

Kinco

Product Introduction of Kinco VFD



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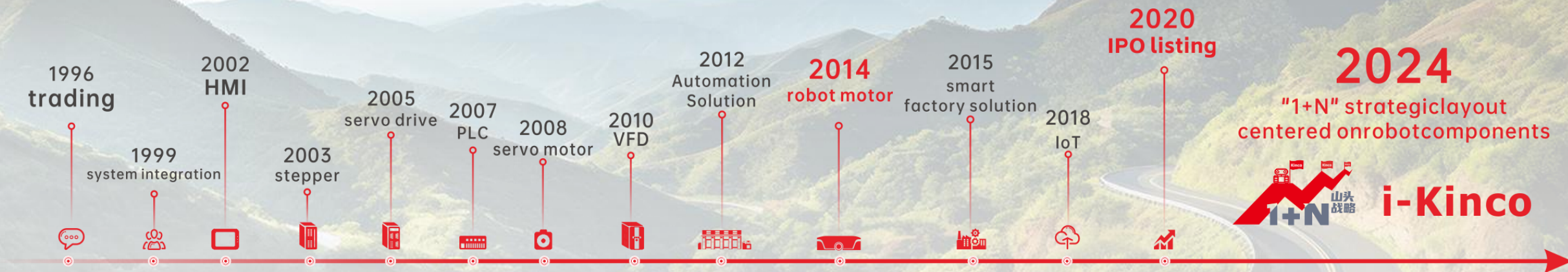
Typical Application

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Kinco VFD Products

Kinco Company Profile

Kinco is a leading Chinese supplier of **motion control** and **human-machine interaction(HMI)** devices for **robots** and **intelligent equipment**



Vision:
Enabling Robots to Build a Better Life for Humankind



Values:

Customer First / Openness and Enterprise,
Perseverance and Hard Work / Integrity and Trustworthiness

M-IoT



Automation Core Components



i-Kinco Robotic Motor Modules

Four Major Bases, Global Service

Kinco 步科
步科股份：688160



Changzhou



Shanghai



Chengdu



Shenzhen

10+ Global Marketing Centers
100+ Domestic Service Providers
70+ Global Partners

All-Year-Round Online Service
Hotline: 400-700-5281



Win-Win Cooperation



Where there are robots, there is Kinco

HAIROBOTICS
海柔创新

Geek+

HANGCHA

Linde

NOBLELIFT 诺力

SINSUN 新松

HELI 合力

KUKA

ABB

FANUC

UNIVERSAL ROBOTS



One-stop service for logistics solutions

BlueSword
兰剑智能

DAIFUKU
Automation that Inspires

ENFON
上海音峰机器人

今天国际

KENGIC 科捷智能

Gen-song

inform 音飞
智能储存解决方案



Trusted partner of international brands

FESTO

OMRON

Honeywell

B&R
A member of the ABB Group

LS

KEBA
Automation by innovation.

EMERSON

SIEMENS
Ingenuity for life



Preferred brand in manufacturing industry

SAIC 上汽集团
SAIC MOTOR



上海地铁
SHANGHAI METRO

中国中车
CRRC

CSR
中国南车

CETC
中国电科



Motion control specialist for medical imaging equipment

UNITED 联影
IMAGING

SIEMENS
Healthineers



Empower new quality productive forces for advanced manufacturing

BYD

CATL
宁德时代

ATW
奥特维

S.C 捷佳伟创
SHENZHEN S.C

Lyric 利元亨
play with lyric

HACHT
海昌智能

LEAD 先导



Large terminal applications

通威股份
TONGWEI CO., LTD.

LONGi 隆基

一汽-大众
FAW-VOLKSWAGEN

小鹏



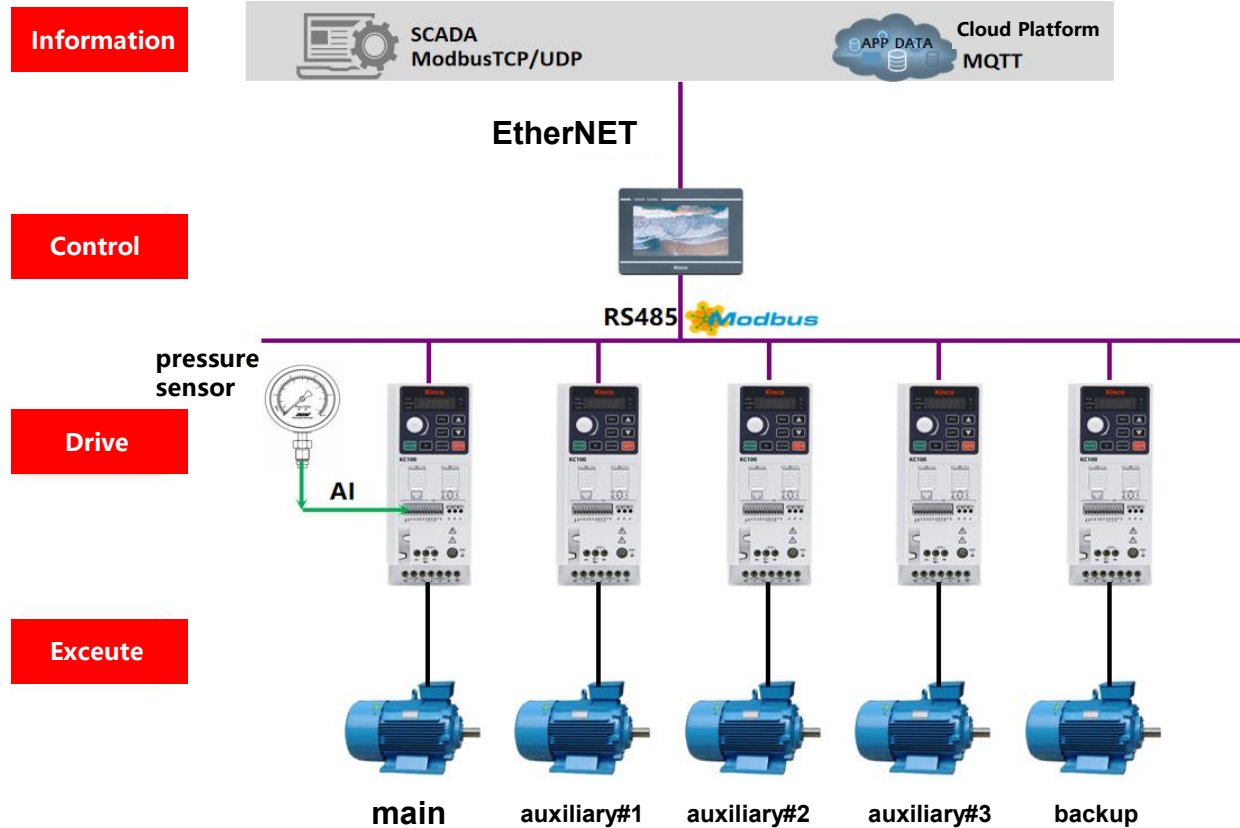
东风汽车

红旗

SHEIN

Kinco Typical Application

Fan and Pump



Kinco Solution

- KC100 series VFD + MK series (HMI + PLC combo)

Kinco Values

- **Easy-to-Use**
Special pump cycling control logic
- **Intelligent**
Water pump automatically sleep/wake up
- **Well-Performanced**
The best VF control to guarantee speed accuracy at full speed

Drilling Machine



Kinco Solution

PLC+HMI+Servo+VFD solution for 3-axis and 4-axis CNC machine tools

Kinco Values

- **Performance**

The best VF control. It will guarantee speed accuracy at full speed

- **Peek Frequency**

Output frequency up to 2000Hz when VF control

- **Integrated Solution**

PLC+HMI+Servo+VFD



Construction Robot (Plasterer)



Kinco Solution:

KC200 Series VFD

Kinco Values:

- 1. Performance:** The best VF control. It will guarantee speed accuracy at full speed
- 2. Independent air duct design:** Strong heat dissipation in narrow installation space
- 3. Suit for harsh environments:** Board layers greater than 75um





Kinco Solution: KC270 Crane Machine

Kinco Values:

1. **Low-frequency load carrying capacity:** It can avoid the runaway phenomenon during start-stop;
2. **Brake control logic:** It can avoid the phenomenon of walking hook during starting and stopping;
3. **Lifting control logic:** simplifying the number of functional parameters and simple debugging;
4. Dual-motor step-by-step drive, which can realise step-by-step drive for main hook walking and lifting;
5. **Protection:** Overload protection, limit protection, emergency stop device to ensure the safety and stability of lifting operations;



Kinco Products

Efficient Driver, Unlimited Power



KC100 series
Small Power Book-Type VFD

2S: 0.4~2.2kW
4T: 0.75~5.5kW



KC200 Series
General Purpose VFD

2S: 0.4~2.2kW
4T: 0.75~560KW

VFD Product Series-KC100



VFD Product Series - KC100



Superior Performance

- The new VF algorithm can realize 0.1Hz with 150% load stable operation, industry leading;
- **Voltage and current multi-level all-round suppression protection for the stable operation of the frequency converter.**

Rich Configuration

- **Wide input voltage range, applicable to different regions of the world grid voltage;**
- Standardly equipped with 50kHz high-speed pulse input and output terminals, built-in braking unit, suitable for different low-power application scenarios.

Easy to Operate

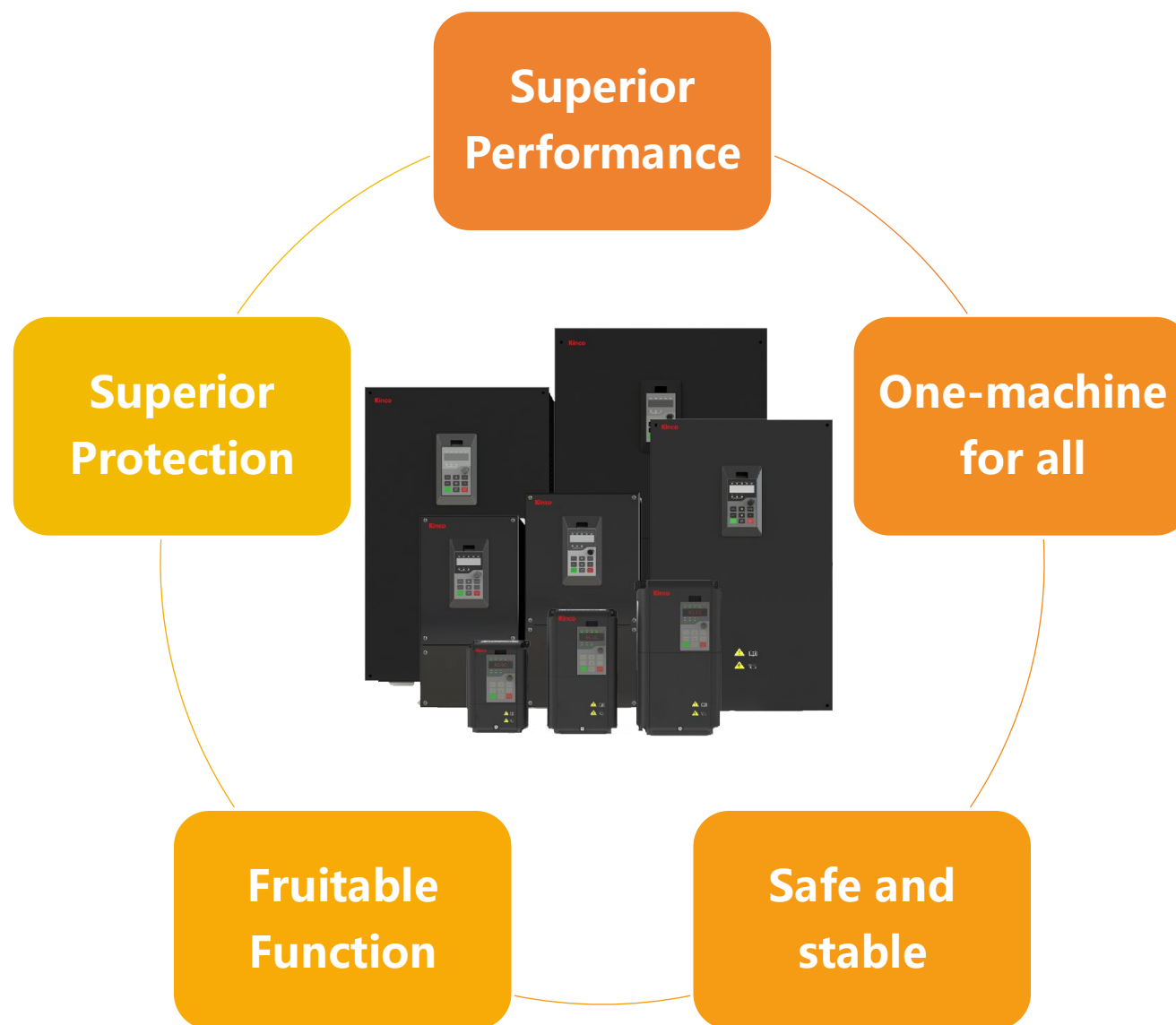
- Configuration of pluggable plug-in terminals, wiring, maintenance is more convenient;
- Optional rail mounting is available.

Safe and Stable

- Independent cooling channels to improve cooling efficiency while effectively avoiding foreign object intrusion;
- The boards are coated with more than 75um (up to 3C3 standard) for longer service life in harsh environments;
- Equipped with wave-by-wave current limiting to avoid overcurrent faults caused by sudden loads or abnormal current conditions;



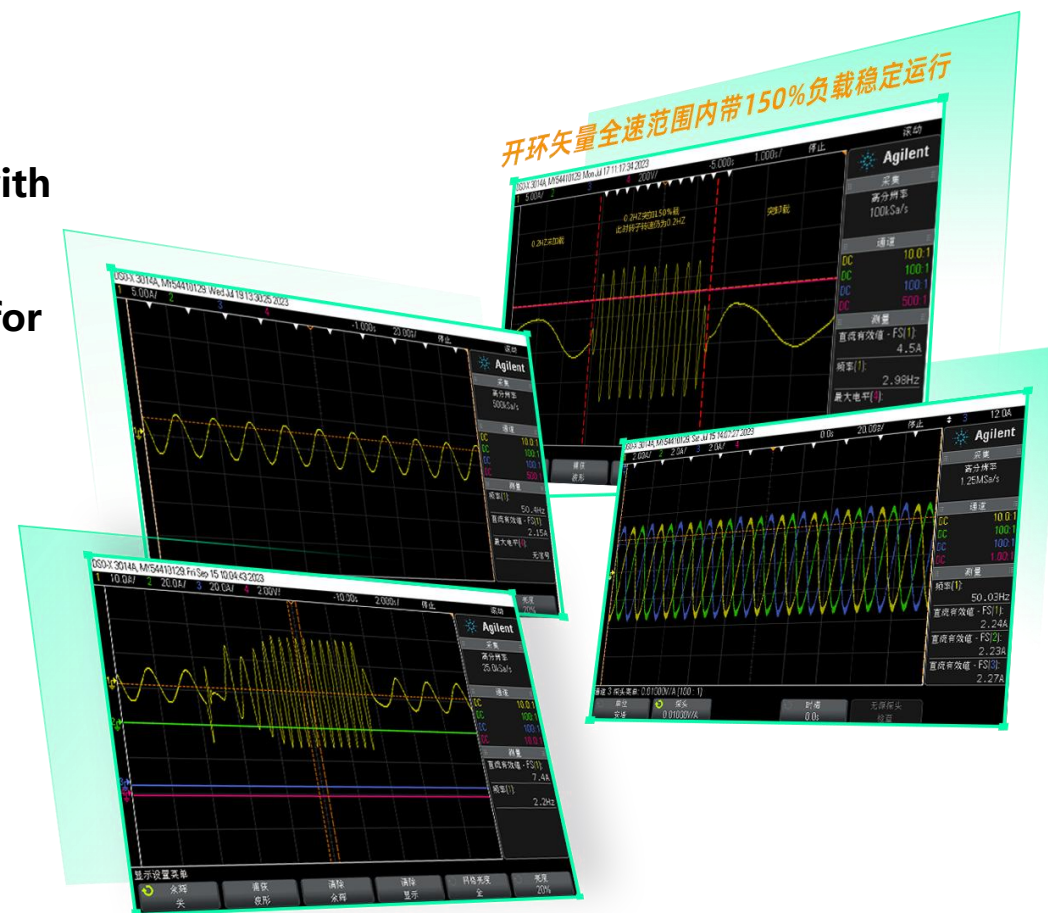
VFD Product Series-KC200



VFD Product Series - KC200

Superior Performance

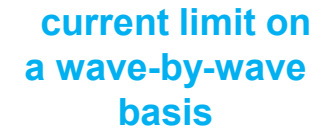
- The new VF algorithm achieves stable operation at a minimum of 0.1Hz with 150% load, leading the industry;
- The new SVC algorithm enables stable operation down to 0.1Hz with 150% load;
- Voltage and current multi-level all-round suppression protection for the stable operation of the frequency converter.



全新的高性能vf控制算法, 0.1Hz带150%负载稳定运行

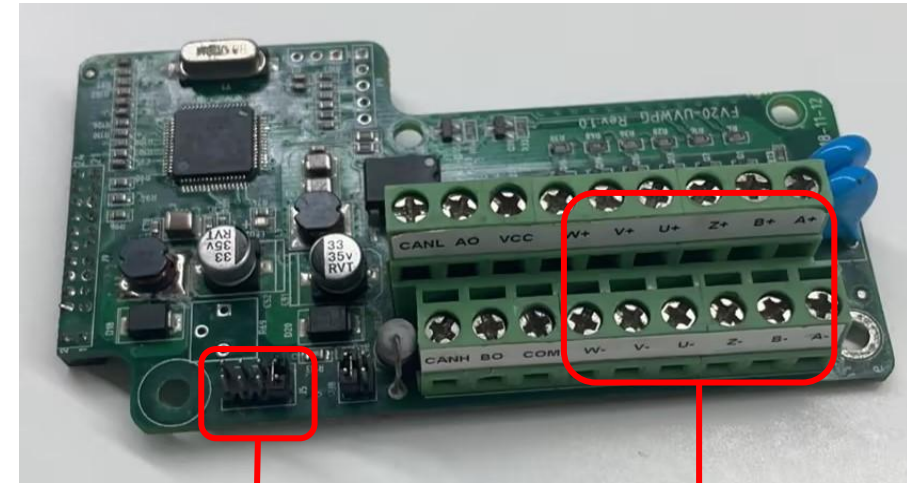
Kinco 步科
步科股份：688160

- Software + hardware dual overcurrent protection;
- Overvoltage protection triggered during operation is avoided by automatically adjusting the busbar voltage or by flux braking;
- Recover motor kinetic energy in case of instantaneous drop in bus voltage, instantaneous power loss without shutdown;
- The whole system is equipped with wave-by-wave current limiting as standard to avoid over-current faults caused by sudden load or abnormal current conditions;
- Automatically adjust the carrier frequency according to the temperature rise, efficient heat dissipation, high temperature operation without derating.



One machine for all

- Wide input voltage design, applicable to different regions of the world grid voltage;
- Support open-loop and closed-loop control algorithms for synchronous motors and asynchronous motors, applicable to various application scenarios;
- Analog signal range interval customization, applicable to a variety of types of sensor signals, more convenient;
- Incremental PG card supports 5V/12V/24V signals, one card for more convenience.



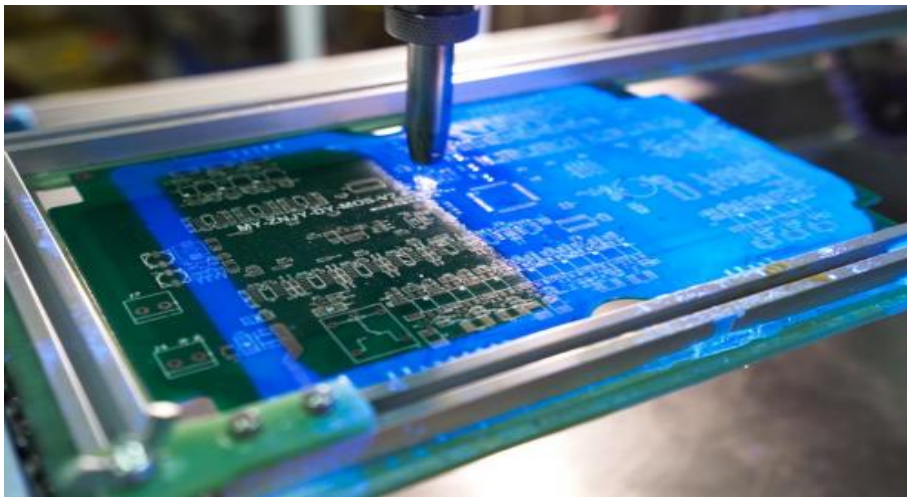
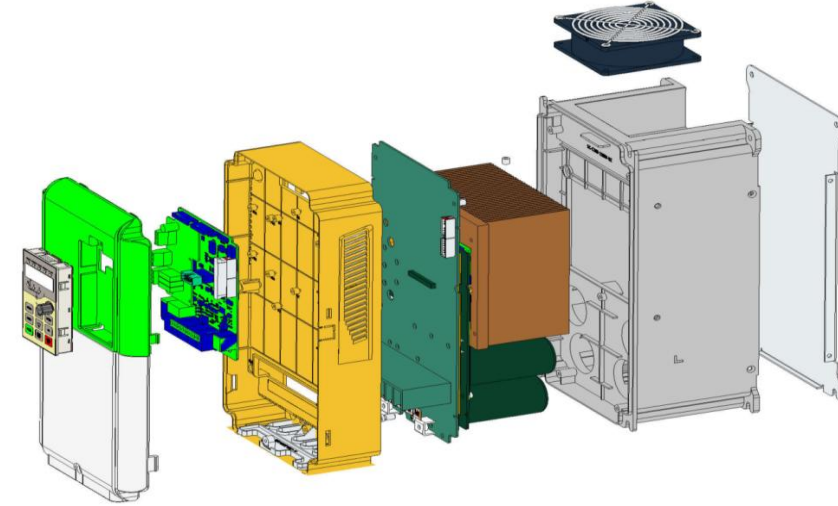
Encoder supply
voltage selection

Encoder
signal terminals

VFD Product Series - KC200

Feature-Rich

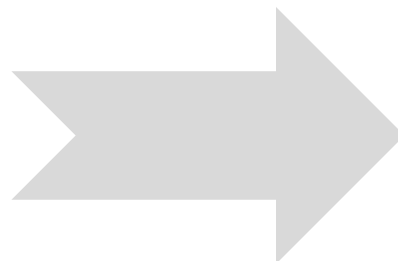
- New communication-based master-slave control logic, support up to 32 machines to run synchronously (lab data);
- **Modbus-RTU and CANopen communication methods are equipped as standard, which are not required in regular scenarios;**
- Standard with pendulum frequency, simple PLC control logic, segmented PID control logic, communication address mapping and other functions, debugging more convenient;
- Dual motor step-by-step drive, 100KHz high-speed pulse input and output, applicable to more scenes.



Safe and Stable

- Independent heat dissipation channel, improve heat dissipation efficiency at the same time, can effectively avoid the intrusion of foreign objects;
- The boards are coated with more than 75um (up to 3C3 standard) for longer service life in harsh environments;
- Equipped with wave-by-wave current limiting to avoid overcurrent faults caused by sudden loads or abnormal current conditions.

KC100 Features and Applications



Water supply/fan Special circulating pump control is suitable for secondary water supply industry Super strong low-frequency band load capacity is suitable for sewage pumps Built-in constant pressure water supply, sleep/wake-up functions, etc.



Transmission line
Super VF performance, easier to start
PN/EC communication conversion solution, more economical
FDT function can meet the needs of simple jacking, universal



High speed spindle
Super low frequency load capacity, can be started with load
VF control output frequency up to 2000Hz, the frequency range is wider
Software and hardware dual protection, more stable

KC200 Features and Applications



The maximum power is 400kW, which meets the common power requirements of customers

The super low frequency carrying capacity ensures the stable operation of the unit

Excellent heat dissipation performance to meet the long-term

Chemical Engineering



Suitable for a variety of motor types to meet various scenarios

Super low frequency carrying capacity to meet various process requirements

Board coatings greater than 75um, longer life in extreme

Heavy industry



Super low frequency load capacity start worry-free;

Excellent VF performance is required for heavy-duty high-power application scenarios such as football grinding, mixing, and pressing

Thank You

Kinco
