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Control Drive Sensor Transmission Digitalization

E630

High Performance Vector Control VFDs

Initiative Integrity Innovation

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HCFA ATC

All information in this document is subject to change without notice.
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Due to the delay in updating the paper version, please refer to the official website for the latest product information.

Product Features

High efficiency and energy saving

Asynchronous motor,
synchronous motor
reluctance motor, brushless motor

Book-shaped design

Slim model
Independent heat dissipation duct

Flexible expansion

Communication card, PG card,
IO card, external keypad

Safe and reliable

Meet 3C3 coating design
Built-in C3 filter
STO optional*

Performance Improved

High-speed control, ×4 weak magnetism,
to improve low-frequency load capacity

Easy to learn and use

LED can be externally connected
and can be operated by PC

Smart Interconnection

Key component self-diagnosis,
and with Bluetooth & WiFi

Built-in integration

Built-in brake unit
(optional for 37kW~110kW)
Built-in DC reactor
(optional for 55kW and above)

*Note: To be released in 2025

High Efficiency and Energy Saving

One model, multiple controls

- Advanced MCU control platform, equipped with advanced vector control algorithm.
- Better driving capabilities for various motors commonly used in industrial application scenarios.

Efficient Control

- Built-in multiple motor energy-saving control algorithms to reduce equipment operation energy consumption.
- Combined with the VFDs operation status monitoring, users can count the equipment operation time and estimate the output power.
- Combined with HCFA ME-series high-efficiency PMSMs, energy savings of up to **10%~20%** can be achieved.

Book-shaped Design

New book-shaped design, high power density, supports side-by-side installation

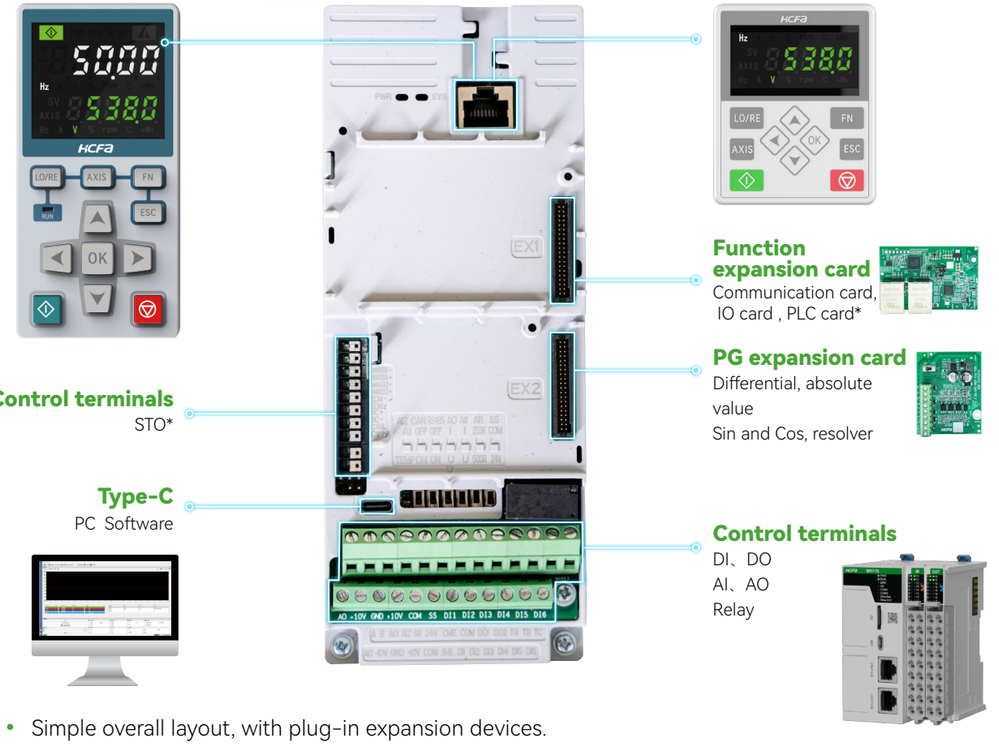
- The E630 series adopts a slim structure, and its volume is reduced by more than 20%compared with the original models.
- The book-type design fully utilizes the cabinet space and reduces the cost of using the cabinet.

Independent air duct

- Isolating electronic devices from air ducts to enhance protection of key components such as modules and capacitors.
- Using a plug-in heat sink and an axial-flow fan, making it immune to high-temperature environments.
- Multi-air outlet heat dissipation channel, upper exhaust fan installation, can be easily disassembled to reduce maintenance costs .

Flexible Expansion

Rich network bus expansion



- Simple overall layout, with plug-in expansion devices.
- Supports the use of function expansion card and PG expansion card at the same time.
- Hardware modular design, external keyboard supports hot swap

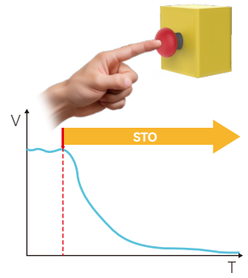
*Note: To be released in 2025

Safe and Reliable

Three-phase current detection, more reliable output protection

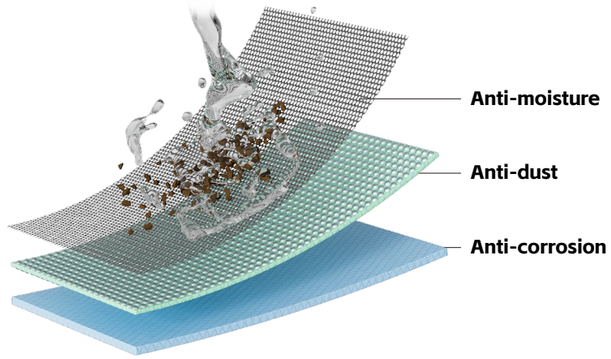
STO function

The E630 series have been built-in STO (SafeTorque Off). When a danger occurs, the system triggers the base blocking function of the VFDs, cuts off the VFDs output in a hardware manner, stops the equipment operation as quickly as possible, and protects the safety of people and machines more reliably .

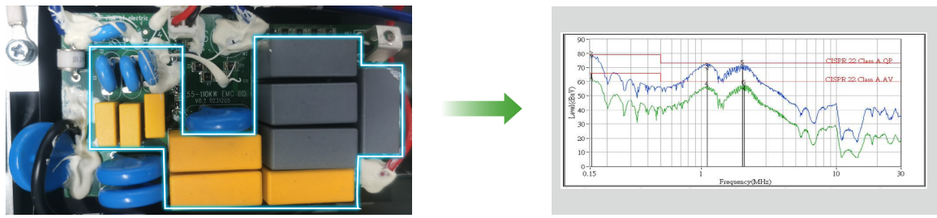


Strengthened coating, to meet harsh working conditions

- The whole machine strengthens the three-proof capabilities, improves the environmental resistance of the PCB , and ensures a healthy and stable product life cycle.
- Adapt to harsh application conditions and meet 3C3 environmental requirements.



Built-in EMC filter

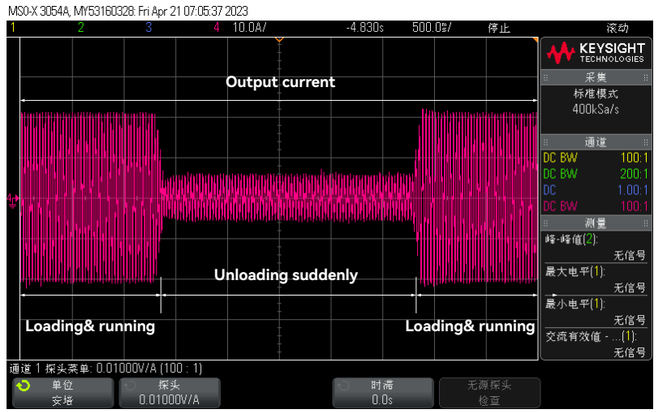


- To reduce high-frequency electromagnetic interference, the E630 has a built-in EMC filter (meets IEC 61800-3 Class II environment).

Performance Improved

High-speed control

- High-performance MCU, combined with a new motor control algorithm, can meet the requirements of various types of motor control.
- Excellent motor weakening control algorithm + high-bandwidth vector control technology to achieve good control of high-speed motors (×4 weakening).

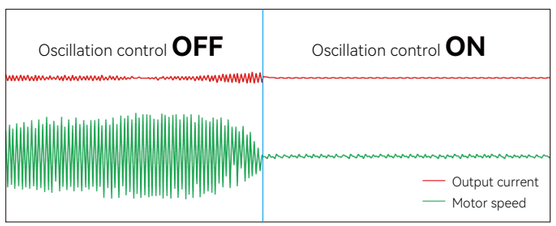


Comprehensive performance improved

- A new generation of motor energy-saving control technology develops discontinuous modulation algorithms to reduce motor operating losses and improve the overall energy efficiency.
- In FVC mode, it can achieve 200% output at 0Hz, with strong low-frequency power characteristics to meet the needs of low-speed & high-torque scenarios.

Advanced vibration-suppression capabilities

- Solve the problem of motor vibration that is easy to occur when the motor runs at high speed, and improve the service life and product quality.
- Develop adaptive filtering software algorithms to resolve vibrations that may occur during motor operation.



Easy to Learn and Use

4 sets of independent parameter storage

Quickly copy parameters between different VFDs.

Support Type-C interface

Easily connect with the host computer to achieve data interaction.

Support perpetual calendar function (external battery)

The built-in clock can accurately record the time information of the fault, which is helpful for problem analysis and precise positioning.

The longest supported external lead distance is 100m

The keypad and host support CAN communication.

With a tray, it can be installed independently on the cabinet door

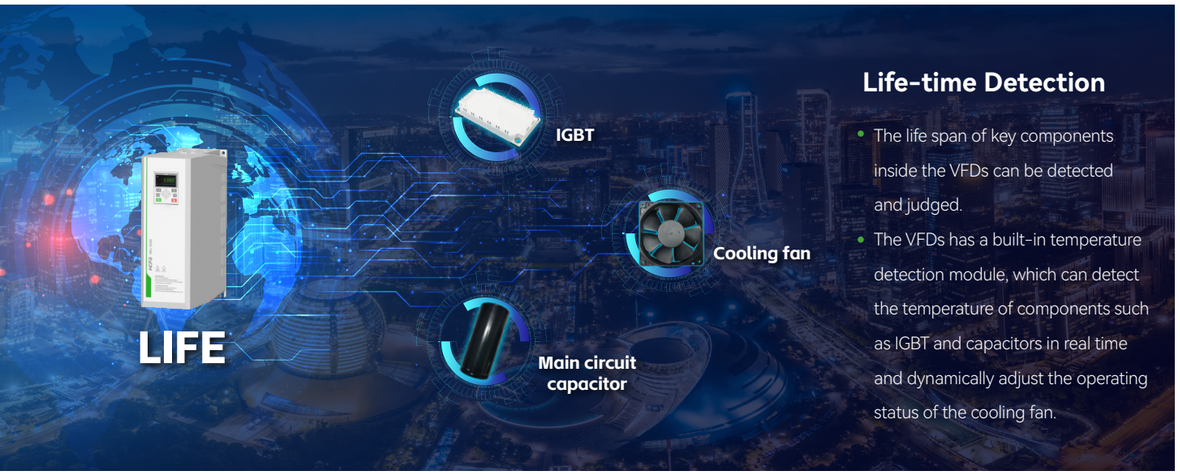
Built-in SD card expansion port

Can be stored in the Micro SD card, and when used with a host computer and a perpetual calendar, long-term recording of waveforms and data can be achieved.

Host computer connection

With HCFA host computer software, easy to save the VFDs data monitoring machine , view and modify parameters, and facilitate on-site debugging.

Smart Interconnection

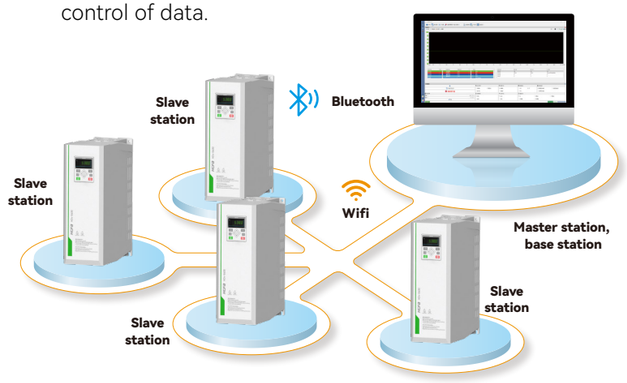


Life-time Detection

- The life span of key components inside the VFDs can be detected and judged.
- The VFDs has a built-in temperature detection module, which can detect the temperature of components such as IGBT and capacitors in real time and dynamically adjust the operating status of the cooling fan.

Convenient networking

- Supports wireless network communication, facilitates system networking connection, and realizes remote monitoring and control of data.



Remote I/O

- On-site IO signal is directly transmitted to the VFDs and uploaded to the PLC through communication, etc.

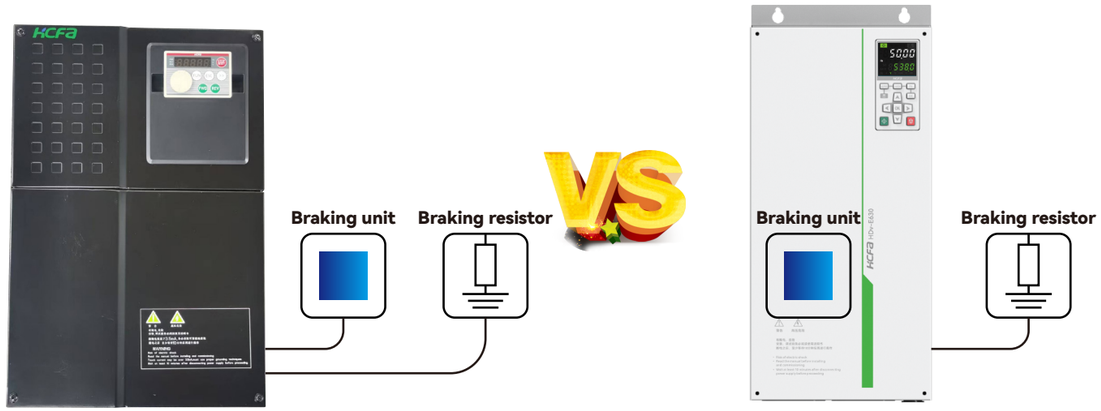
IOT Function

- Can be connected to a mobile phone or tablet APP to realize debugging such as parameter editing and status monitoring.

Built-in Integration

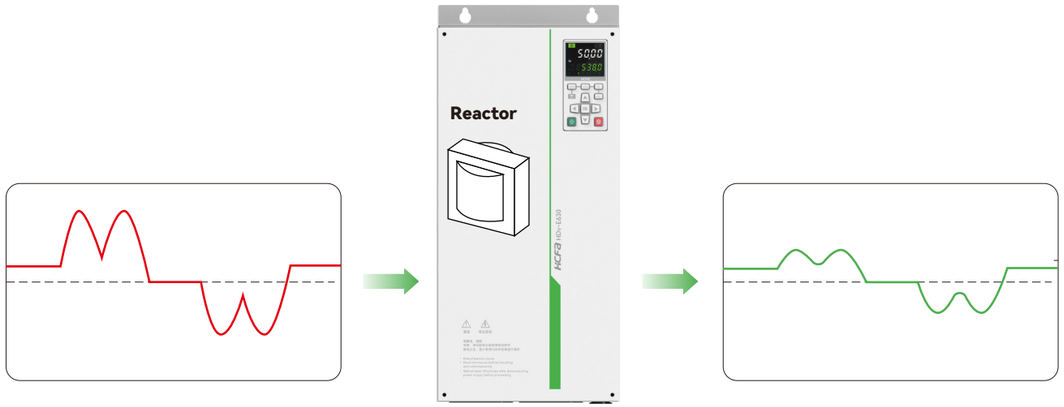
Built-in brake unit

- Can support up to 110kW VFDs and has a built-in braking unit.
- Saves installation space and wiring costs and improves the reliability of equipment operation.



Built-in DC reactor

- For applications with high harmonic requirements, models with built-in DC reactors are available to improve the power factor of the power supply.
- Built-in DC reactors, saves installation space and wiring costs.



Naming Rule

**HDv - E630 - 4T 7.5 B S - * **

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product name
HCFA VFDs

② Product series
E630 series

③ Voltage leve	
2T	Three-phase 220V-240V
4T	Three-phase 380V-480V

④ Power level	
0.7	750W
1.5	1.5kW
...	...
011	11kW
018	18.5kW
090	90kW
110	110kW
450	450kW

⑤ Brake components	
None	No brake
B	With brake

⑥ Functional components	
None	No STO function
S	With STO function

⑦ Hardware code

⑧ Software code

Product Specifications

Three-phase AC380 ~ AC480V																		
Power [kW]			0.75*	1.5*	2.2*	3.7*	5.5*	7.5*	11	15	18.5	22	30	37	45	55	75	90	110
Max. motor capacity [kW]			0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110
Rated output current [Arms]			2.1	3.8	5.1	9	13	17	25	32	37	45	60	75	91	112	150	176	210
Input current [Arms]			3.4	5	5.8	10.5	14.6	20.5	26	35	38.5	46.5	62	76	92	113	157	180	214
Power capacity [kVA]			1.5	3	4	5.9	8.9	11	17	21	24	30	40	57	69	85	114	134	160
Braking resistor	External brake resistor	Resistance value Ω	800	380	260	150	100	75	50	38	32	27	20	16	13	10.5	7.7	6	5
		Capacity [kW]	0.15	0.3	0.44	0.75	1.1	1.5	2.2	3	4	4.5	6	7	9	11	15	18	22
	Mini. braking resistance [Ω]		96	96	96	32	32	32	24	24	24	24	20	16	16	8	8	5	4
Rated output voltage [V]			0~Input voltage																
Max. output frequency			0.00~599.00Hz																
Carrier frequency			VF: 1KHz~16KHz SVC: 1KHz~10KHz FVC: 1KHz~10KHz																
Overload capacity			110% rated current for 1 hour, 150% rated current for 1 minute, 180% rated current for 3 seconds																
Input power voltage [V]			Three-phase 380 ~ 480V AC, 50/60Hz -15% ~ 10% Actual allowable voltage range Three-phase 323V ~ 528V AC																

Basic Functions	
Max. frequency	0.00 ~ 599.00Hz（Except non-standard models）
Carrier frequency	VF: 1.5000KHz~16.000KHz; SVC: 1.500KHz~10.000KHz; The carrier frequency can be automatically adjusted according to the IGBT temperature and loadcharacteristics
Input frequency resolution	Digital setting: 0.01Hz Analog setting: Max. frequency × 0.025%
Motor type and control method	3-phase asynchronous motor: VF control, SVC, FVC PMSM: SVC, FVC
Starting torque	150% (SVC 0.5Hz)
Speed range	1 : 50 VF control; 1 : 100 SVC; 1 : 1000 FVC
Speed control accuracy	±1.0% VF control; ±0.5% SVC; ±0.02% FVC
Overload capacity	110% rated current for 1h, 150% rated current for 1 min, 180% rated current for 3s
Torque boost	Automatic torque boost; manual torque boost 0.1%~30.0%
V/F curve	Linear V/F, multi-point V/F, square V/F, V/F separation
Automatic voltage regulation (AVR)	When the grid voltage changes, it can automatically keep the output voltage constant
DC braking	DC braking frequency: 0.00Hz~max. frequency, braking time: 0.00s~30.00s, braking action voltage value: 0.00%~50.00%
Jog control	Jog frequency range: 0.00Hz~max. frequency; Jog acceleration and deceleration time 0.00s~600.00s
Simple PLC, multi-speed operation	Up to 16 speeds can be achieved through built-in PLC or control terminals
Built-in PID	2 sets of PID parameters can easily realize closed-loop process control system

*Note: To be released in 2025

Personalized Features

Custom button	Support optional programmable buttons, Jog, Positive /negative input switching function, Function code display switching, Start/stop command switching, Free stop and Emergency stop
Communication bus	Modbus、CANopen、EtherCAT、EtherNet IP、Modbus-TCP、Profinet
STO function*	STO function (optional)
Custom fault function	Users can customize analog or digital faults
Acceleration/deceleration curves	Linear acceleration/deceleration method, S-curve acceleration/deceleration method; lifting load acceleration /deceleration curve method
Electricity metering	Can calculate the power consumption per unit time
Display mode switching	The display mode can be quick menu mode or a mode different from the factory default, which is convenient for debugging
Run command channel	3 methods: operation panel setting, control terminal setting, communication setting. Can be switched
Frequency source	8 frequency sources: Digital setting, analog voltage setting, analog current setting, pulse setting, multi-speed, PLC, PID, communication setting
Wireless communications	Wifi , Bluetooth, and IoT communication functions are optional

Special Features

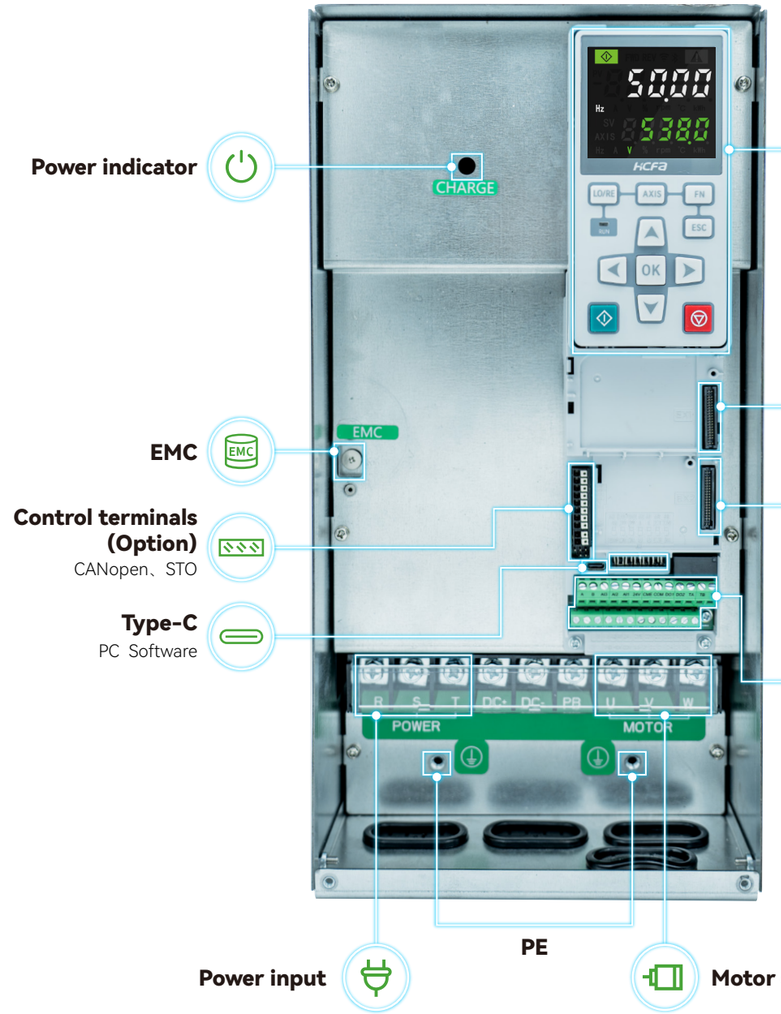
Speed tracking	Improve speed tracking function (IM/PM), start in non-stationary state
Weak magnetic properties	Weak magnetic load capacity, high-speed weak magnetic capacity
Active preheating	Active motor preheating function reduces the viscosity of grease at low temperatures and enhances low-temperature starting capability
Overload and load reduction	Introduce overload and load reduction function to avoid downtime due to faults
Wide voltage characteristics	Wide voltage range 380V~480V (-15%~10%)
LED display	With LED keyboard to realize parameter setting and status monitoring functions
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.
Communication expansion card	Modbus、CANopen、EtherCAT、EtherNet IP、Modbus-TCP、Profinet
PG expansion card	Supports differential type, absolute value, resolver, Sin and Cos
I/O expansion card	DI、DO、AI、AO
PLC expansion card	Support PLC program development*

Environment

Application location	Indoors, free from direct sunlight, dust, corrosive gas, flammable gas, oil mist, water vapor, dripping water or salt, etc.
Altitude	Below 1000m (please derate for altitudes above 1000m)
Ambient temperature	-10℃~+60℃ (When the ambient temperature is between 50℃~60℃, the rating should be derated by 10% for every +5℃ of temperature)
Humidity	Less than 95%RH, no condensation
Vibration	During operation: 3.5mm, peak-to-peak from 5-9Hz; 1.5g, from 9-150Hz; Comply with IEC60068-2-6
Storage temperature	-30℃~+80℃
Protection level	IP20
Cooling method	Forced air cooling
Shock	During operation: 15g, 11ms Comply with IEC/EN60068-2-27

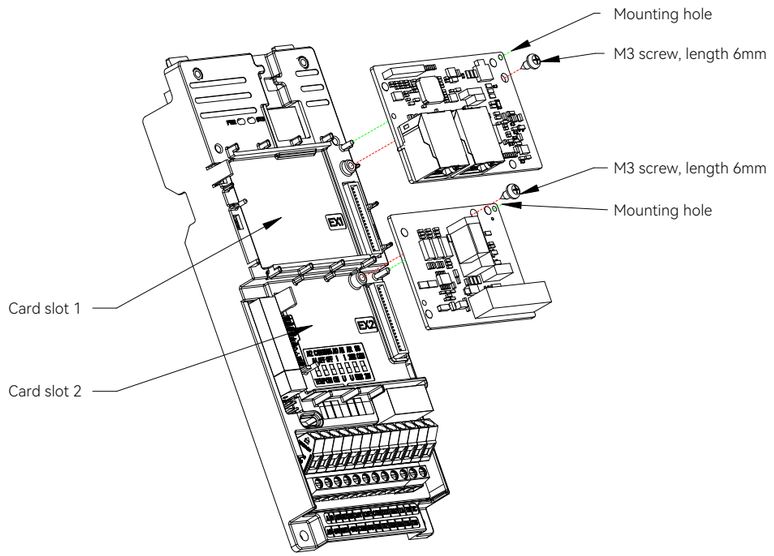
*Note: To be released in 2025

E630 Wiring Diagram and Port Definition



Button	Name	Description	Button	Name	Description
LO/RE	Control command source switch button	Operation panel and remote control switching		Left shift button	Change the display parameters in level 0 menu. In level 2&3 menus, move left to display panel parameters
AXIS	AXIS	Reserved		Right shift button	Change the display parameters in level 0 menu. In level 2&3 menus, move right to display panel parameters.
FN	FN	Multi-function button, determined by P10.02	OK	Parameter setting /OK	Confirm and enter into the next menu
ESC	ESC	Enter into level 0 or return to previous menu		Operation button	In the case of panel control, it is used to control the motor operation
	UP	Increase parameters		RESET/STOP	When a fault alarm occurs, it is used to reset the fault running state and stop the motor running
	DOWN	Reduce parameters			

Expansion Card Definition

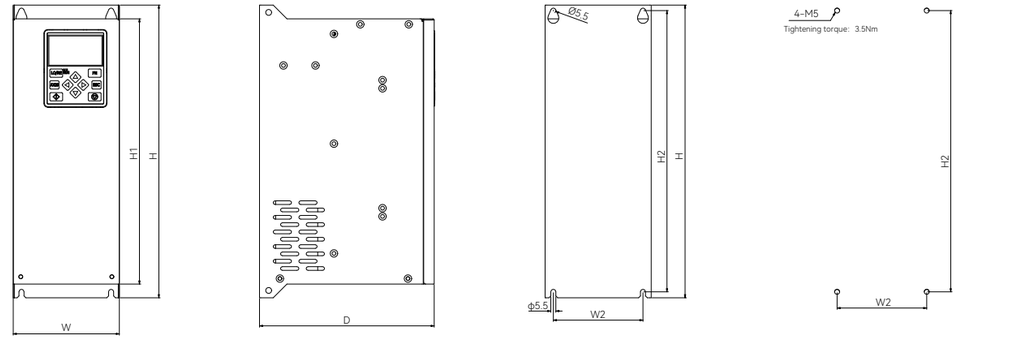


	Model name	Appearance	Description
Encoder expansion card	HDv-PG1-ADM-000 ABZ incremental encoder expansion card		Support differential input, collector input, push-pull input, 5V, 12V encoder power supply can be selected
	HDv-PG1-MDM-000 Absolute encoder expansion card		Adapted to Tamagawa absolute encoder, supports 2.5M baud rate. Power supply and signal adopt isolation scheme, with stronger anti-interference ability
	HDv-PG1-RDM-000 Resolver encoder expansion card		Can output 7VRMS/10kHZ excitation source and receive 0.5 ratio feedback signal
	HDv-PG1-SDM-000 Sin-Cos encoder expansion card		Applicable to sin-cos encoder without C/D signal, A/B signal frequency response up to 125kHz
Communication expansion card	HDv-CME-ECU-000 EtherCAT communication expansion card		Dual network port design, support EtherCAT protocol, realize VFDs networking function, make the VFDs become fieldbus slave station, receive fieldbus control
	HDv-CME-CAN-000 CANopen communication expansion card		Supports CAN2.0A physical layer, CANopen protocol and up to 1M transmission rate, adopts isolated communication mode, and has stronger anti-interference ability
	HDv-CME-MOD-000 Modbus communication expansion card		Support Modbus communication protocol and up to 115.2k BPS transmission rate, adopt isolated communication mode, strong anti-interference ability

External Dimensions

E630 11kW-15kW

Unit: mm

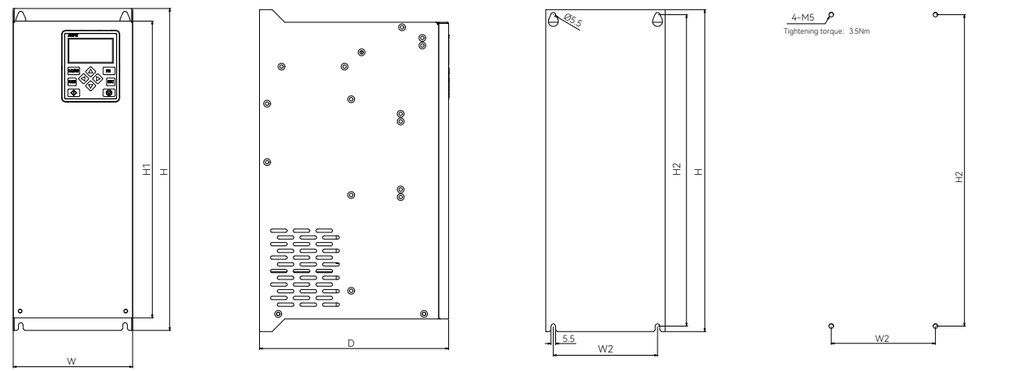


Weight: 5.1kg

Model name	External dimensions			Body dimensions			Mounting dimensions		Mounting hole	Mounting method
E630	W	H	D	W	H1	D1	W2	H2	ϕ	Wall-mounted
HDv-E630-4T011B-000	116	320	191	116	290	170	98	307.5	5.5	√
HDv-E630-4T011BS-000*										
HDv-E630-4T015B-000										
HDv-E630-4T015BS-000*										

E630 18.5kW-30kW

Unit: mm



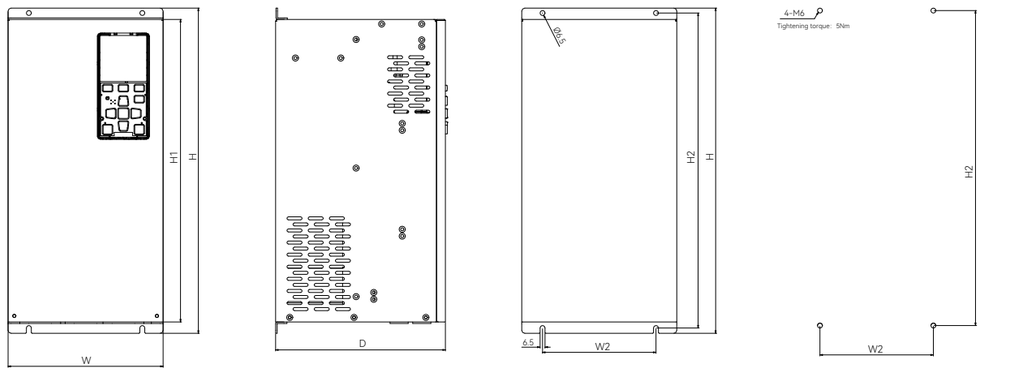
Weight: 8.5kg

Model name	External dimensions			Body dimensions			Mounting dimensions		Mounting hole	Mounting method
E630	W	H	D	W	H1	D1	W2	H2	ϕ	Wall-mounted
HDv-E630-4T018B-000	142	383	225	142	353	170	124	370.5	5.5	√
HDv-E630-4T018BS-000*										
HDv-E630-4T022B-000										
HDv-E630-4T022BS-000*										
HDv-E630-4T030B-000										
HDv-E630-4T030BS-000*										

*Note: To be released in 2025

E630 37kW-45kW

Unit: mm

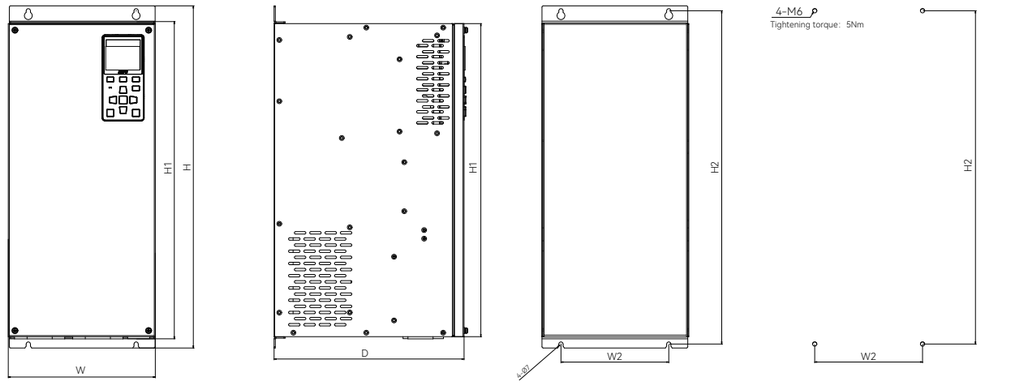


Weight: 13.5kg

Model name	External dimensions			Body dimensions			Mounting dimensions		Mounting hole	Mounting method
E630	W	H	D	W	H1	D1	W2	H2	ϕ	Wall-mounted
HDv-E630-4T037-000	205	430	225	205	400	170	150	417	5.5	√
HDv-E630-4T037B-000										
HDv-E630-4T037BS-000*										
HDv-E630-4T045-000										
HDv-E630-4T045B-000										
HDv-E630-4T045BS-000*										

E630 55kW-75kW

Unit: mm

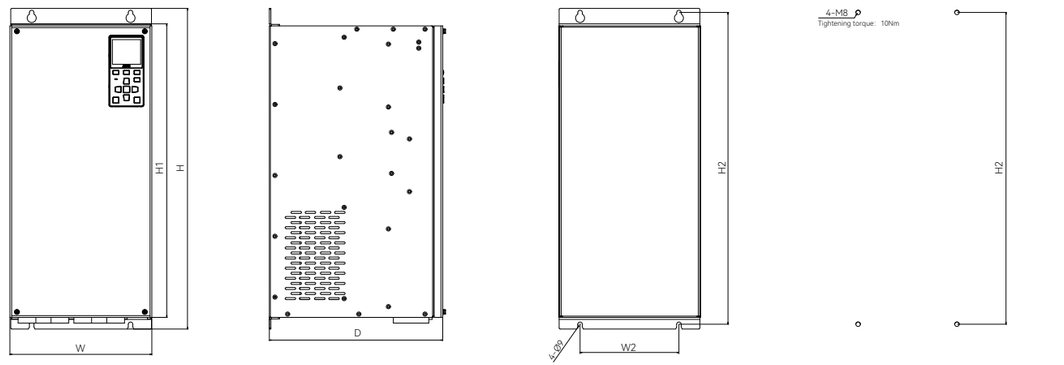


Weight: 29kg

Model name	External dimensions			Body dimensions			Mounting dimensions		Mounting hole	Mounting method
E630	W	H	D	W	H1	D1	W2	H2	ϕ	Wall-mounted
HDv-E630-4T055-000	240	558	310	240	511	170	176	544	5.5	√
HDv-E630-4T055B-000										
HDv-E630-4T055BS-000*										
HDv-E630-4T075-000										
HDv-E630-4T075B-000										
HDv-E630-4T075BS-000*										

E630 90kW-110kW

Unit: mm

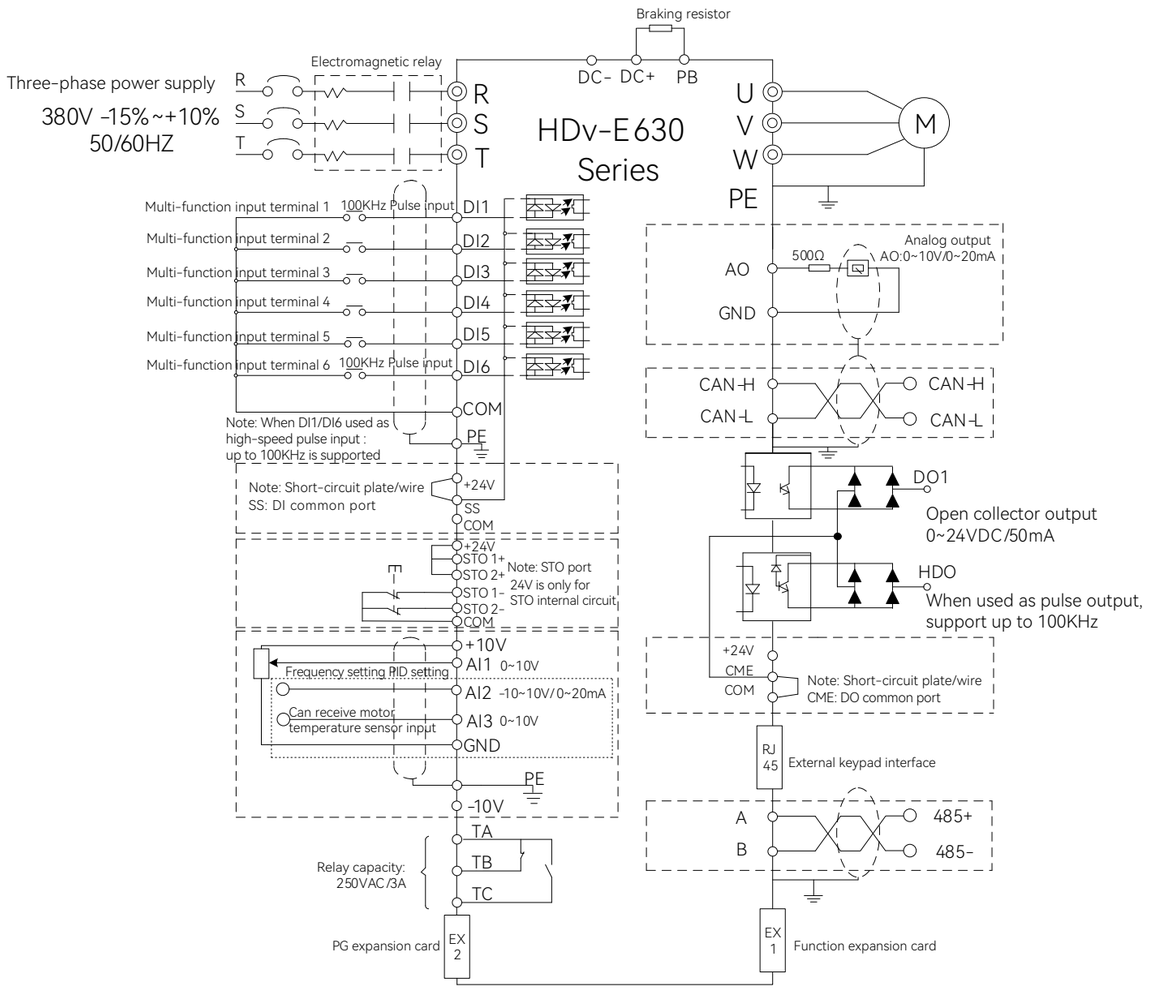


Weight: 40kg

Model name	External dimensions			Body dimensions			Mounting dimensions		Mounting hole	Mounting method
E630	W	H	D	W	H1	D1	W2	H2	ϕ	Wall-mounted
HDv-E630-4T090-000	280	633	342	280	575	170	195	615	5.5	√
HDv-E630-4T090B-000										
HDv-E630-4T090BS-000*										
HDv-E630-4T110-000										
HDv-E630-4T110B-000										
HDv-E630-4T110BS-000*										

*Note: To be released in 2025

Standard Wiring Diagram

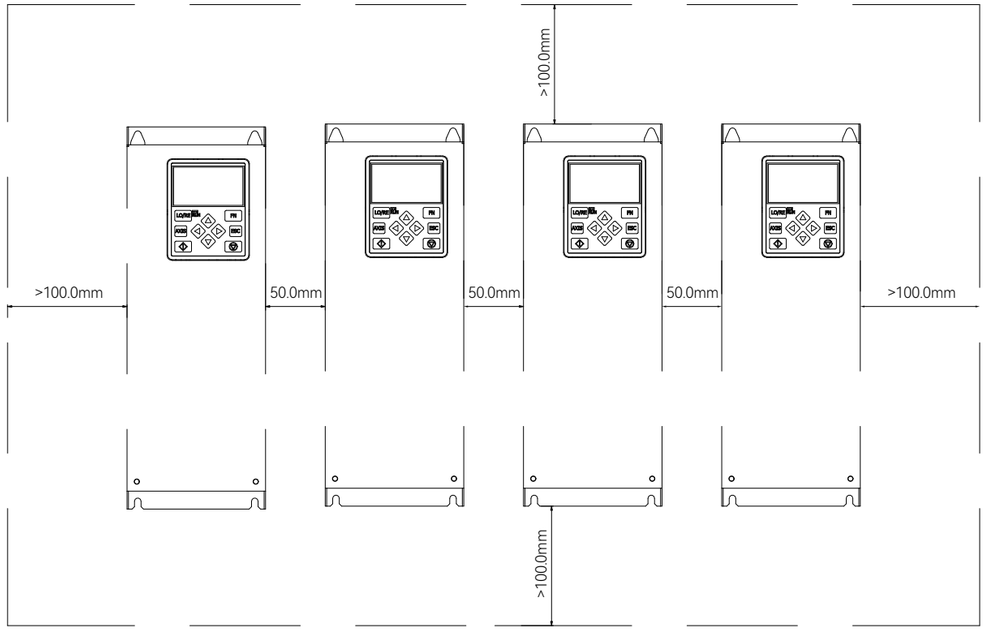


Installation and Wiring Precautions

Installation Environment

1. The ambient temperature is required to be within -10℃ and 60℃. If the temperature exceeds 50℃, the power supply must be derated (maximum derating of 20% at 60℃).
2. Install on the surface of flame-retardant objects, leaving enough space for heat dissipation.
3. Free from the location of direct sunlight.
4. Free from the place with moisture and water droplets. The humidity should be lower than 95%.
5. Free from the place of vibration. The vibration should be less than 5.9m/s^2 (0.6g).
6. Free from the place of oil, dust and metal powder.
7. Free from the places with corrosive, flammable or explosive gases.

Installation Direction and Space



Precautions

1. When installing the VFDs, do not seal the holes or place it upside down, otherwise it will cause the VFDs to overheat and alarm.
2. To ensure that the cooling fan has a relatively low wind resistance and can effectively dissipate heat, please follow the recommended installation distance when installing one or more VFDs.
3. When multiple VFDs are installed in parallel, the ambient temperature should be lower than 40℃.
4. Please avoid installing the VFDs above another one, because the heat generated by the lower VFDs during operation will rise, which may easily cause the temperature increase.
5. Please do not install heat source components such as braking resistors near the VFDs.
6. When the cabinet is in a high humidity environment, please install a dehumidifier to avoid condensation.

Selection Guide

E630 series VFDs		
Voltage level	**Model name**	**Function description**
380V	HDv-E630-4T011B-000	E630, 3-phase 380V, 11kW, built-in Modbus RTU and brake unit
	HDv-E630-4T015B-000	E630, 3-phase 380V, 15kW, built-in Modbus RTU and brake unit
	HDv-E630-4T018B-000	E630, 3-phase 380V, 22kW, built-in Modbus RTU and brake unit
	HDv-E630-4T022B-000	E630, 3-phase 380V, 30kW, built-in Modbus RTU and brake unit
	HDv-E630-4T030B-000	E630, 3-phase 380V, 18.5kW, built-in Modbus RTU and brake unit
	HDv-E630-4T037-000	E630, 3-phase 380V, 37kW, built-in Modbus RTU
	HDv-E630-4T045-000	E630, 3-phase 380V, 45kW, built-in Modbus RTU
	HDv-E630-4T055-000	E630, 3-phase 380V, 55kW, built-in Modbus RTU
	HDv-E630-4T075-000	E630, 3-phase 380V, 75kW, built-in Modbus RTU
	HDv-E630-4T090-000	E630, 3-phase 380V, 90kW, built-in Modbus RTU
	HDv-E630-4T110-000	E630, 3-phase 380V, 110kW, built-in Modbus RTU
	HDv-E630-4T037B-000	E630, 3-phase 380V, 37kW, built-in Modbus RTU and brake uni
	HDv-E630-4T045B-000	E630, 3-phase 380V, 45kW, built-in Modbus RTU and brake unit
	HDv-E630-4T055B-000	E630, 3-phase 380V, 55kW, built-in Modbus RTU and brake unit
	HDv-E630-4T075B-000	E630, 3-phase 380V, 75kW, built-in Modbus RTU and brake unit
	HDv-E630-4T090B-000	E630, 3-phase 380V, 90kW, built-in Modbus RTU and brake unit
	HDv-E630-4T110B-000	E630, 3-phase 380V, 110kW, built-in Modbus RTU and brake unit

Naming Rule

HDv - ME 5 - 112 M 55C 20C B - I B35 T - S F N

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

① Product	
HDv	HCFA motor

② Product series	
ME	PMSM
RE	SynRM

③ Energy efficiency	
3	IE3
4	IE4
5	IE5

④ Frame No.	
080	80 center height
090	90 center height
100	100 center height
112	112 center height
132	132 center height
160	160 center height
180	180 center height
200	200 center height
225	225 center height
280	280 center height
315	315 center height
355	355 center height

⑤ Foot hole distance	
S	Short case
M	Middle case
L	Long cas

⑥ Power (two digits + one letter)	
A	×1
B	×10
C	×100
D	×1000
E	×10000

⑦ Speed (two digits + one letter)	
A	×1
B	×10
C	×100
D	×1000
E	×10000

⑧ Voltage level	
A	AC660
B	AC380
C	AC220
D	AC110

⑨ Case type	
I	Cast aluminum
A	Cast iron

⑩ Installation method	
B3	Foot installation
B35	Flange with foot
B5	Flange without foot

⑪ Outlet mode	
R	Right outlet
L	Left outlet
T	Top outlet

⑫ Shaft output method	
N	Optical axis
S	Single keyway
D	Double keyway

⑬ Cooling method	
F	IC411 coaxial fan cooling
Q	IC44 forced fan cooling
L	Liquid cooling
X	Natural cooling

⑭ Encoder	
N	No encoder
R	Resolver
P	Optical
M	Magnetic

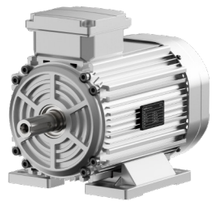
PMSM Specifications

High efficiency and energy saving: Up to IE5 energy efficiency

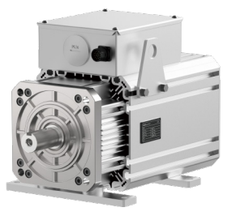
High power density: 1-2 frame sizes lower than asynchronous motors , smaller size

High reliability: high protection, anti-demagnetization design, suitable for harsh environments

	Model name	Power/kw	Voltage/V	Current/A	Speed/rpm	Torque/Nm	Number of poles	Frequency/Hz	Efficiency	Energy Efficiency Index	Power Factor	Applicable VFDs
112 base Coaxial fan cooling	HDv-ME5-112M55C20CB-IB35T-SFN	5.5	380	10.2	2000	26.26	10	166.67	92.6	IE5	≥0.93	HDv-E600-4T5.5B-000
	HDv-ME5-112M75C20CB-IB35T-SFN	7.5	380	13.7	2000	35.81	10	166.67	93.3	IE5	≥0.93	HDv-E600-4T7.5B-000
	HDv-ME5-112M90C20CB-IB35T-SFN	9.0	380	16.2	2000	42.98	10	166.67	93.7	IE5	≥0.93	HDv-E610-4T011B-000
	HDv-ME5-112M40C15CB-IB35T-SFN	4.0	380	7.3	1500	25.47	10	125.00	92.8	IE5	≥0.93	HDv-E600-4T3.7B-000
	HDv-ME5-112M55C15CB-IB35T-SFN	5.5	380	10.2	1500	35.02	10	125.00	93.4	IE5	≥0.93	HDv-E600-4T5.5B-000
	HDv-ME5-112M75C15CB-IB35T-SFN	7.5	380	13.8	1500	47.75	10	125.00	94	IE5	≥0.93	HDv-E600-4T7.5B-000
	HDv-ME5-112M22C10CB-IB35T-SFN	2.2	380	4.2	1000	21.01	10	83.33	89.7	IE5	≥0.93	HDv-E600-4T2.2B-000
	HDv-ME5-112M30C10CB-IB35T-SFN	3.0	380	5.4	1000	28.65	10	83.33	90.6	IE5	≥0.93	HDv-E600-4T3.7B-000
	HDv-ME5-112M40C10CB-IB35T-SFN	4.0	380	7.5	1000	38.20	10	83.33	91.4	IE5	≥0.93	HDv-E600-4T3.7B-000



	Model name	Power/kw	Voltage/V	Current/A	Speed/rpm	Torque/Nm	Number of poles	Frequency/Hz	Efficiency	Energy Efficiency Index	Power Factor	Applicable VFDs
112 base Forced air cooling	HDv-ME5-112M75C20CB-IB35T-SQN	7.5	380	13.6	2000	35.81	10	166.67	93.3	IE5	≥0.93	HDv-E600-4T7.5B-000
	HDv-ME5-112M75C20CB-IB35T-SQN	9.0	380	16.4	2000	42.98	10	166.67	93.7	IE5	≥0.93	HDv-E610-4T011B-000
	HDv-ME5-112M90C20CB-IB35T-SQN	11.0	380	20.4	2000	52.53	10	166.67	94	IE5	≥0.93	HDv-E610-4T011B-000
	HDv-ME5-112M55C15CB-IB35T-SQN	5.5	380	10.5	1500	35.02	10	125.00	93.4	IE5	≥0.93	HDv-E600-4T5.5B-000
	HDv-ME5-112M75C15CB-IB35T-SQN	7.5	380	13.6	1500	47.75	10	125.00	94	IE5	≥0.93	HDv-E600-4T7.5B-000
	HDv-ME5-112M90C15CB-IB35T-SQN	9.0	380	16.5	1500	57.30	10	125.00	94.4	IE5	≥0.93	HDv-E610-4T011B-000
	HDv-ME5-112M30C10CB-IB35T-SQN	3.0	380	5.6	1000	28.65	10	83.33	90.6	IE5	≥0.93	HDv-E600-4T3.7B-000
	HDv-ME5-112M40C10CB-IB35T-SQN	4.0	380	7.2	1000	38.20	10	83.33	91.4	IE5	≥0.93	HDv-E600-4T3.7B-000
	HDv-ME5-112M55C10CB-IB35T-SQN	5.5	380	10.1	1000	52.53	10	83.33	92.2	IE5	≥0.93	HDv-E600-4T5.5B-000



PMSM Product Features

ME-series low-voltage three-phase PMSM is a high-efficiency motor developed by HCFA for industrial application scenarios, with the characteristics of high efficiency and energy saving, high reliability, high power density, low noise, etc. Now we have launched 112 base, power range 2.2kW-11kW, F-class insulation, IP54 protection, and adaptability to a variety of installation methods and cooling methods. It can be widely used in textile spindles, ceramic machinery, fans and water pumps, industrial transmission, rubber and plastic machinery and other industries, matched with HCFA E630 series VFDs, to get its excellent performance!

High energy -efficiency
- IE5
- Energy saving and emission reduction

High reliability
- High temperature protection
- Low vibratio
- Low noise

Great intelligence
- Fault warning
- Easy to install and use
- Better control curve

High integration
- Small size
- High power density
- Fully compatible with E600 series VFDs

Zhejiang Hechuan Technology Co., Ltd., established in 2011, is a company that focuses on the research and development, manufacturing, sales and application integration of industrial automation products, and committed to providing core components and system integration solutions for smart factories.

The main products include controllers, servo systems, vision systems, encoders, VFDs, HMIs, electric rollers, precision transmission components, etc., covering the entire field of industrial automation.

We have newly established a 200-mu high-efficiency precision industrial transmission industrialization base. By introducing industry professionals, it has orderly promoted the industrialization application of precision guide rails, lead screws and other transmission components.

In November 2023, HCFA Technology and Bosch Rexroth signed a strategic cooperation agreement. Bosch Rexroth strategically invested in HCFA Technology and planned to cooperate to establish a subsidiary. Based on common innovation concepts and innovative thinking, the two parties will integrate their respective advantages, form resource complementarity, and carry out in-depth cooperation, striving to become ecological partners in the entire value chain of industrial automation and promote the further development of China's industrial automation industry.

R&D Centers
6
Set up nationally

R&D investment
10%+
Proportion of revenue

R&D personnel
300+
Elite gathering

- **Established six R&D centers in Longyou, Hangzhou, Shenzhen, Dalian, Suzhou and Germany**
- **Self-designed ASIC and SOC chips, realize localization replacement**
- **First-class AMR magnetic technology/high-precision encoder in the industry**