AUCTECH

High - Performance Field-Bus Servo System

AD2/AD3 Servo Drives

AUCTECH

AUCTECH Automation

Tel:+86 020 8489 8493
Web:www.auctech.com.cn
Guangzhou Auctech Automation Technology Limited

AUCTECH 2023-V2.0

- Power range 0.2~15kW
- EtherCAT high-speed real-
- SS, STO security features integrated
- High pre-state response, current loop period 1.6μs, speed loop period 62.5μs, position loop period 125μs
- High accuracy, up to 25bit encoder support
- Easy to use, with one-touch self-tuning, electronic nameplate, vibration suppression, etc.

Powerful debugging tools

- Parameter configuration, self-learning, curve analysis, etc.

EtherCAT high speed bus

- Minimum communication period 125μs
- Jitter less than 1μs

Flexible IO function

- High-speed DI
- General DI
- DO
- AI
- AO

Multiple input voltage specifications

- 1/3 phase AC220V
- 3-phase AC380V
- DC power supply

Compact volume design

- 20 percent smaller than the previous generation
- Reliable EMC design

Quick and easy terminal wiring

- Easy connection, saving time for on-site installation and maintenance

High level of safety protection design

- STO
- SS

Quick and easy panel operation

- Rigid table integration, debugging is more simple and convenient
- Integrated point-and-click, self-learning, etc.
- Information Diagnostics

Wide range of encoder types

- Tamagawa Encoder. EnDot, Panasonic. Rotation, ABZ

High-performance servo motors

- Large torque range
- Permanent Magnet Synchronous Servo Motor with High Dynamic Response

Excellent control effect

- Position loop period 125μs
- Velocity loop frequency response ≥ 2.5kHz

Applied Industries


Motor Vehicles

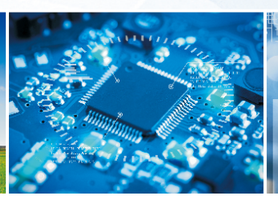

Manipulators and Industrial Robots


Li-ion Battery


Consumer Electronics


Printing


New Energy


Semiconductor and ElectronicsTechnology


Amusement


Food Packaging

AD2&AD3 Series

High-performance Bus Type Servo Drives

AD2&AD3 high-performance servo drives and ASK series servo motors are perfectly combined for a variety of driving applications, and can realize the switching of bit control, speed control and torque control at will. Through the optimized design,AD2&AD3 servo system can have excellent performance, rich functions, stable andreliable, convenient and flexible user experience.

Application

- Return to zero
- Sychronization
- Cams
- Synchronize
- Spatial interpolation
- Movement planning
- XYZ Space robotics
- Scara manipulator
- Delta manipulator
- Six-jointed robots

Ordering Information

AD2 RE-4R2 SA-E-□

(1) (2) (3) (4) (5) (6) (7) (8)

AD2:Series

Code Name	Type of representation
AD2	AD2:Series
AD3	AD3:Series

R:Type of machine

Code Name	Type of representation
R	Standard servo units

E: Control interface method

code name	Description
E	EtherCAT bus-controlled type

4R2:Rated output current

code name	Description
1R8	1.8 Arms
2R8	2.8 Arms
3R5	3.5 Arms
4R2	4.2 Arms
060	6.0Arms
100	10.0Arms
120	12.0Arms
140	14.0Arms
250	25.0Arms
340	34.0Arms

Manufacturer Definition

code name	Description
None	standard type
S	STO type
SA	High-precision analogue input + STO +
T000~T999	Customised

E:First encoder type

code name	Description
E	Communication Encoder

A:Voltage level and input method

code name	Description
A	Single phase AC220V
C	Three-phase AC380V (N2 only)

S:Capacity Rating

code name	Description
S	S Standard Capacity Type
P Note 2)	Capacity Enhanced

Note: 1) Naming rules are only used for model resolution, and cannot be used for ordering, so consult with AUCTECH before ordering.
2) Under the same current capacity, increase the capacitance capacity so as to have a stronger output power, suitable for more frequent current impact occasions.

High-performance servo drives

High-performance Bus Type Servo Drives

For more solutions please visit
www.auctech.com.cn

AD2 Series

High-performance Bus Type
Servo Drives

General Specification

Operating environment

Storage Temperature	-20~65℃
Transport temperature	-20~70℃
Operating Temperature	0~45℃
Relative air humidity	Below 90% RH, no condensation
Vibration strength	4.9m/s ^{2}
impact strength	19.6m/s ^{2}
Altitude of use	Below 1000m; above 1000m, 1.1 per cent for every 400m of elevation, up to 2000m of elevation.
working environment	No corrosive, flammable gases, oil droplets, conductive dust, dust
Protection level	IP20
Flame retardant grade	V0

Voltage

Range	1/3-phase AC200V-AC240V; 3-phase AC345V-AC440V
frequency	50/60Hz ±5%
PWM frequency/ control mode	10K/sine wave current drive

Safety

Safe Torque-Off Standard*	IEC 61800-5-2, SIL3 Ple
Safety stop criteria	

IO

DI	5*DLM, of which 2 high-speed DI (response <10μs), 3 common DI (response <50μs)
DO	4*DO, single max. withstand voltage DC30V, max. continuous current DC50mA
AI	2*AI, 12-bit (16-bit) resolution accuracy, -10V~+10V signals
AO	1*AO, 12-bit resolution accuracy, -10V~+10V signal
Internal DC24V output power	5W

Communication

EtherCAT	CoE(PDO.SDO),DC-Distributed Clock
communication distance	Maximum M100 (ideal environment, good cable material)

Motor connection

output voltage	AC 0~220V / AC 0~400V
output frequency	0~600Hz
Supported Motor Types	Three-phase AC synchronous servo motor
Body Encoder	Communication type 17 bit/23 bit single-turn/multi-turn absolute encoder, wire-saving type ABZ
Second encoder	ABZ, wire-saving type ABZ
Maximum cable length	60m

Note: AI resolution accuracy is 16bit for S-type version.
*Supported bu S model only, please contact AUCTECH for details.

AC220V AD2 Servo Drive Specification

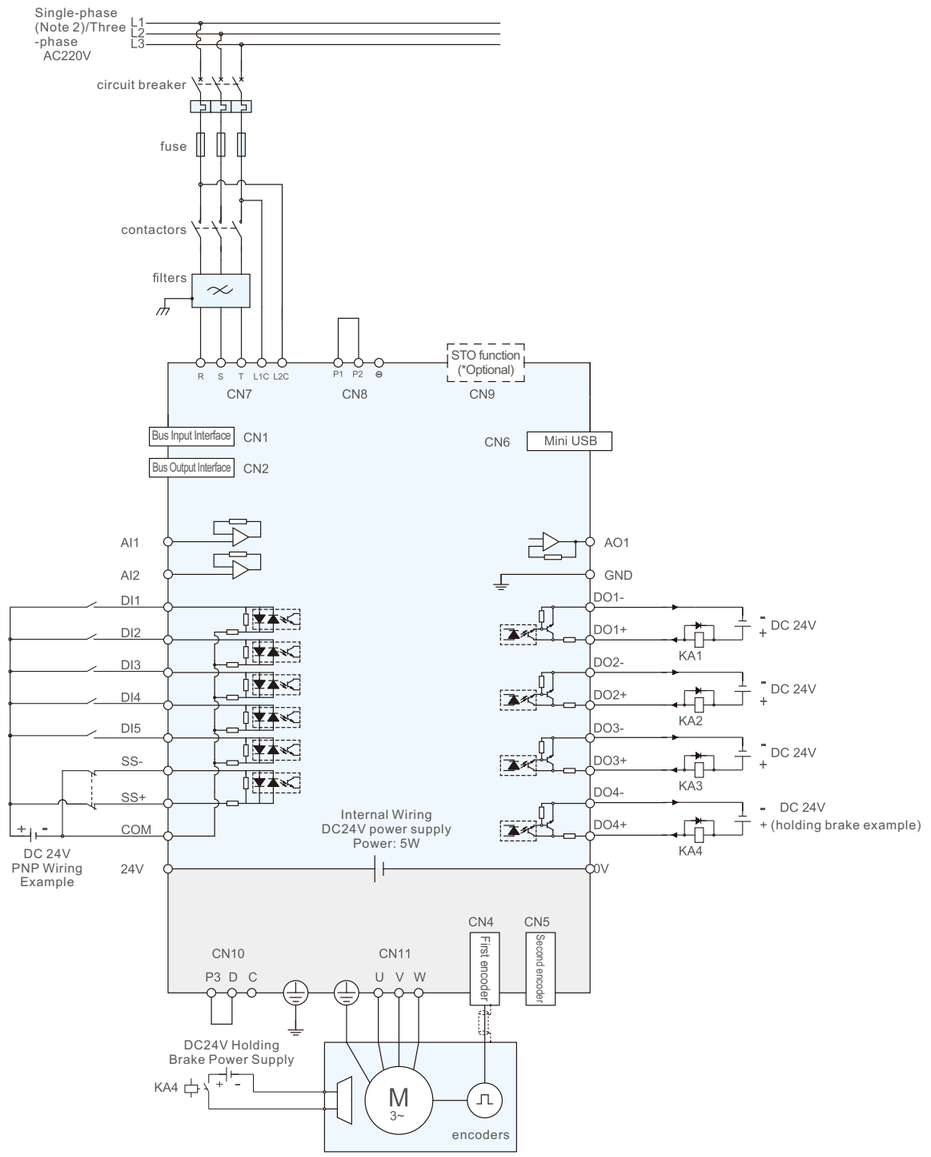
model	1R8SA	2R8SA	4R2SA	060PA	100SA	120SA	120PA	140SA
main power	AC200V~AC240V ; 50/60Hz							
Control power	AC200V~AC240V ; 50/60Hz ; 30W							
power (output)	200W	400W	750W	1.0kW	1.5kW	1.5kW	2.0kW	3.0kW
Single-phase input current	2.5 Arms	4.1 Arms	6.1 Arms	8.2 Arms	10.5 Arms	11.8 Arms	14.0 Arms	20.0 Arms
Three-phase input current	1.2 Arms	1.9 Arms	2.8 Arms	4.0 Arms	6.7 Arms	7.0 Arms	8.2 Arms	9.3 Arms
Rated output current	1.8 Arms	2.8 Arms	4.2 Arms	6.0 Arms	10.0 Arms	12.0 Arms	12.0 Arms	14.0 Arms
Maximum output current	5.4 Arms	8.4 Arms	12.6 Arms	18.0 Arms	30.0 Arms	35.0 Arms	35.0 Arms	35.0 Arms
Overload factor	300%	300%	300%	300%	300%	280%	280%	250%
Built-in braking resistor	×	×	40W，80Ω	60W，40Ω	60W，40Ω	60W，40Ω	100W，20Ω	100W，20Ω
Minimum resistance of external braking resistor	40Ω	40Ω	40Ω	25Ω	25Ω	25Ω	20Ω	20Ω
Dimensional information W*H*D (mm)	45*180*165	45*180*165	45*180*165	60*180*165	60*180*165	60*180*165	70*192*181	70*192*181
Size specification	A1	A1	A1	A2	A2	A2	A3	A3

AC380V AD2 Servo Drive Specification

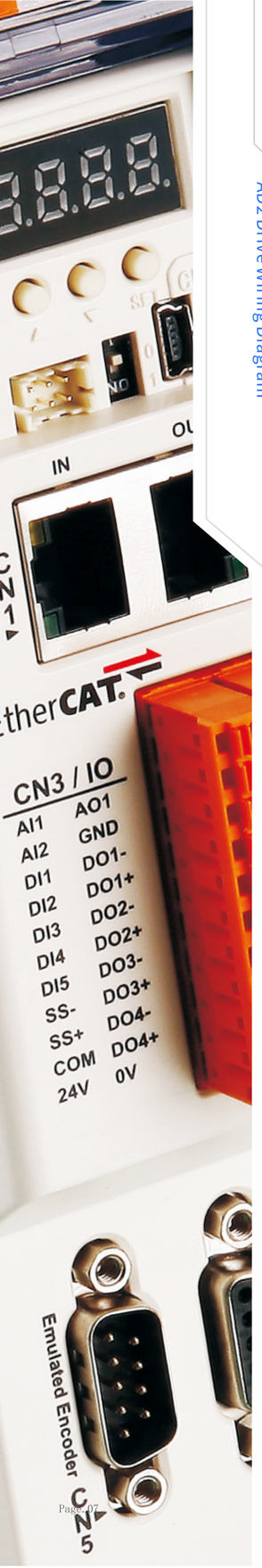
model	5R4SC	6R8SC	8R3SC	100SC	120SC	140SC	210SC	250SC	340SC
main power	Three-phase AC345V~AC440V;50/60HZ								
Control power	DC 24V,-10%~+10% ; 36W								
Minimum drive current consumption	1Arms						1.3Arms		
power (output)	2kW	3kW	4kW	5kW	6kW	7kW	9kW	10kW	15kW
Three-phase input current*	7.3 Arms	9.2 Arms	10.7 Arms	11.7 Arms	14 Arms	17 Arms	24 Arms	28 Arms	38 Arms
Rated output current	5.4 Arms	6.8 Arms	8.3 Arms	10 Arms	12 Arms	14 Arms	21 Arms	25 Arms	34 Arms
Maximum output current	16.2 Arms	20.4 Arms	24 Arms	30 Arms	35 Arms	35 Arms	62.5 Arms	62.5 Arms	66 Arms
Overload factor	300%	300%	290%	300%	290%	250%	290%	250%	194%
Built-in braking resistor	×	×	×	×	×	×	×	×	×
Minimum resistance of external braking resistor	50Ω	50Ω	50Ω	50Ω	50Ω	50Ω	20Ω	20Ω	20Ω
Size information W*H*D (mm)	70*265*218			80*265*218			115*375*218		
Size specification	B1			B2			B3		
Recommended Circuit Breaker Current	Three-phase input current x (matched motor power/matched drive power) (Note 2)								

Note: 1- Refer to the Braking Resistor Selection Table in the Drive Accessories section for external braking resistor selection.
For example: 250SC drive 10KW full load three-phase input current is 28A, matching 9KW servo motor, the recommended circuit breaker current is 28 * 9 / 10 = 25.2A
The data with "*" is the data under the three-phase 380V voltage test.

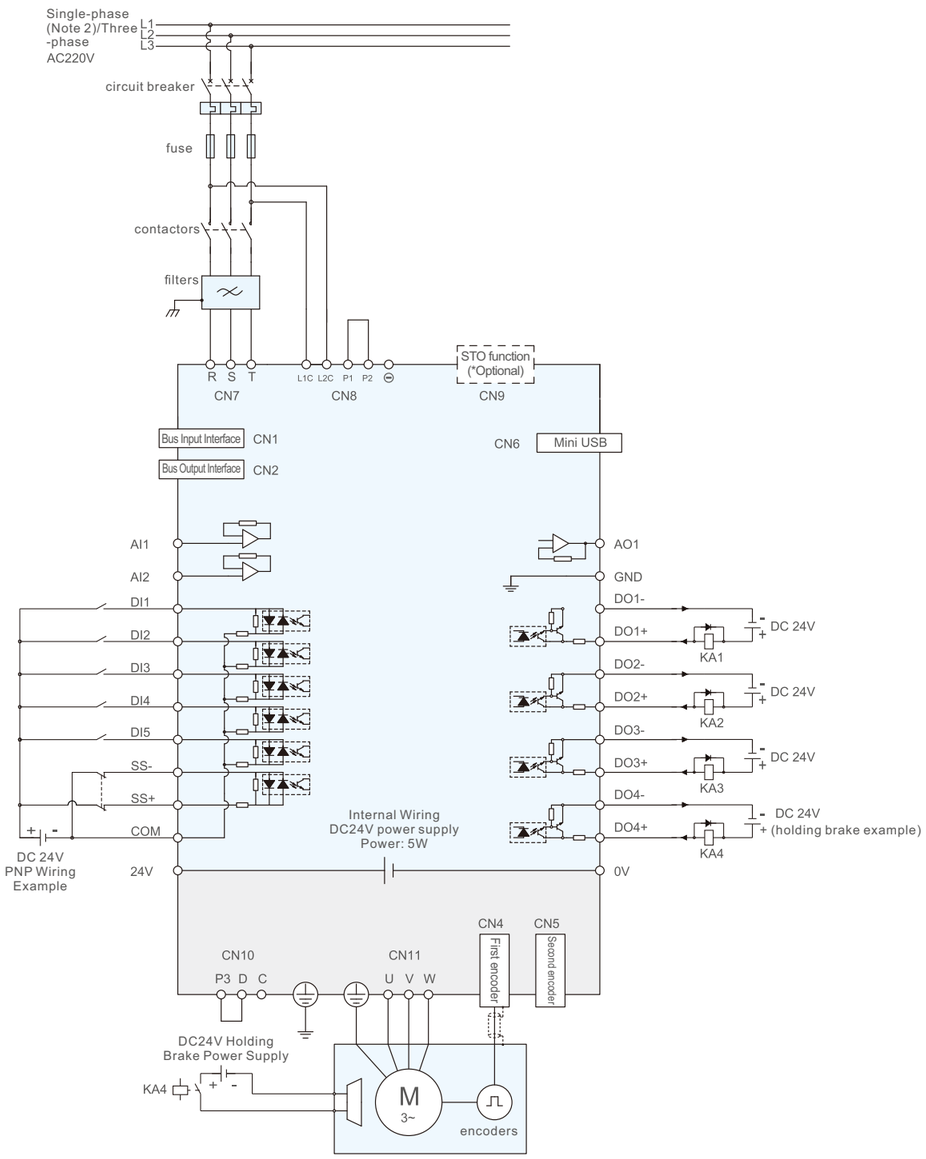
AC220V class A1/A2 specification standard type AD2 Drive Wiring Diagram W



Note: 1) This is a wiring example, the actual wiring varies according to the drive specifications, please refer to the user manual or consult with AUCTECH.
2) For single-phase, wire any two phases of R, S and T.
3) DI1 and DI2 are high-speed DIs.
4) Please refer to the user's manual for the S type and contact AUCTECH for details.

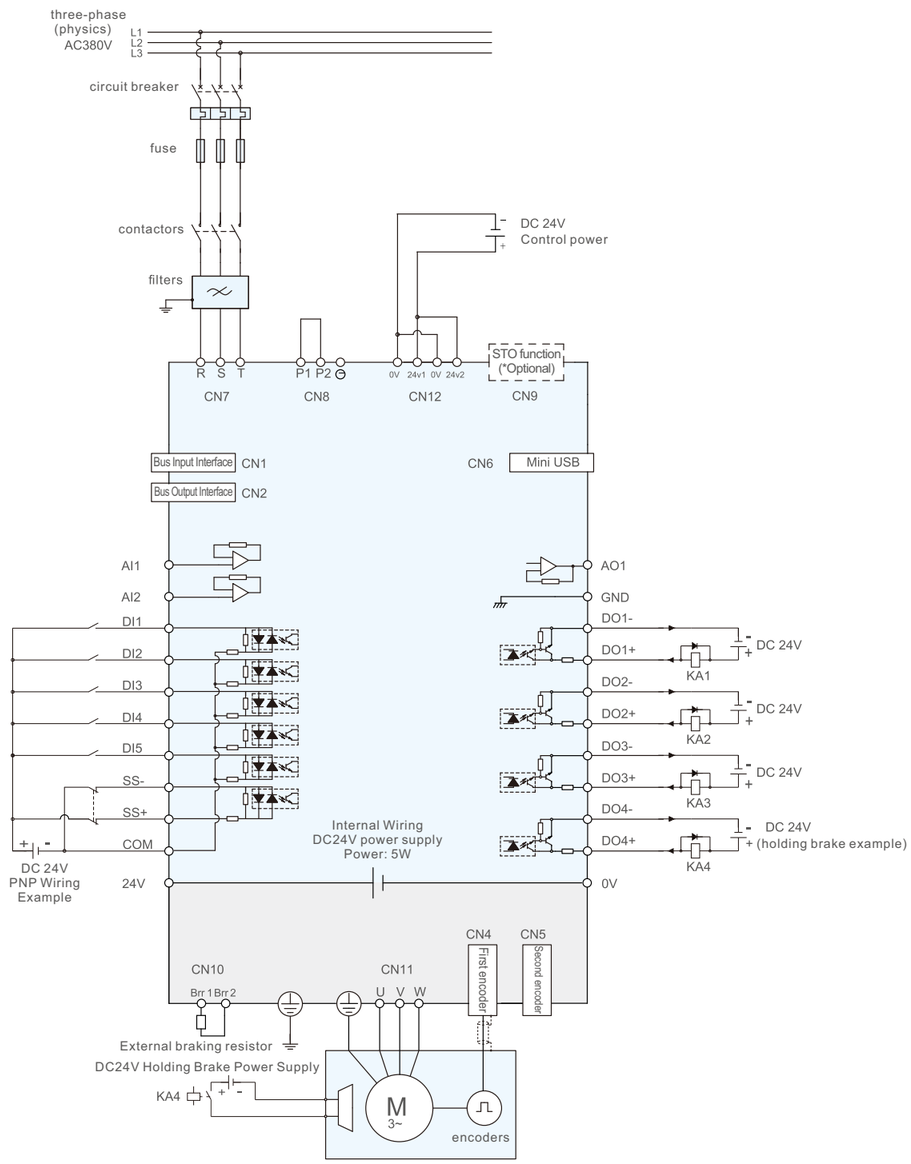


AC220V class A3 specification standard type AD2 Drive Wiring Diagram



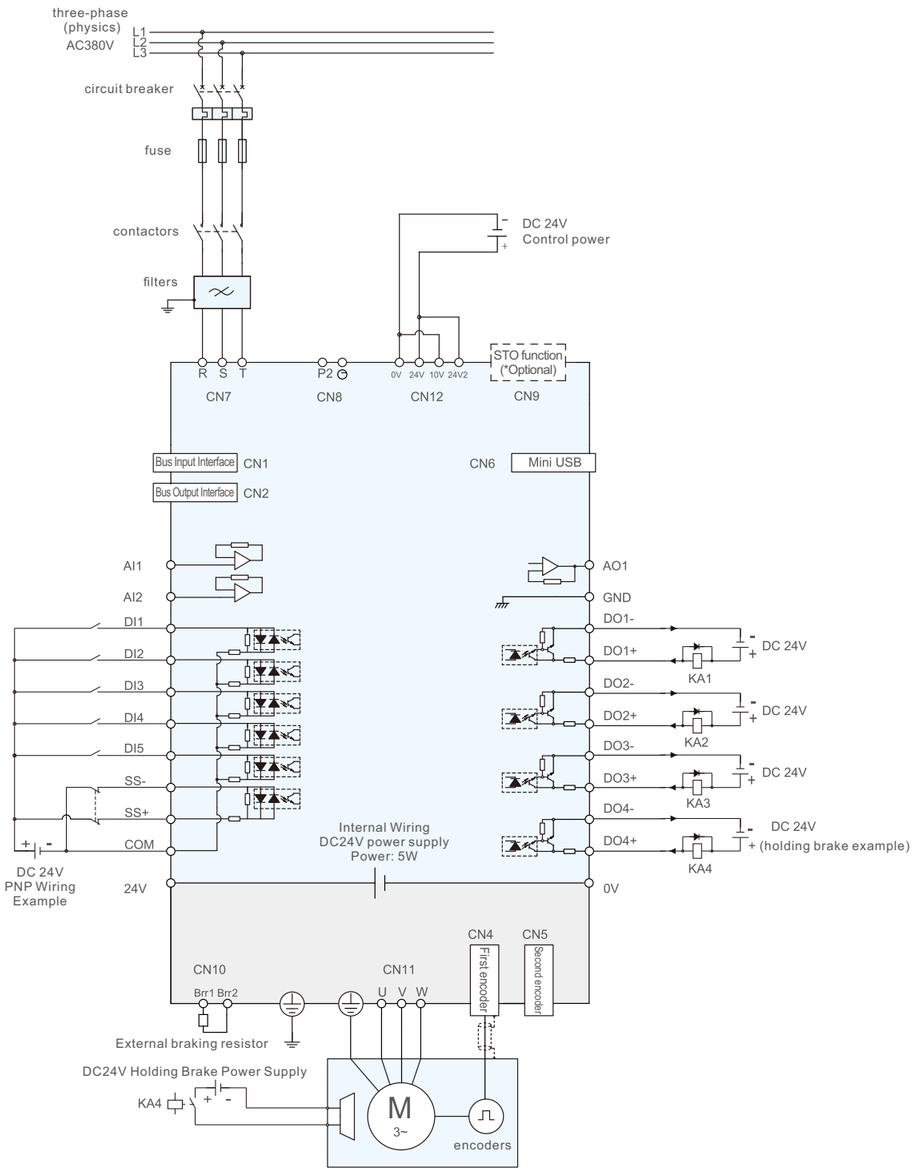
Note: 1) This is a wiring example, the actual wiring varies according to the drive specifications, please refer to the user manual or consult with AUCTECH.
2) For single-phase, wire any two phases of R,S and T.
3) DI1 and DI2 are high-speed DIs.
4) For S type, please refer to the user's manual, for more information, please contact AUCTECH.

AC220V class B1/B2 specification standard type AD2 Drive Wiring Diagram



Note: 1) This is a wiring example, the actual wiring varies according to the drive specifications, please refer to the user manual or consult with AUCTECH.
2) This wiring is an example of wiring for B1 and B2 size drivers, and should not be used for B3 size drivers.
3) DI1 and DI2 are high-speed DIs.
4) For S type, please refer to the user's manual, for more information, please contact AUCTECH.

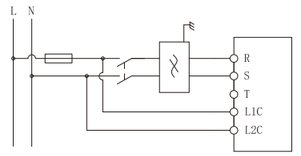
AC380V class B3 specification standard type
AD2 Drive Wiring Diagram



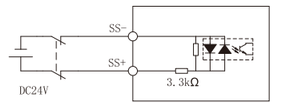
Note: 1) This is a wiring example, the actual wiring varies according to the drive specifications, see the user manual or consult with AUCTECH.
2) DI1 and DI2 are high-speed DIs.
3) For S type, please refer to the user's manual and contact AUCTECH for details.

Wiring Diagram

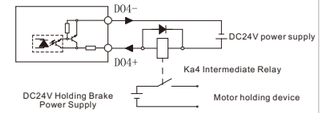
Mains wiring when using single-phase AC220V (can be connected to any two of the RSTs)



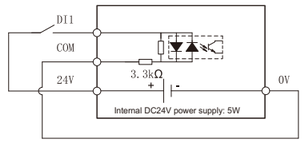
Emergency stop wiring diagram (normally closed wiring example)
Note chapter: drive emergency stop channel configuration and the actual wiring consistent



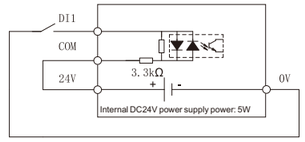
Example of DO output wiring a holding brake
Note: Please pay attention to the direction of current flow and the use of external circuits with diodes, and make sure that the diode polarity is correctly wired. Also check whether the DO channel of the servo drive is configured as a holding brake output.



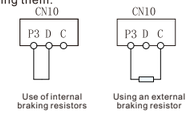
PNP signal input wiring when using internal DC24V power supply



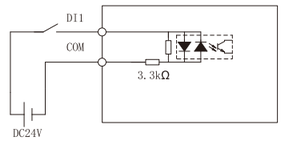
NPN Signal Input Wiring for Internal DC24V Supply



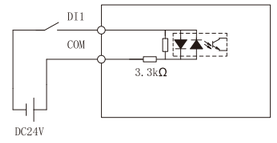
Wiring when using internal and external braking force resistors respectively
Note: When using an external braking resistor, it is necessary to cancel the shorting piece between P3 and D. In addition, some models of A1 specification, and some models of B1, B2, and B3 specification do None a built-in braking resistor, so please pay attention to this when using them.



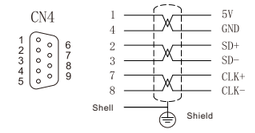
PNP signal input wiring when using external DC24V power supply



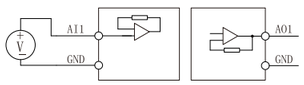
NPN signal input wiring when using external DC24V power supply



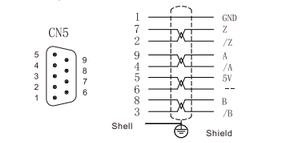
CN4 Encoder Pinout Example
Note that the maximum current output capability between the 5V,GND pins is 200mA.



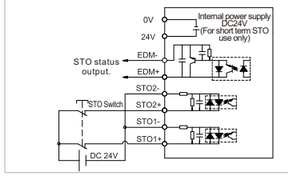
Analogue wiring example (standard type)
Inputs and outputs are all -10V-10V with 12-bit resolution.
Note: Always use twisted shielded cable.



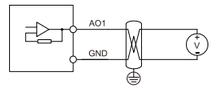
Analogue wiring example (standard type)
Inputs and outputs are all -10V-10V with 12-bit resolution.
Note: Always use twisted shielded cable.



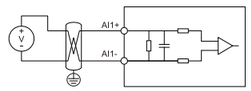
Cn9 STO function wiring(S type)



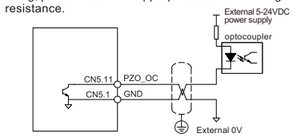
Analogue wiring example (standard type)
Inputs and outputs are all -10V-10V with 12-bit resolution.
Note: Always use twisted shielded cable.



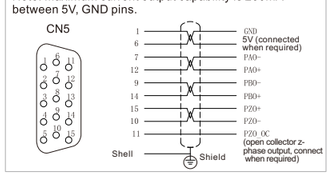
Analogue wiring example (standard type)
Inputs and outputs are all -10V-10V with 12-bit resolution.
Note: Always use twisted shielded cable.



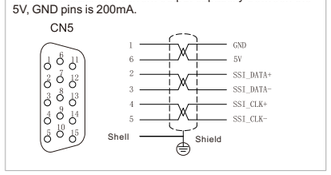
Cn5 open collector Z-phase output wiring (S type)
Note that Open collector only supports NPN type, and the maximum current output capacity is 50mA. When using, please match the appropriate current limiting resistance.



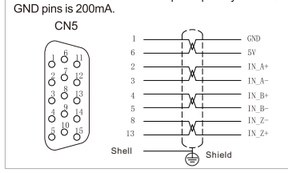
CN5 2nd encoder - crossover output wiring (S type)
Note: Maximum current output capability is 200mA between 5V, GND pins.



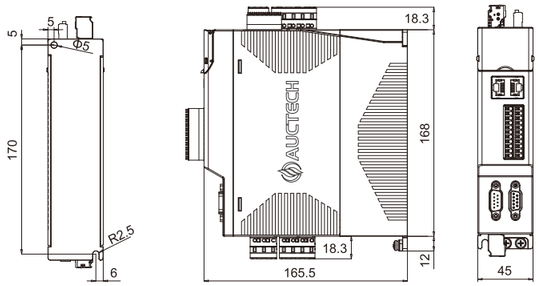
CN5 Second Encoder - SSI Encoder Input Wiring (S type)
Note: The maximum current output capability between the 5V, GND pins is 200mA.

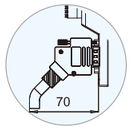


CN5 Second Encoder - ABZ Encoder Input Wiring (S type)
Note: The maximum current output capability between the 5V, GND pins is 200mA.



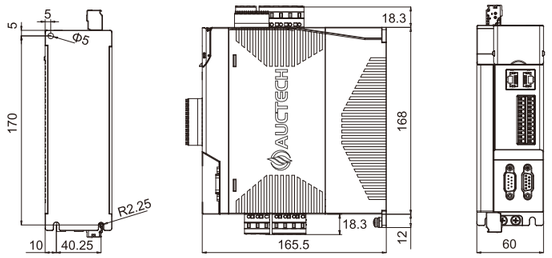
AC220V Class AD2 Drive Specification Dimension Drawing

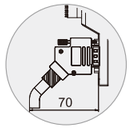




Note: The minimum cable bend distance is 70mm.

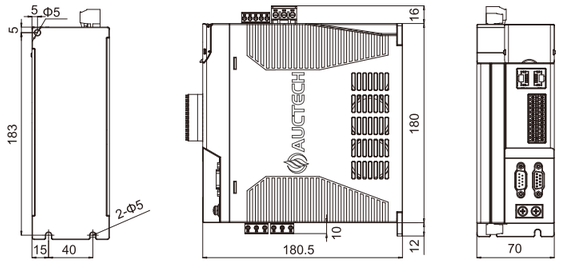
No.	Drive Model	Specification size WxHxD (mm)
1	AD2RE-1R8SA	A1 45x180x165
2	AD2RE-2R8SA	
3	AD2RE-4R2SA	

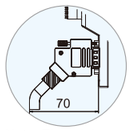




Note: The minimum cable bend distance is 70mm.

No.	Drive Model	Specification size WxHxD (mm)
1	AD2RE-060PA	A2 60x180x165
2	AD2RE-100SA	
3	AD2RE-120SA	

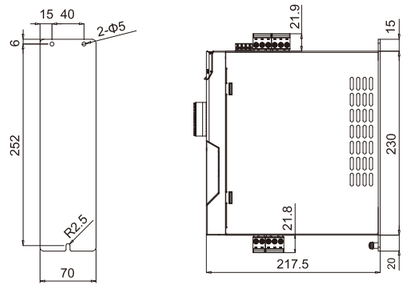


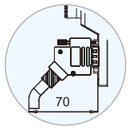


Note: The minimum cable bend distance is 70mm.

No.	Drive Model	Specification size WxHxD (mm)
1	AD2RE-120PA	A3 70x192x181
2	AD2RE-140SA	

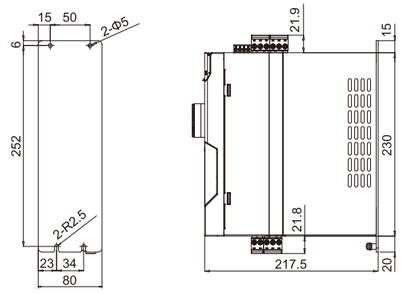
AC380V Class AD2 Drive Specification Dimension Drawing

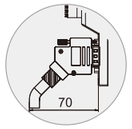




Note: The minimum cable bend distance is 70mm.

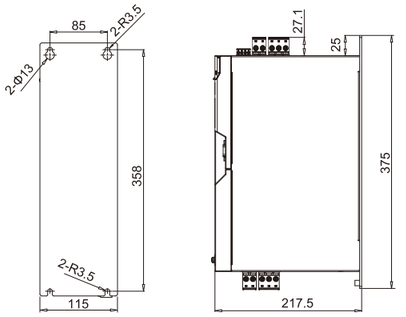
No.	Drive Model	Specification size WxHxD (mm)
1	AD2RE-5R4SC	B1 70X265X218
2	AD2RE-6R8SC	
3	AD2RE-8R3SC	

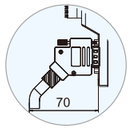




Note: The minimum cable bend distance is 70mm.

No.	Drive Model	Specification size WxHxD (mm)
1	AD2RE-100SC	B2 80X265X218
2	AD2RE-120SC	
3	AD2RE-140SC	



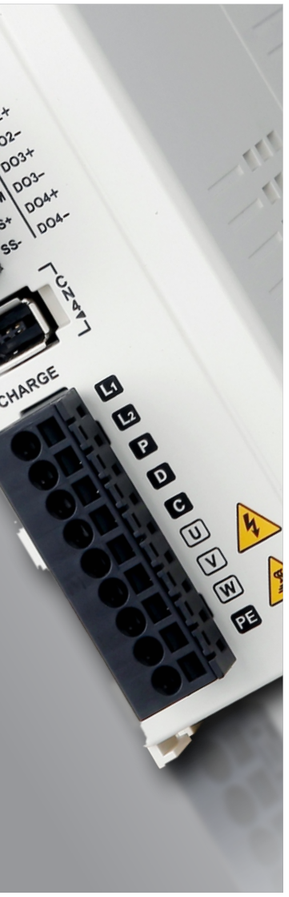


Note: The minimum cable bend distance is 70mm.

No.	Drive Model	Specification size WxHxD (mm)
1	AD2RE-210SC	B3 115X375X218
2	AD2RE-250SC	
3	AD2RE-340SC	

AD3 Series

High-performance Bus Type Servo Drives



AD3 Technical Parameter General Specification

Operating environment

Storage temperature	-20~65℃
transport temperature	-20~70℃
operating temperature	0~45℃
Relative air humidity	Below 90% RH, no condensation
Vibration strength	4.9m/s ^{2}
Impact strength	19.6m/s ^{2}
Use of seabed heights	Below 1000m; above 1000m, 1.1% is reduced for each 100m of elevation The highest used sea level is 2000m.
working environment	Non-corrosive, no flammable gases, no oil drips, no conductive dust, no dirt
Protection level	IP20
Flame retardant grade	V0

Voltage

range	AC200V~AC240V
frequency	50/60Hz ±5%
PWM frequency/ control mode	8K/sine wave current drive

Safety

Safe Torque Off Break Standard*	IEC 61800-5-2, SIL3 Ple
Safety stop criteria	

IO

DI	5*DI with 200μs refresh period
DO	4*DO, single maximum withstand voltage DC30V, maximum continuous current DC50mA

Communication

EtherCAT	COE(PDO,SDO),DC-Distributed clock with synchronization cycle jitter less than 1μs
communication distance	Maximum M100 (Ideal environment, good cable material)

Motor connection

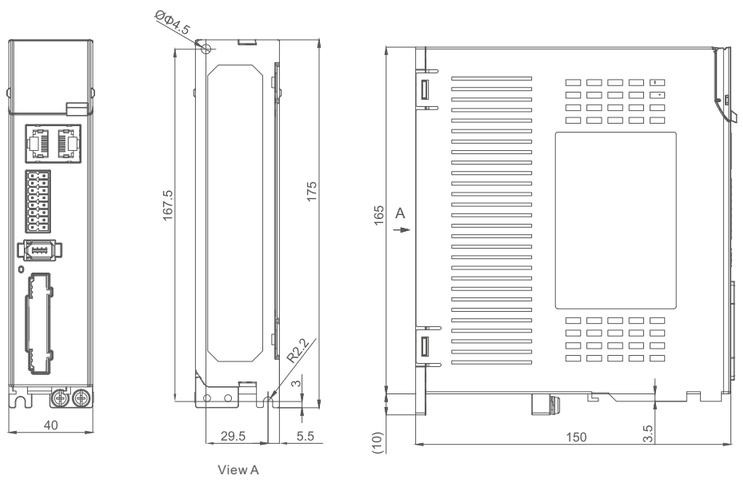
output voltage	AC 0~220V
output frequency	0~600Hz
Supported Motor Types	Three-phase AC synchronous servo motor
Body Encoder	Communicating 17-bit/23-bit encoder
Maximum cable length	60m

*Only customized models are supported, please contact us for details.

AC220V AD3 Servo Drive Specification

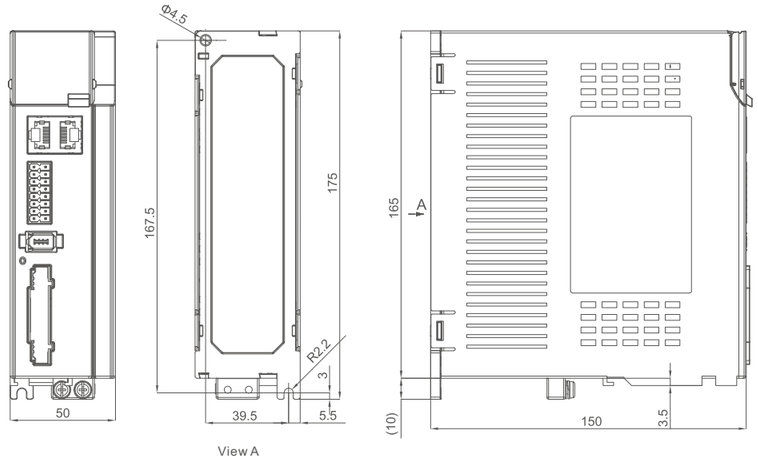
Model	1R8SA	2R8SA	3R5SA	4R2SA
Input power supply	AC 200V ~ AC 240V			
Frequency	50/60 Hz			
Power	200 W	400 W	600 W	750 W
Single-phase input current	2.5 A rms	4.1 A rms	5.2 A rms	6.1 A rms
Rated output current	1.8 A rms	2.8 A rms	3.5 A rms	4.2 A rms
Maximum output current	7.2 A rms	9.8 A rms	10.5 A rms	12.6 A rms
Overload factor	400%	350%	300%	300%
Built-in braking resistor	×	×	40W, 80 Ω	40W, 80 Ω
Minimum resistance of external braking resistor	50Ω	50Ω	50Ω	50Ω
Dimension Information WxHxD(mm)	40x175x150	40x175x150	50x175x150	50x175x150
Size specification	C1	C1	C2	C2

AC220V Class AD3 Drive Specification Dimension Drawing



No.	Drive Model
1	AD3RE-1R8SA
2	AD3RE-2R8SA

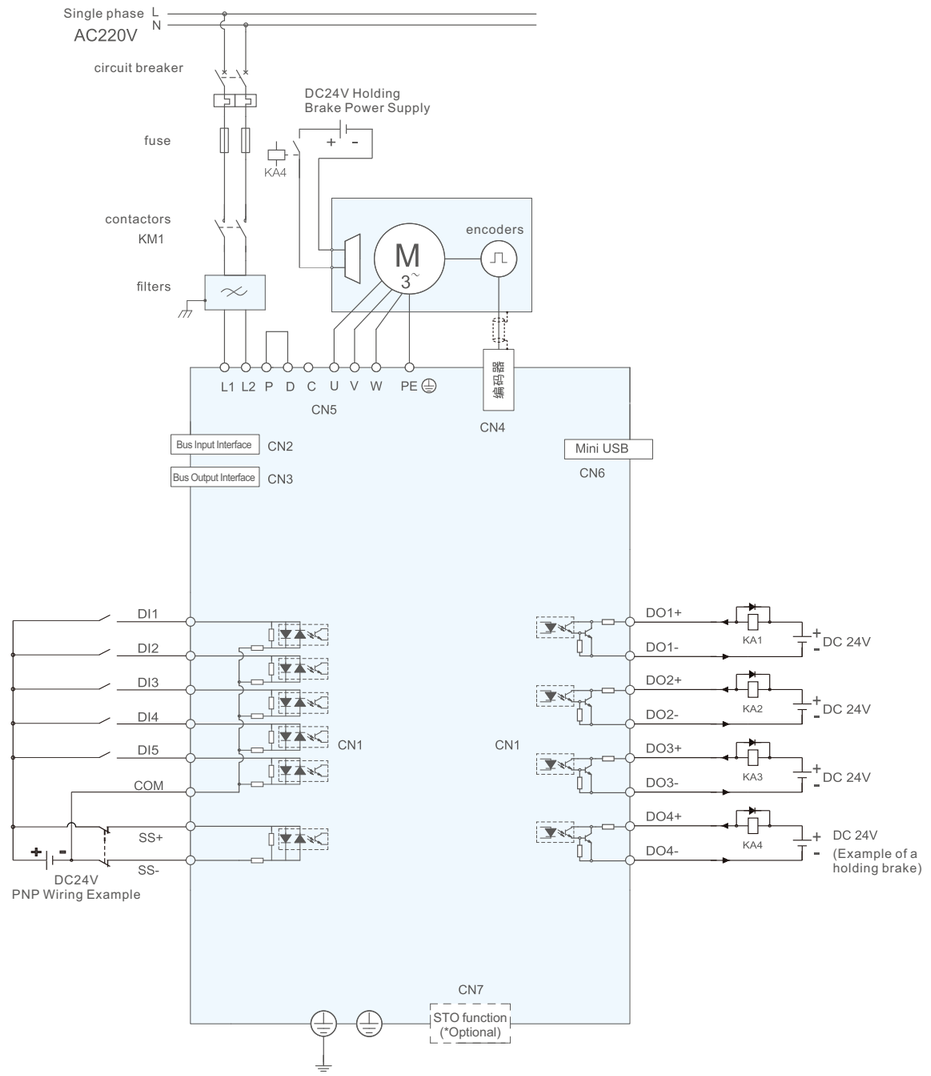
Dimensions WxHxD(mm)
C1 40x175x150



No.	Drive Model
1	AD3RE-3R5SA
2	AD3RE-4R2SA

Dimensions WxHxD(mm)
C2 50x175x150

AC220V AD3 Drive Wiring Diagram

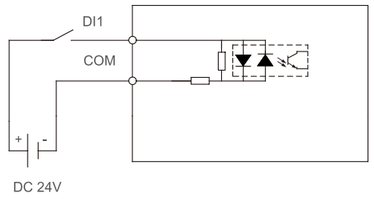


Note:

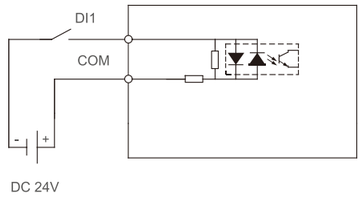
1. This is the wiring diagram for the standard AD3 driver. Before wiring, please carefully check whether the actual driver matches it or not.

Drive Wiring Diagram

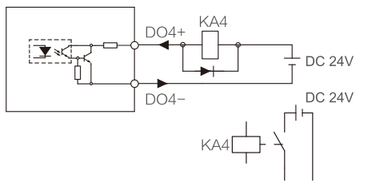
PNP signal input wiring when using external DC24V power supply



NPN signal input wiring when using external DC24V power supply

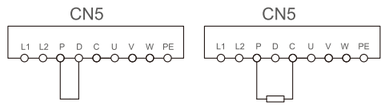


DO Output Wiring - Brake Example
Note: Please pay attention to the direction of current flow and the external circuit where the collector is used.



Motor holding device

Wiring when using internal and external braking resistors respectively
Note: When external braking resistor is used, it is necessary to cancel the shorting piece between P and D.



Use of internal braking resistors

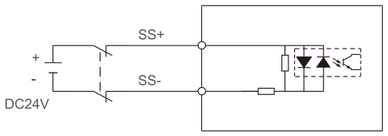
Using an external braking resistor

Drive Wiring Diagram

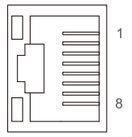
Motor Encoder CN4 Interface Pin Definitions

	Communication Encoder
1	5V
2	GND
3	CLOCK+
4	CLOCK+
5	SD+
6	SD-
Shell	Shield

Emergency stop connection diagram (normally closed wiring example)

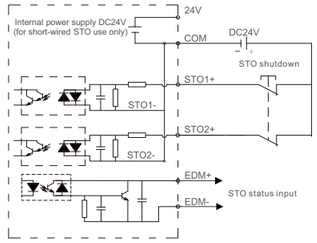


EtherCAT network port definition



1	TD+
2	TD-
3	RD+
4	Reserve
5	Reserve
6	RD-
7	Reserve
8	Reserve

STO function to pick up the finding map (customized version only)



Braking Resistor Selection Table

Drive Model	Matching Motor Power	Drive Internal Braking Resistor	Recommended external braking resistor*			Maximum braking energy EC (J) that can be absorbed by the driver capacitor
			Model	Power	Resistance	
AD2RE-1R8SA、AD3RE-1R8SA	200W	None	RXLG-100W 50RJ	100W	50Ω	20
AD2RE-2R8SA、AD3RE-2R8SA	400W		RXLG-100W 50RJ	100W	50Ω	
AD2RE-3R5SA、AD3RE-3R5SA	600W	40W;80Ω	RXLG-200W 50RJ	200W	50Ω	
AD2RE-4R2SA、AD3RE-4R2SA	750W		RXLG-200W 50RJ	200W	50Ω	
AD2RE-060PA	850W	60W;40Ω	RXLG-200W 25RJ	200W	25Ω	34
	1.0kW		RXLG-200W 25RJ	200W	25Ω	
AD2RE-100SA	1.0kW		RXLG-200W 25RJ	200W	25Ω	
	1.5kW		RXLG-400W 25RJ	400W	25Ω	
AD2RE-120SA	1.0kW		RXLG-200W 25RJ	200W	25Ω	
	1.3KW		RXLG-400W 25RJ	400W	25Ω	
	1.5kW		RXLG-400W 25RJ	400W	25Ω	
AD2RE-120PA	1.8kW	100W; 20Ω	RXLG-400W 25RJ	400W	25Ω	60
	2.0kW		RXLG-400W 25RJ	400W	25Ω	
AD2RE-140SA	2.5kW		RXLG-500W 25RJ	500W	25Ω	
	2.6kW		RXLG-500W 25RJ	500W	25Ω	
	3.0kW		RXLG-800W 25RJ	800W	25Ω	
AD2RE-5R4SC	1.0kW	None	RXLG-200W 50RJ	200W	50Ω	130
	2.0kW		RXLG-400W 50RJ	400W	50Ω	
AD2RE-6R8SC	1.3kW		RXLG-400W 50RJ	400W	50Ω	
	1.5kW		RXLG-400W 50RJ	400W	50Ω	
	2.0kW		RXLG-400W 50RJ	400W	50Ω	
	2.5kW		RXLG-500W 50RJ	500W	50Ω	
	3.0kW		RXLG-800W 50RJ	800W	50Ω	
AD2RE-8R3SC	1.8kW		RXLG-400W 50RJ	400W	50Ω	
	2.5kW		RXLG-500W 50RJ	500W	50Ω	
	3.5kW		RXLG-800W 50RJ	800W	50Ω	
	4.0kW		RXLG-800W 50RJ	800W	50Ω	
AD2RE-100SC	2.3kW	None	RXLG-500W 50RJ	500W	50Ω	156
	3.0kW		RXLG-800W 50RJ	800W	50Ω	
	4.0kW		RXLG-800W 50RJ	800W	50Ω	
	5.0kW		RXLG-1000W 50RJ	1000W	50Ω	
AD2RE-120SC	6.0kW	None	RXLG-1500W 50RJ	1500W	50Ω	156
AD2RE-140SC	7.0kW		RXLG-1500W 50RJ	1500W	50Ω	
AD2RE-180SC	8.3kW		RXLG-2000W 50RJ	2000W	50Ω	
AD2RE-250SC	10.0kW	None	RXLG-2000W 25RJ	2000W	25Ω	203
AD2RE-340SC	11.0kW	None	RXLG-2500W 25RJ	2500W	25Ω	270
	13.2kW		RXLG-3000W 25RJ	3000W	25Ω	
	14.7kW		RXLG-3000W 25RJ	3000W	25Ω	
	15.0kW		RXLG-3000W 25RJ	3000W	25Ω	

Note: The power of the gliding resistor in the selection table is the recommended power, and you can choose the appropriate power according to the demand. (External braking resistors need to be purchased by the user)

Naming rules for braking resistors

RXLG - 1000W - 50R J

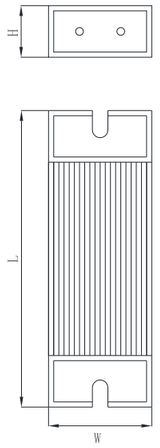
① Aluminum Housed Resistor Series

② power
100W
200W
...
3000W

③ Resistance value
25R 25Ω
50R 50Ω

④ Error
J ±5%

Dimensions



(Schematic diagram of braking resistor)

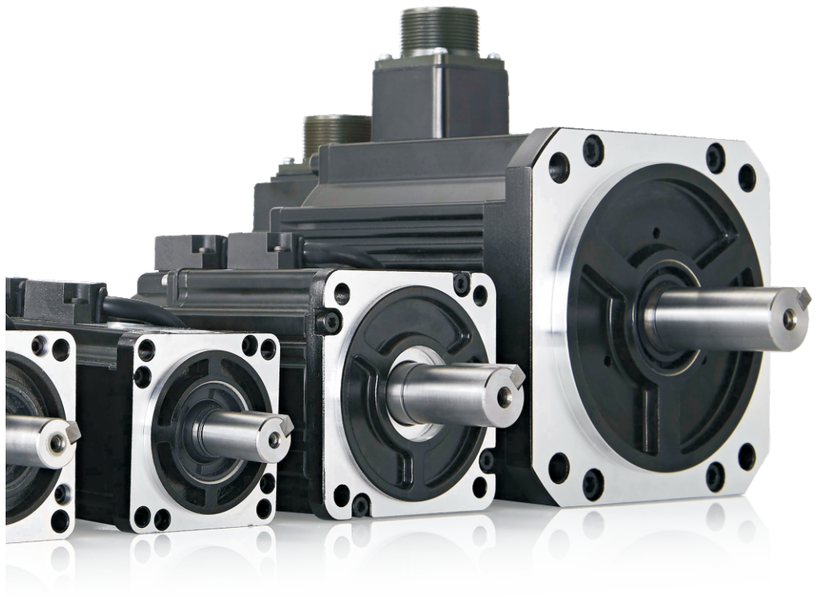
No.	Braking Resistor Model	Specification size LxWxH(mm)
1	RXLG-100W 50RJ	115x40x20
2	RXLG-200W 50RJ / RXLG-200W 25RJ	165x60x30
3	RXLG-400W 50RJ / RXLG-400W 25RJ	265x60x30
4	RXLG-500W 50RJ / RXLG-500W 25RJ	285x60x30
5	RXLG-800W 50RJ / RXLG-800W 25RJ	335x60x30
6	RXLG-1000W 50RJ	300x100x50
7	RXLG-1500W 25RJ / RXLG-1500W 50RJ	400x100x50
8	RXLG-2000W 25RJ / RXLG-2000W 50RJ	450x100x50
9	RXLG-2500W 25RJ	485x100x50
10	RXLG-3000W 25RJ	550x100x50

Functional Characteristics

- High-performance rare-earth permanent magnet rotor' High-medium and low inertia selectable, good dynamic response
- Three opposite potential sinusoidal design, very low cogging torque, good low-speed smooth characteristic.
- Output shaft protected by oil seals and standard brake as an option
- Protection class IP65 or IP67, insulation class B or F
- Conforms to CE marking standards

Optional encoder feedback method

- Incremental Encoders
- Multi-turn absolute encoders



KMT Series Motor Model Description

ASK 130 – 4 – 054 M 15 30 B – A

ASK Series Servo

Flange grade

40 flange; 130 flange; 180flange;
100 flange; 130 flange; 180 flange;
200 flange; 230 flange

Voltage Rating

2: AC200V
4: AC380V

Rated Tirqye

054 means 54Nm

Rotational inertia class

L: Low inertia
M: Medium inertia
H: High inertia

Rated speed

15:1500rpm; 20:2000rpm
25:2500rpm; 30:3000rpm

Rated speed

15:1500rpm; 20:2000rpm
25:2500rpm; 30:3000rpm

Max speed

15:1500rpm; 20:2000rpm
25:2500rpm; 30:3000rpm

None: without breakerer

B: with breaker

Encoder type

A : : 23-bit multi-turn absolute encodere
A1: 17-bit Optoelectronic encodere
A2: 17-bit magnet encodere

Notes:
1) The naming rules are only used for model interpretation, and cannot be used for ordering, please consult with AUCTECH before ordering.
2) The presence or absence of oil seals and brakes will result in different motor characteristics;
3) The motor data may be changed, so please confirm with AUCTECH when using it for design purposes.

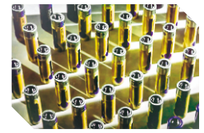
ASK Series

Three-phase AC permanent magnet synchronous servo motor

ASK three-phase AC permanent magnet synchronous servo motors are 4/5 poles,low cogging torque design, with AD2 & AD3 servo drives to form a powerful, high-performance servo system.The motor supports 3 times overload, and different types of encoders can be selected according to the actual site requirements, which can fully meet your high level requirements for dynamic response performance, speed range, position feedback accuracy, and output torque accuracy!

Typical application

Typical Applications



SmartDrives

40/60/80Flange

AC220V

3000rpm

0.1kW~1kW

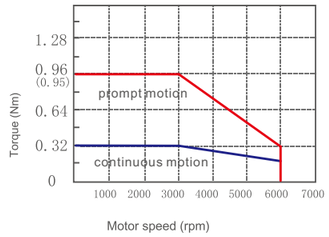
Motor Technical Data

Motor Model	ASK40-2-003M3060	ASK60-2-006M3060	ASK60-2-013M3050	ASK80-2-024M3050	ASK80-2-032M3050
Voltage U(AC)	220V				
Rated power Pr(kW)	0.1	0.2	0.4	0.75	1
Rated current Ir(Arms)	0.92	1.5	2.1	4.1	5.7
Rated torque Tr(Nm)	0.32	0.64	1.27	2.39	3.19
Running speed Nr(rpm)	3000	3000	3000	3000	3000
Maximum current Imax(Arms)	2.85	5.5	6.5	13.4	17.7
Maximum torque Tmax(Nm)	0.95	2.23	3.81	7.17	9.56
Maximum speed Nmax(rpm)	6000	6000	5000	5000	5000
Torque coefficient Kt (Nm/A)	0.38	0.427	0.605	0.645	0.56
Moment of inertia Jm (10Kg^{4} -.m2)	0.062(0.072)	0.28(0.30)	0.56(0.58)	1.5(1.65)	2.0(2.15)
Electrical time constant te (ms)	0.81	2.46	2.11	4.71	5.09
Mechanical time constant tm (ms)	1.128	1.432	1.151	0.919	0.822
Weight (kg)	0.43 (0.59)	0.95 (1.35)	1.3 (1.55)	2.12 (2.7)	2.8(3.4)
Heatsink Size(mm)	Aluminum 200x200x6		Aluminum 250x250x6		
Clamping voltage Ub(DC)	24V				
Holding current Ib(A)	0.29	0.31		0.48	
Holding torque Tb (Nm)	≥0.4	≥1.5		≥3.2	
Driver Adaptation Information					
Recommended cable cross-sectional area (mn2)	0.5	0.5	0.5	0.5	0.5
Recommended Drive Models	AD3RE-1R8SA-E	AD3RE-1R8SA-E	AD3RE-2R8SA-E	AD3RE-4R2SA-E	AD2RE-060PA-E

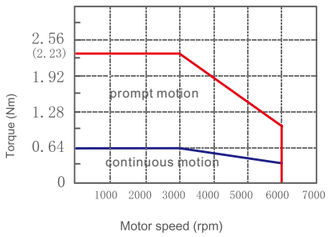
Note: The above is the standard type, ( ) is the parameter of motor with holding brake;

Torque-Speed Characteristics

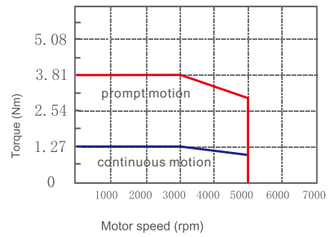
ASK40-2-003M3060



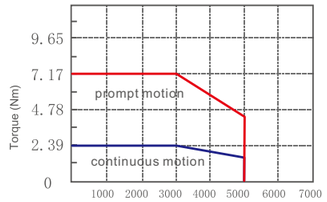
ASK60-2-006M3060



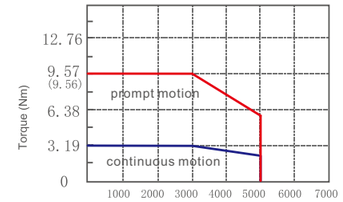
ASK60-2-013M3050



ASK80-2-024M3050

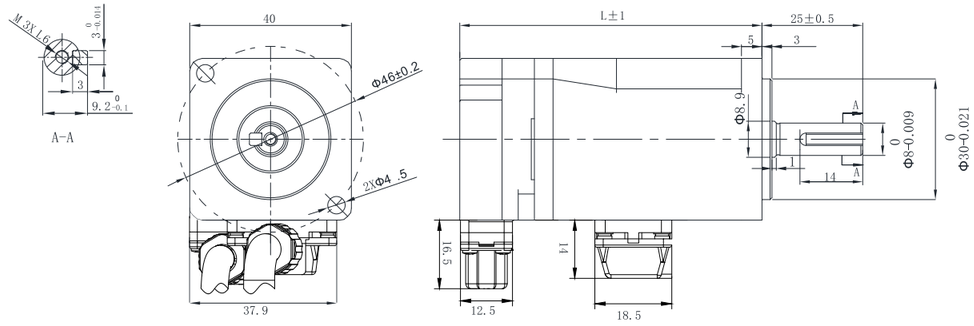


ASK80-2-032M3050



Note: Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

ServoMotor Dimensions (40 Flange)

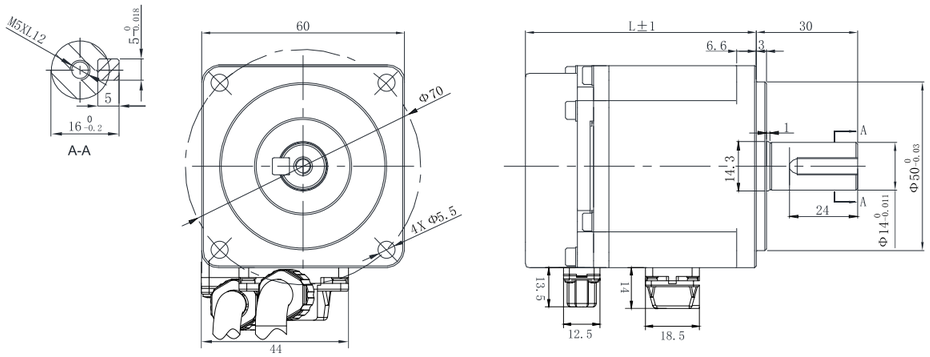


External Dimension

Unit (mm)

Motor Model	L (without brake size)	L (with brake size)
ASK40-2-003M3060	67.7	95

Servo Motor Dimensions (60 Flange)

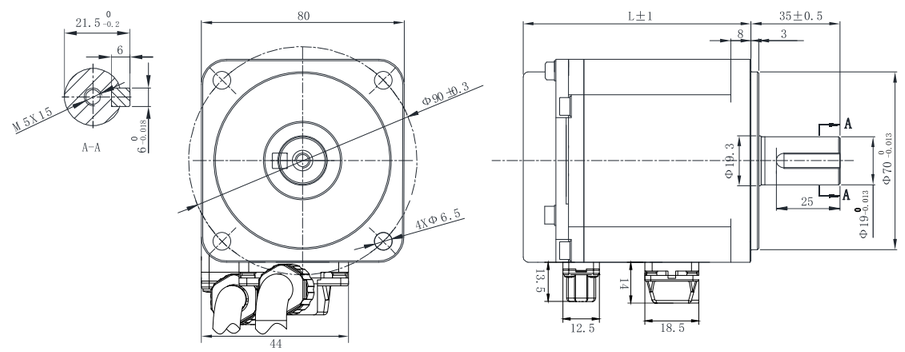


External Dimension

Unit (mm)

Motor Model	L (without brake size)	L (with brake size)
ASK60-2-006M3060	71.8	101.1
ASK60-2-013M3050	88.8	118.1

Servo Motor Dimensions (80 Flange)



External Dimension

Unit (mm)

Motor Model	L (without brake size)	L (with brake size)
ASK80-2-024M3050	90.9	121.9
ASK80-2-032M3050	103.9	134.9

130 Flange

AC220V

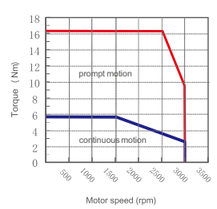
1500rpm

0.85kW~1.8kW

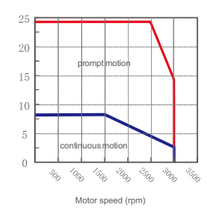
Motor Technical Data

Motor Model	ASK130-2-054M1530	ASK130-2-083M1530	ASK130-2-096M1530	ASK130-2-115M1530
Voltage U(AC)	220V			
Rated power Pr(kW)	0.85	1.3	1.5	1.8
Rated current Ir(Arms)	6.12	9.25	11.5	12.9
Rated torque Tr(Nm)	5.41	8.27	9.55	11.46
Rated speed Nr(rpm)	1500	1500	1500	1500
Maximum current Imax(Arms)	18.4	27.75	34.5	34.9
Maximum torque Tmax(Nm)	16.2	24.81	28.7	31
Maximum speed Nmax (rpm)	3000	3000	3000	3000
Torque coefficient Kt (Nm/A)	0.88	0.89	0.83	0.89
Moment of inertia Jm (10Kg-4 .m)^2	9.0(10.5)	13.0(14.5)	17(18.5)	21.7(23.2)
Electrical time constant te (ms)	8.47	8.89	7.4	12.33
Mechanical time constant tm (ms)	1.60(1.86)	1.42(1.58)	1.64(1.78)	1.11(1.19)
Weight (kg)	5.8(7.4)	7.0(8.8)	8.4 (10.2)	10(11.8)
Heatsink Size(mm)	Aluminum 300x300*12			
Clamping voltage Ub(DC)	24V			
Holding current Ib(A)	0.69			
Braking torque Tb(Nm)	>12			
Driver Adaptation Information				
Recommended cable cross-sectional area (mm)^2	0.75	1.5	1.5	2.5
Recommended Drive Models	AD2RE-060PA-E	AD2RE-100SA-E	AD2RE-120SA-E	AD2RE-120PA-E

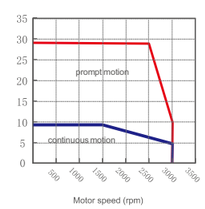
ASK130-2-054M1530



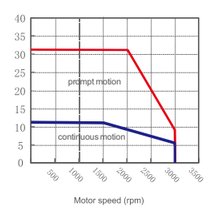
ASK130-2-083M1530



ASK130-2-096M1530



ASK130-2-115M1530



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

130 Flange

AC220V

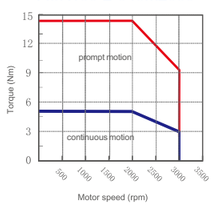
2000rpm

1kW~2.5kW

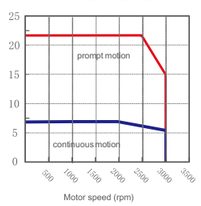
Motor Technical Data

Motor Model	ASK130-2-048M2030	ASK130-2-072M2030	ASK130-2-096M2030	ASK130-2-119M2030
Voltage U(AC)	220V			
Rated power Pr(kW)	1	1.5	2	2.5
Rated current Ir(Arms)	5.4	8	11.5	13.4
Rated torque Tr(Nm)	4.77	7.16	9.55	11.9
Rated speed Nr(rpm)	2000	2000	2000	2000
Maximum current Imax(Arms)	16.2	24	34.5	34.9
Maximum torque Tmax(Nm)	14.3	21.5	28.6	31
Maximum speed Nmax (rpm)	3000	3000	3000	3000
Torque coefficient Kt (Nm/A)	0.88	0.90	0.83	0.89
Moment of inertia Jm (10Kg-4 .m)^2	9(10.5)	13.0(14.5)	17.0(18.5)	21.7(23.2)
Electrical time constant te (ms)	8.47	8.89	7.40	12.33
Mechanical time constant tm (ms)	1.60(1.86)	1.42(1.58)	1.64(1.78)	1.11(1.19)
Weight (kg)	5.8(7.4)	7.0(8.8)	8.4(10.2)	10(11.8)
Heatsink Size(mm)	Aluminum 300x300*12			
Clamping voltage Ub(DC)	24V			
Holding current Ib(A)	0.69			
Braking torque Tb(Nm)	>12			
Driver Adaptation Information				
Recommended cable cross-sectional area (mm)^2	0.75	1.5	1.5	2.5
Recommended Drive Models	AD2RE-060PA-E	AD2RE-100SA-E	AD2RE-120PA-E	AD2RE-140SA-E

› ASK130-2-048M2030



› ASK130-2-072M2030



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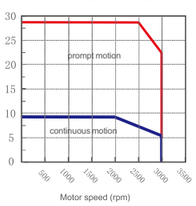
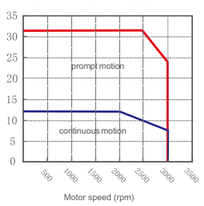


› ASK130-2-119M2030



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

130 Flange

AC380V

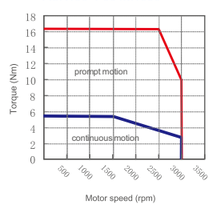
1500rpm

0.85kW~2.3kW

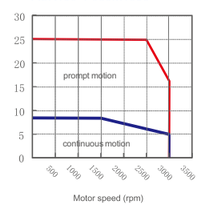
Motor Technical Data

Motor Model	ASK130-4-054M1530	ASK130-4-083M1530	ASK130-4-096M1530	ASK130-4-115M1530	ASK130-4-150M1530
Voltage U(AC)	380V				
Rated power Pr(kW)	0.85	1.3	1.5	1.8	2.3
Rated current Ir(Arms)	4.42	6	5.8	7.8	10.2
Rated torque Tr(Nm)	5.41	8.27	9.55	11.46	15
Rated speed Nr(rpm)	1500	1500	1500	1500	1500
Maximum current Imax(Arms)	13.26	18	17.3	23.4	30.6
Maximum torque Tmax(Nm)	16.2	24.8	28.7	31	45
Maximum speed Nmax (rpm)	3000	3000	3000	3000	3000
Torque coefficient Kt (Nm/A)	1.22	1.38	1.66	1.47	1.47
Moment of inertia Jm (10Kg-4 .m)^2	9(10.5)	13(14.5)	17(18.5)	21.7 (23.2)	21.7(23.2)
Electrical time constant te (ms)	8.45	9.59	10.07	10.91	10.91
Mechanical time constant tm (ms)	1.60(1.86)	1.35(1.51)	1.2(1.3)	1.14(1.22)	1.14(1.22)
Weight (kg)	5.8(7.4)	7(8.8)	8.4(10.2)	10(11.8)	10(11.8)
Heatsink Size(mm)	Aluminum 300x300*12				
Clamping voltage Ub(DC)	24V				24V
Holding current Ib(A)	0.69				0.69
Braking torque Tb(Nm)	>12				≥15
Driver Adaptation Information					
Recommended cable cross-sectional area (mm)^2	0.75	0.75	0.75	1.5	1.5
Recommended Drive Models	AD2RE-5R4SC-E	AD2RE-5R4SC-E	AD2RE-5R4SC-E	AD2RE-6R8SC-E	AD2RE-100SC-E

› ASK130-4-054M1530



› ASK130-4-083M1530



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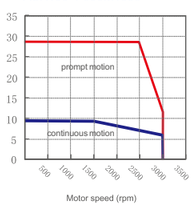
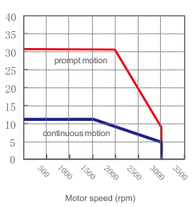


› ASK130-4-115M1530



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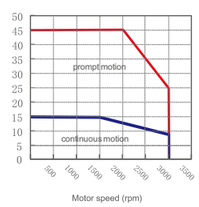


Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

130 Flange

AC380V

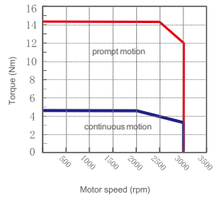
2000rpm

1kW~3kW

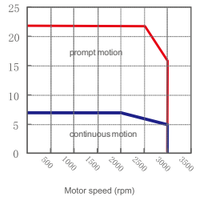
Motor Technical Data

Motor Model	ASK130-4-048M2030	ASK130-4-072M2030	ASK130-4-096M2030	ASK130-4-119M2030	ASK130-4-146M2030
Voltage U(AC)	380V				
Rated power Pr(kW)	1	1.5	2	2.5	3
Rated current Ir(Arms)	3.9	5.2	5.8	8.1	9.95
Rated torque Tr(Nm)	4.77	7.16	9.55	11.9	14.64
Rated speed Nr(rpm)	2000	2000	2000	2000	2000
Maximum current Imax(Arms)	11.7	15.6	17.4	24.3	29.85
Maximum torque Tmax(Nm)	14.31	21.48	28.65	35.7	43.92
Maximum speed Nmax (rpm)	3000	3000	3000	3000	3000
Torque coefficient Kt (Nm/A)	1.22	1.38	1.65	1.47	1.47
Moment of inertia Jm (10Kg-4 .m)^2	9(10.5)	13.0(14.5)	17.0(18.5)	21.7(23.2)	21.7(23.2)
Electrical time constant te (ms)	8.45	9.59	10.07	10.91	10.91
Mechanical time constant tm (ms)	1.60(1.86)	1.35(1.51)	1.2 (1.3)	1.14 (1.22)	1.14 (1.22)
Weight (kg)	5.8(7.4)	7.0(8.8)	8.4(10.2)	10(11.8)	10(11.8)
Heatsink Size(mm)	Aluminum 300x300*12				
Clamping voltage Ub(DC)	24V				24V
Holding current Ib(A)	0.69				0.69
Braking torque Tb(Nm)	>12				≥15
Driver Adaptation Information					
Recommended cable cross-sectional area (mm)^2	0.75	0.75	0.75	1.5	1.5
Recommended Drive Models	AD2RE-5R4SC-E	AD2RE-5R4SC-E	AD2RE-6R8SC-E	AD2RE-8R3SC-E	AD2RE-100SC-E

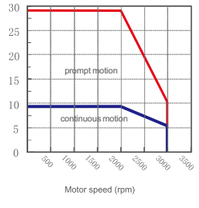
ASK130-4-048M2030



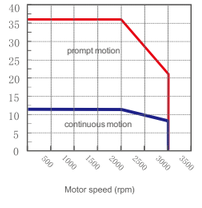
ASK130-4-072M2030



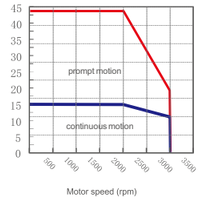
ASK130-4-096M2030



ASK130-4-119M2030



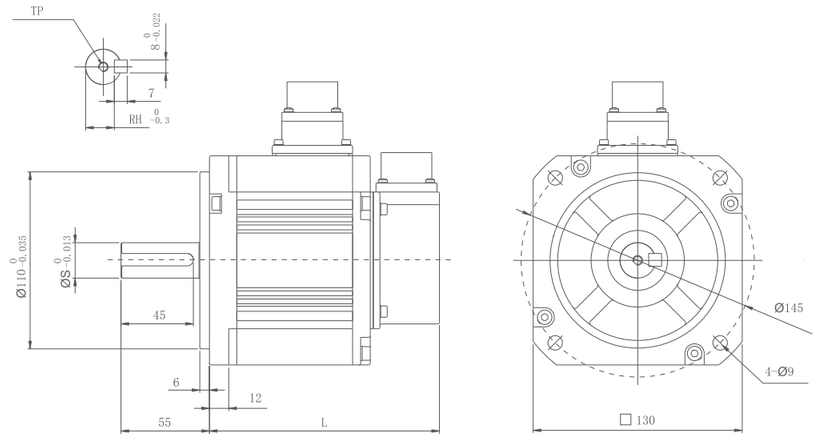
ASK130-4-146M2030



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

Servo Motor Dimensions (130 flange)



External Dimension — Unit (mm)

Motor Model	S	RH	TP	L (without holding brake size)	L (with holding brake size)
ASK130-2-054M1530 ASK130-2-048M2030	22	18	M6× L20	143.5	169.5
ASK130-2-083M1530 ASK130-2-072M2030	22	18	M6× L20	160.5	186.5
ASK130-2-096M2030	22	18	M6× L20	177.5	203.5
ASK130-2-115M1530 ASK130-2-119M2030 ASK130-4-146M2030 ASK130-4-150M2030	22	18	M6× L20	207.5	233.5

Note: Motors with the same flange, torque and speed have the same external dimensions for the 380V and 220V class models.

180 Flange

AC380V

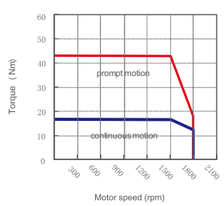
1500rpm

2.5kW~7.5kW

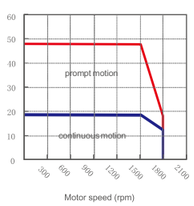
Motor Technical Data

Motor Model	ASK180-4-170H1518	ASK180-4-185H1518	ASK180-4-280H1518	ASK180-4-350H1518	ASK180-4-480H1518
Voltage U(AC)	380V				
Rated power Pr(kW)	2.5	2.9	4.4	5.5	7.5
Rated current Ir(Arms)	6.5	7.4	10.4	12	20
Rated torque Tr(Nm)	17	18.5	28	35	48
Rated speed Nr(rpm)	1500	1500	1500	1500	1500
Maximum current Imax(Arms)	16.1	19	25	24	40
Maximum torque Tmax(Nm)	42	47	67	70	96
Maximum speed Nmax (rpm)	1800	1800	1800	1800	1800
Torque coefficient Kt (Nm/A)	2.6	2.5	2.7	2.9	2.4
Moment of inertia Jm (10Kg-4 .m)^2	65(66.1)	70(71.1)	96.4(97.5)	122.5(123.6)	167.2(168.3)
Electrical time constant te (ms)	5.3	6.5	6.3	6.2	6.3
Mechanical time constant tm (ms)	2.5	2.05	1.89	1.69	1.65
Weight (kg)	19.5(24.5)	20.5(25.5)	25.5(30.5)	30.5(35.5)	40(45)
Heatsink Size(mm)	Aluminum 550x550*30				
Clamping voltage Ub(DC)	24V				
Holding current Ib(A)	1.7				
Braking torque Tb(Nm)	50				
Driver Adaptation Information					
Recommended cable cross-sectional area (mm)^2	1.5	1.5	1.5	1.5	2.5
Recommended Drive Models	AD2RE-6R8SC-E	AD2RE-8R3SC-E	AD2RE-120SC-E	AD2RE-140SC-E	AD2RE-210SC-E

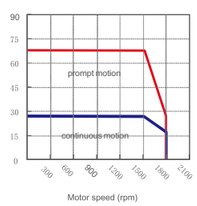
ASK180-4-170H1518



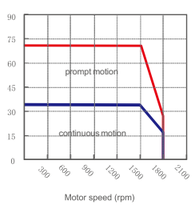
ASK180-4-185H1518



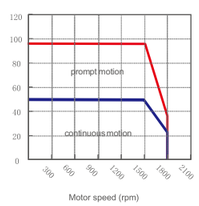
ASK180-4-280H1518



ASK180-4-350H1518



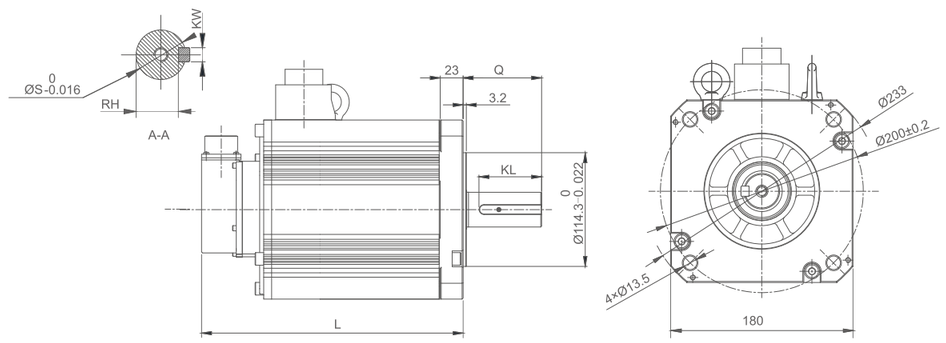
ASK180-4-480H1518



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

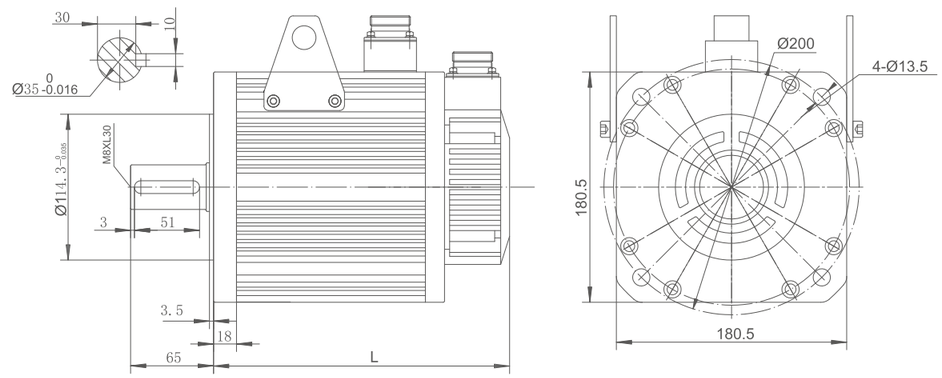
Servo Motor Dimensions (180 flange)



External Dimension

Unit (mm)

Motor Model	S	Q	KW	KL	RH	L (without holding brake size)	L (with holding brake size)
ASK180-4-185M1530	35	79	10	63	30	207.5	246.7
ASK180-4-270M1530	35	79	10	63	30	230	269.2
ASK180-4-350M1530	42	113	12	100	37	259	298.2
ASK180-4-478M1530	42	113	12	100	37	278.5	317.7



External Dimension

Unit (mm)

Motor Model	L (without holding brake size)	L (with holding brake size)
ASK180-4-170H1518	227	301
ASK180-4-185H1518	233	307
ASK180-4-280H1518	263	337
ASK180-4-350H1518	293	367
ASK180-4-480H1518	347	421

Note: Motors with the same flange, torque and speed have the same external dimensions for the 380V and 220V class models.

180 Flange

AC380V

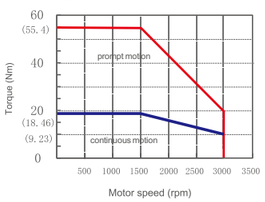
1500rpm

2.9kW~7.5kW

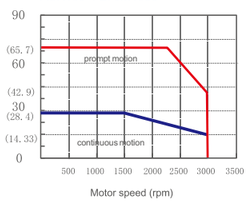
Motor Technical Data

Motor Model	ASK180-4-185M1530	ASK180-4-270M1530	ASK180-4-350M1530	ASK180-4-478M1530
Voltage U(AC)	380V			
Rated power Pr(kW)	2.9	4.4	5.5	7.5
Rated current Ir(Arms)	11.0	14.4	19.3	26.5
Rated torque Tr(Nm)	18.5	27	35.01	47.75
Rated speed Nr(rpm)	1500	1500	1500	1500
Maximum current Imax(Arms)	33.0	35.1	57.9	66
Maximum torque Tmax(Nm)	55.4	65.7	105	118.9
Maximum speed Nmax (rpm)	3000	3000	3000	3000
Torque coefficient Kt (Nm/A)	1.68	1.872	1.814	1.802
Moment of inertia Jm (10Kg-4 .m)^2	55(59.3)	82.7(87.0)	107(111.3)	134(138.3)
Electrical time constant te (ms)	21.64	17.50	16.67	18.40
Mechanical time constant tm (ms)	1.82	1.92	1.53	1.51
Weight (kg)	13.0(17.0)	16.0(20.0)	21.0(25.0)	26.0(30.0)
Heatsink Size(mm)	Aluminum 680x680*35			
Clamping voltage Ub(DC)	24V			
Holding current Ib(A)	1.3			
Braking torque Tb(Nm)	≥40		>40	≥50
Driver Adaptation Information				
Recommended cable cross-sectional area (mm)^2	1.5	2.5	2.5	4.0
Recommended Drive Models	AD2RE-100SC-E	AD2RE-140SC-E	AD2RE-210SC-E	AD2RE-250SC-E

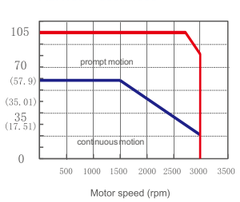
ASK180-4-185M1530



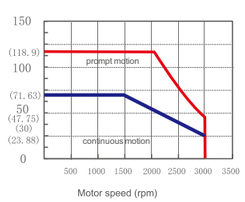
ASK180-4-270M1530



ASK180-4-350M1530



ASK180-4-478M1530



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

180 Flange

AC220V

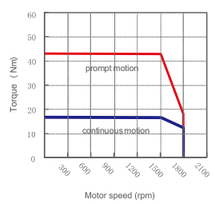
1500rpm

2.5kW~2.9kW

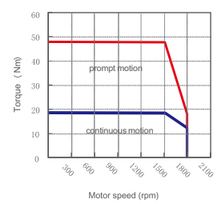
Motor Technical Data

Motor Model	ASK180-2-170H1518	ASK180-2-185H1518
Voltage U(AC)	220V	
Rated power Pr(kW)	2.5	2.9
Rated current Ir(Arms)	10	11.7
Rated torque Tr(Nm)	17	18.5
Rated speed Nr(rpm)	1500	1500
Maximum current Imax(Arms)	24.7	29.7
Maximum torque Tmax(Nm)	42	47
Maximum speed Nmax (rpm)	1800	1800
Torque coefficient Kt (Nm/A)	1.7	1.58
Moment of inertia Jm (10Kg-4 .m)^2	65(66.1)	70(71.1)
Electrical time constant te (ms)	6.6	6.05
Mechanical time constant tm (ms)	2.2	2.0
Weight (kg)	19.5(24.5)	20.5(25.5)
Heatsink Size(mm)	Aluminum 500x500*30	
Clamping voltage Ub(DC)	24V	
Holding current Ib(A)	1.7	
Braking torque Tb(Nm)	50	
Driver Adaptation Information		
Recommended cable cross-sectional area (mm)^2	1.5	1.5
Recommended Drive Models	AD2RE-140SA-E	AD2RE-140SA-E

ASK180-2-170H1518



ASK180-2-185H1518



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

200 Flange

AC380V

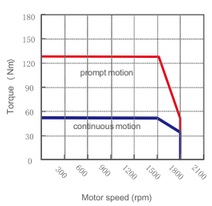
1500rpm

8.3kW~13.2kW

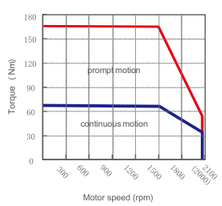
Motor Technical Data

Motor Model	ASK200-4-530M1516	ASK200-4-700M1520	ASK200-4-840M1518
Voltage U(AC)	380V		
Rated power Pr(kW)	8.3	11	13.2
Rated current Ir(Arms)	18	28	23
Rated torque Tr(Nm)	53	70	84
Rated speed Nr(rpm)	1500	1500	1500
Maximum current Imax(Arms)	42.5	66	60
Maximum torque Tmax(Nm)	125	165	215
Maximum speed Nmax (rpm)	1600	2000	1800
Torque coefficient Kt (Nm/A)	2.9	2.5	3.6
Moment of inertia Jm (10Kg-4 .m)^2	72(73.8)	97.7(99.5)	130.8(132.6)
Electrical time constant te (ms)	12.1	15.2	16.4
Mechanical time constant tm (ms)	1.49	0.93	0.77
Weight (kg)	46(61)	52(66)	59(71.5)
Heatsink Size(mm)	Aluminum 650x650*35		
Clamping voltage Ub(DC)	24V		
Holding current Ib(A)	4		
Braking torque Tb(Nm)	120		
Driver Adaptation Information			
Recommended cable cross-sectional area (mm)^2	2.5	4	4
Recommended Drive Models	AD2RE-210SC-E	AD2RE-340SC-E	AD2RE-340SC-E

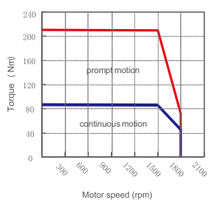
ASK200-4-530M1516



ASK200-4-700M1520



ASK200-4-840M1518



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

230 Flange

AC380V

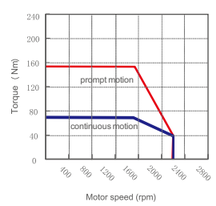
1500rpm

11kW~15kW

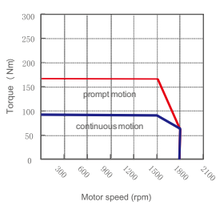
Motor Technical Data

Motor Model	ASK230-4-700H1522	ASK230-4-950H1518
Voltage U(AC)	380V	
Rated power Pr(kW)	11	15
Rated current Ir(Arms)	30	36
Rated torque Tr(Nm)	70	95
Rated speed Nr(rpm)	1500	1500
Maximum current Imax(Arms)	66	66
Maximum torque Tmax(Nm)	154	174.2
Maximum speed Nmax (rpm)	2200	1800
Torque coefficient Kt (Nm/A)	2.3	2.85
Moment of inertia Jm (10Kg-4 .m)^2	260(262.2)	380(382.2)
Electrical time constant te (ms)	14.3	14
Mechanical time constant tm (ms)	8.2	12.8
Weight (kg)	64	77.5
Heatsink Size(mm)	Aluminum 650x650*35	
Clamping voltage Ub(DC)	24V	
Holding current Ib(A)	4	
Braking torque Tb(Nm)	120	
Driver Adaptation Information		
Recommended cable cross-sectional area (mm)^2	4	6
Recommended Drive Models	AD2RE-340SC-E	AD2RE-340SC-E

ASK230-4-700H1522



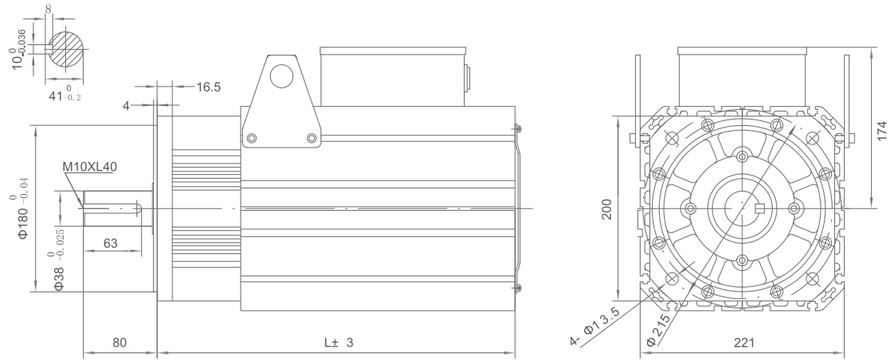
ASK230-4-950H1518



Note 1) The above is the standard model, and ( ) is the parameter of holding brake motor;

2) Characteristics in the instantaneous operating area may vary depending on the supply voltage; if the load torque is within the rated torque, it can be used in the continuous operating area.

Servo Motor Dimensions (200 flange)

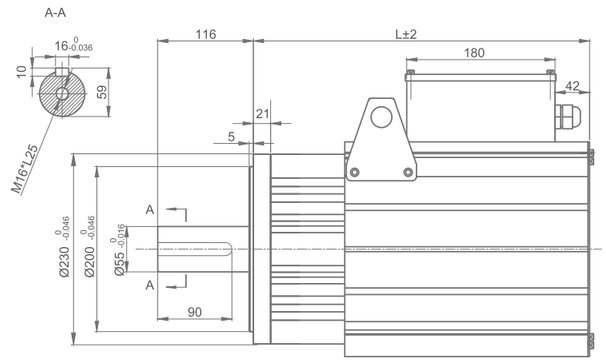


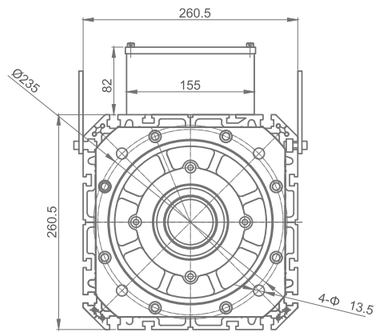
External Dimension

Unit (mm)

Motor Model	L (without holding brake size)	L (with holding brake size)
ASK200-4-530M1516	392	492
ASK200-4-700M1520	435	535
ASK200-4-840M1518	462	568

Servo Motor Dimensions (230 flange)





External Dimension

Unit (mm)

Motor Model	L (without holding brake size)	L (with holding brake size)
ASK230-4-700H1522	408	508
ASK230-4-950H1518	458	558

Recommended Model Comparison

Motor		Cable		Drive
Flange	Motor Model	Power & Brake Cable Model	Encoder cable type	Recommended Drive Models
40	ASK40-2-003M3060	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	AD3RE-1R8SA-E
	ASK40-2-003M3060B	LM-□□□ SBF/SBB-□.S		
60	ASK60-2-006M3060	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	AD3RE-1R8SA-E
	ASK60-2-006M3060B	LM-□□□ SBF/SBB-□.S		
	ASK60-2-013M3050	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	AD3RE-2R8SA-E
	ASK60-2-013M3050B	LM-□□□ SBF/SBB-□.S		
80	ASK80-2-024M3050	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	AD3RE-4R2SA-E
	ASK80-2-024M3050B	LM-□□□ SBF/SBB-□.S		
	ASK80-2-032M3050	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.S	AD2RE-060PA-E
	ASK80-2-032M3050B	LM-□□□ SBF/SBB-□.S		
130	ASK130-2-054M1530	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-060PA-E
	ASK130-2-054M1530B	LM-□□□-AB4-□.S		
	ASK130-2-083M1530	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-100SA-E
	ASK130-2-083M1530B	LM-□□□-BB4-□.S		
	ASK130-2-096M1530	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-120SA-E
	ASK130-2-096M1530B	LM-□□□-BB4-□.S		
	ASK130-2-115M1530	LM-□□□-CA4-□.S	LE-□□□-4P4-□.S	AD2RE-120PA-E
	ASK130-2-115M1530B	LM-□□□-CB4-□.S		
	ASK130-2-048M2030	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-060PA-EP
	ASK130-2-048M2030B	LM-□□□-AB4-□.S		
	ASK130-2-072M2030	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-100SA-E
	ASK130-2-072M2030B	LM-□□□-BB4-□.S		
	ASK130-2-096M2030	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-120PA-E
	ASK130-2-096M2030B	LM-□□□-BB4-□.S		
	ASK130-2-119M2030	LM-□□□-CA4-□.S	LE-□□□-4P4-□.S	AD2RE-140SA-E
	ASK130-2-119M2030B	LM-□□□-CB4-□.S		
	ASK130-4-054M1530	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-5R4SC-E
	ASK130-4-054M1530B	LM-□□□-AB4-□.S		
	ASK130-4-083M1530	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-5R4SC-E
	ASK130-4-083M1530B	LM-□□□-AB4-□.S		
	ASK130-4-096M1530	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-5R4SC-E
	ASK130-4-096M1530B	LM-□□□-AB4-□.S		
	ASK130-4-115M1530	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-6R8SC-E
	ASK130-4-115M1530B	LM-□□□-BB4-□.S		
	ASK130-4-150M1530	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-100SC-E
	ASK130-4-150M1530B	LM-□□□-BB4-□.S		
	ASK130-4-048M2030	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-5R4SC-E
	ASK130-4-048M2030B	LM-□□□-AB4-□.S		
	ASK130-4-072M2030	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-5R4SC-E
	ASK130-4-072M2030B	LM-□□□-AB4-□.S		
	ASK130-4-096M2030	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	AD2RE-6R8SC-E
	ASK130-4-096M2030B	LM-□□□-AB4-□.S		
	ASK130-4-119M2030	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-8R3SC-E
	ASK130-4-119M2030B	LM-□□□-BB4-□.S		
	ASK130-4-146M2030	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	AD2RE-100SC-E
	ASK130-4-146M2030B	LM-□□□-BB4-□.S		
180	ASK180-4-185M1530	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-100SC-E
	ASK180-4-185M1530B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-270M1530	LM-□□□-CA7-□.S	LE-□□□-4P6-□.S	AD2RE-140SC-E
	ASK180-4-270M1530B	LM-□□□-CA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-350M1530	LM-□□□-CA7-□.S	LE-□□□-4P6-□.S	AD2RE-210SC-E
	ASK180-4-350M1530B	LM-□□□-CA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-478M1530	LM-□□□-DA7-□.S	LE-□□□-4P6-□.S	AD2RE-250SC-E
	ASK180-4-478M1530B	LM-□□□-DA7-□.S		
		LB-□□□-B7-□		
	ASK180-2-170H1518	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-140SA-E
	ASK180-2-170H1518B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	ASK180-2-185H1518	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-140SA-E
	ASK180-2-185H1518B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		

Recommended Model Comparison

Motor		Cable		Drive
Flange	Motor Model	Power & Brake Cable Model	Encoder cable type	Recommended Drive Models
180	ASK180-4-170H1518	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-6R8SC-E
	ASK180-4-170H1518B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-185H1518	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-8R3SC-E
	ASK180-4-185H1518B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-280H1518	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-120SC-E
	ASK180-4-280H1518B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-350H1518	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	AD2RE-140SC-E
	ASK180-4-350H1518B	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	ASK180-4-480H1518	LM-□□□-CA7-□.S	LE-□□□-4P6-□.S	AD2RE-210SC-E
	ASK180-4-480H1518B	LM-□□□-CA7-□.S		
		LB-□□□-B7-□		
200	ASK200-4-530M1516	KLM-□□□-CW4-□.S	LE-□□□-4P6-□.S	AD2RE-210SC-E
	ASK200-4-530M1516B	KLM-□□□-CW4-□.S		
		LB-□□□-W-□		
	ASK200-4-700M1520	KLM-□□□-DW4-□.S	LE-□□□-4P6-□.S	AD2RE-340SC-E
	ASK200-4-700M1520B	KLM-□□□-DW4-□.S		
		LB-□□□-W-□		
	ASK200-4-840M1518	KLM-□□□-DW4-□.S	LE-□□□-4P6-□.S	AD2RE-340SC-E
	ASK200-4-840M1518B	KLM-□□□-DW4-□.S		
		LB-□□□-W-□		
230	ASK230-4-700H1522	KLM-□□□-DW4-□.S	LE-□□□-4P6-□.S	AD2RE-340SC-E
	ASK230-4-700H1522B	KLM-□□□-DW4-□.S		
		LB-□□□-W-□		
	ASK230-4-950H1518	KLM-□□□-EW4-□.S	LE-□□□-4P6-□.S	AD2RE-340SC-E
	ASK230-4-950H1518B	KLM-□□□-EW4-□.S		
		LB-□□□-W-□		