VEICHI

Stock Code: 688698

PRODUCT CATALOG

Contents

Inverter

Servo System

Control System

Industrial Machines

Smart IoT

Product Classification

01 Inverters

High, medium and low frequency inverters with excellent performance, rich functions,high reliability and operability, complete in all specifications. Widely applied in different occasions and fields, and widely accpected by customers.

02 Servo System

Stable and reliable performance accommodating to all sorts of industrial control devices, helps to raise production efficiency and product quality, and to reduce system cost and enhance market competitiveness.

03 Control System

Designed with multiple communication interfaces and control instructions, offering more efficient, more precise and more convenient industrial products and solutions.

04 Industial machines and SloTs

Integrated solutions from device access to acutal application at one stop, equipping companies with valuable industrial data.
End-to-end solutions with high reliability and effect realization for extensive use.


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Honorable Certification

Excellent independent research and development abilities and acclaimation earned Veichi the titles like Jiangsu provincial-level Enterprise Technology Center, Jiangsu Private-own Technical Enterprise, Specialized and sophisticated enterprises that produce new and unique products Jiangsu Engineering Research Center, Jiangsu New and High-tech Enterprise and Suzhou city-level Gazelle Company (High Growth Enterprise) and the highest level of credits.

Authorized patents for innovative technologies have topped 148 by the end of 12, 2022, including 36 patents for invention.

Honorable certifications for superb quality

148	36	91	21	62
Authorized patents	Patents for invention	Patent for utility models	Patent for design	Software copyright

R & D Capacity

01 Talents

We have gathered excellent professional and technical talents in the field of industrial control in China, and our R&D personnel account for 34.17% of the total employees, while technical personnel with bachelor's degree or above account for 90%.

02 Ideas

Adhering to the research and development concept of "strive for the better by innovating technologies", Veichi is always committed to providing customers with stable and trustworthy products and technical serives.

03 Investment

Annual R&D investment in Veichi accounts for about 10% of the revenue. EMC laboratory, safety laboratory, reliability laboratory, product performance testing laboratory and a number of experimental platforms for mulitple industrial applications are established successively.By increasing the R&D investment, Veichi is able to maintain it's technical advantages in the field of inverters, servo systems and control systems.

04 Achievements

By the end of 12, 2022, a total of 148 patents have been granted, including 36 invention patents, mainly in the areas of electrical transmission, industrial control, green energy, industrial automation equipment, etc.

05 Partners

The company has established in-depth cooperation with many famous universities and research institutions in China, and has set up "Jiangsu Postdoctoral Innovation Practice Base" and "Jiangsu Postgraduate Workstation" to continuously launch professional products with characteristics.

06 Modes

Veichi adopts EDA design concept :theoretical design, simulation verification (thermal simulation, circuit simulation, code simulation) - prototype implementation and IPD (Integrated Product Development) development process for efficient and collaborative development.

Inverters

Committed to provide better products for control industry

Veichi's AC series inverters are rich in functions, easy in use, reliable in performance, complete in specifications and suitable in various applications. We have provided more than 188 million sets of AC series inverters and related solutions that have been applied in various fields of industrial automation throughout China and outer world since 2017.
In the meantime, we have saved about 216 billion kW/h of electricity and reduced about 2152 tons of carbon dioxide emissions. Both quality and performance of our products have been unanimously recognized by our customers.

- Stable and reliable
- Well-adapted
- Comprehensive power rating
- Wide voltage range
- Abundant accessories


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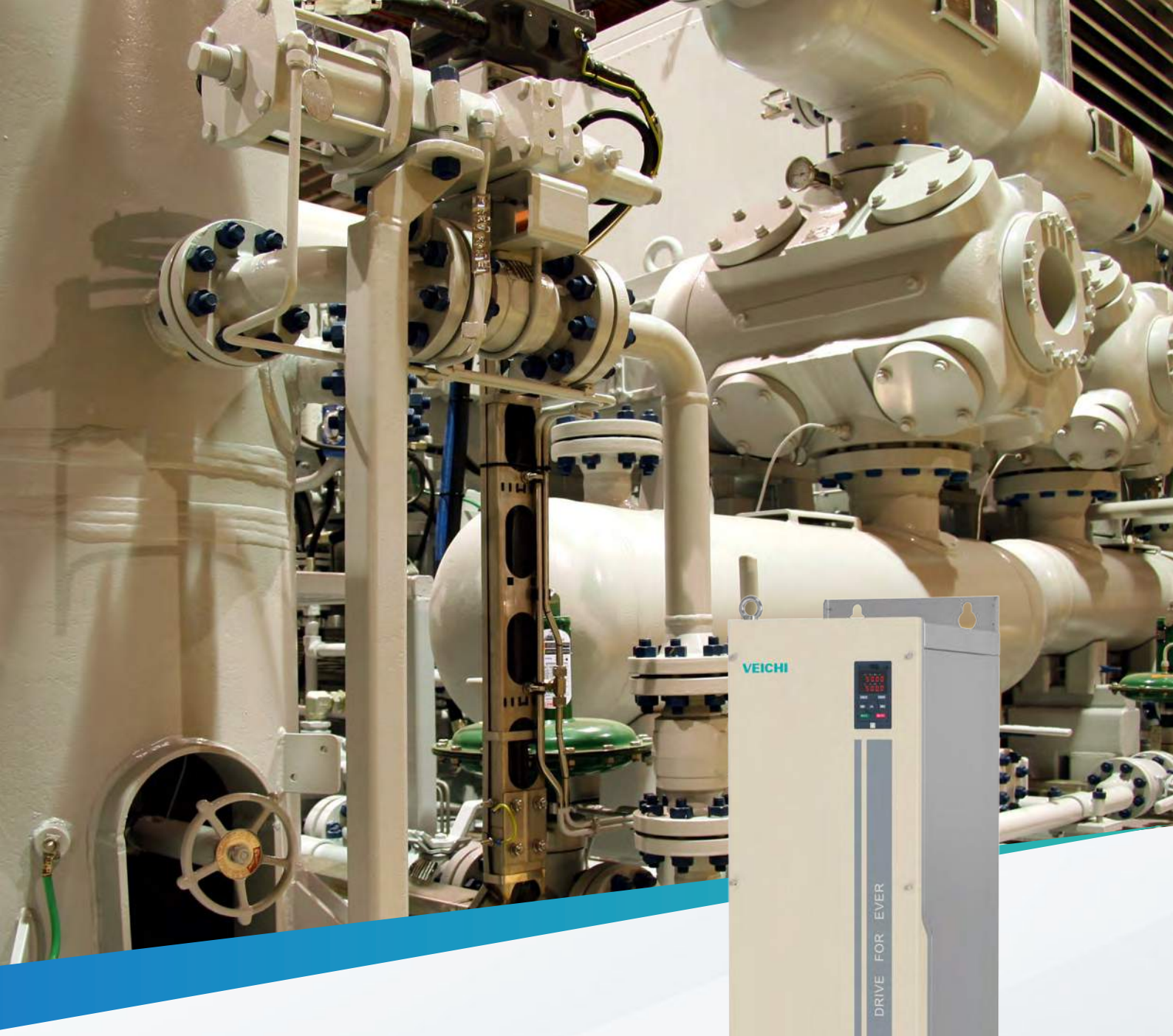


AC320-Series and Silicon Carbide High-speed Inverter

Single-phase 220V AC 50Hz/ 60Hz 0.75kW-15kW
Three-phase 220V AC 50Hz/ 60Hz 0.75kW-220kW
Three-phase 380V AC 50Hz/ 60Hz 0.75kW-1120kW
Three-phase 660V AC 50Hz/ 60Hz 22kW-1120kW

- High frequency output
- New hi-speed PM motor vectoring algorithm
- Applicable for high-frequency carrier
- High degree of protection
- High-efficiency and energy-saving

Features

High frequency output up to 3000Hz	Higher protection and adaptability	New optimized motor vector control algorithm platform to ensure continuous and stable operation under high-speed & high-carrier	Easy wiring & operation
Optimized circuit design, reduced product failure rate, prolonged service life	Improved efficiency of electric transmission system with high speed and high efficiency permanent magnet motor	High power density and reduced volume & weight for easy arrangement	Outstanding EMC rating & anti-interference performance

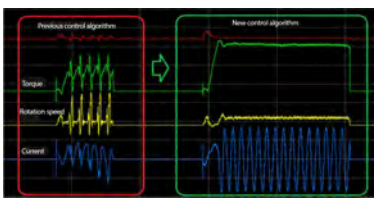
Description

AC320-Series & silicon carbide-series inverters are applicable for high-speed and high-carrier motors. Both products have excellent resistance to high voltage, high temperature, low loss and such, fully meeting the requirements of high efficiency, compact size and low weight in power electronic systems. Recently developed SIC power device inverter between 380V-480V has been used more in the new energy vehicles, photovoltaic power generation, hydrogen fuel cells, industrial power supply and other fields. As to the AC320 series inverter, except for its usage on high-speed magnetic levitation and permanent magnet high-speed air compressors, it has achieved notable grades on the general inverter market, exhibiting excellent competitiveness and vitality.

Characteristics

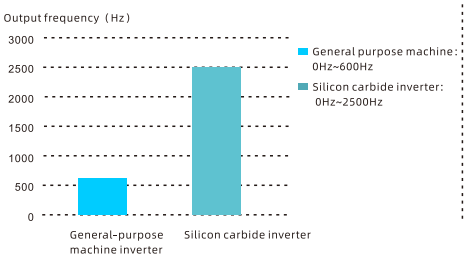
New hi-speed PM motor vectoring algorithm

New hi-speed PM motor vectoring algorithm algorithm enables 200% of the rated torque at OHz under open-loop control.



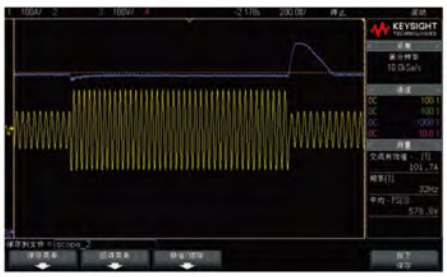
High frequency output

Excellent space vector pulse width modulation technology leads to motor drive frequency reaching 2500Hz, carrier 20KHz-40KHz.



Accurate decoupling and fast response

Precise decoupling with high-speed motor torque & excitation adds with excellent dynamic response performance.



Applicable Industries

It can be widely used in magnetic levitation, particular machinery, refrigeration system, chemical industry, biopharmaceutical and other industries.

AC01 – Series Network Inverter

Single-phase 220V AC 50Hz/60Hz 0.4kW-4kW
Three-phase 380V AC 50Hz/60Hz 0.75kW-7.5kW

- Easy operation & application
- Compact volume & structure
- Hardware optimized for higher stability
- Standard product with various certificates
- Reliable performance and rich functions

Features

Book-type design for smaller size and larger power density	Easy network-based design for parallel installation and instant application	UL, CE, TUV, EAC certificated	Rich software functions for various AC motor field debugging
Covered with 100% highly protective UV adhesive	Load scanning algorithm to reduce energy consumption	Convenient upper computer software for quick field debugging and monitoring	Full protection for running voltage, temperature and current

Description

AC01 - Series network inverter is designed especially for food machineries, transmission bands, fans and pumps, and textile machineries, which is of high power and high density and can offer drive with simple speed regulation, reduced energy and improved efficiency. It can also be used for occasions that requires high accuracy like permanent magnet synchronous motors, covering several industries and featuring higher cost performance.

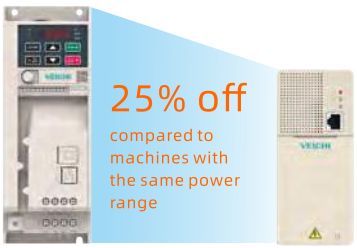
Characteristics

High reliability

AC01-series products are all produced from fully automated production lines and further processes of tests, aging, packaging all completed automatically. Standard production procedures and quality management, three-anti painting covering 100% auxiliary product core parts together deliver higher performance.

Smaller size

Brand-new heat dissipation structure on AC01 network inverters with improved circuit saves over 25% of the original volume, thus it's easier to install and assembly.



Higher software integration

AC01 network inverters boast quick debugging and regulation, that is install and employ. Equipped with drive algorithms of asynchronous motors, permanent magnet synchronous motors, spindle motors and servo motors, it can drive for different fields.

Applicable Industries

Fans and pumps, logistics, food machineries and textile.

AC800-series Engineering Inverter for Multi-motors

Inverter module:
400V level (three-phase power supply) : 2.2kW-500kW
Grade 690V (three-phase power supply) : 55kW-710kW

Active rectifier module:
400V level {three-phase power supply) : 64kW-560kW
690V level {three-phase power supply) : 117kW-639kW

Active rectifier four quadrant inverter cabinet machine:
400V level {three-phase power supply) : 55kW-2800kW
690V level {three-phase power supply) : 55kW-5600kW

- Excellent control performance
- Convenient and quick debugging tools
- Modular design, common DC busbar solution
- Multiple extension interfaces for all kinds of needs
- Multiple fault handling & protections for safety and stability

Features

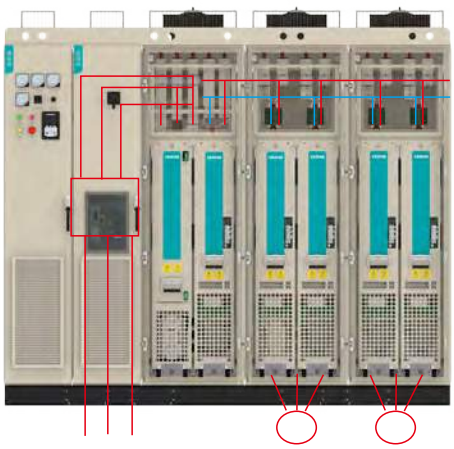
ARM+FPGA dual-chip control framework for high-speed and high-precision loop control operations	Open-loop and closed-loop vector control	Multiple communication protocols like Modbus, Profibus-DP, Profinet, CANopen, etc.	Independent standard module design for flexible configuration selection and book-type design for size reduction
Common DC busbar saving energy and user cost, reducing wiring difficulty and consumption, supporting for multi-module parallel machines	AFE active rectifier, effectively reducing the harmonic content of the grid side, "perfect harmonic-free"	Easy debugging and setting, multi-functional keyboard with Bluetooth, parameter copy and recovery	Multiple fault handling and protection means for safety and stability, supporting STD function

Description

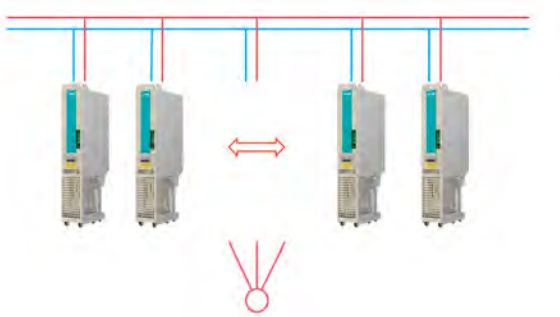
AC800-series engineering inverter for multi-motors is a high-performance, high-end inverter developed by Veichi after years of technical accumulation, in-depth market research and demand analysis. With excellent control performance, modular design, common DC busbar solution, convenient and quick debugging tools, abundant expansion interfaces, multiple fault handling and protection means etc., it can provide the drive core for energy saving and emission reduction and to meet the diversified inverter needs of industrial enterprises.

Modular design

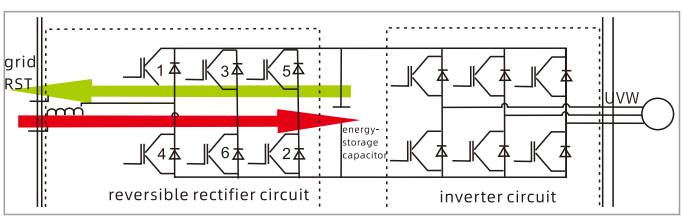
Common DC busbar solutions



Parallel high power solutions



AFE active rectifier quadrant technology



AC830-Series Four-quadrant Inverter

Cabinet unit :
400V class (three-phase power): 45-355kW
690V class (three-phase power): 45-560kW

- AFE active rectifier
- Super efficient and energy-saving drive
- High speed and high precision loop control operation
- High-speed drives for synchronous, asynchronous and high-speed motors
- Easy and fast debugging tools

Features

AFE active rectifier, effectively reducing the harmonic content of the grid side, "perfect harmonic-free"

ARM+FPGA dual-chip control structure, high-speed and high-precision loop control operations

Compatible for asynchronous, synchronous and high-speed motor

Easy debugging and setting, multi-functional keyboard with Bluetooth, parameter copy and recovery

Multiple fault handling and protection means for safety and stability

Super-efficient energy-saving

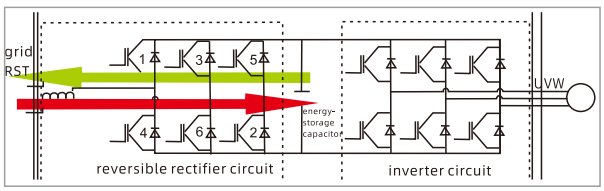
Random carrier technology for a comfortable industrial environment

Description

AC830 series four-quadrant cabinet inverter adopts ARM+FPGA dual-chip control structure platform to ensure the excellence of dynamic response and control accuracy of the drive system.

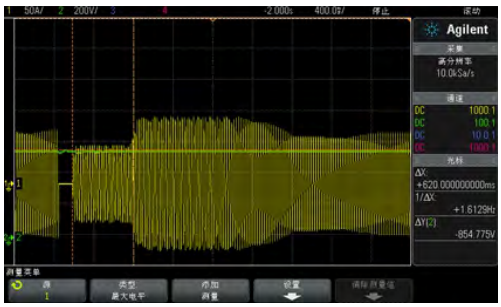
The AFE fully controlled rectifier ensures that the harmonics fed back to the grid do not exceed 5%, and is equipped with a convenient multi-function LCD keyboard with Bluetooth for easy and convenient debugging of handheld devices, and supports parameter copying and recovery.

AFE active rectifier four-quadrant technology



Performance control and torque tracking

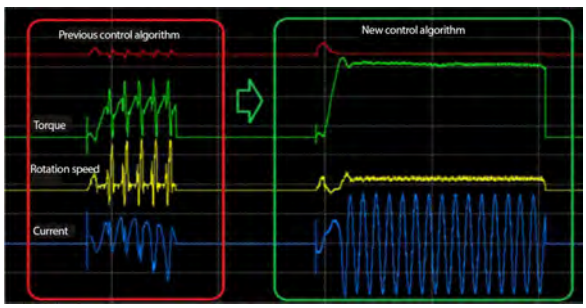
In the large inertia equipments, the remanence voltage is large when shutdown and restart, so the remanence magnitude and phase can be estimated directly and then pre-excited during rotation and acceleration.



Open-loop and closed-loop vector control

Open-loop vector control , 0.5Hz 150% starting torque

Closed-loop vector control , 0Hz 200% starting torque



Convenient debugging means

ACH100 Series
Medium-voltage Inverter

Three-phase 6kV: 250kW-13000kW
Three-phase 10kV: 315kW-17000kW

- SM and AM , open-loop and closed-loop vector drives supported
- Extra high potency
- Wide margin, high reliability design
- Abundant communic-ation & terminal extension interfaces
- Multi-model supply like all-in-one machines & split machine

Features

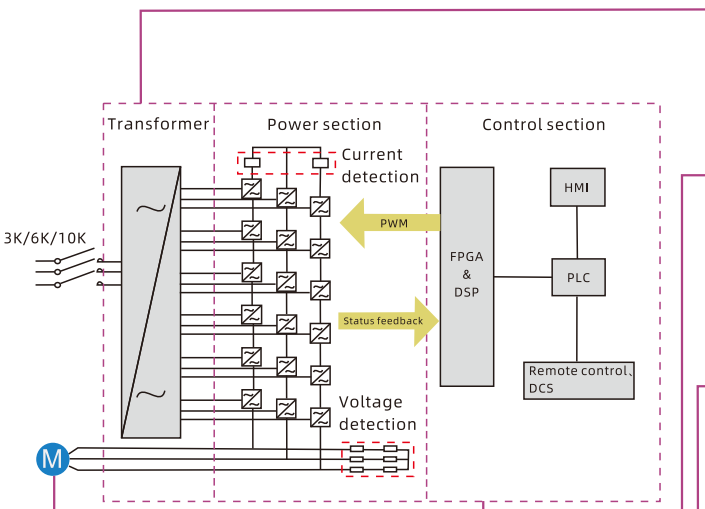
Innovative hardware technology and open - loop vector control algorithm bring high reliability, low harmonics and high efficiency	High and low voltage RT bring adaptability of the power grid fluctuation	Optical fiber communication and optical coupling isolation bring strong and weak electrical isolation and higher safety and reliability	Power unit is designed with automatic bypass function
Input by multiple phase shifted rectifier while output by multi-level drive thus drive perfectly without harmonics	Parameter setting in Chinese and fault checking interface are easy for users to operate	Master-slave control and automatic control of the power balance are applicable for multi-electric perfect harmonic-free operator systems, such belt conveyor in mine, etc.	Multiple communication bus expansion is suitable for Modbus TCP/IP, CAN open, Profibud DP and other communication protocols

Description

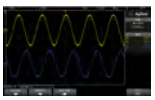
ACH100-Series medium voltage inverter speed control system is developed for high - high voltage source-type inverters, with advanced input phase shifting rectification, innovative bridge inverter technology, optimized series superposition technology, DSP + FPGA dual-core control, vector control algorithm, resulting in high control accuracy, fast dynamic response, low frequency output torque, high power factor, low harmonic content, and that input and output current waveforms are close to sinusoidal waveforms, which therefore, is known as "perfect harmonic-free" frequency converters.

ACH100 series medium voltage inverter has the advantages of stable and reliable operation, precise control, easy maintenance, high operating efficiency and convenient operation, which can significantly improve the operating conditions of motors, fans and pumps in industrial and mining enterprises, reduce the system operation and maintenance costs, and ensure that competitiveness is further improved during production so that enterprises can benefit from the application of this inverter.

Description on high-voltage frequency conversion speed control system



Phase shift rectifier transformer provides an independent isolated power supply for each unit, and phase shift rectification has minimal impact on the power grid. The input current and voltage waveform at 80% load shown in the figure

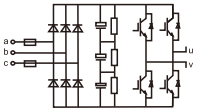


Introduction to Main control System

- The master control system adopts touch screen + PLC + main control board serial structure to reduce data loop, to balance the pressure of data processing of each module. All data transmission are done by serial communication to enhance anti-panic ability, and ensure long-term stable operation of the system.
- DSP + FPGA combination control is adopted in the master control core part, so the main frequency of 100M DSP enables high-speed data processing and instantaneity in the system. FPGA internal logic clock goes up to 150M, and the modules communicate with no delay basically, the parallel processing of data is to accelerate the logic operation and system protection.
- Human-machine interface all in Chinese is user-friendly for operation and fault status check, and PLC module is designed for on-site electrical control and external communication interface.

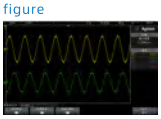
The schematic diagram of the main loop of the power unit is shown below. It is mainly composed of the rectifier bridge, electrolytic capacitor and IGBT. The unique double-sided frequency doubling drive technology is adopted to greatly reduce the heat of the IGBT and make the system run more stably. Modular structure eases further installation and maintenance.

Unit-driven waveform



Output voltage waveform of the unit

Power unit series stacked output perfect sine wave, output waveform at 80% load, as shown in the figure



Servo System

faster and preciser， better products for Made in China 2025 initiative

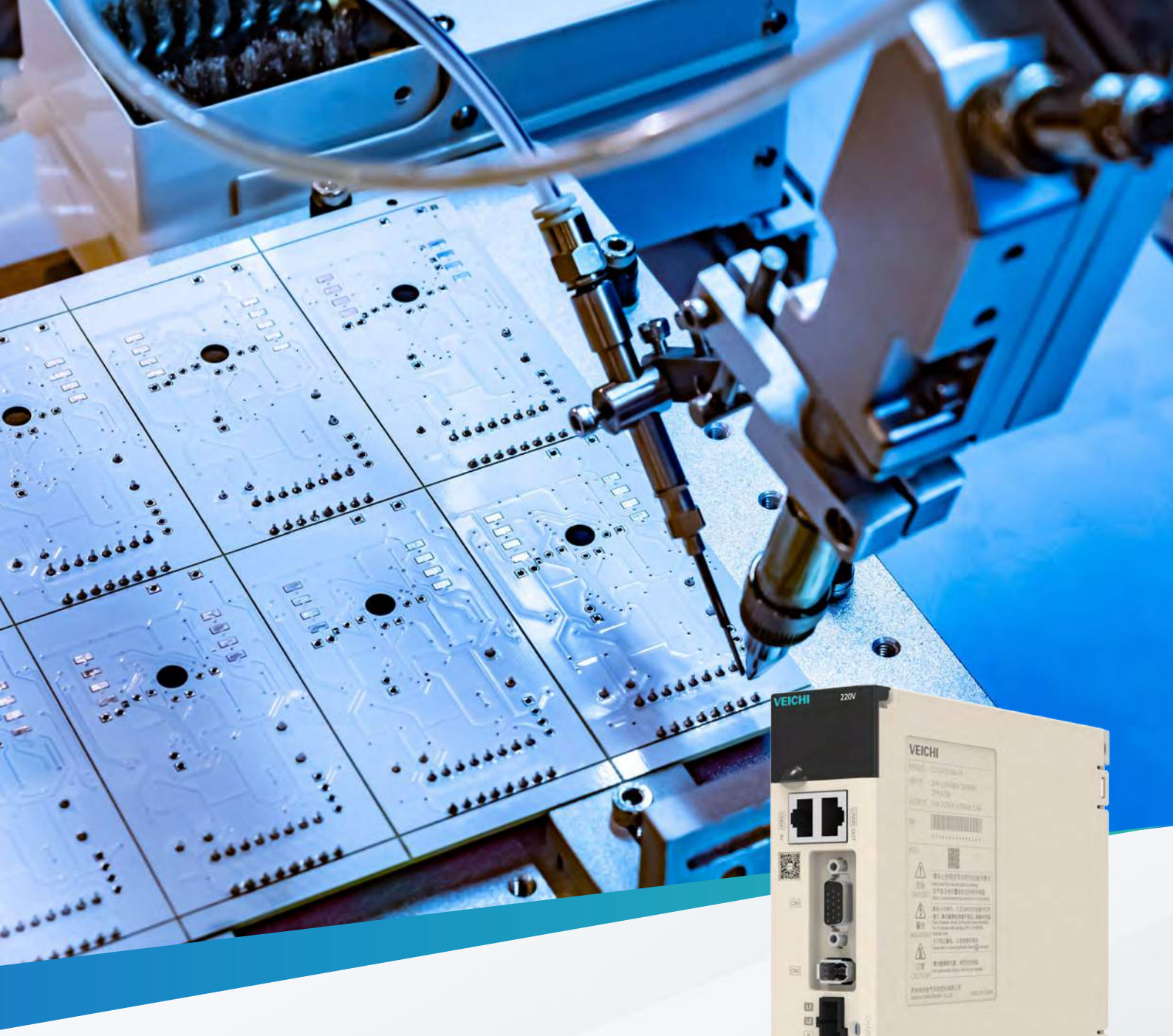
multi-functions

mighty performance

multi-bus

smart and user-friendly

steady and faithworthy



SD710-Series
General-purpose Servo System

- debugging and upgrading of upper computer
- copy of drive parameters
- automatic parameter tuning
- structural upgrade for smaller size
- compatible with 17bit and 23bit absolute encoders

Features

Together with 23bit motor, the loop bandwidth can reach 3kHz, and thus can be adapted to different high and mid-day requirements	Micro USB interface & RS485 communication as standard, while CANopen communication & EtherCAT communication as optional	Widely used in 3C, woodworking, packaging, printing, logistics, food, textile, medical electronics, environmental protection and other industries	Step-by-step installation guide for easier operation
Debugging software with drive parameters copy function to eliminate the tedious parameters setting the same model	Hardware & structural upgrades and smaller size	Absolute encoder with power-cut position memory ensures 3+ battery life; Diffident resolution encoders ensures all kinds of applications	Intelligent control runs with the different mechanical structures to complete to achieve automatic setting of a variety of complex loop parameters without human work

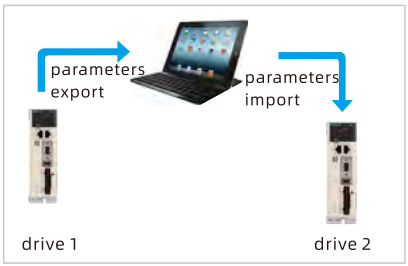
Characteristics

Debugging and upgrading of upper computer

Step-by-step installation guide for easier operation

Copy of drive parameters

The debugging software enanles copy function of drive parameters, eliminating the tedious setting parameters of the same model



Automatic parameter turning

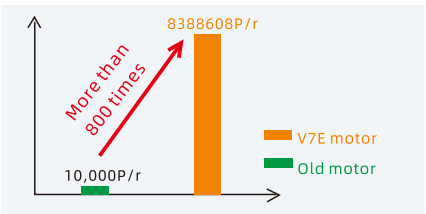
1. Runs according to different mechanical structures
2. Completes the automatic setting of various complex loop parameters
3. Enables automatic setting according to mechanical conditions, without manual operation
4. Enables position setting time up to 10ms

differentiated handling for lead screw, synchronous belt, rigid body and other mechanical structures

Compatible with 17/23 bit resolution encoder

Absolute encoder with power-cut position memory for 3+ battery life;

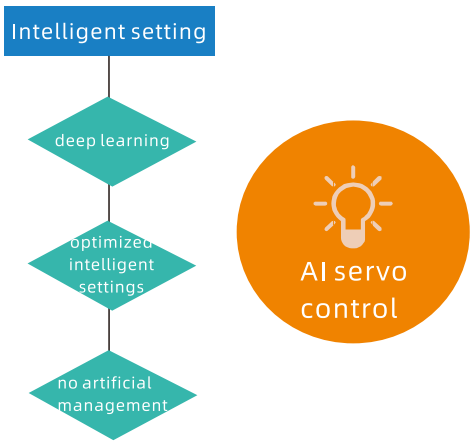
Diffident resolution encoders for all kinds of applications.



Hardware & structure upgrade and smaller size

Hardware and structural upgrades, together with SRS models, reduce 30% of the whole volume.

SD710 SD700



Applicable Industries

Used in packaging machines, 3C electronics, woodworking, engraving machines and other industries.

SD500-Series Spindle Servo System

- Standard dual encoder interface, fully closed-loop vector control
- Self-adjusting optimal loop parameters
- Precise positioning and speed regulation
- Sensitive load responsiveness
- Large low-frequency torque, wide speed range

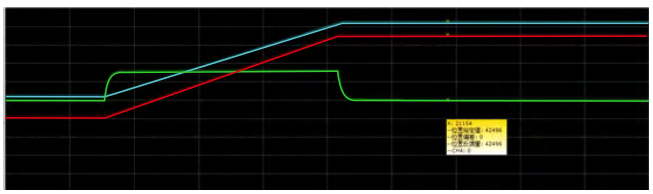
Features

Open-loop, closed-loop vector control and MIII bus communication are supported, synchronous and asynchronous drives are integrated	Accurate speed and position control are supported with a positioning accuracy reaching of ±1 pulse	Powerful self-learning is developed that motor parameters, encoder, system inertia and speed loop parameters are all self-adjusting	Wider constant torque output platform and stronger weak magnetic acceleration is developed
Multi-stage quasi-stop position reduces rigid tapping error to ±2%	Easy one-key operation for zero position is developed	Strong current limiting and overload capacity for the hardwares leads to adaptability to all kinds of harsh working conditions	Eighty kinds of fault protection for comprehensive product safety are developed

Characteristics

Highly accurate position deviation control

Position control deviations down to 0 pulses

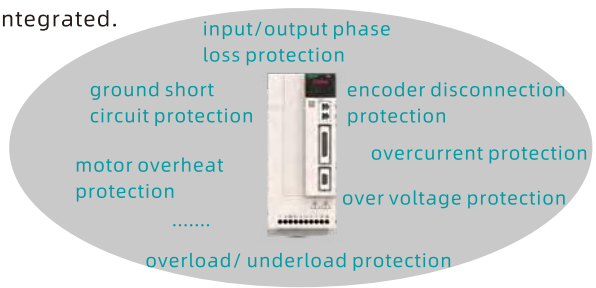


Improved interfaces

Six-way switch + one-way High-speed input switch	Two-way encoder input + one-way differential output with arbitrary frequency division	Two-way collector output + two-way relay output	Equipped with 5V, 10V, 24V external power supply	One-way bipolar analog input + one-way unipolar analog input + one-way analog output

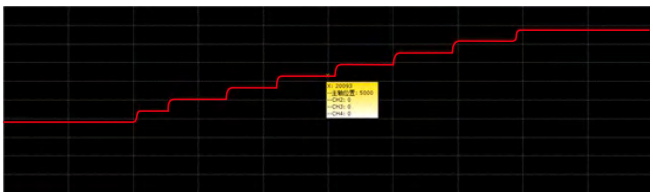
Improved protection

Short-circuit protection to ground, input/output phase failure protection, encoder disconnection protection, over-current protection, over-voltage protection, overload/light load protection, motor overheating protection and others are integrated.



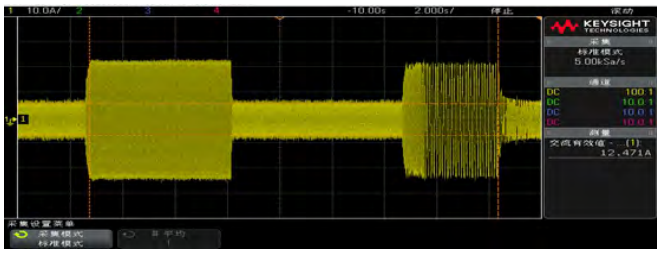
Powerful functions

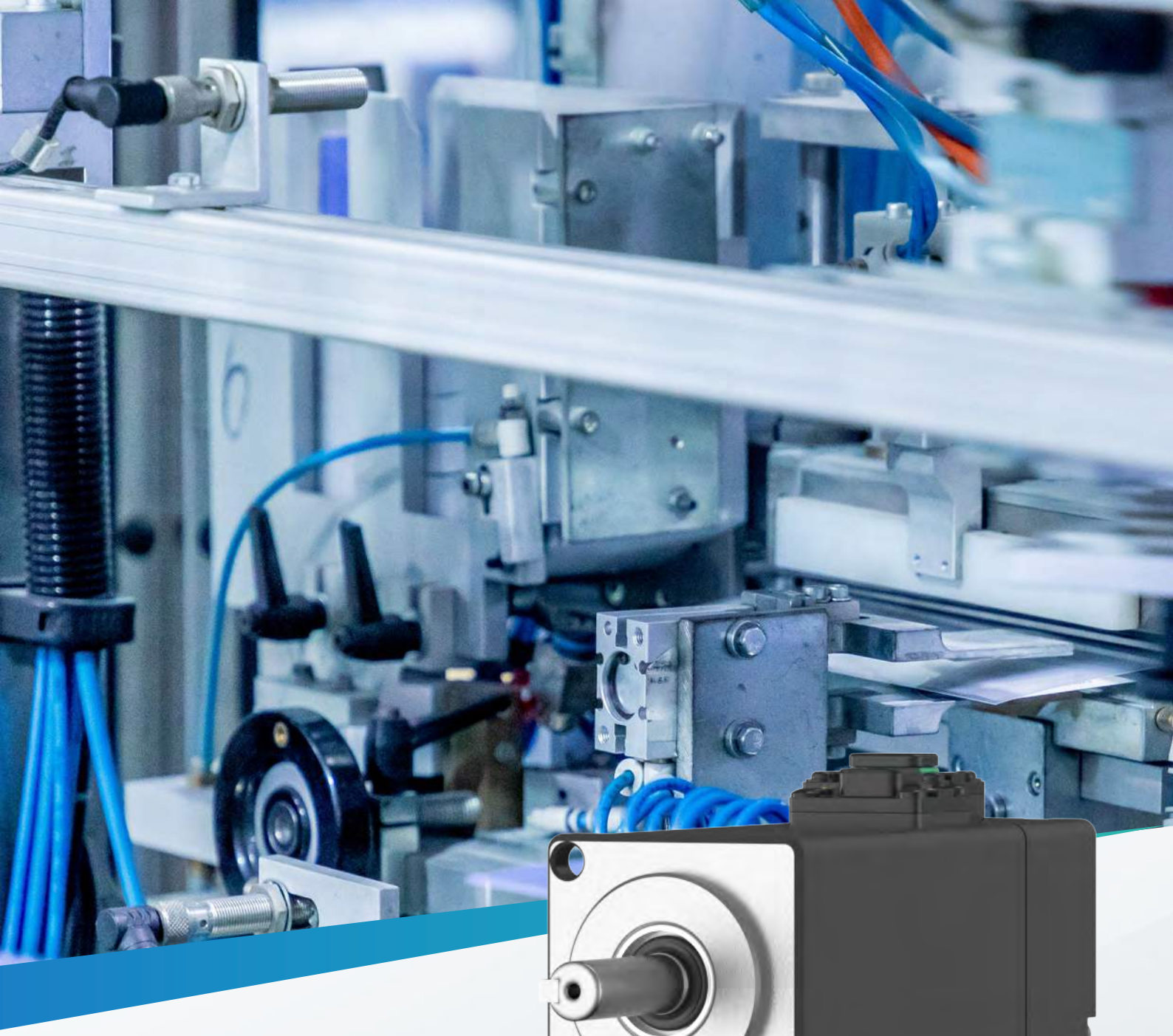
Position, speed and torque control; asynchronous motor / synchronous motor, V / F, open-loop & closed-loop vector control; multiple-pulses positioning method; inertia recognition, self-tuning loop parameters ; 8 index quasi-stop control; position swing; one-key setting for zero point; PID control and all other functions meet a variety of needs



Superior system performance

Superior current vector control algorithm	outstanding frequency conversion & energy saving control
Wide range of speed regulation & low speed pulsation at ultra-high speed	Accurate torque control & stable power output
Safe and reliable hardware	Large low frequency torque & stable speed
Fast position control response & high accuracy	Satisfactory load dynamic & static response control





V7U-Series Motor

UI international certificate

Low temperature rise

High performance

Strong protection

Compact body

Features

Fully upgraded hardware protection and anti-interference	Qualified for the US UL certificate and European Union CE certificate	Insulation grade up to F	Overload capacity up to 3~4 times
Low loss silicon steel sheet adopted for higher efficiency	Precise dynamic balance for faster response	Lower temperature rise	Smaller size and lighter with 20% volume off compared to previous products

Characteristics

Full series with the CE & UL certificate

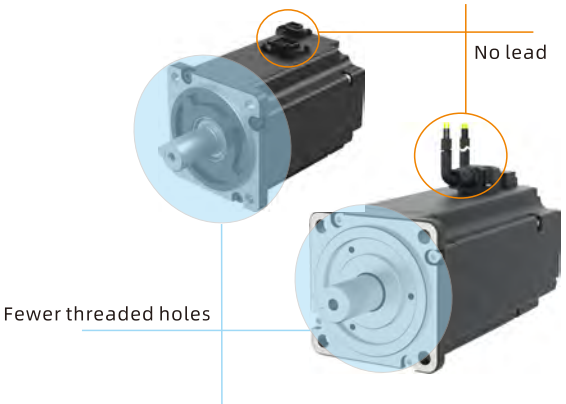
Models of V7U -Series all have certified by CE & UL that all of the parts inside have met the according requirements .

Insulation grade F

V7U -Series motors allow for 155℃maximum and winding temperature rise is limited up to 100(k), taking on stronger temperature resistance and longer service life.

No lead outside for tidier look

V7U-Series motors looks tidier since they are designed with terminal wiring without the lead outside and with integrated end caps without that many perforations.

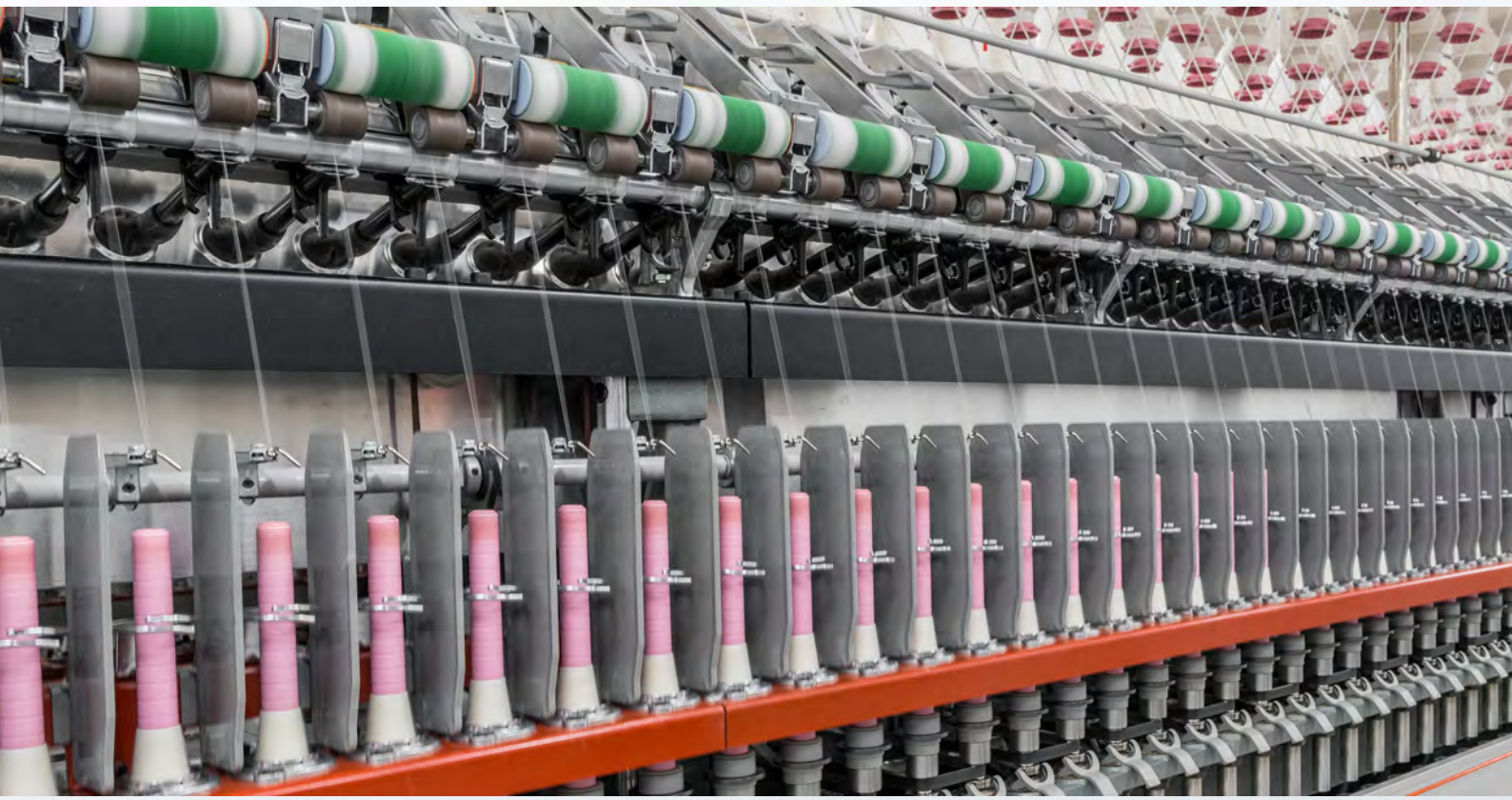


V7E characteristics maintained

Developed on the same platform with high mechanized process as V7E-series motors, V7U motors feature low temperature rise and compact size.

Control System

Beautiful shape, excellent performance, high quality, precise control brought by correct choice



Novel structure design

Flexible extensions

Multiple position & motion control functions

Convenient application

Mainstream industrial bus solutions


VEICHI
VS-MC104
AXIS-1
AXIS-2
AXIS-3
AXIS-4

VC3-Series PLC

User programs supported up to 64K steps

High-speed eight-way pulse input & output at 200khz

Convenient firmware upgrade

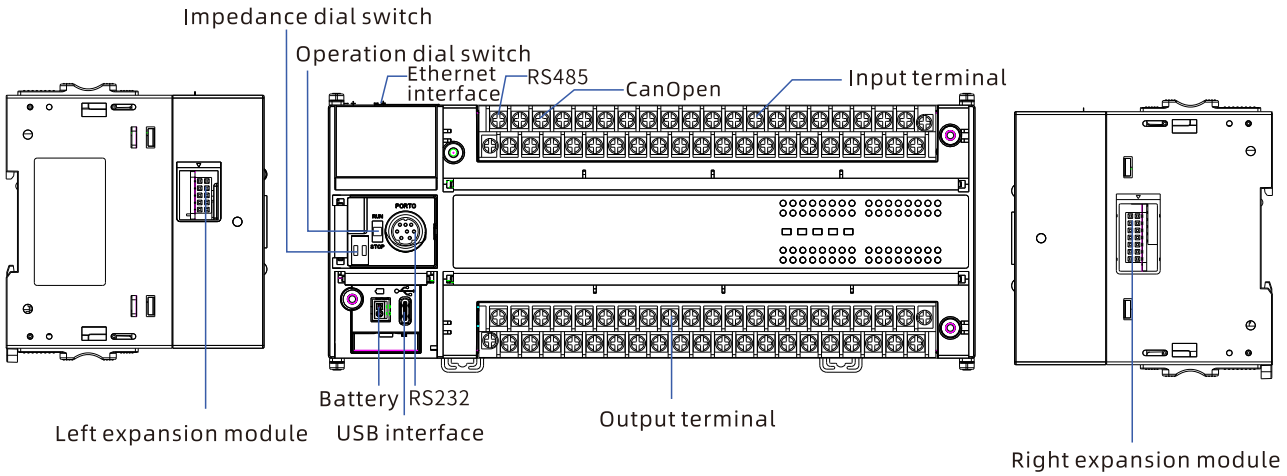
CAN open supported

Right expansion module IO & Special module supported

Features

CAN open communication (301 / 402 protocol)	Eight-way pulse input & output at 200khz & multiple positioning methods	8-way pulse input at 200Khz;8-way of IO external interrupt function	15 expansion modules max
Ethernet ModbusTCP & Program upload\ download supported	USB communication supported making debugging more convenient and fast	Compact structure but powerful, showing a very high cost performance	impact structure with powerful functions, together gaining a high capacity-price ratio

Port Description



Specifications

Designation	Parameter
Program data capacity	64K
Basic instruction execution duration	0.065us
Serial port communication	One-way for RS232, and one way for Rs485
CAN communication	CAN open （301/402 protocol）
Ethernet	Modbus TCP & upload\download
High-speed input	High-spead eight-way input at 200khz
High-speed output	High-spead eight-way onput at 200khz
Extension Modules	15 extensions max
Programming Languages	LD/SFC supported
USB	Upload/download and firmware upgrade
Positioning	Multi-positioning modes

VI20-Series Touch Screen

- High-definition &high-brightness LCD display with a maximum viewing angle of 170°
- 300+ protocols local parsing, MQTT supported
- VPN and routing, digital storage supported
- PLC remote download & data configuration
- Historical data search

Features

High-definition and high-brightness LCD display with a maximum viewing angle of 170°	Edge computing with strong embedded runtime software, i.e. edge computing software	Flink IOT expansion module supported through which field device data can be remotely configured	Cloud platform FlexCloud supported based on the B/5 structure of the powerful SAAS platform
Expansion module card slot for: FLink, FLink-2G(-A), FLink-4G(-A), FLink-4G(-C), Flink-WiFi(-A)	Map monitoring	Data report	Mobile APP

Description

Veichi V120-series products, a new generation of IoT HMI, housed with industrial ABS plastic thus low cost, adopts highly reliable new mold, more practical downward wire exit and redesigned elegant appearance.And there are products with higher resolution models for your choice.

With the optional FLink IoT module, IoT HMI can be upgraded immediately and customers can enjoy the complete industrial IoT cloud platform service.

Specifications

	Model	VI20-043S-F	VI20-070S-F	VI20-070S-FE	VI20-101S-F	VI20-101S-FE	VI20-156S-FE
Hardware parameters	Display screen	4.3" 16:9 TFT LCD screen	7" 16:9 TFT LCD screen		10.1" 16:9 TFT LCD screen		15.6" 16:9 TFT LCD screen
	Resolution	800×480	1024×600				1920×1080
	Color	16 bits	24 bits				65K
	Brightness	250 cd/m²	350 cd/m²			400 cd/m²	250 cd/m²
	Backlight		LED				
	LCD life		50000 hours				
	Touch screen		4-wire industrial resistive touch screen				
	CPU	720MHz ARM	600MHz ARM Cortex-A8				1G ARM Cortex-A8
	Memory	64MB RAM+128MB Flash	128M Flash + 128M DDR3				256MB FLASH+ 512MB DDR3
	RTC	With	Built-in real-time clock				
	SD card	Without					Micro SD (TF) card
	Ethernet	Without	Without	1 channel 10M/100M adaptive	Without	1 channel 10M/100M adaptive	2 channel 10M/100M adaptive
	USB port	One Type-C OTG interface	One USB Slave 2.0 port; One USB Host 2.0 port				
	Program download method	USB Slave/U Disk (adapter cable required)	USB Slave/U Disk	USB Slave/U Disk/ Ethernet	USB Slave/U Disk	USB Slave/U Disk/ Ethernet	USB Slave/U Disk/ Ethernet
	Serial communication interface	COM1: RS232/RS485/RS422 COM3: RS232	COM1:RS232/RS485/RS422 COM2:RS485 COM3:RS232	COM1:RS232/RS485/RS422 COM2:RS485 COM3:RS232	COM1: RS232/RS485/RS422 COM3: RS232	COM1:RS232/RS485/RS422 COM2:RS485 COM3:RS232	COM1/ COM3: RS232/RS485/RS422; COM2: RS485/RS422
	LCD viewing angle (T/B/L/R)	80°/80°/80°/80°	85°/85°/85°/85°				

Solar Pumping Inverter

Beautiful and unique look

SIoT

MPPT+ multiple protection

Drives a wide range of machines

Superior performance, multi-functional

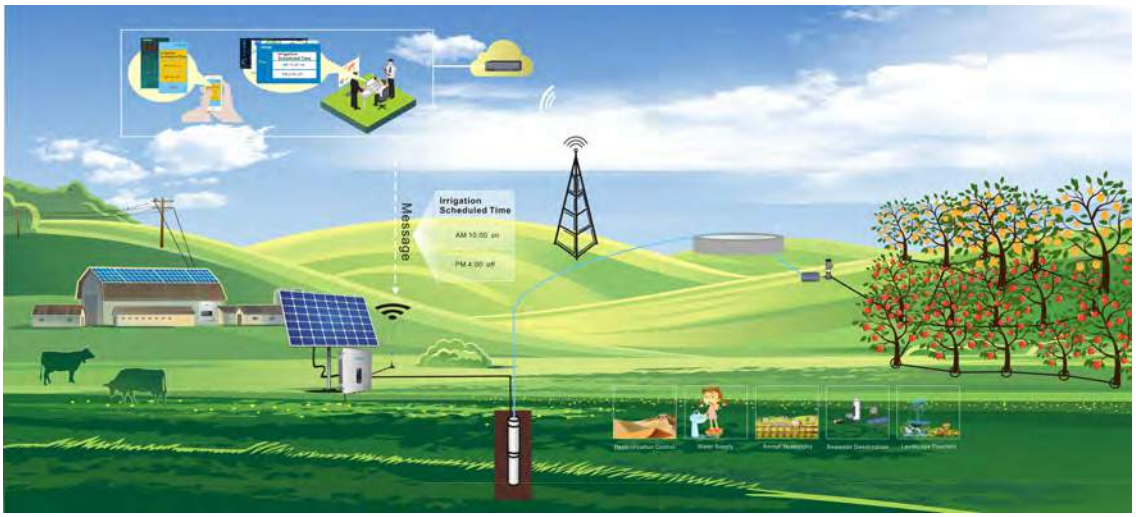
Features

SIoT for Smart Irrigation	Wireless transmission and one-key operation via APP	High reliability, high power density, high applicability	Vertical air duct design for DC fan cooling

Multiple voltage options including AC110/ 220V /400V	Drive for permanent magnet synchronous, asynchronous & BLOC motors	MPPT maximum power output + multiple protection functions

Characteristics

Automatical run set by SIoT



Photovoltaic pump IOT topology diagram

User-layer

VEICHI

Internet-layer

wireless network（2G/3G/4G）& local area network

Receiving-layer

Terminal

Agricultural irrigation

Landscape fountain

Desert management

Domestic water supply

Pool water supply

Sea water desalination

S200-Series Construction Hoist-specific Integrated Machine

- Built-in load limiter
- Built-in clock control chip
- Contracting brake-specific logic control
- Voice module
- Remote monitoring module

Features

Smooth operation without vibration and slippage during frequent pointing operation or arbitrary operation

HMI human-machine inte-raction & Visual control: display of the floor, running direction, running speed, weight, etc.; self-diagnosis for faluts and easier maintenance

Optimized structure, gre-atly saving installation space; a variety of inlet and outlet ways, while meeting the needs of different users

Full range of torque verification enableing emergency stop in case of abnormality to improve the safety and reliability of the equipment

Independant upper and lo-wer deceleration limit inter-face without any interference enabling quick entering in the high-speed gear, to enhance the efficiency of equipment transport

Soft limit protection with accurate feedback of real-time position through height encoder ensuring no rapid hoisting or falling even when the upper and lower limits fail

Spare industrial frequency control board port ensuring industrial / variable dual mode operation easily and thus 24 hours of non-stop operation

System Composition


Cage-top operator box


Drop test box


Operating floor


Brake resistor


Inverter


Hinge pin sensor


lOT module


Altimeter coder


Transmission device

Naming Rules

S200-E4-037B

- Brake type B: Energy brake type
- Inverter power (KW)
- E-type machine 4th generation products
- Integrated construction lift-specific machinewith a rated load of 2000KG

Model Specification

Model	Motor power	Rated input voltage	Rated output current (A)	Remarks
S200-C4/E4-037B	37KW	Three-phase 380V	75	11KW*3
S200-C4/E4-045B	45KW		90	13KW*3
S200E-055-B	55KW		120	15KW*3
S200E-075-B	75KW		150	18.5KW*3

Systematic Solutions for Intelligent （unmanned） Construction Hoist

- Real-time operation at request without any man work
- Current floor display on floor call saving waiting
- Voice broadcast of floors and opening/ closing the door
- Wire-less Lora for long distance, 2-5 km in city
- Stainless steel housing with IPX3 waterprorf

Features

Anti-pinch of feeder's door to activate light curtain and stop closing the door once human detected	Supervisory camera monitoring number of people and banning drive from start once overpopulation detected	Auto full-load non-stop activated once loading rate reaching 85% during which outer calls will be ignored and machine will direct to target floor	Voice note of opening/ closing door of cage, floor reaching, floor door closing
Manual, semi-auto, auto modes supported in the control system	HMI inside the cage real-time recording of fault information and floor debugging	Energy feedback integrated adopted for safety and energy-saving	Timeout protection of motor so opening & closing will be counted down until feedback signal of completion or it will stop output to avoid mechanism damage

Auto regulation

Left and right cages are auto regulated. The closer cage to the same direction will take the landing call signal. And the cage during unloading will not take the call so the other one will take all of the floor calls.

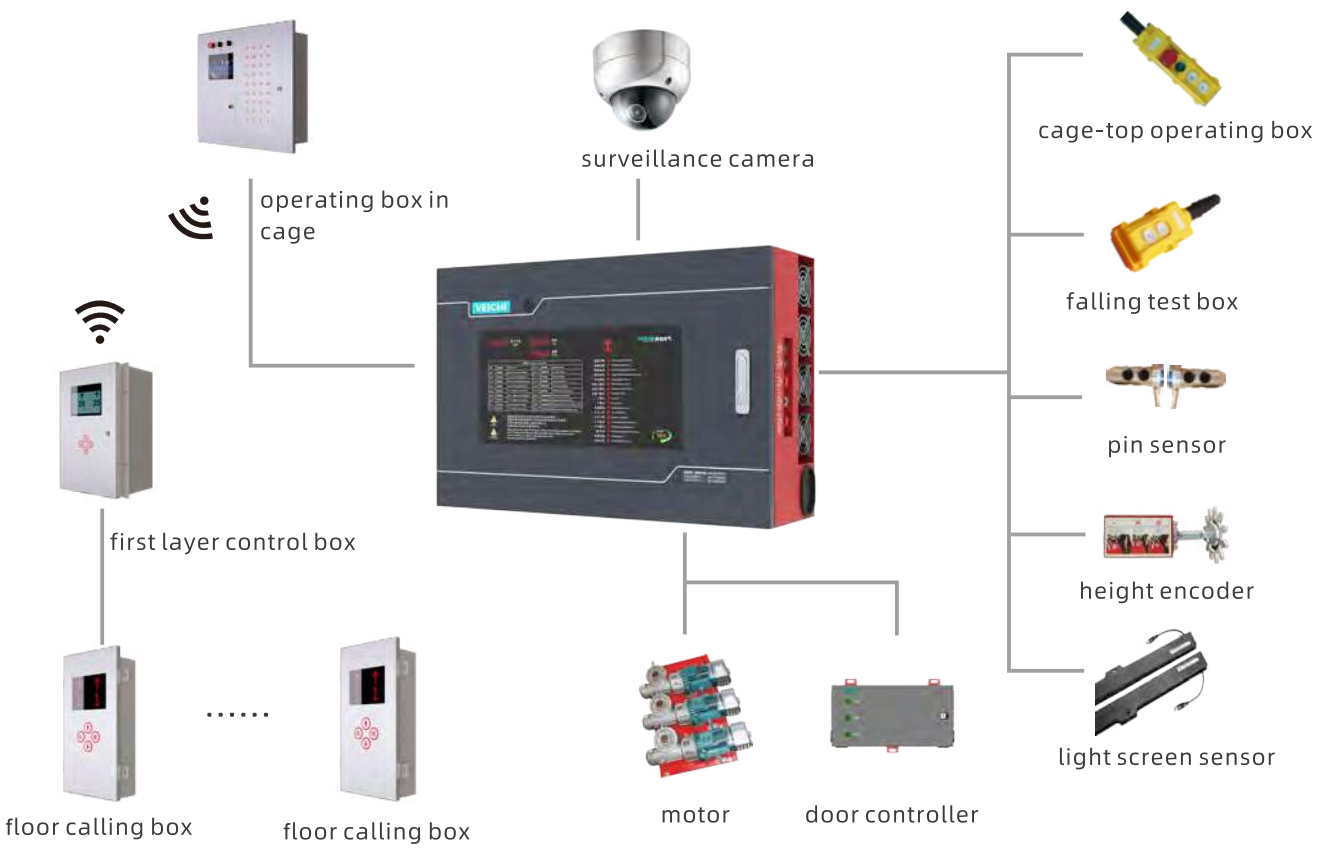
Mode selection

Auto mode Select via floor calls or the operating box to direct cages to target floor, and feeding doors will be opened or closed automatically;

Manual mode Cages will only be maneuvered via operating handle or HIM level floor, floor calls will not function; Manual button operation on the operating box to open/close the feeding doors;

Semi-auto mode Similar to the auto mode except that cage door can only be closed via button on the operating box;

System Composition



AC70T-Series
Hoist-special Inverter

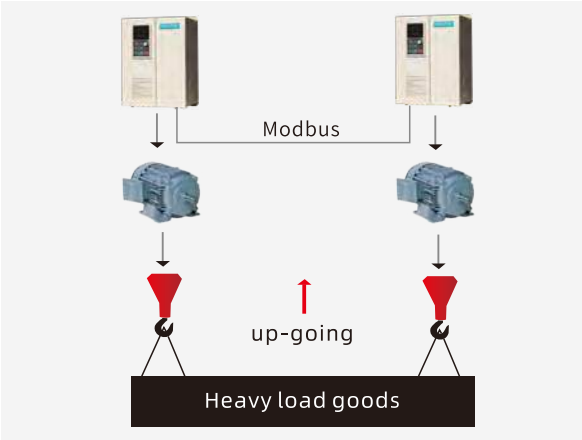
- Specialized logical brake control
- Multi-purpose application
- Stall protection
- Limit stop
- IoT expansion port

Features

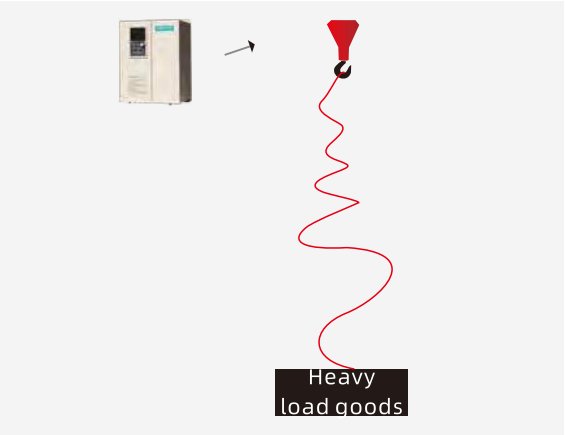
Automatic speed boost for light loads or empty hooks with the appropriate operating speeds	Zero speed torque maintained to prevent load slide caused by long mechanical delay of the brake	Two synchronous lifting mechanisms secured by the synchronous control thus safer	Upper limit value set to limit the operation of the inverter, alarm display and lifting device stop set to prevent overload operation
Torque rise value detected and the motor stopped automatically to improve safety when the goods accidentally touch other objects	Crane-specific maintenance monitoring for braking occurrence as a basis for maintenance	Decelerate before accelerating to avoid wire overstretch caused by tensil impact and thus raise efficiency	Profibus-DP, Modbus and CANopen are supported to facilitate the communica-tion between inverters, PLC and HMI

Characterisctis

Objects lifted by double lifting mechanisms at the same time ensured synchronous operation with the master and slave speed synchronization control function for safety

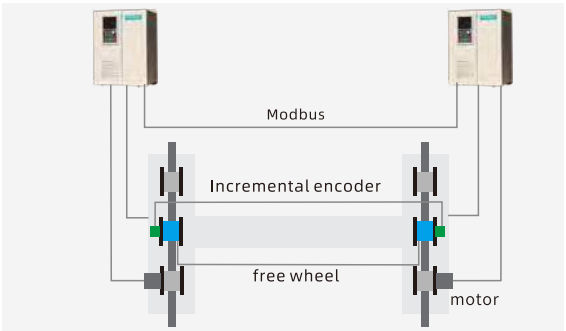


Loose rope detection against unsafe operation caused by light-load high speed function with slack rope of the crane

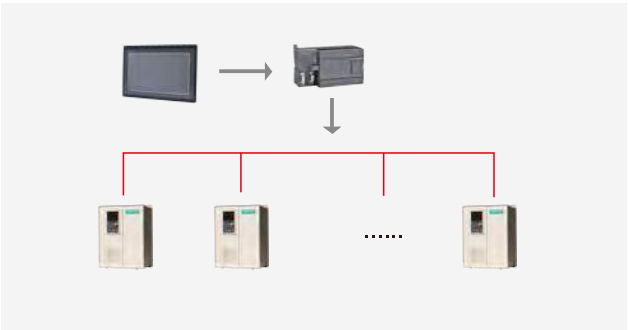


Constant power control

Constant power control, that is speed follows loads, means that maximum speed is calculated based on current load to realize high speed for light load and low speed for heavy load. Secondary hook is canceled for higher stability and efficiency.



Profibus-DP, Modbus and CAN open protocols to facilitate the communication between multiple inverters, PLCs and HMIs



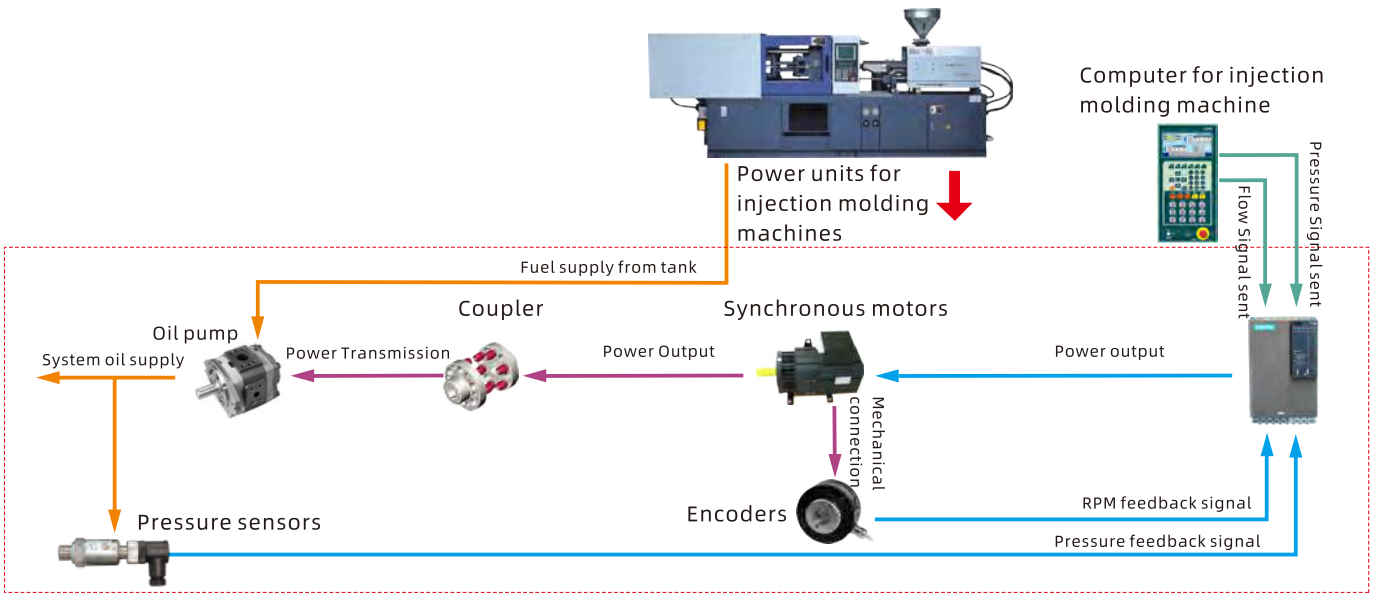
SD650-Series
Electro-hydraulic Servo System

- Built-in drive unit
- High-performance servo control
- Super overload capability
- Super protection capability
- Multiple message delivery methods

Features

Built-in CAN & 485 communication function	Air-cooled and liquid-cooled cooling methods suitable for different environments	Vector, weak magnetic & PID control	0-10V DC/ 4-20 mA for direct analog signal input
Isolated terminal method adopted for safety and efficiency	0Hz: 180% Speed stabilization accuracy : ±0.2% Torque control accuracy : ±2%	Phase loss, short circuit, overheating detection and other protection methods	Multiple message delivery methods like Analog, CAN & 485 communication, internal command, etc.

System Working Principle



Applicable Industries


Injection molding machine


Bending machine


Oil press


Shoe machine


Die Casting Machine

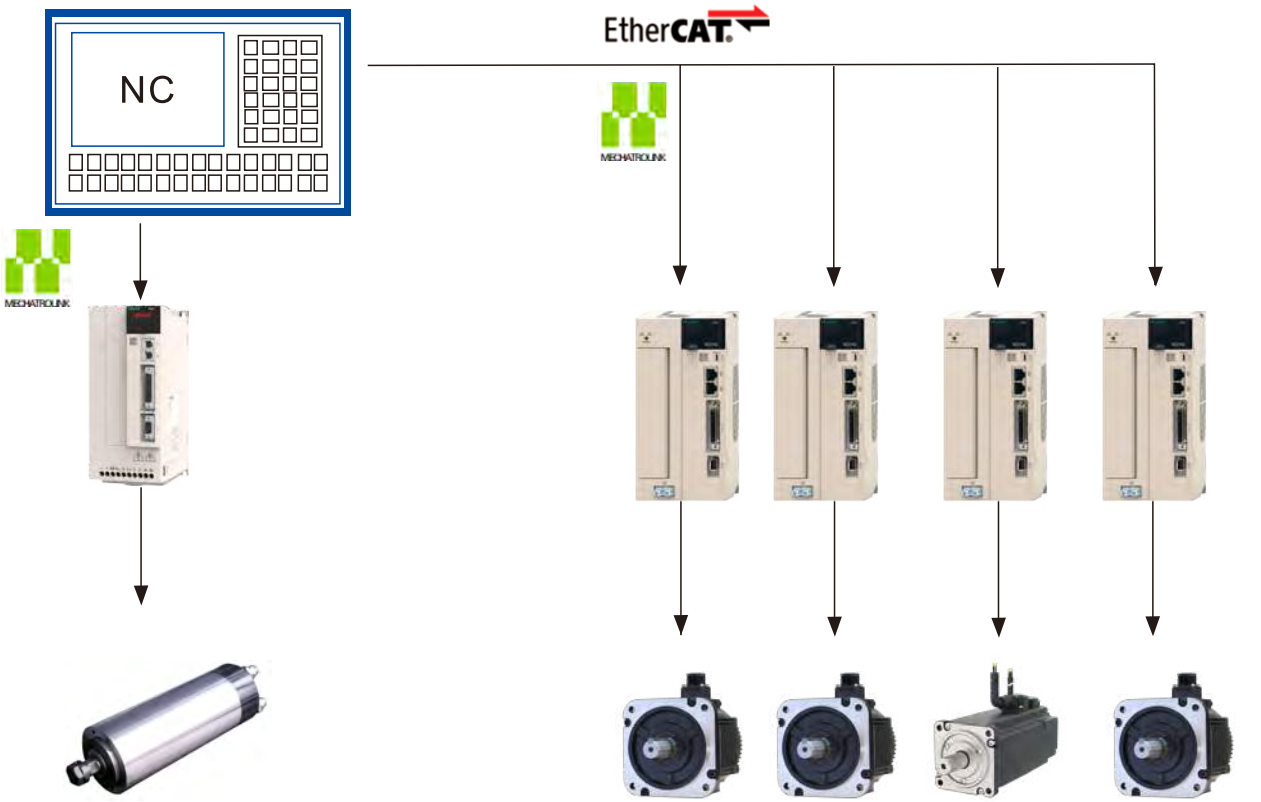
SD500-Series
Machine Tool Spindle Servo System

- Standard dual encoder Interface with fully closed-loop vector control
- Wan wave, sine cosine, Mechatrolink-III bus supported
- Inertia recognition with self-tuning of loop parameters
- High load responsiveness
- Large low-frequency torque with wide speed range

Features

Feed axis servo supports multiple bus protocols with 23-bit servo motor, providing 3KHz speed zonation frequency	Power head servo supports bus and pulse control up to 6000 rpm for smoother milled planes	Turret servo supports bus-controlled torque limit and 1/0 control backlash compensation	Turret servo supports receiving turret proximity switch signal to control release or lock of solenoid valves
Equipped with double PG as standard, which can achieve accurate speed and position control with a positioning accuracy of ±1 pulse	Powerful self-learning for automatic setting motor parameters, encoder, system inertia and speed loop	Hardware current limit and strong overload capacity adaptable to all kinds of harsh working conditions	Eighty kinds of fault protection for comprehensive safety

CNC Turning and Milling Machine Solution



Spindle servo system

Feed axis servo system

Servo system for turret

Servo system for power head

AP100-Series
Integrated Drive for Air Compressor

- Three-in-one design to meet multiple customer needs
- IP52 high protection level and strong environmental adaptability
- Drive for various synchronous & asynchronous screw compressors
- Intelligent Internet of Things for real-time remote monitoring of field applications
- Advanced fuzzy PI algorithm

Features

Integrated air compressor control process for easy wiring and improved reliability	Unique energy-saving vector control algorithm	User-friendly air duct design to enhance heat dissipation and facilitate disassembly, cleaning and maintenance	Intelligent cloud for real-time remote monitoring of air compressors
Double pre-determination of motor demagnetization mechanism to maximize the prevention of irreversible demagnetization of the motor	Advanced fuzzy Pl control algorithm for voltage stabilization, no overshoot and fast response	Vector control algorithm with up to 600Hz	Tl high-performance DSP chip bringing the high execution speed up tp 200m, displaying high reliability and high carrier frequency, low temperature rise & low noise

Solutions for the All-in-one Air Compressor Industry

Applicable Industries

Special Drive and Solution for High-speed Centrifugal Turbine

AC320 with forced air cooling
LC320 with liquid cooling

High frequency output up to2000Hz

Leading high-speed motor control algorithm

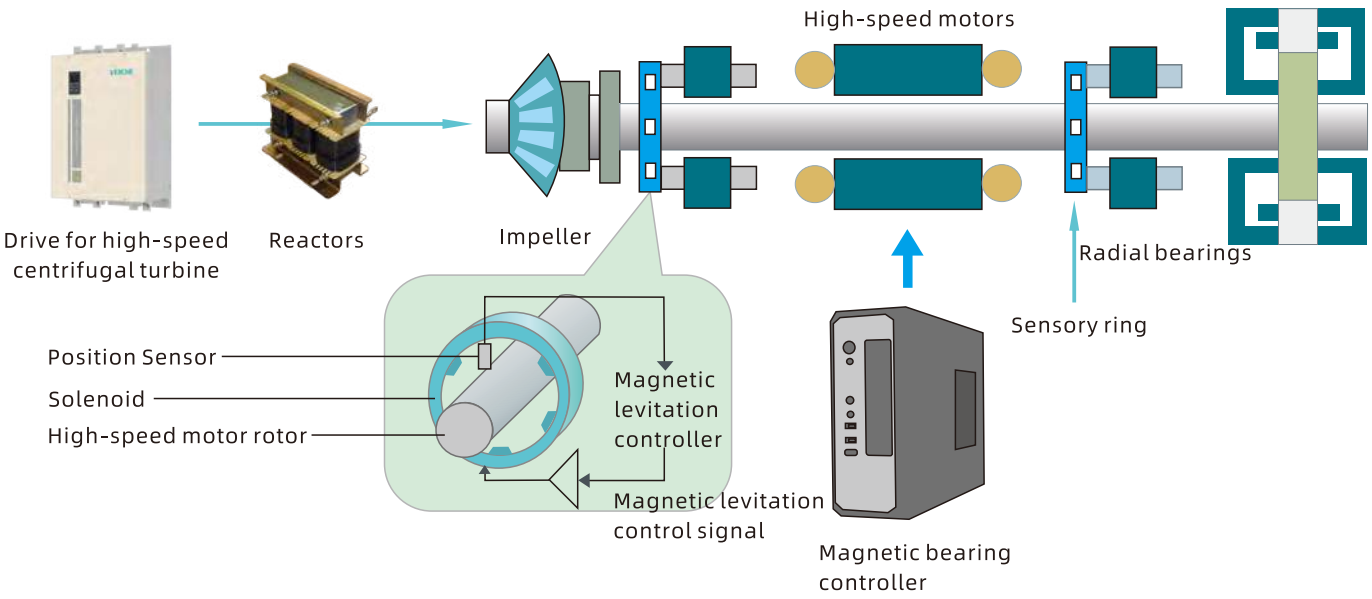
Abundant expansions like IO, communication & GPRS card, etc

customized SiC power semiconductor supported

Features

High frequency output with vector control 0-1200Hz and V/F control 0-3000Hz	Full series qualified for high-speed motor and high -carrier, liquid cooling type supports for high carrier without derating	match with high-speed motor redundant component of magnetic levitation, air levitation, ceramics and filmatic bearing to reduce bearing wear	Full control mode for sinusoidal filter drive and sinusoidal filter drive to suppress harmonic wave effective and protect the motor, and thus longer service life
Reliable magnetic levitation motor rotor running with bus voltage maintenance added with energy information feedforward	Strong extension capability for process cards of multiple occasions to replace PLC perfectly	Liquid-cooling type is 40% -70% of air-cooling machine with the same power, IP54 protection for fields with severe air quality	customized SiC power semiconductor inverter supported for high-end and efficient applications

High-speed Motor-specific Drive Solutions



Aeration and Aeration


Aeration and aeration


Air compression


Heating, ventilation and cooling


MVR steam preparation


Hydrogen cell bus


Cogeneration

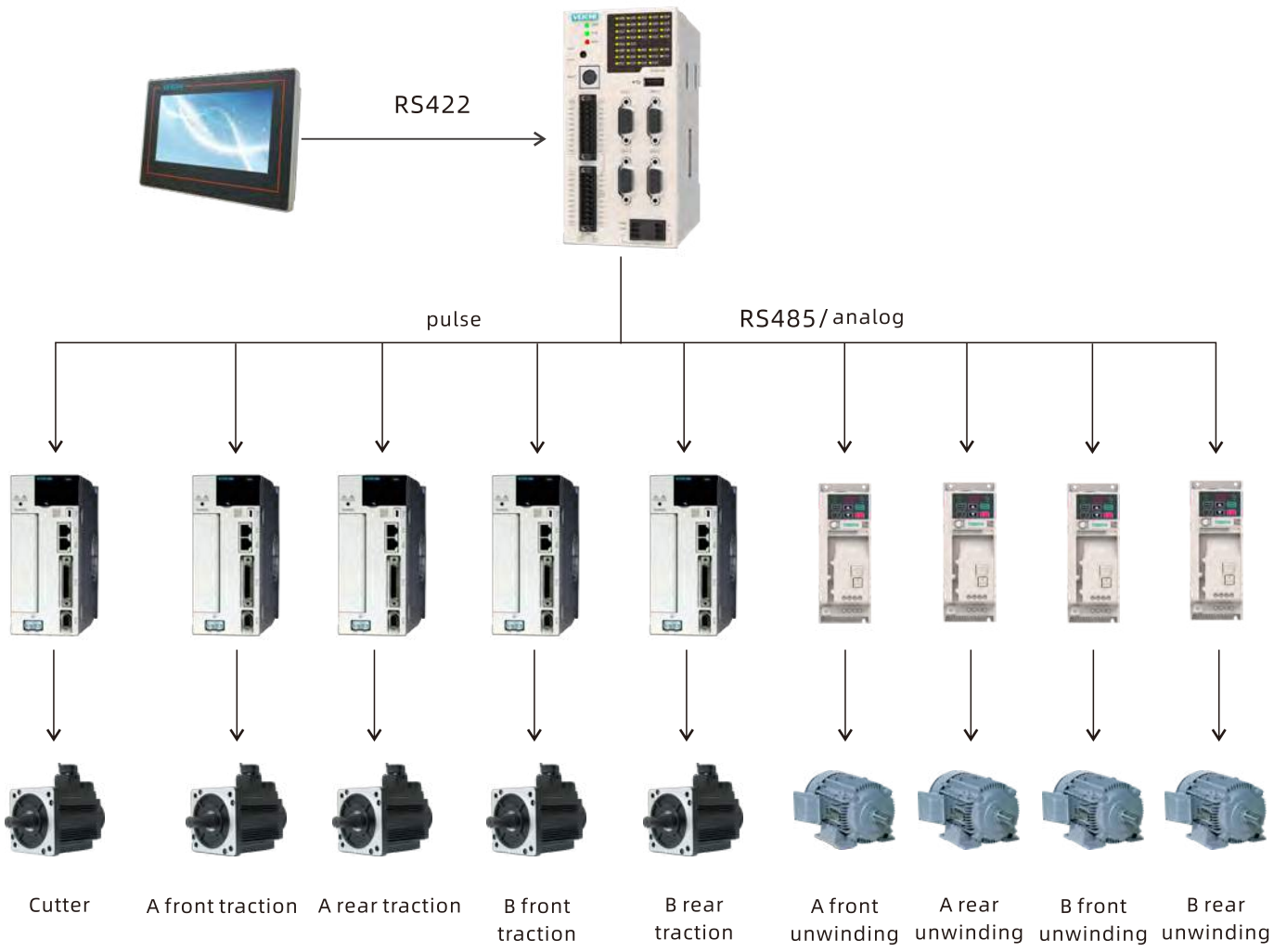
Solutions for Packing Industry

- Horizontal packaging machine
- Vertical packaging machine
- Tissue paper packaging machine
- Bag making machine
- .....

Features

System diversification for various models	Self-developed V5 motion controller adopted for high efficiency with error ±0.25mm (color scale/bag length accuracy)	Powerful function suitable for different packaging materials
Configurable with IOT module for convenient remote operation	Simple operation & easy wiring and debugging	Electronic mouth wheel curve control adopted for more stable operation

Tri-side-seal Dual-channel Topology



SD100-Series Low-voltage Servo System

DC 24-70V

Single-shaft drive:50W-3000W

Dual-shaft drive:100W-1500W

- Energy-saving
- Super overload capability
- Ultra-high standard
- Multiple control modes
- Delicate structure

Features

Double power supply with independent control	Built-in 24V band-type power supply to lower system cost	Multiple communication protocols like CANopen, EtherCAT, Profinet, RS485	Delicate and compact body to save installation space
2 times higher overload capability combined with unique heat dispassion technique for high-temperature environment	Performance certificated internationally to meet international market demands	High-performance, high-precision and high rotation	Standard with 17-bit absolute encoder for more accurate position and stable speed

Product Description

SD100-Series low-voltage servo system, based on the world-leading algorithm platform, supports single-shaft, dual-shaft and multi-shaft motor algorithm control. They are compact in size, abundant in functions, featuring convenience, flexibility, stability and reliability, widely applied in various occasions with high performance, high accuracy and high speed. Occasions that requires high-end voltage and volume like movable robots (AMR, AGV), service robots, specialized robots, logistics, warehousing and sorting, and medical devices.

Energy-saving drive

New-generation of energy-saving drive reduces motor heating loss thus raises use ratio by over 10%.

Low-power dissipation mode during stand-by extends battery life by 10% and reduces carbon dioxide emission.

Energy use ratio raised by over **10%**

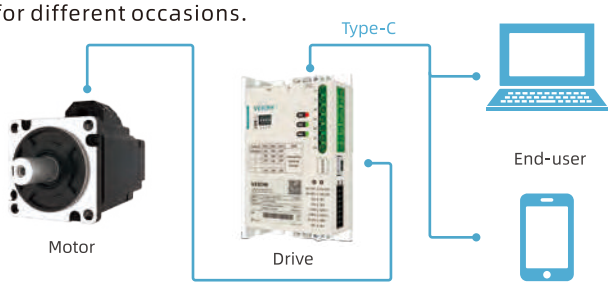
Battery life extended by over **10%**

Convenient and user-friendly

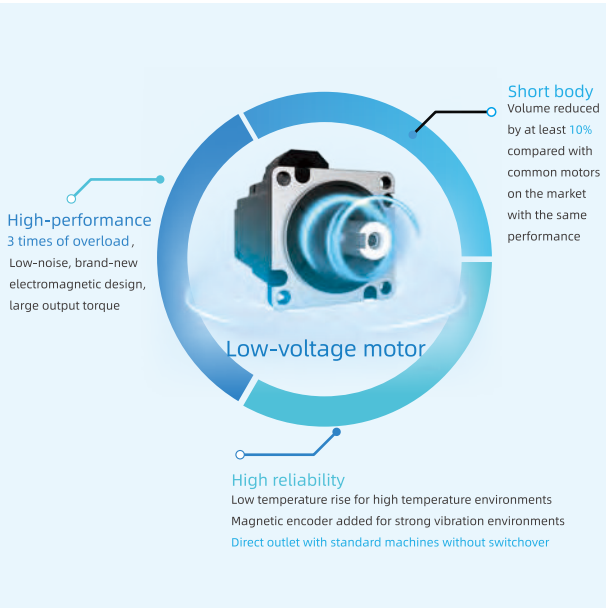
Easy wiring: European terminals and hot plug terminals are used to save wiring.

Easy debugging: Easy upper computer is used for debugging via USB-Type-c data line.

Easy installation: front and side installation are both applicable for different occasions.



Short body, high-performance & reliability



AC310 Series
Tension Control-specific inveter

Single-phase 220V AC 50Hz/60Hz 0.75kW-l 5kW
Three-phase 220V AC 50Hz/60Hz 0.75kW-220kW
Three-phase 380V AC 50Hz/60Hz 0.75kW-l l 20kW
Three-phase 660V AC 50Hz/60Hz 22kW-l l 20kW

- Real-time monitoring of line speed, current coil diameter & output torque
- High performance vector control
- Fast dynamic response and high output torque accuracy
- Constant tension by line speed feedback
- Smooth start-up, stable tension at both high and low speeds

Features

High-performance vector control for fast dynamic response, high accuracy of output torque and constant tension during acceleration and deceleration

Automatic adjustment of output torque to ensure constant material tension through wire speed feedback

Built-in dynamic and static friction compensation module to optimize the tension control, with the taper compensation function to achieve the flatness of the winding

Set-up for disconnection detection, pre-drive and shutdown brake signal output function to ensure the stability and reliability of equipment operation

Smooth start for stable tension at both high and low speeds

Advanced algorithm adopted for output torque accuracy, real-time monitoring of the running line speed to obtain accurate winding diameter, strong anti-interference ability

Full series of booklet design, DC fan heat dissipation to save space and enhance reliability

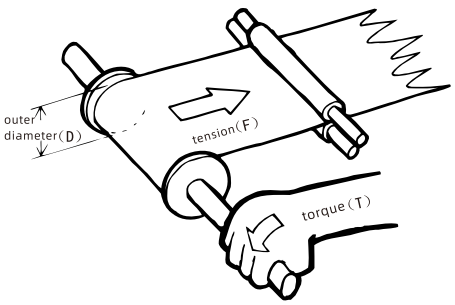
Tension Control Method

◎ Speed control: Tension position feedback automatically adjusts the PID output speed slip to ensure constant material tension.

◎ Open-loop tension torque control: the inverter directly controls the motor output torque and output frequency to follow the material line speed automatically without tension feedback signal.

◎ Closed-loop tension torque control: tension feedback signal needed and is adjusted by built-in PID to form a closed-loop tension control motor output torque, so that the material surface tension is constant.

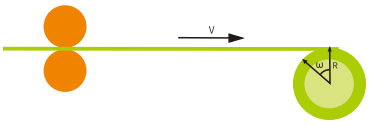
Basic Principles



Since: Torque (T) = Tension (F) × Radius (D/2)

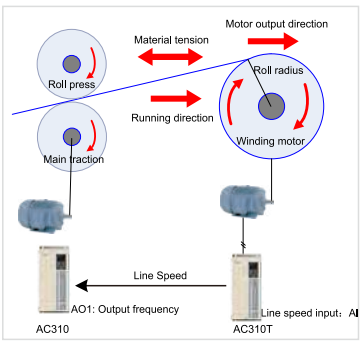
$$\text{Therefore: tension (F)} = \frac{\text{Torque (T)}}{\text{Radius (D/2)}} = \frac{2\times T}{D}$$

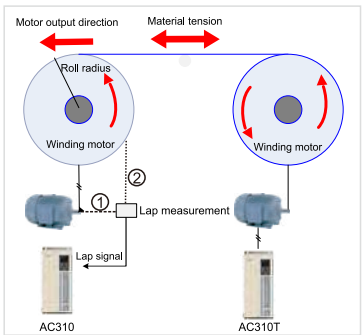
Linear Speed Method



$V=K\times\omega\times r$

Common Solutions





Wire speed method:

The front-end machinery provides the material traction, which determines the material line speed, and the material tension is determined by the AC310 winding. The roll diameter can be calculated from the wire speed given by the traction.

Application of the thickness method:

The front end machinery does not provide the traction mechanism to determine the line speed, the material line speed is directly determined by the front kick motor, and the material tension is determined by the AC310 winding.

Smart IoT

Provide integrated solutions of cloud, network, and user end

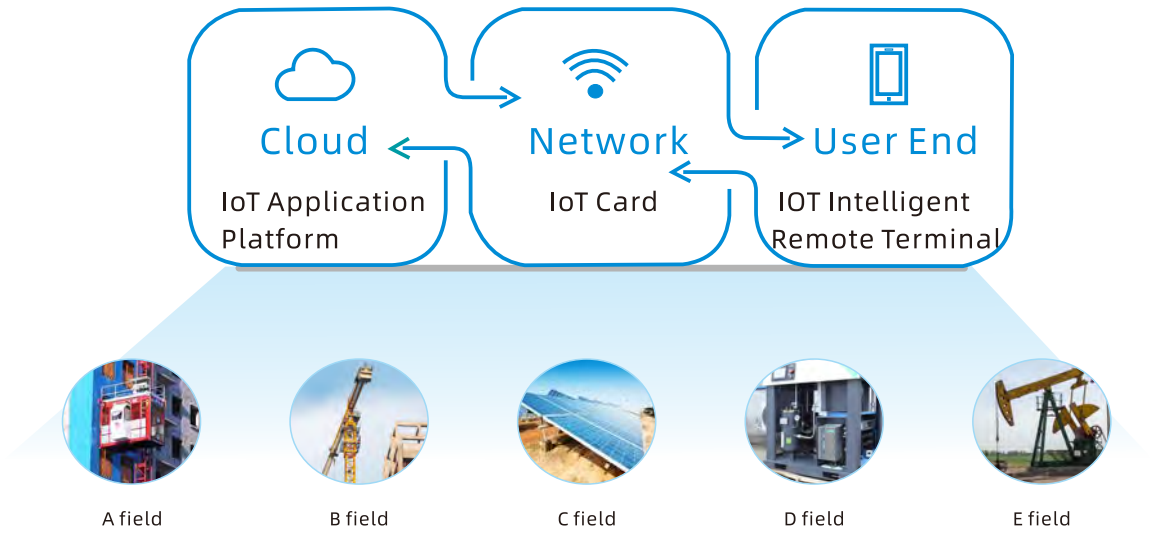
More stable 4G signal communication and full network access

More intelligent IOT terminal for instant use

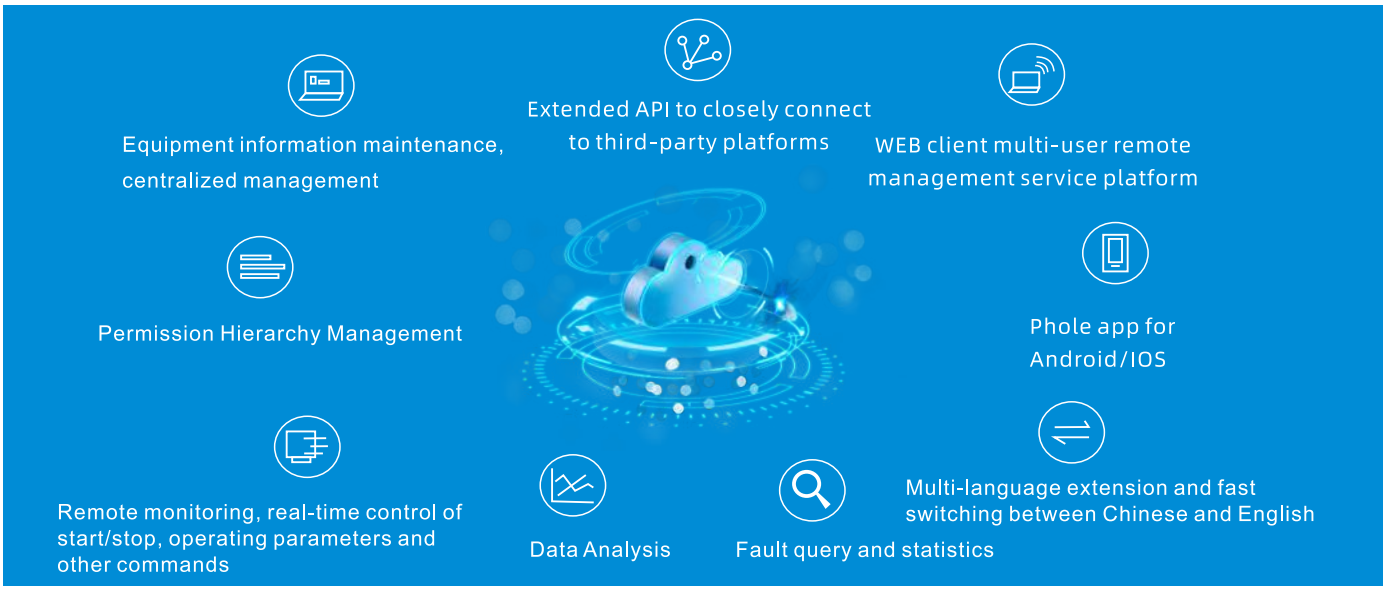
More reliable performance for 24-hour stable operation

More efficient trouble shooting and real-time uploading of faults

Service upgrades to track device status anytime & anywhere



Main Features of IOT Platform

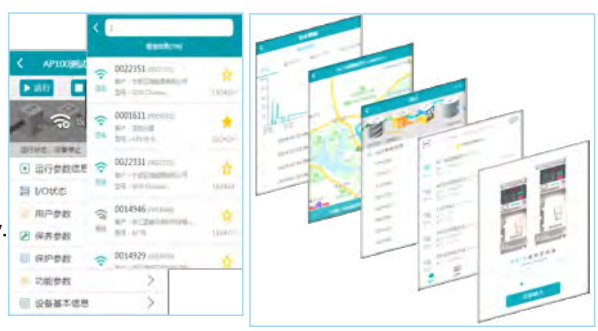


IOT Card

China Mobile card for domestic users

Main Features of IOT Intelligent Remote Terminal

◎ Real-time positioning and accuracy depends on the density of surrounding base stations, usually in the range of 2 km.
◎ Anti-demolition (optional) to prevent malicious demolition and destruction, and protect the rights and interests of customers.
◎ Active fault reporting to send notifications to customers in the first place for in-time handling.
◎ The data collected regularly for data security and collection efficiency.
◎ Firmware upgraded remotely for more efficient maintenance service.
◎ Multiple-device access supported for one IOT terminal and multiple slave device.
◎ Offline storage of data to collect data without network
◎ SMS setting of GPRS internal parameters supported



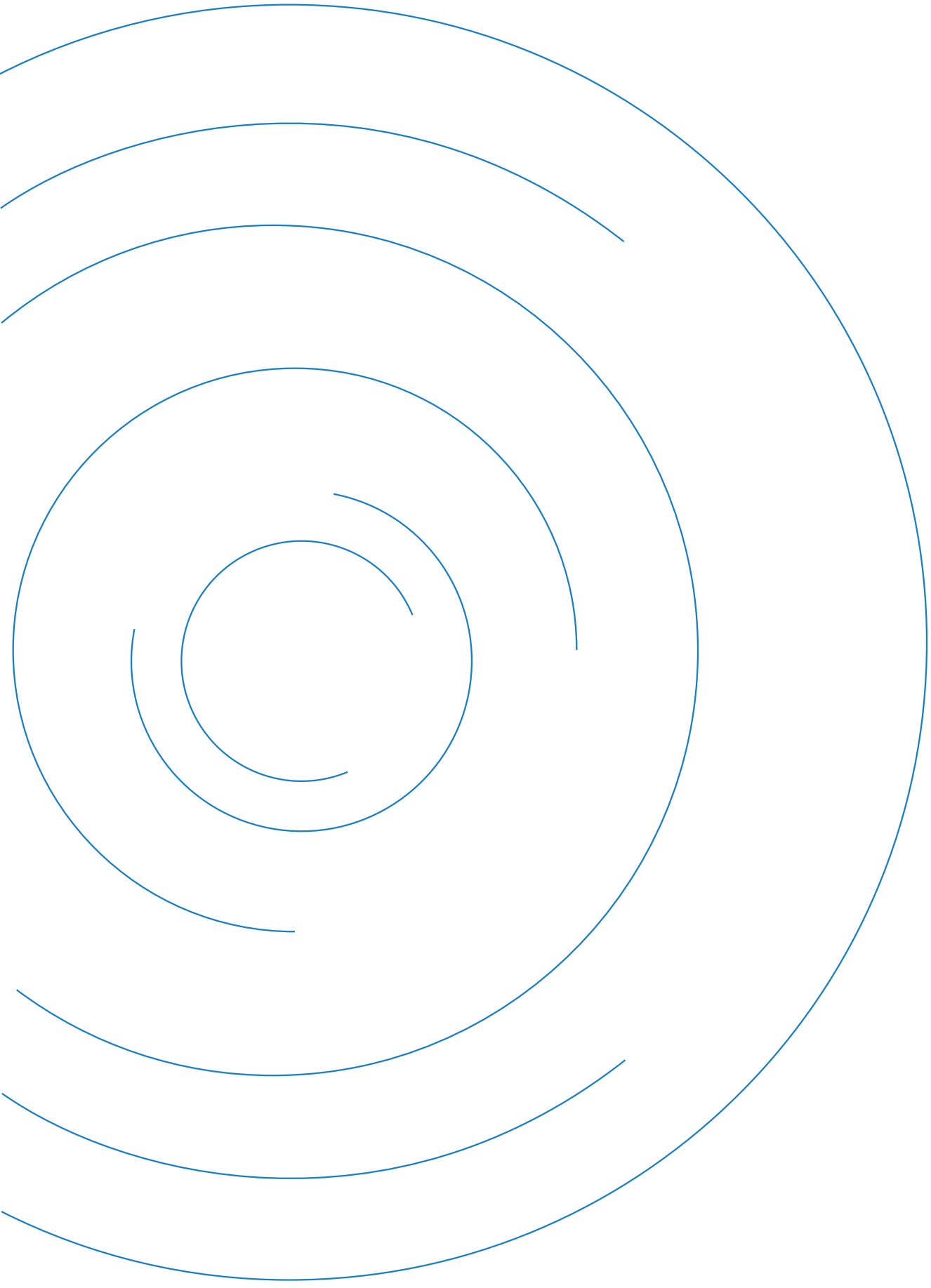
Innovative technology leading service

Domestic

20 service outlets established and 182 contracted channel dealers, distribution channels covering 31 provinces & cities on mainland China, and Hong Kong, Macao and Taiwan

Overseas

Offices and services established in major cities in Southeast Asia, Europe, America and Africa, and global services being expanded guadually



VEICHI

To be a leading company in the field of electric drive and industrial control

Company Profile

Veichi（stock code：688698）has always committed to electric drive and industrial control since it's foundation. As an all-round company engaged in R & D，manufacturing and sales on high-tech industrial automation products, Veichi has been identified with several honorary titles such as Jiangsu provincial-level Enterprise Technology Center, Jiangsu Private-own Technical Enterprise, Specialized and sophisticated enterprises that produce new and unique products, Jiangsu Engineering Research Center, Jiangsu New and High-tech Enterprise and Suzhou city-level Gazelle Company (High Growth Enterprise) and has obtained the highest level of enterprise credit. Through years of independent research and development, Veichi now has authorized patents totaling 148 by the end of 12, 2022, and among them 36 are for invention. Having established R & D center and manufacturing bases in Suzhou, Shenzhen and Xi'an, added with the wholly-owned subsidiary in India, Veichi now are dealing with customers from several nations and regions and has the full capability to provide safe, competitive and trustworthy products and services to customers from the larger world.

Veichi provides various products including inverters from 0.4kW to 5,600kW, servo systems from 50W to 200kW, motion controllers, PLC and HMI, which are applied in all sorts of fields occasions like lifting,mining, rail traffic, machine tools, compressors, plastic equipment,photo-voltaic pumping, construction, robots/mechanical arms,printing and packaging, chemical fibers for textile use, metallurgy, municipal works, petrol work and chemical engineering.

20 service stations and 182 contracted distributors cover 31 provinces on China mainland and Hong Kong, Macao and Taiwan regions,which guarantees a massive and efficient network for sales and services for our customers.

Veichi will continue to abide by the operation philosophy, that is,guided by market demand and driven by technical innovation,enlarge and enhance its core business like inverters, servo systems,control systems and SIoTs. And Veichi will always be hard at providing quality products and services for customers and further make contributions to the development of electric drives and industrial controls.

Suzhou R&D and Production Base

covering an area of 42.7 mu (28,300 m^2)
totaling 72,500m^2

Shenzhen R&D Center

shenzhen base mainly for research and development, office covering 3600m^2

Xi'an R&D Center

office covering 725m^2


VEICHI 伟创电气

Development History

2005

– Business started in Shenzhen
– First generation of inverter on the market

2013

– Suzhou Veichi Electric Co., Ltd established
– First generation of servo system on the market

2014

– Suzhou Veichi first-stage project put into construction

2015

– Advanced integrated product development mode (IPD) initiated

2016

– Suzhou Veichi first-stage project put into operation
– First generation of motion control system on the market

2017

– Veichi honored with New High-tech Enterprise

2018

– Veichi honored with secondary enterprise of standardized production safety among Jiangsu province

2019

– Veichi restructured to a company limited by shares
– Indian subsidiary established
– Veichi honored with Jiangsu Province Enterprise Technology Center

2020

– A-share science and technology innovation board landing successfully
– Veichi honored with Jiangsu Province Specialized and Sophisticated Enterprise That Produces New and Unique Products
– Veichi honored with Jiangsu Province Engineering Technology Research Center of Medium& high Power Inverters and Servo motion Controllers

2021

– Veichi subsidiary corporation established
– Veichi honored with national-level Specialized and Sophisticated Enterprise That Produces New and Unique Products

2022

– Xi'an R&D center established
– Veichi digital energy subsidiary corporation established
– Veichi honored with AAA certificate of integrating IT application with industrialization

2023

– Suzhou Veichi second-stage project put into operation
– Suzhou Veichi third-stage project put into construction
– Veichi medical facility subsidiary established

Corporate Culture

Corporate culture

Care for employees, work with partners and grow together

Core values

Customer-centered, striver-based

Operation philosophy

Guided by market demand, driven by technological innovation

Corporation vision

Be a leading company in the field of electric drive and industrial control

Developmment Strategies

【3231】

3 core technologies : electric motors,power electronics, motion control

2 applications: electric drive and industial control

3 marketing tactics: systematic solutions, TOP customized services and ODM for World-renowned enterprises

1 dream:be a leading company in the field of electric drive and industrial control

Product Manufacturing

Automated production equipments create a new ecology of "smart factory"

Products are based on digital technologies. From the beginning of product development, to production programme and then production, that is the whole production cycle,is digitalized and intellectualied, with an annual output up to 600,000 units.

5 fully imported SMT high-speed chip mounting lines, 5 automatic coating lines, 4 DIP testing lines, 1 automated line equipped with robotic arms, 12 production lines, normal and high temperature aging room, and sheet metal fabrication workshop, together with other intelligentized production supporting equipments, ensures production of all of the Veichi products.

All of the products are checked according to the quality management mode of 3 (tri-inspection system) + 1(proportional inspection) during the whole process, and all of them are carried out automatically so as to ensure the performance of the original factory standard machines.

Three major production management system like WMS， MES and ERP ensure that the unique product codes of each product are traceable in the system to check the quality.





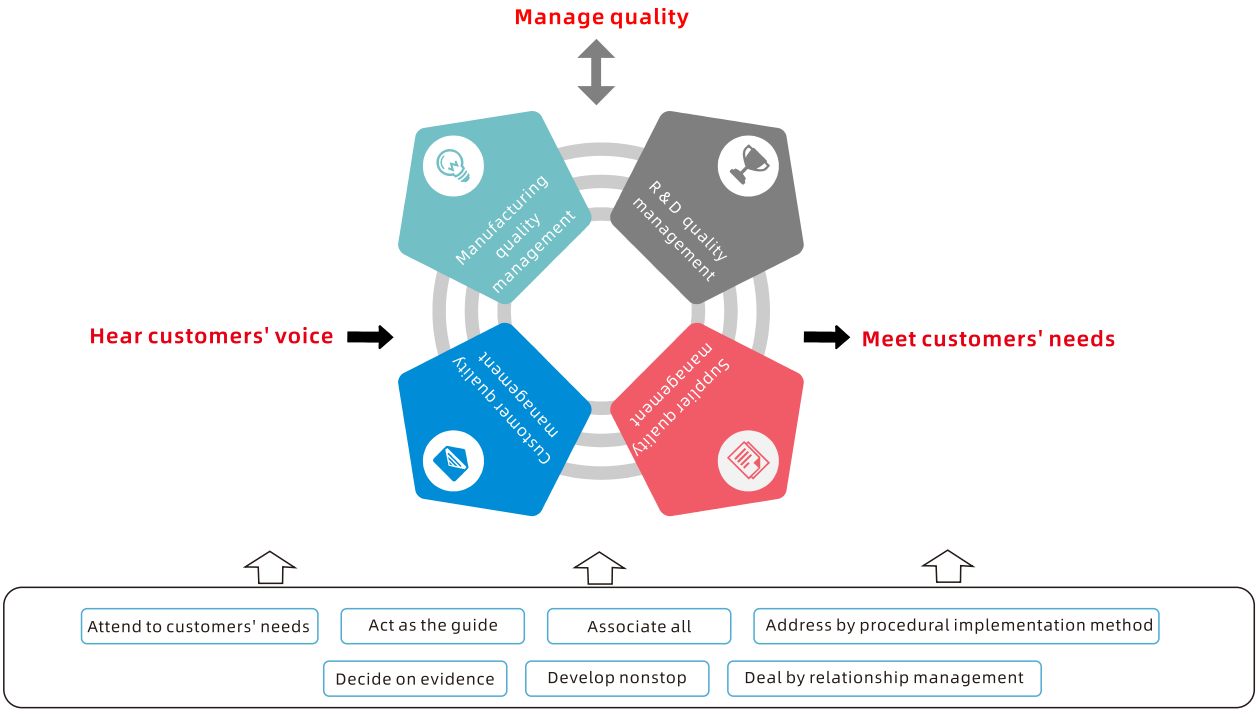

Quality Management

Inheritation of craftsman spirit creates ingenious products

By the policy and philosophy of quality first, procurement, product development, production process and other aspects are all managed by the world's leading standards to ensure the high quality of products.

Each code with products is unique, and this code can be used in the system to trace its details during production.

Quality management system based on the seven



ISO9001:2015
ISO14001:2015
ISO45001:2018

The whole series of products have passed CE certification

The whole series of products have passed 3C certification

Customized products comply with RoHS 2.0 Directive

Measurement Management System has passed AAA certification

After-sales service has passed five-star certification

The whole series of products have passed QC08000 requirements

UL certicated

TUV certicated

AC310-Series High-performance Vector Inverter

Single-phase 220V AC 50Hz/ 60Hz 0.75kW-15kW
Three-phase 220V AC 50Hz/ 60Hz 0.75kW-220kW
Three-phase 380V AC 50Hz/ 60Hz 0.75kW-1120kW
Three-phase 660V AC 50Hz/ 60Hz 22kW-1120kW

- Book-style design with narrow bodies
- High performance magnetic field-oriented & Vector control technology
- Permanent magnet synchronous & asynchronous motor compatible
- Abundant expansion accessories for com-prehensive applicable
- High power density & reliability & applicability

Features

High-performance vector general platform with new motor control algorithms	Permanent magnet synchronous & three-phase asynchronous & spindle & torque motors and other integrated open-/closed-loop drives all compatible	Industry parameters attributed together and suitable for various applications	Easy debugging & setup for field firmware upgrade
Comprehensively optimizated algorithm for better driving effect & more comprehensive protection	Random carrier technology for a comfortable industrial environment	Communication protocols: standard MODBUS, optional Profinet, Profibus-DP and CANopen	Booklet design for the whole series, DC fan cooling for space-saving and enhanced reliability

Description

Book-style narrow body design reduces up to 60% in volume, modularized structure layout leads to higher degree of sealing of electronic components.

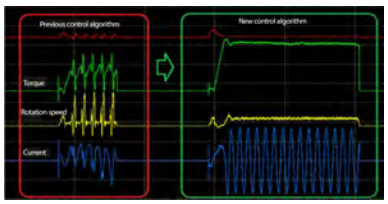
Direct heat dissipation from upper and lower directions thus they can be installed side by side and space is utilized more rationally, greatly reducing the size and cost of the panel cabinet for higher value.

Professional European-style terminals ensure safety and reliability while shorter wiring time and improved efficiency of the group cabinet.

Characteristics

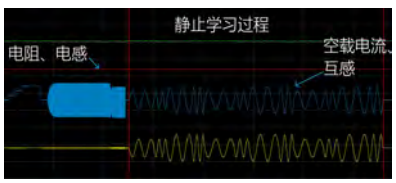
Optimizd synchronous motor drive ——high frequency injection method

The high-frequency signals injected in open-loop operation contribute to the output of 200% of the rated torque at OHz under open-loop control for the permanent magnet synchronous motor, and function even more steadily under heavy load.



Leading self-learning Algorithm

The effect of static self-learning is comparable to that of rotational self-learning, as motor parameters are obtained when the motor cannot be unloaded.



- A multi-purpose machine compatible with asynchronous & synchronous motors for diversified needs
- Dual SPI extension ports with auto recognizing for cards, rich extensions all in one
- Full range of protections for inverter and motor
- New function code layout for easy using and locating

AC330-Series Synchronous Reluctance Motor-special Drive

Single-phase 220V AC 50Hz/ 60Hz 0.75kW-15kW
Three-phase 220V AC 50Hz/ 60Hz 0.75kW-220kW
Three-phase 380V AC 50Hz/ 60Hz 0.75kW-1120kW
Three-phase 660V AC 50Hz/ 60Hz 22kW-1120kW

- Extra efficienient drive
- Energy-saving and cost-reducing
- Expansion cards applicable
- Dependable performance
- Deep integration

Features

New high-performance vector algorithm platform for synchronous reluctance motors	Extra efficient & energy-saving drive	Precise decoupling by torque & excitation , excellent dynamic response	Comprehensive thermal simulation design to optimize the hardware layout
Book-type design for all of the series to reduce space	Abundant expansion interfaces for accessories for wider applications	Easier debugging methods for on-site firmware upgrades	Tri-protection for the complete machine and tri-protection coating for PCBA to ensure stability and dependability

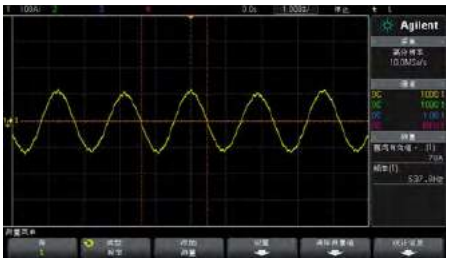
Description

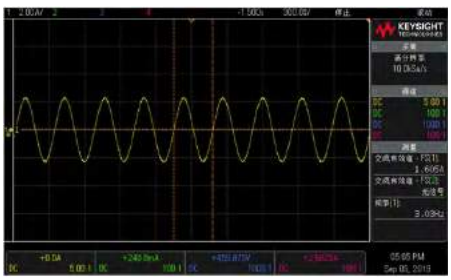
AC330 series inverter, which is designed with a narrow body just as a book, integrats synchronous reluctance motors and auxiliary algorithm platform of synchronous reluctance motor drives, thus are applied specially for synchronous reluctance motors due to it's stability and reliability.

Characteristics

Superior control capacity when low frequency & weak flux

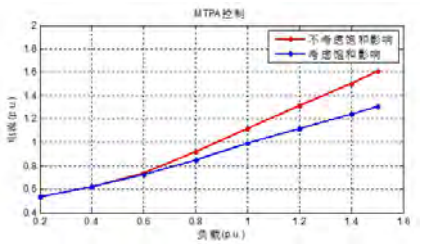
The AC330 series can drive synchronous reluctance motors at a speed ratio of 50:1, far exceeding the 20:1 low-frequency speed control capability supported by other products on the market; And then, a new high-speed weak magnetic control algorithm has been developed above the base speed to maximize the torque output by using the voltage limit, stablizing the normal operation under high speed and weak flux. Thus Veichi's AC330-Series driver for synchronous reluctance motor are perfect for low frequency and weak flux combined.





Efficient and energy-saving capacity

AC330 series of special drive, with a newly optimized MTPA algorithm, displays accurate control and efficient operation. Coupled with the AC330-series new generation of energy-saving control technology, the electrical system can automatically adjust the energy consumption according to the load, leading to the maximum improvement of motor efficiency and reduction of energy loss. Electrical energy efficiency increases to IE4 and above.



Current under MTPA control

All-round protection and reliable performance

AC330-serie synchronous reluctance motor-special drive, equipped with all-round protection for hardware and software such as output short-circuit protection,internal buffering relay protection, fan drive circuit protection, external 24V DC short circuit protection, motor overload protection and others, achieving a full range of protection for the motor and peripheral equipments.

AC10-Series General-purpose Inverter

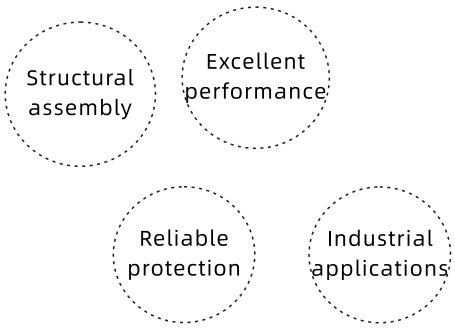
Single-phase 220V AC 50Hz/ 60Hz 0.4kW-2.2kW
Three-phase 220V AC 50Hz/ 60Hz 0.4kW-2.2kW
Three-phase 380V AC 50Hz/ 60Hz 0.75kW-22kW

- Unique heat dissipation
- Network design for easy connetion
- Book-style design with compact and narrow body
- Time & effort & energy saving during operation
- Flexible for a variety of installation methods

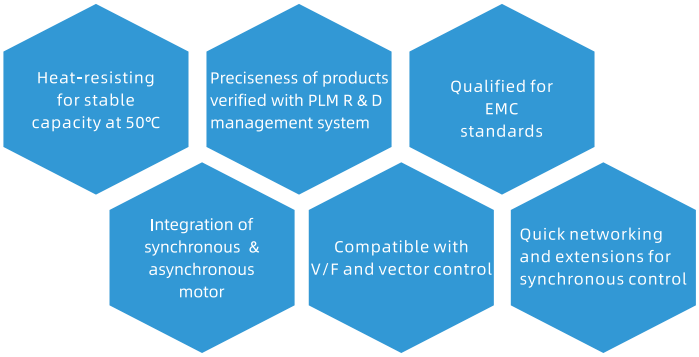
Features

Hidden cables for more convenient alignment	Book-like compact design saves installation space	Advanced design concept for a variety of applications	Comprehensive fail-safe function for stability and reliability
Simple in appearance while powerful in performance	Various installation methods including rail, side, vertical installation	Book-style narrow-body compact design for seamless side-by-side installation	Applicable to fans and pumps, automatic production lines, food packaging lines, logistics equipments and many other industries

Description

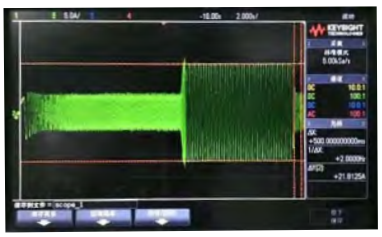


Superior Performance



Comprehensive Protections

Equipped with protections against over current, overload, wave by wave limit, overvoltage and such all-round protection from inverters to peripheral devices.



Structural Assembly

Full series designed with narrow bodies as books.The upper and lower direct heat dissipation enabling a gap-free side-by-side installation.
More prominent and flexible for several installment methods like rail, side, vertical and other forms.

Applicable Industries

Widely used in automatic production lines, food packaging lines, logistics equipments, fans and pumps and many other industries.

AC810-Series
Standard Inverter for Multi-motors

Basic rectifier module:
400V（three-phase power supply）：22/45/110/160kW

Inverter module:
400V (three-phase power supply):1.5-75kW

- Flexible networking and extension
- Net multiple function extensions and communication protocols
- Modularized design for flexible configuration
- Common DC bus solution for energy and cost reduction
- Full and multi-layer protection & fault grading and classification

Features

ARM+FPGA dual-chip controlling structure with superb response and precision	Asynchronous, synchronous, reluctance, high-speed motors all compatible	Comprehensive and multi-layer protection & fault grading and classification management	Net multiple function extensions and communication protocols
	Filter, rectifier, inverter, braking, buffer modules independent from each other for convenient configuration	Common DC bus solution for electronic control wiring reduction and thus cost & energy reduction	

Description

AC810-series standard inverter for multi-motors is developed on Veichi's high-performance high-end technological platform of frequency and speed regulation products. It features excellent control performance, flexible networking and extensions, modular design and common DC bus with high safety level and stability.

Modularized design

◎ Filter, rectifier, inverter, braking and buffer all designed into independent and standard modules thus modules configurable according to motor power

◎ Book-like appearance design saving 30% space thus easier for cabinet layout with lower costs.

◎ Standard design for volume production & delivery

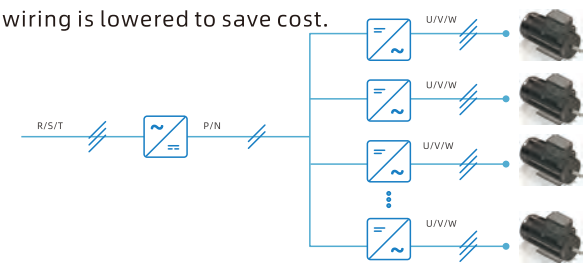
Common DC bus solution

◎ Energy from power generation and electricity between the inverter modules can be exchanged through the common DC bus and saved 5%-30% off when feedback load lowering or crimping/unwinding.

◎ Rectifier module and brake module current are effectively reduced and so as system capacity.

◎ Unified power supply by rectifier unit reduces the main circuit switch and brake unit consumption.

◎ Difficulty and consumption of electric control system wiring is lowered to save cost.



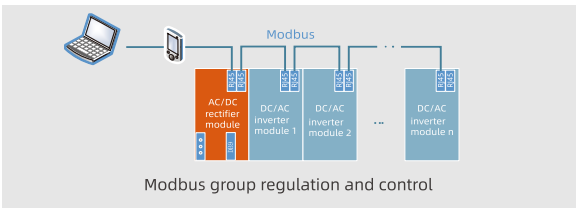
Net multiple protocols

◎ Modbus-RTU protocol: maximum baud rate 115200, 128 nodes, maximum distance 1000m.

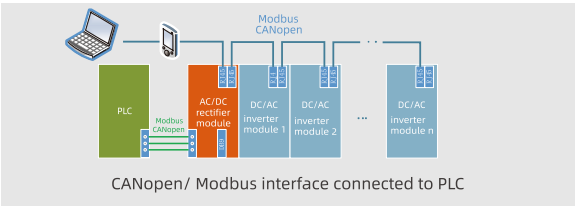
◎ Profibus-DP (optional for different models): 12M rate, 32 nodes, maximum distance 100m.

◎ Profinet protocol.

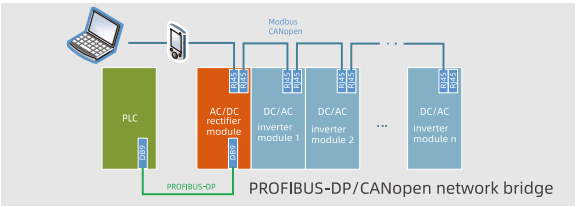
◎ CANopen protocol: 1M rate, 64 nodes, maximum distance 40m.



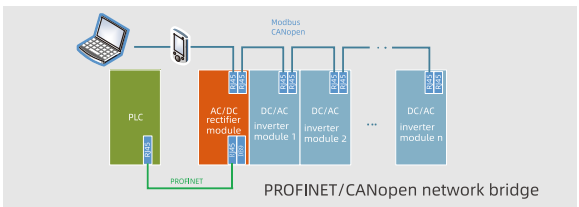
Modbus group regulation and control



CANopen/ Modbus interface connected to PLC



PROFIBUS-DP/CANopen network bridge



PROFINET/CANopen network bridge

Low and Medium-voltage Inverter

Three-phase 660V： 22kW-1120kW

Three-phase 1140V： Tri-level　　Two/four quadrants: 45kW-1000kW

Three-phase 3300V： Tri-level　　Two/four quadrants: 500kW-2500kW

- Stable operation
- Energy saving and high efficiency
- Safety and reliability
- Wide range of power band coverage
- Compact size and high power density

Features

Open and closed loop vector drive for AC motor drive integration	Advanced flux algorithm and modular design	Optimized low frequency dedicated overload and overcurrent protection curve to meet the specific needs of the field drive	Easy to install, debug and maintain
Good grid adaptability & wide grid voltage range	Built-in medium-voltage inverter drive applications & power balance of main-sub communication applications	Upgraded dust protection, strong adaptability to the environment	Thickened PCB board & three-proof paint treatment

Description

At present, the company's general-purpose medium-voltage inverter consists of AC310 and ACP30 two product platforms, including AC310-T6, ACP30-Tl11, ACP30-T33, which strengthens the user-friendliness and industry-specific design, achieving high performance, high reliability, high applicability and other characteristics, gaining excellent cost performance and good user reputation.

Characteristics

AC310-T6 series is the basic rectifier series inverter, and the drive application is consistent with AC310 series.

◎ All series are iron case inverters.

◎ Asynchronous, synchronous, spindle, high-speed motor drive control function with open-loop, closed-loop vector control algorithm platform with various expansion, and optional cards are like standard CANopen,Profibus-DP,Profinet expansion communication.

◎ ACP30-Tl 1 and ACP30-T33 series products have the following features.

ACP30-T11 and ACP30-T33 series products have the following features:

◎ Designed with NPC three-level topology and low voltage stress, friendlier to motor insulation, adapt to the long-distance drive motor.

◎ Adaptable to permanent magnet synchronous motors and asynchronous motors, open-loop vector control to ensure heavy load starting.

◎ Designed with four-quadrant inverter drive models, optional AFE rectification, high grid affinity, low harmonic content.

Applicable Industries

Industrial engineering and mining, municipal environmental protection, paper making machinery, lifting machinery, metallurgy and other industries.

ACH200-Series Medium-voltage Inverter

Three-phase 6kV: 315kW~1120 kW
Three -phase 10kV: 400kW~2000kW

- Control platform with excellent dynamic response & accuracy
- Superb low-voltage control performance
- Stall protection for full frequency to trace rotation & process quickly
- Advanced anti-interference switching between high & low voltage
- Multiple unit bypassed to avoid harmonic wave

Features

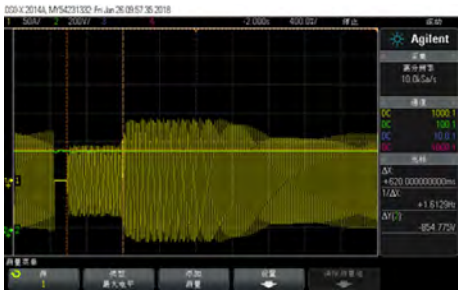
DSP+FPGA dual-chip controlling structure to realize high-speed & highly-accurate loop control operation	Dead zone compensation & low-frequency oscillation suppression	Stall protection for full frequency to trace rotation speed and process within 200ms	Master-slave control with CAN or fiber communication to ensure instantaneity and output consistency
Phase locking for power frequency and frequency conversion switching and running without interference	High adaptability to grid fluctuation and running maintained during 1~5s power failure	Harmonic free to lower both grid-side and motor side THD value to 2%	Multiple extension modules with full protections including PT100 temperature detection

Description

ACH200-Series medium-voltage is the third generation of products that are independently developed, designed and manufactured by Veichi, featuring mature power unit series technique, DSP+FPGA dual-chip controlling, vector control algorithm with high accuracy, fast response and large torque at low-frequency output, and it is widely used in draught fans, pumps, compressors and belt conveyors.

Stall protection in place

Stall protection is always functioning to trace rotation speed no matter how the motor is. And inverter direct frequency output is automatically activated and drag the motor to set status during 0.1~1s of instantaneous fault recovery caused by power failure and such.



Residual voltage on devices of large inertia remains quite strong, and when it restarts, residual voltage and phases can be estimated and then begins rotating and exciting, and accelerating

Excellent low-frequency control performance

Dead zone compensation

Current waveform close to sinusoid at low frequency

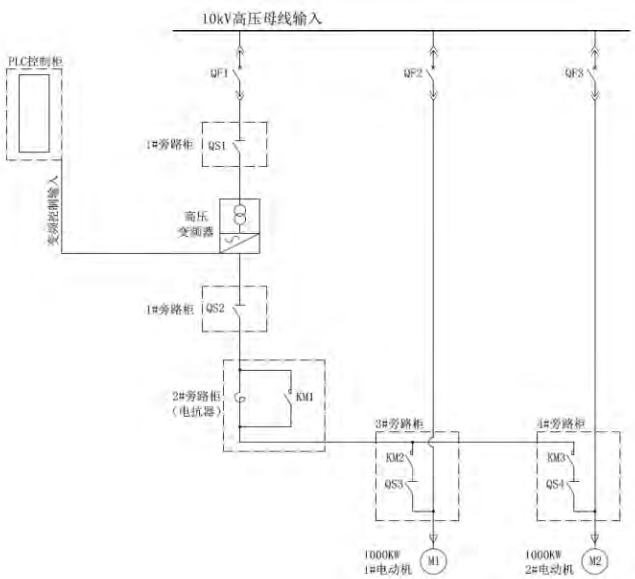
Oscillation suppression

Motor syntony avoided at low frequency

Advanced interference-free switching

Phase locking is added so interference-free switching and running of the motor between power frequency and frequency conversion, especially suitable for multi - pump wheel switching of the pump.

Impact current stays lower than 1.5 times of the motor rated current.



SD700-Series
High-performance Servo Drives

robust control

smart setting

Multi-stage vibration control

23-bit absolute value encoder

brand-new structure

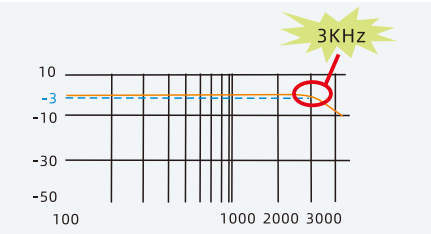
Features

loop response bandwidth up to 3KHz	23-Bit absolute encoder and communication speed up to 2.SMbps	Automatical bandwidth setting to complete PIO loop gain calculation	Powerful and ueser-friendly upper computer software to manage multi - channel monitoring
Mainstream field bus such as EtherCAT, PROFINET, CANopen, RS-485, MECHATROLINK II, MECHATROLINK Ill.etc, supported	Automatic inertia recognition, loop gain, friction compensation and other parameter settings supported	Multi-segment vibration control to effectively limit resonance	Robust control to ensure smooth operation for loads with up to 30 times inertia

Characteriscis

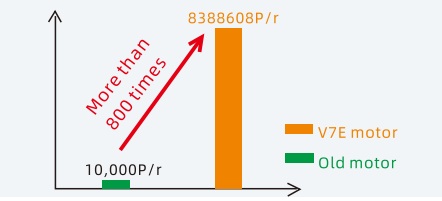
loop response bandwidth reaches up to 3KHz

Through the unique current loop algorithm, loop bandwidth is effectively increased, which greatly shortens the setting time, and the setting time reaches as fast as 1ms to improve the production efficiency.



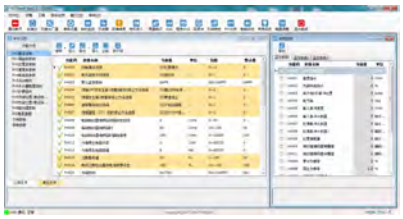
23-Bit absolute value encoder

Leading 23-Bit absolute encoder is adopted whose pulses are up to 8388608 per revolution and communication speed up to 2.5Mbps.
It enables better positioning accuracy, more smoothness at low speeds and no loss when power down.



powerful upper computer software

Do not need installation of any debugging software and easy to use USB communication between driver and PC.



Parameter Specifications

Drive power range: 100W-200KW

Output torque range: O.16N. m-3183 N.m

Applicable Industries


Machine tools


Mechanical arms


Wood-working machines


Electronic manufacturing


Intelligent logistics


Die-cutting machines

SD780-Series General-purpose Servo System

International standard UL certification

Powerful bus communication

STO

STO function

Clean debugging panel

17/23-bit absolute encoder compatible

Features

Hardware protection and anti-interference performance upgraded comprehensively, reaching UL & CE certification requirements	All products of this series qualified with STO SIL3 safety requirements to offer safer running environment for customers	Multiple bus communication options of CAN open & EtherCAT	Applied to 3C, lithium, semiconductor, new energy, photovoltaic and other industries mainly
Debugging & upgrade via upper computer with hand - by - hand installation wizard to simplify the servo application	Debugging software with drive parameter copy function, to eliminate repetitive parameter setting operation for the same model	Automatic parameter tuning for mechanical conditions without manual interference to realize intelligent parameter setting of various complex loops within as fast as 10ms	V7U motor, IP67 protection on the body, performance optimization of temperature rise 5-10℃ lower than previous generation & shaft jump precision higher than 0.02mm

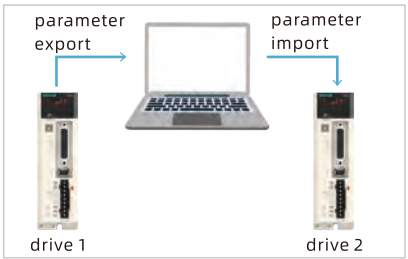
Characteristics

Debugging & upgrade via upper computer

Hand - by - hand installation wizard to simplify servo system application

Drive parameter copy

Parameter copy function in the debugging software saving repetitive settings on the same model



Parameter self-tuning

1. adjust to different mechanical structures
2. complete the intelligent setting of various complex loop parameters
3. auto setting with mechanical conditions without manual operation
4. position tuning with in 10 ms as fast as possible

screw rod , synchronous belt-suitable to different mechanical structures

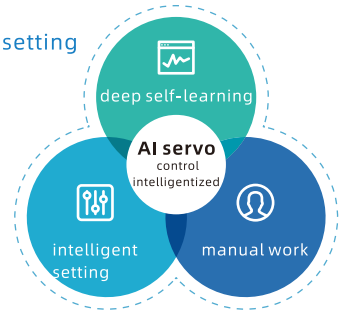
International standard UL certification

Applicable to import and export between United States, Canada and other countries

STO function

Standard SIL3 safe torque off function suitable for new energy, lithium battery, photovoltaic and other industries to provide higher security for users.

Intelligent setting



Standard configuration with Micro USB upper computer-special interface

Micro USB	Standard configuration with Micro USB upper computer-special interface
RS485	Standard configuration with rs485 communication port
CANopen	Optional with CAN open communication port
EtherCAT	Optional with Ether CAT communication port

V7E-Series Motor

High performance cost ratio

Better outgoing

Lower temperature rise

Higher precision

Shorter length

Features

Faster heat dissipation and better uniformly distributed humidity	Rotor 10-stage optimized design	Optimized design of permanent magnet, high demagnetization resistance	Overload capacity up to 3-4 times
High slot space-factor, large winding diameter, low resistance,20% less heat generation	The open design of the motor shaft end equipped with a variety of encoders, providing users with a variety of options	Fast motor dynamic response	Motor volume 20% smaller than previous products with small size and light weight

Characteristics

Full range of motors with IP67 protection level ensures higher durability

V7E motors have have high protection level enables more working environments and longer service life.Protection level is currently the highest in the industry.

Dust and gas can not enter since rubber parts are used on all of the seams to ensure leakproofness.

No harmful effects from strong water spraying in any direction against the housing

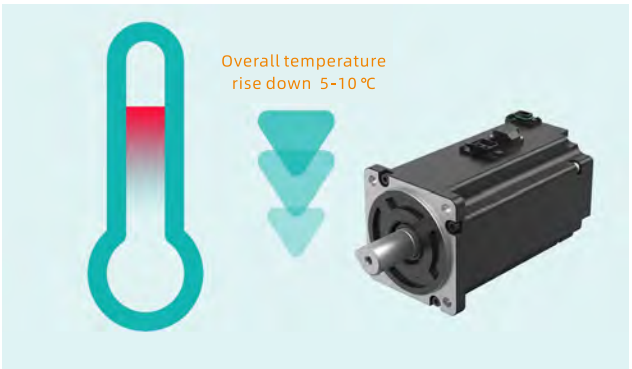
The shell being immersed temporarily in 1 m deep water under normal temperature and pressure will not cause harmful effects

No lead line for cleaner appearance

V7E motor is designed with terminal wiring thus no lead wires, and integrated end caps with fewer opening on the front cover screws, which makes the overall motor simpler and more pleasing to the eye.

Less shaft runout and higher precision

The V7E motor has smaller shaft runout and higher accuracy, which can be used for higher-end occasions. The accuracy of shaft runout has been increased from 4 to 2, which shows the advanced level in the industry.



Smaller shaft has been upgraded

From 0.04mm to 0.02mm thus deliver higher accuracy for more complicated occasions, one of the best among industries.

V7R-Series
Servo Decelerating Motor

Short body

High precision

Big load

Safety and Reliability

Standard design

Features

Integrated design saving 40% decelerator length compared to split mounting structure

Gear back clearance ≤3arc-min, rigid coupling between gears and shafts for higher precision

Stronger radial force and axial force bearable for 3 times larger loading torque

Oil and grease lubrication, body maintenance free, protection level IP65, traditional connection structure canceled, mechanical reliability enhanced

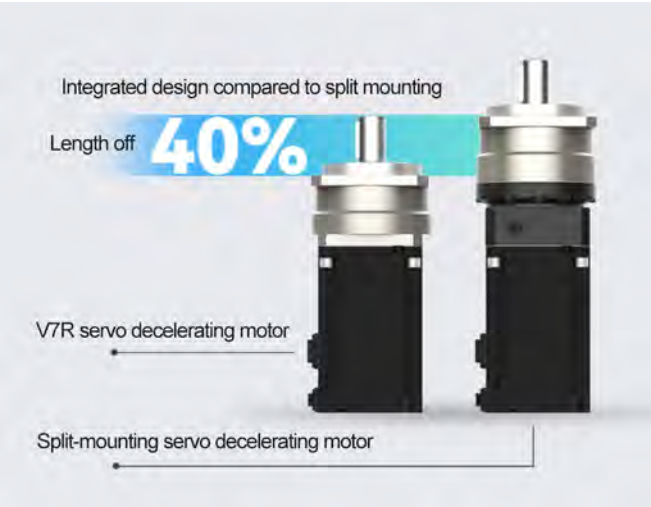
Standardized and integrated products saving repeated drawing checking during procurement

Debugging-free, easy to install, and plug and play

Characteristics

Integrated design

Motor and decelerator are connected via pinboards thus length is reduced by 40% compared to split type.



High precision

Motor spindle noses are equipped with sun gears via interference fit, and deliver higher precision when direct running with planet gears.

Applicable Industries


Laser cutting machine


AGV


Carving machine


Hand tool


Coiling machine

VC1-Series PLC

User programs supported up to 16K steps

three-way pulse output at 100khz

convenient firmware upgrade

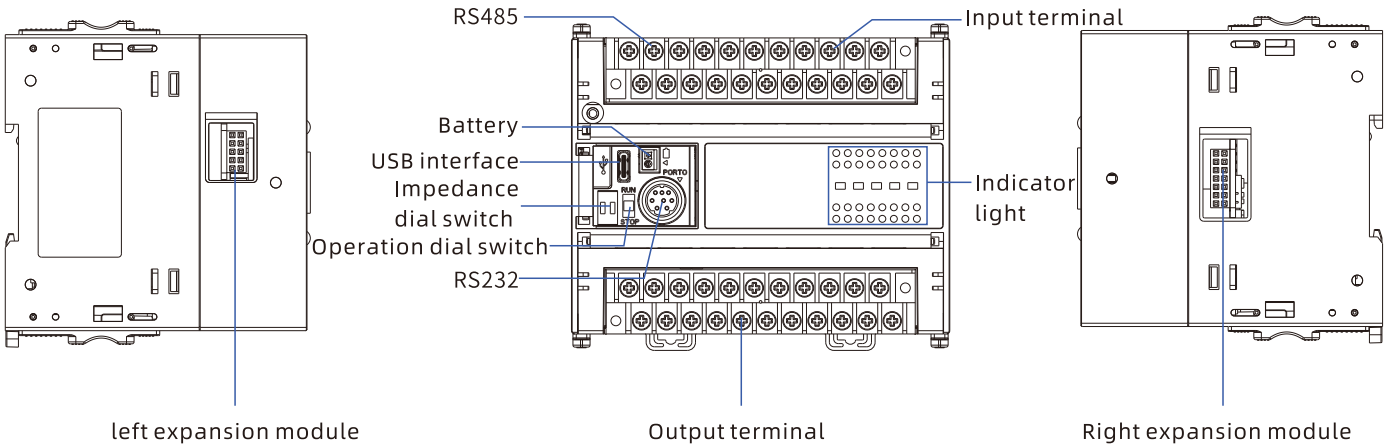
232
485
one-way for 232, one way for 485

multiple extensions

Features

1-way 485 can be added via left expansion module	2-way 50Khz high-speed counter, 6-way 10Khz high-speed counter	Ethernet supported via left expansion	USB communication supported making debugging more convenient and fast

Port Description



Specifications

Designation		Parameter
General	Basic instruction execution duration	0.2μs
	Real-time clock	±45s/m(normal temperature)
Storage	Program Capacity	16k steps
	Power-off data preservation	Supported
	Power-off soft components preservation	Flash saved permenantly, 2000 elements max
IO	Maximum IO points	128
	Maximum expansion modules	15
	Digital filtering	Filtering time can be set the for the 8 input points software, and the subsequent points are filtered by hardware with a filtering constant of oms
Positioning control	Maximum pulse output (transistor)	3 ways at 100Khz
	Single-phase counting channel	2 channels of maximum input frequency 50 kHz, 6 channels of maximum input frequency 10 kHz
	Biphase counting channel	1 channel with maximum input frequency of 25 kHz, 3 channels with maximum input frequency of 5 kHz
Communication	Serial communication port	one way for 232, one way for 485
	Ethernet	none
	USB communication	USB 2.0

VC5-Series PLC

EtherCAT master station

CANopen master and slave station

Simple motion control settings

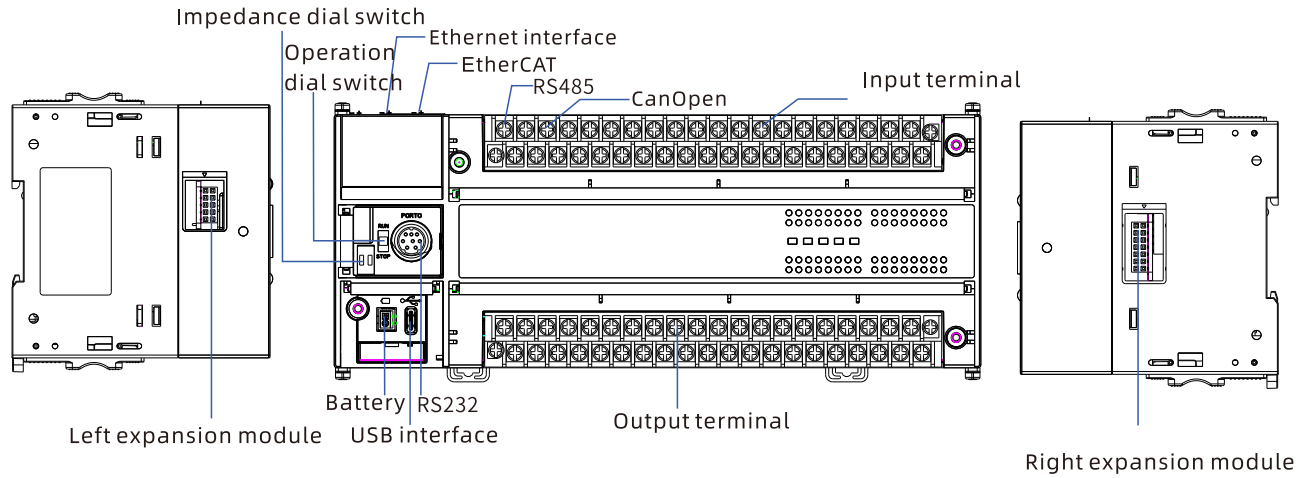
Abundant communication interfaces

Integrated high-speed pulse

Features

32-axis Ether for AT bus motion control,position, speed, torque, point motion control and interpolation	72 EtherCAT slaves stations	RS485, CAN, Ethernet and EtherCAT interfaces for multi-level network communication	PLC open-based motion control commands bringing 32-axis max motion control; host supports 4-axis by 200KHz pulse output, 8-way high-speed input at 200KHz
Efficient and convenient programming methods such as LD/SFC programming and function block instructions	The main unit with 32-way inputs and 32-way outputs, including 8-wau high-speed inputs and 8-way high-speed outputs, thus realizing 4-axis pulse output and 4-axis encoder counting	15 expansion modules max	Support linear interpolation, circular interpolation, electronic cam and electronic gear

Port Description

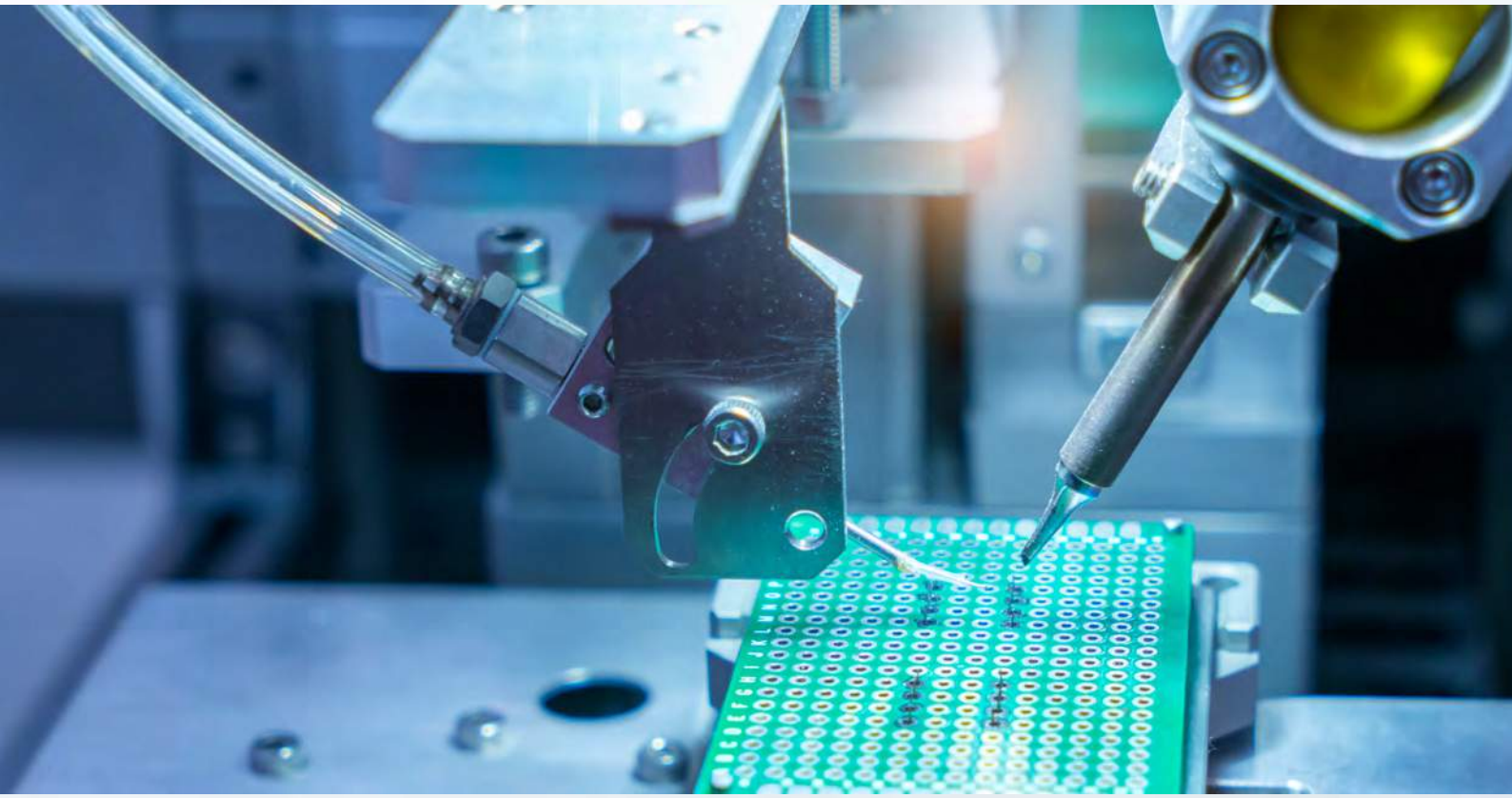


Specifications

Designation	Parameter
Program data capacity	200K steps of the user program, about 128K soft components among which are about 84K power cut perservation
Number of axes available	32 axes EtherCAT& over 72 EhterCAT slave stations
Synchronizing cycle	EtherCAT synchronization cycles supports a minimum of 250 μs
Serial port communication	One way for RS232 and one way for Rs485
CAN communication	CAN open （301/402 protocol）
Ethernet	Modbus TCP & upload\download
High-speed input	High-spead eight-way input at 200khz (4-way AB phase counting)
High-speed output	High-spead eight-way onput at 200khz (4-axis pulse output)
Extension Modules	15 extensions max
Programming Languages	LD,SFC and FB instructions supported
USB	Upload/download and firmware upgrade
Motion	Linear interpolation, circular interpolation; electronic gear and electronic cam function, etc.

Industrial Dedicated Inverter

start with and develop for industrial-specific inverters



Photovoltaic pump drive

Intelligent weaving system

Crane industry

Machine tools and compressors

Electro-hydraulic servo drive

Environmental ventilation

Printing and packaging


VEICHI

Solutions for Water Pump

- Integrated Drive (GS00)
- Mini Pump Drive (GS10)
- IP65 Pump Drive (GS30)
- Pump VFD (GS20)
- IOT

Features

SloT for smart watering

Wireless transmission & one-key operation via mobile APP

High reliability & high power density for wide application

Vertical air duct for heat dissipation

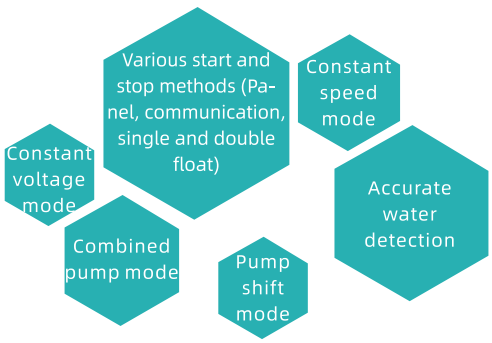
Multiple voltage selection of AC110V/220V400V

Drive permanent magnet synchronous & asynchronous & BLDC motors

MPPT maximum power output + multiple protections

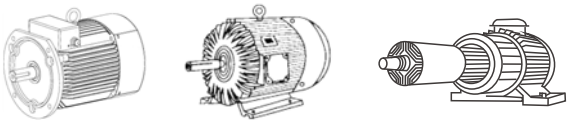
Characteristics

Multiple water supply functions



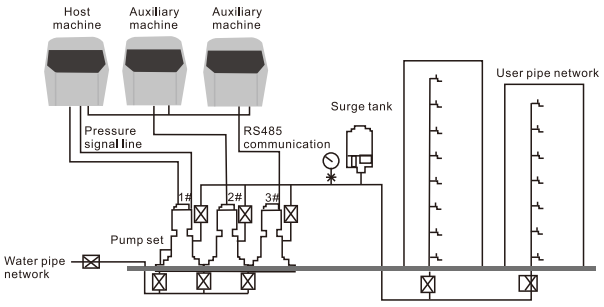
Perfectly drive a variety of pump motors

Perfectly drive a variety of water pump motors such as asynchronous, permanent magnet synchronous, synchronous reluctance, etc.



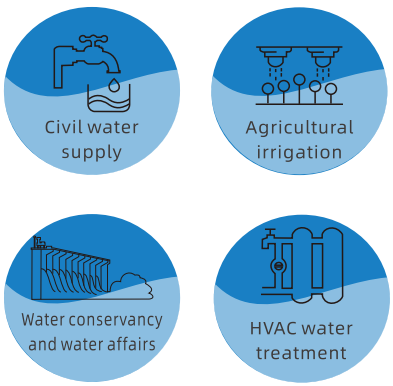
Multiple pump control

- The pressure of the pipe network is detected by the host and sent to the auxiliary machine. When the pressure is not enough, the auxiliary machine starts and runs according to the set frequency, and the main machine performs constant pressure PID adjustment.
- The main and auxiliary machines alternately run in sequence at regular intervals to realize the uniform use of the water pump and extend the life of the water pump.



Wide range of applications

Used in many occasions such as civil water supply, agricultural irrigation, water conservancy and water affairs, HVAC water treatment, etc.



QT-Series
Integrated Crane Tower Drive

- Modular design
- High-performance PLC logic control unit
- Easy maintenance
- IP54 protection
- Remote monitoring modules

Features

Installation debugging: debugging mode is on during factory debugging to shield travel limits and weight-torque limits and ensure safe running at low speeds

The three major functional modules of hoisting/ swiveling/amplitude change operate independently and do not affect each other

Logical operation and fast data processing ability of three major mechanisms

Double signals, double brakes: double signals, double brakes on lifting brake control circuit designed as redundant braking circuit

Remote positioning, real-time monitoring and remote fault diagnosis of machineries etc.

Logic control of holding brake: logic control realized through the release frequency, release current, brake release time, brake holding time, etc. , to ensure system safety and reliability

Load-speed function: calculate the maximum operating speed according to load. "high speed for light load, low speed for heavy load" to improve efficiency

System Composition

Systematic Solutions for Intelligent （unmanned） Construction Hoist

Intelligent drive

Humanoid detection

Machine-man interaction

Intelligent diagnosis

Video surveillance

Features

Intelligent drive controlled easily via cage-bottom box or operating portable box to direct freight elevator up and down

AI humanoid detection will stop the freight elevator when human detected in the cage to guarantee safety

Smarter HMI machine-man interaction simplifies operation

Intelligent voice notice, emergency stop, fault and real-time voice broadcast of abnormal limiting

Fault self-diagnosis leads users to quick troubleshooting and raise repair efficiency

Distribution box & operating box integrated facilitates installation & single-dual cage switching without differentiating the cage-bottom power control boxes, thus this is more compatible

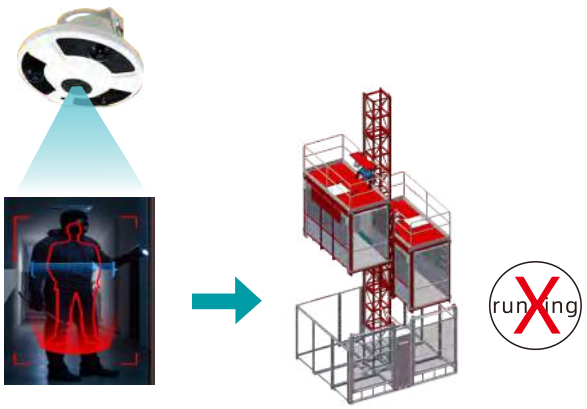
Floor calling via the floor caller enables level control easily

Video Surveillance

Transmit the surroundings around the freight elevator to the monitoring screen so drivers can check obstacles and personals nearby.

Built-in Humanoid Detection

Built-in humanoid detection will limit moving of the elevator and let out voice warning once man taking the elevator against rules detected until he leaves.



System Composition

ACP30-Series
Explosion Protection Inverter

660V two-level two-quadrant / four-quadrant: 45KW-630KW
1140V three-level two-quadrant / four-quadrant: 55KW-1000KW
3300V three-level two-quadrant / four-quadrant: 800KW-2500KW

New platform with wide coverage

Three-level topology against the trouble of burning motor

Heavy-duty start-up function and strong power cycle capability

Compact structure reducing installation space

Stray inductance reduced for longer service

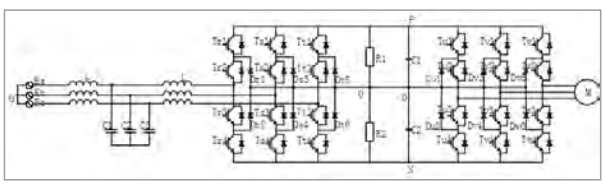
Features

New platform developed for medium pressure and medium power conditions covering all applications of explosion-proof inverters	Three-level topology to solve the trouble of burning motor & cable line up to 2000 meters	Designed scraper, belt machine, winch, etc in coal mine working conditions with heavy-duty starting capability and strong power cycle capability	Thermal simulation & electromagnetic simulation done on all the products for scientificity
Dedicated LCD screen with friendlier human-machine interaction and more comprehensive information	High-power synchronous motor on control automatically locks the pole position before starting to achieve shock -free starting	Standard CAN communication power balance control with fast response & low load imbalance	Short circuit protection located to each phase, and multiple faults locked at the same time for easy maintenance

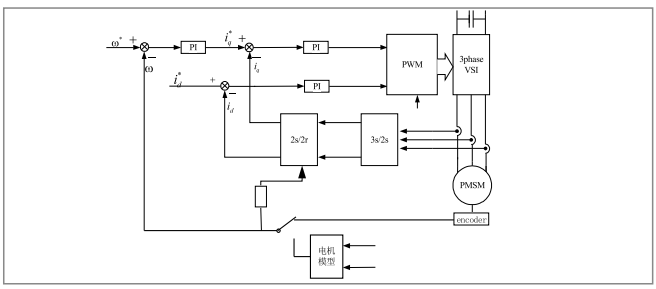
Description

The ACP30 series, a high-performance vector inverter developed for the coal mining industry, covers input voltage from 660V, 1140V to 3300V, with two-quadrant and four-quadrant operation capability, and can tow asynchronous motors and permanent magnet solid-stepping motors. It adopts the industry-leading motor vector control technology, AFE controlled rectification technology and NPC three-level topology, can provide a complete inverter solution for the coal mining industry.

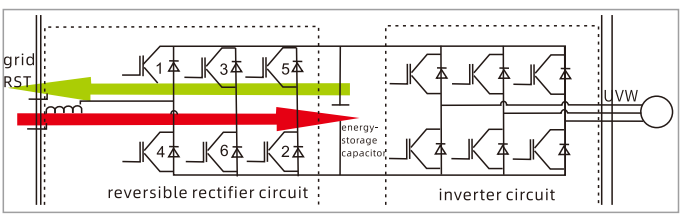
Back-to-back NPC three-level topology



High-power motor vector control technology



AFE controlled rectification technology



Applicable Industries

Belt conveyor

Permanent magnet synchronous motor

Fully mechanized scraper and shearer for mining

Water pump

EHS100-Series
Integrated Servo Drive

Integrated control, power and brake functions all in one

Easy installation and wiring without electric control box

No debugging & self-learning, LAPU

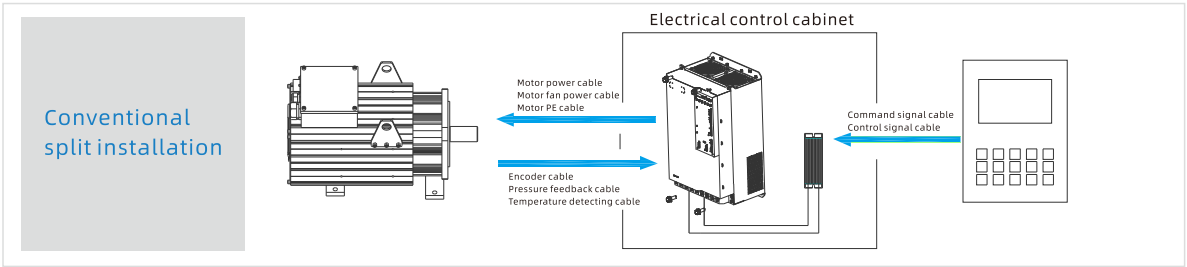
Dual independent air ducts with IP56 fan

Features

Space saved & productivity improved reducing production errors and correction costs	Wring inside which contr-ibuting to improvement of EMC compatibility, significantly reducing interference and increa-sing stability	Integrated brake avoiding failure and damage caused by wrong selection or improper selection of devices	Intelligent temperature control with70,000-hour -long-life fan (IP56 protection)
IPM inline magnet design for low temperature rise and fast response	Advanced weak magnetic algorithm doubling the torque for easy handling of overload and speed	Keyboard with RJ45 network cable interface with hot-plug, extendable from a distance, and installable independently with brackets	Joint control mode such as synchronize, follow, overlay, intelligent tracking and others

Characteristics

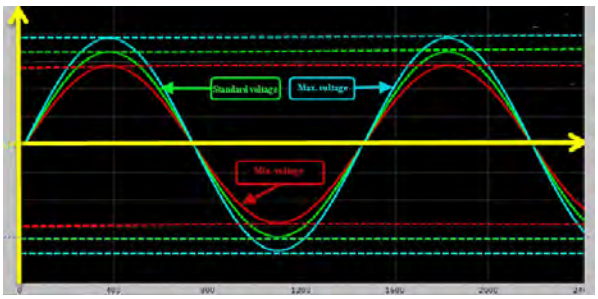
Subvert the conventional methods



The system is free of debugging and self-learning, and can be operated by powering up and in the meantime the original motor size and method remain to reduce the drive electrical cabinet.
No need to connect motor power cable, fan power cable, temperature detection cable, encoder cable, brake resistor cable, motor PE cable, etc.

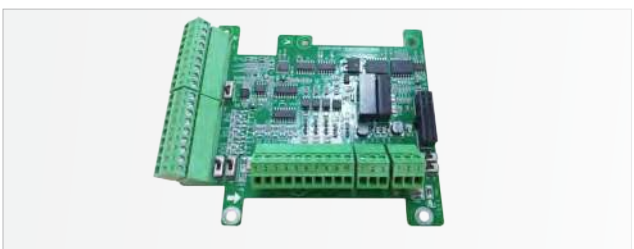
AC300V-AC480V wide power input

The ultra-wide AC input voltage range can cope with various harsh grid environments and enhance the applicability of the equipment under extreme working conditions.



Position closed-loop cards

Position closed-loop card for all-in-one machines, combined with excellent position control algorithms
It is suitable for various types of position sensors, analog signals, pulse signals, etc. and for various industries.



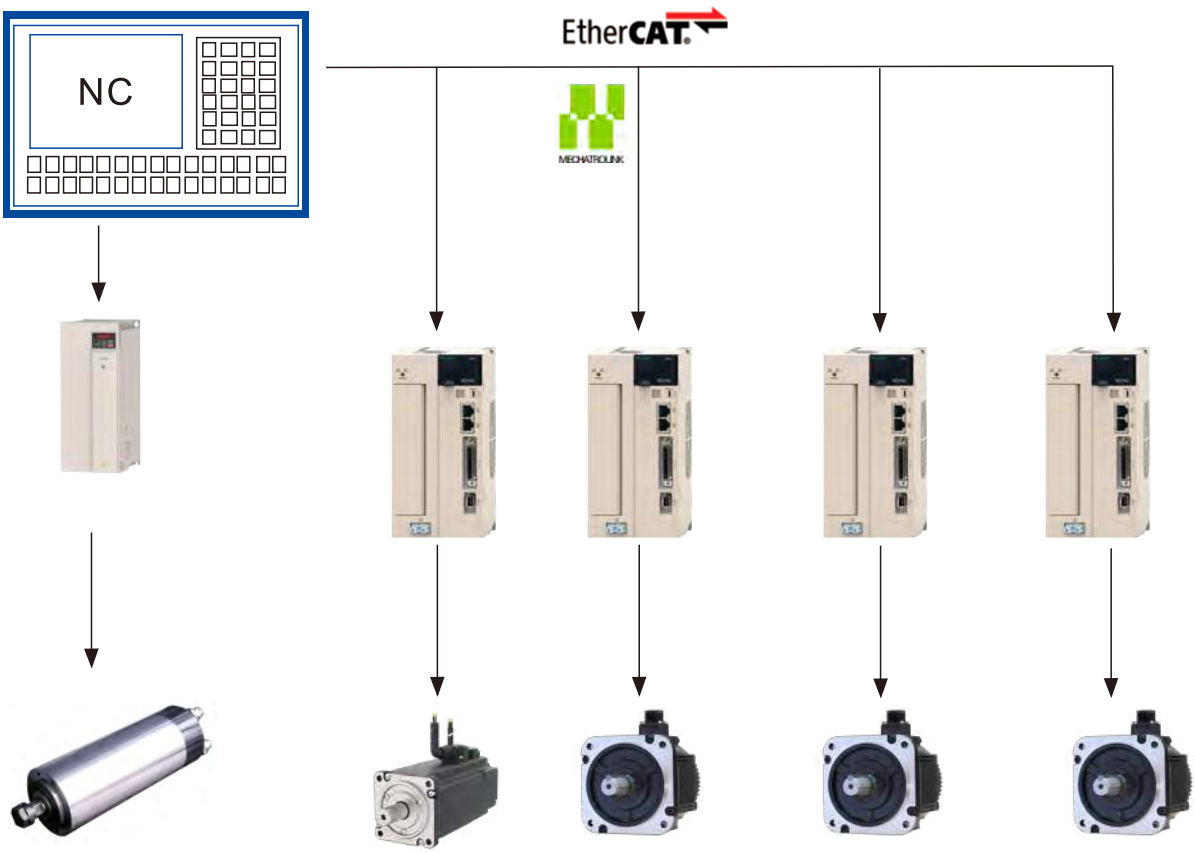
SD700-Series
Machine Tool-special Servo System

- Multiple bus protocols
- Loop response bandwidth of 3kHz
- 23-bit absolute encoder
- Powerful upper computer software
- New structural design

Features

Multiple communication interfaces for high speed and high precision control	Standard 850W, 1.3kW motor for feed axis & all with waterproof connectors	Online mapping to modify parameters and debug easily	Special servo for tool magazine supports half-round tool position calculation, multi-turn overflow processing, gap compensation and other functions
Tool magazine servo supports test mode for easy debugging	Fine grain pattern and high finish of the processed workpiece are guaranteed	Multi-segment vibration control is supported to effectively limit the resonance	Automatic inertia recognition, loop gain, friction compensation and other parameter settings is supported

Engraving and Milling Machine Solutions



Spindle high-frequency inverter

Servo system for tool changer

Servo system for feed axis

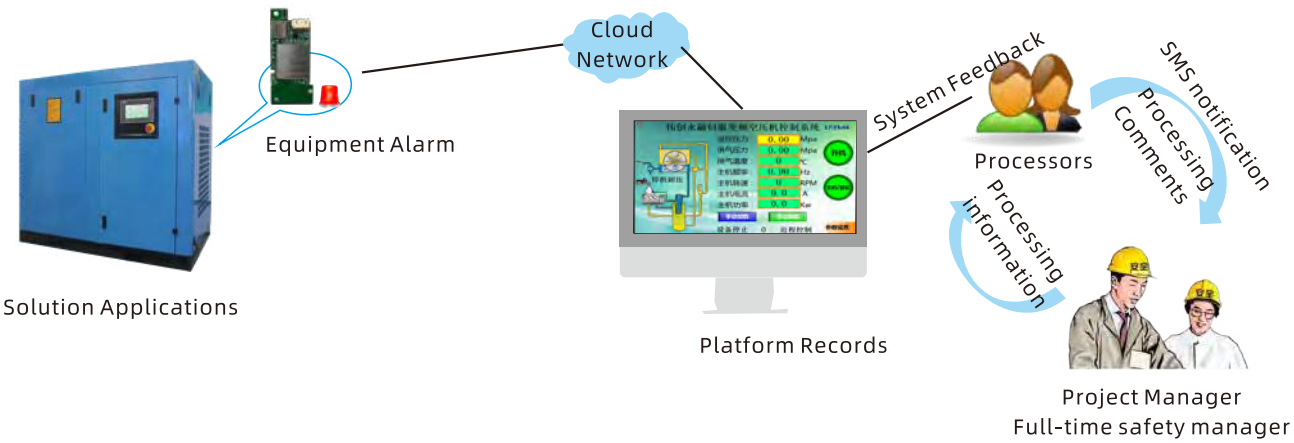
AP150-Series
Integrated Drive for Air Compressor

- Drive for synchronous, asynchronous, permanent magnet & reluctance motors
- Stable, accurate and fast constant pressure voltage
- High energy efficiency and energy consumption decreased by more than 25%
- Easy wiring, installation and debugging
- Highly integrated system

Features

High-speed integration of host, fan machine drive output and air compressor logic control system	Fast response characteristics for pressure fluctuation ±0.01 Mpa	Simple debugging with solidified parameters while without tuning. Immediate operatinon when power is on without any setting on parameters	Permanent magnet motor minimum current algorithm to boost voltage, reduce output current and lower specific power
Built-in IoT module for real-time control of equipment operation and maintenance information	Timed start/stop available	User-friendly interface	Strong drive for asynchronous motors, permanent magnet motors and synchronous magnet resistance motors

All-in-one Solutions for Air Compressor Industry



Applicable Industries

Packaging | Electronics | Automobile making | Printing | Metal processing

VC600C-Series
Integrated Electric Control of Water Jet Weaving Machine

- Water and oil proofing
- Reliable connection
- visual weft detection
- Direct-driven system
- Full functional coverage

Features

Easy installation, high level of box protection and visualization, fanless design to eliminate water vapor, oil and gas	Internal and external plug-in cable connection, making the product more scalable and easy to maintain	Weft detection with independent intellectual property rights;visual sensitivity adjustment to improve debugging efficiency	Permanent magnet direct drive system to greatly reduce energy consumption and ensure reliable and accurate operation of the equipment
Four-spray pattern control technology, double warp beam electric feed electric roll, electronic dobby control and other functions	Fanless design with back heatsink, miniaturized size and high integration	More energy-saving common DC bus technology than traditional asynchronous motor and direct drive	Standard with non-terminated toroidal transformer for lower temperature rise, higher resistance to vibration and more stable operation

Characteristics

Box introduction

◎**IP54 protection-level (certification: 20210505K12013)** box can stand direct water drenching, thus can effectively prevent the weaving sites from water vapor, protecting the normal operation of equipments and prolonging the service life of equipments.

◎**The use of back radiator & fanless design**
Through the back of the box design air duct, cabinet temperature is effectively reduced, completely solving the problem that the traditional textile control cabinet fans are easy to damage due to the water vapor and accumulation of oil.

◎**Volume miniaturization & higher integration**
VC600C series directly eliminates the cost of equipment chassises, achieving smaller size, lighter weight, more convenient installation methods.

◎**Visual weft detection(Invention patent number:ZL201910889295.5)**
The independently developed visualization weft detection technology, compared to the traditional way, it is more intuitive and more convenient; With weft detection self-learning function, it can eliminate effectively empty stops and missed stops.

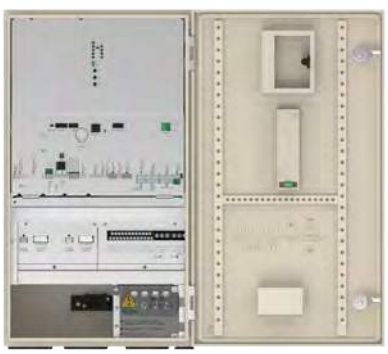
Layout introduction

◎**modularized concept adopted**
to eliminate the traditional inline harness and then solve the problem of poor contact of harness in high vibration environment.

◎**Easy maintenance and extensions**
to add, replace the corresponding control module.when transforming the devices

◎**Non-terminated toroidal transformer as standard**
Standard with non-terminated toroidal transformer can stand lower temperature rise, vibration thus delivering more stable operation.

◎ **Common DC bus technology adopted**
Compared with traditional asynchronous motor and direct drive, it is more energy-saving.



VC600C-series direct drive system functional

◎ Smooth operation - electronic inertia technology of low speed fluctuation.

◎ Easy speed adjustment - infinitely variable speed for arbitrary adjustment.

◎ Green and energy-saving technology-using permanent magnet frequency conversion technolog to reduce energy consumption.

◎ Permanent magnetism-150℃ high temperature resistant magnets adopted thus no demagnetization.

Efficient range 300-1200R/min of weaving speed due to elimination of the brake disc, belt disc, reducing most of the transmission loss; Veichi's core vector control synchronization technology lifting the system energy-saving rate of about 20%.

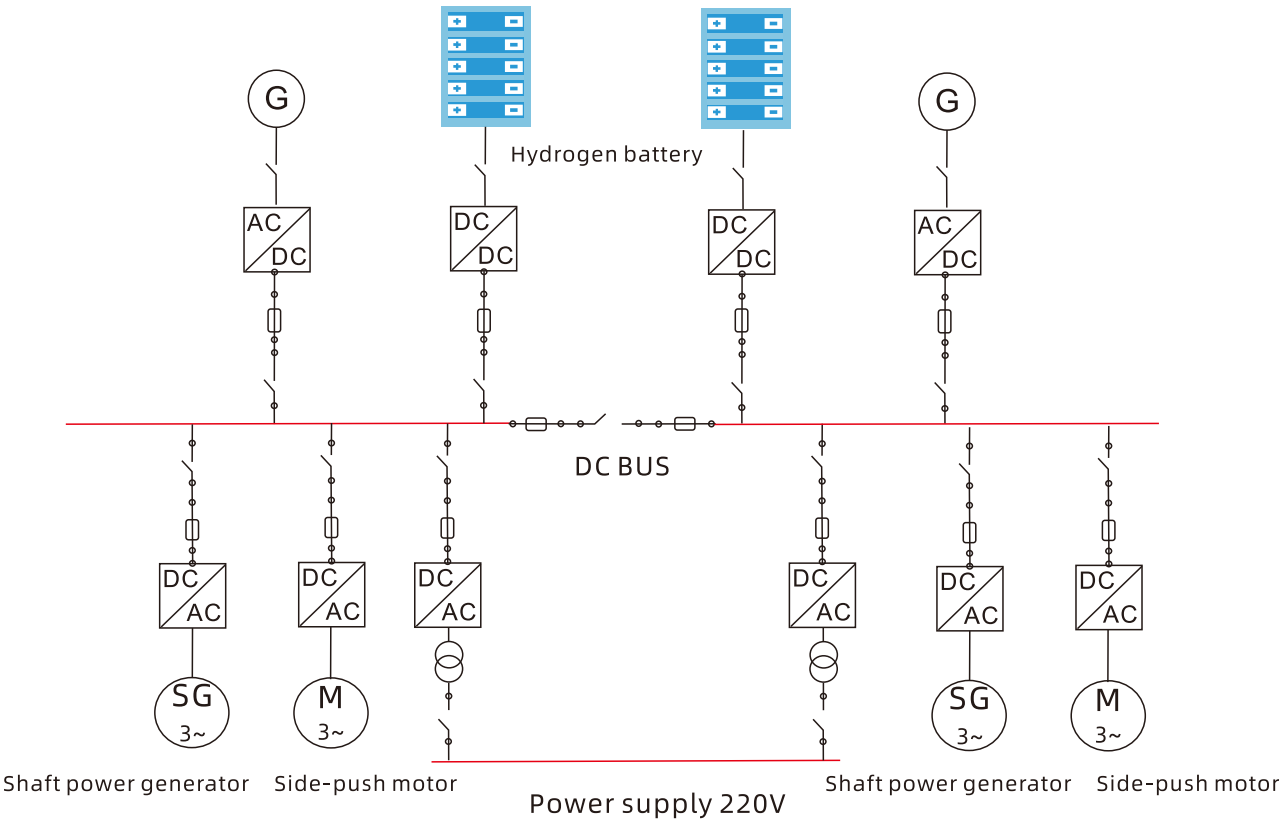
Systematic Solutions for Ships and Offshore Engineering

- Systematic solutions for AC electric propulsion
- Systematic solutions for shaft power generation
- Hybrid power system integration
- Systematic solutions for all-electric driven new energy ship
- Systematic solutions for deck mechanical drive

Features

DC networking system basis can easily and flexibly integrate core drives like variable speed generator set, shaft power generator set, fuel battery and power electronic converters	Fault tolerance is raised and storage/fuel battery/ shaft power generator set are integrated for redundant power supply for ships	Unique remote diagnosis and service combined with fuse protector, isolator, breaker and transverter to protect system safety	DC bus 1000V networking reduces 40% cable layout compared to 690V or 660V AC plans
Fuel battery and shaft power generator set can reduce diesel generator set and then saves more space available	Zero discharge at port will shut down the diesel generator and fuel battery starts to generate power	Absorption of strong loading fluctuations increases fuel efficiency and decreases motor running time	High-performance power electronic converters help to thrust ships into a new age featuring low- carbon

Systematic Solutions for Hybrid Power DC Networking



◎ Hybrid power DC networking system are adopted on AC800CS-Series multi-machine drive products;

◎ This product meets the requirements of ship-special power electronic converters, covering air cooling/liquid cooling, active recitifier, DC-DC chopper module with all power up to 5.6MW.

◎ Built-in DC networking technical reserves and converter control technologies for all kinds of power generator and propellers.

◎ Shaft power generator is designed with PTI, PTO, and PTH and with soft control of load transferring, grid-connection and grid-island splitting.

AC310-XL series
Wire and Cable Drawing Machine Electric Control System

Booklike compact body for clean and convenient cabinet installation with reduced space

Separate air duct with good dissipation, fans movable

PCB with thickened triple-anti painting for higher reliability

Strong resistance for vibration of drawbench

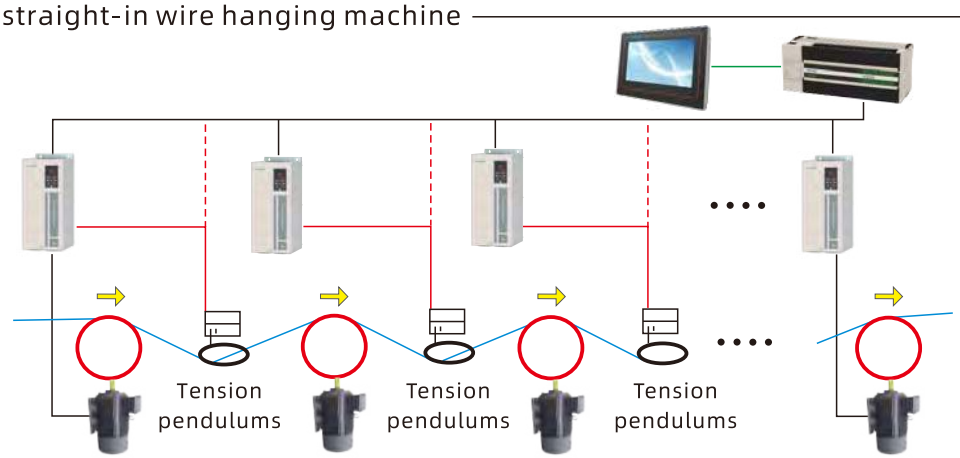
Abundant expansions for IO card, communication card and others

Features

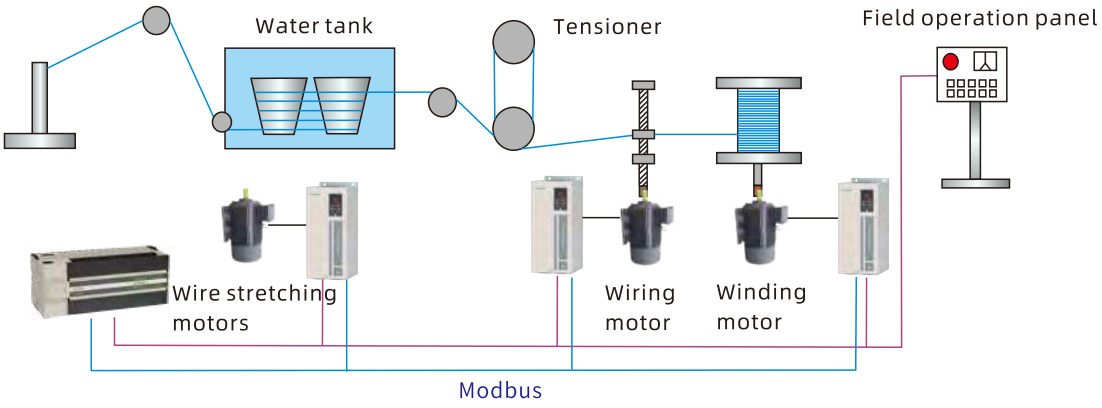
Integreated drive for both Synchronous and asynchronous moters	Easy and convenient to use macro definition; one-key parameter setting always ready for use, and adapted to various cable devices	A variety of communication applications including standard Mod bus protocol, CAN open, Profinet, Profibus -DP & other communication protocols extendable	High-performance vector control technology with low frequency and large torque, delivering 150% torque output at open loop 0.5Hz and 200% torque output at closed-loop 0Hz
Open-loop torque response <20ms, speed stabilization accuracy 0.2% (synchronous), 0.5% (asynchronous) to ensure high performance output	Good PID control algorithm to meet a variety of applic-ations, fast response to instantaneous speed regu-lation, to achieve pendulum stability, winding dynamic balance	Smooth start and stop, no break in the emergency acceleration and deceleration to ensure stable and reliable production	Built-in function modules including speed measure-ment, length counting, weighing, brake output and other auxiliary functions, effectively reducing the cost of system components

Solutions for Wire Hanging Machine

Solutions for straight-in wire hanging machine



Solutions for water tank drawing machine



Environment Ventilation-special Inverter

Create green energy to help achieve the "double carbon" goal

IN310 industrial fan-specific inverter

Air conditioner compressor-specific driver board

Light commercial air conditioners-specific inverters

Features

IN310 industrial fan-specific inverter.Integ-rated and friendly human -machine interaction and easy operation	Air conditioner compressor drive board with boardlike structure for compact size and space saving and easy installation	Inverter cabinet for air conditioner compressor with integrated and easy installment and thus more suitable for harsh environments	.....

Solutions for Industrial Fan

The product integrates inverter, multi-function LCD screen, speed knob, up-and-down electric switch, compatible with synchronous asynchronous motor drive, with the stunning design to break the traditional appearance of the group cabinet to create a quiet and comfortable environment at the same time and to provide a quality user experience.

Solution for Rail Transit Air-conditioning

The drive adopts the board structure, which is perfectly suitable for the installation environment of vehicle-mounted air-conditioning units, and the product adopts the advanced control technology of Veichi, which is suitable for most of the vehicle-mounted compressors on the market and can save energy to the maximum.

Inverter board for air conditioner compressor

Compressor

Solutions for Light Commercial Air Conditioning Inverter Unit

The special inverter cabinet integrates power module, control system, filter unit and circuit breaker, and is widely used in shopping malls, subway stations and other commercial environment.

Partners


中信重工
CITIC HEAVY INDUSTRIES


中国中车
CRRC


中国石油


SIASUN 新松
超 越 期 望 Beyond Expectation


XCMG
徐工集团


SANY


DAHAN 大汉建机


Midea


LEO利欧


BORCHE


Hymson
海目星激光


海佳机械
HAIJIA MACHINERY


恒力集团
HENGLI GROUP


YANGLI
扬力集团


天元集团


DZ
大中电机


沃得精机
WORLD GROUP


HiTurbine
Compressor & Blower


方圆集团
FANGYUAN GROUP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SEAH


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Transmit power for the world


ZCJSD

Service and Support

Innovative technology and service First

Practice the "customer-centric" service concept and create a "five-heart" service system

Network and telephone dual platform service for real-time grasp of service dynamics, with "heartful, patient, dedicated" service, to truly let customers "buy with confidence, use with comfort"

Multiple service outlets at home and abroad, and a wholly owned subsidiary in India

24-hour technical and after-sale service

Fast response to give specific solutions within 4 hours

5 warehousing centers of fast and convenient global logistics and distribution

Pre-sales

Promote techonolog,invest sites, produce programs,assess energy saved

During-sales

Customized service,design consultation, installation and debugging,on-site training

After-sales

Regular return visits,regular maintenance, timely maintenance,user training

Intelligent manufacturing brings green and better future

In the context of the national commitment to dual carbon goals of "carbon peak" and "carbon neutral", the development of intelligent manufacturing, green manufacturing, has become the inevitable trend of high-quality development of the manufacturing industry.

In the future, Veichi Electric will continue to adhere to the business philosophy of "market demand-oriented, technology innovation-driven", and give full play to its technological research and development advantages in the industrial automation industry. Combined with rich experience in industry applications, we will continue to increase investment in research and development to help the manufacturing industry gain with both scientific and technological innovation, push the industrial transformation and upgrading, and join hands with the industries to move towards a new green future.

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