoder: RD5-PR7R6S2C Second encoder+STO: RD5-PR7R6S2SC	standard type: RD5-ER7R6S2 Optional Second Encoder: RD5-ER7R6S2SC Second encoder+STO: RD5-ER7R6S2SC	standard type: RD5-FR7R6S2 Optional Second Encoder: RD5-FR7R6S2SC Second encoder+STO: RD5-FR7R6S2SC	standard type: RD5-CR7R6S2 Optional Second Encoder: RD5-CR7R6S2SC Second encoder+ Analog: RD5-CR7R6S2AC	standard type: RD5-RR7R6S2 Optional Second Encoder: RD5-RR7R6S2SC Second encoder+ Analog: RD5-RR7R6S2AC	Single/ three-phase AC220V
		R2H080-S10C30C-NC1N1						
		R2H080-S10C30C-OC1N1						
		R2H080-S10C30C-PC1N1						
		R2H080-S10C30C-MC1B1						
		R2H080-S10C30C-NC1B1						
		R2H080-S10C30C-OC1B1						
		R2H080-S10C30C-PC1B1						

16、R2H130 servo motor configuration specification 220V/(850 W-2200W)

Motor Power	Inertia	Model	23bit		17bit		With Brake		Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
			Single-Turn	Multi-Turn	Single-Turn	Multi-Turn	Yes	No					
850w	High Inertia	R2H130-S85B15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2H130-S85B15C-NH1N1				●							
		R2H130-S85B15C-OH1N1	●										
		R2H130-S85B15C-PH1N1		●									
		R2H130-S85B15C-MH1B1			●		●						
		R2H130-S85B15C-NH1B1				●							
		R2H130-S85B15C-OH1B1	●										
		R2H130-S85B15C-PH1B1		●									
1300W	High Inertia	R2H130-S85B15C-PH1B1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2H130-S13C15C-NH1N1				●							
		R2H130-S13C15C-OH1N1	●										
		R2H130-S13C15C-PH1N1		●									
		R2H130-S13C15C-MH1N1			●		●						
		R2H130-S13C15C-NH1B1				●							
		R2H130-S13C15C-OH1B1	●										
		R2H130-S13C15C-PH1B1		●									
1800W	High Inertia	R2H130-S18C15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2H130-S18C15C-NH1N1				●							
		R2H130-S18C15C-OH1N1	●										
		R2H130-S18C15C-PH1N1		●									
		R2H130-S18C15C-MH1B1			●		●						
		R2H130-S18C15C-NH1B1				●							
		R2H130-S18C15C-OH1B1	●										
		R2H130-S18C15C-PH1B1		●									
2200W	High Inertia	R2H130-S22C15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2H130-S22C15C-NH1N1				●							
		R2H130-S22C15C-OH1N1	●										
		R2H130-S22C15C-PH1N1		●									
		R2H130-S22C15C-MH1B1			●		●						
		R2H130-S22C15C-NH1B1				●							
		R2H130-S22C15C-OH1B1	●										
		R2H130-S22C15C-PH1B1		●									

17、Selection Comparison Table of R2H130 and RD5 Servo drives 220V/(850W-2200W)

<table>
<tr><th rowspan="2">Motor Power</th><th rowspan="2">Inertia</th><th rowspan="2">Model</th><th colspan="6">Servo drives model</th></tr>
<tr><th>Pulse</th><th>EtherCAT</th><th>PROFINET</th><th>CANopen</th><th>RS485</th><th>Power supply specification</th></tr>
<tr><td rowspan="8">850W</td><td rowspan="8">High Inertia</td><td>R2H130-S85B15C-MH1N1</td><td rowspan="8">standard type:
RD5-PR7R6S2
Optional
Second Encoder:
RD5-PR7R6S2C
Second encoder+STO:
RD5-PR7R6S2SC</td><td rowspan="8">standard type:
RD5-ER7R6S2
Optional
Second Encoder:
RD5-ER7R6S2C
Second encoder+STO:
RD5-ER7R6S2SC</td><td rowspan="8">standard type:
RD5-FR7R6S2
Optional
Second Encoder:
RD5-FR7R6S2
Second encoder+STO:
RD5-FR7R6S2SC</td><td rowspan="8">standard type:
RD5-CR7R6S2
Optional
Second Encoder:
RD5-CR7R6S2
Second encoder+
Analog:
RD5-CR7R6S2AC</td><td rowspan="8">standard type:
RD5-RR7R6S2
Optional
Second Encoder:
RD5-RR7R6SC
Second encoder+
Analog:
RD5-RR7R6S2AC</td><td rowspan="8">Single/
three-phase
AC220V</td></tr>
<tr><td>R2H130-S85B15C-NH1N1</td></tr>
<tr><td>R2H130-S85B15C-OH1N1</td></tr>
<tr><td>R2H130-S85B15C-PH1N1</td></tr>
<tr><td>R2H130-S85B15C-MH1B1</td></tr>
<tr><td>R2H130-S85B15C-NH1B1</td></tr>
<tr><td>R2H130-S85B15C-OH1B1</td></tr>
<tr><td>R2H130-S85B15C-PH1B1</td></tr>
<tr><td rowspan="8">1300W</td><td rowspan="8">High Inertia</td><td>R2H130-S13C15C-MH1N1</td><td rowspan="8">standard type:
RD5-PR012S2
Optional
Second Encoder:
RD5-PR012S2C
Second encoder+STO:
RD5-PR012S2C</td><td rowspan="8">standard type:
RD5-ER012S2
Optional
Second Encoder:
RD5-ER012S2C
Second encoder+STO:
RD5-ER012S2C</td><td rowspan="8">standard type:
RD5-FR012S2
Optional
Second Encoder:
RD5-FR012S2C
Second encoder+STO:
RD5-FR012S2SC</td><td rowspan="8">standard type:
RD5-CR012S2
Optional
Second Encoder:
RD5-CR012S2C
Second encoder+
Analog:
RD5-CR012S2AC</td><td rowspan="8">standard type:
RD5-RR012S2
Optional
Second Encoder:
RD5-RR012S2C
Second encoder+
Analog:
RD5-RR012S2AC</td><td rowspan="8">Single/
three-phase
AC220V</td></tr>
<tr><td>R2H130-S13C15C-NH1N1</td></tr>
<tr><td>R2H130-S13C15C-OH1N1</td></tr>
<tr><td>R2H130-S13C15C-PH1N1</td></tr>
<tr><td>R2H130-S13C15C-MH1B1</td></tr>
<tr><td>R2H130-S13C15C-NH1B1</td></tr>
<tr><td>R2H130-S13C15C-OH1B1</td></tr>
<tr><td>R2H130-S13C15C-PH1B1</td></tr>
<tr><td rowspan="8">1800W</td><td rowspan="8">High Inertia</td><td>R2H130-S18C15C-MH1N1</td><td rowspan="8">standard type:
RD5-PR014S2
Optional
Second Encoder:
RD5-PR014S2C
Second encoder+STO:
RD5-PR014S2SC</td><td rowspan="8">standard type:
RD5-ER014S2
Optional
Second Encoder:
RD5-ER014S2C
Second encoder+STO:
RD5-ER014S2SC</td><td rowspan="8">standard type:
RD5-FR014S2
Optional
Second Encoder:
RD5-FR014S2C
Second encoder+STO:
RD5-FR014S2SC</td><td rowspan="8">standard type:
RD5-CR014S2
Optional
Second Encoder:
RD5-CR014S2C
Second encoder+
Analog:
RD5-CR014S2AC</td><td rowspan="8">standard type:
RD5-RR014S2
Optional
Second Encoder:
RD5-RR014S2C
Second encoder+
Analog:
RD5-RR014S2AC</td><td rowspan="8">Single/
three-phase
AC220V</td></tr>
<tr><td>R2H130-S18C15C-NH1N1</td></tr>
<tr><td>R2H130-S18C15C-OH1N1</td></tr>
<tr><td>R2H130-S18C15C-PH1N1</td></tr>
<tr><td>R2H130-S18C15C-MH1B1</td></tr>
<tr><td>R2H130-S18C15C-NH1B1</td></tr>
<tr><td>R2H130-S18C15C-OH1B1</td></tr>
<tr><td>R2H130-S18C15C-PH1B1</td></tr>
<tr><td rowspan="8">2200W</td><td rowspan="8">High Inertia</td><td>R2H130-S18C15C-MH1N1</td><td rowspan="8">standard type:
RD5-PR014S2
Optional
Second Encoder:
RD5-PR014S2C
Second encoder+STO:
RD5-PR014S2SC</td><td rowspan="8">standard type:
RD5-ER014S2
Optional
Second Encoder:
RD5-ER014S2C
Second encoder+STO:
RD5-ER014S2SC</td><td rowspan="8">standard type:
RD5-FR014S2
Optional
Second Encoder:
RD5-FR014S2C
Second encoder+STO:
RD5-FR014S2SC</td><td rowspan="8">standard type:
RD5-CR014S2
Optional
Second Encoder:
RD5-CR014S2C
Second encoder+
Analog:
RD5-CR014S2AC</td><td rowspan="8">standard type:
RD5-RR014S2
Optional
Second Encoder:
RD5-RR014S2C
Second encoder+
Analog:
RD5-RR014S2AC</td><td rowspan="8">Single/
three-phase
AC220V</td></tr>
<tr><td>R2H130-S22C15C-NH1N1</td></tr>
<tr><td>R2H130-S22C15C-OH1N1</td></tr>
<tr><td>R2H130-S22C15C-PH1N1</td></tr>
<tr><td>R2H130-S22C15C-MH1B1</td></tr>
<tr><td>R2H130-S22C15C-NH1B1</td></tr>
<tr><td>R2H130-S22C15C-OH1B1</td></tr>
<tr><td>R2H130-S22C15C-PH1B1</td></tr>
</table>

LIMON

18、Selection Comparison Table of R2H130 and RD5 Servo drives 380V/(850W-2200W)

Motor Power	Inertia	Model	23bit Single-Turn	23bit Multi-Turn	17bit Single-Turn	17bit Multi-Turn	With Brake Yes	With Brake No	Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
850W	High Inertia	R2H130-T85B15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2H130-T85B15C-NH1N1				●							
		R2H130-T85B15C-OH1N1	●										
		R2H130-T85B15C-PH1N1		●									
		R2H130-T85B15C-MH1B1			●		●						
		R2H130-T85B15C-NH1B1				●							
		R2H130-T85B15C-OH1B1	●										
		R2H130-T85B15C-PH1B1		●									
1300W	High Inertia	R2H130-T13C15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2H130-T13C15C-NH1N1				●							
		R2H130-T13C15C-OH1N1	●										
		R2H130-T13C15C-PH1N1		●									
		R2H130-T13C15C-MH1N1			●		●						
		R2H130-T13C15C-NH1N1				●							
		R2H130-T13C15C-OH1B1	●										
		R2H130-T13C15C-PH1B1		●									
1800W	High Inertia	R2H130-T18C15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2H130-T18C15C-NH1N1				●							
		R2H130-T18C15C-OH1N1	●										
		R2H130-T18C15C-PH1N1		●									
		R2H130-T18C15C-MH1B1			●		●						
		R2H130-T18C15C-NH1B1				●							
		R2H130-T18C15C-OH1B1	●										
		R2H130-T18C15C-PH1B1		●									
2200W	High Inertia	R2H130-T22C15C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2H130-T22C15C-NH1N1				●							
		R2H130-T22C15C-OH1N1	●										
		R2H130-T22C15C-PH1N1		●									
		R2H130-T22C15C-MH1B1			●		●						
		R2H130-T22C15C-NH1B1				●							
		R2H130-T22C15C-OH1B1	●										
		R2H130-T22C15C-PH1B1		●									

19、Selection Comparison Table of R2H130 and RD5 Servo drives 380V/(850W-2200W)

<table>
<tr><th rowspan="2">Motor Power</th><th rowspan="2">Inertia</th><th rowspan="2">Model</th><th colspan="6">Servo drives model</th></tr>
<tr><th>Pulse</th><th>EtherCAT</th><th>PROFINET</th><th>CANopen</th><th>RS485</th><th>Power supply specification</th></tr>
<tr><td rowspan="8">850W</td><td rowspan="8">High Inertia</td><td>R2H130-T85B15C-MH1N1</td>
<td rowspan="8">standard type:
RD5-PR5R4T3
Optional
Second Encoder:
RD5-PR5R4T3C
Second encoder+STO:
RD5-PR5R4T3SC</td>
<td rowspan="8">standard type:
RD5-ER5R4T3
Optional
Second Encoder:
RD5-ER5R4T3C
Second encoder+STO:
RD5-ER5R4T3SC</td>
<td rowspan="8">standard type:
RD5-FR5R4T3
Optional
Second Encoder:
RD5-FR5R4T3C
Second encoder+STO:
RD5-FR5R4T3SC</td>
<td rowspan="8">standard type:
RD5-CR5R4T3
Optional
Second Encoder:
RD5-CR5R4T3C
Second encoder+
Analog:
RD5-CR5R4T3AC</td>
<td rowspan="8">standard type:
RD5-RR5R4T3
Optional
Second Encoder:
RD5-RR5R4T3C
Second encoder+
Analog:
RD5-RR5R4T3AC</td>
<td rowspan="8">Three-phase
AC380V</td></tr>
<tr><td>R2H130-T85B15C-NH1N1</td></tr>
<tr><td>R2H130-T85B15C-OH1N1</td></tr>
<tr><td>R2H130-T85B15C-PH1N1</td></tr>
<tr><td>R2H130-T85B15C-MH1B1</td></tr>
<tr><td>R2H130-T85B15C-NH1B1</td></tr>
<tr><td>R2H130-T85B15C-OH1B1</td></tr>
<tr><td>R2H130-T85B15C-PH1B1</td></tr>
<tr><td rowspan="8">1300W</td><td rowspan="8">High Inertia</td><td>R2H130-T85B15C-MH1N1</td>
<td rowspan="8">standard type:
RD5-PR8R4T3
Optional
Second Encoder:
RD5-PR8R4T3C
Second encoder+STO:
RD5-PR8R4T3SC</td>
<td rowspan="8">standard type:
RD5-ER8R4T3
Optional
Second Encoder:
RD5-ER8R4T3C
Second encoder+STO:
RD5-ER8R4T3SC</td>
<td rowspan="8">standard type:
RD5-FR8R4T3
Optional
Second Encoder:
RD5-FR8R4T3C
Second encoder+STO:
RD5-FR8R4T3SC</td>
<td rowspan="8">standard type:
RD5-CR8R4T3
Optional
Second Encoder:
RD5-CR8R4T3C
Second encoder+
Analog:
RD5-CR8R4T3AC</td>
<td rowspan="8">standard type:
RD5-RR8R4T3
Optional
Second Encoder:
RD5-RR8R4T3C
Second encoder+
Analog:
RD5-RR8R4T3AC</td>
<td rowspan="8">Three-phase
AC380V</td></tr>
<tr><td>R2H130-T15C15C-NH1N1</td></tr>
<tr><td>R2H130-T13C15C-OH1N1</td></tr>
<tr><td>R2H130-T13C15C-PH1N1</td></tr>
<tr><td>R2H130-T13C15C-MH1B1</td></tr>
<tr><td>R2H130-T13C15C-NH1B1</td></tr>
<tr><td>R2H130-T13C15C-OH1B1</td></tr>
<tr><td>R2H130-T13C15C-PH1B1</td></tr>
<tr><td rowspan="8">1800W</td><td rowspan="8">High Inertia</td><td>R2H130-T18C15C-MH1N1</td>
<td rowspan="8">standard type:
RD5-PR012T3
Optional
Second Encoder:
RD5-PR012T3C
Second encoder+STO:
RD5-PR012T3SC</td>
<td rowspan="8">standard type:
RD5-ER012T3
Optional
Second Encoder:
RD5-ER012T3C
Second encoder+STO:
RD5-ER012T3SC</td>
<td rowspan="8">standard type:
RD5-FR012T3
Optional
Second Encoder:
RD5-FR012T3C
Second encoder+STO:
RD5-FR012T3SC</td>
<td rowspan="8">standard type:
RD5-CR012T3
Optional
Second Encoder:
RD5-CR012T3C
Second encoder+
Analog:
RD5-CR012T3AC</td>
<td rowspan="8">standard type:
RD5-RR012T3
Optional
Second Encoder:
RD5-RR012T3C
Second encoder+
Analog:
RD5-RR012T3AC</td>
<td rowspan="8">Three-phase
AC380V</td></tr>
<tr><td>R2H130-T18C15C-NH1N1</td></tr>
<tr><td>R2H130-T18C15C-OH1N1</td></tr>
<tr><td>R2H130-T18C15C-PH1N1</td></tr>
<tr><td>R2H130-T18C15C-MH1B1</td></tr>
<tr><td>R2H130-T18C15C-NH1B1</td></tr>
<tr><td>R2H130-T18C15C-OH1B1</td></tr>
<tr><td>R2H130-T18C15C-PH1B1</td></tr>
<tr><td rowspan="8">2200W</td><td rowspan="8">High Inertia</td><td>R2H130-T22C15C-MH1N1</td>
<td rowspan="8">standard type:
RD5-PR012T3
Optional
Second Encoder:
RD5-PR012T3C
Second encoder+STO:
RD5-PR012T3SC</td>
<td rowspan="8">standard type:
RD5-ER012T3
Optional
Second Encoder:
RD5-ER012T3C
Second encoder+STO:
RD5-ER012T3SC</td>
<td rowspan="8">standard type:
RD5-FR012T3
Optional
Second Encoder:
RD5-FR012T3C
Second encoder+STO:
RD5-FR012T3SC</td>
<td rowspan="8">standard type:
RD5-CR012T3
Optional
Second Encoder:
RD5-CR012T3C
Second encoder+STO:
RD5-CR012T3AC</td>
<td rowspan="8">standard type:
RD5-RR012T3
Optional
Second Encoder:
RD5-RR012T3C
Second encoder+STO:
RD5-RR012T3AC</td>
<td rowspan="8">Three-phase
AC380V</td></tr>
<tr><td>R2H130-T22C15C-NH1N1</td></tr>
<tr><td>R2H130-T22C15C-OH1N1</td></tr>
<tr><td>R2H130-T22C15C-PH1N1</td></tr>
<tr><td>R2H130-T22C15C-MH1B1</td></tr>
<tr><td>R2H130-T22C15C-NH1B1</td></tr>
<tr><td>R2H130-T22C15C-OH1B1</td></tr>
<tr><td>R2H130-T22C15C-PH1B1</td></tr>
</table>

20、R2H180 servo motor configuration specification 380V/(2.9 kW-7.5kW)

Motor Power	Inertia	Model	23bit		13bit		With Brake		Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
			Single-Turn	Multi-Turn	Single-Turn	Multi-Turn	Yes	No					
2.9kW	High Inertia	R2H180-T29C15C-MH1N1			●			●	●	180	ϕ35	Aviation Plug Type	AC380V
		R2H180-T29C15C -MH1N1				●							
		R2H180-T29C15C -OH1N1	●										
		R2H180-T29C15C -PH1N1		●									
		R2H180-T29C15C-MH1B1			●		●						
		R2H180-T29C15C-NH1B1				●							
		R2H180-T29C15C-OH1B1	●										
		R2H180-T29C15C-PH1B1		●									
4.4kW	High Inertia	R2H180-T44C15C-MH1N1			●			●	●	180	ϕ35	Aviation Plug Type	AC380V
		R2H180-T44C15C-NH1N1				●							
		R2H180-T44C15C-OH1N1	●										
		R2H180-T44C15C-PH1N1		●									
		R2H180-T44C15C-MH1B1			●		●						
		R2H180-T44C15C-NH1B1				●							
		R2H180-T44C15C-OH1B1	●										
		R2H180-T44C15C-PH1B1		●									
5.5kW	High Inertia	R2H180-T55C15C-MH1N1			●			●	●	180	ϕ42	Aviation Plug Type	AC380V
		R2H180-T55C15C-NH1N1				●							
		R2H180-T55C15C-OH1N1	●										
		R2H180-T55C15C-PH1N1		●									
		R2H180-T55C15C-MH1B1			●		●						
		R2H180-T55C15C-NH1B1				●							
		R2H180-T55C15C-OH1B1	●										
		R2H180-T55C15C-PH1B1		●									
7.5kW	High Inertia	R2H180-T75C15C-MH1N1			●			●	●	180	ϕ42	Aviation Plug Type	AC380V
		R2H180-T75C15C-NH1N1				●							
		R2H180-T75C15C-OH1N1	●										
		R2H180-T75C15C-PH1N1		●									
		R2H180-T75C15C-MH1B1			●		●						
		R2H180-T75C15C-NH1B1				●							
		R2H180-T75C15C-OH1B1	●										
		R2H180-T75C15C-PH1B1		●									

21、Selection Comparison Table of R2H180 and RD5 Servo drives 380V/(2.9kW-7.5kW)

Motor Power	Inertia	Model	Servo drives model					
			Pulse	EtherCAT	PROFINET	CANopen	RS485	Power supply specification
2.9kW	High Inertia	R2H180-T29C15C-MH1N1 R2H180-T29C15C-NH1N1 R2H180-T29C15C-OH1N1 R2H180-T29C15C-PH1N1 R2H180-T29C15C-MH1B1 R2H180-T29C15C-NH1B1 R2H180-T29C15C-OH1B1 R2H180-T29C15C-PH1B1	standard type: RD5-PR012T3 Optional Second Encoder: RD5-PR012T3C Second encoder+STO: RD5-PR012T3SC	standard type: RD5-ER012T3 Optional Second Encoder: RD5-ER012T3C Second encoder+STO: RD5-ER012T3SC	standard type: RD5-FR012T3 Optional Second Encoder: RD5-FR012T3C Second encoder+STO: RD5-FR012T3SC	standard type: RD5-CR012T3 Optional Second Encoder: RD5-CR012T3C Second encoder+ Analog: RD5-CR012T3AC	standard type: RD5-RR012T3 Optional Second Encoder: RD5-RR012T3C Second encoder+ Analog: RD5-RR012T3AC	Three-phase AC380V
4.4kW	High Inertia	R2H180-T44C15C-MH1N1 R2H180-T44C15C-NH1N1 R2H180-T44C15C-OH1N1 R2H180-T44C15C-PH1N1 R2H180-T44C15C-MH1B1 R2H180-T44C15C-NH1B1 R2H180-T44C15C-OH1B1 R2H180-T44C15C-PH1B1	standard type: RD5-PR017T3 Optional Second Encoder: RD5-PR017T3C Second encoder+STO: RD5-PR017T3SC	standard type: RD5-ER017T3 Optional Second Encoder: RD5-ER017T3C Second encoder+STO: RD5-ER017T3SC	standard type: RD5-FR017T3 Optional Second Encoder: RD5-FR017T3C Second encoder+STO: RD5-FR017T3SC	standard type: RD5-CR017T3 Optional Second Encoder: RD5-CR017T3C Second encoder+ Analog: RD5-CR017T3AC	standard type: RD5-RR017T3 Optional Second Encoder: RD5-RR017T3C Second encoder+ Analog: RD5-RR017T3AC	Three-phase AC380V
5.5kW	High Inertia	R2H180-T44C15C-MH1N1 R2H180-T55C15C-NH1N1 R2H180-T55C15C-OH1N1 R2H180-T55C15C-PH1N1 R2H180-T55C15C-MH1B1 R2H180-T55C15C-NH1B1 R2H180-T55C15C-OH1B1 R2H180-T55C15C-PH1B1	standard type: RD5-PR021T3 Optional Second Encoder: RD5-PR021T3C Second encoder+STO: RD5-PR021T3SC	standard type: RD5-ER021T3 Optional Second Encoder: RD5-ER021T3C Second encoder+STO: RD5-ER021T3SC	standard type: RD5-FR021T3 Optional Second Encoder: RD5-FR021T3C Second encoder+STO: RD5-FR021T3SC	standard type: RD5-CR021T3 Optional Second Encoder: RD5-CR021T3C Second encoder+ Analog: RD5-CR021T3AC	standard type: RD5-RR021T3 Optional Second Encoder: RD5-RR021T3C Second encoder+ Analog: RD5-RR021T3AC	Three-phase AC380V
7.5kW	High Inertia	R2H180-T75C15C-MH1N1 R2H180-T75C15C-NH1N1 R2H180-T75C15C-OH1N1 R2H180-T75C15C-PH1N1 R2H180-T75C15C-MH1B1 R2H180-T75C15C-NH1B1 R2H180-T75C15C-OH1B1 R2H180-T75C15C-PH1B1	standard type: RD5-PR026T3 Optional Second Encoder: RD5-PR026T3C Second encoder+STO: RD5-PR026T3SC	standard type: RD5-ER026T3 Optional Second Encoder: RD5-ER026T3C Second encoder+STO: RD5-ER026T3SC	standard type: RD5-FR026T3 Optional Second Encoder: RD5-FR026T3C Second encoder+STO: RD5-FR026T3SC	standard type: RD5-CR026T3 Optional Second Encoder: RD5-CR026T3C Second encoder+ Analog: RD5-CR026T3AC	standard type: RD5-RR026T3 Optional Second Encoder: RD5-RR026T3C Second encoder+ Analog: RD5-RR026T3AC	AC380V

22、R2A130 servo motor configuration specification 220V/(1kW-3kW)

Motor Power	Inertia	Model	23bit Single-Turn	23bit Multi-Turn	17bit Single-Turn	17bit Multi-Turn	With Brake Yes	With Brake No	Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
1kW	Low Inertia	R2A130-S10C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2A130-S10C20C-NH1N1				●							
		R2A130-S10C20C-OH1N1	●										
		R2A130-S10C20C-PH1N1		●									
		R2A130-S10C20C-MH1B1			●		●						
		R2A130-S10C20C-NH1B1				●							
		R2A130-S10C20C-OH1B1	●										
		R2A130-S10C20C-PH1B1		●									
1.5kW	Low Inertia	R2A130-S10C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2A130-S15C20C-NH1N1				●							
		R2A130-S15C20C-OH1N1	●										
		R2A130-S15C20C-PH1N1		●									
		R2A130-S15C20C-MH1B1			●		●						
		R2A130-S15C20C-NH1B1				●							
		R2A130-S15C20C-OH1B1	●										
		R2A130-S15C20C-PH1B1		●									
2kW	Low Inertia	R2A130-S20C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2A130-S20C20C-NH1N1				●							
		R2A130-S20C20C-OH1N1	●										
		R2A130-S20C20C-PH1N1		●									
		R2A130-S20C20C-MH1B1			●		●						
		R2A130-S20C20C-NH1B1				●							
		R2A130-S20C20C-OH1B1	●										
		R2A130-S20C20C-PH1B1		●									
3kW	Low Inertia	R2A130-S30C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC220V
		R2A130-S30C20C-NH1N1				●							
		R2A130-S30C20C-OH1N1	●										
		R2A130-S30C20C-PH1N1		●									
		R2A130-S30C20C-MH1B1			●		●						
		R2A130-S30C20C-NH1B1				●							
		R2A130-S30C20C-OH1B1	●										
		R2A130-S30C20C-PH1B1		●									

23、Selection Comparison Table of R2A130 and RD5 Servo drives 220V/(1kW-3kW)

Motor Power	Inertia	Model	Servo drives model					
			Pulse	EtherCAT	PROFINET	CANopen	RS485	Rated voltage
1kW	Low Inertia	R2A130-S10C20C-MH1N1	standard type: RD5-PR7R6S2 Optional Second Encoder: RD5-PR7R6S2C Second encoder+STO: RD5-PR7R6S2SC	standard type: RD5-ER7R6S2 Optional Second Encoder: RD5-ER7R6S2C Second encoder+STO: RD5-ER7R6S2SC	standard type: RD5-FR7R6S2 Optional Second Encoder: RD5-FR7R6S2C Second encoder+STO: RD5-FR7R6S2SC	standard type: RD5-CR7R6S2 Optional Second Encoder: RD5-CR7R6S2C Second encoder+ Analog: RD5-CR7R6S2AC	standard type: RD5-RR7R6S2 Optional Second Encoder: RD5-RR7R6S2C Second encoder+ Analog: RD5-RR7R6S2AC	Single/ three-phase AC220V
		R2A130-S10C20C-NH1N1						
		R2A130-S10C20C-OH1N1						
		R2A130-S10C20C-PH1N1						
		R2A130-S10C20C-MH1B1						
		R2A130-S10C20C-NH1B1						
		R2A130-S10C20C-OH1B1						
		R2A130-S10C20C-PH1B1						
1.5kW	Low Inertia	R2A130-S15C20C-MH1N1	standard type: RD5-PR012S2 Optional Second Encoder: RD5-PR012S2C Second encoder+STO: RD5-PR012S2SC	standard type: RD5-ER012S2 Optional Second Encoder: RD5-ER012S2C Second encoder+STO: RD5-ER012S2SC	standard type: RD5-FR012S2 Optional Second Encoder: RD5-FR012S2C Second encoder+STO: RD5-FR012S2SC	standard type: RD5-CR012S2 Optional Second Encoder: RD5-CR012S2C Second encoder+ Analog: RD5-CR012S2AC	standard type: RD5-RR012S2 Optional Second Encoder: RD5-RR012S2C Second encoder+ Analog: RD5-RR012S2AC	Single/ three-phase AC220V
		R2A130-S15C20C-NH1N1						
		R2A130-S15C20C-OH1N1						
		R2A130-S15C20C-PH1N1						
		R2A130-S15C20C-MH1B1						
		R2A130-S15C20C-NH1B1						
		R2A130-S15C20C-OH1B1						
		R2A130-S15C20C-PH1B1						
2kW	Low Inertia	R2A130-S20C20C-MH1N1	standard type: RD5-PR014S2 Optional Second Encoder: RD5-PR014S2C Second encoder+STO: RD5-PR014S2SC	standard type: RD5-ER014S2 Optional Second Encoder: RD5-ER014S2C Second encoder+STO: RD5-ER014S2SC	standard type: RD5-FR014S2 Optional Second Encoder: RD5-FR014S2C Second encoder+STO: RD5-FR014S2SC	standard type: RD5-CR014S2 Optional Second Encoder: RD5-CR014S2C Second encoder+ Analog: RD5-CR014S2AC	standard type: RD5-RR014S2 Optional Second Encoder: RD5-RR014S2C Second encoder+ Analog: RD5-RR014S2AC	Single/ three-phase AC220V
		R2A130-S20C20C-NH1N1						
		R2A130-S20C20C-OH1N1						
		R2A130-S20C20C-PH1N1						
		R2A130-S20C20C-MH1B1						
		R2A130-S20C20C-NH1B1						
		R2A130-S20C20C-OH1B1						
		R2A130-S20C20C-PH1B1						
3kW	Low Inertia	R2A130-S30C20C-MH1N1	standard type: RD5-PR018T2 Optional Second Encoder: RD5-PR018T2C Second encoder+STO: RD5-PR018T2SC	standard type: RD5-ER018T2 Optional Second Encoder: Second encoder+STO: RD5-ER018T2SC	standard type: RD5-FR018T2 Optional Second Encoder: RD5-FR018T2C Second encoder+STO: RD5-FR018T2SC	standard type: RD5-CR018T2 Optional Second Encoder: RD5-CR018T2C Second encoder+ Analog: RD5-CR018T2AC	standard type: RD5-RR018T2 Optional Second Encoder: RD5-RR018T2C Second encoder+ Analog: RD5-RR018T2AC	Single/ three-phase AC220V
		R2A130-S30C20C-NH1N1						
		R2A130-S30C20C-OH1N1						
		R2A130-S30C20C-PH1N1						
		R2A130-S30C20C-MH1B1						
		R2A130-S30C20C-NH1B1						
		R2A130-S30C20C-OH1B1						
		R2A130-S30C20C-PH1B1						

24、R2A130 servo motor configuration specification 380V/(1kW-3kW)

Motor Power	Inertia	Model	23bit		17bit		With Brake		Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
			Single-Turn	Multi-Turn	Single-Turn	Multi-Turn	Yes	No					
1kW	Low Inertia	R2A130-T10C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2A130-T10C20C-NH1N1				●							
		R2A130-T10C20C-OH1N1	●										
		R2A130-T10C20C-PH1N1		●									
		R2A130-T10C20C-MH1B1			●		●						
		R2A130-T10C20C-NH1B1				●							
		R2A130-T10C20C-OH1B1	●										
		R2A130-T10C20C-PH1B1		●									
1.5kW	Low Inertia	R2A130-T15C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2A130-T15C20C-NH1N1				●							
		R2A130-T15C20C-OH1N1	●										
		R2A130-T15C20C-PH1N1		●									
		R2A130-T15C20C-MH1B1			●		●						
		R2A130-T15C20C-NH1B1				●							
		R2A130-T15C20C-OH1B1	●										
		R2A130-T15C20C-PH1B1		●									
2kW	Low Inertia	R2A130-T20C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2A130-T20C20C-NH1N1				●							
		R2A130-T20C20C-OH1N1	●										
		R2A130-T20C20C-PH1N1		●									
		R2A130-T20C20C-MH1B1			●		●						
		R2A130-T20C20C-NH1B1				●							
		R2A130-T20C20C-OH1B1	●										
		R2A130-T20C20C-PH1B1		●									
3kW	Low Inertia	R2A130-T30C20C-MH1N1			●			●	●	130	ϕ22	Aviation Plug Type	AC380V
		R2A130-T30C20C-NH1N1				●							
		R2A130-T30C20C-OH1N1	●										
		R2A130-T30C20C-PH1N1		●									
		R2A130-T30C20C-MH1B1			●		●						
		R2A130-T30C20C-NH1B1				●							
		R2A130-T30C20C-OH1B1	●										
		R2A130-T30C20C-PH1B1		●									

25、Selection Comparison Table of R2A130 and RD5 Servo drives 220V/(1kW-3kW)

Motor Power	Inertia	Model	Servo drives model					
			Pulse	EtherCAT	PROFINET	CANopen	RS485	Rated voltage
1kW	Low Inertia	R2A130-T10C20C-MH1N1	standard type: RD5-PR3R5T3 Optional Second Encoder: RD5-PR3R5T3C Second encoder+STO: RD5-PR3R5T3SC	standard type: RD5-ER3R5T3 Optional Second Encoder: RD5-ER3R5T3C Second encoder+STO: RD5-ER3R5T3SC	standard type: RD5-FR3R5T3 Optional Second Encoder: RD5-FR3R5T3C Second encoder+STO: RD5-FR3R5T3SC	standard type: RD5-CR3R5T3 Optional Second Encoder: RD5-CR3R5T3C Second encoder+ Analog: RD5-CR3R5T3AC	standard type: RD5-RR3R5T3 Optional Second Encoder: RD5-RR3R5T32C Second encoder+ Analog: RD5-RR3R5T3AC	Three-phase AC380V
		R2A130-T10C20C-NH1N1						
		R2A130-T10C20C-OH1N1						
		R2A130-T10C20C-PH1N1						
		R2A130-T10C20C-MH1B1						
		R2A130-T10C20C-NH1B1						
		R2A130-T10C20C-OH1B1						
		R2A130-T10C20C-PH1B1						
1.5kW	Low Inertia	R2A130-T15C20C-MH1N1	standard type: RD5-PR5R4T3 Optional Second Encoder: RD5-PR5R4T3C Second encoder+STO: RD5-PR5R4T3SC	standard type: RD5-ER5R4T3 Optional Second Encoder: RD5-ER5R4T3C Second encoder+STO: RD5-ER5R4T3SC	standard type: RD5-FR5R4T3 Optional Second Encoder: RD5-FR5R4T3C Second encoder+STO: RD5-FR5R4T3SC	standard type: RD5-CR5R4T3 Optional Second Encoder: RD5-CR5R4T3C Second encoder+ Analog: RD5-CR5R4T3AC	standard type: RD5-RR5R4T3 Optional Second Encoder: RD5-RR5R4T3C Second encoder+ Analog: RD5-RR5R4T3AC	Three-phase AC380V
		R2A130-T15C20C-NH1N1						
		R2A130-T15C20C-OH1N1						
		R2A130-T15C20C-PH1N1						
		R2A130-T15C20C-MH1B1						
		R2A130-T15C20C-NH1B1						
		R2A130-T15C20C-OH1B1						
		R2A130-T15C20C-PH1B1						
2kW	Low Inertia	R2A130-T15C20C-MH1N1	standard type: RD5-PR8R4T3 Optional Second Encoder: RD5-PR8R4T3C Second encoder+STO: RD5-PR8R4T3SC	standard type: RD5-ER8R4T3 Optional Second Encoder: RD5-ER8R4T3C Second encoder+STO: RD5-ER8R4T3SC	standard type: RD5-FR8R4T3 Optional Second Encoder: RD5-FR8R4T3C Second encoder+STO: RD5-FR8R4T3SC	standard type: RD5-CR8R4T3 Optional Second Encoder: RD5-CR8R4T3C Second encoder+ Analog: RD5-CR8R4T3AC	standard type: RD5-RR8R4T3 Optional Second Encoder: RD5-RR8R4T3C Second encoder+ Analog: RD5-RR8R4T3AC	Three-phase AC380V
		R2A130-T20C20C-NH1N1						
		R2A130-T20C20C-OH1N1						
		R2A130-T20C20C-PH1N1						
		R2A130-T20C20C-MH1B1						
		R2A130-T20C20C-NH1B1						
		R2A130-T20C20C-OH1B1						
		R2A130-T20C20C-PH1B1						
3kW	Low Inertia	R2A130-T30C20C-MH1N1	standard type: RD5-PR012T3 RD5-PR012T3C Second encoder+STO: RD5-PR012T3SC	standard type: RD5-ER012T3 RD5-ER012T3C Second encoder+STO: RD5-ER012T3SC	standard type: RD5-FR012T3 RD5-FR012T3C Second encoder+STO: RD5-FR012T3SC	standard type: RD5-CR012T3 Optional Second Encoder: Second encoder+ Analog: RD5-CR012T3AC	standard type: RD5-RR012T3 Optional Second Encoder: Second encoder+ Analog: RD5-RR012T3AC	Three-phase AC380V
		R2A130-T30C20C-NH1N1						
		R2A130-T30C20C-OH1N1						
		R2A130-T30C20C-PH1N1						
		R2A130-T30C20C-MH1B1						
		R2A130-T30C20C-NH1B1						
		R2A130-T30C20C-OH1B1						
		R2A130-T30C20C-PH1B1						

26、Naming Rules of R3 Series Servo

R3	H	080	-	S	75B	30C	-	M	T	1	N	1
①	②	③		④	⑤	⑥		⑦	⑧	⑨	⑩	⑪

①:Product Series

R3: R3 Series Servo Motor

③: Motor Flange

040:40 flange

060:60 flange

080:80 flange

⑤: Rated Power

10B:100W

20B:200W

40B:400W

75B:750W

10C:100W

⑦: Encoder Type

M: 17bit Single-turn Absolute type

N: 17bit Multi-turn Absolute type

O: 23bit Single-turn Absolute type

P: 23bit Multi-turn Absolute type

⑨: Shaft Connection Method

0: Shaft output

1: Shaft output (keyed)

⑪: Oil Seal

0: With Oil Seal

1: Without Oil Seal

②: Inertia Capacity

A: Low Inertia

M: Medium Inertia

H: High Inertia

④: Rated Voltage

S: AC220V

⑥: Rated Speed

30 C: 3000RPM

⑧: Interface Type

T: Terminal type

⑩: Brake

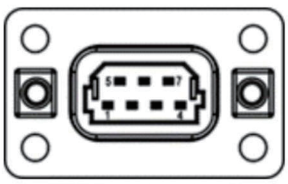
N: With Brake

B: Without Brake

27、Connector Wiring Standards for R3 Series Servo

40、60、80 Flange

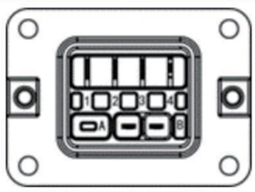
Encoder Connector



Motor Side Definition

Pin Number	Function
1	SD+
2	SD-
3	E+
4	E-
5	+5V
6	GND
7	PE

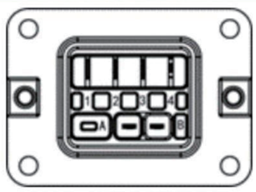
Power Connector (Without Brake)



Motor Side Definition

Pin Number	Function
1	V
2	U
3	W
4	PE

Power Connector (With Brake)



Motor Side Definition

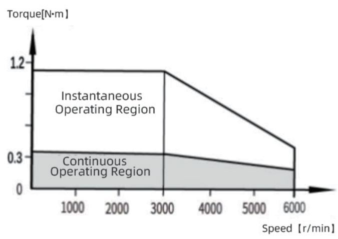
Pin Number	Function
1	V
2	U
3	W
4	PE
A	BK+
B	BK-

28、 Technical Parameters of R3 Series Servo Motors

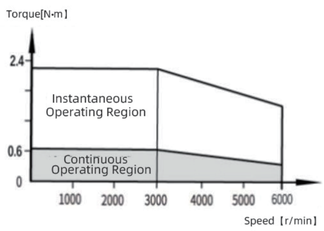
Motor Specifications	R3H040-S10B30C-xxxxx	R3H060-S20B30C-xxxxx	R3H060-S40B30C-xxxxx	R3H080-S75B30C-xxxxx	R3H080-S10C30C-xxxxx
Rated Power(W)	100	200	400	750	1000
Rated voltage(V)	220	220	220	220	220
Rated current(A)	0.98	1.3	2.6	4.6	6.3
Rated torque(N.m)	0.32	0.64	1.27	2.39	3.18
Rated Speed(r/min)	3000	3000	3000	3000	3000
Instantaneous Maximum Current(A)	3.9	4.4	8.6	16.3	20.9
Instantaneous Maximum Torque(N.m)	1.12	2.23	4.445	8.36	11.13
Instantaneous Maximum Speed(r/min)	6000	6000	6000	6000	6000
Back Electromotive Force (V/1000r/min)	20	31.98	34.09	34.4	33.9
Phase Resistance(Ω)	0.327	0.492	0.49	0.52	0.505
Torque Coefficient (N.m/A)	13.186	8.286	3.33	0.936	0.638
Q-axis Inductance (mH)	7.81	9.35	5.09	2.8	2.04
D-axis Inductance(mH)	5.39	7.8	4.13	2.25	1.675
Electrical Time Constant(ms)	1.01	2.07	2.77	5.4	11.646
Rotor Inertia($kg.m^2X10^{-4}$)	0.031(0.034)	0.34(0.35)	0.59(0.60)	1.72(1.77)	2.23(2.28)
Weight (kg)	0.36(0.55)	0.8(1.17)	1.14(1.51)	2.15(2.83)	2.59(3.27)
Number of Poles	5				
Motor Insulation Class	F				
Protection Level	IP67 with oil seal (oil seal mounted on shaft end)				
Operating Environment	Operating Temperature: 0~40℃; Operating Humidity: 20%~80%RH (non-condensation)				

Note: Parameters in () are for motors with brake.

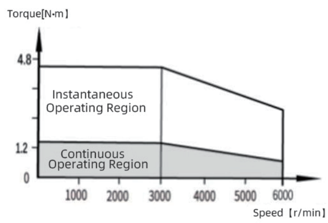
Torque Characteristics Chart:



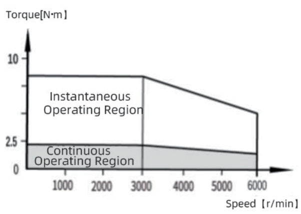
R3H040-S10B30C-xxxxx



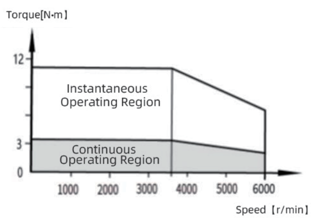
R3H060-S20B30C-xxxxx



R3H060-S40B30C-xxxxx



R3H080-S75B30C-xxxxx



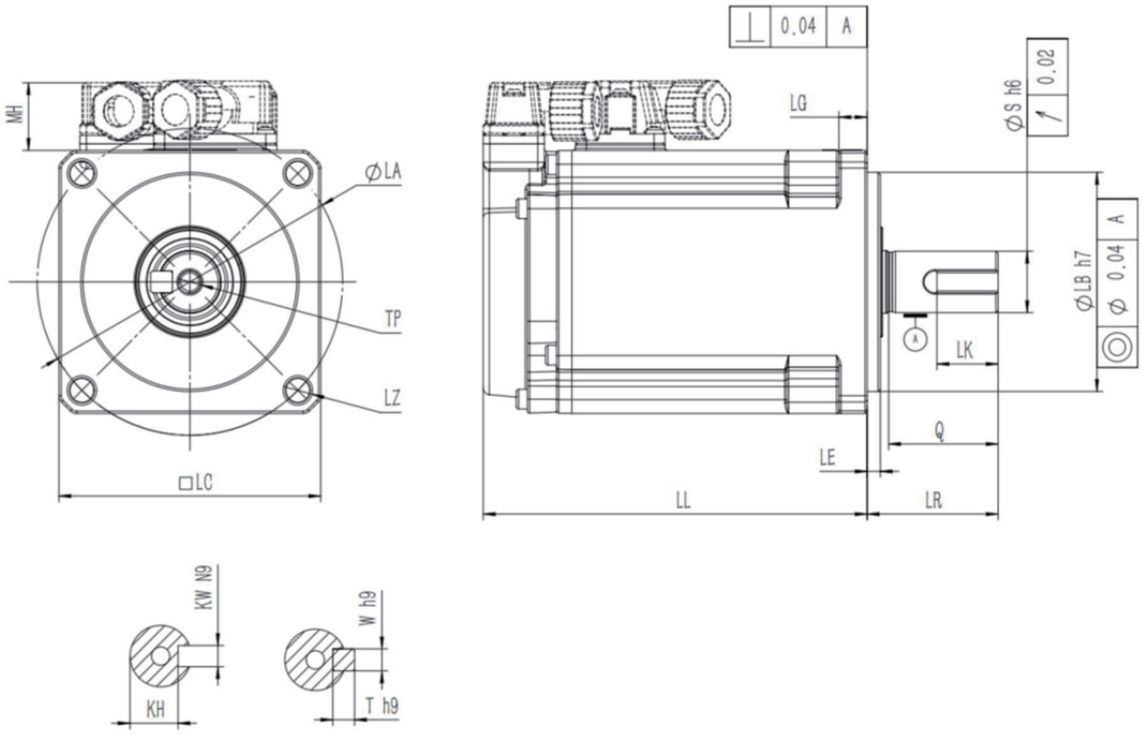
R3H080-S10C30C-xxxxx

Outline Dimensions Diagram:

Model	LC	LL	LR	LA	LZ	MH	LG	LE	Q
R3H040-S10B30C-xxxxx	40	73.4 (100.1)	25	46	4.3	16.8	5.5	3	20
R3H060-S20B30C-xxxxx	60	70.5 (99.7)	30	70	5.5	15.8	6.5	3	25.5
R3H060-S40B30C-xxxxx	60	88 (117.2)	30	70	5.5	15.8	6.5	3	25.5
R3H080-S75B30C-xxxxx	80	94.4 (128.6)	35	90	6.4	15.5	8	3	30.2
R3H080-S10C30C-xxxxx	80	107.9 (142.1)	35	90	6.4	15.5	8	3	30.2

Note: Parameters within () are for motors with holding brakes.

Model	LB	S	TP	LK	KH	KW	W	T	
R3H040-S10B30C-xxxxx	30	8	M3 depth7	14	6.2	3	3	3	
R3H060-S20B30C-xxxxx	50	14	M5 depth10	14	10.5	5	5	5	
R3H060-S40B30C-xxxxx	50	14	M5 depth10	14	10.5	5	5	5	
R3H080-S75B30C-xxxxx	70	19	M6 depth12	22	15	6	6	6	
R3H080-S10C30C-xxxxx	70	19	M6 depth12	22	15	6	6	6	



29、R3 Series Servo Motor Configuration Specifications

Motor Power	Inertia	Model	23bit		17bit		With Brake		Oil Seal	Flange	Shaft Diameter	Wiring Form	Rated voltage
			Single-Turn	Multi-Turn	Single-Turn	Multi-Turn	Yes	No					
100W	High Inertia	R3H040-S10B30C-MT1N0			●			●		40	ϕ 8	Terminal Type	AC220V
		R3H040-S10B30C-NT1N0				●							
		R3H040-S10B30C-OT1N0	●										
		R3H040-S10B30C-PT1N0		●									
		R3H040-S10B30C-MT1B0			●		●						
		R3H040-S10B30C-NT1B0				●							
		R3H040-S10B30C-OT1B0	●										
		R3H040-S10B30C-PT1B0		●									
200W	High Inertia	R3H060-S20B30C-MT1N1			●			●	●	60	ϕ 14	Terminal Type	AC220V
		R3H060-S20B30C-NT1N1				●							
		R3H060-S20B30C-OT1N1	●										
		R3H060-S20B30C-PT1N1		●									
		R3H060-S20B30C-MT1B1			●		●						
		R3H060-S20B30C-NT1B1				●							
		R3H060-S20B30C-OT1B1	●										
		R3H060-S20B30C-PT1B1		●									
400W	High Inertia	R3H060-S40B30C-MT1N1			●			●	●	60	ϕ 14	Terminal Type	AC220V
		R3H060-S40B30C-NT1N1				●							
		R3H060-S40B30C-OT1N1	●										
		R3H060-S40B30C-PT1N1		●									
		R3H060-S40B30C-MT1B1			●		●						
		R3H060-S40B30C-NT1B1				●							
		R3H060-S40B30C-OT1B1	●										
		R3H060-S40B30C-PT1B1		●									
750W	High Inertia	R3H080-S40B30C-MT1N1			●			●	●	80	ϕ 19	Terminal Type	AC220V
		R3H080-S40B30C-NT1N1				●							
		R3H080-S75B30C-OT1N1	●										
		R3H080-S75B30C-PT1N1		●									
		R3H080-S75B30C-MT1B1			●		●						
		R3H080-S75B30C-NT1B1				●							
		R3H080-S75B30C-OT1B1	●										
		R3H080-S75B30C-PT1B1		●									
1kW	High Inertia	R3H080-S10C30C-MT1N1			●			●	●	80	ϕ 19	Terminal Type	AC220V
		R3H080-S10C30C-NT1N1				●							
		R3H080-S10C30C-OT1N1	●										
		R3H080-S10C30C-PT1N1		●									
		R3H080-S10C30C-MT1B1			●		●						
		R3H080-S10C30C-NT1B1				●							
		R3H080-S10C30C-OT1B1	●										
		R3H080-S10C30C-PT1B1		●									

LIMON

30、Comparison Table of Selection for R3 Series Servo Motors and RD5 Series Servo drives

Motor Power	Inertia	Model	Servo drives model					
			Pulse	EtherCAT	PROFINET	CANopen	RS485	Rated voltage
100W	High Inertia	R3H040-S10B30C-MT1N0 R3H040-S10B30C-NT1N0 R3H040-S10B30C-OT1N0 R3H040-S10B30C-PT1N0 R3H040-S10B30C-MT1B0 R3H040-S10B30C-NT1B0 R3H040-S10B30C-OT1B0 R3H040-S10B30C-PT1B0	standard type: RD5-PR001S2 Optional Second Encoder: RD5-PR001S2C Second encoder+STO: RD5-PR001S2SC	standard type: RD5-ER001S2 Optional Second Encoder: RD5-ER001S2C Second encoder+STO: RD5-ER001S2SC	standard type: RD5-FR001S2 Optional Second Encoder: RD5-FR001S2C Second encoder+STO: RD5-FR001S2SC	standard type: RD5-CR001S2 Optional Second Encoder: RD5-CR001S2C Second encoder+ Analog: RD5-CR001S2AC	standard type: RD5-RR001S2 Optional Second Encoder: RD5-RR001S2C Second encoder+ Analog: RD5-RR001S2AC	Single/ three-phase AC220V
200W	High Inertia	R3H060-S20B30C-MT1N1 R3H060-S20B30C-NT1N1 R3H060-S20B30C-OT1N1 R3H060-S20B30C-PT1N1 R3H060-S20B30C-MT1B1 R3H060-S20B30C-NT1B1 R3H060-S20B30C-OT1B1 R3H060-S20B30C-PT1B1	standard type: RD5-PR1R6S2 Optional Second Encoder: RD5-PR1R6S2C Second encoder+STO: RD5-PR1R6S2SC	standard type: RD5-ER1R6S2 Optional Second Encoder: RD5-ER1R6S2C Second encoder+STO: RD5-ER1R6S2SC	standard type: RD5-FR1R6S2 Optional Second Encoder: RD5-FR1R6S2C Second encoder+STO: RD5-FR1R6S2SC	standard type: RD5-CR1R6S2 Optional Second Encoder: RD5-CR1R6S2C Second encoder+ Analog: RD5-CR1R6S2AC	standard type: RD5-RR1R6S2 Optional Second Encoder: RD5-RR1R6S2C Second encoder+ Analog: RD5-RR1R6S2AC	Single/ three-phase AC220V
400W	High Inertia	R3H060-S40B30C-MT1N1 R3H060-S40B30C-NT1N1 R3H060-S40B30C-OT1N1 R3H060-S40B30C-PT1N1 R3H060-S40B30C-MT1B1 R3H060-S40B30C-NT1B1 R3H060-S40B30C-OT1B1 R3H060-S40B30C-PT1B1	standard type: RD5-PR2R8S2 Optional Second Encoder: RD5-PR2R8S2C Second encoder+STO: RD5-PR2R8S2SC	standard type: RD5-ER2R8S2 Optional Second Encoder: RD5-ER2R8S2C Second encoder+STO: RD5-ER2R8S2SC	standard type: RD5-FR2R8S2 Optional Second Encoder: RD5-FR2R8S2C Second encoder+STO: RD5-FR2R8S2SC	standard type: RD5-CR2R8S2 Optional Second Encoder: RD5-CR2R8S2C Second encoder+ Analog: RD5-CR2R8S2AC	standard type: RD5-RR2R8S2 Optional Second Encoder: RD5-RR2R8S2C Second encoder+ Analog: RD5-RR2R8S2AC	Single/ three-phase AC220V
750W	High Inertia	R3H080-S75B30C-MT1N1 R3H080-S75B30C-NT1N1 R3H080-S75B30C-OT1N1 R3H080-S75B30C-PT1N1 R3H080-S75B30C-MT1B1 R3H080-S75B30C-NT1B1 R3H080-S75B30C-OT1B1 R3H080-S75B30C-PT1B1	standard type: RD5-PR5R5S2 Optional Second Encoder: RD5-PR5R5S2C Second encoder+STO: RD5-PR5R5S2SC	standard type: RD5-ER5R5S2 Optional Second Encoder: RD5-ER5R5S2C Second encoder+STO: RD5-ER5R5S2SC	standard type: RD5-FR5R5S2 Optional Second Encoder: RD5-FR5R5S2C Second encoder+STO: RD5-FR5R5S2SC	standard type: RD5-CR5R5S2 Optional Second Encoder: RD5-CR5R5S2C Second encoder+ Analog: RD5-CR5R5S2AC	standard type: RD5-RR5R5S2 Optional Second Encoder: RD5-RR5R5S2C Second encoder+ Analog: RD5-RR5R5S2AC	Single/ three-phase AC220V
1kW	High Inertia	R3H080-S10C30C-MT1N1 R3H080-S10C30C-NT1N1 R3H080-S10C30C-OT1N1 R3H080-S10C30C-PT1N1 R3H080-S10C30C-MT1B1 R3H080-S10C30C-NT1B1 R3H080-S10C30C-OT1B1 R3H080-S10C30C-PT1B1	standard type: RD5-PR7R6S2 Optional Second Encoder: RD5-PR7R6S2C Second encoder+STO: RD5-PR7R6S2SC	standard type: RD5-ER7R6S2 Optional Second Encoder: RD5-ER7R6S2C Second encoder+STO: RD5-ER7R6S2SC	standard type: RD5-FR7R6S2 Optional Second Encoder: RD5-FR7R6S2C Second encoder+STO: RD5-FR7R6S2SC	standard type: RD5-CR7R6S2 Optional Second Encoder: RD5-CR7R6S2C Second encoder+ Analog: RD5-CR7R6S2AC	standard type: RD5-RR7R6S2 Optional Second Encoder: RD5-RR7R6S2C Second encoder+ Analog: RD5-RR7R6S2AC	Single/ three-phase AC220V

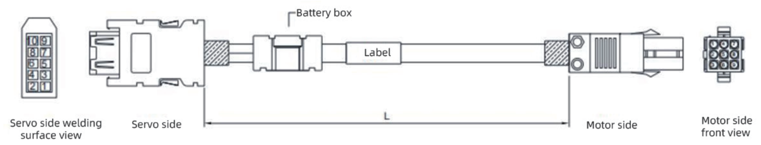
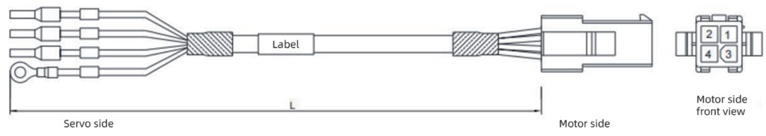
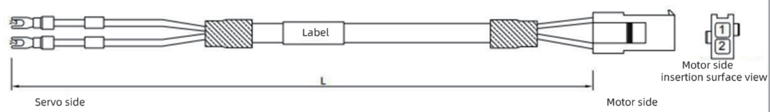
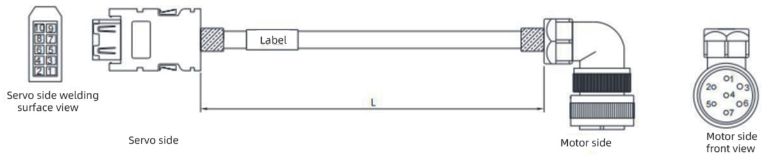
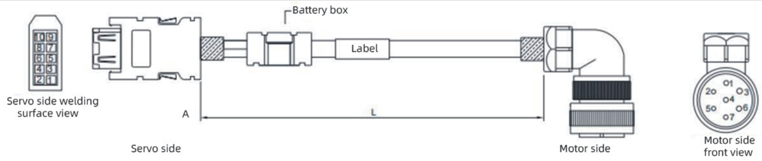
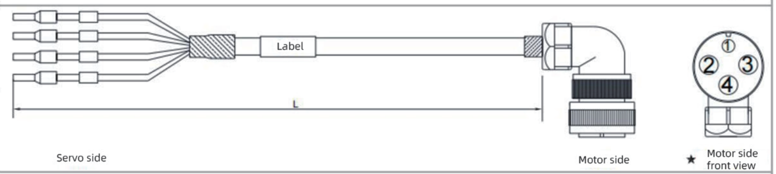
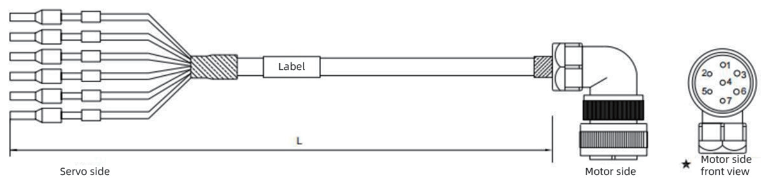
31、Adapter Cable Naming Rules for R2/R3 Series Servo Motors and RD5 Series

SC - M 1 1 7 B - 3.0

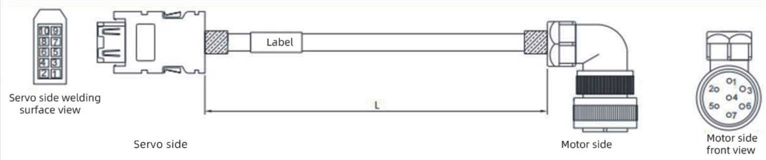
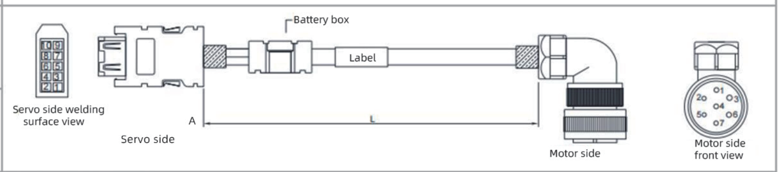
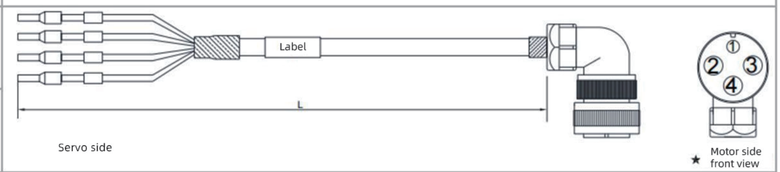
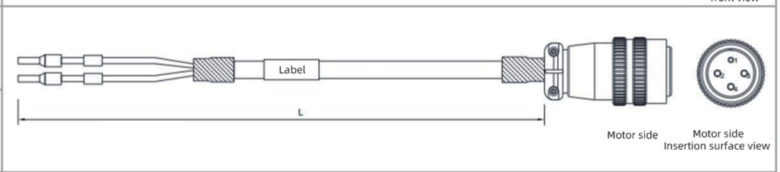
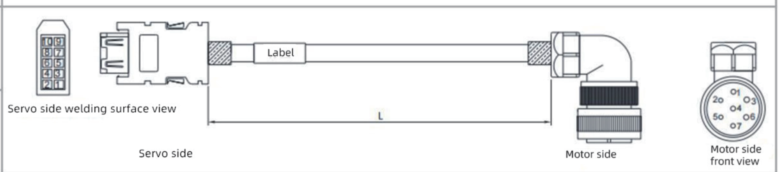
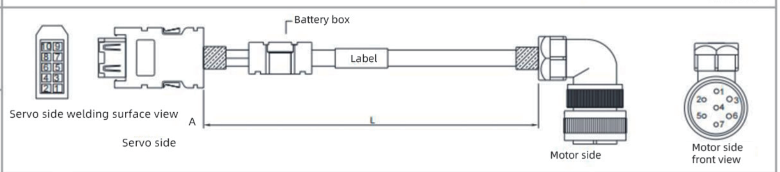
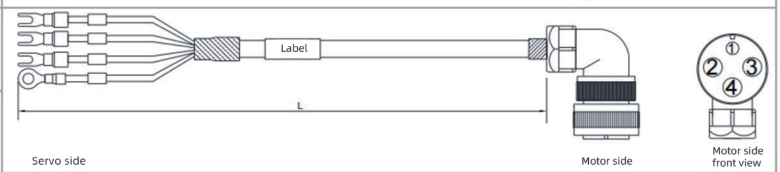
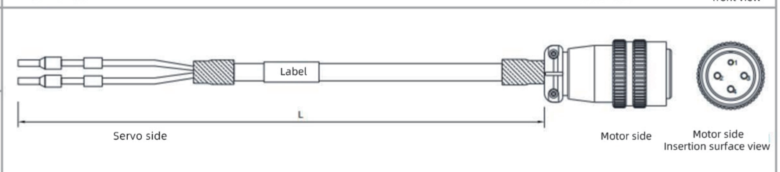
① ② ③ ④ ⑤ ⑥ ⑦

①:Product Series	②: Harness type	③: Servo side connector type	④: Cable current specification/encoder type	⑤: Motor Side Terminal Type	⑥: Cable flexibility	⑦: Cable length
SC:Servo cable	M:Non-brake power cable B:Brake power cable	1:UVW pin type, PE circular 2:All terminals are pin type 3:PE circular, All other terminals are U type	1:Cable current rating 1 (18AWG) 2:Cable current rating 2 (14AWG) 3:Cable current rating 3 (12AWG)	1: AMP 4P connector 2: 130 flange non-brake aviation plug (4-holes aviation plug YD28K4TSL) 3: 180 flange aviation plug (4-holes aviation plug YD32K4TSL) 5: 130 flange brake aviation plug (7-holes aviation plug YD28K7TSL) 7: Terminal connector (front outlet) 8: Terminal connector (rear outlet)	B: Standard cable H: High-flex cable S: High-flex with shielding	3.0:3m 5.0:5m 10.0:10m
	E:Encoder cable	1:1394-10P 2:1394-6P	1:Single-turn absolute value 2:Multi-turn absolute value (with battery box) 2:Multi-turn absolute value (without battery box)	1: AMP 4P connector 4: 130/180 flange aviation plug (7-holes aviation plug YD28K7TSL) 7:Terminal connector (front outlet) 8:Terminal connector (rear outlet)	B: Standard cable H: High-flex cable	
	H: Brake cable	2: All terminals are pin type 3: All terminals are U-shaped	1:Cable current rating 1 (18AWG) 2:Cable current rating 2 (14AWG) 3:Cable current rating 3 (12AWG)	1: AMP 2P connector 2: 180 flange brake aviation plug (4-holes aviation plug XS16K4TM)	B: Standard cable S: High-flex with shielding	

32、Adapter Cable Type Rules for R2 Series Servo Motors and RD5 Series Servo

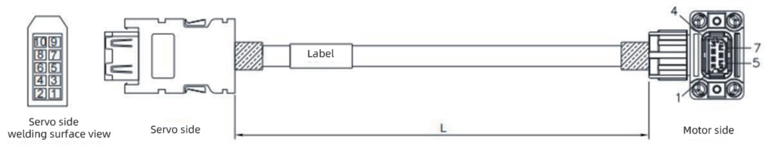
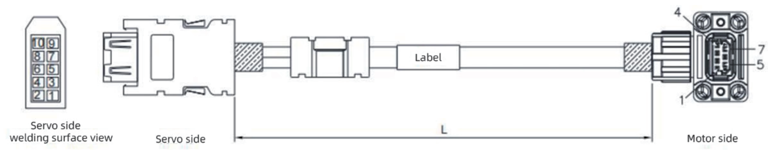
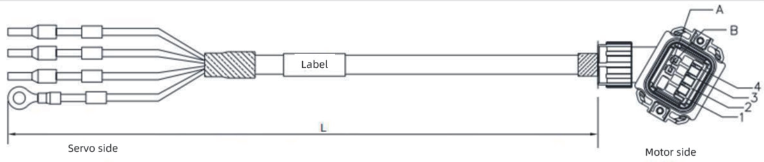
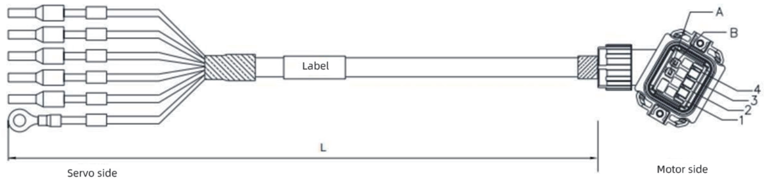
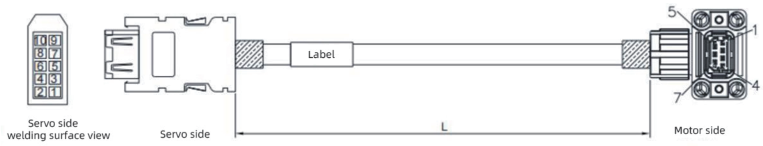
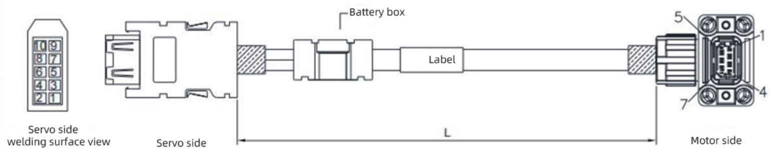
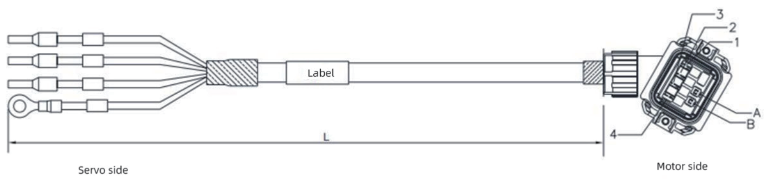
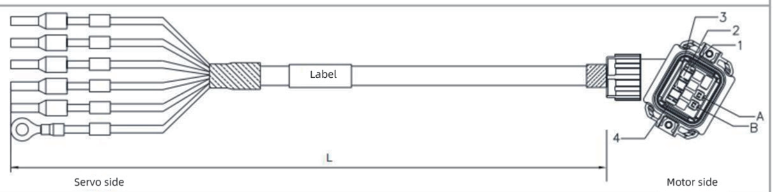
Adapter motor	Wiring Type	Cable Type	Cable Flexibility	Cable Model	Cable Diagram
R2 Series Motors (40, 60, 80Flange) 220V/ (50W-1kW)	AMP Connector	Single-turn Encoder Cable	Standard Cable	SC-E111B-□	
			High-flex Cable	SC-E111H-□	
		Multi-turn Encoder Cable	Standard Cable	SC-E121B-□	
			High-flex Cable	SC-E121H-□	
		Power Cable	Standard Cable	SC-M111B-□	
			High-flex Cable	SC-M111H-□	
		Brake Cable	Standard Cable	SC-H311B-□	
			High-flex Cable	SC-H311H-□	
R2 Series Motors (130 Flange) 220V/380V/ (850W-2.2kW)	Aviation Plug Type Connector	Single-turn Encoder Cable	Standard Cable	SC-E114B-□	
			High-flex Cable	SC-E114H-□	
		Multi-turn Encoder Cable	Standard Cable	SC-E124B-□	
			High-flex Cable	SC-E124H-□	
		Power Cable	Standard Cable	SC-M222B-□	
			High-flex Cable	SC-M222H-□	
		Brake Power Cable	High-flex Cable	SC-B225B-□	
			High-flex Cable	SC-B225H-□	

□Indicated cable length: e.g., □=3.0, meaning cable length is 3m. Standard specifications: 3.0m/5.0m/10.0m

Adapter motor	Wiring Type	Cable Type	Cable Flexibility	Cable Model	Cable Diagram
R2 Series Motors (180Flange) 380V/2.9kW	Aviation Plug Type Connector	Single-turn Encoder Cable	Standard Cable	SC-E114B-☐	
			High-flex Cable	SC-E114H-☐	
		Multi-turn Encoder Cable	Standard Cable	SC-E124B-☐	
			High-flex Cable	SC-E124H-☐	
		Power Cable	Standard Cable	SC-M223B-☐	
			High-flex Cable	SC-M223H-☐	
		Brake Cable	Standard Cable	SC-H212B-☐	
			High-flex Cable	SC-H212H-☐	
R2 Series Motors (180Flange) 380V/ (4.4kW-7.5kW)	Aviation Plug Type Connector	Single-turn Encoder Cable	Standard Cable	SC-E114B-☐	
			High-flex Cable	SC-E114H-☐	
		Multi-turn Encoder Cable	Standard Cable	SC-E124B-☐	
			High-flex Cable	SC-E124H-☐	
		Power Cable	Standard Cable	SC-M333B-☐	
			High-flex Cable	SC-M333H-☐	
		Brake Cable	Standard Cable	SC-H212B-☐	
			High-flex Cable	SC-H212H-☐	

☐Indicated cable length: e.g.,☐=3.0, meaning cable length is 3m. Standard specifications: 3.0m/5.0m/10.0m

33、Adapter Cable Type Rules for R3 Series Servo Motors and RD5 Series Servo

Adapter motor	Wiring Type	Cable Type	Cable Flexibility	Cable Model	Cable Diagram
R3 Series Motors (40、60、80 Flange) 220V/ (100W-1kW)	Terminal type (front outlet)	Single-turn Encoder Cable	Standard Cable	SC-E117B-□	
			High-flex Cable	SC-E117H-□	
		Multi-turn Encoder Cable	Standard Cable	SC-E127B-□	
			High-flex Cable	SC-E127H-□	
		Power Cable	Standard Cable	SC-M117B-□	
			High-flex Cable	SC-M117H-□	
		Brake Power Cable	Standard Cable	SC-B117B-□	
			High-flex Cable	SC-B117H-□	
R3 Series Motors (40、60、80 Flange) 220V/ (100W-1kW)	Terminal type (rear outlet)	Single-turn Encoder Cable	Standard Cable	SC-E118B-□	
			High-flex Cable	SC-E118H-□	
		Multi-turn Encoder Cable	Standard Cable	SC-E128B-□	
			High-flex Cable	SC-E128H-□	
		Power Cable	Standard Cable	SC-M118B-□	
			High-flex Cable	SC-M118H-□	
		Brake Power Cable	Standard Cable	SC-B118B-□	
			High-flex Cable	SC-B118H-□	

□Indicated cable length: e.g., □=3.0, meaning cable length is 3m. Standard specifications: 3.0m/5.0m/10.0m

LIMON in P.R.China

ADD: Building D8&D9, Zhizao Port, Lane 215, Qingyi Road, High-tech Zone, Ningbo City, Zhejiang Province

TEL : 0574-8751 5351

English Website

LIMON AUTO TECH CO., LTD.

CAT F.401