SLANVERT

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SLANVERT

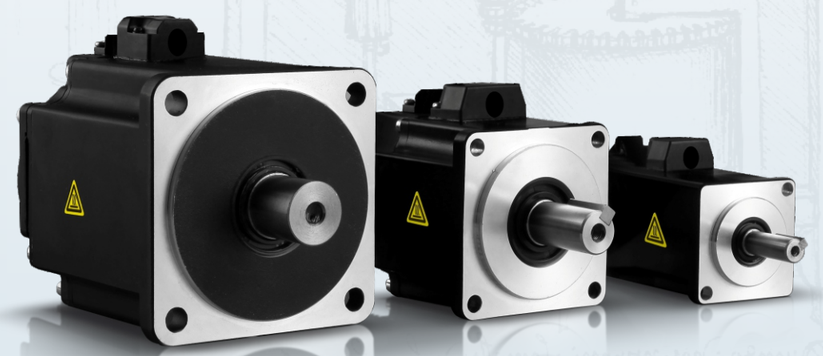
EtherCAT®

High-performance
servo drives

SLANVERT

The Art Of Technology

Contents



- Power range 0.2~15 kW
- EtherCAT high-speed real-time EtherNET
- Integrated SS and STO security functions
- High dynamic response, current loop period 1.6μs, speed loop period 62.5μs, position loop period 125μs
- High accuracy, supports up to 25bit encoder
- It is easy to use and has functions such as one-click self-tuning, electronic nameplate, and vibration suppression.

SLANVERT

Powerful debugging tools

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

EtherCAT high-speed bus

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

FlexibleIO function

- High-speed DI
- Normal DI
- DO
- AI
- AO

Various input voltage specifications

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

Compact volume design

- Compact size design, 20% smaller than the previous generation product
- Reliable EMC design

Quick and convenient terminal wiring

- Convenient wiring, saving on-site installation and maintenance tim

High-level safety protection design

- STO
- SS

Quick and convenient panel operation

- Integrated rigidity table makes debugging simpler and more convenient
- Integrated jog, self-learning and other functions
- information diagnosis

Rich encoder types

- Tamagawa encoder, EnDat, Panasonic, Spin change, ABZ

High performance servo motor

- Large torque range
- Highly dynamic and responsive Permanent magnet synchronous servo motor

Excellent control effect

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

Industries

Automobile

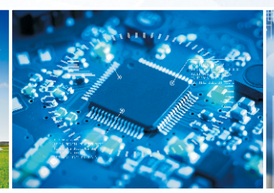
Mechanics and industrial robots

Lithium battery

Consumer electronics

Printing

New energy



Semiconductor and electronic technology

Entertainment

Food packaging

N2&N3 Series

High performance bus type servo drive

N2&N3 high-performance servo drives are perfectly combined with KMT series servo motors, suitable for various driving applications, and can achieve arbitrary switching of position control, speed control and torque control. Through optimized design, N2&N3 servo system can have excellent performance, rich functions, stable and reliable, convenient and flexible user experience.

Application

- Return to zero
- Point-to-point positioning
- cam
- Synchronize
- spatial interpol
- Motion planning
- XYZ space robot
- Scara robot
- Delta robot
- Six joints robot

Ordering Information

N2 R E - 4R2 SA - E - □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

N2: series

Code No.	Type
N2	N2 series
N3	N3 series

R : Model type

Code No.	Representative type
R	Standard servo unit

E : Control interface method

Code No.	Describtion
E	EtherCAT bus control type

4R2 : Rated output current

Code No.	Describtion
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

Home Definition

Code No.	Describtion
None	Standard type
S	STO type
SA	High-precision analog input + STO + frequency division output type (only for N2 series)
T000~T999	Customized

E : First encoder type

Code No.	Describtion
E	Communication encoder

A : Voltage level and input method

Code No.	Describtion
A	Single phase AC220V
C	Three-phase AC380V (for N2 only)

S : Capacity level

Code No.	Describtion
S	Standard capacity type
P see Note 2)	Enhanced capacity

Note: 1) The naming rules are only used for model analysis and cannot be used for ordering. Please consult before ordering.
2Under the same current capability, increasing the capacitance will provide stronger output power, which is suitable for situations with more frequent current surges.

High-performance servo drives

N2 series

High performance
bus type servo drive

General Specifications

Usage environment

Storage temperature	-20~65°C
Transport temperature	-20~70°C
Operating temperature	0~45°C
Relative air humidity	Below 90%RH, no condensation
Vibration resistance	4.9m/s²
Impact strength	19.6m/s²
Use altitude	Below 1000m; When use above 1000m, derate by 1.1% for every 100m,Maximum operating altitude is 2000m.
Working environment	No corrosive, no flammable gases, no oil droplets, no conductive dust, no dust
IP	IP20
Flammability rating	V0

Voltage

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

Safety

Safe Torque Off Standard *	IEC 61800-5-2, SIL3 Ple
Safe Stop Criteria	

IO

DI	5*DI, 2 of which are high-speed DI (response <10μs), 3 common DIs (response <50μs)
DO	4*DO, maximum withstand voltage DC30V per channel, maximum continuous current DC50mA
AI	2*AI, 12-bit (16-bit) resolution accuracy, -10V~+10V signal
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 100M (ideal environment, excellent cable material)

Motor connection

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

Note: The AI resolution accuracy of the SA type customized version is 16bit
*Only supported by SA models, please contact for details.

AC220V N2 Technical Specifications

Model	1R8SA	2R8SA	4R2SA	060PA	100SA	120SA	120PA	140SA
Main power	AC200V~AC240V ; 50/60Hz							
Control power	AC200V~AC240V ; 50/60Hz ; 30W							
Power	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 value of external braking resistor	40Ω	40Ω	40Ω	25Ω	25Ω	25Ω	20Ω	20Ω
Size 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 specifications	A1	A1	A1	A2	A2	A2	A3	A3

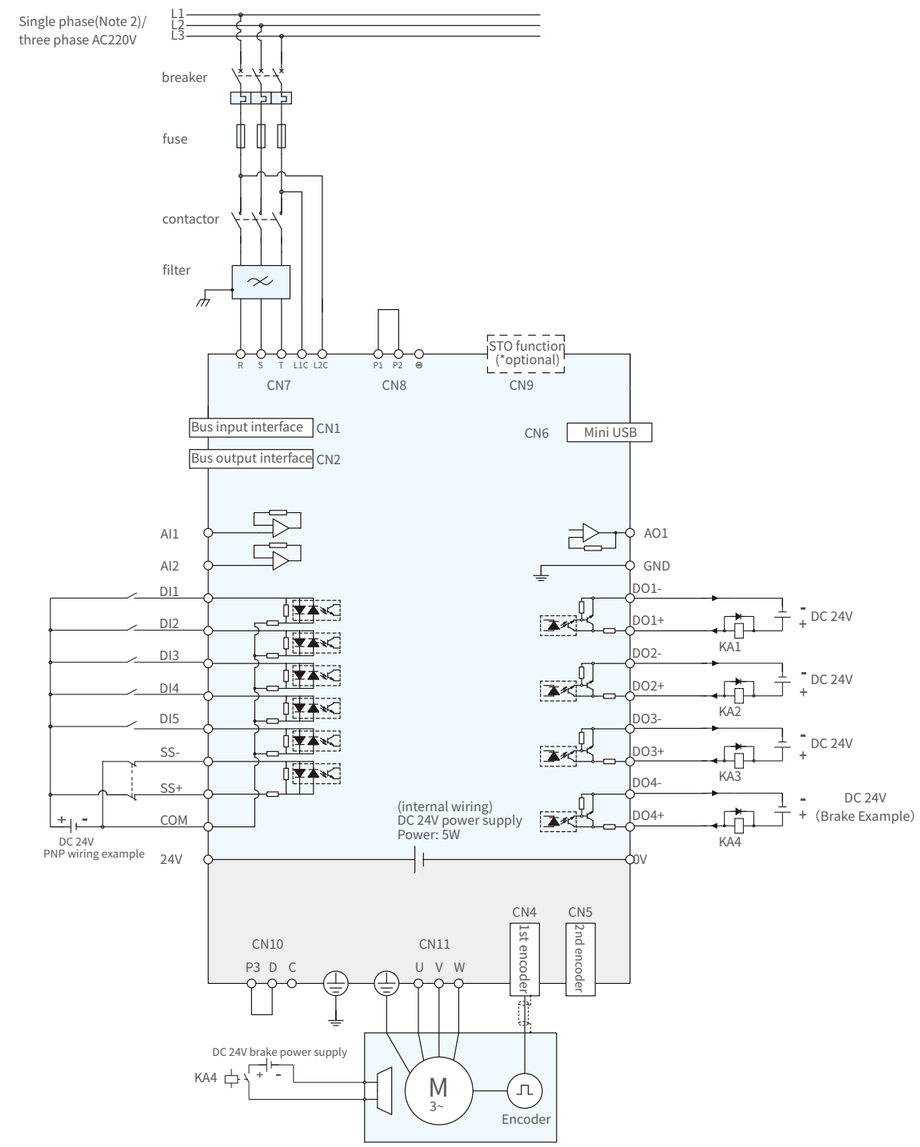
AC380V N2 Technical Specifications

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 current consumption of driver	1Arms						1.3Arms		
Power	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 value 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 specifications	B1			B2			B3		
Recommended circuit breaker current	Three-phase input current x $\frac{\text{matching motor power}}{\text{Matching drive power}}$ (Note 2)								

Note:

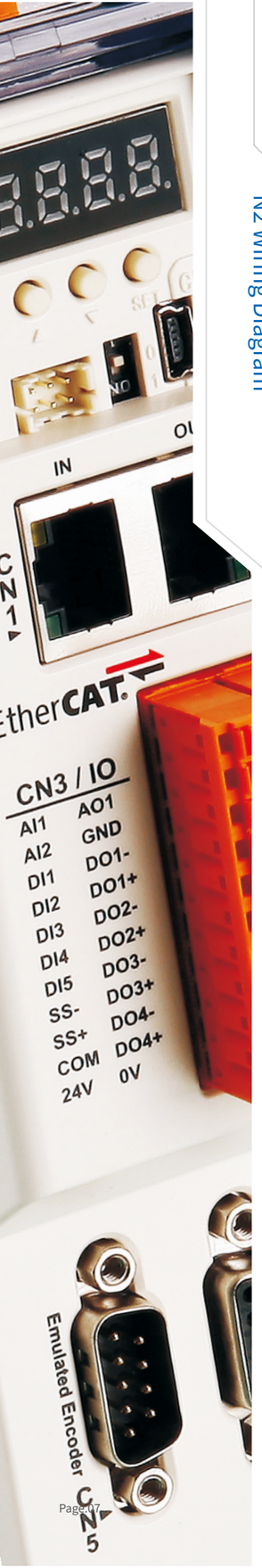
1. For specific selection of external braking resistor, please refer to the braking resistor selection table in the driver accessories section.
2. For example: the three-phase input current of the 250SC driver at 10kW full load is 28A, and when matched with a 9kW servo motor, the recommended circuit breaker current is 28*9/10=25.2A
3. Data with " * " are data under three-phase 380V voltage test.

AC220V class specification standard type N2Wiring Diagram

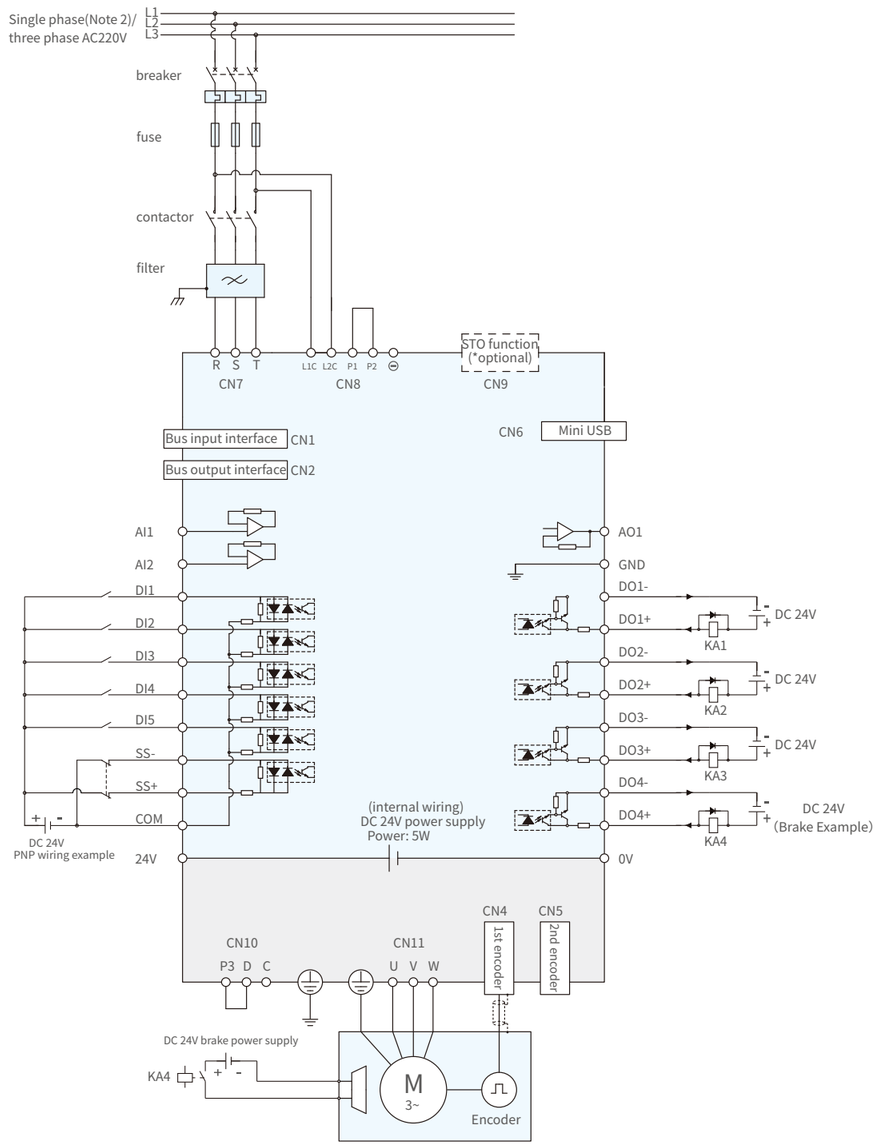


Note:

1) Here is a wiring example, the actual wiring will differ according to the driver specifications. For details, please refer to the user manual or consult company.
2) For single-phase, connect any two phases of R, S, and T.
3) DI1 and DI2 are high-speed DI.
4) For SA type, please refer to the user manual. For details, please contact company



AC220V class A3 specification standard type N2 Wiring Diagram



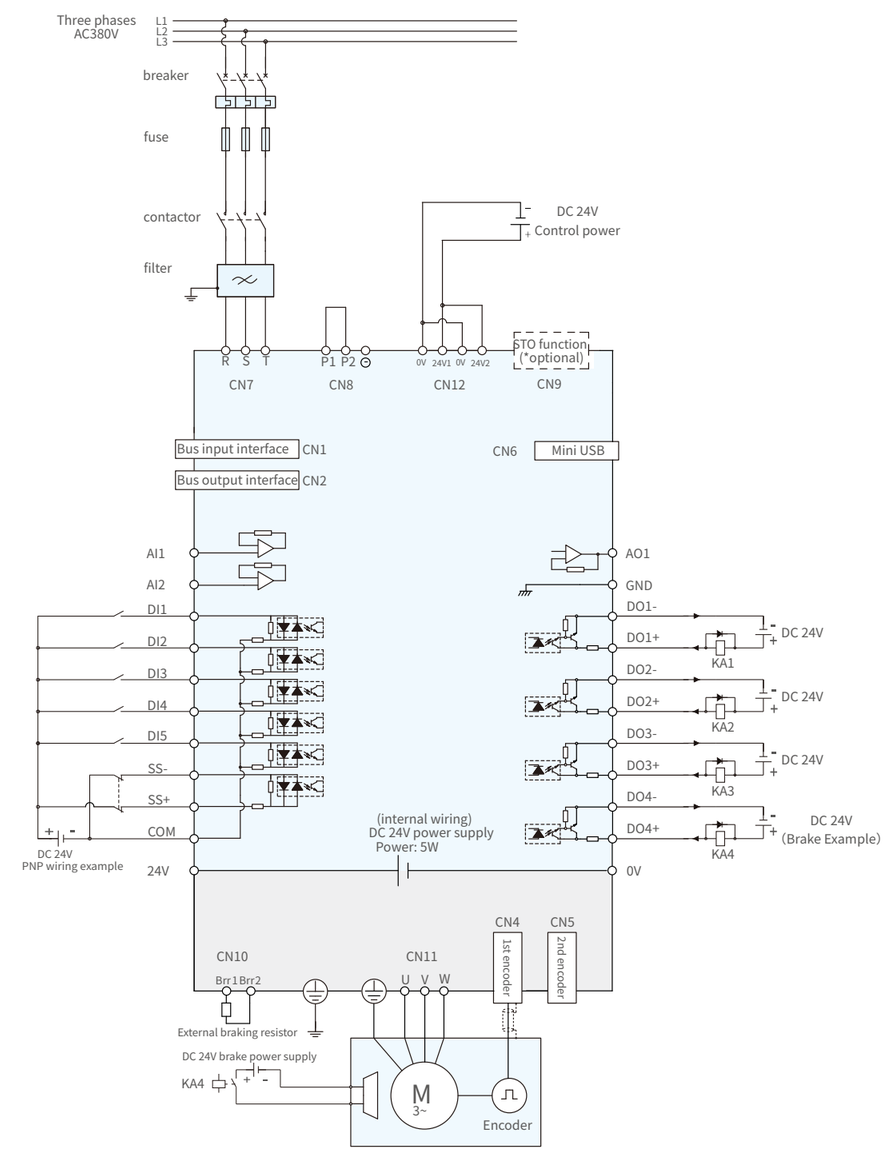
Note: 1) Here is a wiring example, the actual wiring will differ according to the driver specifications. For details, please refer to the user manual or consult the company.

2) For single-phase, connect any two phases of R, S, and T.

3) DI1 and DI2 are high-speed DI.

4) For SA type, please refer to the user manual. For details, please contact Company.

AC380V class B1/B2 specification standard type N2 Wiring Diagram



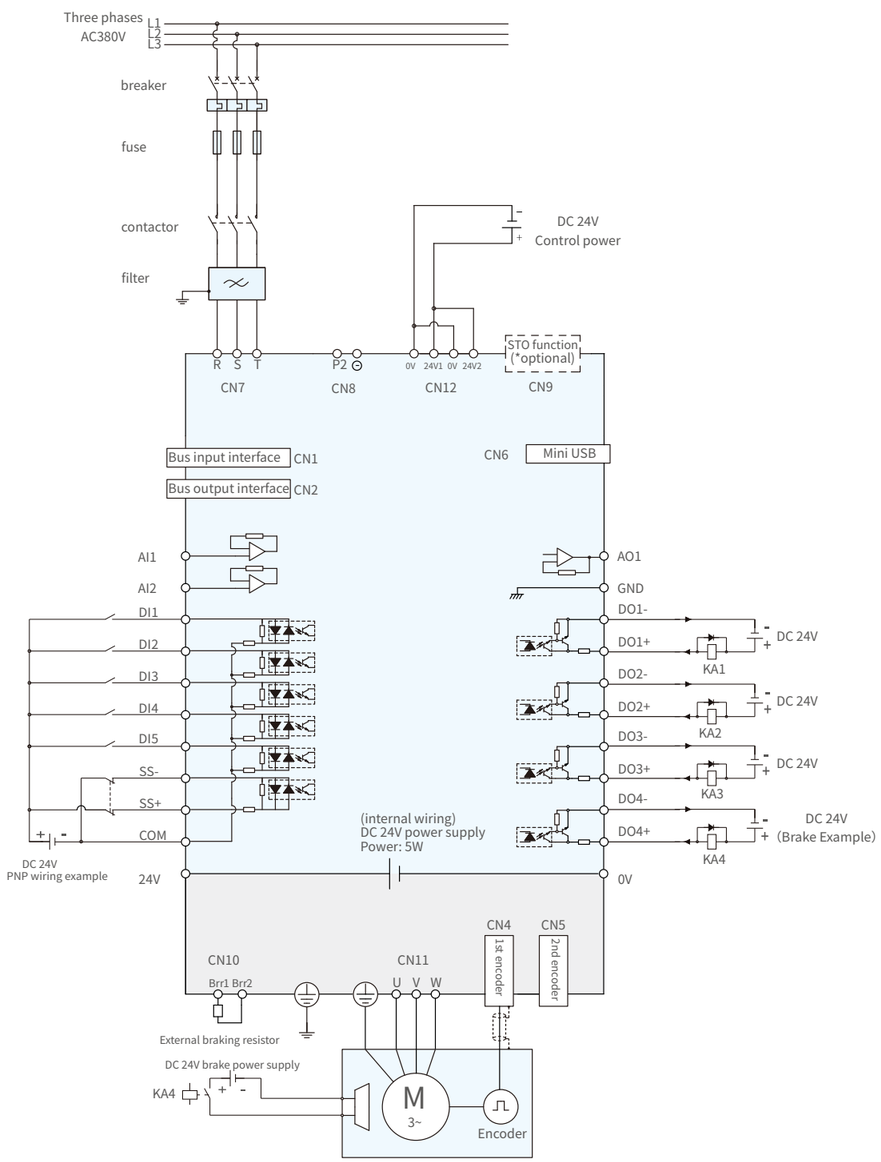
Note: 1) Here is a wiring example, the actual wiring will differ according to the driver specifications. For details, please refer to the user manual or consult the company.

2) This wiring is a wiring example for B1 and B2 specification drives. Do not use it to connect B3 specification drives.

3) DI1 and DI2 are high-speed DI.

4) For SA type, please refer to the user manual. For details, please contact Company.

AC380V class B3 specification standard type
N2 Wiring Diagram



Note: 1) Here is a wiring example, the actual wiring will differ according to the driver specifications.

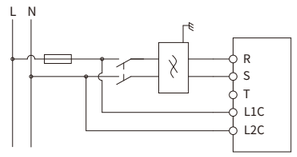
For details, please refer to the user manual or consult company.

2) DI1 and DI2 are high-speed DI

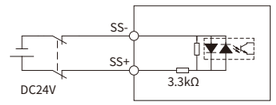
3) For Sa type, please refer to the user manual. For details, please contact .

Wiring Diagram

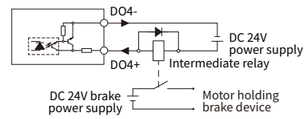
Main power supply wiring when using single-phase AC220V (can be connected to any two circuits in RST)



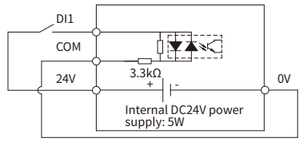
Emergency stop wiring diagram (normally closed wiring example)
Note: The driver emergency stop channel configuration is consistent with the actual wiring.



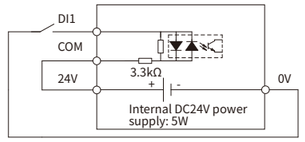
DO output wiring-brake example
Note: Please pay attention to the current flow direction and use an external circuit with a freewheeling diode. And make sure the polarity wiring of the freewheeling diode is correct. Also need to check the servo drive Whether the DO channel is configured as brake outpu



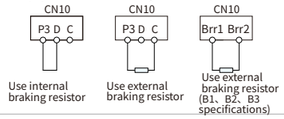
PNP signal input wiring when using internal DC24V power supply



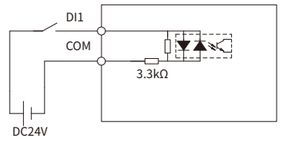
NPN signal input wiring when using internal DC24V power supply



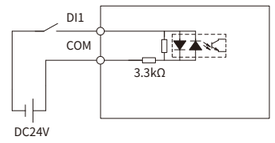
Wiring when using internal and external braking resistors respectively
Note: When using an external braking resistor, you need to cancel the short circuit between P3 and D.In addition, some models with A1 specifications and B1, B2, and B3 specifications are not available.Built-in braking resistor, please pay attention when using it.



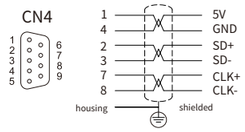
PNP signal input wiring when using external DC24V power supply



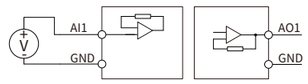
NPN signal input wiring when using external DC24V power supply



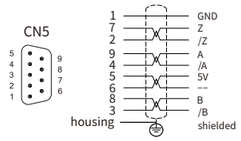
Example, CN4 encoder pin definition
Note that the maximum current output capability between the 5V and GND pins is 200mA.



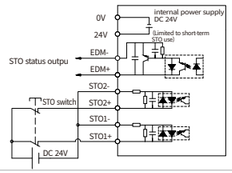
Example,Analog wiring (standard)
Input and output are -10V~+10V, resolution 12 bits.
Note: Be sure to use twisted pair shielded wires.



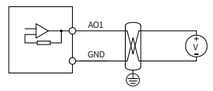
CN5 encoder--ABZ encoder input wiring (standard type)
Note: The maximum current output capability between the V and GND pins is 200mA.



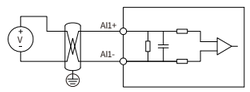
CN9 STO function wiring (SA type)



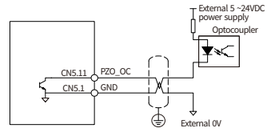
Example, Analog output wiring (SA type)
The output is -10V~+10V, the resolution is 12 bits, and the maximum output capacity is mA.
Note: Be sure to use twisted pair shielded wires.。



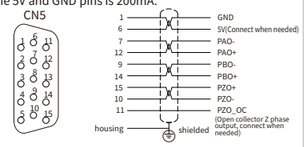
Example, Analog input wiring (SA type)
The input is -10V~+10V, and the resolution is 16 bits.
Note: Be sure to use twisted pair shielded wires.



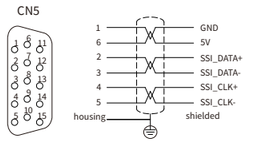
CN5 open collector Z phase output wiring (SA type)
Note: Open collector only supports NPN type. The maximum current output capability is 50mA. Please match a suitable current limiting resistor when using it.



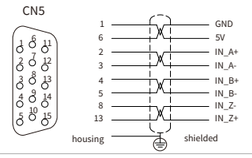
CN5 second encoder--frequency division output wiring(SA type)
Note: The maximum current output capability between the 5V and GND pins is 200mA.



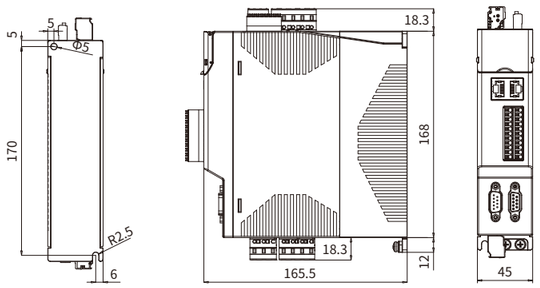
CN5 Second encoder--SSI encoder input wiring (SA type)
Note: The maximum current output capability between 5V and GND pins is 200mA

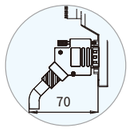


CN5 second encoder--ABZ encoder input wiring(SA type)
Note: The maximum current output capability between the 5V and GND pins is 200mA.



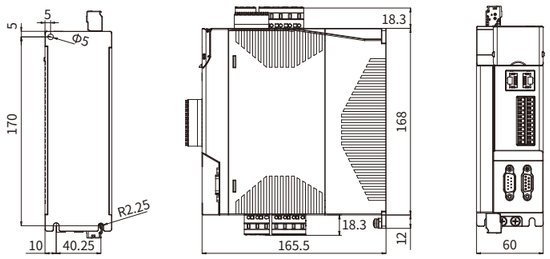
AC220Vclass N2 ServoDrive Dimensions

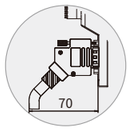




Note: The minimum bending distance of the cable is 70mm

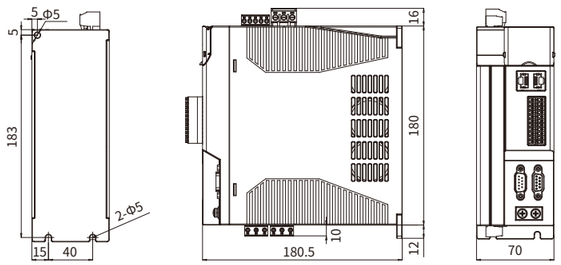
No.	Drives model	Specifications: W×H×D(mm)
1	N2RE-1R8SA	A1 45x180x165
2	N2RE-2R8SA	
3	N2RE-4R2SA	

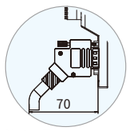




Note: The minimum bending distance of the cable is 70mm

No.	Drives model	Specifications: W×H×D(mm)
1	N2RE-060PA	A2 60x180x165
2	N2RE-100SA	
3	N2RE-120SA	

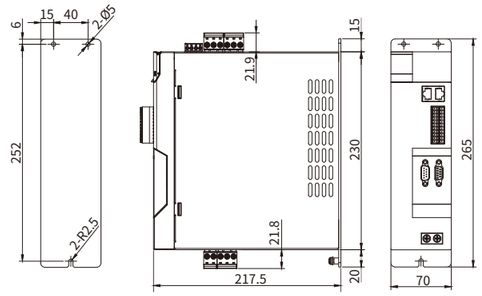


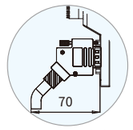


Note: The minimum bending distance of the cable is 70mm

No.	Drives model	Specifications: W×H×D(mm)
1	N2RE-120PA	A3 70x192x181
2	N2RE-140SA	

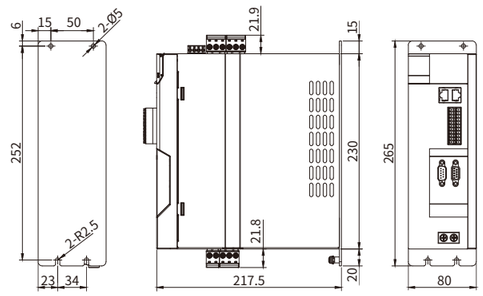
AC380Vclass N2 ServoDrive Dimensions

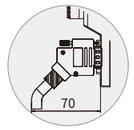




Note: The minimum bending distance of the cable is 70mm

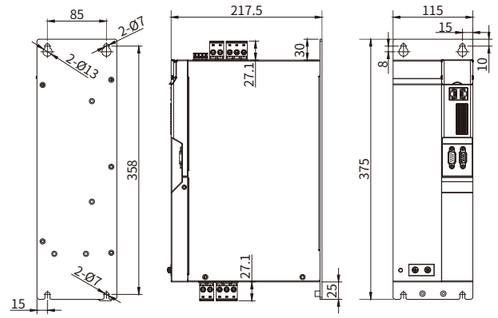
No.	Drives model	Specifications: W×H×D(mm)
1	N2RE-5R4SC	B1 70X265X218
2	N2RE-6R8SC	
3	N2RE-8R3SC	

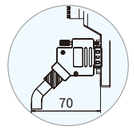




Note: The minimum bending distance of the cable is 70mm

No.	Drives model	Specifications: W×H×D(mm)
1	N2RE-100SC	B2 80X265X218
2	N2RE-120SC	
3	N2RE-140SC	



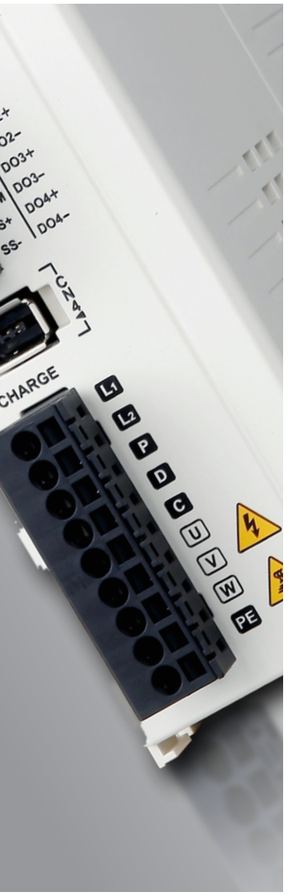


Note: The minimum bending distance of the cable is 70mm

No.	Drives model	Specifications: W×H×D(mm)
1	N2RE-210SC	B3 115X375X218
2	N2RE-250SC	
3	N2RE-340SC	

N3series

High performance
bus type servo drive



N3 General Specifications

Usage environment

Storage temperature	-20~65°C
Transport temperature	-20~70°C
Operating temperature	0~45°C
Relative air humidity	Below 90%RH, no condensation
Vibration resistance	4.9m/s^2
Impact strength	19.6m/s^2
Use altitude	Below 1000m; if it is used above 1000m, derate by 1.1% for every 100m.The highest operating altitude is 2000m.
Working environment	No corrosive, no flammable gases, no oil droplets, no conductive dust, no dust
IP	IP20
Flammability rating	V0

Voltage

Range	AC200V~AC240V
Frequency	50/60Hz ±5%
PWM frequency/ control method	8K/sine wave current drive

Safety

Safe Torque Off Standard*	IEC 61800-5-2, SIL3 Ple
Safe Stop Criteria	

IO

DI	5*DI, refresh cycle 200μs
DO	4*DO, maximum withstand voltage DC30V per channel, maximum continuous current DC 50mA

Communication

EtherCAT	CoE (PDO, SDO), DC-distributed clock, synchronization cycle jitter is less than 1μs
Communication distance	Maximum 100M (ideal environment, excellent cable material)

Motor connection

The output voltage	AC 0~220V
Output frequency	0~600Hz
Supported motor types	Three-phase AC synchronous servo motor
Ontology encoder	Communication type 17-bit/23-bit encoder
Maximum cable length	60m

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

AC220V N3 Technical Specifications

Model	1R8SA	2R8SA	4R2SA	7R6SA*	120SA*
Input power	AC 200V ~ AC 240V				
Frequency	50/60 Hz				
Power	200 W	400 W	750 W	1000 W	1500 W
Single phase input current	2.5 Arms	4.1 Arms	6.1 Arms	9.6 Arms	12.8 Arms
Rated output current	1.8 Arms	2.8 Arms	4.2 Arms	7.6 Arms	12 Arms
Maximum output current	7.2 Arms	9.8 Arms	12.6 Arms	30 Arms	50 Arms
Overload factor	400%	350%	300%	250%	250%
Built-in braking resistor	×	×	40W, 80Ω	80W, 25Ω	80W, 25Ω
Minimum resistance value of external braking resistor	50Ω	50Ω	50Ω	20Ω	15Ω
Size information WxHxD(mm)	40x175x150	40x175x150	50x175x150	56x170x174	80x170x183
Size specifications	C1	C1	C2	C3	C4

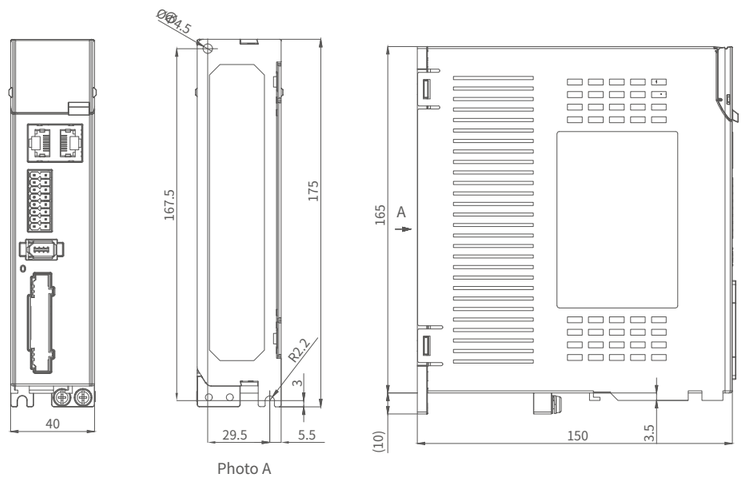
Note: * represents the model under development, please contact for details

AC380V N3 Technical Specifications

Model	3R5SC*	5R4SC*	8R4SC*	120SC*	170SC*	210SC*	260SC*
Input power	AC 345V ~ AC 440V						
Frequency	50/60 Hz						
Power	1000 W	1500 W	2000 W	3000 W	5000 W	6000 W	7500 W
Single phase input current	2.4 Arms	3.6 Arms	5.6 Arms	8 Arms	12 Arms	16 Arms	21 Arms
Rated output current	3.5 Arms	5.4 Arms	8.4 Arms	11.9 Arms	16.5 Arms	20.8 Arms	25.7 Arms
Maximum output current	10 Arms	15 Arms	25 Arms	40 Arms	50 Arms	75 Arms	75 Arms
Overload factor	200%	200%	200%	200%	200%	250%	200%
Built-in braking resistor	80W, 100Ω	80W, 100Ω	50W, 80Ω	50W, 80Ω	100W, 35Ω	100W, 35Ω	100W, 35Ω
Minimum resistance value of external braking resistor	80Ω	60Ω	45Ω	40Ω	35Ω	25Ω	25Ω
Size information WxHxD(mm)	56x170x174	56x170x174	80x170x183	80x170x183	90x253.6x232.8	90x253.6x232.8	90x253.6x232.8
Size specifications	C3	C3	C4	C4	C5	C5	C5

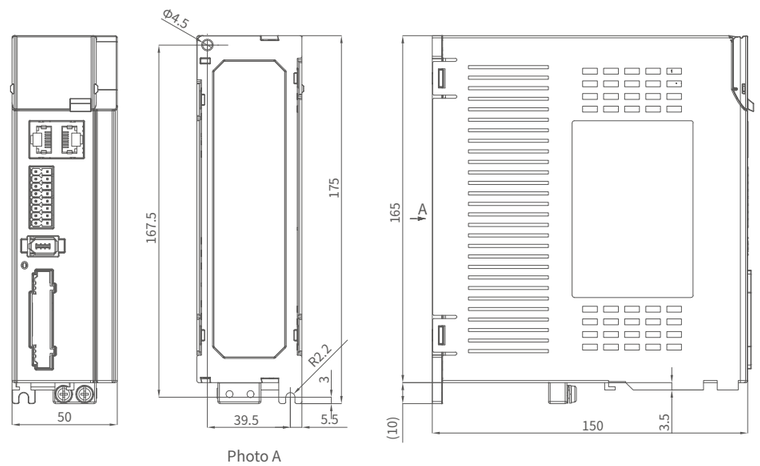
Note: * represents the model under development, please contact for details

AC220V class N3 ServoDrive Dimensions



No.	Drives model
1	N3RE-1R8SA
2	N3RE-2R8SA

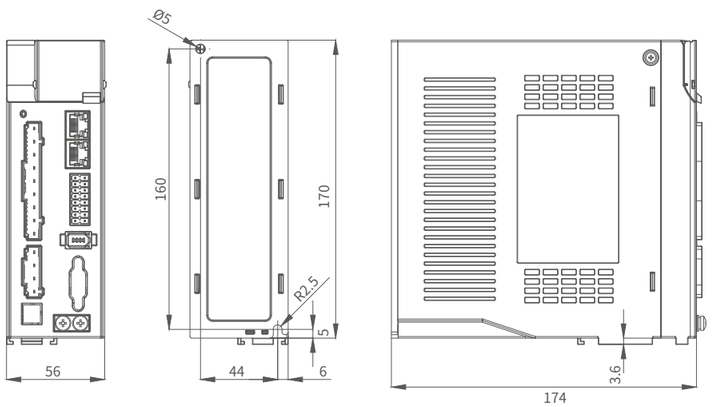
Specification W×H×D(mm)
C1 40x175x150



No.	Drives model
1	N3RE-4R2SA

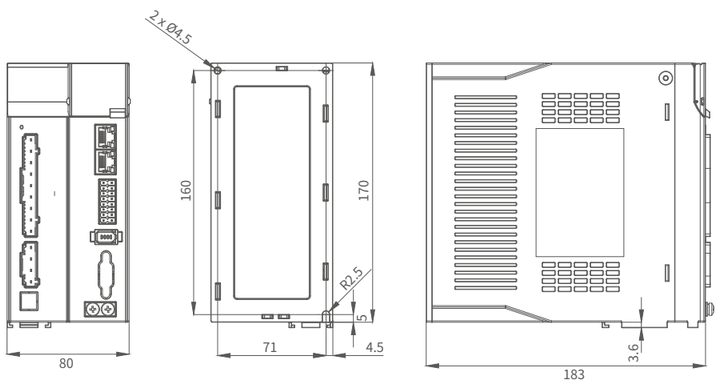
Specification W×H×D(mm)
C2 50x175x150

AC380V class N3 ServoDrive Dimensions



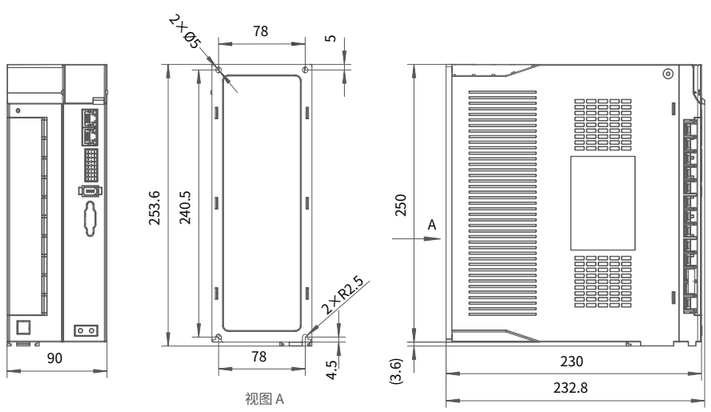
No.	Drives model
1	N3RE-7R6SA
2	N3RE-3R5SC
3	N3RE-5R4SC

Specification W×H×D(mm)
C3 56x170x174



No.	Drives model
1	N3RE-120SA
2	N3RE-8R4SC
3	N3RE-120SC

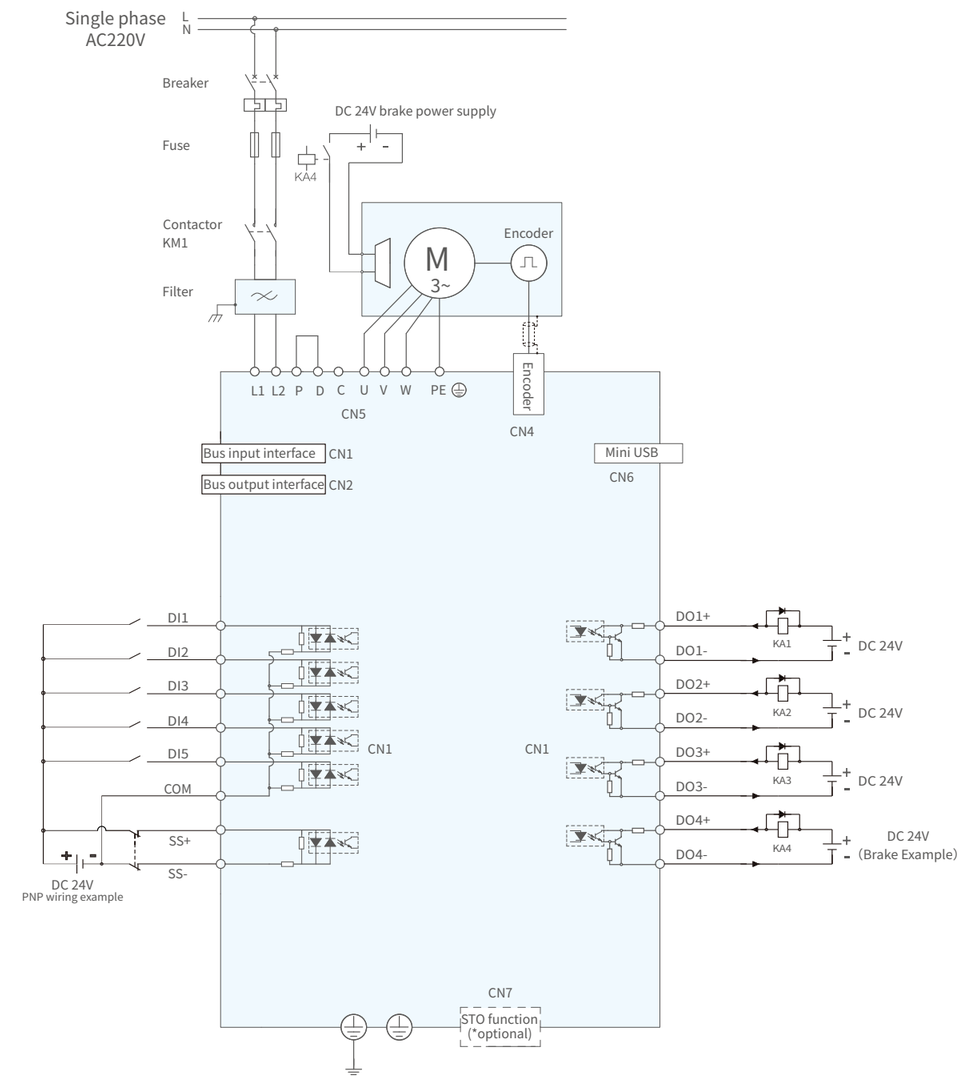
Specification W×H×D(mm)
C4 80x170x183



No.	Drives model
1	N3RE-170SC
2	N3RE-210SC
3	N3RE-260SC

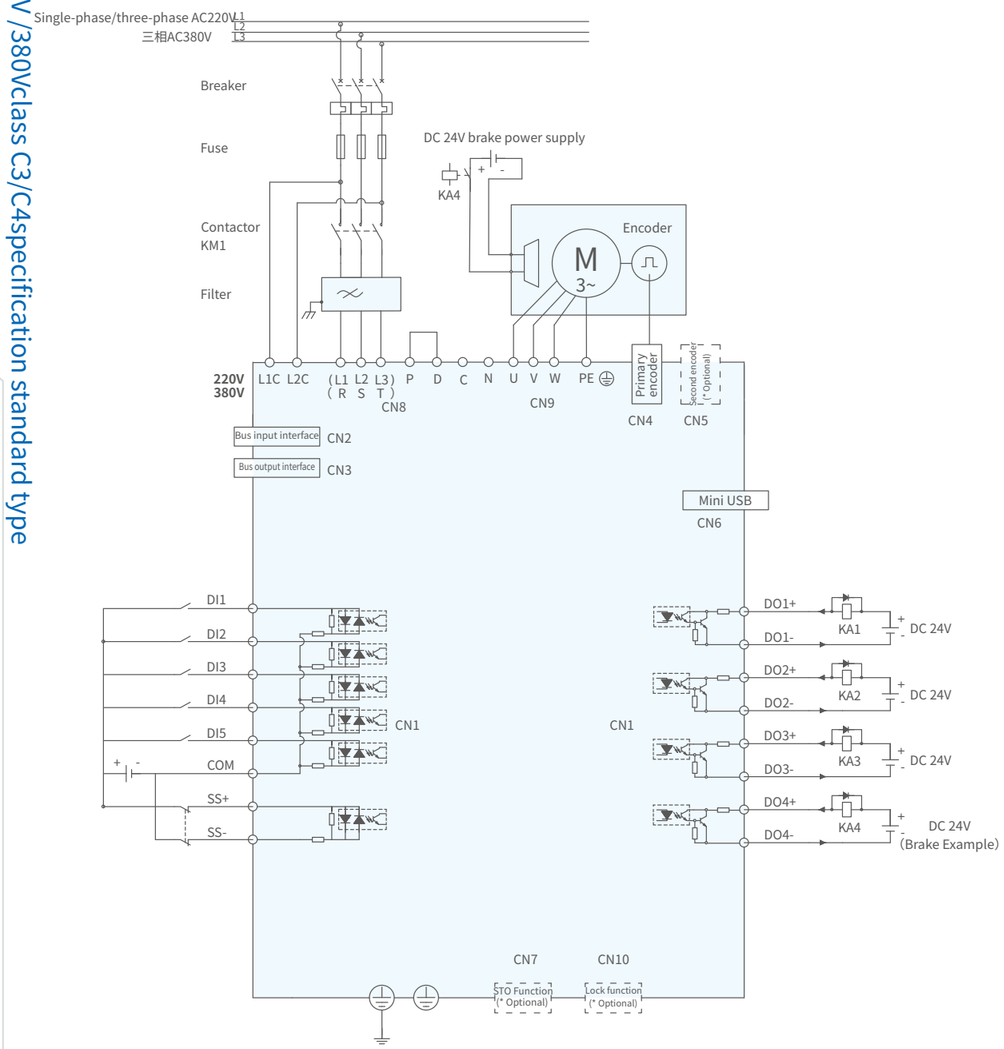
Specification W×H×D(mm)
C5 90x253.6x232.8

AC220V class A1/A2specification standard type N3 Wiring Diagram



Note: This is the wiring diagram of the standard N3 driver. Please carefully check whether the actual driver matches it before wiring.

AC220V /380Vclass C3/C4specification standard type
N3 Wiring Diagram



Note:

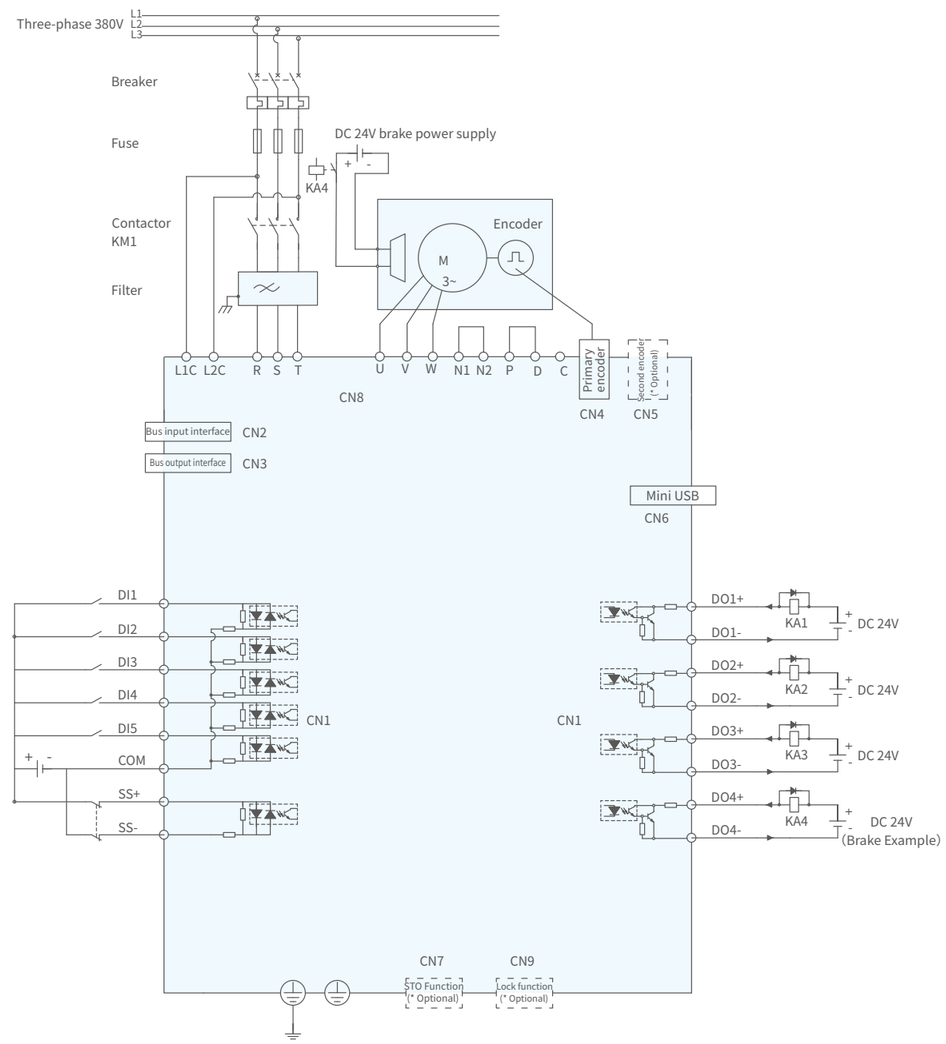
1、When the 220V input is applied, the CN8 terminal is L1C L2C L1 L2 L3 P D C N

When the 380V input is applied, the CN8 terminal is L1C L2C R S T P D C N

2、In single-phase mode, connect any two phases of L1, L2, and L3.

3、This is the wiring diagram of the standard N3 driver. Please carefully check whether the actual driver matches it before wiring.

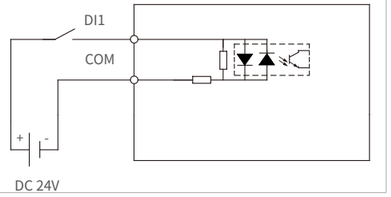
AC380V class C5 specification standard type
N3 Wiring Diagram



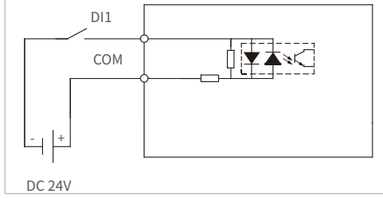
Note:

1. This is the wiring diagram of the standard N3 driver. Please carefully check whether the actual driver matches it before wiring.

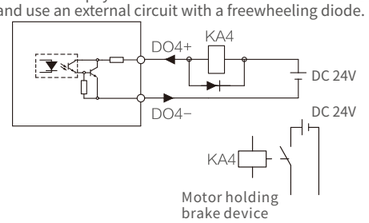
PNP signal input wiring when using external DC24V power supply



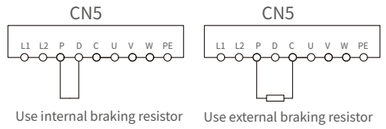
NPN signal input wiring when using external DC24V power supply



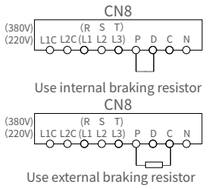
DO output wiring-brake example
Note: Please pay attention to the current flow direction and use an external circuit with a freewheeling diode.



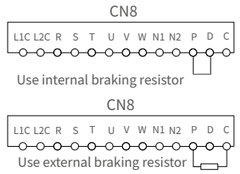
Wiring when using internal and external braking resistors respectively
Note: When using an external braking resistor, the short circuit between P and D needs to be cancelled.



Wiring when internal and external brake resistors are used respectively
Note: When using an external brake resistor, you need to cancel the short splice between P and D.
Only available for C3/C4 specification drives



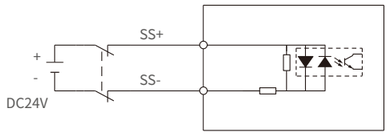
Wiring when internal and external brake resistors are used respectively
Note: When using an external brake resistor, you need to cancel the short splice between P and D.
Only available for C5 specification drives



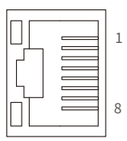
Motor encoder CN4 interface pin definition

	Communication encoder
1	5V
2	GND
3	CLOCK+
4	CLOCK+
5	SD+
6	SD-
Housing	Shielded

Emergency stop wiring diagram (normally closed wiring example)

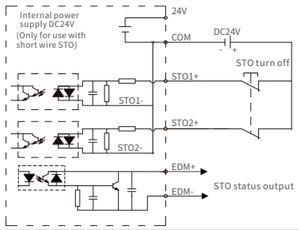


EtherCAT Network port definition



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

STO function wiring diagram (customized version only)



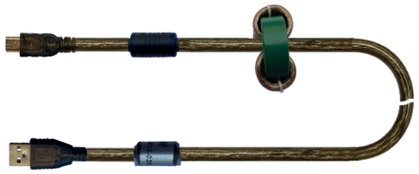
Debugging software

Model

KST-SW.02

Explanation

N2&N3 series servo system debugging software

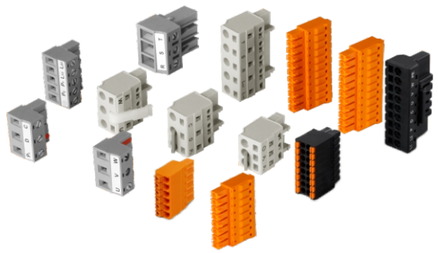


Debug cable

Model	Explanation
KSL-M13-030	N2&N3 series MiniUSB debugging cable 3M

Signal cable

Model	Explanation
KSL-S03-010	N3 series pulse servo signal cable 1M
KSL-S03-015	N3 series pulse servo signal cable 1.5M



Terminal group

Model	Explanation
KSA-TB11.01	N2 series A1/A2 specification terminal group
KSA-TB12.01	N2 series A3 specification terminal group
KSA-TB13.01	N2 series B1/B2 specification terminal group
KSA-TB14.01	N2 series B3 specification terminal group
KSA-TB17.01	N3 series C1/C2 specification terminal group
KSA-TB17.02	N3 series C1/C2 specifications with STO terminal group
KSA-TB19.01	N3 series E1/E2 specification terminal group

网线

Model	Explanation
KSL-CAT-003.01	EtherCAT communication network cable 0.3M
KSL-CAT-005.01	EtherCAT communication network cable 0.5M
KSL-CAT-010.01	EtherCAT communication network cable 1M
KSL-CAT-030.01	EtherCAT communication network cable 3M
KSL-CAT-050.01	EtherCAT communication network cable 5M

EtherCAT Pin definition

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

Note: The network cable is Category 5e. If you have special requirements, please consult Company.

Braking resistor CombinationTable

Drive model	Matching motor power	Driver internal braking resistor	Recommended external braking resistor			
			Model	Power	Resistance	Maximum braking energy Ec(J) that the driver capacitor can absorb
N2RE-1R8SA、N3RE-1R8SA	200W	无	RXLG-100W 50RJ	100W	50Ω	20
N2RE-2R8SA、N3RE-2R8SA	400W		RXLG-100W 50RJ	100W	50Ω	
N3RE-3R5SA	600W	40W;80Ω	RXLG-200W 50RJ	200W	50Ω	
N2RE-4R2SA、N3RE-4R2SA	750W		RXLG-200W 50RJ	200W	50Ω	
N2RE-060PA	850W	60W;40Ω	RXLG-200W 25RJ	200W	25Ω	34
	1.0kW		RXLG-200W 25RJ	200W	25Ω	
N2RE-100SA	1.0kW		RXLG-200W 25RJ	200W	25Ω	
	1.5kW		RXLG-400W 25RJ	400W	25Ω	
N2RE-120SA	1.0kW		RXLG-200W 25RJ	200W	25Ω	
	1.3KW		RXLG-400W 25RJ	400W	25Ω	
	1.5kW		RXLG-400W 25RJ	400W	25Ω	
N2RE-120PA	1.8kW	100W; 20Ω	RXLG-400W 25RJ	400W	25Ω	60
	2.0kW		RXLG-400W 25RJ	400W	25Ω	
N2RE-140SA	2.5kW		RXLG-500W 25RJ	500W	25Ω	
	2.6kW		RXLG-500W 25RJ	500W	25Ω	
	3.0kW		RXLG-800W 25RJ	800W	25Ω	
N2RE-5R4SC	1.0kW	无	RXLG-200W 50RJ	200W	50Ω	130
	2.0kW		RXLG-400W 50RJ	400W	50Ω	
N2RE-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	
N2RE-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	
N2RE-100SC	2.3kW	无	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	
N2RE-120SC	6.0kW	无	RXLG-1500W 50RJ	1500W	50Ω	156
N2RE-140SC	7.0kW		RXLG-1500W 50RJ	1500W	50Ω	
N2RE-210SC	8.3kW		RXLG-2000W 50RJ	2000W	50Ω	
N2RE-250SC	10.0kW	无	RXLG-2000W 25RJ	2000W	25Ω	203
N2RE-340SC	11.0kW	无	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 braking resistor power in the selection table is the recommended power, and the appropriate power can be selected on site according to needs. (External braking resistor needs to be purchased by the user)

Ordering Information

RXLG - 1000W - 50R J

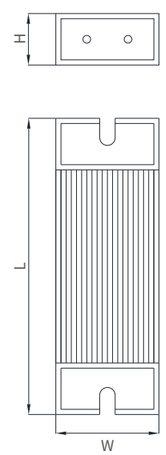
❶ Aluminum housing resistor series

❷ power
100W
200W
...
3000W

❸ Resistance
25R 25Ω
50R 50Ω

❹ error deviation
J ±5%

Dimensions



(braking resistor diagram)

No.	Braking resistor model	Specifications: L×W×H (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

KMT Series

Three-phase AC permanent magnet synchronous servo motor

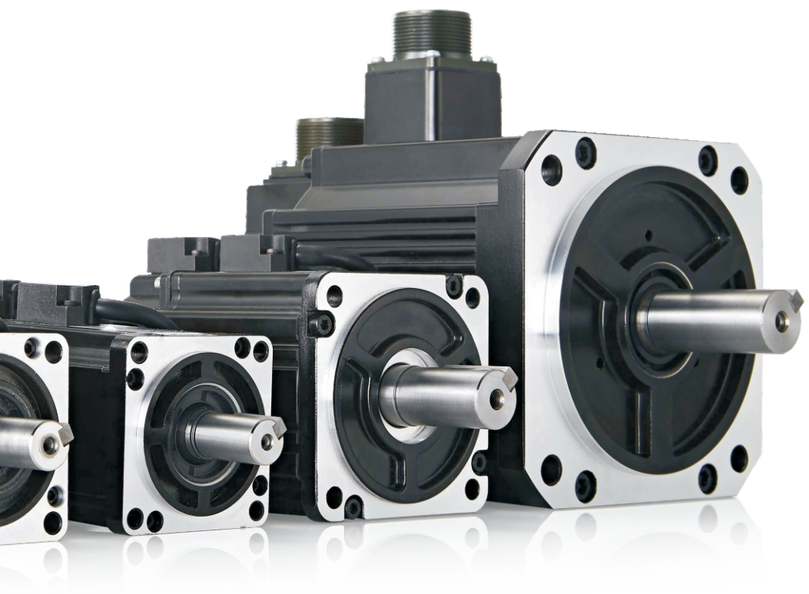
KMT three-phase AC permanent magnet synchronous servo motor is designed with 4/5 pole pairs and low slot torque. It is combined with N2&N3 servo driver to form a servo system with powerful functions and excellent performance. The motor supports 3 times overload, and different types of encoders can be selected according to actual site needs, which can fully meet your high-level requirements for dynamic response performance, speed regulation range, position feedback accuracy, and output torque accuracy!

Functional Characteristics

- High performance rare earth permanent magnet rotor, high, medium and low inertia optional, good dynamic response
- Three Phase Back EMF Sinusoidal Design, extremely low groove torque, good low-speed smoothing characteristics
- Output shaft oil seal protection, and standard brake optional
- Protection grade or IP65 or IP67, B or F class insulation
- Meet CE standard

Encoder feedback methods are optional:

- Incremental encoder
- Multiturn absolute encoder



KMT Ordering Informations

KMT M 130 H – 85B 15 EA – B O K . □ – □

KMT Series

None: Standard type
L: Low inertia type
M:Medium inertia type
H: High inertia type

Flange
40 flange
60 flange
80 flange
100 flange
130 flange
180 flange
200 flange
230 flange

Voltage Level
None : AC220V
H : AC380V

Rated Power（W）
B : x10
C : x100
D : x1000
Example：40B : 400W

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

Encoder
E8: 17-bit multi-turn absolute encoder
EA: 23-bit multiturn absolute encoder

None Without brake
B With brake

None Without oil seal
O With oil seal

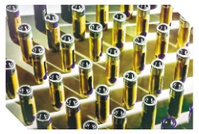
None Optical axis
K With key, with threaded hole

None Standard
G Plastic case aviation insert, only for 40/60/80 flange
H Metal jet, 180 flanges only

Type (Only for E8 specification encoders with 80mm flange and below)
None Split
X Overall

Note:
1) The naming rules are only used for model analysis and cannot be used for ordering. Please consult Company before ordering;
2) Whether there is an oil seal or a brake will cause different motor characteristics, please pay attention;
3) Motor data may change, please confirm with Company before using it for design purposes.

Typical application



Smart Drives

40/60 Flange

AC220V

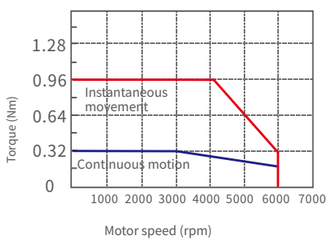
3000rpm

0.1kW~0.4kW

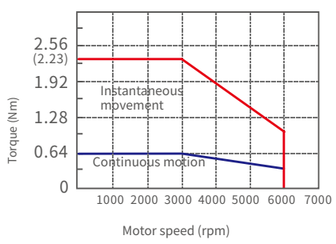
Motor Technical Data

Motor No.	KMT40-10B30	KMT60-20B30	KMT60-40B30
Voltage U(AC)	220V		
Rated power Pr (kW)	0.1	0.2	0.4
Rated current Ir(Arms)	0.93	1.6	2.3
Rated torque Tr (Nm)	0.32	0.64	1.27
Rated speed Nr (rpm)	3000	3000	3000
Maximum current Imax(Arms)	2.79	5.5	6.5
Maximum torque Tmax (Nm)	0.96	2.23	3.81
Maximum speed Nmax(rpm)	6000	6000	5000
Torque coefficient Kt(Nm/A)	0.342	0.459	0.645
Moment of inertia Jm (10^{-4}Kg.m^2)	0.073(0.075)	0.28(0.30)	0.56(0.58)
Electrical time constant te(ms)	0.81	1.95	2.66
Mechanical time constant tm (ms)	1.128	1.432	1.151
Weight(kg)	0.4(0.6)	0.81(1.26)	1.3（1.55）
Heat sink size(mm)	Aluminum 200 x 200 x 6	Aluminum 250 x 250 x 6	
Brake voltage Ub(DC)	24V	24V	
Brake current Ib(A)	0.208	0.32	
Brake torque Tb(Nm)	＞3.2	⩾1.5	
Driver adaptation information			
Recommended cable cross-sectional area(mm^2)	0.5	0.5	0.5
Recommended drive models	N3RE-1R8SA-E	N3RE-1R8SA-E	N3RE-2R8SA-E

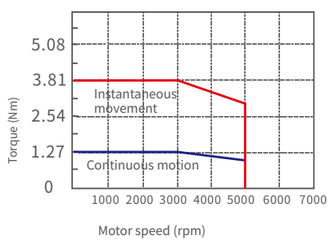
KMT40-10B30



KMT60-20B30



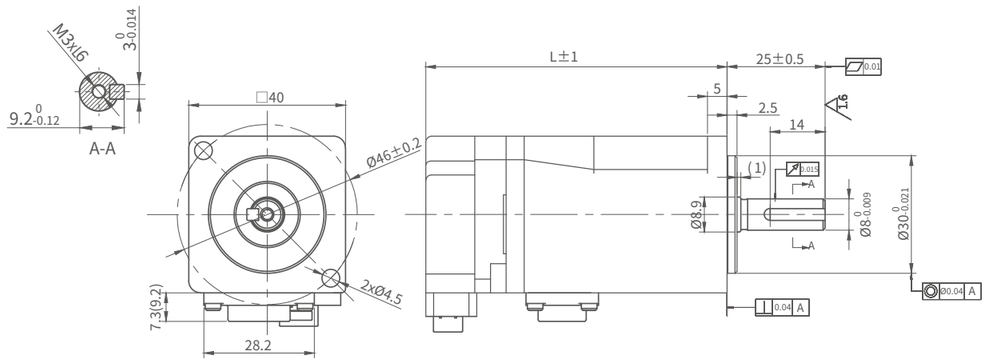
KMT60-40B30



Note: 1)The above are standard models, () are parameters of motors with brakes;

2)The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

ServoMotor Dimensions（40 Flange）

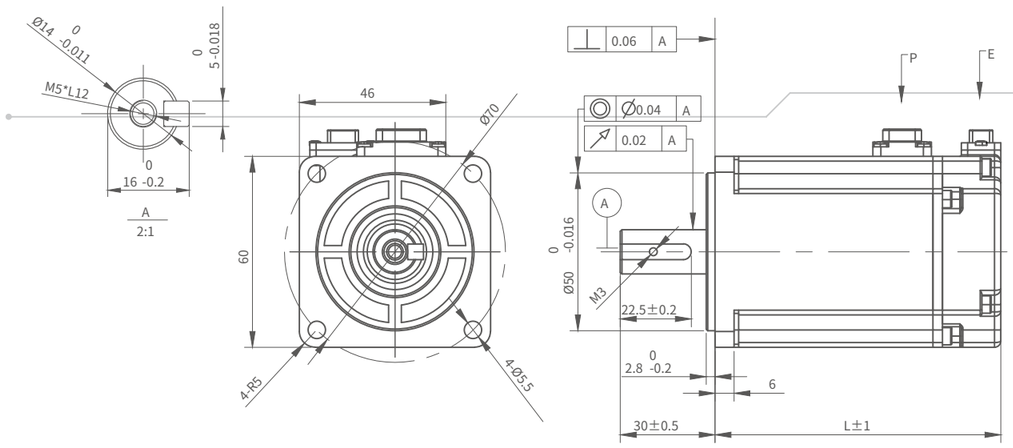


External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMT40-10B30E□	76.9	104.6

ServoMotor Dimensions（60 Flange）



External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMT60-20B30E□	73	104.2
KMT60-40B30E□	90.5	121.7

80Flange

AC220V

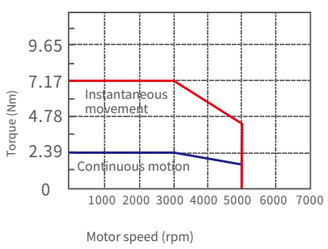
3000rpm

0.1kW~1kW

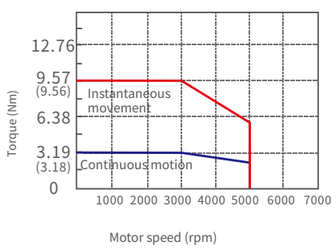
Motor Technical Data

Motor No.	KMT80-75B30	KMT80-10C30	KMT80-10C25*
Voltage U(AC)		220V	
Rated power Pr (kW)	0.75	1	1
Rated current Ir(Arms)	4.1	5.7	6.8
Rated torque Tr (Nm)	2.39	3.18	4
Rated speed Nr (rpm)	3000	3000	2500
Maximum current Imax(Arms)	13.4	17.7	20.4
Maximum torque Tmax (Nm)	7.17	9.56	12
Maximum speed Nmax(rpm)	5000	5000	5000
Torque coefficient Kt(Nm/A)	0.645	0.627	0.604
Moment of inertia Jm (10^{-4}Kg.m^2)	1.5(1.65)	2.0(2.15)	1(1.02)
Electrical time constant te(ms)	4.73	5.56	9.22
Mechanical time constant tm (ms)	0.919	0.822	0.5613
Weight(kg)	2.2(2.8)	2.8(3.4)	2.56(3.17)
Heat sink size(mm)		Aluminum 250 x 250 x 6	
Brake voltage Ub(DC)		24V	24V
Brake current Ib(A)		0.48	0.48
Brake torque Tb(Nm)		≥3.2	>3.2
Driver adaptation information			
Recommended cable cross-sectional area(mm^2)	0.5	0.5	0.5
Recommended drive models	N3RE-4R2SA-E	N2RE-060PA-E	N2RE-100SA-E

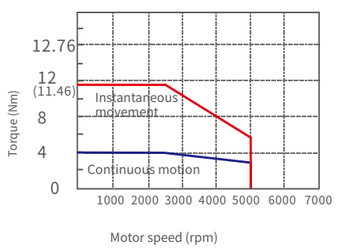
KMT80-75B30



KMT80-10C30



KMT80-10C25

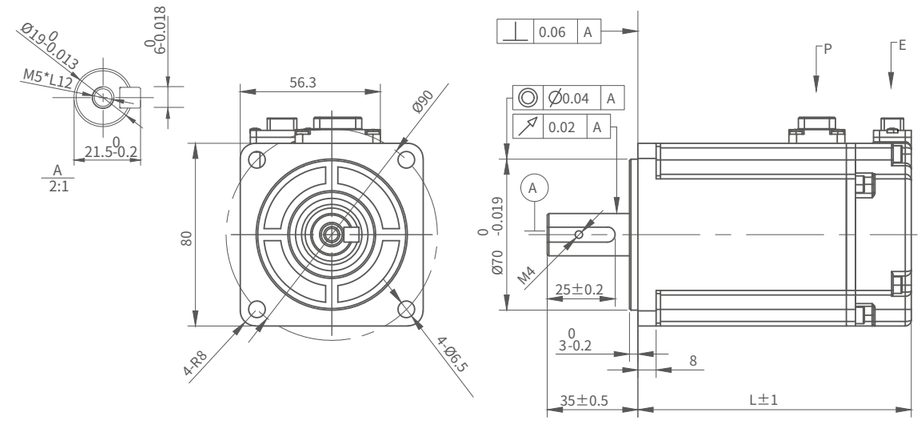


Note: 1)The above are standard models, () are parameters of motors with brakes;

2)The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

ServoMotor Dimensions（80 Flange）

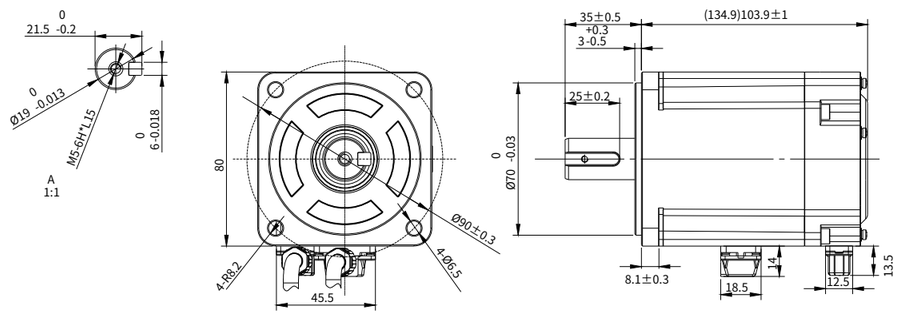


External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMT80-75B30E□	93	123
KMT80-10C30E□	106	136

ServoMotor Dimensions（80 Flange）



External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMT80-10C25E□	103.9	134.9

100 Flange

AC220V

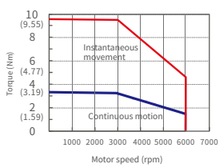
3000rpm

1kW~2kW

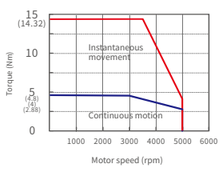
Motor Technical Data

Motor No.	KMTM100-10C30	KMTM100-15C30	KMTM100-20C30
Voltage U(AC)		220V	
Rated power Pr (kW)	1	1.5	2
Rated current Ir(Arms)	7.7	8.6	11.3
Rated torque Tr (Nm)	3.18	4.77	6.37
Rated speed Nr (rpm)	3000	3000	3000
Maximum current Imax(Arms)	23.1	25.8	33.9
Maximum torque Tmax (Nm)	9.55	14.32	19.1
Maximum speed Nmax(rpm)	6000	5000	5000
Torque coefficient Kt(Nm/A)	0.416	0.555	0.563
Moment of inertia Jm (10^{-4}Kg.m^2)	2.07(2.33)	2.69(2.95)	3.6(3.86)
Electrical time constant te(ms)	6.99	7.02	7.18
Mechanical time constant tm (ms)	0.70	0.58	0.55
Weight(kg)	4.5(5.4)	5.0(6.5)	6.0(7.5)
Heat sink size(mm)		Aluminum 400 x 410x 15	
Brake voltage Ub(DC)		24V	
Brake current Ib(A)		0.6	
Brake torque Tb(Nm)		⩾9	
Driver adaptation information			
Recommended cable cross-sectional area(mm^2)	1.5	1.5	1.5
Recommended drive models	N2RE-100SA-E	N2RE-100SA-E	N2RE-120PA-E

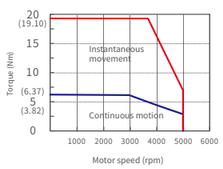
KMTM100-10C30



KMTM100-15C30



KMTM100-20C30



Note: **1) The above are standard models, ( ) are parameters of motors with brake;**
2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;
if the load torque is within the rated torque, it can be used in the continuous working area.

100 Flange

AC380V

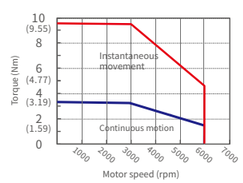
3000rpm

1kW~2.5kW

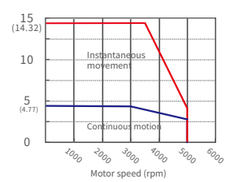
Motor Technical Data

Motor No.	KMTM100H-10C30	KMTM100H-15C30	KMTM100H-20C30	KMTM100H-25C30
Voltage U(AC)		380V		
Rated power Pr (kW)	1	1.5	2	2.5
Rated current Ir(Arms)	4.5	4.8	6.8	8.4
Rated torque Tr (Nm)	3.18	4.77	6.37	8.0
Rated speed Nr (rpm)	3000	3000	3000	3000
Maximum current Imax(Arms)	13.5	14.4	20.4	24
Maximum torque Tmax (Nm)	9.55	14.32	19.1	22.7
Maximum speed Nmax(rpm)	6000	5000	5000	5000
Torque coefficient Kt(Nm/A)	0.707	0.99	0.936	0.947
Moment of inertia Jm (10^{-4}Kg.m^2)	2.07(2.33)	2.69(2.95)	3.6(3.86)	4.37(4.55)
Electrical time constant te(ms)	8.63	6.36	6.93	9.16
Mechanical time constant tm (ms)	0.73	0.68	0.56	0.45
Weight(kg)	4.5(5.4)	5.0(6.5)	6.0(7.5)	7.0(8.5)
Heat sink size(mm)		Aluminum 400 x 410 x 15		
Brake voltage Ub(DC)		24V		
Brake current Ib(A)		0.6		
Brake torque Tb(Nm)		⩾9		
Driver adaptation information				
Recommended cable cross-sectional area(mm^2)	0.75	0.75	1.5	1.5
Recommended drive models	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-6R8SC-E	N2RE-8R3SC-E

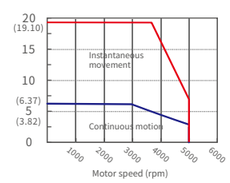
KMTM100H-10C30



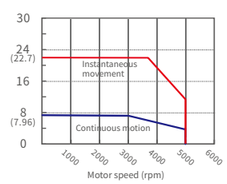
KMTM100H-15C30



KMTM100H-20C30

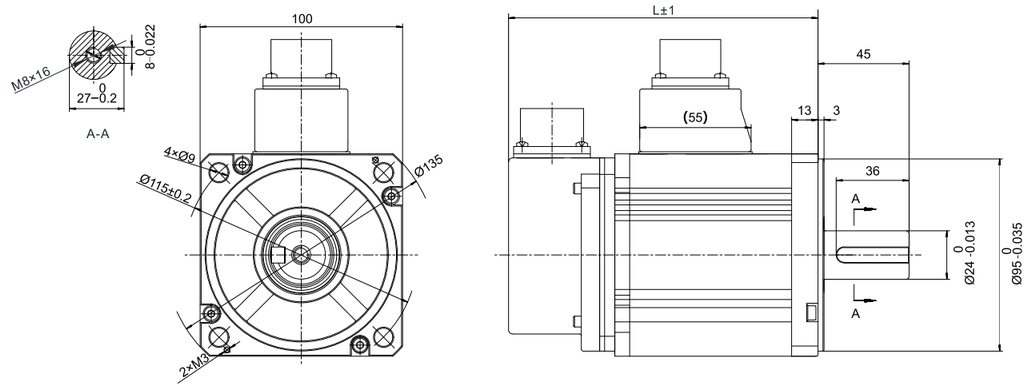


KMTM100H-25C30



Note: 1) The above are standard models, ( ) are parameters of motors with brake;
2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;
if the load torque is within the rated torque, it can be used in the continuous working area.

ServoMotor Dimensions（100 Flange）



External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMTM100□-10C30E□	146.9	183
KMTM100□-15C30E□	166.9	203
KMTM100□-20C30E□	186.9	223
KMTM100H-25C30E□	206.9	243

Note: For motors with the same flange, torque, and speed, the 380V and 220V models have the same overall dimensions.

130 Flange

AC220V

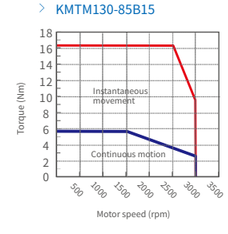
1500rpm

0.85kW~1.8kW

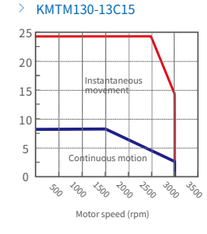
Motor Technical Data

Motor No.	KMTM130-85B15	KMTM130-13C15	KMTM130-15C15	KMTM130-18C15
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 (10^{-4}Kg.m^2)	9.0(10.5)	13.0(14.5)	17(18.5)	21.7(23.2)
Electrical time constant te(ms)	9.68	10.7	11.11	10.61
Mechanical time constant tm (ms)	1.60(1.86)	1.42(1.58)	1.64(1.78)	1.11(1.19)
Weight(kg)	6.0(7.8)	7.4(9.2)	8.8（10.6)	10.4(12.2)
Heat sink size(mm)	Aluminum 300 x 300 x 12			
Brake voltage Ub(DC)	24V			
Brake current Ib(A)	1			
Brake 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	N2RE-060PA-E	N2RE-100SA-E	N2RE-120SA-E	N2RE-120PA-E

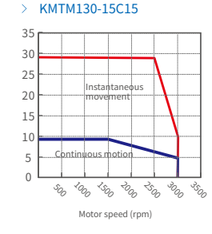
KMTM130-85B15



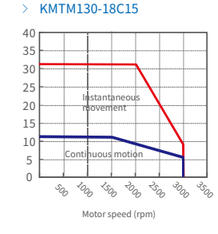
KMTM130-13C15



KMTM130-15C15



KMTM130-18C15



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC220V

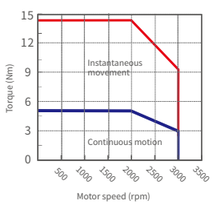
2000rpm

1kW~2.5kW

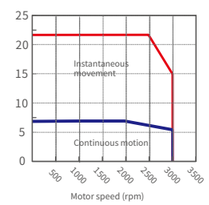
Motor Technical Data

Motor No.	KMTM130-10C20	KMTM130-15C20	KMTM130-20C20	KMTM130-25C20
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	0.89	0.83	0.89
Moment of inertia Jm (10^{-4}Kg.m^2)	9(10.5)	13.0(14.5)	17.0(18.5)	21.7(23.2)
Electrical time constant te(ms)	9.68	10.7	11.11	10.61
Mechanical time constant tm (ms)	1.60(1.86)	1.42(1.58)	1.64(1.78)	1.11(1.19)
Weight(kg)	6.0(7.8)	7.4(9.2)	8.8(10.6)	10.4(12.2)
Heat sink size(mm)	Aluminum 300 x 300 x 12			
Brake voltage Ub(DC)	24V			
Brake current Ib(A)	1			
Brake 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	N2RE-060PA-E	N2RE-100SA-E	N2RE-120PA-E	N2RE-140SA-E

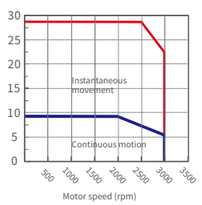
› KMTM130-10C20



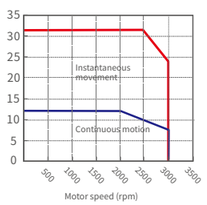
› KMTM130-15C20



› KMTM130-20C20



› KMTM130-25C20



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC220V

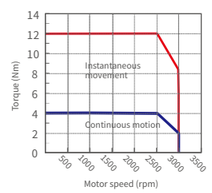
2500rpm

1kW~2.5kW

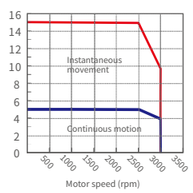
Motor Technical Data

Motor No.	KMTM130 -10C25	KMTM130 -13C25	KMTM130 -15C25	KMTM130 -20C25	KMTM130 -25C25
Voltage U(AC)	220V				
Rated power Pr (kW)	1	1.3	1.5	2	2.5
Rated current Ir(Arms)	4.5	5.7	6.8	8.6	11.5
Rated torque Tr (Nm)	4	5	6	7.7	9.55
Rated speed Nr (rpm)	2500	2500	2500	2500	2500
Maximum current Imax(Arms)	13.6	17	20.4	25.8	34.5
Maximum torque Tmax (Nm)	12	15	18	23.1	28.7
Maximum speed Nmax(rpm)	3000	3000	3000	3000	3000
Torque coefficient Kt(Nm/A)	0.88	0.88	0.88	0.89	0.83
Moment of inertia Jm (10^{-4}Kg.m^2)	9(10.5)	9(10.5)	9(10.5)	13(14.5)	17（18.5）
Electrical time constant te(ms)	9.68	9.68	9.68	10.7	11.11
Mechanical time constant tm (ms)	1.60(1.86)	1.6(1.86)	1.6(1.86)	1.42(1.58)	1.64（1.78）
Weight(kg)	6.0(7.8)	6.0(7.8)	6.0(7.8)	7.4(9.2)	8.8（10.6）
Heat sink size(mm)	Aluminum 300 x 300 x 12				
Brake voltage Ub(DC)	24V				
Brake current Ib(A)	1				
Brake torque Tb(Nm)	>12				
Driver adaptation information					
Recommended cable cross-sectional area(mm^2)	0.75	0.75	1.5	1.5	1.5
Recommended drive models	N2RE-060PA-E	N2RE-100SA-E	N2RE-100SA-E	N2RE-120PA-E	N2RE-140SA-E

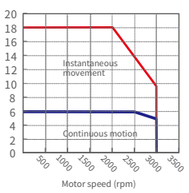
› KMTM130-10C25



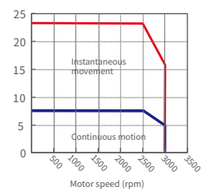
› KMTM130-13C25



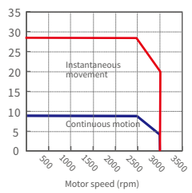
› KMTM130-15C25



› KMTM130-20C25



› KMTM130-25C25



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC220V

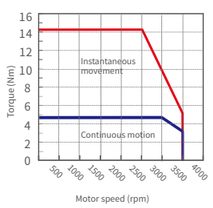
3000rpm

1.5kW~3kW

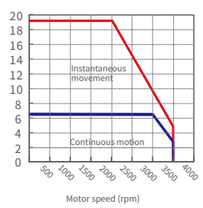
Motor Technical Data

Motor No.	KMTM130-15C30	KMTM130-20C30	KMTM130-25C30	KMTM130-30C30
Voltage U(AC)	220V			
Rated power Pr (kW)	1.5	2	2.5	3
Rated current Ir(Arms)	5.4	7.2	8.88	11.5
Rated torque Tr (Nm)	4.77	6.36	7.95	9.55
Rated speed Nr (rpm)	3000	3000	3000	3000
Maximum current Imax(Arms)	16.2	21.6	26.6	34.5
Maximum torque Tmax (Nm)	14.3	19.08	23.9	28.6
Maximum speed Nmax(rpm)	3500	3500	3500	3500
Torque coefficient Kt(Nm/A)	0.88	0.88	0.89	0.83
Moment of inertia Jm (10^{-4}Kg.m²)	9(10.5)	9 (10.5)	13 (14.5)	17.0(18.5)
Electrical time constant te(ms)	9.68	9.68	10.7	11.11
Mechanical time constant tm (ms)	1.60(1.86)	1.60 (1.86)	1.42 (1.58)	1.64(1.78)
Weight(kg)	6.0(7.8)	6.0(7.8)	7.4 (9.2)	8.8(10.6)
Heat sink size(mm)	Aluminum 300 x 300 x 12			
Brake voltage Ub(DC)	24V			
Brake current Ib(A)	1			
Brake torque Tb(Nm)	⩾12			
Driver adaptation information				
Recommended cable cross-sectional area(mm²)	0.75	1.5	1.5	1.5
Recommended drive models	N2RE-100SA-E	N2RE-120PA-E	N2RE-140SA-E	N2RE-140SA-E

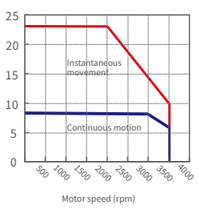
› KMTM130-15C30



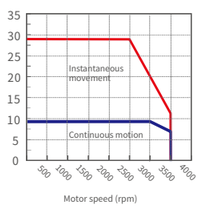
› KMTM130-20C30



› KMTM130-25C30



› KMTM130-30C30



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC380V

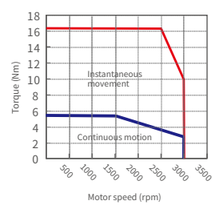
1500rpm

0.85kW~2.3kW

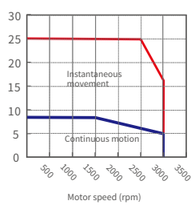
Motor Technical Data

Motor No.	KMTM130H -85B15	KMTM130H -13C15	KMTM130H -15C15	KMTM130H -18C15	KMTM130H -23C15
Voltage U(AC)	380V				
Rated power Pr (kW)	0.85	1.3	1.5	1.8	2.3
Rated current Ir(Arms)	3.5	5.1	5.6	6.9	8.7
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)	10.5	15.3	16.8	20.7	26.1
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)	1.69	1.76	1.84	1.79	1.81
Moment of inertia Jm (10^{-4}Kg.m²)	9(10.5)	13(14.5)	17(18.5)	21.7 (23.2)	21.7(23.2)
Electrical time constant te(ms)	10.03	11.07	13.13	12.38	12.38
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)	6.0(7.8)	7.4(9.2)	8.8(10.6)	10.4(12.2)	10.4(12.2)
Heat sink size(mm)	Aluminum 300 x 300 x 12				
Brake voltage Ub(DC)	24V				24V
Brake current Ib(A)	1				1
Brake torque Tb(Nm)	⩾12				⩾15
Driver adaptation information					
Recommended cable cross-sectional area(mm²)	0.75	0.75	0.75	1.5	1.5
Recommended drive models	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-6R8SC-E	N2RE-100SC-E

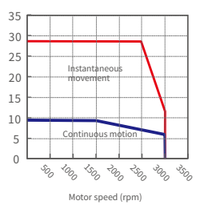
› KMTM130H-85B15



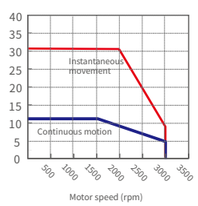
› KMTM130H-13C15



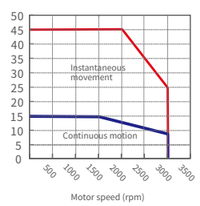
› KMTM130H-15C15



› KMTM130H-18C15



› KMTM130H-23C15



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC380V

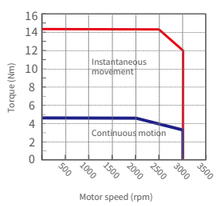
2000rpm

1kW~3kW

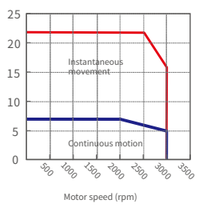
Motor Technical Data

Motor No.	KMTM130H -10C20	KMTM130H -15C20	KMTM130H -20C20	KMTM130H -25C20	KMTM130H -30C20
Voltage U(AC)	380V				
Rated power Pr (kW)	1	1.5	2	2.5	3
Rated current Ir(Arms)	3.0	4.4	5.6	7.1	8.3
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)	9.0	13.2	16.8	21.3	24.9
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)	1.7	1.75	1.84	1.78	1.83
Moment of inertia Jm (10^{-4}Kg.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)	10.03	11.07	13.13	12.38	12.38
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)	6.0(7.8)	7.4(9.2)	8.8(10.6)	10.4(12.2)	10.4(12.2)
Heat sink size(mm)	Aluminum 300 x 300 x 12				
Brake voltage Ub(DC)	24V				24V
Brake current Ib(A)	1				1
Brake 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	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-8R3SC-E	N2RE-100SC-E

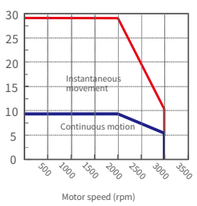
KMTM130H-10C20



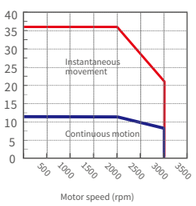
KMTM130H-15C20



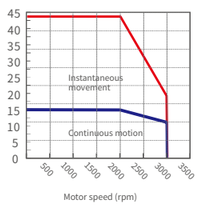
KMTM130H-20C20



KMTM130H-25C20



KMTM130H-30C20



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC380V

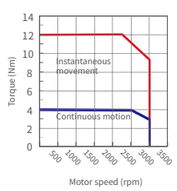
2500rpm

1kW~3.8kW

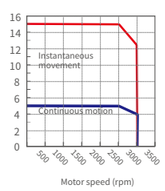
Motor Technical Data

Motor No.	KMTM130H -10C25	KMTM130H -13C25	KMTM130H -15C25	KMTM130H -20C25	KMTM130H -25C25	KMTM130H -38C25
Voltage U(AC)	380V					
Rated power Pr (kW)	1	1.3	1.5	2	2.5	3.8
Rated current Ir(Arms)	2.7	3.2	3.9	4.8	5.6	8.3
Rated torque Tr (Nm)	4	5	6	7.7	9.55	15
Rated speed Nr (rpm)	2500	2500	2500	2500	2500	2500
Maximum current Imax(Arms)	8.1	9.6	11.7	14.4	16.8	24.9
Maximum torque Tmax (Nm)	12	15	18	23.1	28.7	45
Maximum speed Nmax(rpm)	3000	3000	3000	3000	3000	3000
Torque coefficient Kt(Nm/A)	1.6	1.67	1.67	1.75	1.84	1.81
Moment of inertia Jm (10^{-4}Kg.m^2)	9(10.5)	9(10.5)	9(10.5)	13(14.5)	17（18.5)	21.7(23.2)
Electrical time constant te(ms)	10.03	10.03	10.03	11.07	13.13	12.38
Mechanical time constant tm (ms)	1.60(1.86)	1.60(1.86)	1.60(1.86)	1.35(1.51)	1.12（1.20)	1.14(1.22)
Weight(kg)	6.0(7.8)	6.0(7.8)	6.0（7.8)	7.4(9.2)	8.8（10.6)	10.4(12.2)
Heat sink size(mm)	Aluminum 300 x 300 x 12					
Brake voltage Ub(DC)	24V					24V
Brake current Ib(A)	1					1
Brake torque Tb(Nm)	⩾12					⩾15
Driver adaptation information						
Recommended cable cross-sectional area(mm^2)	0.75	0.75	0.75	0.75	1.5	1.5
Recommended drive models	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-100SC-E

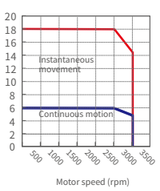
KMTM130H-10C25



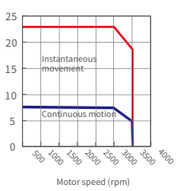
KMTM130H-13C25



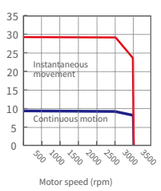
KMTM130H-15C25



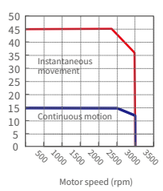
KMTM130H-20C25



KMTM130H-25C25



KMTM130H-38C25



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC380V

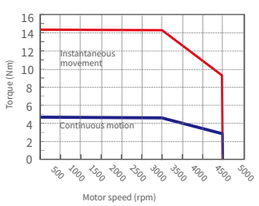
3000rpm

1.5kW~2.5kW

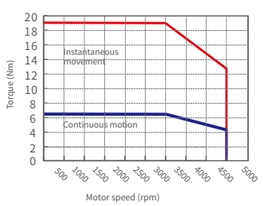
Motor Technical Data

Motor No.	KMTM130H-15C30	KMTM130H-20C30	KMTM130H-25C30
Voltage U(AC)		380V	
Rated power Pr (kW)	1.5	2	2.5
Rated current Ir(Arms)	4.3	5.4	6.9
Rated torque Tr (Nm)	4.77	6.36	7.95
Rated speed Nr (rpm)	3000	3000	3000
Maximum current Imax(Arms)	12.9	16.2	20.7
Maximum torque Tmax (Nm)	14.31	19.08	23.85
Maximum speed Nmax(rpm)	4500	4500	4500
Torque coefficient Kt(Nm/A)	1.19	1.22	1.24
Moment of inertia Jm (10^{-4}Kg.m^2)	9(10.5)	9(10.5)	13(14.5)
Electrical time constant te(ms)	8.62	8.62	11.40
Mechanical time constant tm (ms)	1.60(1.86)	1.60(1.86)	1.35(1.51)
Weight(kg)	6.0(7.8)	6.0(7.8)	7.4(9.2)
Heat sink size(mm)		Aluminum 300 x 300 x 12	
Brake voltage Ub(DC)		24V	
Brake current Ib(A)		1	
Brake torque Tb(Nm)		⩾12	
Driver adaptation information			
Recommended cable cross-sectional area(mm^2)	0.75	0.75	0.75
Recommended drive models	N2RE-5R4SC-E	N2RE-5R4SC-E	N2RE-6R8SC-E

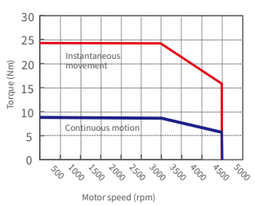
› KMTM130H-15C30



› KMTM130H-20C30



› KMTM130H-25C30



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

130 Flange

AC380V

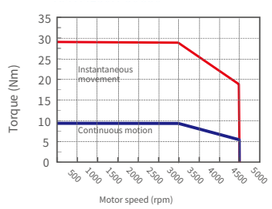
3000rpm

3kW~5kW

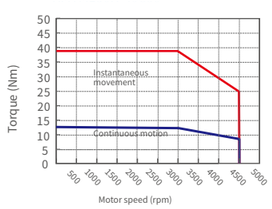
Motor Technical Data

Motor No.	KMTM130H-30C30	KMTM130H-40C30	KMTM130H-50C30
Voltage U(AC)		380V	
Rated power Pr (kW)	3	4.0	5.0
Rated current Ir(Arms)	8.64	10.2	13.2
Rated torque Tr (Nm)	9.55	12.7	15.92
Rated speed Nr (rpm)	3000	3000	3000
Maximum current Imax(Arms)	25.9	30.6	35
Maximum torque Tmax (Nm)	28.7	38.1	40.3
Maximum speed Nmax(rpm)	4500	4500	4500
Torque coefficient Kt(Nm/A)	1.19	1.25	1.27
Moment of inertia Jm (10^{-4}Kg.m^2)	17（18.5）	21.7(23.2)	27（28.5）
Electrical time constant te(ms)	11.57	12.04	11.71
Mechanical time constant tm (ms)	1.12(1.20)	1.14(1.22)	2.1(2.2)
Weight(kg)	8.8(10.6)	10.4(12.2)	12.5（14.4）
Heat sink size(mm)	Aluminum 300 x 300 x 12		Aluminum 450 x 450 x 25
Brake voltage Ub(DC)	24V	24V	24V
Brake current Ib(A)	1	1	1
Brake torque Tb(Nm)	⩾12	⩾15	⩾16.5
Driver adaptation information			
Recommended cable cross-sectional area(mm^2)	1.5	1.5	2.5
Recommended drive models	N2RE-8R3SC-E	N2RE-120SC-E	N2RE-140SC-E

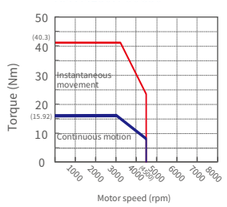
› KMTM130H-30C30



› KMTM130H-40C30



› KMTM130H-50C30

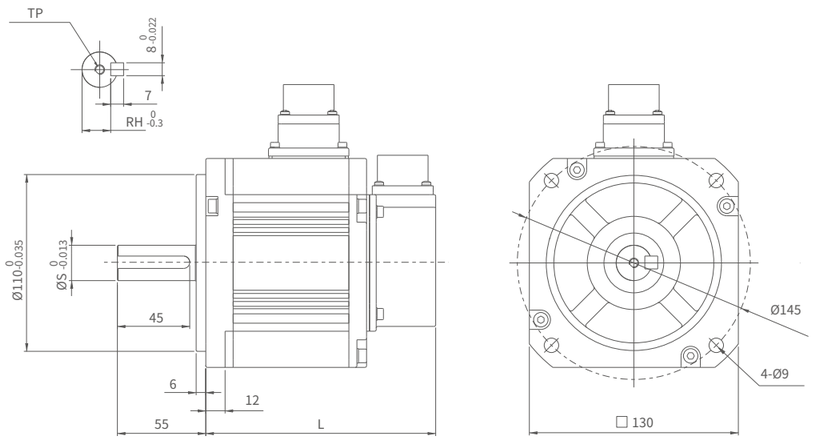


Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

ServoMotor Dimensions（130 Flage）



External Dimension

Unit(mm)

Motor model	S	RH	TP	L (Without brake size)	L (With brake size)
KMTM130□-85B15E□	22	18	M6×L20	142.5	169.3
KMTM130□-10C20E□					
KMTM130□-15C30E□					
KMTM130□-10C25E□					
KMTM130□-13C25E□					
KMTM130□-15C25E□					
KMTM130□-20C30E□					
KMTM130□-13C15E□	22	18	M6×L20	159.5	186.3
KMTM130□-15C20E□					
KMTM130□-20C25E□					
KMTM130□-25C30E□					
KMTM130□-20C20E□	22	18	M6×L20	176.5	203.3
KMTM130□-30C30E□					
KMTM130□-25C25E□					
KMTM130□-15C15E□					
KMTM130□-18C15E□	22	18	M6×L20	196.5	223.3
KMTM130□-25C20E□					
KMTM130□-30C20E□					
KMTM130□-40C30E□					
KMTM130□-23C15E□					
KMTM130□-38C25E□					
KMTM130H-50C30E□	24	20	M8×L20	227	253.8

Note: For motors with the same flange, torque, and speed, the 380V and 220V models have the same overall dimensions.

180 Flange

AC380V

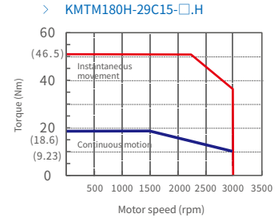
1500rpm

2.9kW~7.5kW

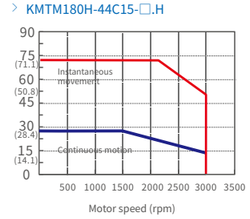
Motor Technical Data

Motor No.	KMTM180H-29C15-□.H	KMTM180H-44C15-□.H	KMTM180H-55C15-□.H	KMTM180H-75C15-□.H
Voltage U(AC)	380V			
Rated power Pr (kW)	2.9	4.4	5.5	7.5
Rated current Ir(Arms)	10.5	16	20.7	25
Rated torque Tr (Nm)	18.6	28.4	35	48
Rated speed Nr (rpm)	1500	1500	1500	1500
Maximum current Imax(Arms)	29.75	42	52	65
Maximum torque Tmax (Nm)	46.5	71.1	87.6	119
Maximum speed Nmax(rpm)	3000	3000	3000	3000
Torque coefficient Kt(Nm/A)	1.94	1.93	1.92	2
Moment of inertia Jm (10^{-4}Kg.m²)	44.7(52.35)	64.9(72.55)	86.9(94.55)	127.5(135.15)
Electrical time constant te(ms)	24.36	26.09	27.19	25.24
Mechanical time constant tm (ms)	1.5（1.8）	1.4（1.6）	1.5(1.7)	1.6(1.7)
Weight(kg)	14.1(18.9)	18.1(22.9)	22.7(27.5)	30.3（35.1）
Heat sink size(mm)	Iron 550*550*30			
Brake voltage Ub(DC)	24V			
Brake current Ib(A)	1.3			
Brake torque Tb(Nm)	⩾55			
Driver adaptation information				
Recommended cable cross-sectional area(mm²)	1.5	2.5	2.5	4.0
Recommended drive models	N2RE-100SC-E	N2RE-140SC-E	N2RE-210SC-E	N2RE-250SC-E

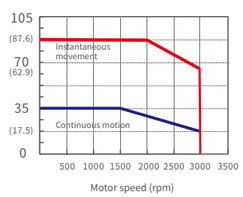
KMTM180H-29C15-□.H



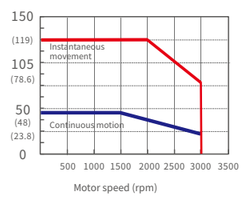
KMTM180H-44C15-□.H



KMTM180H-55C15-□.H



KMTM180H-75C15-□.H



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage;

if the load torque is within the rated torque, it can be used in the continuous working area.

180 Flange

AC220V

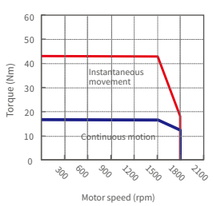
1500rpm

2.5kW~2.9kW

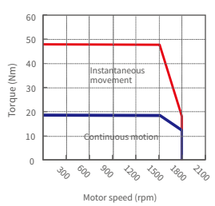
Motor Technical Data

Motor No.	KMTH180-25C15	KMTH180-29C15
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 (10^{-4}Kg.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)
Heat sink size(mm)	Iron 550 x 550 x 30	
Brake voltage Ub(DC)	24V	
Brake current Ib(A)	1.7	
Brake torque Tb(Nm)	50	
Driver adaptation information		
Recommended cable cross-sectional area(mm^2)	1.5	1.5
Recommended drive models	N2RE-140SA-E	N2RE-140SA-E

KMTH180-25C15



KMTH180-29C15



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

180 Flange

AC380V

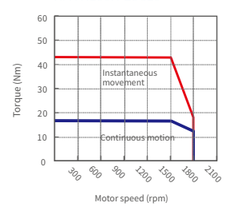
1500rpm

2.5kW~7.5kW

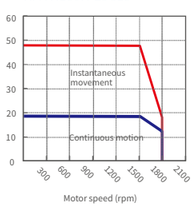
Motor Technical Data

Motor No.	KMTH180H -25C15	KMTH180H -29C15	KMTH180H -44C15	KMTH180H -55C15	KMTH180H -75C15
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 (10^{-4}Kg.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)
Heat sink size(mm)	Iron 550 x 550 x 30				
Brake voltage Ub(DC)	24V				
Brake current Ib(A)	1.7				
Brake 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	N2RE-6R8SC-E	N2RE-8R3SC-E	N2RE-120SC-E	N2RE-140SC-E	N2RE-210SC-E

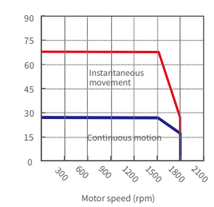
KMTH180H-25C15



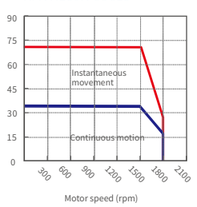
KMTH180H-29C15



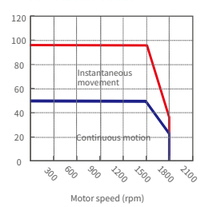
KMTH180H-44C15



KMTH180H-55C15



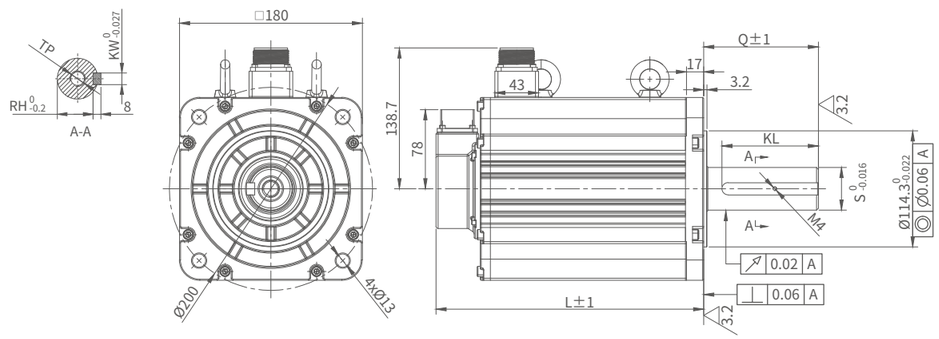
KMTH180H-75C15



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

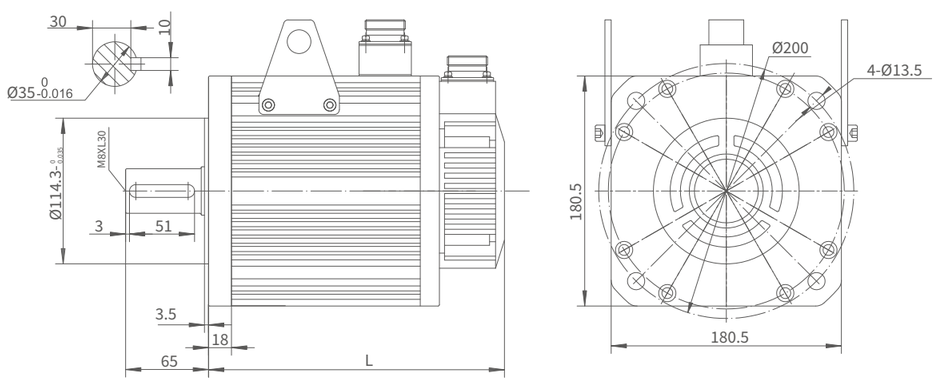
ServoMotor Dimensions（180 Flage）



External Dimension

Unit(mm)

Motor model	S	Q	KW	KL	RH	TP	L (Without brake size)	L (With brake size)
KMTM180H-29C15E□-□.H	35	79	10	65	30	M12×L33.5	169.5	203.3
KMTM180H-44C15E□-□.H	35	79	10	65	30	M12×L33.5	193	226.8
KMTM180H-55C15E□-□.H	42	113	12	95	37	M16×L44	216.5	250.3
KMTM180H-75C15E□-□.H	42	113	12	95	37	M16×L44	263.5	297.3



External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMTH180□-25C15E□	227	301
KMTH180□-29C15E□	233	307
KMTH180H-44C15E□	263	337
KMTH180H-55C15E□	293	367
KMTH180H-75C15E□	347	421

Note: For motors with the same flange, torque, and speed, the 380V and 220V models have the same overall dimensions.

200 Flange

AC380V

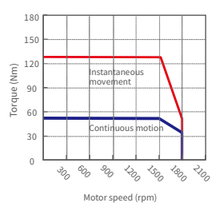
1500rpm

8.3kW~13.2kW

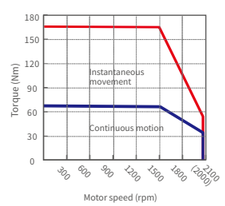
Motor Technical Data

Motor No.	KMTM200H-83C15	KMTM200H-11D15	KMTM200H-13D15
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 (10^{-4}Kg.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)
Heat sink size(mm)		Iron 650 x 650 x 35	
Brake voltage Ub(DC)		24V	
Brake current Ib(A)		4	
Brake torque Tb(Nm)		120	
Driver adaptation information			
Recommended cable cross-sectional area(mm^2)	2.5	4	4
Recommended drive models	N2RE-210SC-E	N2RE-340SC-E	N2RE-340SC-E

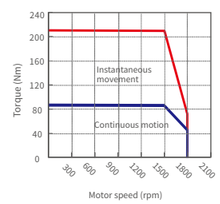
KMTM200H-83C15



KMTM200H-11D15



KMTM200H-13D15



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

230 Flange

AC380V

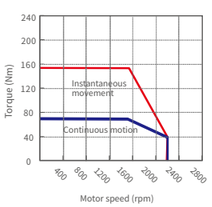
1500rpm

11kW~15kW

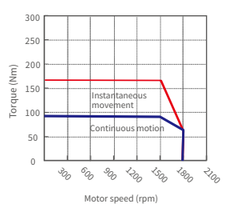
Motor Technical Data

Motor No.	KMTH230H-11D15	KMTH230H-15D15
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 (10^{-4}Kg.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
Heat sink size(mm)	Iron 650 x 650 x 35	
Brake voltage Ub(DC)	24V	
Brake current Ib(A)	4	
Brake torque Tb(Nm)	120	
Driver adaptation information		
Recommended cable cross-sectional area(mm^2)	4	6
Recommended drive models	N2RE-340SC-E	N2RE-340SC-E

KMTH230H-11D15



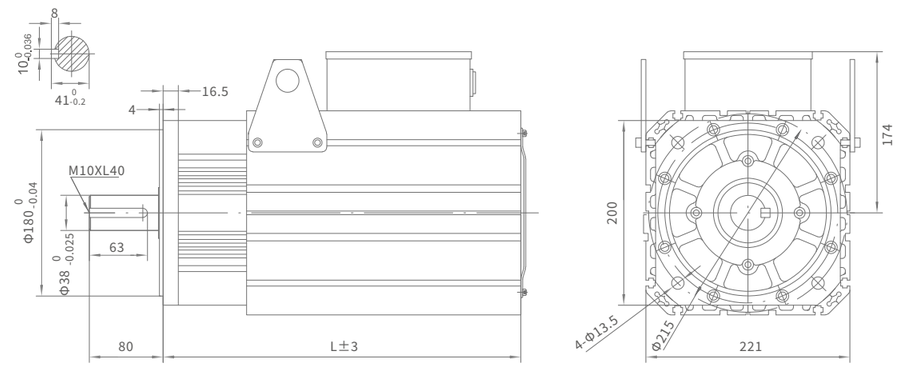
KMTH230H-15D15



Note: 1) The above are standard models, ( ) are parameters of motors with brake;

2) The characteristics of the instantaneous working area will vary depending on the power supply voltage; if the load torque is within the rated torque, it can be used in the continuous working area.

ServoMotor Dimensions（200 Flage）

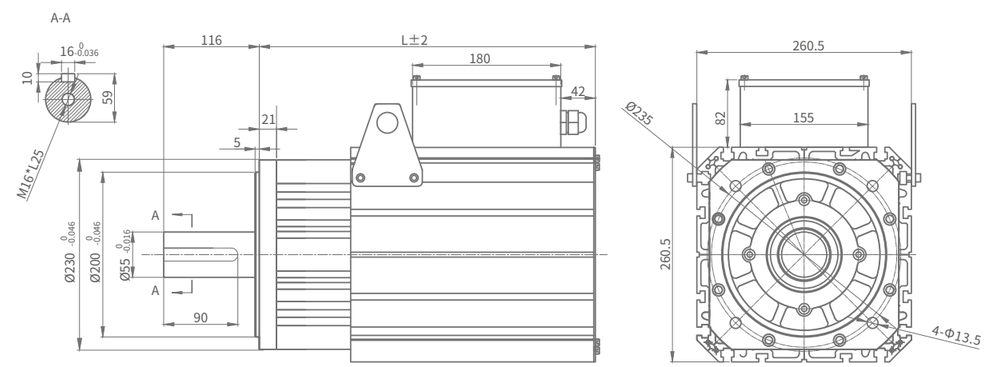


External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMTM200H-83C15E□	392	492
KMTM200H-11D15E□	435	535
KMTM200H-13D15E□	462	568

ServoMotor Dimensions（230 Flage）



External Dimension

Unit(mm)

Motor model	L (Without brake size)	L (With brake size)
KMTH230H-11D15E□	408	508
KMTH230H-15D15E□	458	558

Power cables

LM – 030 – B A4 – 2 . □

Motor Power cable

Length 3m=030

Max. support 60 meters=600

Wire Specification

S	0.5mm²
A	0.75mm²
B	1.5mm²
C	2.5mm²
D	4mm²
E	6mm²

Home Definition

None	Drive side sling type, no connector
S	Applicable to N2&N3 series drives

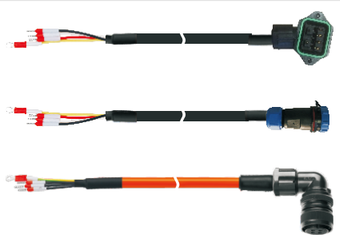
Special Requirements

0	PVC common fixed cable (black)
2	PVC highly flexible cable (10 million bends)
3	PUR water-proof, oil-resistant and corrosion-resistant flexible cable
4	PVC shielded fixed cable (Black)
5	PVC shielded highly flexible cable (10 million bends)

Cable Side Connector Type

AF	is suitable for the front outlet of the 40/60/80 flange plastic housing plug-in connector without brake motor (AB is the rear outlet)*
BF	is suitable for 40/60/80 flange plastic housing plug-in connector with brake motor front outlet (BB is rear outlet)*
A2	is suitable for 40/60/80 flange plastic shell aviation connector without brake motor
B2	is suitable for plastic shell aviation connectors for 40/60/80 flange motors with holding brakes
A4	is suitable for metal aviation connectors of 100/130 flange motors without brakes.
B4	is a metal aviation connector suitable for 100/130 flange motors with brakes.
A7	Metal aviation connector suitable for 180 flange motors
AG	Metal aviation connector suitable for 180.H flange motors without brakes.
BG	Metal aviation connector suitable for 180.H flange motors with brakes.

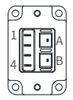
Cable side connector type	Cable side connector model
AF/AB	SC-MC6S-AE20-01
BF/BB	SC-MC6S-AE20-01
A2	CP-GM1311/S-4B
B2	CE-GM2111/S-6B
A4	CMS3108A20-4SI
B4	CMS3108A20-18SI
A7	YD32-4
AG/BG	CMS3108A22-A6SI



Note: 1. Standard cable lengths are 3m, 5m, 7m,10m, 15m, 20m, other lengths need to be customized.
2. *The maximum cable length for plastic case plug-in adapter is 40 meters.

Power Cables Connector Specifications

40/60/80 flange motor plastic housing plug-in connector:



Terminal symbol	1	2	3	4	A	B
signal	U	V	W	PE	Brake-	Brake+

SC-MC6S-AE20-01

40/60/80 flange motor plastic housing plug-in connector:

Terminal symbol	1	2	3	4
signal	V	U	W	PE

CP-GM1311/S-4B

Terminal symbol	1	2	3	4	5	6
signal	V	U	W	PE	Brake+	Brake-

CE-GM2111/S-6B

100/130 flange motor with metal aviation connector

Terminal symbol	A	B	C	D
signal	U	V	W	PE

CMS3108A20-4SI(without brake)

Terminal symbol	G	H	F	I	B	E
signal	Brake+	Brake-	U	V	W	PE

CMS3108A20-18SI(with brake)

180 flange motor with metal aviation connector:

Terminal symbol	1	2	3	4
signal	PE	U	V	W

YD32-4

180□.H flange motor with metal aviation connector:

Terminal symbol	A	B	C	D	1	2
signal	U	V	W	PE	Brake+	Brake-

CMS3108A22-A6SI

Encoder Cables

LE – 030 – 1 P2 – 0 . □

Motor Encoder Cable

Length 3m=030

Maximum support 60 meters = 600

Encoder Specifications

Fill in according to the selected motor encoder type

1	Single turn absolute value (4 cores) (Used when the encoder is incremental)
4	Multi-turn absolute value type (6 cores, with battery and 2 wires, without battery) (Used when the encoder is absolute value)

Cable Side Connector Type

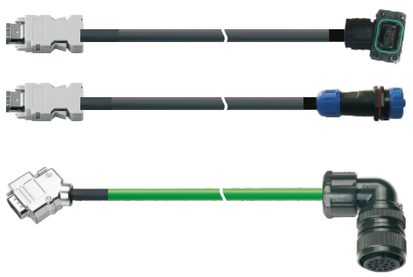
PF	Plastic shell direct plug connector suitable for 40/60/80 flange motors, front outlet (PB is rear outlet)*
P2	is suitable for plastic shell aviation connectors for 40/60/80 flange motors
P4	Metal aviation connector suitable for 100/130/180.H flange motors
P6	Metal aviation connector suitable for 180/200/230 flange motors

Special Requirements

0	PVC shielded ordinary fixed cable (black)
2	PVC shielded highly flexible cable (10 million bends)
3	PUR shielded waterproof, oil-resistant, corrosion-resistant flexible cable

Home Definition

None	Drive side sling type, without connector
S	Applicable to N2 series drives
V	Applicable to N3 series drives

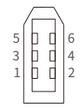


Cable side connector type	Cable side connector model
PF/PB	SC-MC7S-A820-P1
P2	CP-GM1311/S-9
P4	CMS3108A20-29SI
P6	YD28-7

Note: 1. Standard cable lengths are 3m, 5m, 7m, 10m, 15m, and 20m. The other lengths need to be customized.
2. *The maximum cable length for plastic case plug-in adapter is 40 meters.

Encoder Cables Connector Specifications

N3 Driver Side Pin Definition:

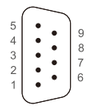


Communication encoder

1	5V	4	RESERVE
2	GND	5	SD+
3	RESERVE	6	SD-
Housing	Shielded		

KSA-1394a6p.01

N2 Driver Side Pin Definition:



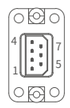
DB-9 Connector Pin Definition

1 5V	4 GND	7 CLK+
2 SD+	5 RESERVE	8 CLK-
3 SD-	6 RESERVE	9 RESERVE

Housing Shielded

KSA-DB9p.02

40/60/80 flange motor plastic housing plug-in connector:



Terminal Symbol	1	2	3	4	5	6	7
Signal	PE	5V	0V	SD+	SD-	BAT+	BAT-

SC-MC7S-A820-P1

40/60/80 flange motor plastic housing plug-in connector:

Terminal Symbol	1	2	3	6	7	8	9
Signal	SD+	SD−	BAT+	5V	0V	BAT−	PE

CP-GM1311/S-9

100/130/180.H flange motor with metal aviation connector:

Terminal Symbol	G	H	J	K	L	S	T
Signal	0V	5V	PE	SD+	SD-	BAT-	BAT+

CMS3108A20-29SI

180/200/230 flange motor with metal aviation connector:

Terminal Symbol	1	2	3	4	5	6	7
Signal	PE	5V	0V	SD+	SD-	BAT+	BAT-

YD28-7

Brake Cables

LB – 030 – B7 – 0

Motor brake cable

Length 3m=030

Maximum support 60 meters = 600

Cable Side Connector Type

B7	Metal aviation connector for 180 flange motors
W	Suitable for junction box wiring of 200/230 flange motors

Special Requirements

0	PVC common fixed cable (black)
2	PVC highly flexible cable (10 million bends)
3	PUR water-proof, oil-resistant and corrosion-resistant flexible cable

Encoder Cables Connector Specifications

180 flange motor with metal aviation connector:

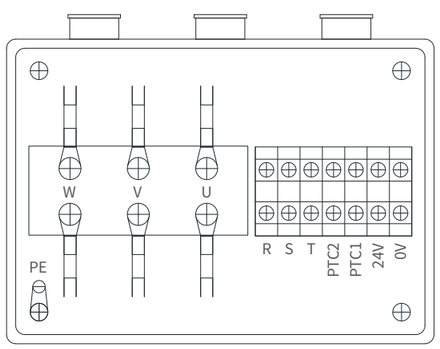
WS16J2TQ

Terminal symbol	1	2
signal	Brake+	Brake-

Cable side connector type	Cable side connector model
B7	WS16J2TQ
W	Junction box method

Note: 1. Standard cable lengths are 3m, 5m, 7m,10m, 15m, 20m, other lengths need to be customized.

Junction Box



Power cable connection definition

Color	Red	Yellow	Blue
Signal	U	V	W

Brake cable wiring definition

Color	Red	Black
Signal	24V	0V

Definition of machine power wiring

Color	Red	White	Blue
Signal	R	S	T

Temperature sensor wiring definition

Color	Blue	Blue
Signal	PTC1	PTC2

Note: 200/230 flange motors use a junction box to connect power lines, fans, brakes, sensors, etc.
The pin definitions are as shown in the figure above;

Power Cables

KLM – 030 – D W4 – 0 . □

Power Cable

Lengh 3m=030

Maximum support 60 meters = 600

Wiring Specification

C	2.5mm²
D	4mm²
E	6mm²

Note: Used for power cables connected to 200/230 flange motors using junction boxes;

Cable Side Connector Type

W4	power cable 200/230 flange motor wiring with junction box, 4 cores

Special Requirement

0	PVC normal fixed cable (black)
2	PVC highly flexible cable (10 million bends)
3	PUR water-proof, oil-resistant and corrosion-resistant flexible cable

Home Definition

None	Drop the line directly without connecting the connector
S	Applicable to N2&N3 series drives

Fan Cables

KLF – 030 – A W – 0

Fan Cable

Length 3m=030

Maximum support 60 meters = 600

Wire Diameter Specifications

A	0.75mm²

Note: Forced cooling fan for 200/230 flange motors

Cable Side Connector Type

W	200/230 flange motors are wired using junction boxes

Special Requirements

0	PVC ordinary fixed cable
2	PVC highly flexible cable (10 million bends)
3	PUR water-proof, oil-resistant and corrosion-resistant flexible cable

Temperature Sensor Cables

KLT – 030 – A W – 0

Temperature Sensor Cable

Length 3m=030

Maximum support 60 meters = 600

Sensor Type

B	PTC temperature sensor

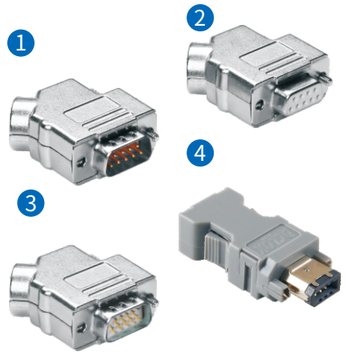
Note: used for temperature sensor feedback of 200/230 flange motor;

Cable Side Connector Type

W	200/230 flange motors are wired using junction boxes

Special Requirements

0	PVC ordinary fixed cable (black)
2	PVC highly flexible cable (10 million bends)
3	PUR water-proof, oil-resistant and corrosion-resistant flexible cable



Encoder cable connector

Cable side connector type and model description

⑤ SC-MC7S-A820-P1
40/60/80 flange specification plastic housing in-line encoder connector

⑥ CP-GM1311/S-9
40/60/80 flange specification plastic housing aviation encoder connector

⑦ CMS3108A20-29SI
100/130/180.H flange specification uses metal aviation encoder connector

⑧ YD28-7
180/200/230 flange specification uses metal aviation encoder connector

Absolute encoder battery pack

Battery component model description

⑯	BAT-N2	Battery pack (for N2 series 4P encoder specification)
⑰	BAT-ER14505H+BAT-CV02	Battery pack (for N2 series 2P encoder specification)
⑱	BAT-N3	Battery pack (for N3 series)
⑲	BAT-ER14505H	3.6V disposable lithium battery

D-Sub connector

Model Description

① KSA-DB9p.02
DB9 DB9 male connector, 45° outlet, used for the first encoder interface of N2 series drives

② KSA-DB9s.02
DB9 female connector, 45° outlet, used for the second encoder interface of N2 series drives

③ KSA-DB15p.02
DB15 male connector, 45° outlet method, used for the second encoder interface of N2 series SA type driver

④ KSA-1394a6p.01
1394a6p male connector for N3 series drive encoder interface

Connector for power cable

Cable side connector type Model Description

⑨ SC-MC6S-AE20-01
40/60/80 flange specification plastic shell direct plug power connector

⑩ CP-GM1311/S-4B
40/60/80 flange specification plastic shell air plug power connector

⑪ CE-GM2111/S-6B
40/60/80 flange specification plastic shell air plug power connector (including brake wire pins)

⑫ CMS3108A20-4SI
100/130 flange specifications use metal aviation plug power connector

⑬ CMS3108A20-18SI
100/130 flange specification uses metal air plug power connector (including brake wire pins)

⑭ YD32-4
180 flange specification uses metal air plug power connector

⑮ CMS3108A22-A6SI
180.H flanges with metal power connectors

Combination Table

Motor		Wires		Drives
Flange	Motor no.	Power & Brake Cable Model	Encoder Cable Model	Recommended Drive Models
40	KMT40-10B30E□-OK	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	N3RE-1R8SA-E
	KMT40-10B30E□-BOK	LM-□□□ SBF/SBB-□.S		
60	KMT60-20B30E□-OK	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	N3RE-1R8SA-E
	KMT60-20B30E□-BOK	LM-□□□ SBF/SBB-□.S		
	KMT60-40B30E□-OK	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	N3RE-2R8SA-E
	KMT60-40B30E□-BOK	LM-□□□ SBF/SBB-□.S		
80	KMT80-75B30E□-OK	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.V	N3RE-4R2SA-E
	KMT80-75B30E□-BOK	LM-□□□ SBF/SBB-□.S		
	KMT80-10C30E□-OK	LM-□□□ SAF/SAB-□.S	LE-□□□-4PF/4PB-□.S	N2RE-060PA-E
	KMT80-10C30E□-BOK	LM-□□□ SBF/SBB-□.S		
	KMT80-10C25E□-OK.G	LM-□□□-AA2-□.S	LE-□□□-4P2-□.S	N2RE-100SA-E
	KMT80-10C25E□-BOK.G	LM-□□□-AB2-□.S		
100	KMTM100-10C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM100-10C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM100-15C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM100-15C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM100-20C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-120PA-E
	KMTM100-20C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM100H-10C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM100H-10C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM100H-15C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM100H-15C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM100H-20C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-6R8SC-E
	KMTM100H-20C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM100H-25C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-8R3SC-E
	KMTM100H-25C30E□-BOK	LM-□□□-BB4-□.S		
130	KMTM130-85B15E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-060PA-E
	KMTM130-85B15E□-BOK	LM-□□□-AB4-□.S		
	KMTM130-13C15E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM130-13C15E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-15C15E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-120SA-E
	KMTM130-15C15E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-18C15E□-OK	LM-□□□-CA4-□.S	LE-□□□-4P4-□.S	N2RE-120PA-E
	KMTM130-18C15E□-BOK	LM-□□□-CB4-□.S		
	KMTM130-10C20E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-060PA-E
	KMTM130-10C20E□-BOK	LM-□□□-AB4-□.S		
	KMTM130-15C20E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM130-15C20E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-20C20E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-120PA-E
	KMTM130-20C20E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-25C20E□-OK	LM-□□□-CA4-□.S	LE-□□□-4P4-□.S	N2RE-140SA-E
	KMTM130-25C20E□-BOK	LM-□□□-CB4-□.S		
	KMTM130-10C25E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-060PA-E
	KMTM130-10C25E□-BOK	LM-□□□-AB4-□.S		
	KMTM130-13C25E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM130-13C25E□-BOK	LM-□□□-AB4-□.S		
	KMTM130-15C25E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM130-15C25E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-20C25E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-120PA-E
	KMTM130-20C25E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-25C25E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-140SA-E
	KMTM130-25C25E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-15C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-100SA-E
	KMTM130-15C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM130-20C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-120PA-E
	KMTM130-20C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-25C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-140SA-E
	KMTM130-25C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM130-30C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-140SA-E
	KMTM130-30C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-85B15E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-85B15E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-13C15E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-13C15E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-15C15E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-15C15E□-BOK	LM-□□□-AB4-□.S		

Combination Table

Motor		Wires		Drives
Flange	Motor no.	Power & Brake Cable Model	Encoder Cable Model	Recommended Drive Models
130	KMTM130H-18C15E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-6R8SC-E
	KMTM130H-18C15E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-23C15E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SC-E
	KMTM130H-23C15E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-10C20E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-10C20E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-15C20E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-15C20E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-20C20E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-20C20E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-25C20E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-8R3SC-E
	KMTM130H-25C20E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-30C20E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SC-E
	KMTM130H-30C20E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-10C25E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-10C25E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-13C25E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-13C25E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-15C25E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-15C25E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-20C25E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-20C25E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-25C25E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-25C25E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-38C25E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-100SC-E
	KMTM130H-38C25E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-15C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-15C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-20C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-5R4SC-E
	KMTM130H-20C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-25C30E□-OK	LM-□□□-AA4-□.S	LE-□□□-4P4-□.S	N2RE-6R8SC-E
	KMTM130H-25C30E□-BOK	LM-□□□-AB4-□.S		
	KMTM130H-30C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-8R3SC-E
	KMTM130H-30C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-40C30E□-OK	LM-□□□-BA4-□.S	LE-□□□-4P4-□.S	N2RE-120SC-E
	KMTM130H-40C30E□-BOK	LM-□□□-BB4-□.S		
	KMTM130H-50C30E□-OK	LM-□□□-CA4-□.S	LE-□□□-4P4-□.S	N2RE-140SC-E
	KMTM130H-50C30E□-BOK	LM-□□□-CB4-□.S		
180	KMTM180H-29C15E□-OK.H	LM-□□□-BAG-□.S	LE-□□□-4P4-□.S	N2RE-100SC-E
	KMTM180H-29C15E□-BOK.H	LM-□□□-BBG-□.S		
	KMTM180H-44C15E□-OK.H	LM-□□□-CAG-□.S	LE-□□□-4P4-□.S	N2RE-140SC-E
	KMTM180H-44C15E□-BOK.H	LM-□□□-CBG-□.S		
	KMTM180H-55C15E□-OK.H	LM-□□□-CAG-□.S	LE-□□□-4P4-□.S	N2RE-210SC-E
	KMTM180H-55C15E□-BOK.H	LM-□□□-CBG-□.S		
	KMTM180H-75C15E□-OK.H	LM-□□□-DAG-□.S	LE-□□□-4P4-□.S	N2RE-250SC-E
	KMTM180H-75C15E□-BOK.H	LM-□□□-DBG-□.S		
	KMTH180-25C15E□-OK	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	N2RE-140SA-E
	KMTH180-25C15E□-BOK	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	KMTH180-29C15E□-OK	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	N2RE-140SA-E
	KMTH180-29C15E□-BOK	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	KMTH180H-25C15E□-OK	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	N2RE-6R8SC-E
	KMTH180H-25C15E□-BOK	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	KMTH180H-29C15E□-OK	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	N2RE-8R3SC-E
	KMTH180H-29C15E□-BOK	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		

Combination Table

Motor		Wires		Drives
Flange	Motor no.	Power & Brake Cable Model	Encoder Cable Model	Recommended Drive Models
180	KMTH180H-44C15E□-OK	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	N2RE-120SC-E
	KMTH180H-44C15E□-BOK	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	KMTH180H-55C15E□-OK	LM-□□□-BA7-□.S	LE-□□□-4P6-□.S	N2RE-140SC-E
	KMTH180H-55C15E□-BOK	LM-□□□-BA7-□.S		
		LB-□□□-B7-□		
	KMTH180H-75C15E□-OK	LM-□□□-CA7-□.S	LE-□□□-4P6-□.S	N2RE-210SC-E
	KMTH180H-75C15E□-BOK	LM-□□□-CA7-□.S		
		LB-□□□-B7-□		
200	KMTM200H-83C15E□-OK	KLM-□□□-CW4-□.S	LE-□□□-4P6-□.S	N2RE-210SC-E
	KMTM200H-83C15E□-BOK	KLM-□□□-CW4-□.S		
		LB-□□□-W-□		
	KMTM200H-11D15E□-OK	KLM-□□□-DW4-□.S	LE-□□□-4P6-□.S	N2RE-340SC-E
	KMTM200H-11D15E□-BOK	KLM-□□□-DW4-□.S		
		LB-□□□-W-□		
	KMTM200H-13D15E□-OK	KLM-□□□-DW4-□.S	LE-□□□-4P6-□.S	N2RE-340SC-E
	KMTM200H-13D15E□-BOK	KLM-□□□-DW4-□.S		
		LB-□□□-W-□		
230	KMTH230H-11D15E□-OK	KLM-□□□-DW4-□.S	LE-□□□-4P6-□.S	N2RE-340SC-E
	KMTH230H-11D15E□-BOK	KLM-□□□-DW4-□.S		
		LB-□□□-W-□		
	KMTH230H-15D15E□-OK	KLM-□□□-EW4-□.S	LE-□□□-4P6-□.S	N2RE-340SC-E
	KMTH230H-15D15E□-BOK	KLM-□□□-EW4-□.S		
		LB-□□□-W-□		

Note: 200/230 flange motor, in the cable selection, need to adapt the fan, temperature sensor cable, please refer to the motor accessories part selection.