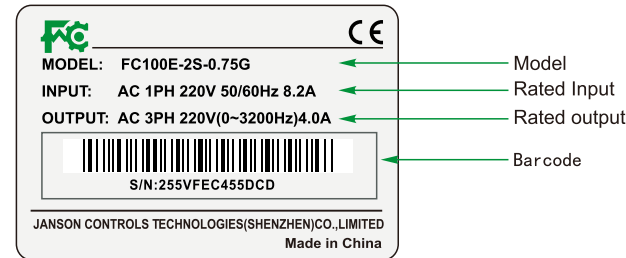




FC100E SERIES MINI SERIES VFD



1.Nameplate



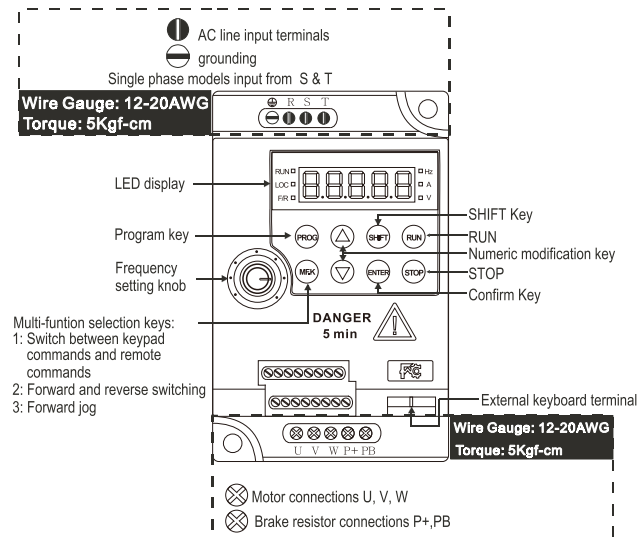
2.Model Description

FC100E - 2S - 0.75G

① ② ③

Name	Mark	Description	Detail
AC Drive series	①	FC100E	Series Name
Voltage level	②	Voltage level	2S:Single-phase 220V Range:-15% ~20% 4T:Three-phase 380V Range:-15% ~20%
Adaptable power	③	Adaptable motor power(KW)	0.4KW~15KW

3.Connection terminal



4.Product Specifications

Electrical Specification	
Input Voltage	Single Phase/Three Phase 200-240V,Three Phase 380~440V Fluctuate no more than±10%, Imbalance Rate <3%.
Input Frequency	50/60Hz ± 5%
Output Voltage	0V~Input Voltage
Output Frequency	Vector Control: 0~300Hz V/F Control: 0~3200Hz

Performance	
Overload Capacity	150% rated output current for 1 minute, 180% rated output current for 2 seconds.
Control Method	Open-loop vector control (SVC), V/F control
Run Command Setting Method	Operation Panel Setting, External Terminal Setting,Communication Setting.
Speed Setting Method	Digital setting, analog setting/pulse setting, communication setting.
Speed Setting Resolution	Digital setting: 0.01Hz, Analog setting: 1% × maximum frequency
Speed Control Accuracy	SVC: ±0.5%
Speed Control Range	SVC: 1:100
Torque Control Response	SVC: <200ms
Starting Torque	SVC: 150% rated torque/0.5Hz

Special Feature	
Programmable Input & Output Terminals	Input& Output terminal function can be edited
Process PID Adjustment Function	Built-in process PID module
Simple PLC Function	Built-in simple PLC module, which can realize timing and multi-segment frequency output.
Textile Wobble Function	Built-in textile swing frequency function module

Protective function	
Overvoltage Stall	Bus voltage automatic control to prevent overvoltage fault
Automatic Current Limiting Protection	Output current is automatically limited to prevent over-current faults

Overload Pre-Alarm & Alarm	Overload Pre-warning and protection
Output Phase Loss Protection	Output phase loss automatic detection and alarm function
Overvoltage & Overflow Stall Control	Automatically limit current and voltage during operation to prevent frequent over-current and over-voltage tripping
Output Short-to-Ground Protection	Effective protection function for output short circuit to ground
Output Phase-to-Phase Short Circuit Protection	Output interphase short circuit effective protection function

Input & Output	
External analog power supply	+10V , load capacity 100mA
External digital power supply	+24V , load capacity 200mA
Analog Input	AI1: Voltage 0~10V/0-20mA
Analog Voltage Output	AOV: 0~10V
Analog Current Output	AOI: 0~20mA
Digital Input	DI1~DI5 (DI5 can be selected as a high-speed pulse signal)
Digital Output	FM: FM can be selected as high-frequency pulse signal output
Relay output	TA/TB/TC: Contact rating 250VAC/3A or 30VDC/1A
MODBUS Communication	A+、 B-

Operation Display	
LED Display	Set frequency, output frequency, output voltage, output current, motor speed, output torque, digital terminals, status parameters, programming menu parameters and fault codes etc.

Indicator Light	3 units indicators, 3 status indicators.
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Environmental characteristics	
Working Temperature	-10~+40°C, Maximum temperature is 50°C, Air Temperature change is less than 0.5°C/min,40~50°C Derating is required, output current derating 2% for each 1°C.

Storage Environment Temperature	-40~+70°C
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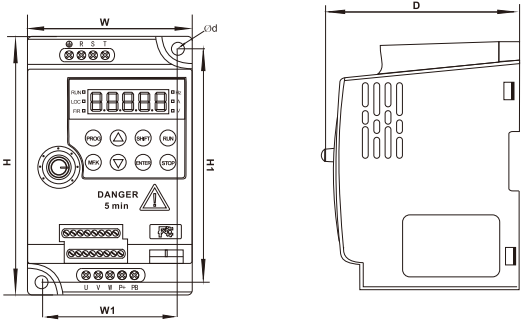
Application	Indoor, free from direct sunlight, dust, corrosive gas, flammable gas, oil mist, water vapor, dripping water or salt etc.
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Altitude	Less than 1000 meters, derating is required for more than 1000 meters.
Humidity	Less than 95%RH, no condensation
Vibration resistance	3.5m/s² at 2~9Hz, 10m/s² at 9~200Hz (IEC60721-3-3).
Protection Degree	IP20
Pollution Level	Class 2 (Dry, non-conductive dust pollution)
Certification	
CE	The whole series has passed CE certification
Optional accessories	
Keypad	The whole series supports external keyboard through standard network cable

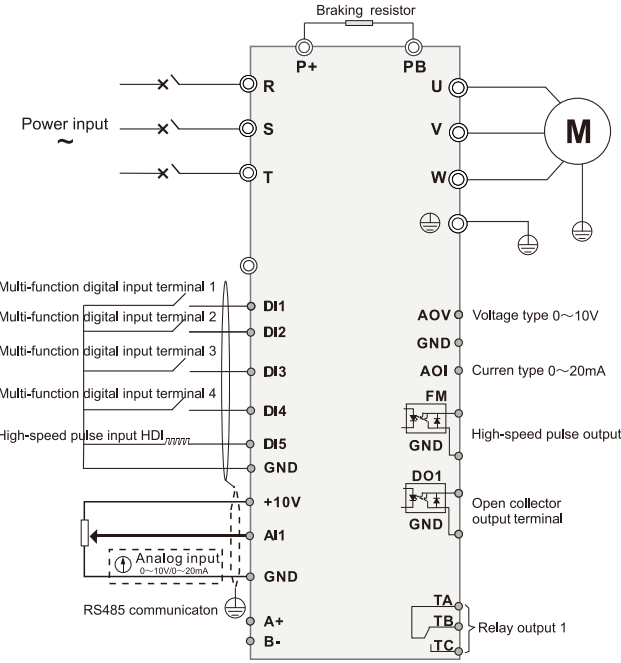
5.Model Description

Model	Adaptable Motor (kW)	Input Current (A)	Output Current (A)	Rate Capacity (KVA)	W (mm)	H (mm)	D (mm)	W1 (mm)	H1 (mm)	Ød (mm)	GW (kg)
1 Phase Input and 3 Phase Output 220V (-15%~+15% Tolerance)											
FC100E-2S-0.4G	0.40	6.50	2.10	0.70	85	142	116	73	136	5	1.0
FC100E-2S-0.75G	0.75	8.20	4.00	1.50							
FC100E-2S-1.5G	1.50	14.0	7.00	3.00							
FC100E-2S-2.2G	2.20	23.0	9.60	4.00							
FC100E-2S-4.0G	4.00	39.0	16.5	5.90	106.5	240.5	148	96	230		3.0
FC100E-2S-5.5G	5.50	60.0	25.0	8.50							
3 Phase Input and 3 Phase Output 220V (-15%~+15% Tolerance)											
FC100E-2T-4.0G	4.00	19.0	16.5	5.90	106.5	240.5	148	96	230	5	3.0
FC100E-2T-5.5G	5.50	28.0	25.0	8.50							
FC100E-2T-7.5G	7.50	35.0	30.0	11.0							
3 Phase Input and 3 Phase Output 380V (-15%~+15% Tolerance)											
FC100E-4T-0.75G	0.75	3.40	2.10	1.50	85	142	116	73	136	5	1.0
FC100E-4T-1.5G	1.50	5.00	3.80	3.00							
FC100E-4T-2.2G	2.20	5.80	5.10	4.00							
FC100E-4T-4.0G	4.00	10.5	9.00	5.90							
FC100E-4T-5.5G	5.50	14.6	13.0	8.90	95	180	120	83	168		2.0
FC100E-4T-7.5G	7.50	19.0	17.0	11.0							
FC100E-4T-11G	11.0	28.0	25.0	16.0	106.5	240.5	148	96	230		3.0
FC100E-4T-15G	15.0	35.0	32.0	21.0							
1 Phase Input 220V and 3 Phase Output 380V(-15%~+15% Tolerance)											
FC100E-2S4T-0.75G	0.75	7.50	2.50	1.50	85	142	116	73	136	5	1.0
FC100E-2S4T-1.5G	1.50	11.0	3.70	3.00							
FC100E-2S4T-2.2G	2.20	15.0	5.00	4.00							
FC100E-2S4T-4.0G	4.00	26.0	8.50	5.90							
FC100E-2S4T-5.5G	5.50	39.0	13.0	8.90	95	180	120	83	168		2.0

6.Product outline drawing



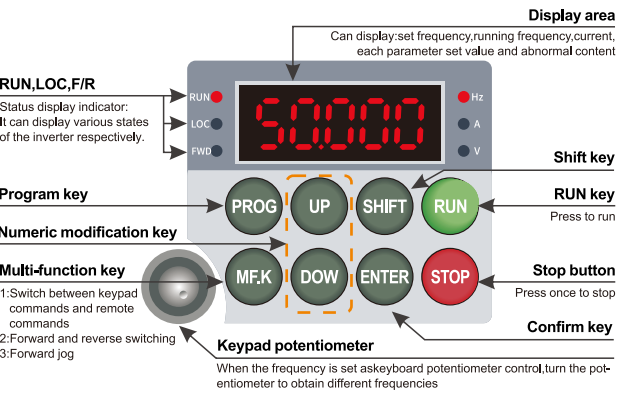
7.Wiring of inverter control circuit



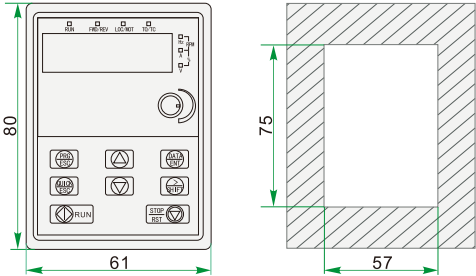
Note:

- ✧ All FC100E series inverters have the same wiring method for the control circuit.
- ✧ The above figure shows the wiring diagram of the three-phase 380V inverter.
- ✧ Terminal Ⓢ represents the main circuit terminal, and Ⓞ represents the control circuit terminal.

8.Keyboard Description



9.External keyboard dimensions



10.Description of the main circuit terminals of the inverter

Mark	Name	Description
R、S、T	Power input terminal	S、T : single-phase 220V AC input power supply R、S、T : three-phase 380V AC input power supply
P+、PB	Brake resistor connection terminal	Connect to the braking resistor
U、V、W	VFD output termina	Connect to a three-phase motor
Ⓢ	Ground terminal	Ground terminal

Low Cost AC Drive Specially Desgined For Low Horsepower Applications

- ✧ Same Outlook and Function as Delta L Series;
- ✧ Adjustable V/F Curve;
- ✧ Carruer Frequency Upto 10KHZ;
- ✧ Auto Torque Boost & Slip Compensation;
- ✧ Built In Modbus (Rs485);
- ✧ Built In EMI Filter.



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