CONTROL| SERVO|DIRECT DRIVE|CUSTOMIZE

yasaka

— FA components and solutions —

YSK2 SERIES
AC SERVO SYSTEM

GENERAL
AC SERVO

DIRECT DRIVE
AC SERVO

ALL-IN-ONE
4/6 AXIS AC SERVO

EtherCAT Modbus PROFINET

ABOUT US

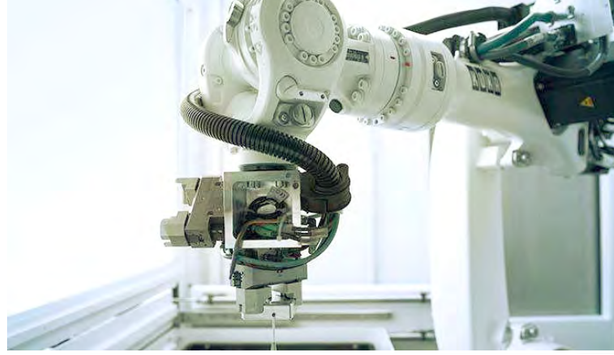
YASAKA focuses on the R&D, production, and sales of core components for industrial automation, and provides customers with the most cost-effective products and solutions throughout the life cycle.

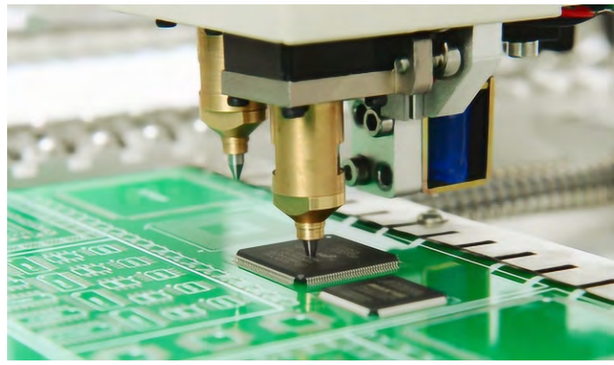
- The company's mission is to "continue to innovate and provide customers with high-performance, comprehensively cost-optimal motion control products and solutions."
- The company adheres to the core values of technological innovation, quality assurance, honesty and trustworthiness, and win-win cooperation.
- The company's main products include: YSK2-MS multi-axis integrated servo driver, YSK2-DD direct drive servo system, YSK2 series EtherCAT, Profinet and pulse control servo, etc.
- The company's products are widely used in industrial robots, direct drive scenarios, 3C, semiconductors, packaging and other industries.

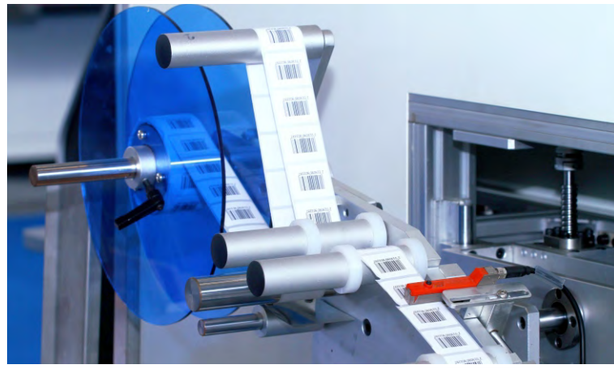
In the future, Verneris willing to work with customers to explore, dig deeper, focus on industry pain points, continue to innovate, and create technologically advanced products and solutions that are closer to the needs of end users.

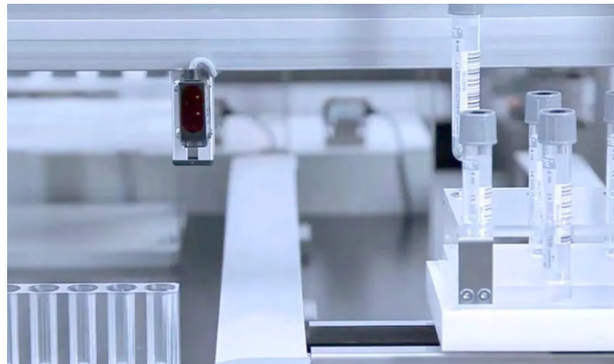
Main applications

Industrial robot Direct drive Medical 3C Semi-conductor Packaging









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CONTENTS

YSK2 SERIES

Introduction

YSK2-***AE SERIES

EtherCAT

- EtherCAT Control
- Supports Beckhoff, Omron and CodeSys host stations
- Supports SM & DSC
- Supports CSP、CSV、CST
- Supports probe and position synchronization output

YSK2-***AP SERIES

PROFINET

- Profinet control
- Supports S7-1500/1200、200Smart etc. host statinos
- Supports RT、IRT
- Supports Profidrive AC1-AC4
- Supports 750 additional messages and DSC

YSK2-***A SERIES

Modbus

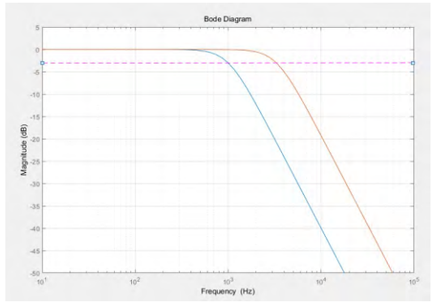
- Pulse control
- Supports all kinds of motion control cards and PLC
- Supports Modebus RTU
- Pulse input type: PNP and NPN single-ended, high-speed differential

Features

Fast

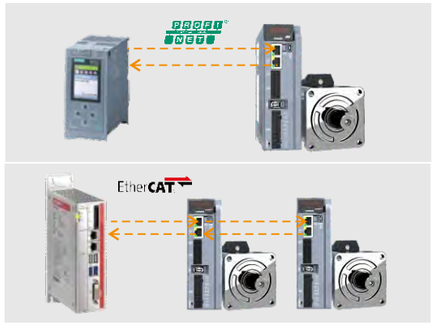
High sampling rate, high bandwidth

- Current loop performance: sampling period 1.6us, up to 625k sampling frequency, low loop delay
- Speed loop bandwidth: up to 3000HZ
- Position loop setting: within 5ms
- Position error setting: within 100 encoder units (23-bit encoder)



Real-time synchronization cycle 250us

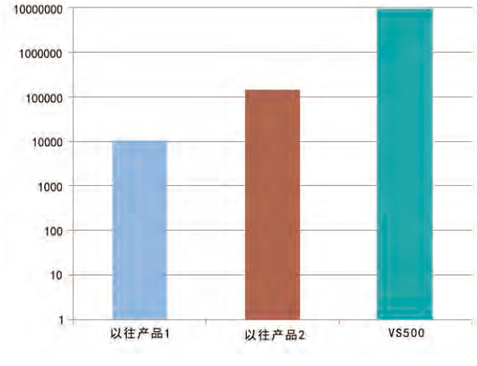
- Communication protocol: EtherCAT、Profinet IRT
- RT communication bandwidth: real-time Ethernet 100M bandwidth
- Synchronization period: DC synchronization period or IRT synchronization period, the minimum can be 250us or an integer multiple of 250us.



Accurate

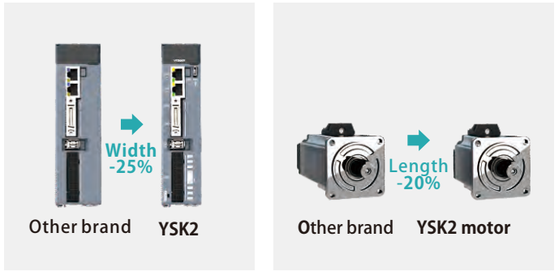
Resolution up to 0.15 arc seconds

- Optional 23-bit multi-turn absolute photoelectric encoder
- Resolution as high as 1/8388608 revolutions, corresponding to 0.15 arc seconds
- Repeatability up to 15 arc seconds



Compact

Compared with mainstream models in the market, the driver body width is reduced by 25% and the motor body length is reduced by 20%, greatly saving installation space.

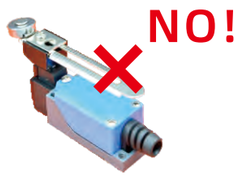


Stable

Real-time MTPA algorithm to improve power density
Te=Kt*Iq+(Ld-Lq)*id*iq For various IPM motor types, calculate the vertical and horizontal axis components of the current command in real time according to the motor parameters to make full use of the reluctance torque.

Safe

- Soft limit function
- Built-in brake circuit power supply
- Safe torque off function STO
- DB dynamic braking to prevent abnormal movement



Easy

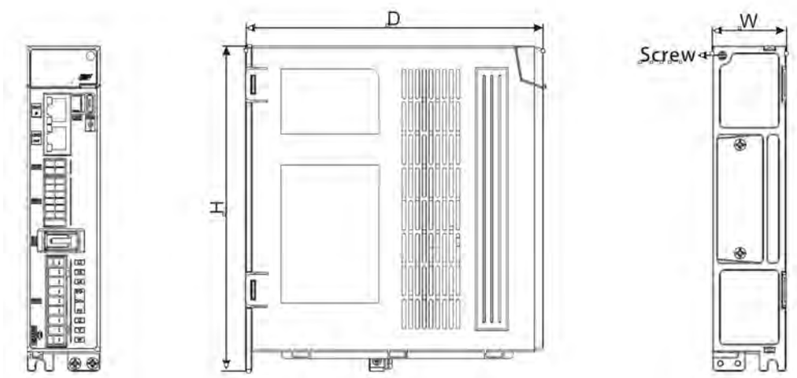
- TYPE-C debugging interface
- Position and speed jog function
- Supports offline and online inertia identification
- Supports high-response positioning applications and contour trajectory control
- One-click rigidity self-adjusting

Drive nomenclature

YSK2- DD 200 A - XXX

- Drive series: YSK2
- Drive type: Blank: general type; DD: direct drive type
- Voltage class: Empty:220V; T:380V
- Control type: A: pulse, AE: EtherCAT, AP: Profinet
- Rated power: 010: 100W; 020: 200W; 040: 400W; 075: 750W; 100: 1KW; 150: 1.5KW; 200: 2KW

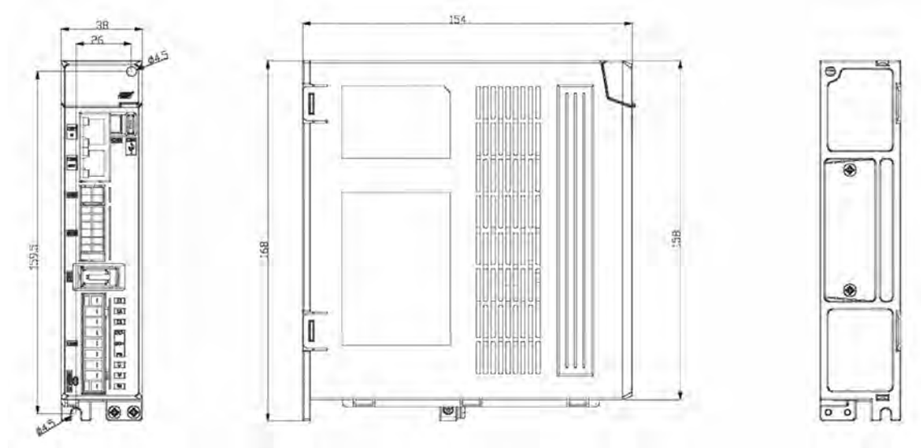
Drive dimensions



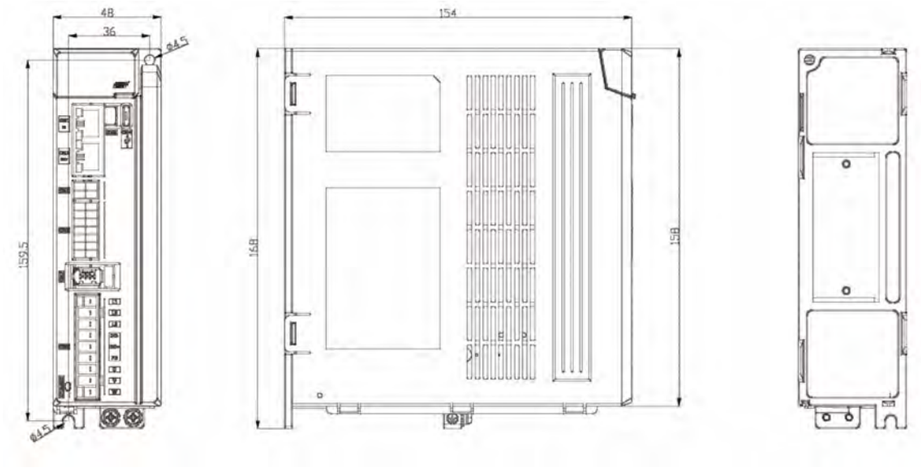
Size	Dimensions			Weight (kg)
	W(mm)	H(mm)	D(mm)	
SIZE A	38	168	154	0.9
SIZE B	48	168	154	1.2
SIZE D	81	174.2	183	1.9

Drive outline dimensions

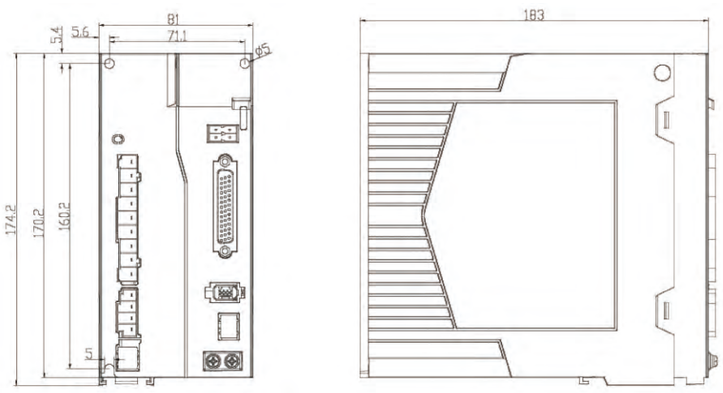
SIZE A



SIZE B



SIZE D



Dirve power and size

Model	Input	Output	Size
	Voltage (V)	Current (A)	
YSK2-010A	220	1.2	SIZE A
YSK2-020A	220	1.8	
YSK2-040A	220	2.7	
YSK2-075A	220	4.5	SIZE B
YSK2-100A	220	6.0	
YSK2-150A	220	8.4	SIZE D
YSK2-200A	220	12.0	
YSK2-T100A	380	3.5	
YSK2-T150A	380	5.4	
YSK2-T200A	380	8.4	
YSK2-T300A	380	12.0	

Basic specifications

Item	Specifications										
YSK2	010A	020A	040A	075A	100A	150A	200A	T100A	T150A	T200A	T300A
Rated current (Arms)	1.2	1.8	2.7	4.5	6.0	8.4	12.0	3.5	5.4	8.4	12.0
Max current (Arms)	3.6	5.4	8.1	13.5	18.0	25.2	36.0	10.5	16.2	25.2	28.8
Input power	1PH AC220V 50~60Hz					1PH/3PH AC220V 50~60Hz		3PH AC380V 50~60Hz			
Encoder	17bit/23bit										
Control mode	7 control modes: position control, speed control, torque control, position/speed control, position/torque control, speed/torque control, bus control										

Technical specifications

Position control	Pulse input	Max frequency	Open collector input, max 500KHz, pulse width above 1 us		
			Differential input, max 5MHz, pulse width above 125ns		
		Input pulse form	Pulse+Sign, A+B phase, CW+CCW		
		Gear ratio setting	Encoder resolution/10000000<A/B<Encoder resolution/2.5		
		Instruction filter	Smooth filter, FIR filter		
	Pulse output	Pulse output	Encoder position or pulse synchronization output		
		Pulse division	Any frequency division		
		Pulse form	A/B/Z differential. Z open collector.		
	Internal position		**1-16 positions**		
Speed control	Control method		External analog/DI terminal selection/Internal parameter /Communication setting		
	Analog input		**DC±10V**		
	Torque limit		Parameter setting		
Torque control	Control method		External analog/DI terminal selection/Internal parameter /Communication setting		
	Analog input		**DC ± 10V**		
	Speed limit		Parameter setting		
Common functions	Control signal	Input/Output	**YSK2 (Size A/B): 7IN/3OUT**		
			YSK2-AE, YSK2-**AP (Size A/B): 5IN/2OUT**		
			All series (Size D): 9IN/3OUT		
	Analog	Input	**YSK2 (optional): 2IN**		
	STO		**All series size A/B (optional), size D (standard)**		
	Auto gain adjustment		Yes		
	Adaptive filter		Yes		
	Speed observer		Yes		
	Damping control		Yes		
	Gravity compensation		Yes		
	Model tracking		Yes		
	Encoder output		Yes		
	Dynamic brake		Yes (optional)		
	Regenerative function		Built-in or external		
	Protection function		Over-current, over-voltage, under-voltage, over-load, regenerative fault, etc.		
	Communication	**USB**	**PC Software ServoSuit**		
		Series	**Pulse type:RS485**	**E:EtherCAT**	**P:PROFINET**

Communication specifications

EtherCAT specifications

Item	Descriptions
Communication protocol	**EtherCAT**
Supported service	**CoE(PDO、SDO)**
Synchronization mode	**DC**- Distributed clock
Physical layer	**100BASE-TX**
Baud rate	**100Mbit/s（1000Base-TX)**
Duplex mode	Full duplex
Topology	Ring, line
Transmission medium	Shielded category 5E cable or better
Transmission distance	The distance between two nodes is less than 100M
EtherCAT frame length	**44**byte~**1498**byte
Process data	Maximum single Ethernet frame 1486 byte
Synchronization jitter of two slaves	**<1us**
Refresh time	1000 switching inputs and outputs are about 30us; 100 servo axes are about 100us

Profinet specifications

Item	Description
Communication protocol	**Profinet**
Process data	**RT/ IRT**
Cycle time	**RT** mode: minimum 1ms
	IRT mode: minimum 500us
Sync jitter	**<1us**
Physical layer	**100BASE-TX**
Baud rate	**100MBit/S（100Base-TX)**
Duplex mode	Full duplex
Topology	Ring, line, star, tree
Transmission medium	Shielded category 5E cable or better
Profinet interface	**2**

Environmental specifications

Environment		Specifications
Temperature	Use ambient temperature	0~55℃
	Storage ambient temperature	-20~65℃
Humidity	Use ambient humidity	Below 20~85%RH, no condensing
	Storage ambient humidity	Below 20~85%RH, no condensing
Environment		Indoor (no direct sunlight), no corrosive gases, no flammable gases, no oil mist, no dust
Altitude		Below 1000m
Vibration		5.8m/s2 below 10~60Hz resonance frequency
Insulation withstand voltage		AC1500V between primary and FG for 1 minute

Introduction

YSK2-DD***AE direct drive

- EtherCAT Control
- Supports Beckhoff, Omron and CodeSys host stations
- Supports SM & DSC
- Supports CSP、CSV、CST
- Supports probe and position synchronization output

YSK2-DD***AP direct drive

- Profinet control
- Supports S7-1500/1200、200Smart etc. host statinos
- Supports RT、IRT
- Supports Profidrive AC1-AC4
- Supports 750 additional messages and DSC

YSK2-DD***A direct drive

- Pulse control
- Supports all kinds of motion control cards and PLC
- Supports Modebus RTU
- Pulse input type: PNP and NPN single-ended, high-speed differential

YSK2-DD SERIES

Features

Fast
- High sampling rate
- High bandwidth
- Real-time industrial Ethernet

Accurate
- Resolution up to 0.1um
- Repeatable positioning accuracy up to 0.5um

Compact
- Drive width reduced by 25%
- Motor length reduced by 20%

Safe
- Safe torque off
- Soft limit function

Easy
- TYPE-C debugging
- Position speed jog function
- Parameter identification
- One-click rigidity tuning

Special functions

Supports DDR、DDL motor	1. Direct-drive rotary motors (DDR) and linear motors (DDL) can be controlled through Profinet or EtherCAT master station without gateway transfer. 2. Or through IO, pulse or 485 communication control method
Multiple phase seeking methods	Micro-motion phase seeking, direct positioning phase seeking, quasi-static phase seeking (moving range is about 1um)
Accurate compensation	Supports up to 100 points of accuracy compensation, programmable with laser interferometer to test accuracy

Drive nomenclature

YSK2- DD 200 A - XXX

- Drive series: YSK2
- Drive type: Empty: general type; DD: direct drive type
- Voltage class: Empty:220V; T:380V
- Control type: A: pulse, AE: EtherCAT, AP: Profinet
- Rated power: 010: 100W; 020: 200W; 040: 400W; 075: 750W; 100: 1KW; 150: 1.5KW; 200: 2KW

Drive power and size

Model	Input	Output	Size
	Voltage (V)	Current (A)	
YSK2-DD010A	**220**	**1.2**	**SIZE A**
YSK2-DD020A	**220**	**1.8**	
YSK2-DD040A	**220**	**2.7**	
YSK2-DD075A	**220**	**4.5**	**SIZE B**
YSK2-DD100A	**220**	**6**	
YSK2-DD200A	**220**	**12**	**SIZE D**
YSK2-DDT100A	**380**	**3.5**	
YSK2-DDT200A	**380**	**8.4**	
YSK2-DDT300A	**380**	**12**	

Compatible motors

Motor	Voltage	Drive	Drive size
DDR DDL rated current< **1.2A**	**220V**	**YSK2-DD010A**	**SIZE-A**
		YSK2-DD010AE	
		YSK2-DD010AP	
DDR DDL rated current< **2.7A**	**220V**	**YSK2-DD040A**	
		YSK2-DD040AE	
		YSK2-DD040AP	
DDR DDL rated current< **4.5A**	**220V**	**YSK2-DD075A**	**SIZE-B**
		YSK2-DD075AE	
		YSK2-DD075AP	
DDR DDL rated current< **6.0A**	**220V**	**YSK2-DD100A**	
		YSK2-DD100AE	
		YSK2-DD100AP	
DDR DDL rated current< **12.0A**	**220V/380V**	**YSK2-DD(T)200A**	**SIZE-D**
		YSK2-DD(T)200AE	
		YSK2-DD(T)200AP	

EtherCAT
SIX-IN-ONE

EtherCAT
FOUR-IN-ONE

Features

01 Outstanding performance

- The current loop control period is 1.6us and the bandwidth is as high as 3300Hz.
- The sampling frequency of speed loop and position loop is up to 16kHz
- Supports model-based feedforward control with gravity compensation and friction compensation
- Supports high-frequency vibration suppression

02 Compact size

- Sampling flat design, ultra-thin body
- Compared with the general servo, the overall volume is reduced by 1/3
- Electrical cabinet space is significantly reduced, reducing costs

03 Easy operation

- Motor parameter wizard installation and dynamic parameter identification
- Dimensional decoupling of gain parameters and one-click rigidity auto-tuning
- Multi-axis debugging interface integration, overall parameter import and export

04 Safe and reliable

- Integrated STO interface, compliant with IEC61508 standard
- Built-in brake output circuit, no external relay required
- Optional built-in dynamic braking circuit to prevent misoperation under non-energized conditions
- Support soft limit, save limit switch or form double limit protection

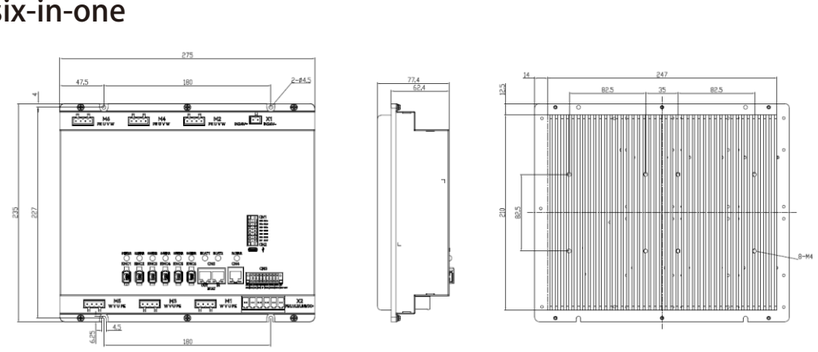
Drive nomenclature

YSK2- MS 6 T 08 Q - XXXXX

- Drive series: YSK2
- Control type: MS: multi-servo
- Number of axis: 6:6-axis; 4:4-axis
- Input voltage: Empty: 220V; T: 380V
- Rated output voltage: 08:8A/8A/5A/5A/3A/3A; 12:12A/12A/8A/5A/3A/3A
- Installation: B: base install; Q: through wall
- Factory code

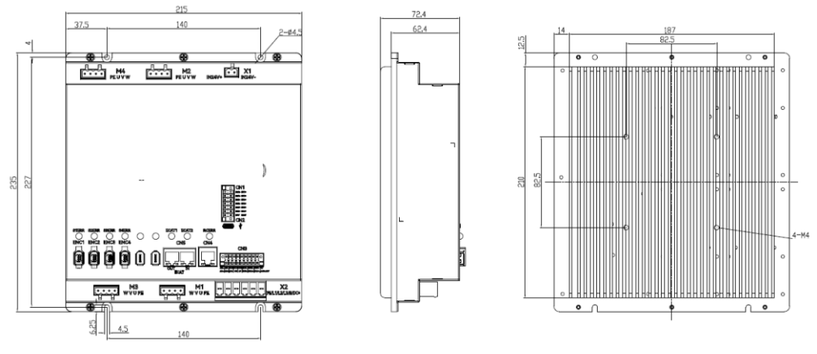
Outline dimensions

YSK2-MS six-in-one



Unit: **mm**

YSK2-MS four-in-one



Unit: **mm**

Technical specifications

Input power	
Control power	**DC 24V0.5AMAX**
Brake power	**DC 24V 1.0AMAX**
I/O	
Digital input	**2 (home, position limit, emergency stop etc.)**
Digital output	**2 (servo ready, alarm etc.)**
Analog input	**2**
Analog output	Not supported
Communication interface	
Protocol	**EtherCAT**
Service	**PDO、SDO**
Sync mode	**DC**
Sync cycle	Min.**250us**
Baud rate	**100Mbit/s**
Control mode	**CSP、CSV、CST、PP、HM**
Commissioning software	
Port	**USB(Type-C)、RS422**
Software	**ServoSuit**
Encoder	
Type	Serial encoder
Safety function	
STO	**STO1、STO2 input STO** output

Environment	
Use/storage temperature	**0℃ ～ +55℃/ -30℃ ～ +65℃**
Use/storage humidity	**90%RH (no condensing)**
Vibration/impact strength	**4.9m/s2/ 19.6m/s2**
Protection level	**IP20**
Altitude	Below 1000m
Others	
Installation	Base installation, through-wall installation
Cooling method	Forced cooling
Dynamic brake	Optional

Power specifications

YSK2-MS608Q

Axis	1	2	3	4	5	6
Output current(rated/Max)	8A/24A	8A/24A	5A/15A	5A/15A	3A/9A	3A/9A
Main power	**50Hz, AC220V**(-15%～+10%)					
Input capacity	**5.5kVA**					
Regeneration	External braking resistor minimum 30ohms, recommended power 1kw					

YSK2-MS612Q

Axis	1	2	3	4	5	6
Output current(rated/Max)	12A/36A	12A/36A	8A/24A	5A/15A	3A/9A	3A/9A
Main power	**50Hz, AC220V**(-15%～+10%)					
Input capacity	**7.5kVA**					
Regeneration	External braking resistor minimum 30ohms, recommended power 2kw					

YSK2-MS405Q

Axis	1	2	3	4
Output current(rated/Max)	5A/15A	5A/15A	3A/9A	3A/9A
Main power	**50Hz, AC220V**(-15%～+10%)			
Input capacity	**3.5kVA**			
Regeneration	External braking resistor minimum 30ohms, recommended power 2kw			

YSK2 Motors

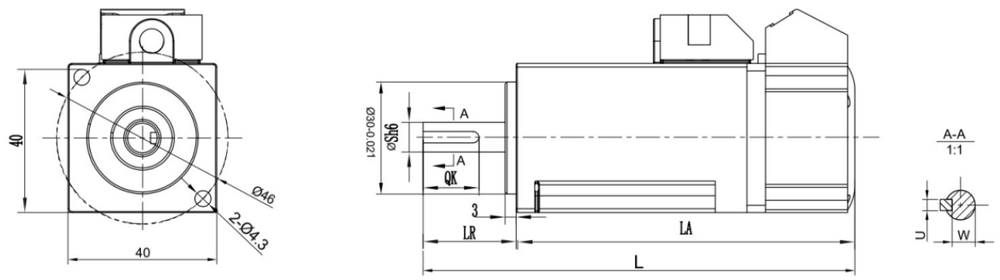
YSK2 motor nomenclature

YSK2- M M 200 B 2 T

- **Motor series** YSK2/YSK3
- **Motor type:** M: standard flange; MQ: 100mm flange; ME: 110mm flange
- Inertia: G: super-high; H: high; M: medium; S: small
- **Capacity** 005: 50W; 010: 100W; 020: 200W; 040: 400W; 075: 750W; 100: 1KW; 150: 1.5KW; 200: 2KW; 300: 3KW
- **Brake:** N: no brake; B: with brake
- Encoder: Empty: 17-bit incremental; A: 17-bit absolute; 2: 23-bit absolute
- **Voltage:** Blank: 220V; T: 380V

Motor dimensions

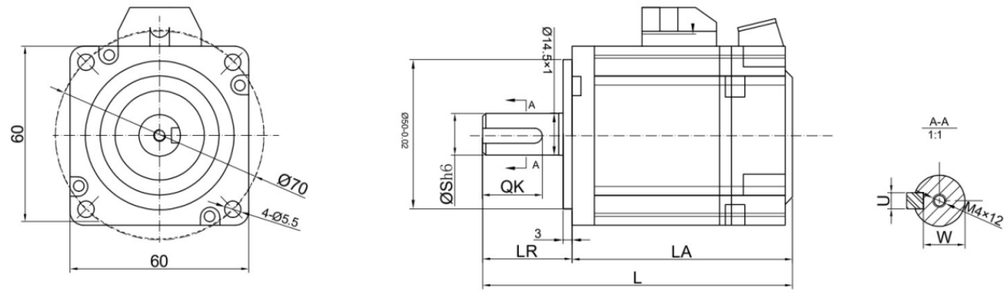
040 flange motor



Unit: mm

Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MH010N	40	116	91	25	15	8	3	6.2

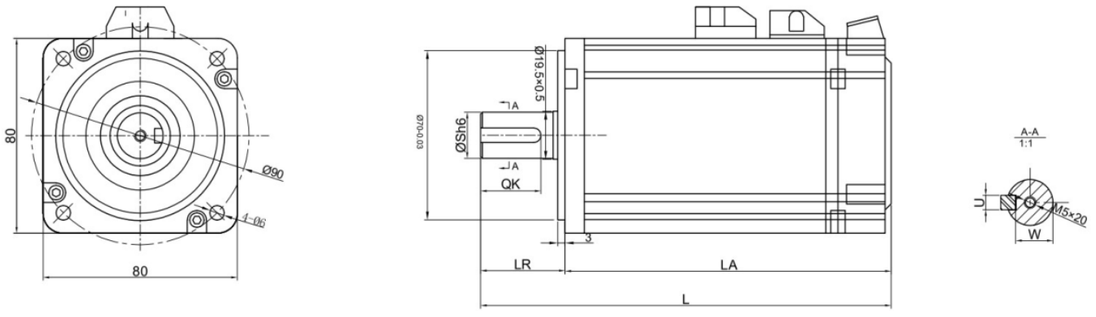
060 flange motor



Unit: mm

Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MH020N	60	104(136)	74(106)	30	20	14	5	11
YSK2-MH040N		122(155)	92(125)	30	20	14	5	11
YSK2-MH060N		143(175)	113(145)	30	20	14	5	11

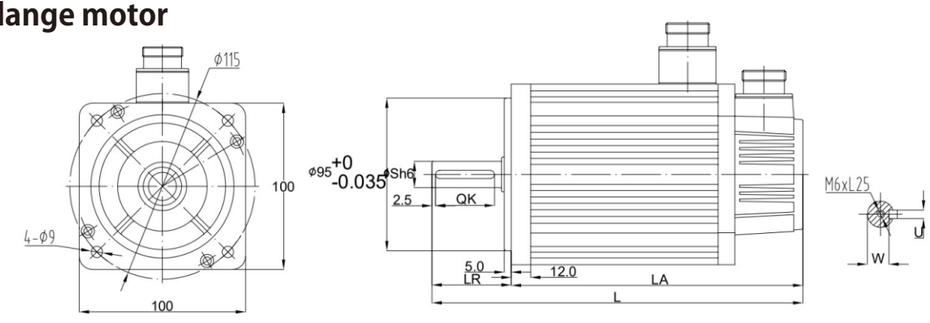
080 flange motor



Unit: mm

Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MH075N	80	136(170)	101(135)	35	25	19	6	15.5
YSK2-MH100N		150(184)	115(149)	35	25	19	6	15.5

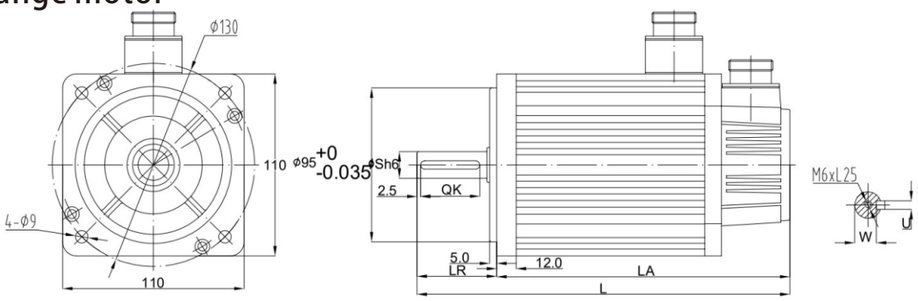
100 flange motor



Unit: mm

Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MQM130N	100	199(239)	154(194)	45	36	24	8	20
YSK2-MQM150N		223(263)	178(218)	45	36	24	8	20
YSK2-MQM200N		245(285)	200(240)	45	36	24	8	20

110 flange motor

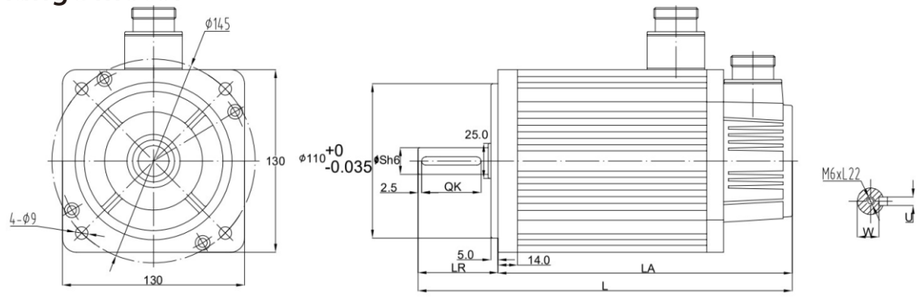


Unit: mm

Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MEM130N	110	215(241)	160(186)	55	41	19	6	15.5
YSK2-MEM150N		259(333)	204(278)	55	40	19	6	15.5
YSK2-MEM180N		274(348)	219(293)	55	40	19	6	15.5
YSK2-MEM200N		334(408)	279(353)	55	40	19	6	15.5

Notes: data in brackets are motors with brake

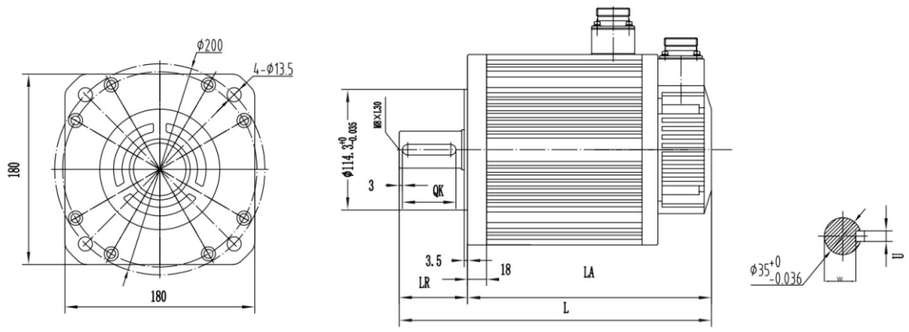
130 flange motor



Unit: mm

Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MG085N	130	200(223)	143(166)	57	40	22	6	18.5
YSK2-MG130N		217(240)	160(183)	57	40	22	6	18.5
YSK2-MG180N		236(259)	179(202)	57	40	22	6	18.5
YSK2-MH150N2		236(259)	179(236)	57	40	22	6	18.5
YSK2-MM100N		212(234)	155(177)	55	40	22	6	18.5
YSK2-MM150N		226(249)	169(191)	57	40	22	6	18.5
YSK2-MM200N		240(262)	183(205)	57	40	22	6	18.5
YSK2-MM200N-T		270(351)	213(294)	57	40	22	6	18.5
YSK2-MH300N-T		298(379)	241(322)	57	40	22	6	18.5

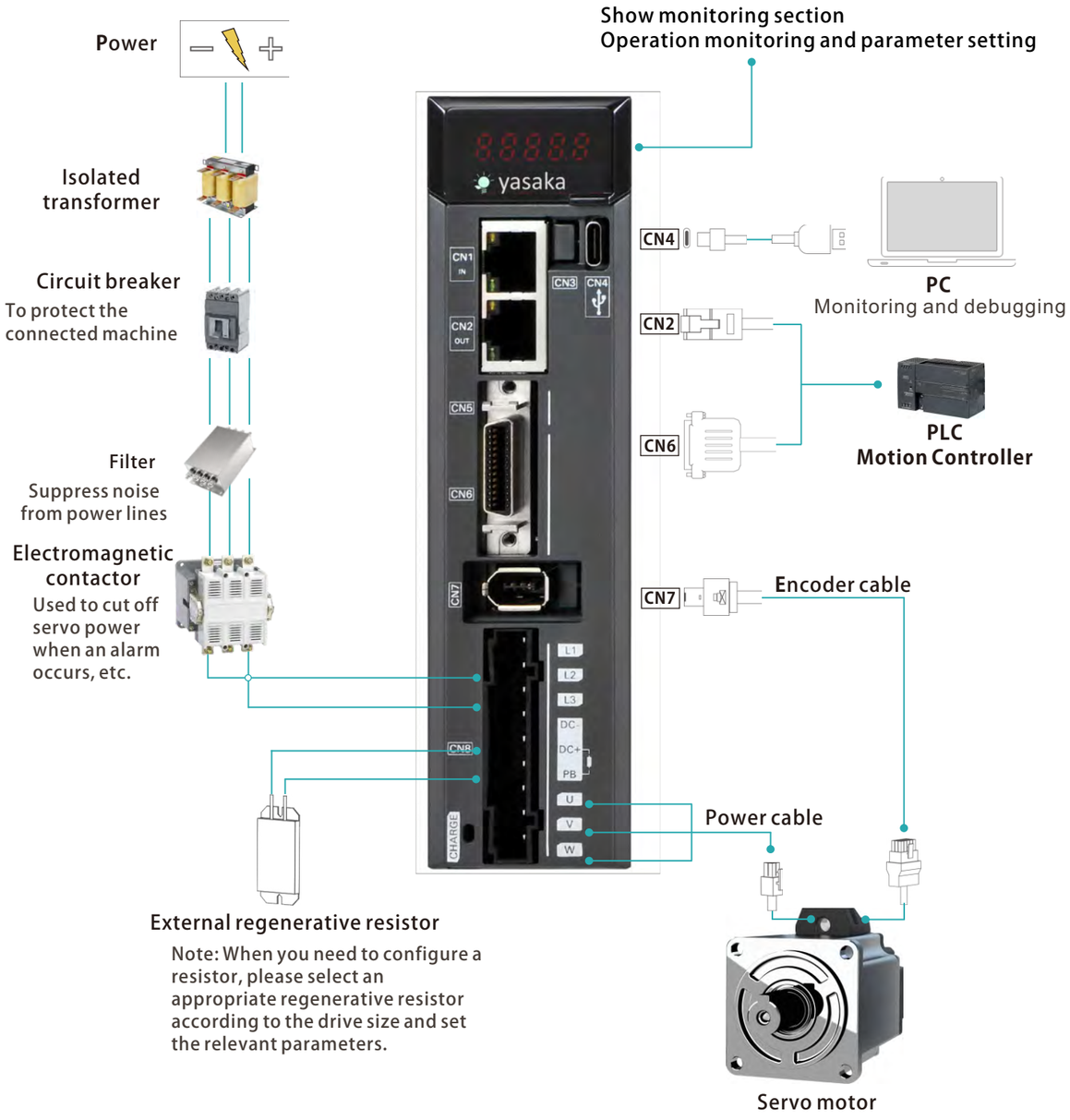
180 flange motor



Unit: mm

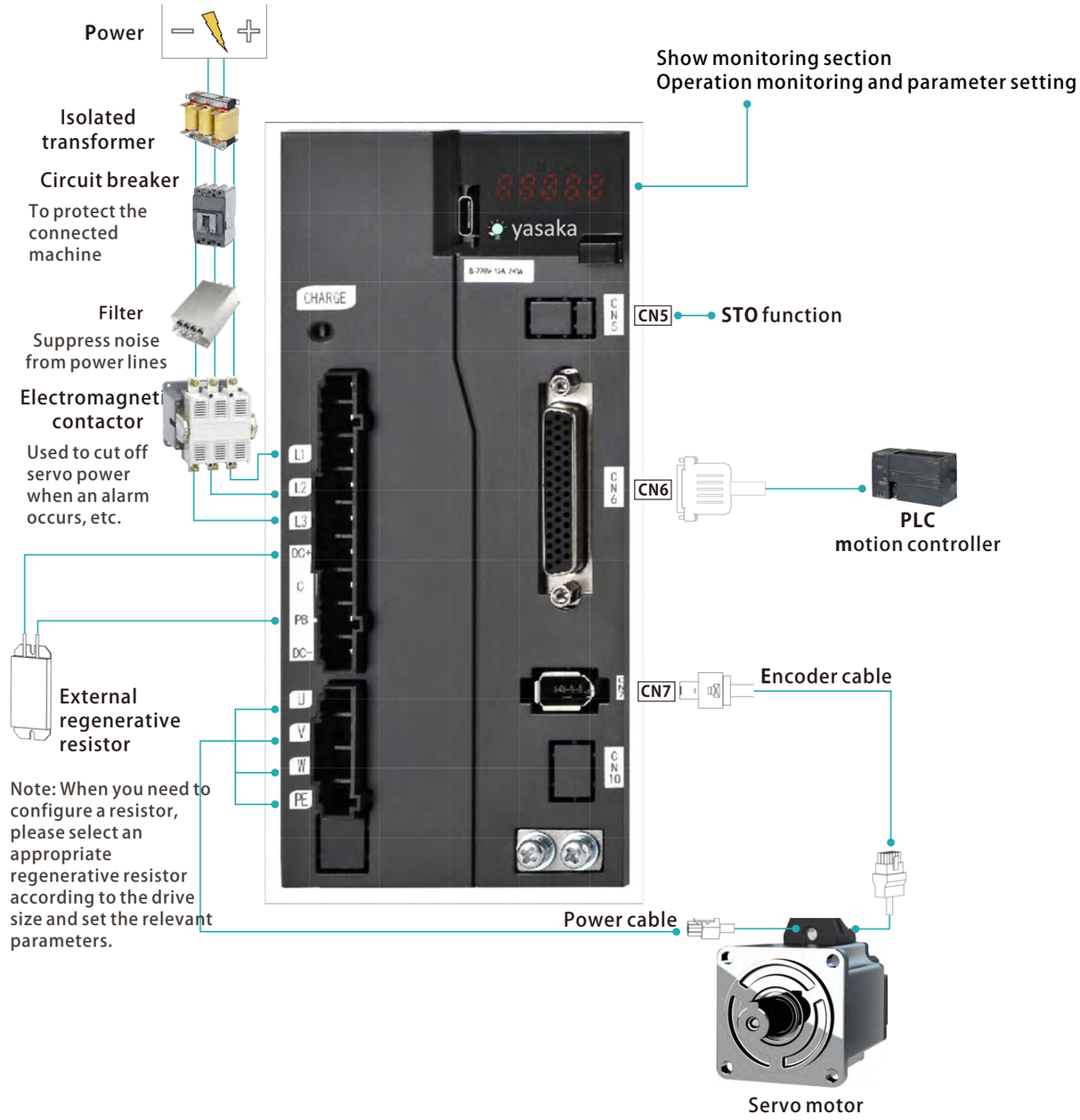
Model	Flange	L	LA	LR	QK	S	U	W
YSK2-MM300N-T	180	297(369)	232(304)	79	65	35	10	30
YSK2-MM450N-T		327(399)	262(334)	79	65	35	10	30
YSK2-MM550N-T		357(429)	292(364)	79	65	35	10	30

YSK2-***A series SIZE A/B



Safety notice:
1. Check whether the power supply and wiring of L1/L2/L3 are correct.
2. Confirm that the phase sequence of the servo motor output U/V/W terminals is correct.
3. This figure takes YSK2-040A as an example.

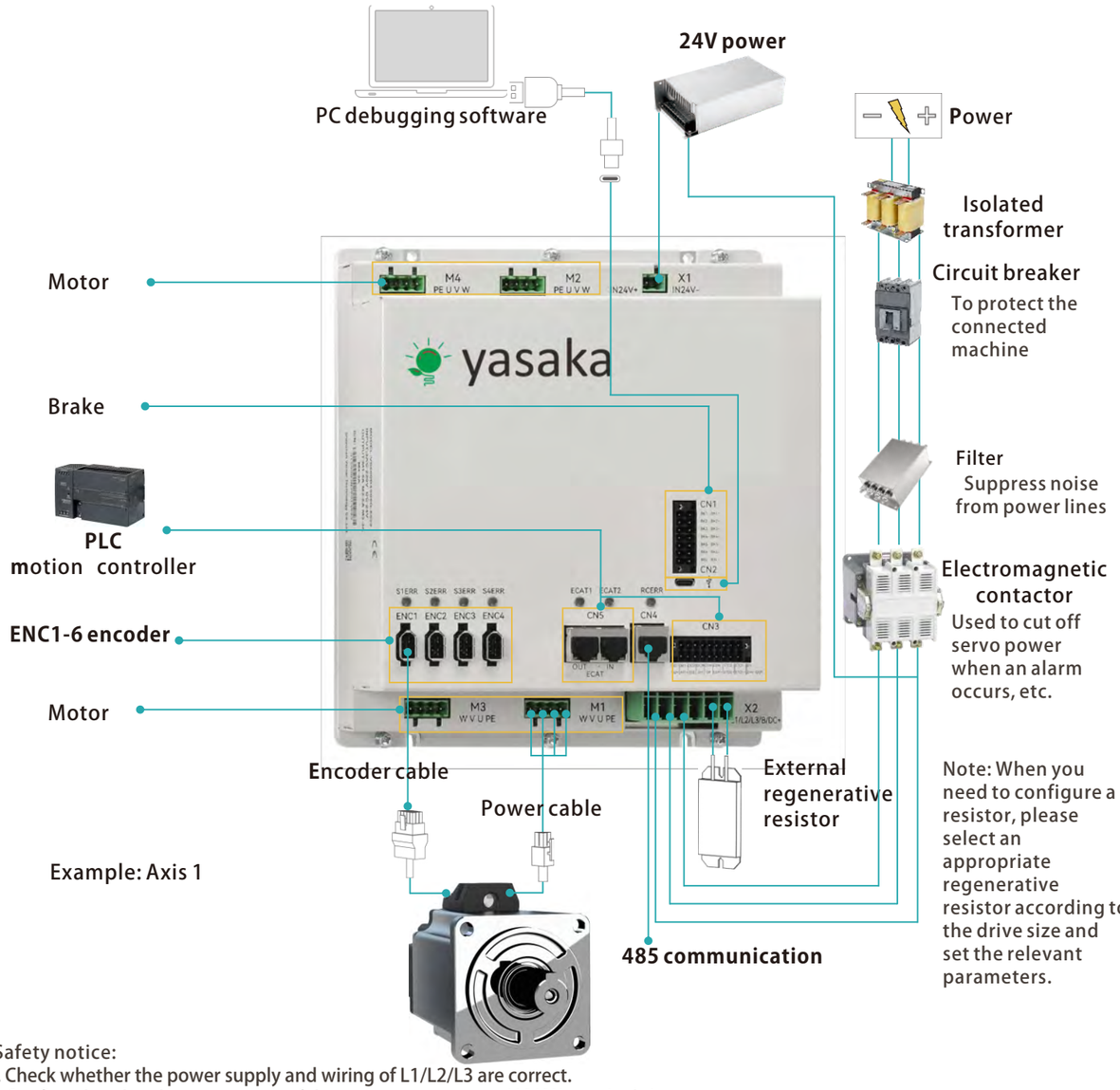
YSK2-***A series SIZE D



Safety notice:
1. Check whether the power supply and wiring of L1/L2/L3 are correct.
2. Confirm that the phase sequence of the servo motor output U/V/W terminals is correct.
3. This figure takes YSK2-200A as an example.

Configurations

YSK2-MS series Four-in-one

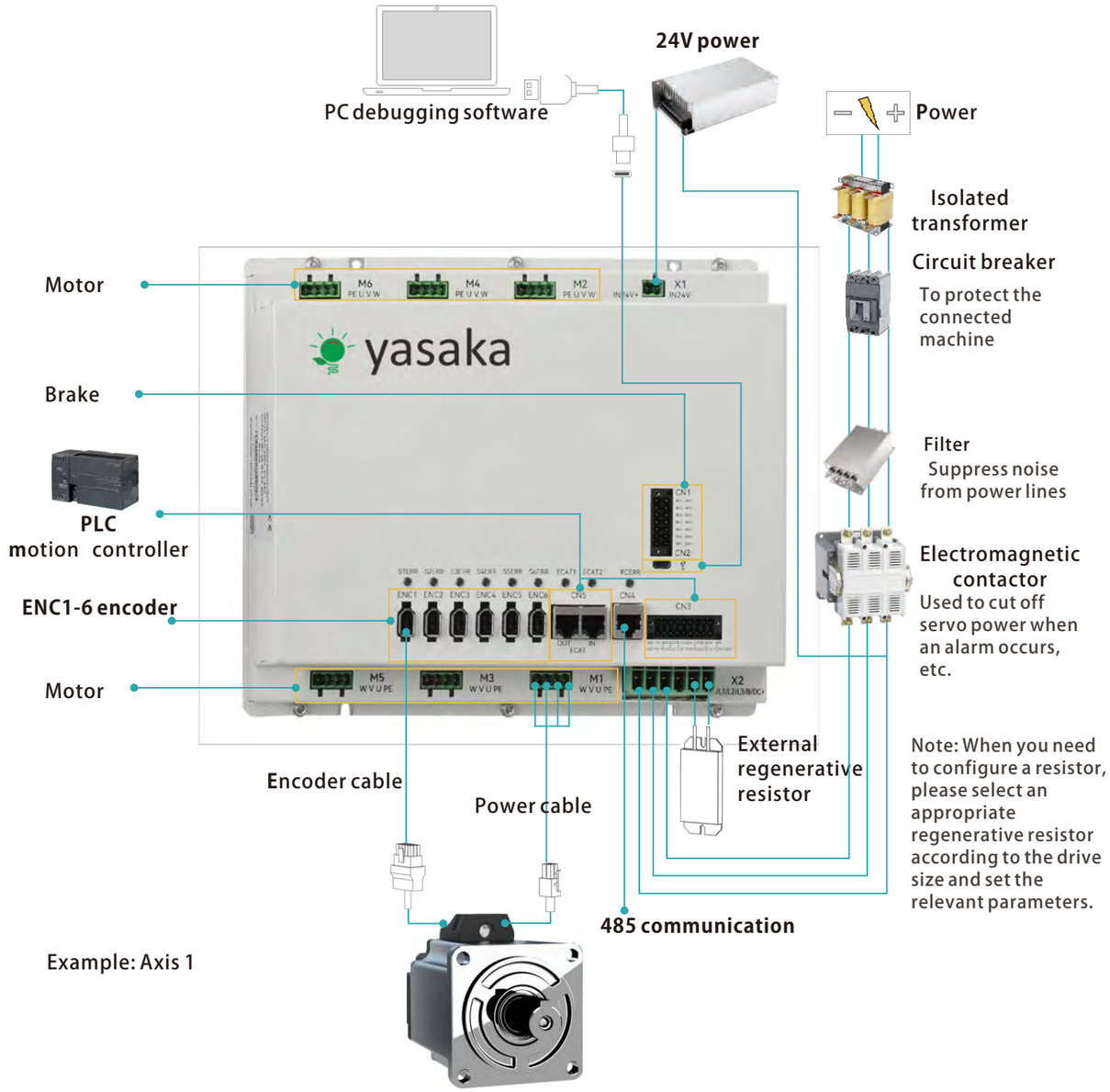


Safety notice:
1. Check whether the power supply and wiring of L1/L2/L3 are correct.
2. Confirm that the phase sequence of the servo motor output U/V/W terminals is correct.
3. This figure takes YSK2-MS405Q as an example.

Motor		IO/STO	
Main power		Brake	
Control power			

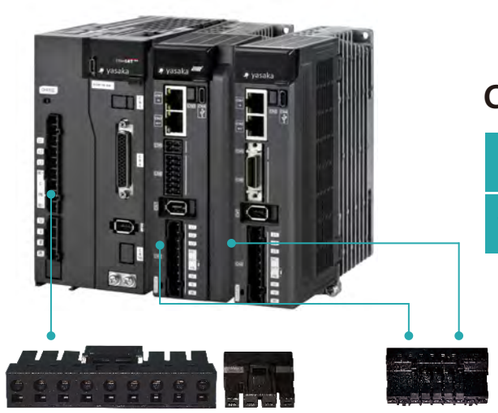
Note: 6-in-1, 4-in-1 use the same connectors

YSK2-MS series Six-in-one



Safety notice:
1. Check whether the power supply and wiring of L1/L2/L3 are correct.
2. Confirm that the phase sequence of the servo motor output U/V/W terminals is correct.
3. This figure takes YSK2-MS608Q as an example.

Main circuit terminal



CN8 main circuit terminal

9PIN	SIZE A/B: all types
13PIN	SIZE D: all types

9PIN: SIZE A/B all types

Pin	Function	
1	L1	220V power input, only used for 3PH 220V
2	L2	220V power input
3	L3	220V power input
4	DC-	DC bus negative
5	DC+	DC bus positive
6	PB	External regenerative resistor: DC+ and PB
7	U	Motor power U phase
8	V	Motor power V phase
9	W	Motor power W phase

13PIN: SIZE D all types

Pin	Function	
1/2	None	Empty
3	L1	220V/380V power input,
4	L2	220V/380V power input,
5	L3	220V/380V power input,
6	DC+	DC bus positive
7	C	Internal regenerative resistor
8	PB	External regenerative resistor: DC+ and PB
9	DC-	DC bus negative
10	U	Motor power U phase
11	V	Motor power V phase
12	W	Motor power W phase
13	PE	Motor grounding

CN6 control terminal

MDR26 IN	SIZE A /B: Pulse type
14PIN	SIZE A /B: Communication types
DB44 PIN	SIZE D: All types

MDR26 PIN： SIZE A /B pulse type

Pin	Function		Pin	Function	
1	DIOP	Digital input COM	14	DI1	Digital input 1
2	DI2	Digital input 2	15	DI3	Digital input 3
3	DI4	Digital input 4	16	+24V	24V
4	DOCOM	Digital output COM	17	DO1	Digital output 1
5	DO2	Digital output 2	18	DO6	Digital output 3
6	DI7	Digital input 7	19	G24V	24V ground
7	OUT_A	Pulse output A+	20	/OUT_A	Pulse output A-
8	OUT_B	Pulse output B+	21	/OUT_B	Pulse output B-
9	OUT_Z	Pulse output Z+	22	/OUT_Z	Pulse output Z-
10	HSIGN	High speed pulse input HSIGN	23	/HSIGN	High speed pulse input /HSIGN
11	HPULSE	High speed pulse input HPULSE	24	/HPULSE	High speed pulse input /HPULSE
12	DI5	Digital input 5	25	DI6	Digital input 6
13	GND	5V ground	26	OC_Z	Z phase open collector output

14PIN ：SIZE A /B communication types

Pin	Function		Pin	Function	
1	G24V	24V ground	2	DIOP	Digital input COM
3	+24V	24V	4	DI5	Digital input 5
5	DO2-	Digital output 2-	6	DI4	Digital input 4
7	DO2+	Digital output 2+	8	DI3	Digital input 3
9	DO1-	Digital output 1-	10	DI2	Digital input 2
11	DO1+	Digital output 1+	12	DI1	Digital input 1
13	BZ+	Brake output +	14	BZ-	Brake output -

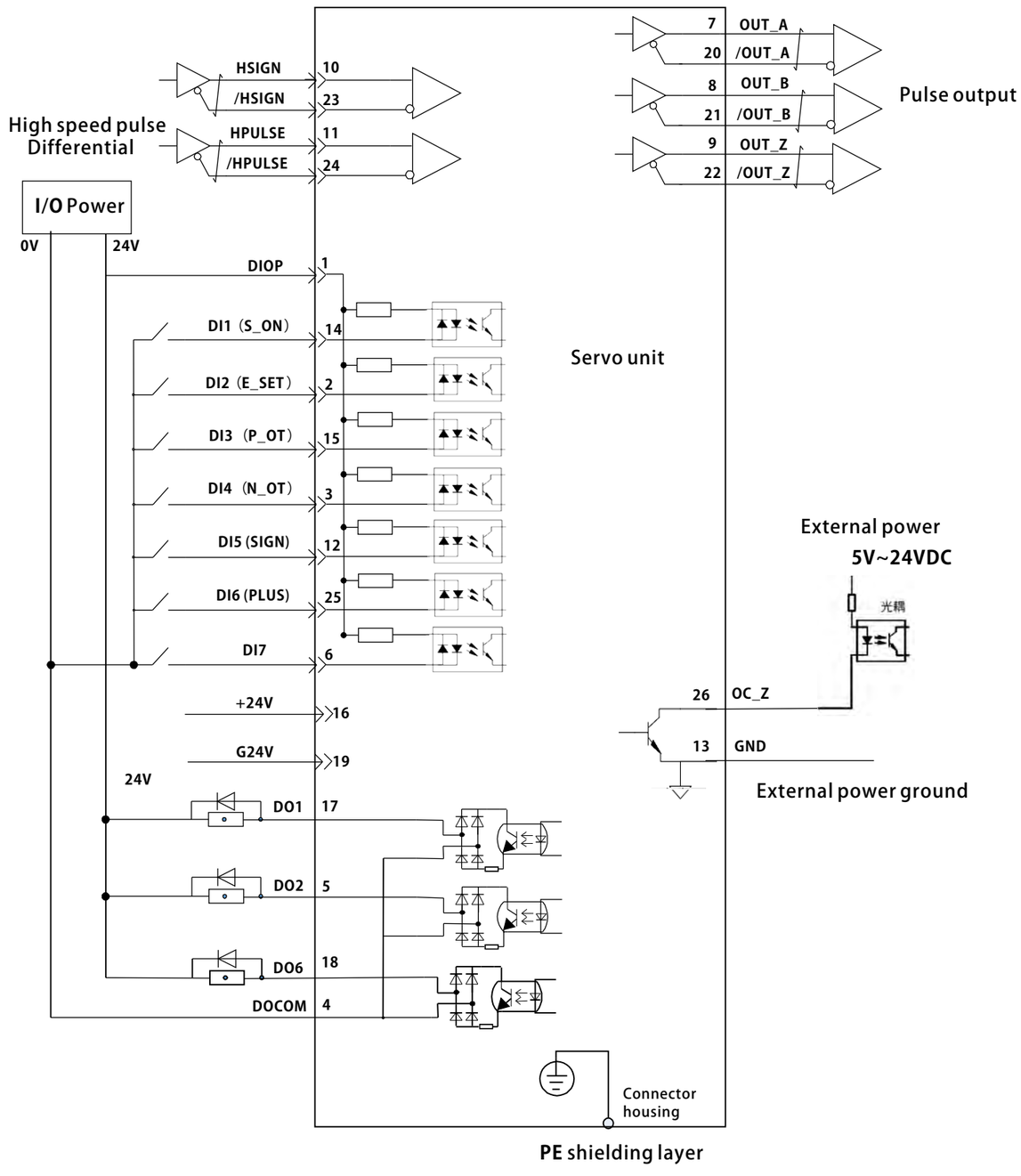
DB44PIN: SIZE D all types

Pin	Function		Pin	Function	
4	DO2-	Digital output 2-	23	/OUT_B	Pulse output B-
5	DO2+	Digital output 2+	24	/OUT_Z	Pulse output Z-
6	DO1-	Digital output 1-	25	OUT_B	Pulse output B+
7	DO1+	Digital output 1+	29	GND	OZ output ground
8	DI4	Digital input 4	30	DI8	Digital input 8
9	DI1	Digital input 1	31	DI7	Digital input 7
10	DI2	Digital input 2	32	DI6	Digital input 6
11	DIOP	Digital input COM	33	DI5	Digital input 5
12	DI9	Digital input 9	34	DI3	Digital input 3
13	OUT_Z	Pulse output Z+	36	/HPULSE	High speed pulse input /HPULSE
14	G24V	24V ground	38	HPULSE	High speed pulse input HPULSE
15	DO6-	Digital output 6-	40	/HSIGN	High speed pulse input /HSIGN
16	DO6+	Digital output 6+	42	HSIGN	High speed pulse input HSIGN
17	24V	24V	44	OC_Z	Z phase open collector output
21	OUT_A	Pulse output A+			
22	/OUT_A	Pulse output A-			

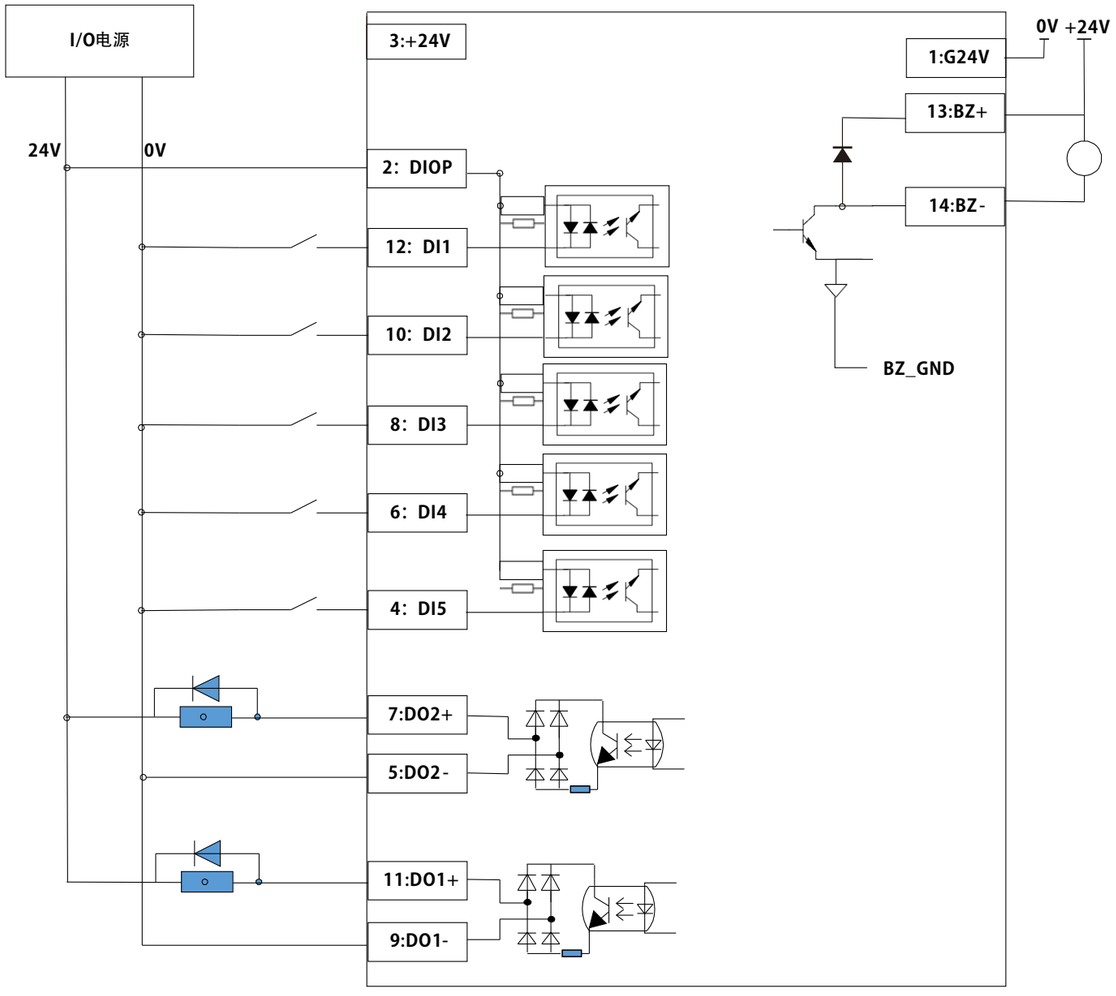
Notes: pulse input is not available for EtherCAT/Profinet models.

Wiring diagram

SIZE A /B 26PIN



SIZE B /D 14PIN



SIZE D 44PIN