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Innovation Integrity Service

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Due to the delayed update of the paper version, please refer to the official website for the latest product information.

LinkedIn YouTube

SV730/730W Series

Advanced AC Servo Drive

HCFa

EtherCAT Technology Group

Evolution 7.0:
Power Reimagined

SV730 Single-axis Series

SV730W Multi-axis Series

SV730, a new-generation AC servo family, includes SV730 Single-axis Series and SV730W Multi-axis Series drives. With a unified family-oriented design language, it fulfills users' demands for enhanced response and precision in servo systems. It is ideal for high-end applications such as lasers, photovoltaics, and lithium batteries.

EtherCAT Technology Group

Evolution

The entire series is designed to conform to international top-tier product standards, meeting users' needs for equipment export overseas.

The entire series complies with the following standards:

- EN IEC 61800-3:2018
- EN IEC 61800-3:2023
- EN IEC 61800-5-1:2023
- UL 61800-5-1 2022
- CSA C22.2 No.274-17

Notes:

1. For the latest information during product certification, please refer to our official website or contact our sales personnel.
2. SV730 only supports the STO function without functional safety certification. For functionally safe certified products, please use SV760 and SV760W.

Power

Ultimate Precision & Superior Performance: Integrating robust power with ultra-fast response, the new servo system injects surging momentum into the equipment and ushers in a new era of intelligent manufacturing.

Precision capture & High-speed response: Featuring dual built-in high-speed probes and 150kHz input frequency testing, the servo system achieves a hardware latency as low as **1μs**. It empowers high-end manufacturing and caters to the high-speed, high-precision requirements of packaging, printing, and semiconductor sectors.

Intelligent & Fast self-tuning !

Supporting multiple self-tuning modes, users only need to set the rigidity level. The servo drive instantly auto-matches optimal parameters: precisely adjusts gain, identifies inertia online, and intelligently enables notch filters — balancing speed and stability. Achieve a leap in efficiency with greatly reduced debugging time!

Reimagined

- Brand-new A-face Wiring Design: Effortless wiring saves space in electrical cabinets.

- Dedicated Heat Dissipation Air Duct Design: Boosts cooling efficiency while preventing dust, high humidity, and other contaminants from entering the drive unit, which effectively enhancing product reliability.

- Reinforced Three-proof Coating: Provides resistance to moisture, dust, and light corrosion.

- Built-in Braking Resistor: Models 750W and above come with built-in braking resistors that dissipate regenerative energy generated during motor deceleration, which ensuring rapid stops and reliable operation of servo motors.

- European-standard Power Terminals: Enable fast installation and reliable connections.

- Pre-reserved Battery Box Expansion: Supports quick disassembly and replacement.

- Black-box-level Monitoring & Intelligent Diagnosis: Makes risks visible and security tangible.

SV730 Single-axis Series

Naming Rule

SV730 A A - 2R8 - S 0 0 - 00

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	Product series
SV730	SV730 series

②	Product type
A	Pulse type
B	EtherCAT bus type

③	Voltage class
A	AC220V
T	AC380V

④	Current specification/Power	
AC 220V		
R90	1.2A	100W
1R6	1.7A	200W
2R8	2.8A	400W
5R5	5.5A	750W
7R6	7.6A	1kW
012	11.6A	1.5kW
014	14A	2kW
AC 380V		
3R5	3.5A	1kW
5R4	5.4A	1.5kW
8R4	8.4A	2kW
012	12A	3kW
018	18A	5kW
022	22A	6kW
026	26A	7.5kW

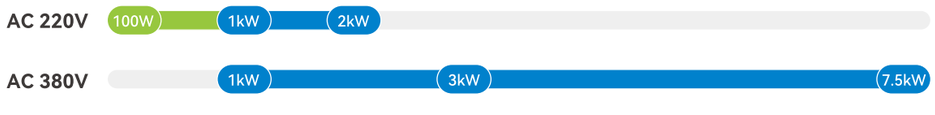
⑤	Functional safety configuration
0	Without STO
S	STO model

⑥	Specification configuration
0	Without DB, no secondary encoder
1	With DB, no secondary encoder

⑦	Braking resistor
0	Without
1	With

⑧	Manufacturer-defined ID
00	-

Voltage Class & Power Planning



Product Series Configuration

Functional configuration	Single-axis product series	
	SV730	
Control mode	Pulse	EtherCAT bus
IO control	8DI/6DO	5DI/3DO
STO function	Optional	Optional
DB dynamic braking	√	√
Frequency division output	√	-
Secondary encoder	-	-
Analog input	2AI（Optional）	-
Analog output	-	-
RS485	√	-
Built-in regenerative resistor	√	√
Encoder bits	20/23/25bit	
CE certification	√ Certification in progress	
UL certification	√ Certification in progress	
Functional safety certification	For STO function（SIL 3 Certification）, the 730 series are not available, and the 760 series are undergoing.	

Bus Drive Product Ordering Guide

Power supply	Rated current (A)	Maximum current (A)	Recommended motor power (kW)	Structure (Size)	Bus standard product model number	STO function
AC220V	1.2	4.6	0.1	A	SV730BA-R90-010	-
	1.7	6.5	0.2	A	SV730BA-1R6-010	-
	2.8	9.3	0.4	A	SV730BA-2R8-010	-
	5.5	16.9	0.8	B	SV730BA-5R5-011	-
	7.6	17.0	1.0	B	SV730BA-7R6-011	-
	11.6	28.0	1.5	C	SV730BA-012-011	-
	15.6	39.0	2.0	C	SV730BA-014-011	-
AC380V	3.5	10.5	1.0	B	SV730BT-3R5-011	-
	5.4	17.0	1.5	B	SV730BT-5R4-011	-
	8.4	20.0	2.0	C	SV730BT-8R4-011	-
	11.9	31.0	3.0	C	SV730BT-012-011	-
	16.5	44.0	5.0	D	SV730BT-018-011	-
	20.8	52.0	6.0	D	SV730BT-022-011	-
	25.7	65.0	7.5	D	SV730BT-026-011	-

*Note: 1.Gray-marked bus product models are scheduled for sequential release in 2026.
2.If STO is required, the 760 series single-axis products are available as an option.

Pulse Drive Product Ordering Guide

Power supply	Rated current (A)	Maximum current (A)	Recommended motor power (kW)	Structure (Size)	Pulse standard product model number	STO function
AC220V	1.2	4.6	0.1	A	SV730AA-R90-010	-
	1.7	6.5	0.2	A	SV730AA-1R6-010	-
	2.8	9.3	0.4	A	SV730AA-2R8-010	-
	5.5	16.9	0.8	B	SV730AA-5R5-011	-
	7.6	17.0	1.0	B	SV730AA-7R6-011	-
	11.6	28.0	1.5	C	SV730AA-012-011	-
	15.6	39.0	2.0	C	SV730AA-014-011	-
AC380V	3.5	10.5	1.0	B	SV730AT-3R5-011	-
	5.4	17.0	1.5	B	SV730AT-5R4-011	-
	8.4	20.0	2.0	C	SV730AT-8R4-011	-
	11.9	31.0	3.0	C	SV730AT-012-011	-
	16.5	44.0	5.0	D	SV730AT-018-011	-
	20.8	52.0	6.0	D	SV730AT-022-011	-
	25.7	65.0	7.5	D	SV730AT-026-011	-

*Note: Pulse products are scheduled for sequential release in 2027.

Bus Technology Specifications

Item			Specifications
Basic specifications	Control mode		IGBT PWM control, sine wave current drive
			220V/380V: Single-phase or three-phase full-bridge rectification
Encoder feedback	SV730		20-bit multi-turn absolute encoder, 23-bit multi-turn absolute encoder, 25-bit multi-turn absolute encoder
Speed/Torque control	Performance	Load variation rate	≤0.5% (at rated speed, 0~100% load)
		Voltage variation rate	≤0.5% (at rated speed, ±10% rated voltage)
		Speed control range	1~7000 rpm (lower limit requires motor to maintain rotation under rated torque)
	Input signal	Speed command input	CSV/PV mode
		Torque command input	CST/PT mode
Position control	Performance	Feedforward compensation	0~100.0% (resolution 0.1%)
	Input signal	EtherCAT Communication Mode	CSP/PP/HM mode
I/O signals	Digital input (DI)	Input signal function selection	5DI
			DI1~DI3: General-purpose DI
			DI4~DI5: High-speed DI
			DI functions: Alarm reset, forward/reverse overtravel, origin switch, emergency stop, probe, etc.
	Digital output	Output signal function selection	3DO
			DO load capacity: 50mA;Voltage range: DC 5V~30V
			DO functions: Servo ready, motor rotation output, comparison/brake/communication forced output, fault/warning
General servo functions	Overtravel prevention function		Immediate stop when P-OT/N-OT activates
	DB dynamic braking		Built-in, supported by some models
	Electronic gear ratio		Numerator/denominator, min. 1/1000, max. resolution×0.4
	Regeneration function		Built-in braking resistor in some models, supports external high-power resistors
	Protection functions		Overcurrent, overvoltage, undervoltage, overload, main circuit detection abnormality, heatsink overheating, phase loss, overspeed, encoder abnormality, excessive position deviation, parameter abnormality, etc.
	Functional safety	Input signal function selection	STO1/STO2: Input blocking for safety module
		Applicable standards	EN 61508:2010, parts 1-7、EN ISO 13849-1、EN 61800-5-2
	EDM output		Safety output signal from safety module
	LED display function		5-digit LED display
	Vibration suppression function		5 sets of notch filters, Type A vibration suppression
	Ease-of-use functions		One-key parameter adjustment, adaptive tuning, speed observer, model tracking, friction compensation, and inertia auto-tuning
	Communication functions	Backstage commissioning interface	Type-C (for HCServoWorks.exe connection)
		Multi-station communication protocol	EtherCAT
		Functions	Status display, user parameter setting, monitoring/alarm trace, JOG/auto-tuning; communication/motion control commands
	Others		Gain adjustment, alarm logging, JOG operation, etc.

AC220V Basic Specifications

Item		Specifications						
Dimension specifications		Size A			Size B		Size C	
Model: SV7**BA-***-***		R90	1R6	2R8	5R5	7R6	012	014
Drive power [kW]		0.1	0.2	0.4	0.75	1	1.5	2.0
Maximum applicable motor capacity [kW]		0.1	0.2	0.4	0.75	1	1.5	2.0
Continuous output current [Arms]		1.2	1.7	2.8	5.5	7.6	11.6	14
Maximum output current [Arms]		4.6	6.5	10.2	16.9	23	32	42
Main circuit	Power supply	Single-phase AC180~264V, 50/60Hz			Three-phase AC180~264V, 50/60Hz			
	Continuous input current [Arms]	0.8	1.3	2.5	4.1	5.7	7.3	10
Control power supply		Internal power supply						
Braking resistor	Resistance value (Ω)	-	-	-	50	50	50	20
	Resistance power (W)	-	-	-	80	80	100	100
	Minimum external allowable resistance [Ω]	40	40	40	40	35	20	20
Cooling method		Natural cooling			Forced air cooling			
Overvoltage class		III						

AC380V Basic Specifications

Item		Specifications						
Dimension specifications		Size B		Size C		Size D		
Model: SV7**BA-***-***		3R5	5R4	8R4	012	018	022	026
Drive power [kW]		1.0	1.5	2.0	3.0	5.0	6.0	7.5
Maximum applicable motor capacity [kW]		1.0	1.5	2.0	3.0	5.0	6.0	7.5
Continuous output current [Arms]		3.5	5.4	8.4	12	18	22.0	26.0
Maximum output current [Arms]		11.3	17.0	25.0	32.0	45	55.0	65.0
Main circuit	Power supply	Three-phase AC342 ~ 484V, 50/60Hz						
	Continuous input current [Arms]	2.9	4.3	5.8	8.6	14.5	17.4	21.7
Control power supply		Single-phase AC342 ~ 484V, 50/60Hz						
Braking resistor	Resistance value (Ω)	50	500	50	40	25	20	20
	Resistance power (W)	80	80	100	100	100	100	100
	Minimum external allowable resistance [Ω]	40	40	40	35	25	20	20
Cooling method		Forced air cooling						
Overvoltage class		III						

CN6 EtherCAT bus communication interface definition

Terminal	Pin number	Signal name	Terminal	Pin number	Signal name
CN6 (IN)	1	TD+	CN6 (OUT)	1	TD+
	2	TD-		2	TD-
	3	RD+		3	RD+
	4	-		4	-
	5	-		5	-
	6	RD-		6	RD-
	7	-		7	-
	8	-		8	-

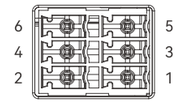
CN1 user IO interface*

*Note: Users can assign DI/DO functions themselves; please refer to the user manual for detailed definitions..

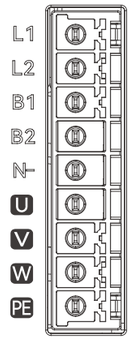
CN2 encoder connection terminal interface definition

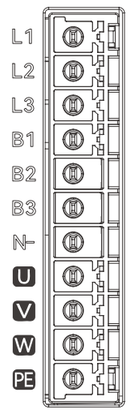
Terminal	Pin number	Function
1	PG 5V	Encoder power supply +5V
2	PG 0V	Encoder power supply 0V
3	-	-
4	-	-
5	PS	Serial data (+)
6	/PS	Serial data (-)
Housing	Shield	Shield

Cn3 STO safety interface definition

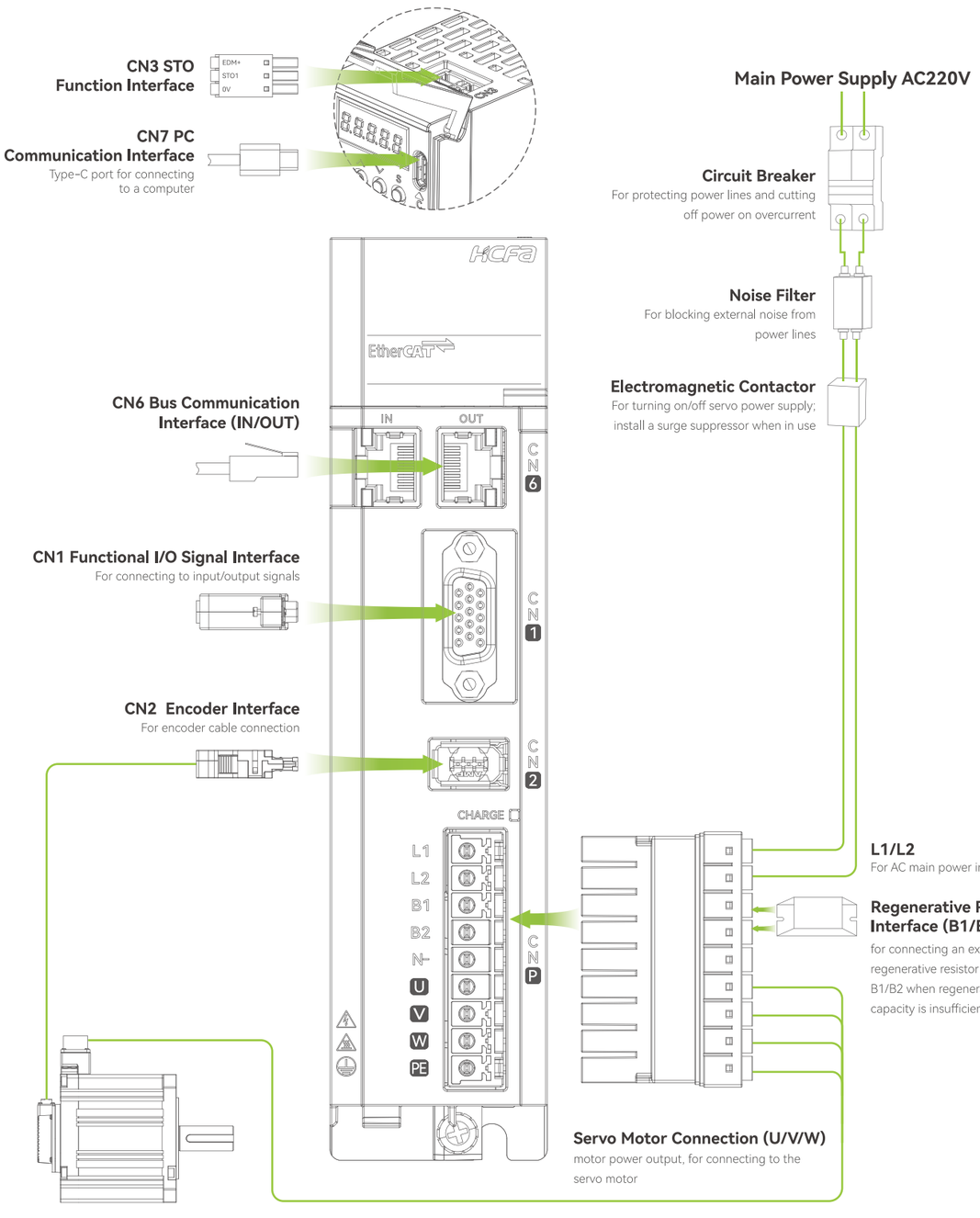
Diagram	Terminal	Pin number	Signal name
	1	0V	Internal 24V power supply -
	2	24V	Internal 24V power supply +
	3	STO1	Functional safety STO1 signal input
	4	STO2	Functional safety STO2 signal input
	5	EDM+	/STO1 and /STO2 are both input and ON when sto status is active.
	6	EDM-	

CNP power supply & motion interface definition

A size diagram	Pin number	Function
	L1	Main circuit power supply input terminal
	L2	
	B1	External braking resistor connection terminal
	B2	
	N-	For common bus only
	U	Servo motor power connection terminal
	V	
	W	
	PE	Motor PE ground terminal

B size diagram	Pin number	Function
	L1	Main circuit power supply input terminal
	L2	
	L3	
	B1	B1/B2 external braking resistor connection terminals. Short-circuit B2 and B3 to enable the built-in regenerative resistor.
	B2	
	B3	
	N-	For common bus only
	U	Servo motor power connection terminal
	V	
	W	
	PE	Motor PE ground terminal

Size A Model



CN3 STO Function Interface

CN7 PC Communication Interface
Type-C port for connecting to a computer

CN6 Bus Communication Interface (IN/OUT)

CN1 Functional I/O Signal Interface
For connecting to input/output signals

CN2 Encoder Interface
For encoder cable connection

Main Power Supply AC220V

Circuit Breaker
For protecting power lines and cutting off power on overcurrent

Noise Filter
For blocking external noise from power lines

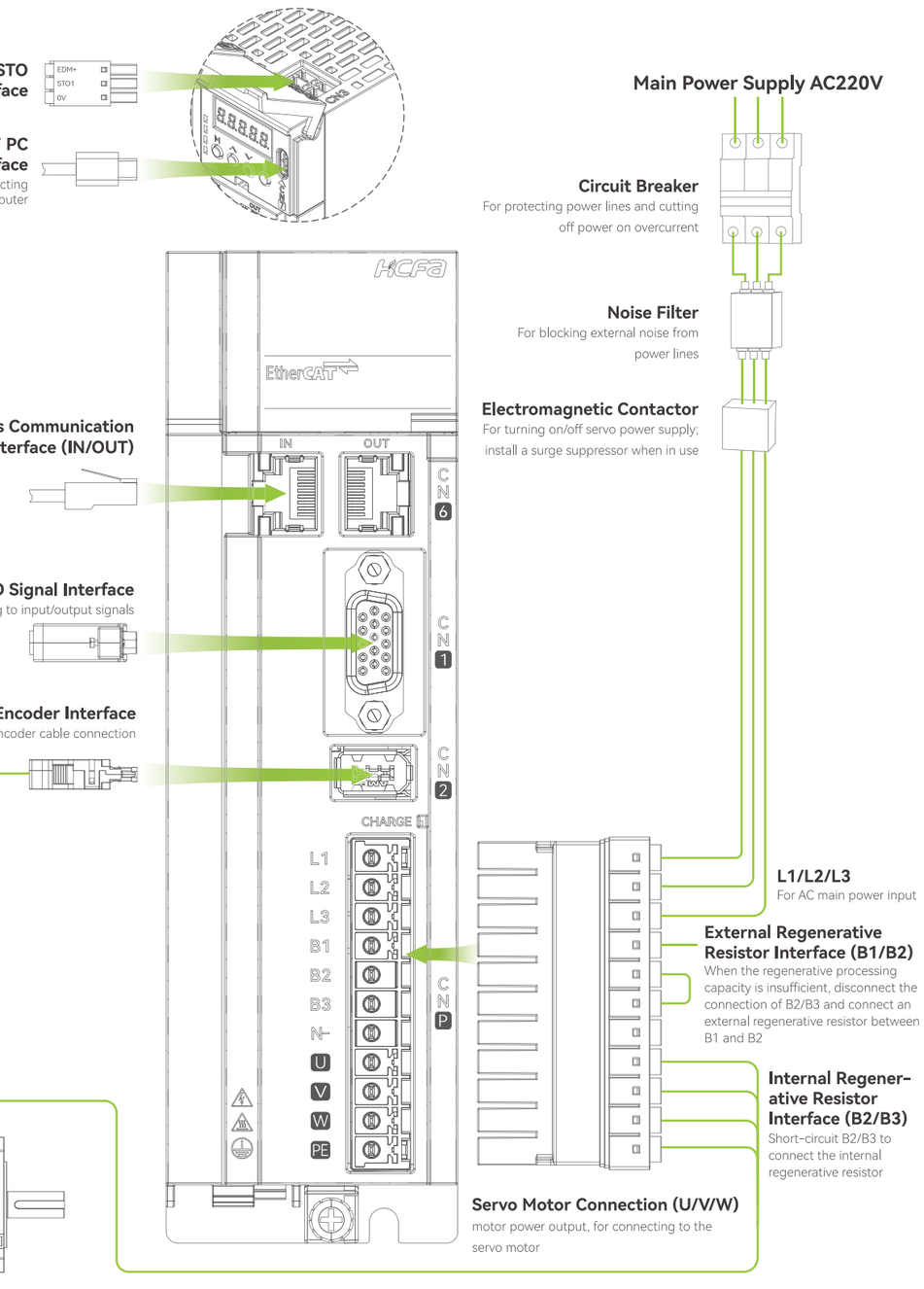
Electromagnetic Contactor
For turning on/off servo power supply; install a surge suppressor when in use

L1/L2
For AC main power input

Regenerative Resistor Interface (B1/B2)
for connecting an external regenerative resistor between B1/B2 when regenerative capacity is insufficient

Servo Motor Connection (U/V/W)
motor power output, for connecting to the servo motor

Size B Model



CN3 STO Function Interface

CN7 PC Communication Interface
Type-C port for connecting to a computer

CN6 Bus Communication Interface (IN/OUT)

CN1 Functional I/O Signal Interface
For connecting to input/output signals

CN2 Encoder Interface
For encoder cable connection

Main Power Supply AC220V

Circuit Breaker
For protecting power lines and cutting off power on overcurrent

Noise Filter
For blocking external noise from power lines

Electromagnetic Contactor
For turning on/off servo power supply; install a surge suppressor when in use

L1/L2/L3
For AC main power input

External Regenerative Resistor Interface (B1/B2)
When the regenerative processing capacity is insufficient, disconnect the connection of B2/B3 and connect an external regenerative resistor between B1 and B2

Internal Regenerative Resistor Interface (B2/B3)
Short-circuit B2/B3 to connect the internal regenerative resistor

Servo Motor Connection (U/V/W)
motor power output, for connecting to the servo motor

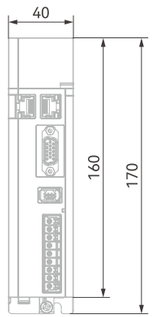
Environmental specifications

Item		Specifications
Environmental conditions	Installation environment requirements	Open-type and indoor use
	Installation/operating temperature	-5℃ to +55℃; no derating for -5℃ to +45℃; derate by 2% per 1℃ above 45℃.
	Storage temperature	-20℃ to +80℃ (maximum temperature guarantee: 80℃ for 72h without condensation)
	Operating & storage humidity	Below 90% RH (no condensation). For better reliability, use in a stable-temperature location.
	Altitude	Maximum 2000m. No derating up to 1000m; derate by 1% per 100m above 1000m.
	Vibration	Below 5.88m/s² (0.6G), 10-60hz (avoid connection at resonance)
	Shock resistance	Acceleration below 19.6m/s²
	Atmospheric pressure	Above 900hPa
	Pollution degree	2
	Overvoltage category	III
	IP rating	IP20 (except terminals: IP00)
	Cleanliness	In environments free of corrosive/flammable gases, water, oil, chemical splashes, dust, dirt, salt, or metal powder.
	Others	No electrostatic interference, strong electric field, strong magnetic field, radiation, etc.

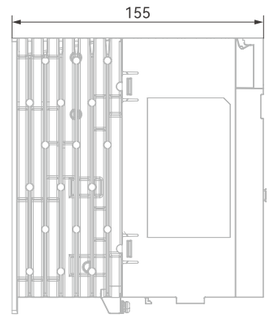
Dimensions

Size A overall dimensions (mm)

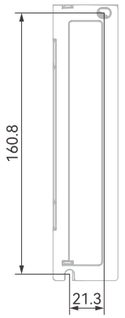
Weight: 690g



Front view



Left view

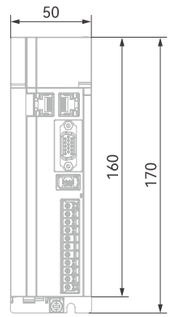


Rear view

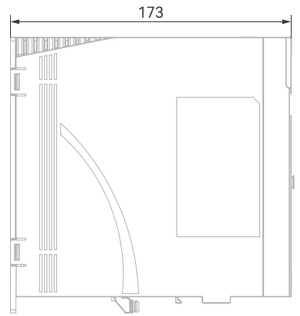
Hole position diagram

Size B overall dimensions (mm)

Weight: 710g

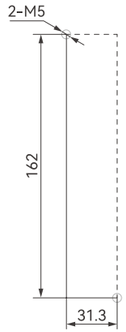


Front view



Left view

Rear view



Hole position diagram

Exquisite Integration

Flexible Expansion

Ushering Servo Drives into the Era of Multi-Axis Bus Systems!

The SV730W multi-axis integrated advanced AC servo system is a sub-series of the SV730 family. It is designed with a minimum of dual axes and a maximum of 4 axes. Boasting product features such as integrated installation, convenient commissioning, and scalability, it can effectively reduce users' TCO (Total Cost of Ownership). The entire product series is developed in compliance with international first-class standards, meeting the demands for equipment exports overseas. It stands as the ultimate choice for cutting-edge multi-axis motion control solutions and ushers servos into the bus-enabled multi-axis era!

SV730W

Multi-axis AC Servo Drive System

EtherCAT Technology Group

Integration

Installation space

60%

Face width reduced by 60%, saving installation space.

Fast Wiring

Engineering wiring

30%

One unit’s wiring time ≈ four units’ wiring time, saving installation costs while greatly reducing installation man-hours.

Convenient Commissioning

- Multi-axis integration.The integrated multi-axis control platform enables concurrent parameter configuration, gain tuning, test runs, and real-time status monitoring across axes A/B/C/D—significantly shortening commissioning time and improving deployment efficiency.
- Enhanced auto-tuning capability.Integrates multiple self-tuning modes—users simply set the rigidity level, and the servo drive instantly auto-matches optimal parameters: precise gain adjustment, real-time inertia identification, and intelligent notch filter activation—delivering both rapid response and stability. This achieves an efficiency leap, with commissioning time reduced by up to 80% or more.

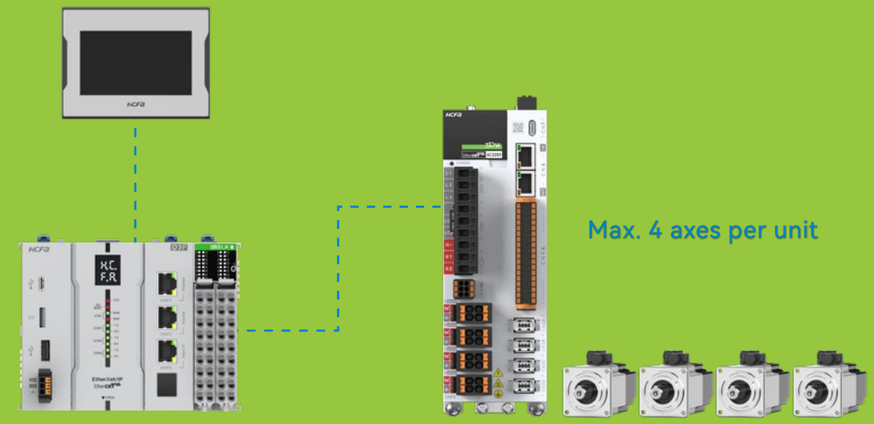
Design Compliance

- The entire series complies with international top-tier standards, meeting your needs for overseas equipment exports.

CE

Note: Certain 730W product models have obtained CE certification.
For the latest information, please visit our official website or contact our sales personnel.

Scalability



A single unit supports up to 4 axes and can be expanded to more.

Naming Rule

SV730 W B A - CCCC - 0000
① ② ③ ④ ⑤ ⑥

①	Product series
SV730	SV730 series

②	Product type
W	Multi-axis

③	Control mode
A	Pulse
B	EtherCAT bus

④	Drive voltage class
A	220V 1P/3P
T	380V 3P
N	380V 3P+N

⑤	Motor current per axis*		
Voltage	220V 1P/3P	380V 3P+N	380V 3P
A	0.9A	0.9A	
B	1.6A	1.6A	
C	2.8A	2.8A	
D	3.5A	3.5A	
E	4.7A	4.7A	
F	5.5A	5.5A	
G	7.6A	7.6A	
H	8.4A	8.4A	
K	11.6A	11.6A	
L	14A	14A	
M			3.5A
N			5.4A
P			8.4A

⑥	Custom code
0000	-

*Note: The number of letters corresponds to the number of axes of the drive.

Product Series Configuration

Functional configuration	Multi-axis product series
	SV730W
Control mode	EtherCAT bus
IO control	21DI/8DO
STO function	√
DB dynamic braking	√
Frequency division output	-
Analog input/output	-
High-speed probe	8 channels
Built-in regenerative resistor	-
Encoder bits	20/23/25bit
CE certification	√ Certification in progress
UL certification	√ Certification in progress
Functional safety certification	No. For functional safety certified products, please use 760W series.

Bus Drive Product Ordering Guide

Drive specifications					Recommended motor specifications		Ordering model
Drive voltage class	Single-axis rated current (A)	Single-axis maximum current (A)	Number of axes	Size	Motor power * Number of axes	Voltage	SV730W
220V 1P/3P	2.8	10.2	2	A	400w*2	220V	SV730WBA-CC
	5.5	16.9	2	A	750w*2	220V	SV730WBA-FF
	7.6	17	2	A	1kW*2	220V	SV730WBA-GG
	11.6	32	2	B	1.5kW*2	220V	SV730WBA-KK
	14	42	2	B	2kW*2	220V	SV730WBA-LL
	2.8	10.2	3	A	400w*3	220V	SV730WBA-CCC
	5.5/2.8	16.9/10.2	3	A	750w*2+400W*1	220V	SV730WBA-FFC
	2.8	10.2	4	A	400w*4	220V	SV730WBA-CCCC
	5.5	16.9	4	B	750w*4	220V	SV730WBA-FFFF
	7.6	17	4	B	1kW*4	220V	SV730WBA-GGGG
380V 3P+N	2.8	10.2	4	A	400w*4	220V	SV730WBN-CCCC
	5.5	16.9	4	B	750w*4	220V	SV730WBN-FFFF
	7.6	17	4	B	1kW*4	220V	SV730WBN-GGGG
380V 3P	5.4	17	2	B	1.5kW*2	380V	SV730WBT-NN
	8.4	25	2	B	2kW*2	380V	SV730WBT-PP

Note : 1.Gray-marked models of bus products are scheduled for sequential release in 2026.

2.AC 380V 3P+N models only support matching with 220V motors.

Technology Specifications

Item				Specifications
Speed/Torque control mode	Performance	Speed variation rate	Load variation rate	≤0.5% (at rated speed, 0~100% load)
			Voltage variation rate	0.5% (at rated speed, ±10% rated voltage)
			Temperature variation rate	25±25℃: ≤0.5%(at rated speed)
		Speed control range		1:10000 rpm (lower limit requires motor to maintain rotation under rated torque)
		Torque control accuracy		±1%
	Input signal	Speed command input	EtherCAT communication mode	CSV/PV mode
		Torque command input	EtherCAT communication mode	CST/PT mode
Position control	Performance	Feedforward compensation		0~100.0% (resolution 0.1%)
		Timing window		1~65535 encoder units
	Input signal	EtherCAT communication mode		CSP/PP/HM mode
I/O signals	Sequential control input signal	Input signal function selection		21-channel DI DI1~DI21: General-purpose DI (100μs input delay on rising edge (signal transition from high to low at 24V input); 50μs input delay on falling edge (signal transition from low to high at 24V input); voltage: 21.6V~26.4V)
				DI functions are as follows: Forward overtravel switch (POT), Reverse overtravel switch (NOT), Home switch DEC (DEC), Probe 0 (LATCH_0), Probe 1 (LATCH_1), Emergency stop (FSTP), Forward torque limit (P_CL), Reverse torque limit (N_CL), CLINKANS, CMCANS, CONV_READY, CONV_MCON, Servo enable (SON), PLSCLR, Alarm reset signal (ALM-CLR), Power-down signal (PWRDOWN), User-defined signals 1~7 (USER1~7)
	Sequential control output signal	Output signal function selection		8-channel DI DO load capacity: 50mA; Voltage range: 5V~30V
				DO functions are as follows: Positioning complete (COIN), Speed coincidence (V_CMP), Motor running (TGON), Servo ready (S_RDY), Torque limit (CLT), Speed limit (VLT), Brake (BK), Warning (WARN), Position proximity (NEAR), C pulse signal (C_PULSE), CLINK, CMCON, PM, DAO1, DAO2, Position comparison output 1~4 (POSCMP1~4), Alarm signal (ALM), User-defined signals 1~7 (USER1~7)
Built-in function	Overtravel (OT) limit function			Immediate stop when P-OT/N-OT actuates.
	Electronic gear ratio			0.001 ≤ B/A ≤ Encoder resolution × 0.4
	Protection function			Overcurrent, overvoltage, undervoltage, overload, main circuit detection anomaly, heatsink overheating, power phase loss, overspeed, encoder anomaly, CPU anomaly, parameter anomaly, others
	Safety function			STO
	LED display function			IEC 61800-5-2:2016
	Display function			Main power CHARGE status displayed on 6-digit LED
	Vibration suppression function			5 notch filters (50Hz ~ 5000Hz), including 2 adaptive ones
	Ease-of-use function			One-touch parameter adjustment, adaptive parameter adjustment, intelligent parameter adjustment, speed observer, model tracking
	Communication function	Background debugging		Type_C
		Multi-station communication protocol		EtherCAT
		Number of axes for multi-station communication		Maximum number of slave stations: 65535
		Axis address setting		No physical knobs; configured via software (0 ~ 65535)
		Function		Status display, user parameter setting, monitoring display, alarm tracing display, communication & motion control command input
		Others		Gain adjustment, alarm recording, JOG operation

AC220V Basic Specifications

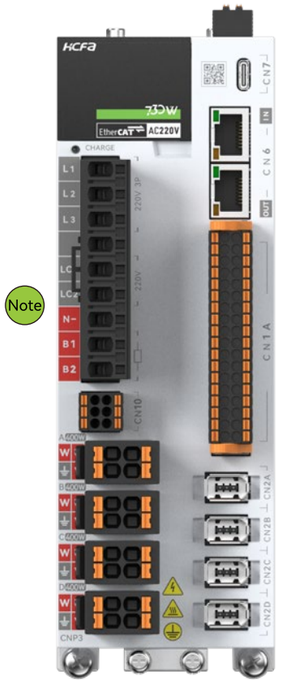
Item		Specifications				
Single-axis model specifications (AC220V)		C	F	G	K	L
Number of axes		2-4 axes	2-4 axes	2-4 axes	2 axes	2 axes
Single-axis power [kW]		0.4	0.75	1	1.5	2
Single-axis continuous output current [Arms]		2.8	5.5	7.6	11.6	14
Single-axis maximum output current [Arms]		10.2	16.9	17	32	42
Main circuit	Power supply voltage	Single-phase/Three-phase AC200 ~ 240V, 50/60Hz			Three-phase AC200 ~ 240V, 50/60Hz	
	Current [Arms]	7.6	15	19.2	15	19.2
Control power supply		Single-phase AC200 ~ 240V, 50/60Hz				
Power loss	Main circuit power consumption	80	110	195	110	195
	Control circuit power loss	15	17	17	19	19
	Total loss	95	127	212	129	214
Regeneration resistor	Minimum allowable external resistance	12	12	12	12	12
Cooling method		Forced air cooling				
Overvoltage class		III				

AC 380V 3P+N Basic Specifications

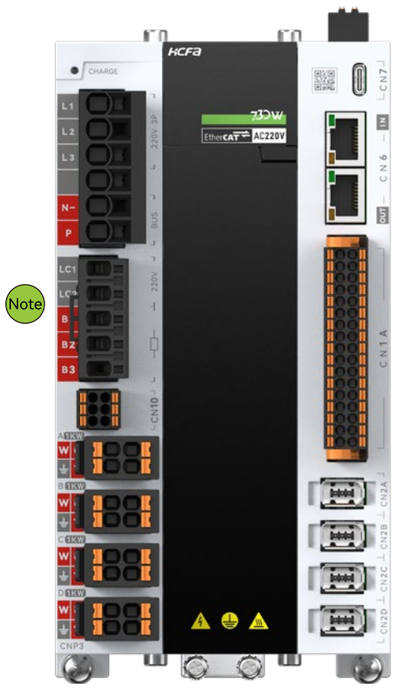
Item		Specifications			
Single-axis model specifications (AC380V 3P+N)		C	F	G	H
Number of axes		2-4 axes	2-4 axes	2-4 axes	2 axes
Single-axis power [kW]		0.4	0.75	1	1.5
Single-axis continuous output current [Arms]		2.8	5.5	7.6	8.4
Single-axis maximum output current [Arms]		10.2	16.9	17	21
Main circuit	Power supply voltage	Three-phase AC330 ~ 440V, 50/60Hz			
	Current [Arms]	7.6	18.5	19.2	20.3
Control power supply		Internal power supply			
Power loss	Main circuit power consumption	80	110	195	205
	Control circuit power loss	15	17	17	17
	Total loss	95	127	212	222
Regeneration resistor	Minimum allowable external resistance	12	12	12	12
Cooling method		Forced air cooling			
Overvoltage class		III			

AC 380V 3P Basic Specifications

Item		Specifications	
Single-axis model specifications (AC380V 3P+N)		N	P
Number of axes		2 axes	2 axes
Single-axis power [kW]		1.5	2
Single-axis continuous output current [Arms]		5.4	8.4
Single-axis maximum output current [Arms]		17	25
Main circuit	Power supply voltage	Three-phase AC330 ~ 440V, 50/60Hz	
	Current [Arms]	8.6	11.5
Control power supply		Single-phase AC330 ~ 440V, 50/60Hz	
Power loss	Main circuit power consumption	105.6	120.6
	Control circuit power loss	19	19
	Total loss	124.6	139.6
Regeneration resistor	Minimum allowable external resistance	40	25
Cooling method		Forced air cooling	
Overvoltage class		III	



[220V Size A]



[220V Size B]

Power supply interface definition

AC220V 1P/3P[Size A]	
L1	Main circuit power supply input AC 200 ~ 240V（50/60Hz）
L2	
L3	
-	-
LC1	Control power supply input AC 200 ~ 240V（50/60Hz）
LC2	
N-	Main circuit busbar -
B1	Main circuit busbar + / External regenerative resistor interface
B2	External regenerative resistor interface

AC220V 1P/3P[Size B]	
L1	Main circuit power supply input AC 200 ~ 240V（50/60Hz）
L2	
L3	
-	-
N-	Main circuit busbar -
P	Main circuit busbar +
LC1	Control power supply input AC 200 ~ 240V（50/60Hz）
LC2	
B1	External regenerative resistor interface
B2	External regenerative resistor interface
B3	Built-in regenerative resistor interface

Note: The silkscreen marking in the illustration is for a four-axis, AC220V model. For other silkscreen markings, please refer to the relevant instructions in the technical manual.

CN10 brake interface definition

Pin number	Signal name	Description
1	24V	24V power supply externally connected to brake
2	0V	
3	BKA+	Brake interface A
4	BKA-	
5	BKB+	Brake interface B
6	BKB-	

*Note 1: Servo brake interfaces A/B can be freely assigned to any axis.

CNP3 UVW power interface definition

Signal name/ Pin number	Description
U	Motor power U-phase output
V	Motor power V-phase output
W	Motor power W-phase output
PE	Grounding terminal, connected to the motor grounding terminal

CN2 encoder connection terminal interface definition

Pin number	Signal name	Function
1	PG 5V	Encoder power supply +5V
2	PG 0V	Encoder power supply 0V
3	-	-
4	-	-
5	PS	Serial data (+)
6	/PS	Serial data (-)
Housing	Shielding	-

CN3 STO safety interface definition

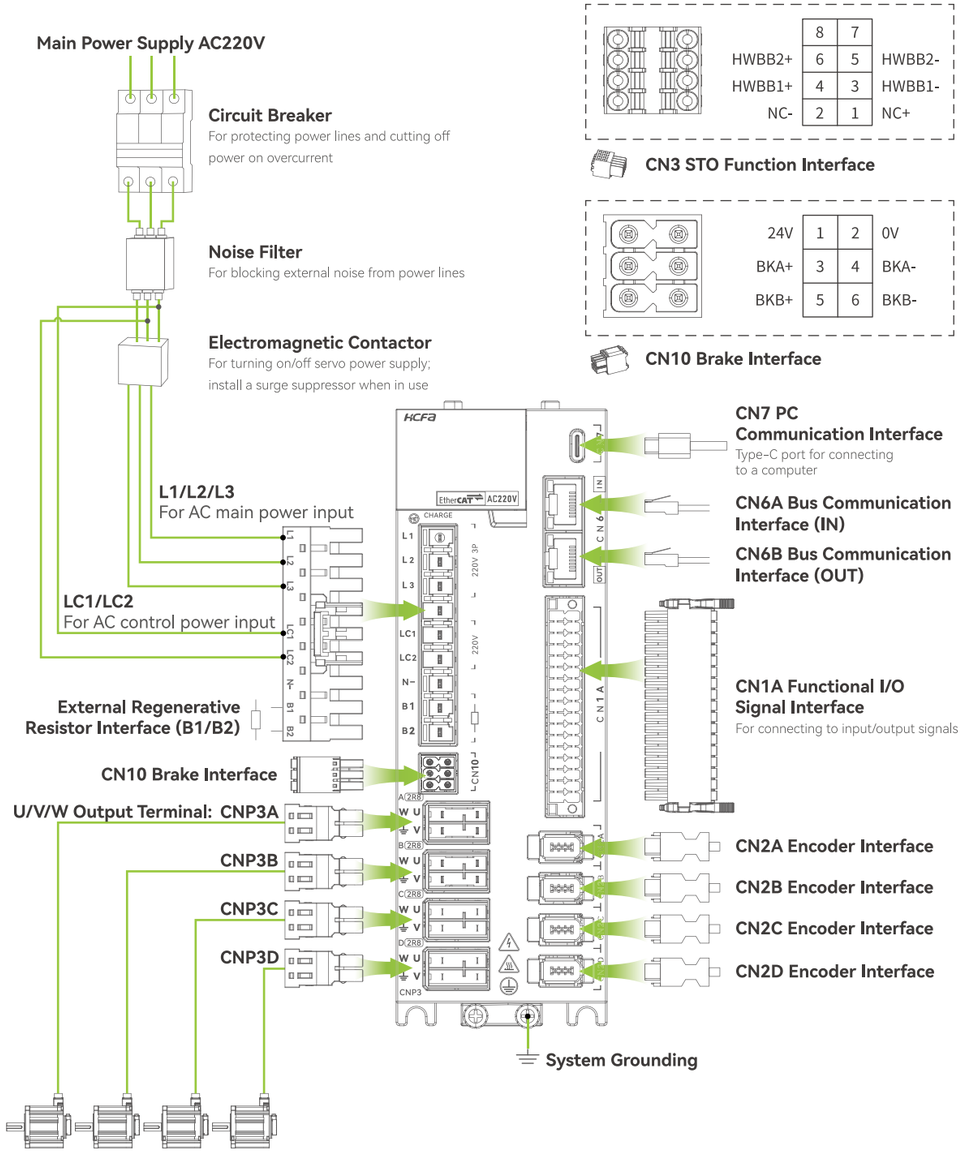
Pin number	Signal name	Function
1	NC+	For internal use only, do not connect anything.
2	NC-	
3	/HWBB1-	Hardware baseblock input: cuts off motor current by turning the signal OFF for baseblock.
4	/HWBB1+	
5	/HWBB2-	
6	/HWBB2+	
7	-	-
8	-	-

CN1 user IO interface definition

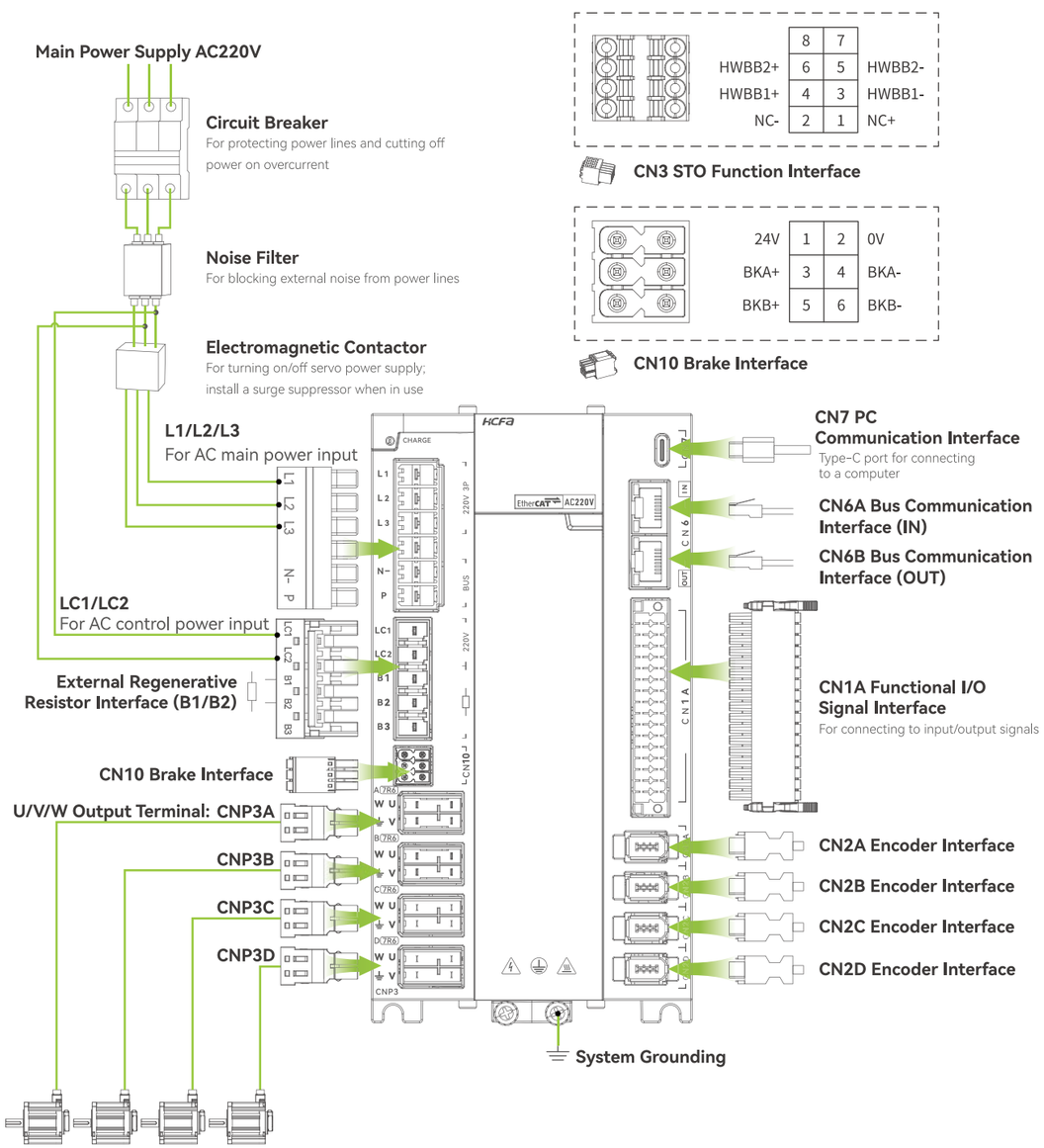
Pin number	Signal name	Pin number	Signal name
1	COM-	2	COM+
3	DO8	4	DO7
5	DO6	6	DO5
7	DO4	8	DO3
9	DO2	10	DO1
11	DI21	12	DI20
13	DI19	14	DI18
15	DI17	16	DI16
17	COM-	18	24V
19	DI15	20	DI14
21	DI13	22	DI12
23	DI11	24	DI10
25	DI9	26	DI8
27	DI7	28	DI6
29	COM+	30	DI5
31	DI4	32	DI3
33	DI2	34	DI1

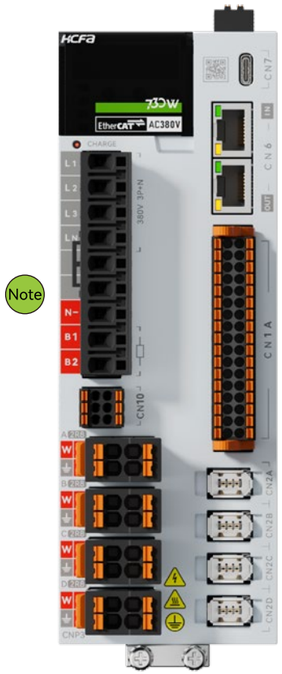
Note: IO can be freely assigned to any axis. For details, refer to the technical manual.

Size A Model

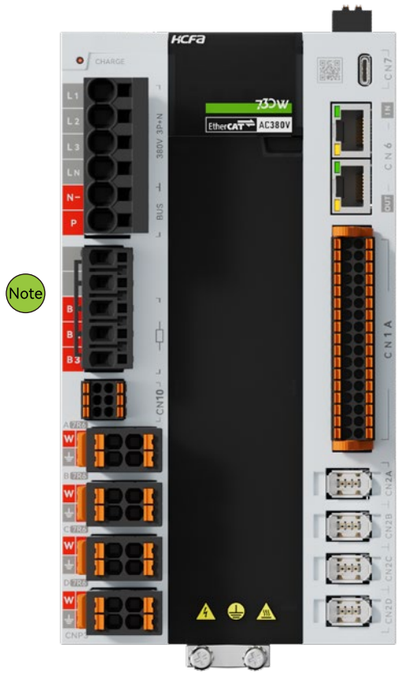


Size B Model





[3P+N Size A]



[3P+N Size B]

Power supply interface definition

AC380V(3P+N) Size A	
L1	AC main circuit power supply input AC330 ~ 440V (50/60Hz) 3P+N (Note: L1 to L3 connect to 380V, LN connects to neutral wire N.)
L2	
L3	
LN	
-	-
-	
N-	Main circuit busbar -
B1	Main circuit busbar + / External regenerative resistor interface
B2	External regenerative resistor interface

AC380V(3P+N) Size B	
L1	Main circuit power supply input AC330 ~ 440V (50/60Hz) 3P+N (Note: L1 to L3 connect to 380V, LN connects to neutral wire N.)
L2	
L3	
LN	
N-	Main circuit busbar -
P	Main circuit busbar +
-	-
-	-
B1	External regenerative resistor interface
B2	External regenerative resistor interface
B3	Built-in regenerative resistor interface

Note: The silkscreen marking in the illustration is for a four-axis, AC380V 3P+N model. For other silkscreen markings, please refer to the relevant instructions in the technical manual.

CN10 brake interface definition

Pin number	Signal name	Description
1	24V	24V power supply externally connected to brake
2	0V	
3	BKA+	Brake interface A
4	BKA-	
5	BKB+	Brake interface B
6	BKB-	

*Note 1: Servo brake interfaces A/B can be freely assigned to any axis.

CNP3 UVW power interface definition

Signal name/ Pin number	Description
U	Motor power U-phase output
V	Motor power V-phase output
W	Motor power W-phase output
PE	Grounding terminal, connected to the motor grounding terminal

CN2 encoder connection terminal interface definition

Pin number	Signal name	Function
1	PG 5V	Encoder power supply +5V
2	PG 0V	Encoder power supply 0V
3	-	-
4	-	-
5	PS	Serial data (+)
6	/PS	Serial data (-)
Housing	Shielding	-

CN3 STO safety interface definition

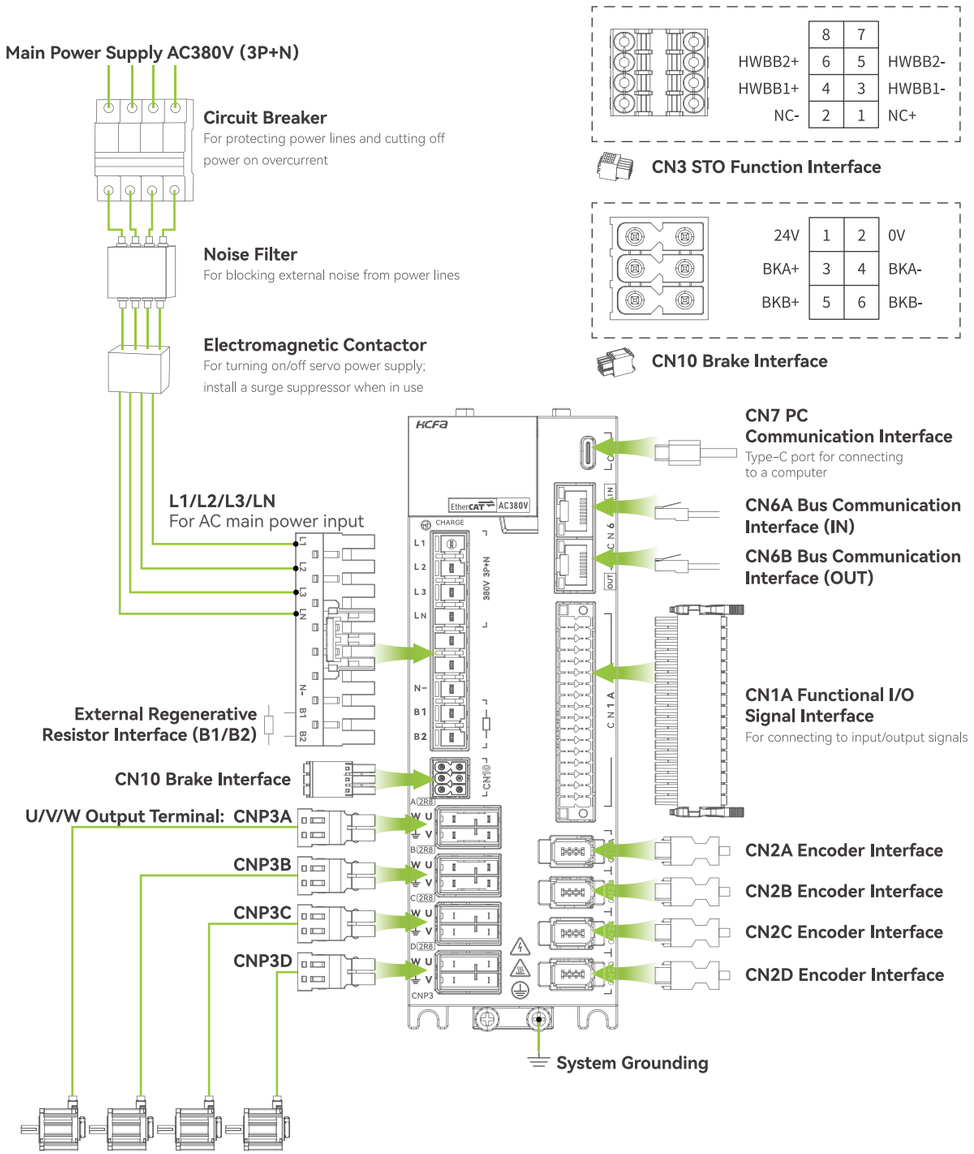
Pin number	Signal name	Function
1	NC+	For internal use only, do not connect anything.
2	NC-	
3	/HWBB1-	Hardware baseblock input: cuts off motor current by turning the signal OFF for baseblock.
4	/HWBB1+	
5	/HWBB2-	
6	/HWBB2+	
7	-	-
8	-	-

CN1 user IO interface definition

Pin number	Signal name	Pin number	Signal name
1	COM-	2	COM+
3	DO8	4	DO7
5	DO6	6	DO5
7	DO4	8	DO3
9	DO2	10	DO1
11	DI21	12	DI20
13	DI19	14	DI18
15	DI17	16	DI16
17	COM-	18	24V
19	DI15	20	DI14
21	DI13	22	DI12
23	DI11	24	DI10
25	DI9	26	DI8
27	DI7	28	DI6
29	COM+	30	DI5
31	DI4	32	DI3
33	DI2	34	DI1

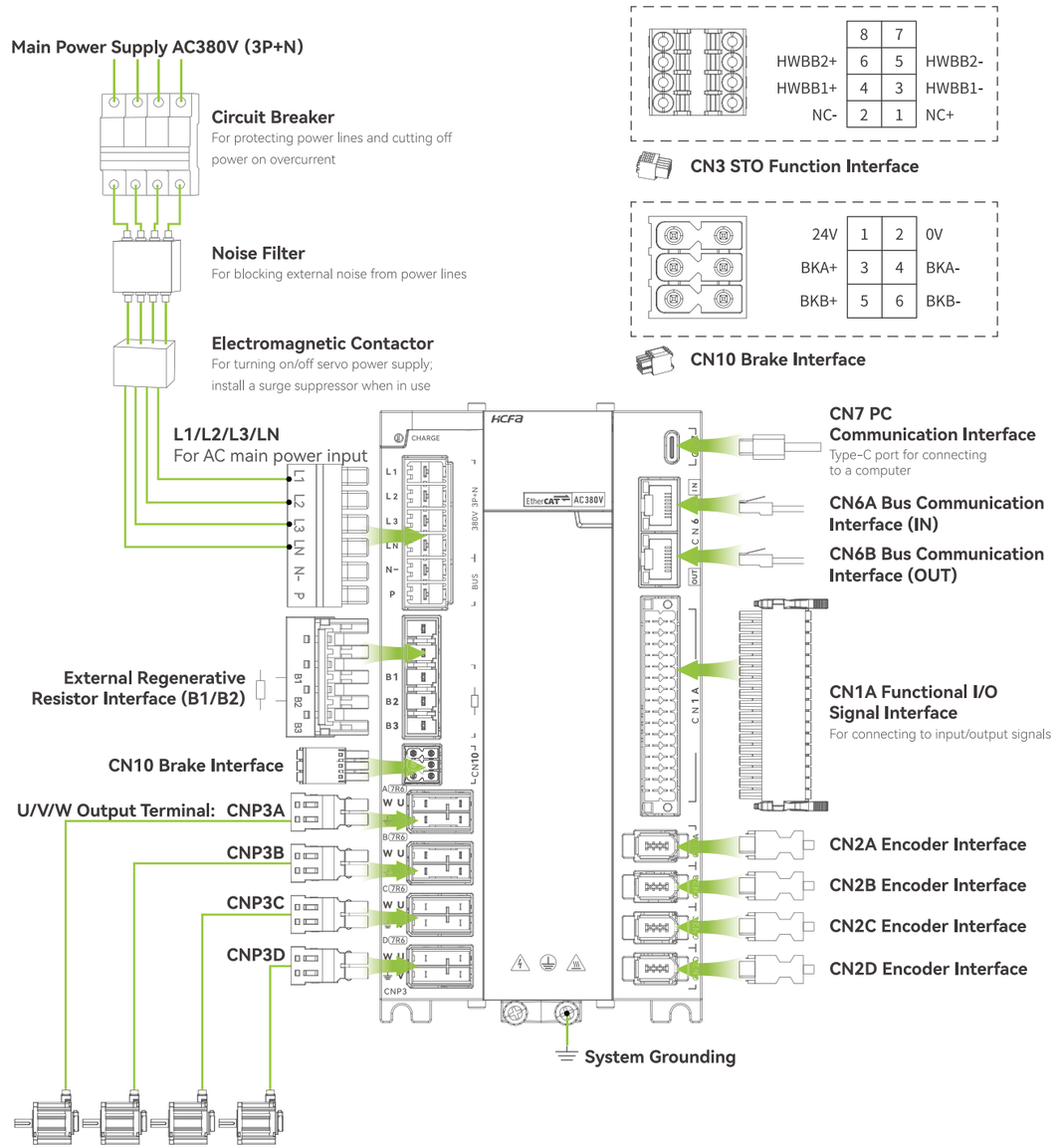
Note: IO can be freely assigned to any axis. For details, refer to the technical manual.

Size A Model



Note: The 730W3P+N motor specification is 220V.

Size B Model



Note: The 730W3P+N motor specification is 220V.

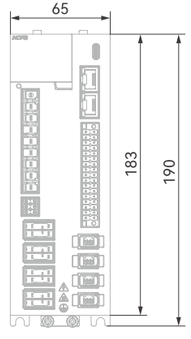
Environmental specifications

Item		Specifications
Environmental conditions	Operating temperature	0 ~ +55℃ (for temperature above 45℃, derate by 10% for every 5 degrees increase in ambient temperature)
	Storage temperature	-20℃ to +80℃ (maximum temperature guarantee: 80℃ for 72h without condensation)
	Operating humidity	20% to 85% RH or less (no condensation)
	Storage humidity	20% to 85% RH or less (no condensation)
	Vibration resistance	Below 5.88m/s² (0.6G), 10-60 Hz (avoid operation at resonance)
	Shock resistance	Acceleration ≤ 100m/s² (XYZ)
	IP rating	IP20
	Cleanliness	• Free of corrosive and flammable gases. • Free of water, oil, and chemical splashes.
	Altitude	Below 1000m; for altitudes 1000m ~ 2000m, derate by 1% per 100m.
	Pollution degree	2
	Overvoltage category	III
	Fault short-circuit current	5Ka
	Others	No electrostatic interference, strong electric field, strong magnetic field, radiation, etc.

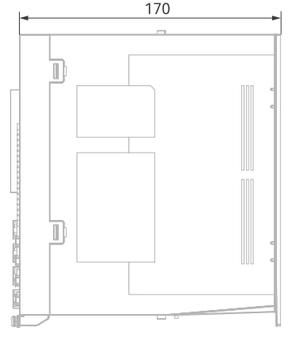
Dimensions

Size A overall dimensions (mm)

Weight: 1.7kg

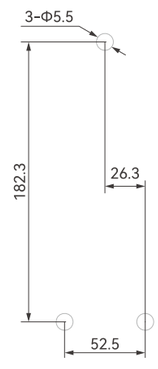


Front view



Left view

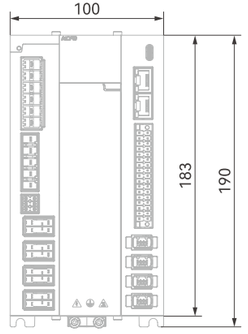
Rear view



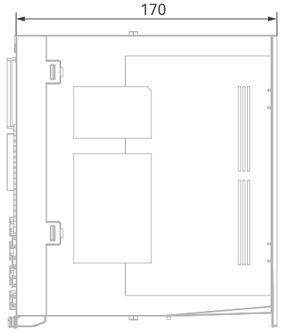
Hole position diagram

Size B overall dimensions (mm)

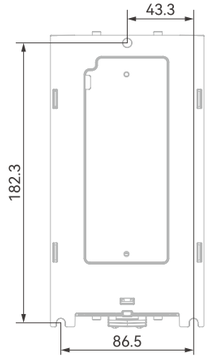
Weight: 2.4kg



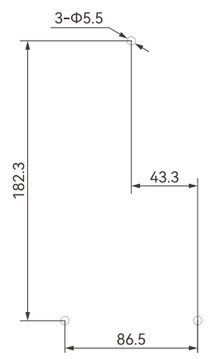
Front view



Left view



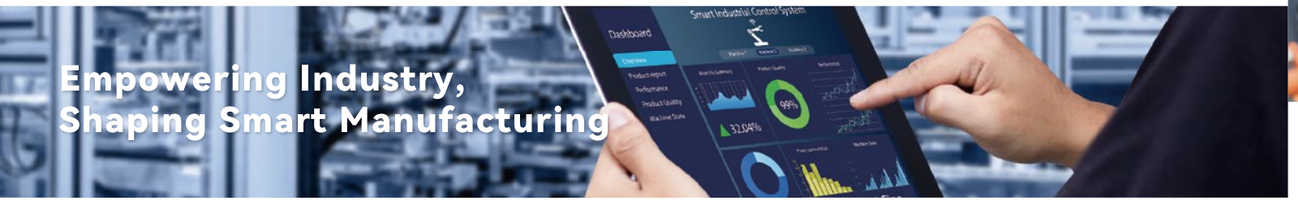
Rear view



Hole position diagram

MEMO

MEMO



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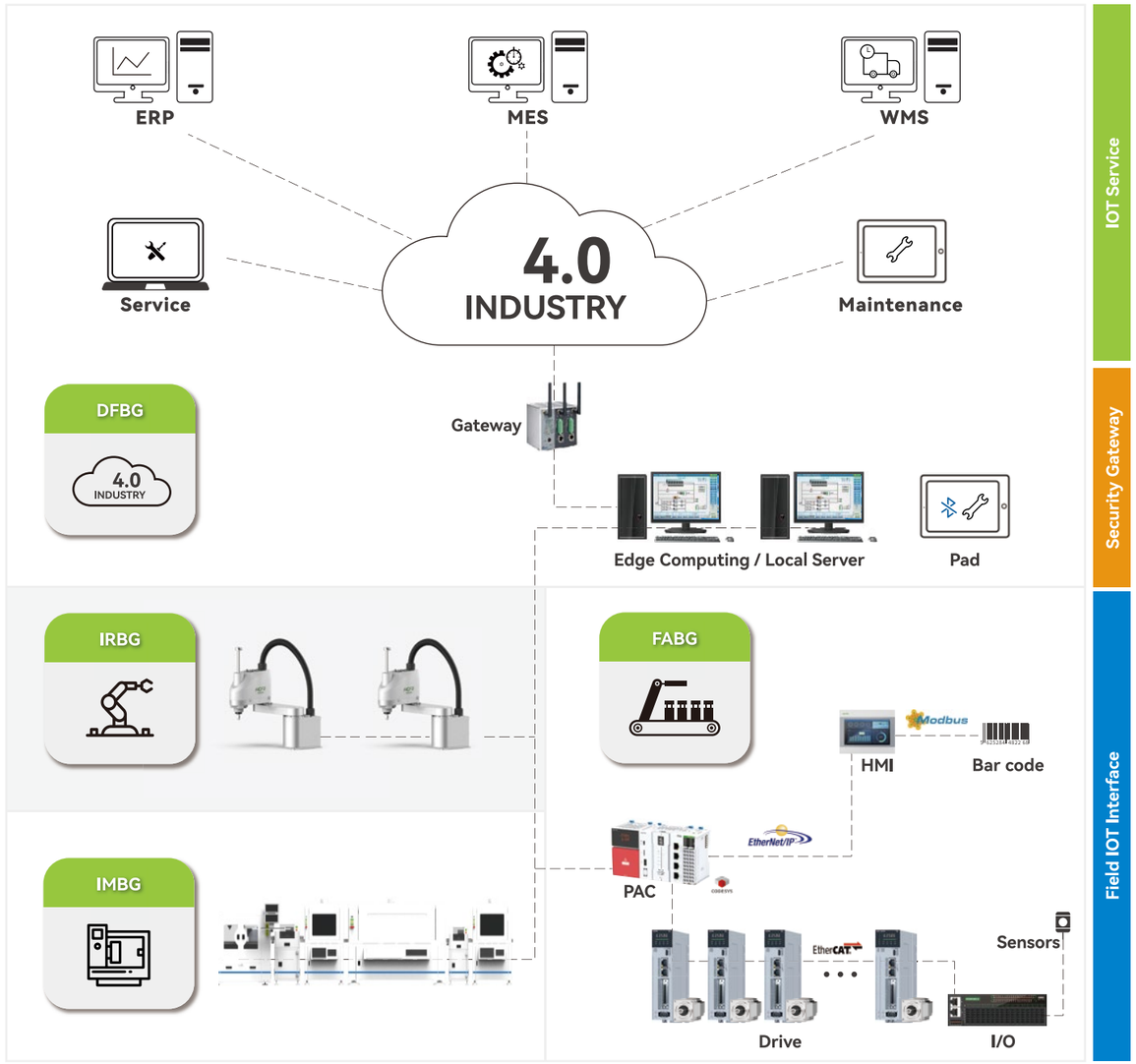

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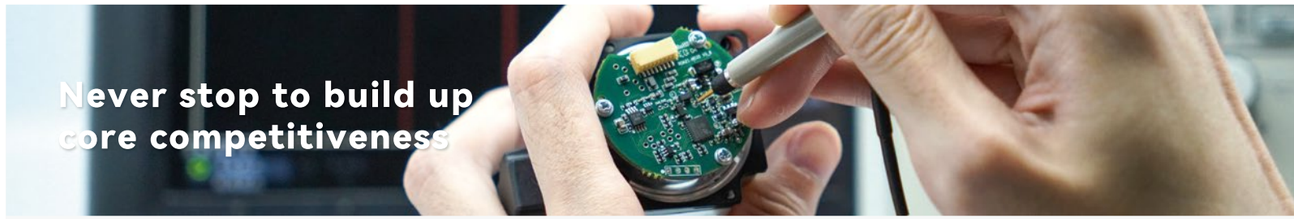
Stock Code: 688320



Never stop to build up core competitiveness

R&D Center
6
Number of Establishments

R&D Investment
10%+
Proportion of Revenue

R&D Personnel
300+
Elite Talent Pool

- Six R&D centers across Longyou, Hangzhou, Shenzhen, Dalian, Suzhou, and Germany