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Customers in 60+ countries and from different industries.



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KI02-2509

Kinco

Product
Catalog

Kinco General Catalog

- HMI
- Servo System
- Stepper System
- Controller
- PLC
- VFD



Manufacturing A Better Life

Contents

Kinco

About Kinco

Kinco was founded in 1996, and successfully listed on the Shanghai Stock Exchange in 2020 (abbreviated name: Kinco share, stock code 688160), which is a high-tech, specialized and sophisticated enterprise that attaches great importance to independent research and development and innovation, mainly engaged in the research and development, production, sales and related technical services of industrial automation and robot core components and digital factory hardware and software. It is a leading supplier of automation control, robot power and digital factory solutions in China.

After years of continuous research and development and innovation, Kinco has established a complete product line with independent intellectual property rights, covering a series of products from machine iot to human-machine interaction, control, drive and execution, which are widely used in robots, medical equipment, logistics equipment, packaging equipment, food equipment, clothing equipment, environmental protection equipment, etc. New energy equipment, rail transit equipment and other automation equipment industry.

Based on the comprehensive industrial automation and digital technology platform, the company has in-depth application scenarios in the robot industry, providing display, control, drive and other multi-dimensional solutions for industrial mobile robots, collaborative robots, industrial robots, pan-service robots, and bionic robots. Through the insight of the industry pain points, deep links with robot customers, combined with the advantages of product research and development, the company continues to innovate, and launches industry-leading low-voltage servo products for mobile robots, integrated servo wheel, frameless torque motor for collaborative robots, robot human-machine interfaces, robot controllers and other products. The company has formed a relatively complete robot core parts capability, and after nearly 10 years of hard work in the robot industry, it has become a leading enterprise in the field of mobile robot low-voltage servo, and has a high brand influence in the industry.

Kinco has four research and development centers in Shanghai, Shenzhen, Changzhou and Chengdu, and two manufacturing bases in Shenzhen and Changzhou, a total of 10+ domestic marketing centers, 100+ domestic service providers, 40+ global partners, and products are exported to 70+ countries overseas. In terms of after-sales service, Kinco has established after-sales service centers in Shanghai, Shenzhen and Changzhou.

HMI

Kinco has been dedicated to industrial human-machine interfaces for 18 years, consistently delivering premium products.

The GREEN series comprehensively enhances the quality of China's high-end manufacturing equipment. The remote service capabilities of Buke's EdgeAccess IoT platform are tailored for OEM equipment while seamlessly integrating with Alibaba Cloud's IIoT platform—— ushering in a new era of industrial connectivity.

The FUTURE series of industrial HMI systems, meticulously designed for advanced equipment industries with premium materials and innovative solutions, boasts a 10-year extended lifespan. Manufactured at Kinco's Smart Manufacturing Center with full traceability of materials and production processes, these systems ensure exceptional quality

- GREEN series
- GREEN series II
- FUTURE series
- FUTURE series II
- MASS series
- MASS series II
- Industry-specific series

Motion Controller

Combined with smart terminals, Kinco provides a one-stop solution for smart manufacturing.

- AK840 series
- AK810 series

PLC

Recognized by customers for the competitive price, powerful performance, and simple design.

- K6S series
- K6 series
- MK series
- K2 series

Remote I/O

Kinco explores more diverse automation application scenarios. Provide customers with more comprehensive automation solutions.

Introduced the Kinco RP20 series bus based I/O system.

- RP20 series

Servo System

Applies Germany high-precision motor control technology, Kinco has 20 years of experience in servo development and application. With complete product line and reliable quality, Kinco servo can be applied in various industries such as robotics, logistics, 3C, medical, and renewable energy.

The servo motors include but are not limited to rotary servo motors, linear motors, and direct-drive motors. They can be equipped with incremental, magnetoelectric, communication, and multi-turn absolute encoders, and can be optionally equipped with outlet or aviation plug-in types.

- DC servo
- AC servo

Stepper System

Kinco steppers are built based on servo technology control platform. They have smaller size, stronger performance, programmable I/O port settings, support bus controls such as pulse, Modbus, CANopen, EtherCAT.

- FM series
- CM series

VFD

Kinco delivers VFDs with high quality, performance, and stability.

- KC100 series
- KC200 series

Four R&D centers and two manufacturing bases



GREEN Series

High-quality, high-performance industrial HMI

With configuration software: Kinco Dtools





Kinco adopts a new design with a strict process to create high-quality GREEN series HMIs.

The GREEN series adopts the mainstream processor in the market, ensuring a long-lasting life cycle and greatly improving the product performance.

Powerful hardware and software, upgrades are more comprehensive

Structure	Material	Color	Core	CPU	Memory
New Structure Exquisite fuselage	Increased hardness and strength Improved temperature resistance	16.77 million true color*except for a few models	Update core version more stable	Freescale industrial-grade 800 MHZ CPU	DDR3 memory up to 128 MB

GREEN Series contain four subseries

GH series Enhanced Type 4.3"~15" - 4 serial port (Except 4.3"), Ethernet - Standard USB Host port, USB slave port - Built-in isolated power, isolated serial port (Ethernet model) - Main board Three-denfence treatment	G series Standard Type 7",10",12" - 3 serial port, Ethernet - Standard USB Host, USB Slave port - Built-in isolated power	GL series Economical Type 4.3"~15" - 2 series port, Ethernet - Standard USB Host, USB slave port (Except 4.3" models)	GT/GW series IoT Type 7"/10.1"/12.1"/15" - Support WIFI, 4G and Ethernet	GR series Embedded type 4.3"-10" - No front shell, rear installation
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GREEN Series

■ Main technical parameters of the GH Series

GH Series	GH043/GH043E GH043U2/ GH043EU2		GH070/GH070E			GH104E				GH150E
G Series				G070/G070E/ G070E-CAN	G100/G100E			G121E	G121HE	
GL Series		GL043/GL043E		GL070/GL070E	GL100/GL100E		GL104E			GL150E
Display size	4.3"	4.3"	7"	7"	10.1"	10.4"	10.4"	12.1"	12.1"	15"
Resolution	480×272	480×272	800×480	800×480	1024×600	800×600	800×600	800×600	1024×768	1024×768
Backlight	LED	LED	LED	LED	LED	LED	LED	LED	LED	LED
Operating temperature	-20~55℃	0~50℃	-10~55℃	0~50℃	0~50℃	-10~55℃	0~50℃	-10~55℃	-10~55℃	-10~55℃
Installation hole size	146×81mm	119×93mm	194×113mm	192×138mm	261×180mm	299×219mm	299×219mm	340×250mm	339×249mm	383×283mm
Configuration software	Kinco DTools V3.5.3 and above									

■ Main technical parameters of the GT Series

GT Series	GT070HE GT070HE-4G* GT070HE-WiFi*	GT070E2	GT100E GT100E-4G* GT100E-WiFi*	GT100E	GT100E2/GT100E2-4G/ GT100E2-WIFI/ GT100E2-CAN	GT121E	GT150E2
Display size	7"	7"	10.1"	10.1"	10.1"	12.1"	15"
Resolution	1024×600	1024×600	1024×600	1024×600	1024×600	1024×768	1024×768
Backlight	LED	LED	LED	LED	LED	LED	LED
Network	10/100M adaptive	2 x 10/100M adaptive	10/100M adaptive	10/100M adaptive	2 x 10/100M adaptive	10/100MHz adaptive	2 x 10/100M adaptive
Operating temperature	0~50℃	0~50℃	0~50℃	0~50℃	-10~55℃	-10~55℃	-10~55℃
Installation hole size	192×138mm	192×138mm	260×202mm	260×202mm	260×202mm	339×249mm	383×283mm
Configuration software	Kinco DTools V3.5.3 and above						

*Notes: "GT□□□-4G" network: 10/100M adaptive, built-in 4G module;
"GT□□□-WiFi" network: 10/100M adaptive, 2.4GHz WiFi.

■ Main technical parameters of the GW Series

GW Series	GW01	GW01-WiFi	GW01-4G
processor	ARM RISC 32Bit 800MHz		
storage	128MB NAND RAM+128MB DDR3 RAM		
Network	2*10/100M self-adaption	self-adaption 2.4GHz wireless WiFi module	2*10/100 self-adaption build in 4G module
Operating temperature	-10℃~55℃		
Dimensions	111.6*93.6*30 mm		
installation	DIN-Rail Mounting (35mm)		

*For more models and technical parameters, please refer to HMI product selection manual

■ Main technical parameters of the GR Series

GR Series	GR043	GR070E	GR100E
Display size	4.3"	7"	10.1"
Resolution	480×272	800×480	1024×600
Backlight	LED	LED	LED
Operating temperature	0~50℃	0~50℃	0~55℃
Installation hole size	107.2×68.9mm	166×101mm	238×148mm
Configuration software	Kinco Dtool V3.5.1		

GREEN Series 2nd generation

With new configuration
software: Kinco DTools Pro



Provide high-performance, efficient development, and cost-effective HMI solutions
for smart manufacturing equipment manufacturers!



Main Frequency
1.5GHz



7~15.6 inch
resistive screen



4GB Large storage
space 512MB memory



Die-cast
aluminum housing



With Kinco DToolsPro
software

Product Specification

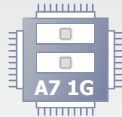
GREEN Series II	G2070HE/G2070HE-WIFI/ G2070HE2	G2100E/G2100E-WIFI/ G2100E2	G2101E/G2101E2	G2121E2	G2150E2	G2156E2/ G2156E-WIFI	G2156E2
Display Size	7"	10.1"	10.1"	12.1"	15"	15.6"	15.6"
Resolution	1024x600	1024x600	1024x600	1024x800	1920x1080	1024x600	1920x1080
Backlight	LED						
Ethernet	G2070HE/G2070HE-WIFI: LAN1:10/100Mbps, G2070HE2: LAN0:10/100MHz; LAN1:10/100MHz	G2100E/G2100E-WIFI: Lan0:10/100 Mbps G2100E2: Lan0:10/100 Mbps; Lan1:10/100 Mbps	G2101E: LAN0:10/100 Mbps G2101E2: LAN0:10/100 Mbps; LAN1:10/100 Mbps	LAN0:10/100Mbps; LAN1:10/100Mbps		LAN0:10/100Mbps;	LAN0:10/100/ 1000Mbps
Operating temperature	0~50°C						
Cutout Size	192x138mm	260x179mm	260x202mm	299x219mm	383x283mm	381.5x245.5mm	381.5x245.5mm
Configuration Software	Kinco DtoolsPro						

GL Series 2nd generation

With new configuration
software: Kinco DTools Pro



Convenient, efficient and intelligent HMI new choice!



Dual-core
A7 1GHz processor



4GB large storage
256MB memory



Full system standard
High definition high brightness
full view liquid crystal



Remote IoT
Select 4G/WIFI

Product main technical parameters

GL2 series	GL2070HE	GL2100E	GL2101E
	GL2070HE-4G	GL2100E-4G	GL2101E-4G
	GL2070HE-WIFI	GL2100E-WIFI	GL2101E-WIFI
Display dimensions	7"	10. 1"	10.1"
Resolution ratio	1024*600	1024*600	1024*600
Backlights	LED		
Network	LAN0:10/100 Mbps		
Working temperature	0-50℃		
Opening size	192*138mm	260*179mm	260*202mm
Configuration software	Kinco DToolsPro V1.7.5 and above		

* Note: GL2□□□-WIFI Network:10/100Mbps,2.4GHz wireless WIFI
GL2□□□-4G Network:10/100Mbps,2.4GHz built-in 4G module

FUTURE Series

Industrial human-machine interface, for high-end equipment industry

With configuration software: Kinco DTools



7 Leading advantages for high-end equipment industry

1

1GHz
Base Cortex-A9

512MB
Ultra large memory

4GB
Ultra-large storage space

Powerful core platform

Industrial CPU frequency 1GHz

2

Support Ethernet
Video surveillance

-Take the lead in supporting webcams

-Leading the video of industrial equipment

-New trend of scene monitoring

-Full series support ONVIF

-Video interface standards

3

Industrial quality
as steady as a mountain

-The main board is three-way spray

-Built-in isolation power supply

-Pure PC materials make it strong

-Wide operating temperature range

-Production of Buke Intelligent Manufacturing Center:

Full quality tracking and monitoring

4

Formulation data
Write without erasing

-Ferroelectric memory allows frequent writing

-Important stored data is not lost

-No frequency reduction, fast data read and write and

-A perfect combination of power loss and preservation

5

Original factory
specification liquid crystal
Stability is a must

-Industrial LCD

-4:3 size large view

-89 degree wide viewing angle

-Wide temperature LCD

-30°C~80°C

6

Standard audio
output

Make device operation no longer monotonous

7

Built-in Internet
of Things functionality

Seamless docking step M-IIoT

Data cleaning
Edge computing

Download remotely

Remote monitor and control

Seamlessly connected to Aliyun IIoT

Data on the cloud is simple and convenient

Remote Upload

PLC remote online debugging

Product Specification

FUTURE series	F070E	F080E	F104E	F150E
			F104E-CAN	
Display dimensions	7"	8"	10.4"	15"
resolution ratio	800×480	800×600	1024×768	1024×768
Backlights	LED	LED	LED	LED
working temperature	-10~55°C	-10~55°C	-10~55°C	-10~55°C
Opening size (mm)	192×138mm	224×161mm	299×219mm	387.5×294.5mm
configuration software	Kinco DTools V3.5.1 and above		Kinco DTools V3.4 and above	

FUTURE Series 2nd generation

A must-have smart terminal for high-end manufacturing

With new configuration software: Kinco DTools Pro

Based on more than 20 years of independent research and development experience in this field, Kinco integrates the latest IoT , big data, cloud computing, edge-device collaboration technology and launched the second-generation of FUTURE series HMI.

Adopt high-performance platform, multi-core high frequency CPU, large memory and storage
Work with Kinco DToolsPro software to provide a good user experience

Main Frequency
1.8GHz

8GB Large storage
space 1GB memory

Power isolation +
PCB protection

With
Kinco DTools Pro

Product Specification

FUTURE series II	F2070E2 F2070E2(UL)	F2100E2 F2100E2(UL)	F2121E2 F2121E2(UL)	F2150E2	F2156E2 F2156E2(UL)	F2156E2-PX F2156E2-PX(UL)
Display Size	7"resistor	10.1"resistor	12.1"resistor	15"resistor	15.6"resistor	15.6"capacitor
Resolution	800x 480	1024 x 600	1280 x 800	1024x768	1920 x 1080	1920 x 1080
Backlight	LED	LED	LED	LED	LED	LED
Network	LAN0: 10/100/1000MB LAN1: 10/100MB	LAN0: 10/100/1000MB LAN1: 10/100MB	LAN0: 10/100/1000MB LAN1: 10/100MB	LAN0: 10/100/1000MB LAN1: 10/100MB	LAN0: 10/100/1000MB LAN1: 10/100MB	LAN0:10/100/1000MB LAN1:10/100MB
Working Temperature	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C
Cutout Size	192×138mm	260×202mm	295×217mm	352×279mm	381.5×245.5mm	381.5×245.5mm
Configuration Software	Kinco DToolsPro V1.1 and above					

07

08

MASS Series

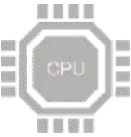
simple and functional

MASS series IoT HMI, CPU main frequency 792MHz
with three serial port



Every MASS product is carefully designed and produced with carefully selected components achieve a stable and reliable industrial HMI. With its streamlined hardware and easy-to-use configuration software, the MASS series is sufficient to meet more than half of the actual applications in the next few years.

The "simple and practical" Mass series makes your products more competitive!



792MHz

New generation of CPU ensures efficient operation



USB Host*1
USB Slave*1

USB master and slave ports are standard for easy and fast program download



3 serial ports

COM0/COM1 supports RS485 able to communicate with controllers of different protocols



New appearance design

Advanced visual beauty

Product Specification 1

MT Series	MT043	MT043E	MT070	MT070E	MT070E-4G	MT100	MT100E
Display Size	4.3"	4.3"	7"	7"	7"	10.1"	10.1"
Resolution	480×272	480×272	800×480	800×480	800×480	1024×600	1024×600
Backlight	LED	LED	LED	LED	LED	LED	LED
Network	-	10/100M adaptive	-	10/100M adaptive	10/100M adaptive	-	10/100M adaptive
Working Temperature	0~50℃	0~50℃	0~50℃	0~50℃	0~50℃	0~50℃	0~50℃
Cutout Size	119×93mm	119×93mm	192×138mm	192×138mm	192×138mm	260×202mm	260×202mm
Configuration Software	Kinco DTools						

Product Specification 2

MR Series	MR043	MR050
Display Size	4.3"	5"
Resolution	480×270	800×480
Backlight	LED	LED
Network	-	-
Working Temperature	0~50℃	0~50℃
Cutout Size	115×66mm	134.4×70.8mm (133.5 x 71mm compatible)
Configuration Software	Kinco DTools	

MASS Series 2nd generation

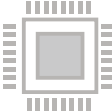
Soft and hard iteration quality first

MASS series with Groupware software: Kinco Dtools



Industrial multi-core CPU and 256MB NAND flash memory +128MB DDR3 memory;
High definition display, 16 megapixels true color;
450cd/m2 display brightness, 800:1 contrast.

Quality first, new MASS series second generation human-machine interface



main frequency is dual-core 1GHz



128M memory
256M storage



Full perspective
HD display



Mounting the clip
Waterproof and oil resistant

Product Specification

M2 series	M2043H	M2043HE	M2070H	M2070HE	M2070HE-WIFI	M2100	M2100E	M2100E-WIFI
Display dimensions	4.3"	4.3"	7"	7"	7"	10.1"	10.1"	10.1"
resolution ratio	800*480	800*480	1024*600	1024*600	1024*600	1024*600	1024*600	1024*600
Backlights	LED	LED	LED	LED	LED	LED	LED	LED
network	\	10/100Mbps	\	10/100Mbps	10/100Mbps wireless WIFI	\	10/100Mbps	10/100Mbps wireless WIFI
working temperature	0-50℃	0-50℃	0-50℃	0-50℃	0-50℃	0-50℃	0-50℃	0-50℃
Opening size	119*93mm	119*93mm	192*138mm	192*138mm	192*138mm	260*179mm	260*179mm	260*179mm
configuration software	Kinco DTools V4.1 and above							

Industry customization

Special-type human-machine interface



Customized specifically for the needs of the industry

SZ7G dedicated handheld terminal



- 7" TFT, 800×480 pixels, 16.77 million true colors;
- Three-position selector switch, emergency stop switch, grip switch, 10 custom buttons, 2 indicator lights;
- Combines buttons and touch for wider use and greater flexibility;
- Handheld terminal, standard with a 5-meter cable;
- Multiple installation methods, such as hanging type, bracket type, etc.

CZ6 is a human-machine interface designed specifically for harsh environments



- The shell is made of high-temperature resistant, high-strength and UV-resistant materials;
- Adopting a wide-temperature LCD screen with an operating temperature range of -20°C~70°C;
- Wider voltage input range, 9~36VDC;
- Excellent internal structure design and the application of silicone pads endow the screen with excellent shock absorption and impact resistance performance; Equipped with military-grade encoder switches, it features longer service life and more stable performance;
- Rich communication interfaces: CAN port supporting CANopen/CANJ1939, serial ports (RS232/RS485);
- IP65 whole-machine waterproof (USB cover must be properly closed).

F2156E-TX Button-integrated Human-Machine Interface



- 15.6" capacitive screen, 1920*1080 HD display, 16.2 million true colors;
- Quad-core CPU + 1GB memory + 8GB flash storage, for ultimate performance;
- Integrated design of the whole machine, combined with buttons and emergency stop, maintaining a consistent and attractive appearance;
- Cantilever mounting, with large operating space, high flexibility and strong adaptability;
- Aluminum alloy metal shell + three-proof coating + power isolation, safe and reliable;

■ Main Technical Parameters of the Product 1

Model specification	SZ7G/SZ7GS/SZ7GE/SZ7GES	RT070/RT070E
Display size	7"resistance	7"resistance
Resolution	800*480	800*480
Backlight	LED	LED
Working temperature	0-50°C	0-50°C
Cable length	Standard 5 meters, optional 10 or 15 meters	
Cut-out size	Bracket/hanging installation	Bracket/hanging installation
Panel protection grade	IP65	IP65

G2100H-CTP Industrial Touch Display



- High screen-to-body ratio with narrow bezel design, 7-inch cutout for 10-inch display
- 1280*800 HD display, multi-point capacitive touch, Type-C interface driver
- Rich interfaces, supporting VGA and HDMI (1.3)
- Enhanced protection, comes standard with three-proof paint and features metal front and rear shells

G100E-LRF Waterproof-Specific Human-Machine Interface



- IP65 rated, shockproof and waterproof
- Easy to use, with USB drive program update
- Handheld for mobile debugging
- Supports multiple mounting methods

MR Series Human-machine interface with rear mounting (no front shell)



- Available in 4 sizes: 4.3", 5", 7" and 10.1"
- Multiple configurations across three series (GR, MR, MR2) for customer selection
- Embedded compact mounting design: sleek, convenient and space-saving
- Single harness design with integrated serial port and power supply

■ Main Technical Parameters of the Product 2

Model specification	Cz6	G100E-LRF	G2100H-CTP
Display size	5.7"resistance	10.1"resistance	10.1"capacitance
Resolution	640*480	1024*600	1280*800
Backlight	LED	LED	LED
Working temperature	-20-70°C	0-50°C	-10-50°C
Cut-out size	171*125mm	260*202mm /Bracket mounting	192*138mm /Bracket mounting
Panel protection grade	IP65(The whole machine)	IP65(The whole machine)	IP65(Front panel)

■ Main Technical Parameters of the Product 3

GR	GR043	GR070E	GR100E
CPU	ARM RISC 32Bit 800MHz		
Memory	256MB NAND+128MB DDR3		
Display size	4.3"	7"	10.1"
Resolution	480*272	800*480	1024*600
Backlight	LED		
Ethernet	\		
Working temperature	0-50°C		
Cut-out size	115*64mm	115*64mm	134.4*70.8mm
Configuration software	Kinco DTools V3.5.3 or above		

■ Main Technical Parameters of the Product 4

MR	MR043	MR043H	MR050
CPU	ARM RISC 32Bit 792MHz		
Memory	128MB NAND+64MB DDR3		
Display size	4.3"	4.3"	5"
Resolution	480*272	800*480	800*480
Backlight	LED		
Ethernet	\		
Working temperature	0-50°C		
Cut-out size	115*64mm	115*64mm	134.4*70.8mm
Configuration software	Kinco DTools V3.5.3 or above		

MR2	MR2070HE
CPU	ARM Cortex-A7 Dual Core 1GHz
Memory	256MB NAND+128MB DDR3
Display size	7"
Resolution	1024*600
Backlight	LED
Ethernet	10/100M
Working temperature	0-50°C
Cut-out size	166*101mm
Configuration software	Kinco DTools V4.1 or above

Capacitive Touch HMI

- Tablet-style interactive experience, what you touch is what you get
- High-definition vision, wonderful presentation
- Ultimate industrial aesthetic design



Brand-new touch experience, with both performance and appearance



F2156E2-PX 15.6-inch High-End Capacitive Touch Screen

- Large size, high protection, high performance
- Quad-core 1.8GHz CPU with 1G+8G storage
- Web Browser + Local Database + Electronic Signature.
- Suitable for intelligent equipment in high-end advanced manufacturing



F2100HE2 - PX/G2100HE - LX 10.1 inch capacitive touch screen

- Narrow bezel design, 7-inch cutout, 10-inch display
- Diverse options, supporting audio output + video playback
- Suitable for industries such as mobile forklifts, HVAC, and medical equipment



SZ10PES 10.1-inch Handheld Capacitive Touch Screen

- Handheld/Hanging Installation
- Standard configuration: dual-circuit emergency stop, selection key switch, three-stage grip switch, built-in RFID
- Standard configuration: 10m cable; optional junction box
- Suitable for large production line debugging in lithium battery, photovoltaic, and automotive industries

■ Main Technical Parameters of the Product 1

Model specification	G2100HE-LX	F2100HE2-PX	F2156E2-PX
Display size	10.1 Capacitance	10.1 Capacitance	15.6 Capacitance
Resolution	800*1280	800*1280	1920*1080
CPU	Quad-core ARM 1.5GHz	Quad-core ARM 1.8GHz	Quad-core ARM 1.8GHz
Memory	512MB+4GB	1GB+8GB	1GB+8GB
Cut out size	192*138mm	192*138mm	381.5*245.5
Working temperature	0-50	0-50	0-50

■ Main Technical Parameters of the Product 2

Model specification	SZ10PES
Display size	10.1 Capacitance
Resolution	1920*1200
CPU	Quad-core ARM 1.8GHz
Memory	1GB+8GB
Working temperature	0-60
Port	1* Dual-circuit Emergency Stop, 1* Key Switch, 1* Dual-circuit Dual-end Enabling Switch
Cable (m)	10m flexible 24-core aviation plug shielded cable (to be used with junction box)

Kinco DToolsPro

A revolutionary, epoch-making development tool

Office software style, style is new, simple and generous
Based on legitimate QT development
Object-oriented development, maintenance and rapid response to upgrades
Tag variable configuration mode, close to the ST language programming habits
Integrated buttons, multiple copies, batch modifications and other convenient operations to help efficient configuration



FD5P PRO Series



Modbus CANopen[®] EtherCAT[®] PROFINET[®]

Kinco FD5P PRO series AC servo system

model :	FD5P(2.9/4/5.5A)	FD5P(2.9/4.5.5A)	FD5P(10/13A)	FD5P(13/17/21/26A)
Product range :	50W~1000W	1500W	2000~2500W	3000W~7500W
Supply voltage :	1PH 200~240VAC	3PH 200~240VAC	3PH 200~240VAC	3PH 380~415VAC

■ Main characteristics

- Support pulse control
- Support Modbus、CANopen、EtherCAT、Profinet
- Notch filter to achieve vibration suppression
- EASY Tune optimization and upgrade + online self-tuning
- Suitable for high-precision encoder applications
- S-curve control
- Real-time synchronous control, improve productivity and multi-axis synchronous control accuracy
- 7 digital inputs, 5 digital outputs, and encoder output
- Overvoltage protection, undervoltage protection, overcurrent protection, overheating protection, short circuit protection

■ Applicable industry

- Robotics: SCARA robot, DELTA robot, and six-joint robot
- Packaging: slitting machines, pillow packaging, and stand-up bags
- Machine tool: engraving and milling machines, precision engraving machines, and laser cutting
- Logistics: sub-building lines and warehouse equipment
- Other occasions requiring high response speed and positioning accuracy

Operation log
Supports the import and export of form configurations and quick configuration

Label communication
Omron, Siemens, Portal, codesys and so on

Template base
Customize combo controls, support import and export

RFID
USB no driver, one-click check to swipe card login

Data base
Built-in SQLite support for access My SQL、SQL Server、Postgresql

I/O
Support 8, 16, and 32-bit data types
Description content can be imported and exported configuration

Electronic signature
Double confirmation by operator and inspector
History records perfectly track

Macro
Function template insertion, Variable lookup replacement, compile separately

Dynamic alarm
Support deviations, multiple ranges, expression type alarm, historical query

CD/FD2S Series



Modbus CANopen[®] EtherCAT[™]

Kinco CD/FD2S series AC servo system

Product model :	CD&FD412S/422S/CD423S	CD&FD612S/622S
Product power :	50W~2000W	1000W~3000W
Power supply voltage :	1-phase/3-phase 200~240VAC	3-phase 380~415VAC

■ Main characteristics

- Supports ModBus, CANopen, and EtherCAT, pulse, and analog control
- Supports EASY TUNE gain automatic adjustment, applicable to most scenarios
- Independent motor brake output interface, directly drives the motor brake
- 24VDC independent logic power input, keeps monitoring servo status after the main power supply is cut off
- Overvoltage, overcurrent, and overheating protection
- Supports incremental encoders and absolute encoders up to 24-bit, the maximum working temperature is 120 Celsius degree
- CE certification, ROHS environmental certification standards

■ Applicable industry

- Robotics: SCARA robot, DELTA robot, and six-joint robot
- Packaging: slitting machines, pillow packaging, and stand-up bags
- Machine tool: engraving and milling machines, precision engraving machines, and laser cutting
- Logistics: sub-building lines and warehouse equipment
- Other occasions requiring high response speed and high positioning accuracy

JD Series



Modbus CANopen[®] EtherCAT[™]

Kinco JD series European bus servo system

Product model :	JD420/430	JD620/630/640/650/660
Product power :	200W~2000W	1500W~7500W
Power supply voltage :	1-phase/3-phase 200~240VAC	3-phase 380~415VAC

■ Main characteristics

- European-style terminal, no need for welding
- Support MODBUS, CANopen, EtherCAT communication protocols
- Support master-slave following and multi-axis synchronization
- Support full closed-loop control
- Accessible servo parameter setting system
- Support two-axis or multi-axis interpolation, and electronic cam
- Mechanical vibration suppression
- SIL3/Cat.3/PL safety (safe torque off)*
- UL certification, CE certification, ROHS environmental certification standards

■ Applicable industry

- Robotics: SCARA robot, DELTA robot, and six-joint robot
- Packaging: slitting machines, pillow packaging, and vertical packaging machinery
- Machine tool: engraving and milling machines, precision engraving machines, laser cutting, and plasma cutting equipment
- Logistics: sorting lines and AVG
- Other occasions requiring high response speed and high positioning accuracy

* Part of types. Please discuss with local sales director.

FD1X5S Series

DC servo system



Modbus CANopen[®] EtherCAT[®] PROFINET[®]

Kinco FD1X5S series high-end DC servo system

Product models: **FD115S power range:** 50~100W, power supply voltage: DC24V~60V, rated current 5A^{*1}
FD125S power range: 200~400W, power supply voltage: DC24V~60V, rated current 12A (up to 15A with auxiliary heatdissipation)
FD135S power range: 750~1000W, power supply voltage: DC24V~60V, rated current 22A (up to 30A with auxiliaryheat dissipation)
FD145S power range: 1000~1500W, power supply voltage: DC24V~60V, rated current 35A (up to 50A with auxiliary heat dissipation)

■ Main Characteristics

- Supports 24~60VDC wide voltages
- Support RS485,CANopen, EtherCAT,Profinet communication.
- Automatically identify motor parameters.
- Motor temperature monitoring and over temperature protection.
- Equipped with S-curve and parameter self-tuning function.
- 1-channel analog function.
- Gantry control function.
- Support STO .
- Motor overspeed protection.
- Use Type-C debugging port.

■ Applicable Industry

- Logistics robots: automatic navigation freight robots, shuttle vehicles, and automatic parking robots
- Logistics equipment: fullyautomatic sorting lines and three-dimensional warehouses
- Medical equipment:smallsystems
- Other occasionsrequiringhighresponsespeed andhigh positioningaccuracy

^{*1} Model is under development

FD1X5 Series

DC servo system



Modbus CANopen[®] EtherCAT[®]

Kinco FD1X5 series economical DC servo system

Product models: **FD125 power range:** 200W~400W, power supply voltage: DC24V~60V, rated current 12A (up to 15A with auxiliary heat dissipation)
FD135 power range: 750W, power supply voltage: DC24V~60V, rated current 20A (up to 30A with auxiliary heat dissipation)
FD145 power range: 1kW~1.5kW, power supply voltage DC24V~60V, rated current 30A (up to 50A with auxiliary heat dissipation)

■ Main Characteristics

- Brand-new control platform, three-ring bandwidth comprehensively improved
- Support RS485,CANopen, EtherCAT communication
- Low driving efficiency has been comprehensively improved
- Automatically identify motor parameters
- S-curve and parameter self-tuning functions
- Motor temperature monitoring, over-temperature protection
- CE certification, ROHS environmental certification standards

■ Applicable Industry

- Logistics robots: automatic navigation freight robots, shuttle vehicles, and automatic parking robots
- Logistics equipment: fully automatic sorting lines and three-dimensional warehouses
- Medical equipment: small systems
- Other occasions requiring high response speed and high positioning accuracy

FD1X4S Series

DC servo system



Modbus CANopen[°] EtherCAT[➔]

Kinco FD1X4S series economic DC servo system

Product model：	FD114S power range: 50W~200W, power supply voltage:DC24V~60V,rated current 5A
	FD124S Power range: 200W~400W, power supply voltage: DC24V~60V, rated current 12A (up to 15Arms with auxiliary heat dissipation)
	FD134S power range: 750W, power supply voltage: DC24V~60V, rated current 20A (up to 25A with auxiliary heat dissipation)
	FD144S power range: 1kW~1.5kW, power supply voltage: DC24V~60V, rated current 30A (up to 40A with auxiliary heat dissipation)
	FD164S power range: 1.5kW~3kW, power supply voltage: DC24V~60V, rated current 60A (up to 80A with auxiliary heat dissipation)

■ Main characteristics

- Support pulse, analog control.
- Support encoder signal output, master-slave.
- Support MODBUS, CANopen and EtherCAT communication control. ^{★1}
- Low-voltage DC power supply, satisfy with requirements of moving car's power and power supply.
- New small-size terminal design, compact size and beautiful appearance.
- 3 times (For maximum) ^{★2} overload design, increase response speed when car starts/stops.
- Over-current, over-heat, over-voltage and motor over-heat protection(I²T), ensure driving system in a safe state.
- All series products conform with CE verification and ROHS environment verification standard.

■ Applicable industry

- Logistics robots: Automatic navigation freight robot, multi-shuttle robot, automatic parking robot and etc.
- Logistics device: Sorting machine, tridimensional warehouse device and etc.
- Medical device: small size system.
- Other occasions: High response speed and high positioning precision.

^{★1} Choose driver type according to different CAN bus requirement

^{★2} Overload ability is limited by motor and driver setting, Please discuss with local sales director

OD Series

Modular servo system



Modbus CANopen[°] EtherCAT[➔]

Kinco OD series modular servo system

Product model：	OD124S Product power: 50W~400W, Power supply voltage: DC24V~60V, Rated current 10A
	OD134S Product power: 400W~750W, Power supply voltage: DC24V~60V, Rated current 20A
	OD134S Power range: 50W-400W, Power supply voltage: DC24V~60V, Rated current 20A

■ Main characteristics

- Mini size, modularization design, rapidly make up multi-driving cases.
- Embedded design, can make driver embedded into customer control system, achieve integration of drivers and controllers.
- Support pulse, analog control.
- Support encoder signal output, slave-master.
- Support MODBUS, CANopen and EtherCAT communication control^{★1}.
- Low-voltage DC power supply, satisfy with requirements of moving car's power and power supply.
- New small-size terminal design, compact size and beautiful appearance.
- 3 times (For maximum) ^{★2} overload design, increase response speed when car starts/stops.
- Over-current, over-heat, over-voltage and motor over-heat protection(I²T), ensure driving system in a safe state.
- All series products conform with CE verification and ROHS environment verification standard.

■ Applicable industry

- Logistics robots: Automatic navigation freight robot, multi-shuttle robot, automatic parking robot and etc.
- Logistics device: Sorting machine, tridimensional warehouse device and etc.
- Medical equipment: small size system.
- Other occasions: High response speed and high positioning precision.

^{★1} Choose driver type according to different CAN bus requirement

^{★2} Overload ability is limited by motor and driver setting, Please discuss with local sales director

iSMK Series

Integrated servo drive motor



Modbus **CANopen** Ether**CAT**

Kinco iSMK series integrated servo drive motor

Product models:	iSMK60 power range: 200W, power supply voltage DC24V~60V, rated current 7A
	iSMK60 power range: 400W, power supply voltage DC24V~60V, rated current 12A
	iSMK80 Power range: 750W, power supply voltage DC24V~60V, rated current 23A

■ Main Characteristics

- 300% overload capacity
- Support CANopen, Modbus RTU,EtherCAT
- Multiple safety protection such as overvoltage protection, undervoltage protection, short circuit protection, motor overheating (I²T) protection, and driver overheating protection
- Can be equipped with an integrated reducer as standard, suitable for rotating and jacking
- CE certification, ROHS environmental certification standards

■ Applicable Industry

- Logistics robots: automatic navigation freight robots, shuttle vehicles, automatic parking robots, etc.
- Logistics equipment: fully automatic sorting lines, three-dimensional warehouses, etc.
- Medical devices: small systems
- Other occasions requiring high response speed and high positioning accuracy

MD60/MD80 Series



Modbus **CANopen** Ether**CAT** **PROFI**

Kinco MD series modularization servo system

Product model :	MD60 prower range 200W, power supply DC24V~60V,rated current 5A
	MD60 prower range 400W, power supply DC24V~60V,rated current 10A
	MD80 prower range 750W, power supply DC24~60V, rated current 20A

■ Main characteristics

- **Compact structure**
The product integrates servo driver and low-voltage servo motor, which is smaller and saves installation space
- **High reliability**
The connection line between the motor and the driver is omitted to reduce the equipment failure caused by connection problems and reduce the equipment failure rate
- **Lower cost**
Save connecting cable and reduce equipment cost effectively

■ Applicable industry

- Logistics robots: Automatic navigation freight robot, multi-shuttle robot, automatic parking robot and etc.
- Logistics device: Sorting machine, tridimensional warehouse device and etc.
- Medical device: small size system.
- Other occasions: High response speed and high positioning precision.

* Overload ability is limited by motor and driver setting, Please discuss with local sales director.

iWMC

Integrated servo wheel module



Kinco iWMC integrated servo wheel module

Product models:

iWMC05606-00450-A150-M■DT-L	iWMC10415-05417-A180-M■DT
iWMC05606-00450-A150-M■DT-R	iWMC10415-06017-A180-M■DT
iWMC10409-02222-A165-M■DT	iWMC10420-08012-A180-M■DT
iWMC10411-04023-A180-M■DT	
Note: ■ = A : Without brake B : With brake	

■ Main Characteristics

- Fully integrated design, the four modules of wheels, reducer, servo motor, and driver (including encoder) are integrated
- Optimize the installation structure, make the installation faster and easier
- Dual power supply design, makes the system safer and more reliable
- Optimize the design of the reducer, with low noise and low temperature rise

■ Application scenarios



50kg~2T Load various types of mobile robots

FMC&FMK Series

Frameless torque motor



Frameless torque motors, unlike traditional servo motors, consist only of stator and rotor components. Compared to framed motors, frameless motors offer flexible configuration and easy installation. Considering the increasing trend of highly integrated drive systems, frameless motors better meet the expectations of engineers. Engineers no longer need to consider motor interfaces in system design, allowing for maximum reduction of space occupied by the power output unit in the drive system, leading to higher system integration.

In response to customers' increasing demands for core joint components, Kinco has launched the fourth-generation FMK series frameless torque motor .

FMK series frameless torque motor has optimized the stator welding process, enhanced the roundness of the stator, and ensured superior performance while minimizing the motor length to meet the usage requirements of customer. In addition, the motor has been upgraded with a larger split ratio and a larger hollow design, and its rotor manufacturing process has been optimized, making it more suitable for embodied intelligent product and effectively reducing customers' overall TCO . Meanwhile, the FMK series frameless torque motor has further expanded its size coverage, basically covering the size specifications of mainstream joint modules on the market, thus making the size options of Kinco's frameless products more comprehensive.



■ Advantages and Features of FMC Frameless Torque Motors

- Independent research and development, with better performance compared to second-generation products:
- Slimmer body thanks to new lightweight design, providing faster and smoother motion as well as smaller size and lower temperature rise under same torque performance.
 - Higher torque density achieved through optimization of electromagnetic solutions, with smaller cogging torque thanks to increased pole pairs.
 - Easy replacement of mainstream foreign products thanks to compatible product dimensions, also wide compatibility to common harmonic reducers in the market.
 - Various frame sizes, larger hollow inner diameter to meet diverse threading requirements, covering loads of 3~25Kg.
 - Customizable options: optional Hall sensors, temperature sensors, etc., with noticeable cost advantages.
 - Digital factory for continuous and stable production, with multiple global / local distribution and offices providing support and services.



■ Advantages and features of FMK frameless torque motor

- The fourth-generation frameless torque motor:
- The size coverage has been upgraded again! The outer diameters of the fourth-generation FMK series products include 25/38/43/50/60/70/85/115/140/160mm;
 - The large split ratio and large hollow design, along with the larger inner diameter of the rotor, are more suitable for the wire passing and board layout requirements during the mechanical design of humanoid robots
 - The process update reduces the weight of the motor and increases the power density, and contribute to the lightweight development of customer's embodied intelligence product overall weight control.
 - The temperature rise performance is excellent. The potting process and electromagnetic optimization bring excellent temperature rise control.
 - The noise and vibration performance is excellent, bringing a good experience to the movement coordination of embodied intelligence products.

Servo Motor



Motor flange	Power	Torque	Rated working voltage
40 flange motor	50W, 100W	0.16Nm~0.32Nm	48VDC, 220VAC
60 flange motor	100W, 200W, 300W, 400W, 600W	0.64Nm~2Nm	24VDC, 48VDC, 220VAC
80 flange motor	400W, 750W, 1000W	1.27Nm~3.18Nm	48VDC, 220VAC, 380VAC
110 flange motor	1050W, 1260W, 1570W, 1880W	4Nm~6Nm	48VDC, 220VAC, 380VAC
130 flange motor	1000W, 1500W, 2000W, 3000W	4.8Nm~14.3Nm	48VDC, 220VAC, 380VAC
150 flange motor	2300W, 3000W, 3500W, 3800W	11Nm~18Nm	380VAC
180 flange motor	3500W, 4400W, 5500W, 7500W	27Nm~48Nm	380VAC

Motor

	SMH series motor	European design, excellent performance, low cogging torque, low temperature rise Can install incremental, communication, single/multi-turn absolute encoder Can match with exported/domestic aviation plug
	SMC series motor	High cost-performance ratio, low cogging torque Can install magnetoelectric, incremental, single/multi-turn absolute encoder Can match with outgoing line/domestic aviation plug
	SMK series motor	Low cogging torque, high protection Support multiple incremental, absolute value magneto electric and absolute magnetic and optical encoder Customizable cable length

Stepper Driver



FM Series Field bus Stepper Driver

Product model:

FM860	Power supply voltage : DC24V~70V, Output current : 0.15~8A
FM880	Power supply voltage : DC24V~70V, Output current : 0.15~10A

Main features

- Support Modbus, CANopen, EtherCAT protocol.
- Support RS232 communication, parameter settings by KincoStep software.
- Support PLS+DIR, CW/CCW and A+B signal.
- Multiple I/O functions, supporting homing, multi-speed, multi-position and lots of other control mode.
- Support automatic parameter adjustable regulation, self-defined shalf-lock, step smooth filter.
- Over-voltage, under-voltage, overheat and over-current protection.
- 2-phase(42,57,86) and 3-phase(57,85) hybrid stepper motor (drive current is under 6A).

Applicable industry

- Electronic device fabrication, Special machine tool, Industrial robot, Inkjet printing device, Clothing textile device, Logistics device, Medical device, AGV, Package device, etc.

CM Series Stepper Driver

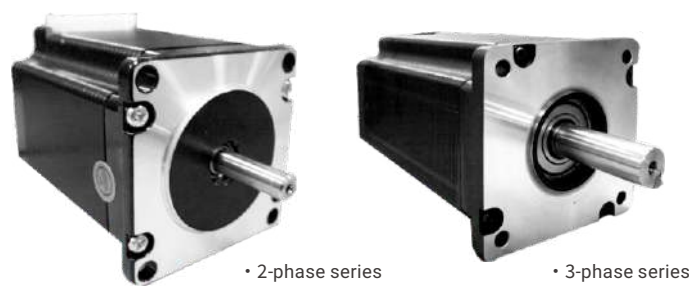
Product model:

2CM525、2CM545、2CM560、2CM860、2CM880、3CM880、CM422B、CM442C、CM880A、CM880B、CM880C
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Main features

- Support PLS+DIR, CW/CCW.
- Micro-step filter function to make motor run stably at low speed.
- Wide voltage range for signal input, easy to wire.
- Parameter self-adaptive function to make motor run smoothly according to different motor type.
- Compact size to save installation space.

Stepper Motor



• 2-phase series

• 3-phase series

Kinco 2-phase and 3-phase hybrid stepper motors are made of high quality CRS (Cold Rolled Steel) and thermostability permanent magnet. The flange size of 2-phase series ranges from 42mm to 130mm, the 3-phase series are of 57mm and 85mm. Kinco stepper motors feature low temperature rise, high reliability and stability, which make Kinco stepper motors suitable for different industries under different ambient conditions.

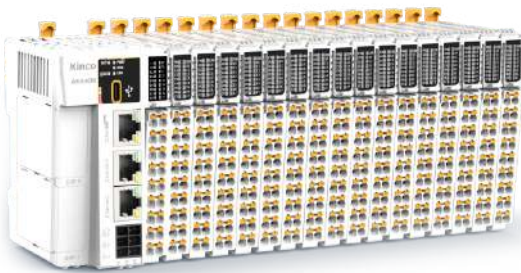
Motor list

Phase	Size	Product model	Holding torque (N.m)	Phase current (A)		Winding resistance (Ω)	Winding inductance (mH)	Motor inertia (Kg.cm ²)	Number of lead wires	Shaft diameter (mm)	Shaft type	Motor length (mm)	Weight (Kg)	Step angle (°)
				Series	Parallel									
2-phase	42	2S42Q-0240	0.22	0.4	0.4	12.5±10%	21±20%	0.054	4	5	No key	40	0.28	1.8
		2S42Q-0348	0.34	0.7	1.4	4.6±10%	4±20%	0.068	8	5	No key	48	0.36	1.8
	57	2S57Q-0541	0.5	0.7	1.5	3.6±10%	4.1±20%	0.135	8	6.35	Platform	41	0.45	1.8
		2S57Q-0956	0.9	1.96	3.92	0.8±10%	1.2±20%	0.3	8	6.35	Platform	56	0.7	1.8
		2S57Q-1376	1.3	1.96	3.92	1±10%	2.1±20%	0.48	8	6.35	Platform	76	1	1.8
		2S57Q-2280	2.2	2.8	5.6	0.8±10%	1.8±20%	0.53	8	8	Platform	80	1.1	1.8
		2S57Q-25B2	2.5	2.9	6	1±10%	1.8±20%	0.8	8	8	Platform	112	1.7	1.8
	86	2S86Q-3465	3.4	6	6	0.3±10%	1.7±20%	1	4	13	Flat key	65	1.7	1.8
		2S86Q-4580	4.5	6	6	0.38±10%	3.5±20%	1.4	4	13	Flat key	80	2.3	1.8
		2S86Q-85B8	8.5	6	6	0.6±10%	6±20%	3.4	4	13	Flat key	118	3.7	1.8
		2S86Q-051F6	12.8	6	6	0.85±10%	10±20%	4	4	15.875	Flat key	156	5.3	1.8
	110	2S110Q-03999	11.7	5.5	5.5	0.7±10%	9.8±20%	5.5	4	19	Flat key	99	5	1.8
		2S110Q-047F0	21	6.5	6.5	0.72±10%	12.8±20%	10.9	4	19	Flat key	150	8.4	1.8
		2S110Q-054K1	30	8	8	0.67±10%	11±20%	16.2	4	19	Flat key	201	11.7	1.8
	130	2S130Y-063R8	40	7	7	0.9±10%	9.5±20%	48.4	4	19	Flat key	230	19	1.8
3-phase	57	3S57Q-04056	0.9	5.6	5.6	0.7±10%	1.7±20%	0.3	4	6.35	No key	56	0.72	1.2
		3S57Q-04079	1.5	5.8	5.8	1.05±10%	2.4±20%	0.48	4	8	No key	79	1	1.2
3-phase	85	3S85Q-04097	4	5.8	5.8	1.1±10%	4.6±20%	2.32	4	12	Whitney key	97	2.7	1.2
		3S85Q-040F7	7.5	4	4	1.78±10%	17.1±20%	0.44	4	14	Flat key	157±1	5.3	1.2

AK840 Series

Motion controller

New generation bus type medium-sized CoDeSys motion controller
Blade modular design, a new choice for automated intelligent design



The AK8X0 series is Kinco's new generation of cost-effective CoDeSys-based medium-sized EtherCAT bus motion controllers. It has made significant improvements in overall performance, functionality, integration, and ease of use. Paired with the RP20 series remote IO system, it is another new solution offered by Kinco to help break industry barriers for customers in various industry.

AK8X0 series motion controller

- ARM Cortex-A53,1.4GHz quad-core processor, achieving ns-level instruction execution speed, with a significant leap in overall performance;
- Relying on the standard CoDeSys platform, it complies with IEC61131-3 and PLCOpen standard, which is a user-friendly product.
- Modular and miniaturized design,equipped with 8DI and 8DO, and the backplane bus supports flexible configuration of 16 expansion modules.
- Supports up to 32-axis EtherCAT synchronous motion control, and supports motion control function such as electronic cams, electronic gears, interpolation.

AK8X0 series parameters

Model		AK840M-0808DTN		AK840M-0808DTP	
Supply power rated voltage		24V DC +/-20%			
Supply power rated power		6W(CPU unit only)/20W(Full-load)			
Power protection		Overcurrent protectionReverse polarity protection Surge absorption			
Communication interface	1*EtherCAT	1*EtherCAT, Synchronization cycle: 1–4 ms; supports up to 32 axes of synchronous motion control Axis-control performance: 1ms, 8 axes synchronized motion control (typical MC: electronic cam)			
	2*Ethernet	2*Ethernet Both support Modbus TCP master/slave, with a maximum of 31 TCP slaves per channel Both support program upload and download			
	1*RS-485	1*RS-485,Supporting Modbus RTU master/slave protocol, supporting up to 31 Modbus RTU slaves			
	1*USB OTG	1*USB OTG ,supports firmware updates via USB drive (limited to FAT32 format)			
Local I/O		8 * Digital inputs(NPN/PNP), supports 2-channel high-speed inputs, A/B phase and pulse/direction signal, with a maximum of 200KHz.			
		8 * Digital outputs,support NPN		8 * Digital outputs,support PNP	
Local bus(backplane bus)		Kinco dedicated K-bus backplane			
Motion Control		8 to 32 axes, 1ms to 4ms, supporting electronic gearing, electronic cam, interpolation, and other motion control functions.			
Program memory		32MB			
Data memory		32MB			
Non-volatile Storage		1MB			
Indicator		PWR: Power status			
		RUN:Device operation status			
		ERR:Device error			
		BUS:Expansion bus error			
		BATT:Low voltage of backup battery			
Dimensions (W × H × D) mm		57*80*108mm			

Model list

Model	Type	Product description
AK840M-0808DTN	PLC	EtherCAT bus-type CoDeSys motion controller, 1*EtherCAT,1*RS485,DI8*24VDC,DO 8*24VDC,NPN, up to 16 expansion modules can be supported;
AK840M-0808DTP		EtherCAT bus type CoDeSys motion controller,1*EtherCAT,1*RS485,DI8*24VDC, DO8*24VDC.PNP,Up to 16 expansion modules can be supported
RP20C-ECT	Expansion module	EtherCAT coupler, connecting up to 16 RP20 series expansion modules
RP20-0016DTP		DO 16*24V DC, PNP;
RP20-1600DT		DI 16*24V DC,source/drain type
RP20-0808DTP		DI 8*24VDC,source type; DO 8*24VDC,PNP;
RP20-0016DTN		DO 16*24V DC,NPN;
*RP20-0008DR		DO 8*Relay output, normally open contact(NO)
RP20-0400TC		AI 4* TC,J/K/E/S/T/0-99mV
RP20-0400RD		AI 4*RTD.Pt100/Pt1000/Cu50
RP20-0400IV		AI 4*IV,4-20mA/ ±10V/1-5V/ ±20mA
*RP20-0004IV		AO 4*IV 4-20mA/0-20mA/ ±10V/1-5V
RP20-0202IV		AI 2*IV,4-20mA/0-20mA/0-10V/1-5V AO 2*IV,4-20mA/0-20mA/0-10V/1-5V
RP20-PW		Power module, powered by 24V DC, rated output: 5V DC, 2A

BD20 expansion module selection

Model list	
Order model	Description
BD20-COM	1*RS485, 1*RS232
BD20-CAN	1*CAN
*BD20-04DI	DO 4*24V DC, PNP/NPN
*BD20-04DO	DI 4*24V DC, , PNP/NPN
BD20-TF	Supports firmware upgrade, user program upgrade, memory expansion, and data backup.

RP20 Series

I/O Module



- Expansion Bus: EtherCAT bus protocol, fast data response, strong expansion capability
- Modular Design: Compact and easy-to-installed modular design, with independent modules, pluggable terminals, high integration
- K-bus: Kinco-RP20 series dedicated bus, with microsecond-level IO refresh

RP20C-CAN specification

Order Model	RP20C-CAN
Technical Specification	
Supply power rated voltage	24V DC +/-20%
Rated power	2.5W(CPU unit only)/20W(Full-load)
Power protection	Overcurrent protection
	Reverse polarity protection
	Surge absorption
Bus protocol	CANopen
Bus interface	2 * RJ45
Baud Rate	Supports 1 Mbps, 500 Kbps, 250 Kbps, 125 Kbps
Maximum distance between station	Typical value: <40 m at 1 Mbps, <1000 m at 125 Kbps
K-Bus communication rate	100Mbps
Indicator	PWR:Power supply
	RUN: Operating status of the expansion bus
	CAN: Status of the can bus
	ERR: Error status of the expansion bus
Expansion capacity	Supports connection of up to 16 RP20 expansion modules
Dimension (W × H × D)	24.3mm * 100mm * 80mm
Weight	≈ 120g
*The K-Bus mentioned here refers to the dedicated expansion bus protocol for the Kinco-RP20 series.	

Product List

Model	Description
RP20C-ECT	EtherCAT-Based Bus Coupler
RP20C-CAN	CANopen-Based bus coupler
RP20-0016DTP	DO 16*24V DC, PNP
RP20-0016DTN	DO 16*24V DC, NPN
RP20-1600DT	DI 16*24V DC
RP20-0808DTP	DI 8*24V DC, DO 8*24V DC, PNP
RP20-0808DTN	DI 8*24V DC, DO 8*24V DC, NPN
RP20-0008DR	DO 8* Relay
RP20-0400IV	AI *4: 4-20mA/1-5V/0-20mA/0-10V/0-5V
RP20-0400RD	AI 4* RTD
RP20-0400TC	AI 4* TC
RP20-0004IV	AO *4: 4-20mA/1-5V/0-20mA/0-10V/0-5V
RP20-0202IV	AI *2: 4-20mA/1-5V/0-20mA/0-10V/0-5V AO *2: 4-20mA/1-5V/0-20mA/0-10V/0-5V
RP20-PW	Power supply module, Powered by 24V DC, Rated Power:20W

AK810 Series

Motion controller



Perfect combination of intelligent terminal, motion controller and robot controller, which provides a one-stop solution for intelligent manufacturing

The new flat-type PLC features a low-profile horizontal design that overcomes vertical space limitations. Tailored for AGV/AMR, shuttles, automated warehouses, and food & pharmaceutical machinery, it combines compact installation, high integration, and reliability to deliver efficient control solutions for smart manufacturing.

AK810 series motion controller

- Multi-Bus Integration: Built-in 1 × EtherCAT Master + 2 × CANopen Masters, enabling dual-bus high-speed motion control and field device management.
- Battery-Free Design: Easily withstands low-temperature and vibration environments, reduces maintenance effort, and ensures continuous system operation.
- High-Speed Signal Capture: Integrated 2 × high-speed inputs for precise acquisition of sensor and encoder signals, enabling fast equipment response.
- Low-Profile Flat Design: Overall height including terminals is only 52mm, purpose-built for vertically constrained installations.

Motion controller model parameter

Model	AK810M-1616DTP
Technical Specification	
Power supply	6W
Rated power	DC24V
Local DI/DO	16*DI,PNP/NPN;16*DO,PNP
Local analog	-
Expansion Method	Optional expansion via EtherCAT or CANopen
High-speed Counter	Supports 2 channels of high-speed pulse input, compatible with A/B phase and pulse/direction signals, up to 200 kHz.
Communication Interface	
CANopen	Equipped with two independent isolated interfaces, each supporting up to 16 CANopen slave devices
Ethernet	1*Ethernet, can be used as programming port,10M/100M,TCP/UDP protocol
EtherCAT	1*EthetCAT,support COE;Motion control 16 axis, support electronic CAM, interpolation
Serial port	1*RS232, 2*RS485, support Modbus
Memory	
Program capacit	32MB
Data capacit	32MB
Power-Off Retention	1MB
SD card/USB	1*MicroSD card ,1*USB HOST(Type-c)
Software	
program software	CoDeSys V3.5
Motion control	Supports 16-axis EtherCAT motion control, with functions such as electronic gearing and electronic cam
Other information	
Protection level	IP20
Temperature range (operate)	-10°C~+55°C
Temperature range (storage)	-40°C~+70°C
Maximum relative humidity	10%~95%,no condensation
Certification	CE
Dimension (L × W × H)	139.5mm*125mm*52.4mm

PLC

K6S/K6/MK/K2 Series



Kinco K6S Series PLC

Kinco K6S series PLC is a compact modular PLC, The modular plug-in design saves more than 50% of the horizontal installation space, and the wiring can be tightened without tools,making the installation and maintenance process simpler and more efficient. Despite the simple design, it is also equipped with a powerful core, integrating high-speed input/output, Ethernet, CAN, RS485 and other conventional functional interfaces, further improving the flexibility, reliability, efficient control and other performance, providing reliable control solutions for industrial automation systems.

- Main features
 - 8K instruction program storage space, 20K bytes data storage space
 - Integrated real-time clock (RTC), 1*Ethernet interface, 2*RS485, 1*CAN interface(both RS485 and CAN interfaces have built-in isolation)
 - Integrated 4 channels of high-speed pulse output (all channels support PTo and PWM mode output).4 channels of high-speed input counting (supports single/double/phase, AB quadrature mode)
 - Expansion port plua-in desian, can connect up to 16 extensions, rich combinations



Kinco K6 Series PLC

Kinco-K6 series PLC is a small PLC product which is a high-performance standard PLC launched by Kinco. K6 series PLC adopt a brand-new technology platform, under the premise of ensuring high performance and high reliability, it provides Ethernet, CAN bus,extended BD board interface and other functions that are closer to user needs,and have obvious advantages such as faster running speed, larger storage space,significantly improved performance, which can meet the diverse needs of users.

- Main features
 - Standard 10/100M Ethernet port, supporting rich network protocols such as TCP/UDP, and can connect up to 16 client at most.
 - Support expansion BD board and CAN bus or serial port, which is more convenient and economical.
 - The K6 series PLC is standardly equipped with multiple channel high-speed pulse input and output , can be connected to 14 expansion module.
 - Adopting a new MCU platform, it has a faster processing speed and supports rich software function such as array and stack.

PLC



Kinco MK Series PLC

Kinco MK series is an economical HMI+PLC combined product that supports IoT functions. MK series based on the cost-effectiveness of the HP series, uses a high-performance CPU and applies the Dtools software platform to support rich screen components and functions. In addition, it combines the Kinco machine IoT technology platform to provide remote upload and download, transparent PLC, VNC monitoring, equipment management and other remote operation and maintenance functions to provide more value to users.

- Main features
 - Built-in IoT function, supports program download,transparent transmission of PLC,VNC monitoring,equipment management and other remote operation and maintenance functions.
 - The HMI uses industrial-grade CPU, large-capacity storage, and supports the Dtools programming software of Kinco.
 - Equipped with Ethernetinterface, which can be connected to Ethernet devices, supports USB expansion storage,etc., which is convenient for connecting more peripherals.
 - 8* KS expansion modules can be connected to meet thevariousapplication needs
 - 4* high-speed pulse counters, and the maximum countingfrequency ofthe pulse counters is 50KHz
 - 4* high-speed pulse outputs, support PTO (pulse train) and PWM (pulse width modulation) output
 - The PLC part contains 2 RS485interfaces, PORT1 and PORT2, with a maximum communication rate of 115.2kbps



Kinco K2 Series PLC

The K2 series PLC is a K-series economical product (non-scalable), which improves the performance and reduces the cost on the basis of the K5 series, and has a high cost performance.

- Main features
 - USB programming port for convenient debugging;
 - Transistor type DIO(DI and DO multiplexing)suitable for more application
 - The K2 series PLC integrates transistor and relay hybrid output, analog quantity and other function that are closer to user needs, which has a high cost performance
 - Maintain the standard series with multiple communication port, multiple high-speed channel, RTC, etc., reducing price without cutting down on material.

PLC

■ Kinco programmable controller module list

Series	Type	Order Number	Function description
K6S	CPU module	K615S-16DT	DC24V power supply,D18*DC24V(PNP/NPN),D08*DC24V(PNP) Support 3 channel 200KHz high-speed counting input,1 channel single-phase 20KHz/ dual-phase 10KHZ Support 3 channel 200KHz high-speed pulse output and 1 channel high-speed pulse(Max speed 10khz) Integrated communication interface:2*RS485,1*Ethernet,1*CAN, supporting up to 16 K6S expansion module
	Expansion module	K621S-16DX	Power supply:DC24V,DI 16*DC24V(NPN/PNP)
		K622S-16DT	Power supply:DC24V,DO 16*DC24V(PNP)
		K622S-16DR	Power supply:DC24V,DO 16*relay
		K623S-16DT	Power supply:DC24V,DI 8*DC24V(NPN/PNP),DO 8*DC24V(PNP)
		K622S-16DTN	Power supply:DC24V,DO 16*DC24V(NPN)
		K633S-06IV	Power supply:DC24V,AI*4:4-20mA、1-5V,0-20mA、0-10V 12-bit resolution, Accuracy: 0.3%FS; AO*2:4-20mA,1-5V,0-20mA,0-10V
		K631S-04TC	Power supply:DC24V,4-channel thermocouple input, supporting J/K/E/S type thermocouple Thermocouple cold junction internal compensation ,external compensation optional, 24-bit resolution,Accuracy :0.19% FS Powered by DC24V, with 4-channel thermal resistance
		K631S-04RD	Power supply:DC24V,4-channel thermal resistance input, supporting Pt100, Cu50, and Pt1000 resistance, supporting two-wire, three-wire or four-wire connection method. 24-bit resolution. Temperature :±0.6°C. Resistance :± 1Ω
K6	CPU module	K606-24DT	Power supply:DC24V,DI 14*DC24V,DO 10*DC24V,Communication port:2*RS485,1*Ethernet,can be connected to 1 BD board and 14 expansion module
		K606-24AT	Power supply:AC100-240V,DI 14*DC24V,DO 10*DC24V,Communication port:2*RS485,1*Ethernet,can be connected to 1 BD board and 14 expansion module
		K606-24DR	Power supply:DC24V,DI 14*DC24V,DO 10*relay,Communication port:2*RS485,1*Ethernet,can be connected to 1 BD board and 14 expansion module
		K606-24AR	Power supply:AC100-240V,DI 14*DC24V,DO 10*relay,Communication port:2*RS485,1*Ethernet,can be connected to 1 BD board and 14 expansion module
		K606EA-30DT	Power supply:DC24V,DI 14*DC24V,DO 10*DC24V,AI 4*IV,AO 2*IV,Communication port:2*RS485,1*Ethernet,can be connected to 2 BD board and 14 expansion module
		K606EA-30AT	Power supply:AC100-240V,DI 14*DC24V,DO 10*DC24V,AI 4*IV,AO 2*IV,Communication port:2*RS485,1*Ethernet,can be connected to 2 BD board and 14 expansion module
		K608-40DT	Power supply:DC24V,DI 24*DC24V,DO 16*DC24V,Communication port:2*RS485,1*Ethernet,can be connected to 2 BD board and 14 expansion module
		K608-40AT	Power supply:AC100-240V,DI 24*DC24V,DO 16*DC24V,Communication port:2*RS485,1*Ethernet,can be connected to 2 BD board and 14 expansion module
		K608-40DR	Power supply:DC24V, DI 24*DC24V,DO 16*relay, Communication port:2*RS485,1*Ethernet,can be connected to 2 BD board and 14 expansion module
		K608-40AR	Power supply:AC100-240V,DI 24*DC24V,DO 16*relay, Communication port:2*RS485,1*Ethernet,can be connected to 2 BD board and 14 expansion module
	Expansion BD board	KB6-CAN	1*CAN(CAN2)
		KB6-2COM	1*RS232(Port0),1*RS485(Port3)
		KB6-4DI	Provide DI 4*DC24V
		KB6-4DO	Provide DO 4*DC24V
	Power module	K680	Power module input voltage:AC85~265V,Rated output current:5V 1A/24V 250mA
	Expansion module	K621-08DX	DI 8*DC24V
		K621-16DX	DI 16*DC24V
		K622-08XR	DO 8*relay
		K622-16XR	DO 16*relay
		K622-08DT	DO 8*DC24V
		K622-16DT	DO 16*DC24V
		K623-16DR	DI 8*DC24V,DO 8*relay
		K623-08DR	D1 4*DC24V,DO 4*relay
		K623-16DT	DI 8*DC24V,DO 8*DC24V
		K623-08DT	D1 4*DC24V,DO 4*DC24V
		K631-04IV	4-channel analog input,4-20mA/1-5V/0-20mA/0-10V
		K631-04RD	4-channel thermal resistance input , Pt100, Pt1000, Cu50, and resistor
		K631-04TC	4-channel thermocouple input,Thermocouple cold junction internal compensation ,external compensation optional,J/K/E/S/T type
		K632-02IV	2-channel analog output,4-20mA/1-5V/0-20mA/0-10V
		K633-04IV	2-channel analog input,4-20mA/1-5V/0-20mA/0-10V;
			2-channel analog output,4-20mA/1-5V/0-20mA/0-10V

PLC

■ Kinco programmable controller module list

Series	Type	Model	Function description
MK	HMI+PLC integrated products	MK070E-33DT	Control part : DC24V power supply,DI 16*DC24V,DO 14*DC24V,AI 2*IV,AO 1*V,1*USB2.0slave(shared for display and control),2*RS485 interface,4 *high-speed counting channel,4* high-speed output channel, supports KS series expansion module Display part (touchable): 700MHz RISC CPU, 128MB Flash+64MB DDR2, 7 '' TFT and 256K color display, 800 * 480 resolution, 1 * USB host, 1 * USB slave, 1 * Ethernet interface (10M/100M adaptive).
		MK070E-32DX	Control part:DC24V power supply,DI 16*DC24V,DO 4*DC24V+12* relay,1*USB2.0slave(shared for display and control),2*RS485 interface,4* high-speed counting channel,2* high-speed output channel, supports KS series expansion module; Display part (touchable): 700MHz RISC CPU, 128MB Flash+64MB DDR2, 7 '' TFT and 256K color display, 800 * 480 resolution, 1 * USB host, 1 * USB slave, 1 * Ethernet interface (10M/100M adaptive).
		MK043E-20DT	Control part: DC24V power supply,DI 9*DC24V,DO 9*DC24V,AI 2*IV,1*USB2.0slave(shared for display and control),2*RS485 interface,4* high-speed counting channel,4* high-speed output channel, supports KS series expansion module Display part (touchable): 700MHz RISC CPU, 128MB Flash+64MB DDR2, 4.3 '' TFT and 256K color display, 480 * 272 resolution, 1 * USB host, 1 * Ethernet interface (10M/100M adaptive).
		MK070E-27DRT	Control part:DC24V power supply, DI 12*DC24V,DO 12* relay,AI 3*RD,1*USB2.0slave(shared for display and control),2*RS485 interface,4* high-speed counting channel, supports KS series expansion module;Display part (touchable): 700MHz RISC CPU, 128MB Flash+64MB DDR2, 7 '' TFT and 256K color display, 800 * 480 resolution, 1 * USB host, 1 * USB slave, 1 * Ethernet interface (10M/100M adaptive).
		MK043E-20DTC	Control part: DC24V power supply,DI 9*DC24V,DO 9*DC24V,AI 2*TC,1*USB2.0slave(shared for display and control),2*RS485 interface,4* high-speed counting channel, 4* high-speed output channel, supports KS series expansion module;Display part (touchable): 700MHz RISC CPU, 128MB Flash+64MB DDR2, 4.3 '' TFT and 256K color display, 480 * 272 resolution, 1 * USB host, 1 * Ethernet interface (10M/100M adaptive).
		MK043E-27DT	Control part: DC24V power supply,DI 10*DC24V,DIO 4*DC24V,DO 10*DC24V,AI 2*IV,AO 1*IV,1*USB2.0slave(shared for display and control),2*RS485 interface, 4* high-speed counting channel,4* high-speed output channel, supports KS series expansion module;Display part (touchable): 700MHz RISC CPU, 128MB Flash+64MB DDR2, 4.3 '' TFT and 256K color display, 480 * 272 resolution, 1 * USB host, 1 * Ethernet interface (10M/100M adaptive),1*RS232.
	Expansion module	KS122-12XR	Power supply: DC20.4~28.8V, DO 12*relay,can be used as a Modbus slave station
		KS123-14DR	Power supply:DC20.4~28.8V, DI 8*DC24V,DO 6*relay,can be used as a Modbus slave station
		KS133-06IV	Power supply:DC20.4~28.8V,4-channel analog input / 2-channel analog output can be selected as 4-20mA/1-5V/0-20mA/0-10V, and can be used as a Modbus slave station
		KS121-16DX	Power supply:DC20.4~28.8V,DI 16*DC24V,can be used as a Modbus slave station
		KS122-14DT	Power supply:DC20.4~28.8V,DO 14*transistor,can be used as a Modbus slave station
		KS131-04RD	Power supply:DC20.4~28.8V,4-channel thermal resistance input, two-wire, three-wire or four-wire system,PT100, PT1000, Cu50, R, can be used as Modbus slave station
	Accessory	MKC-C050S	Hybrid cable(COM+Exp/CAN) DB9(Male)→RJ45(Female)+7-core cable (with a set of 7-pin plug-in terminal) CATE Category 5 shielded network cable(Black 24AWG) , total length 160±10mm UL2464 26AWG shielded cable with wire gauge tube and cylindrical terminal, total length 510 ± 15mm
		MKC-X050S	Serial port type cable DB9(Male)→ 7-core cable (with a set of 7-pin plug-in terminal) UL2464 26AWG shielded cable with wire gauge tube and cylindrical terminal, total length 510 ± 15mm
		MKC-C000S	Extended type cable(Exp/CAN) DB9(Male)-RJ45(Female) CATE Category 5 shielded network cable(Black 24AWG) , total length 160±10mm
K2	CPU module	K205-16DT	Power supply:DC20.4-28.8V, DI 6*DC24V,DIO 4*DC24V,DO 6*DC24V,USB2.0 programming port,2*RS485 communication port, no expansion module allowed
		K205-16DR	Power supply:DC20.4-28.8V, DI 6*DC24V,DIO 4*DC24V,DO 6*relay,USB2.0 programming port,2*RS485 communication port, no expansion module allowed
		K205EX-22DT	Power supply:DC20.4-28.8V, DI 8*DC24V,DIO 6*DC24V,DO 8*DC24V,USB2.0 programming port,2*RS485 communication port, no expansion module allowed
		K205EA-18DT	Power supply:DC20.4-28.8V,DI 8*DC24V,DO 8*DC24V,AI 1*IV,AO 1*IV,USB2.0 programming port,2*RS485 communication port, no expansion module allowed
		K204ET-16DT	Power supply:DC20.4-28.8V,DI 8*DC24V,DO 6*DC24V,AI 1*IV,AO 1*IV, USB2.0 programming port,2*RS485 communication port, no expansion module allowed
		K209M-56DT	Power supply:DC20.4-28.8V,DI 32*DC24V,DO 24*DC24V, USB2.0 programming port,2*RS485 communication port,2*CAN,1* expansion port can be equipped with KS series expansion module (Can be used as CAN interfaces at the same time, supporting CAN free communication)
		K209EA-50DX	Power supply:DC20.4-28.8V, DI 22*DC24V.DO 8* transistor +12* relay, AI 6*IV, AO 2*IV,USB2.0 programming port,3 serial communication port (1*RS232 2*RS485), no expansion module allowed

KC100 Series

High performance VFD for general use



Power Voltage	Single-phase 220V	0.4~2.2kW
	Three-phase 380V	0.75~5.5kW
Telecommunication	Support RS485 standard MODBUS communication protocol	
Terminal	4 digital inputs	1 analog input
	1 relay output	1 analog outputTerminal
	1 channel DO output	1 channel 485 communication

Model and Specification

Model	Power Capacity (kVA)	Input Current (A)	Output Current (A)	Adaptive motor (kW)
Single-phase 220v,50/60Hz				
KC100-2S-0R40G	1.0	5.3	2.5	0.4
KC100-2S-0R75G	1.5	8.2	4.0	0.75
KC100-2S-01R5G	3.0	14.0	7.5	1.5
KC100-2S-02R2G	4.0	23.0	10.0	2.2
Three-phase 380v,50/60Hz				
KC100-4T-0R75G	1.5	3.4	2.3	0.75
KC100-4T-01R5G	3.0	5.0	3.7	1.5
KC100-4T-02R2G	4.0	5.8	5.5	2.2
KC100-4T-03R7G	5.9	10.5	8.8	3.7
KC100-4T-05R5G	8.5	14.5	13.0	5.5

Application

- Sewage treatment, manufacturing production lines, fan ventilation systems, logistics and transportation air conditioning cooling systems, woodworking machinery, and various automated production equipment.

KC200 Series

Mainly used to control and adjust the speed and torque of three-phase AC asynchronous motors



Voltage level

1P 200~240V(-15~+10%) 0.4-2.2kW
3P 380V~480V(-15~+10%) 0.75-560kW

Terminal configuration

6 digital input terminals, 2 analog input terminals;
2 relay output terminals, 2 DO output terminals, 2 analog output terminals;
1 high-speed pulse input terminal (multiplexed with DI6 terminal), 1 high-speed pulse output terminal (multiplexed with DO2 terminal);
One 485 communication terminal and one CAN communication terminal.

Support optional 5V, 12V, 24V incremental PG card



Telecommunication

Standard support 485 standard MODBUS communication protocol;
Standard support CAN-OPEN communication protocol.

Industry application

Light load, heavy load, and ultra -heavy load equipment such as lifting, cement, rubber tires, industrial water treatment, fan ventilation system, stirring, air -conditioning cooling system, woodworking machinery, etc.

KC200 series inverter specifications and technical parameters

Inverter Model	Power capacity kVA	Input Current A	Output Current A	Adaptive motor kW
Single-phase 200V~240V 50Hz/60Hz				
KC200-2S-0R40G	1	5.3	2.5	0.4
KC200-2S-0R75G	1.5	8.2	4	0.75
KC200-2S-01R5G	3	14	7.5	1.5
KC200-2S-02R2G	4	23	10	2.2
Three-phase 380V~480V 50Hz/60Hz				
KC200-4T-0R75G	1.5	3.4	2.3	0.75
KC200-4T-01R5G	2.5	5	3.7	1.5
KC200-4T-02R2G	3.6	5.8	5.5	2.2
KC200-4T-03R7G	5.8	10.5	8.8	3.7
KC200-4T-05R5G	8.6	14.5	13	5.5
KC200-4T-07R5G	11	20.5	17	7.5
KC200-4T-0011G	16.5	26	25	11
KC200-4T-0015G	21	35	32	15
KC200-4T-0018G	24.5	38.5	37	18.5
KC200-4T-0022G	29.5	46.5	45	22
KC200-4T-0030G	39.5	62	60	30
KC200-4T-0037G	49.5	76	75	37
KC200-4T-0045G	59	92	90	45
KC200-4T-0055G	72.5	113	110	55
KC200-4T-0075G	100	157	152	75
KC200-4T-0090G	116	180	176	90
KC200-4T-0110G	138	260	210	110
KC200-4T-0132G	166	232	252	132
KC200-4T-0160G	200	282	304	160
KC200-4T-0185G	230	326	350	185
KC200-4T-0200G	250	352	380	200
KC200-4T-0220G	280	385	426	220
KC200-4T-0250G	309	437	470	250
KC200-4T-0280G	342	491	520	280
KC200-4T-0315G	395	580	600	315
KC200-4T-0355G	437.5	624	665	355
KC200-4T-0400G	629	670	725	400
KC200-4T-0450G	715	792	820	450
KC200-4T-0500G	800	835	950	500
KC200-4T-0560G	896	920	1020	560