Top Ten Inverter Brands in China

User Manual

USER MANUAL

Please read this manual carefully before installing/debugging/using the product! (V1.2)

Fine craftsmanship Value Delivery

Fine craftsmanship Value Delivery

sequence

Thank you for using our company's high-performance general-purpose 100 series AC inverter.

This manual provides users with installation, parameter setting, fault diagnosis, troubleshooting and daily maintenance of this inverter.

Things to note.

To ensure that the inverter can be installed and operated correctly, please read this manual carefully before installation.

Keep it in a safe place and hand it over to the user of the machine.

If you have any questions or special requirements about the use of the inverter, please feel free to contact our regional office or agent.

You can also contact our after-sales service center directly.

This manual is subject to change without prior notice.

Chapter 1 Note Information

1.1 Safety precautions

To ensure safe and reasonable use of this product, please fully understand the safety precautions described in this manual.

Reuse the product.

Warning signs and their meanings

The following symbols are used in this manual to indicate important safety-related information.

Caution may result in personal injury or death, or damage to the product and related systems.

Danger	Danger: Improper operation may result in death or serious safety accidents.
Notice	CAUTION: Minor injury may occur if handled incorrectly.

Operation Qualification

This product must be operated by trained professionals.

Skill training, familiar with the installation, wiring, operation and maintenance of equipment, and correctly deal with various problems that may occur during use

An emergency situation.

Safety Guide

Warning signs are provided for your safety and to prevent operators from being injured, this product and related products from being damaged.

Please read this manual carefully before use and strictly follow the instructions in this manual.

Safety rules and warning signs.

- Correct transportation, storage, installation, and careful operation and maintenance are essential for the safe operation of the inverter.

  During transportation and storage, the inverter must be protected from shock and vibration.

  Store in a dry place free from corrosive gases, conductive powders and dust and the ambient temperature is less than 6600℃.

- This product contains dangerous voltage and controls a potentially dangerous motion mechanism.

  Failure to comply with the regulations or operate in accordance with the requirements of this manual may result in personal injury, loss of life, damage to the product and related personnel.

  System damage.

- Do not perform wiring work when the power is on, otherwise there is a risk of electric shock and death.

  When performing inspections or maintenance, please cut off the power supply of all associated equipment and confirm that the DC voltage of the main circuit is

  After it has descended to a safe level, wait 5 minutes before carrying out related operations.

- The power line, motor line, and control line must be firmly connected, the grounding terminal must be reliably grounded, and the grounding

  The resistance is less than 10Ω.

- Human body static electricity can seriously damage internal sensitive devices. Please follow static electricity prevention measures before performing related operations.

  (ESD) specified measures and methods, otherwise the inverter may be damaged.

- Since the inverter output voltage is a pulse waveform, if a capacitor or a capacitor to improve the power factor is installed on the output side,

  Devices such as varistors for lightning protection must be removed or modified on the input side of the inverter.

- Do not add circuit breakers, contactors or other switching devices to the inverter output side (if you must connect a switch to the output side,

  If there is a switch, the control must ensure that the output current of the inverter is zero when the switch is in action).

- No matter where the fault occurs in the control equipment, it may cause production suspension and serious accidents.

  Take necessary external protective measures or backup devices.

- This product can only be used in accordance with the purpose specified by the manufacturer. It is not allowed to be used in emergency or rescue situations without permission.

  Special fields such as aid, ships, medical treatment, aviation, nuclear facilities, etc.

- The maintenance of this product can only be performed by our company or professionals authorized by our company.

  Unauthorized modification and use of accessories not approved by our company may cause product failure.

  Defective components must be replaced promptly.

1.2 Inverter model description

After receiving the product you ordered, please check whether the outer packaging is damaged. After confirming that it is intact, open the outer packaging and confirm that

Check whether the inverter is damaged, scratched or dirty (damage caused during product transportation is not covered by our company's "three guarantees").

If the product you received is damaged during transportation, please contact us or the shipping company immediately.

After confirming that the received product is intact, please confirm whether the inverter model you received is the same as the one you ordered.

Please refer to the "Model" column on the nameplate on the right side of the inverter for the model. If you find that the product model is inconsistent,

Please contact the agent where you purchased the product or our sales department immediately.

Model:EB 0075 G 3 AA 00001 *

- * Special models
- 00001 Production number
- AA Production Date
- 3 Voltage level (3 means three-phase 380V, 2 means Three-phase 220V, 1 represents single-phase 220V)
- G stands for general purpose
- 0075 Inverter capacity (0075 means 7.5KW, 0007 means 0.75KW)
- EB Product Series (EB means E100)

Single phase 220V			Three-phase 380V		
model	Maximum configuration With motor	Rated Current	model	Maximum configuration With motor	Rated Current
EB0004G1	0..4kW	2..3A	EB0007G3	0.75 kW	2.1A
EB0007G1	0.75 kW	4A	EB0015G3	1.5k W	3.8A
EB0015G1	1.5k W	7A	EB0022G3	2.2k W	5.1A

1.3 Technical Specifications

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Knot Structure	Protection level	IP20
	Cooling method	Forced air cooling, natural cooling
enter power supply	Rated voltage	Three-phase 380V, single-phase 220V
	Phase number and frequency	Three-phase 50/60Hz (refer to rated current specification)
	Allowable range of variation	The voltage allows a change rate of ±20%, and the frequency allows a change of ±5%Hz
	Low voltage protection point	The low voltage action point is set at -20% of the standard voltage, which is determined by the DC bus voltage.
Output power supply	Power Factor	Capacitive load leading
	Rated capacity/current	G series 150% per minute
	Trip current	The instantaneous trip value is 200% of the rated current of the G series
	Temperature protection	Running at 85℃

Control and Output Standard	Control Mode	V/F control
	Frequency output range	0.00～600.00Hz
	Frequency resolution	Keyboard setting: 0.01Hz, analog setting: 0.1Hz
	Baseband	0.5～600Hz
	DC braking plus or minus	Braking voltage is adjustable from 5 to 30%, allowing braking at 0.5 to 50 Hz, and braking for 0.0 to 25.0 seconds
	Speed Time	Adjustable. Acceleration and deceleration time 0.1～6553 seconds
	Low frequency torque compensation	0～30% adjustable, automatic torque boost, any V/F curve adjustable
	Standard Features	Pause and deceleration, PPIIDD control, automatic speed compensation, automatic adjustment of the voltage output (AAVV R), 8-speed operation, power (torque) control, frequency hopping, torque limit, automatic Multi-stage operation, UP-DOWN control, swing frequency operation, two-way signal superposition control, automatic Reset, timer, flip-flop.
Control Signal	Programmable analog input enter	WE V: 0~10V input; I: 4~20mA input
	Digital Input	Four sets of multi-function programmable digital input terminals
	Digital Output	One set of relay output
Communication interface	RS-485	Support standard 485 communication mode——RTU
Display functions	Seven-segment display	Operating frequency, set frequency, bus voltage, output voltage, operating speed, output power rate, output torque, PID given value, PID feedback value, etc. Overload accumulation as standard value, output power limit, output frequency speed conversion, DC bus voltage, output voltage, temperature, etc.
Protection function	Standard Features	Overcurrent, overload, short circuit protection; overvoltage, low voltage protection; overheating protection, grounding, input There is a missing phase.
Installation Environment Require	Ambient temperature	-10～50℃ (use at derating above 40℃)
	Surrounding humidity	9900%%RRHH within ((no condensation))
	Surroundings	No corrosive, flammable, explosive, or water-absorbing dust; no accumulation of various fluffs
	shock	0.5gm or less
	Altitude	Below 1000 meters, if it exceeds, the rated current must be reduced

1.4 Precautions for use

The inverter is designed to operate in industrial environments with electromagnetic interference.

Good, you can ensure the safe and trouble-free operation of the inverter. Please install it according to the following rules to ensure the inverter

The device can operate reliably and effectively avoid the impact of electromagnetic interference.

- Make sure that all control devices connected to the inverter use short and thick grounding cables like the inverter.

  Connect to the common star grounding point or common grounding busbar; ground the motor nearby.

  Connect the motor housing to the ground terminal of the inverter or the protective ground of the control system.

- If leakage occurs when the equipment is not grounded, connect the ground terminal of the inverter to the equipment casing and

  The motor housing is connected. And the N terminal of the single-phase 220V inverter must be connected to the neutral line.

- Conductors are preferably flat, multi-core because they have lower impedance at high frequencies.
- The cable ends should be cut as neatly as possible to keep the unshielded wire segments as short as possible.
- The control cables should be routed as far away from the power supply cables and motor cables as possible, using separate wiring ducts.

  When it is necessary to cross the power supply cable and motor cable, they should be crossed perpendicularly at 90°.

- Make sure the contactor installed in the cabinet is equipped with a surge suppressor. Alternatively,

  The 'R-C' damping circuit is connected to the DC contactor and uses a varistor corresponding to the coil voltage;

  The coil is connected with a 'freewheeling' diode or a varistor-like device corresponding to the coil voltage;

  This is important when the contactor is frequently actuated or when the contactor is controlled by the output relay of the inverter.

  Especially important.

- The connection line to the motor should be shielded cable or armored cable, and the shield layer should be grounded with a cable grounding card.

  Both ends of the device must be grounded reliably.

- Installing an input side noise filter can reduce electromagnetic interference from other equipment on the grid side.

  The input noise filter must be as close to the inverter power input terminal as possible.

  It must be reliably grounded like the inverter.

- Installing an output side noise filter can reduce wireless interference and inductive interference from the motor.

  The noise filter must be as close to the inverter output terminal as possible.

  The device must also be reliably grounded.

- Whenever possible, shielded cables or twisted pair cables should be used for control loop connections.
- Add a 'zero-phase reactor' to the power line near the inverter input terminal and a 'zero-phase reactor' to the power line near the inverter output terminal.

  Add a 'zero-phase reactor' to the motor line and a 'zero-phase reactor' to the control line close to the inverter control terminal.

  The reactor can effectively reduce the electromagnetic induction interference of the inverter and related main cables.

- ● Grounding, correct, reliable grounding is the basic condition for the safe and reliable operation of this product.

  For correct grounding, please read the following precautions carefully.

Warning	● To prevent electric shock, use a grounding wire of the size specified in the technical standards for electrical equipment. inch, and try to shorten the wiring length, and keep the grounding resistance below 10Ω. The leakage current generated by the inverter causes the potential of the grounding terminal far away from the grounding point to be inconsistent. Stable, resulting in electric shock accidents.
Important	● Do not share grounding with welding machines or power equipment that requires large current/pulse current. Otherwise, the inverter may operate abnormally. ● When using multiple inverters, do not use a ring ground. Otherwise, the inverter may fail to ground. Make an exception. ● The motor must be grounded independently nearby, and the motor housing must not be connected to the inverter. The grounding terminal of the device should not share the same grounding network with the control system.

Chapter 2 Product Standard Specifications

To ensure the safe use of this product, maximize the performance of the inverter, and ensure the reliable operation of the inverter

Please use this product strictly in accordance with the environment, wiring, ventilation and other requirements described in this chapter.

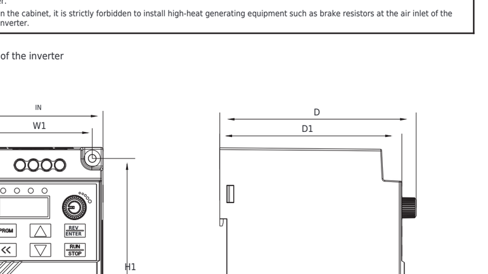
2.1 Installation Environment

In order to give full play to the performance of this product and maintain its functions for a long time, the installation environment is very important.

The product should be installed in an environment that meets the requirements shown in the following table.

environment	Require
Installation location	Indoor installation No direct sunlight
Use temperature	--1100 ～～ ++4400℃℃
Storage temperature	-20 ～ +60℃
Ambient humidity	No condensation below 95%RH
Surroundings	Please install the inverter in the following places: ● Places free from oil mist, corrosive gas, flammable gas, dust, etc.; ● A place where foreign matter such as metal powder, oil, and water cannot enter the inverter (do not place the inverter The frequency converter is installed on flammable materials such as wood); ● A place without radioactive materials or flammable materials; ● A place without harmful gases and liquids; ● Locations with little salt corrosion; ● A location without direct sunlight.
altitude	1000m or less
vibration	When below 10～20Hz: 9.8m/s 2 When below 20～55Hz: 5.9m/s 2
Installation and Cooling	● The inverter must not be installed horizontally or sideways, but must be installed vertically; ● Please install high-heat devices such as brake resistors independently and avoid installing them on the same machine as the inverter. In the cabinet, it is strictly forbidden to install high-heat generating equipment such as brake resistors at the air inlet of the inverter.

22 Installation dimensions of the inverter



Inverter Model	IN	W1	H	H1	D	D1	Install Aperture
EB0004G1	72.5	60	142.5	130	113.8	107	f4.5
EB0007G1							
EB0015G1							
EB0007G3							
EB0015G3							
EB0022G3							

2.3 Basic wiring diagram

This section is to ensure that users use this product safely, maximize the performance of the inverter, and ensure that the inverter can

The various precautions and requirements that must be followed during operation are described. The standard connection diagram is as follows:

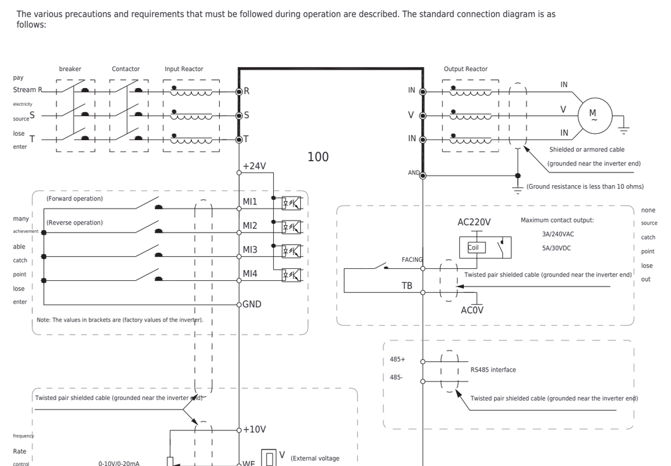


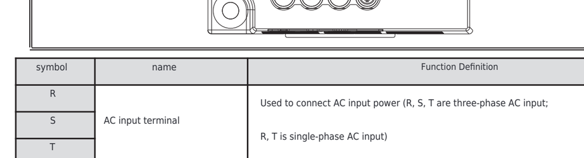
Figure: 1 、The symbol ◉ represents the main circuit terminal;

2 、symbol ○ Represents the control circuit terminal.

Note: Analog output is a dedicated output for frequency, current, voltage and other indicator meters and cannot be used for feedback and other control.

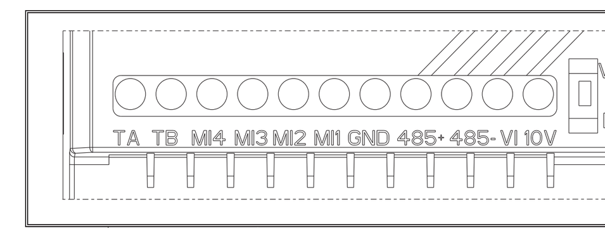
Control operations.

● Main circuit terminals



symbol	name	Function Definition
R	AC input terminal	Used to connect AC input power (R, S, T are three-phase AC input; R, T is single-phase AC input)
S		
T		
IN	AC output terminal	Used to connect motors or other inductive or resistive loads.
V		
IN		
⏚	Ground terminal	Grounded, grounding resistance is less than 10 ohms.

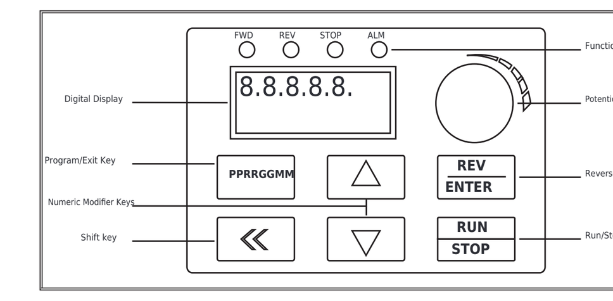
● Control circuit terminals



Terminal Name		Terminal Usage Description
MI1～MI4		Switch input terminal, forming an optical coupler isolation input with +24V and DCM Input voltage range: 9~30V Input impedance: 10kΩ
WE (Slide switch selection)	V	Analog input, voltage range: 0~10V, input impedance: 6.8kΩ.
	I	Analog input, current: 0~20mA, input impedance: 500Ω.
10V		The DC10V power supply provided for this machine has an output current range of 0-50mA
GND		The reference zero potential for voltage.
TA, TB		Relay output: TA/TB normally open Contact capacity: AC250V/3A, DC30V/1A
485+、485-		485 communication port, standard 485 communication interface please use twisted pair or shielded wire

Chapter 3 Operation and display

3.1 Operation panel description



3.2 Button Description

Key Symbols	name	Functional Description
PRGM	Programming Keys	Menu entry or exit, parameter modification
REV/ENTER	Reverse/Confirm key	In the monitoring interface, press this key to reverse the operation (by F7-01 function code determines its function); when in programming interface, confirm Parameter setting.
▲	Increment key	Increment of data or function code
▼	Decrement key	Decrement of data or function code
<	Shift key	Select parameter modification position and display content
RUN/STOP	Run/Stop key	In the stop state, press this key to run forward; in the running state In the state, press this key to stop the operation; in the fault state, operate This button resets the fault.

3.3 Function indicator light description

Indicator light name	illustrate
FWD	Inverter forward running indicator light
REV	Inverter reverse running indicator light
STOP	Inverter stop indicator light
ALM	Inverter fault indicator

Chapter 4 Function parameter table

The symbols in the function table are explained as follows

☆: Indicates that the setting value of this parameter can be changed when the inverter is in the stop or running state;

★: Indicates that the setting value of this parameter cannot be changed when the inverter is in operation;

●: Indicates that the value of this parameter is the actual test record value and cannot be changed;

* : Indicates that the parameter is a "factory parameter" and is limited to the manufacturer's settings. Users are prohibited from operating it.

Function code	Functional Description	Setting range	Factory value	Change
F0 Group Basic parameter group				
F0-00	GP type display	1: G type (constant torque load type) 2: P type (fan, water pump load type)	Model confirmed Certainly	●
F0-01	Motor control method	2: V/F control	2	★
F0-02	Command source selection	0: Operation panel command channel 1: Terminal command channel 2: Communication command channel	0	☆
F0-03	Main frequency source X selection	0: Digital setting (preset frequency F0-08, UP/DOWN can be modified, no memory after power failure) 1: Panel potentiometer speed control 2：VI 6: Multi-segment instructions 7: Simple PLC 8：PID 9: Communication setting	1	★
F0-04	Auxiliary frequency source Y selection	Same as F0-03 (main frequency source X selection)	0	★
F0-05	Auxiliary frequency source Y range when superimposed Range Selection	0: relative to the maximum frequency 1: relative to frequency source X	0	☆
F0-06	Auxiliary frequency source Y range when superimposed Wai	0%～150%	100%	☆
F0-07	Frequency source superposition selection	Units: Frequency source selection 0: Main frequency source X 1: Primary and secondary calculation results (The operation relationship is determined by the tens digit) 2: Switch between main frequency source X and auxiliary frequency source Y 3: Main frequency source X and main and auxiliary operation results are switched Change 4: Auxiliary frequency source Y and main and auxiliary operation results Switch Tens digit: Frequency source main and auxiliary operation relationship 0: Main + Auxiliary 1: Primary-Secondary 2: The maximum value of the two 3: The minimum of the two	00	☆

Function code	Functional Description	Setting range	Factory value	Change
F0-08	Preset frequency	0.00Hz～maximum frequency (F0-10)	50.00Hz	☆
F0-09	Running direction	0: The direction is consistent 1: Opposite direction	0	☆
F0-10	Maximum frequency	50.00Hz～600.00Hz	50.00Hz	★
F0-11	Upper frequency source	0: F0-12 setting 1：VI 5: Communication setting	0	★
F0-12	Upper frequency	Lower frequency limit F0-14 ~ maximum frequency F0-10	50.00Hz	☆
F0-13	Upper frequency offset	0.00Hz～Maximum frequency F0-10	0.00Hz	☆
F0-14	Lower frequency	0.00Hz～Upper frequency limit F0-12	0.00Hz	☆
F0-15	Carrier frequency	0.5kHz～16.0kHz	Model confirmation	☆
F0-16	Carrier frequency adjusts with temperature	0: No 1: Yes	1	☆
F0-17	Acceleration time 1	0.00s～65000s	Model confirmation	☆
F0-18	Deceleration time 1	0.00s～65000s	Model confirmation	☆
F0-19	Acceleration and deceleration time unit	0: 1 second 1: 0.1 sec 2: 0.01 seconds	1	★
F0-21	Auxiliary frequency source deviation during superposition Frequency	0.00Hz～Maximum frequency F0-10	0.00Hz	☆
F0-22	Frequency command resolution	1：0.1Hz 2：0.01Hz	2	★
F0-23	Digital frequency setting stop record Memory Selection	0: No memory 1: Memory	0	☆
F0-24	Acceleration/deceleration time reference frequency	0: Maximum frequency (F0-10) 1: Set frequency 2：100Hz	0	★
F0-25	Runtime frequency instruction UP/DOWN Benchmark	0: operating frequency 1: Set frequency	0	★
F0-26	Command source bundled with frequency source	Units: Operation panel command binding frequency source choose 0: No binding 1: Panel potentiometer speed control 2：VI 6: Multi-speed 7: Simple PLC 8：PID 9: Communication setting Tens digit: Terminal command binding frequency source selection Hundreds place: Communication command binding frequency source selection Thousands: Automatically run binding frequency source selection	0000	☆

Function code	Functional Description	Setting range	Factory value	Change
F0-27	Parameter initialization	0: No operation 01: Restore basic parameter group (F0, F1 group) 02: Clear record information 03: Completely initialize parameters	0	★
F1 Start-stop control parameter group				
F1-00	Startup method	0: Direct start 2: Pre-excitation start (AC asynchronous motor)	0	☆
F1-03	Start frequency	0.00Hz～10.00Hz	0.00Hz	☆
F1-04	Start frequency holding time	0.0s～100.0s	0.0s	★
F1-05	Starting DC braking current/pre-Excitation current	0%～100%	0%	★
F1-06	Start DC braking time/pre-Excitation time	0.0s～100.0s	0.0s	★
F1-07	Acceleration and deceleration method	0: Linear acceleration and deceleration 1: S curve acceleration/deceleration A 2: S-curve acceleration and deceleration B	0	★
F1-08	S curve start time ratio	0.0%～(100.0% minus F1-09)	30.0%	★
F1-09	S curve end period time ratio	0.0%～(100.0% minus F1-08)	30.0%	★
F1-10	Shutdown mode	0: decelerate and stop 1: Free parking	0	☆
F1-11	DC braking start frequency at shutdown	0.00Hz～Maximum frequency	0.00Hz	☆
F1-12	DC braking waiting time	0.0s～100.0s	0.0s	☆
F1-13	DC braking current at shutdown	0%～100%	0%	☆
F1-14	DC braking time at shutdown	0.0s～100.0s	0.0s	☆
F1-15	Braking rate	0%～100%	100%	☆
F2 Group Motor Parameters				
F2-00	Motor Type Selection	0: Ordinary asynchronous motor	0	★
F2-01	Motor rated power	0.1kW～1000.0kW	Model confirmation	★
F2-02	Motor rated voltage	1V～2000V	Model confirmation	★
F2-03	Motor rated current	0.01A～655.35A (Inverter power <= 55kW) 0.1A～6553.5A (Inverter power>55kW)	Model confirmation	★

Function code	Functional Description	Setting range	Factory value	Change
F2-04	Motor rated frequency	0.01Hz～Maximum frequency	Model confirmation	★
F2-05	Motor rated speed	1rpm～65535rpm	Model confirmation	★
F4 Group V/F control parameter group				
F4-00	VF curve setting	0: Linear V/F 1: Multi-point V/F 2: Square V/F 3: 1.2 V/F 4: 1.4 V/F 6: 1.6 V/F 8: 1.8 V/F 10: VF complete separation mode 11: VF semi-separation mode	0	★
F4-01	Torque boost	0.0%: (Automatic torque boost) 0.1%～30.0%	Model confirmation	☆
F4-02	Torque boost cut-off frequency	0.00Hz～Maximum frequency	50.00Hz	★
F4-03	Multi-point VF frequency point 1	0.00Hz～F4-05	10.00Hz	★
F4-04	Multi-point VF voltage point 1	0.0%～100.0%	25.0%	★
F4-05	Multi-point VF frequency point 2	F4-03～F4-07	20.00Hz	★
F4-06	Multi-point VF voltage point 2	0.0%～100.0%	50.0%	★
F4-07	Multi-point VF frequency point 3	F4-05～Motor rated frequency (F0-10)	45.00Hz	★
F4-08	Multi-point VF voltage point 3	0.0%～100.0%	75.0%	★
F4-09	VF slip compensation gain	0.0%～200.0%	0.0%	☆
F4-10	VF overexcitation gain	0～200	64	☆
F4-11	VF oscillation suppression gain	0～100	Model confirmation	☆
F4-13	VF separated voltage source	0: Digital setting (F4-14) 1：VI 5: Multiple instructions 6: Simple PLC 7：PID 8: Communication setting Note: 100.0% corresponds to the rated voltage of the motor	0	☆
F4-14	Digital setting of voltage for VF separation	0V～motor rated voltage	0V	☆

Function code	Functional Description	Setting range	Factory value	Change
F4-15	When the voltage of VF separation rises between	0.0s～1000.0s Note: Indicates the change from 0V to the rated voltage of the motor Time	0.0s	☆
F5 Group Input Terminal Parameters				
F5-00	MI1 terminal function selection	0: No function 1: Forward operation (FWD) 2: Reverse operation (REV) 3: Three-wire operation control 4: Forward jog (FJOG) 5: Reverse jog (RJOG) 6: Terminal UP 7: Terminal DOWN 8: Free parking 9: Fault reset (RESET) 10: Operation paused	1	★
F5-01	MI2 terminal function selection	11: External fault normally open input 12: Multi-segment command terminal 1 13: Multi-segment command terminal 2 14: Multi-segment command terminal 3 15: Multi-segment command terminal 4 16: Acceleration/deceleration time selection terminal 1 17: Acceleration/deceleration time selection terminal 2 18: Frequency source switching 19: UP/DOWN setting cleared (Terminal, keyboard) 20: Run command to switch terminal 21: Acceleration and deceleration prohibited	2	★
F5-02	MI3 terminal function selection	22: PID pause 23: PLC status reset 24: Swing frequency pause 25: Counter input 26: Counter reset 27: Length count input 28: Length reset 29: Torque control disabled 32: Immediate DC braking 33: External fault normally closed input 34: Frequency modification enable	0	★
F5-03	MI4 terminal function selection	35: PID action direction is reversed 36: External parking terminal 1 37: Control command switching terminal 2 38: PID integration pause 39: Switch between frequency source X and preset frequency 40: Frequency source Y and preset frequency switching 43: PID parameter switching 46: Speed control/torque control switch 47: Emergency Stop 48: External parking terminal 2 49: Deceleration DC braking 50: This running time is reset	0	★
F5-10	MIn filter time	0.000s～1.000s	0.010s	☆
F5-11	Terminal command mode	0: Two-wire 1 1: Two-wire 2 2: Three-wire 1 3: Three-wire 2	0	★

Function code	Functional Description	Setting range	Factory value	Change
F5-12	Terminal UP/DOWN change rate	0.001Hz/s～65.535Hz/s	1.00Hz/s	☆
F5-13	VI lower limit	0.00V～F5-15	0.00V	☆
F5-14	VI lower limit corresponding setting	-100.0%～100.0%	0.0%	☆
F5-15	VI upper limit	F5-13～10.00V	10.00V	☆
F5-16	VI upper limit corresponding setting	-100.0%～100.0%	100.0%	☆
F5-17	VI filter time	0.00s～10.00s	0.10s	☆
F5-57	MI1 delay time	0.0s～3600.0s	0.0s	★
F5-58	MI2 delay time	0.0s～3600.0s	0.0s	★
F5-59	MI3 Delay Time	0.0s～3600.0s	0.0s	★
F5-60	MIn terminal effective mode selection 1	0: High level is valid 1: Low level is valid Units: MI1 Tens: MI2 Hundreds: MI3 Thousands: MI4	00000	★

Function code	Functional Description	Setting range	Factory value	Change
F6 group output terminal parameter group				
F6-02	Relay 1 function selection (TA, TB)	0: No output 1: The inverter is running 2: Fault output (fault shutdown) 3: Frequency level detection FDT1 output 4: Frequency arrival 5: Zero speed operation (no output when stopped) 6: Motor overload warning 7: Inverter overload warning 8: Set count value reached 9: The specified count value has been reached 10: Length reached 11: PLC cycle completed 12: Accumulated running time reached 13: Frequency limited 15: Ready to run 17: Upper frequency limit reached 18: Lower frequency limit reached (operation related) 19: Undervoltage status output 20: Communication settings 23: Zero speed running 2 (also output when stopped) 24: Accumulated power-on time has expired 25: Frequency level detection FDT2 output 26: Frequency 1 reaches the output 27: Frequency 2 reaches the output 28: Current 1 reaches the output 29: Current 2 reaches the output 30: Timing arrival output 31: VI input exceeds limit 32: Downloading 33: Reverse running 34: Zero current state 35: Module temperature reaches 36: Output current exceeds limit 37: Lower frequency limit reached (output even when shut down) 38: Alarm output (continue running) 39: Motor over-temperature warning 40: This running time has expired	2	☆
F6-18	Relay 1 output delay time	0.0s～3600.0s	0.0s	☆
F6-22	TA/TB relay terminal is effective state	0: Positive logic 1: Anti-Logic Tens place: Relay 1	00	☆
F7 Group Human Machine Interface Parameters				
F7-00	User Password	0～65535	0	☆

Function code	Functional Description	Setting range	Factory value	Change
F7-01	REV/ENTER key function selection	0: Reverse 1: Operation panel command channel and remote command Channel (terminal command channel or communication command channel) Switch 2: Forward and reverse switching 3: Forward jog 4: Reverse jog	0	★
F7-02	RUN/STOP key function	0: Only in keyboard operation mode, The RUN/STOP key stop function is effective 1: In any operation mode, The RUN/STOP key stop function is effective	1	☆
F7-03	LED operation display parameters 1	0000～FFFF Bit00: Operating frequency 1 (Hz) Bit01: Set frequency (Hz) Bit02: Bus voltage (V) Bit03: Output voltage (V) Bit04: Output current (A) Bit05: Output power (kW) Bit06: Output torque (%) Bit07: MIn input status Bit08: MO output status Bit09: VI voltage (V) Bit12: Count value Bit13: length value Bit14: Load speed display Bit15: PID setting	401F	☆
F7-04	LED operation display parameter 2	0000～FFFF Bit00: PID feedback Bit01: PLC stage Bit03: Operating frequency 2 (Hz) Bit04: Remaining running time Bit05: VI voltage before correction (V) Bit08: Line speed Bit09: Current power-on time (Hour) Bit10: Current running time (Min) Bit12: Communication setting value Bit14: Main frequency X display (Hz) Bit15: Auxiliary frequency Y display (Hz)	0	☆
F7-05	LED stop display parameters	0000～FFFF Bit00: Set frequency (Hz) Bit01: Bus voltage (V) Bit02: MIn input status Bit03: MO output status Bit04: VI voltage (V) Bit07: Count value Bit08: length value Bit09: PLC stage Bit10: Load speed Bit11: PID setting	3	☆
F7-06	Load speed display factor	0.0001～6.5000	3.0000	☆
F7-07	Inverter module heat sink temperature	0.0℃～100.0℃	-	●

Function code	Functional Description	Setting range	Factory value	Change
F7-09	Cumulative running time	0h～65535h	-	●
F7-10	Product Number	-	-	●
F7-11	Software version number	-	-	●
F7-12	Load speed display decimal point number	0: 0 decimal places 1: 1 decimal place 2: 2 decimal places 3: 3 decimal places	1	☆
F7-13	Cumulative power-on time	0h～65535h	-	●
F7-14	Cumulative power consumption	0 to 65535 degrees	-	●
F7-15	Function code modification properties	0: Editable 1: Unmodifiable	0	☆
F8 Group Auxiliary function parameter group				
F8-00	Jog operation frequency	0.00Hz～Maximum frequency	2.00Hz	☆
F8-01	Jog acceleration time	0.0s～6500.0s	20.0s	☆
F8-02	Jog deceleration time	0.0s～6500.0s	20.0s	☆
F8-03	Acceleration time 2	0.0s～6500.0s	Model confirmation	☆
F8-04	Deceleration time 2	0.0s～6500.0s	Model confirmation	☆
F8-05	Acceleration time 3	0.0s～6500.0s	Model confirmation	☆
F8-06	Deceleration time 3	0.0s～6500.0s	Model confirmation	☆
F8-07	Acceleration time 4	0.0s～6500.0s	Model confirmation	☆
F8-08	Deceleration time 4	0.0s～6500.0s	Model confirmation	☆
F8-09	Hop frequency 1	0.00Hz～Maximum frequency	0.00Hz	☆
F8-10	Hop frequency 2	0.00Hz～Maximum frequency	0.00Hz	☆
F8-11	Jump frequency amplitude	0.00Hz～Maximum frequency	0.01Hz	☆
F8-12	Forward and reverse dead time	0.0s～3000.0s	0.0s	☆
F8-13	Reverse control enable	0: Allow 1: Prohibited	0	☆
F8-14	The set frequency is lower than the lower limit frequency Operation Mode	0: Run at the lower frequency limit 1: Shutdown 2: Zero speed operation	0	☆
F8-15	Droop control	0.00Hz～10.00Hz	0.00Hz	☆
F8-16	Set the cumulative power-on arrival time	0h～65000h	0h	☆

Function code	Functional Description	Setting range	Factory value	Change
F8-17	Set the cumulative running arrival time	0h～65000h	0h	☆
F8-18	Start protection selection	0: No protection 1: Protection	1	☆
F8-19	Frequency detection value (FDT1)	0.00Hz～Maximum frequency	50.00Hz	☆
F8-20	Frequency detection hysteresis value (FDT1)	0.0%～100.0%(FDT1 level)	5.0%	☆
F8-21	Frequency arrival detection width	0.0%～100.0%(maximum frequency)	0.0%	☆
F8-22	Jump frequency during acceleration and deceleration Is it effective?	0: Invalid 1: Valid	1	☆
F8-25	Acceleration time 1 and acceleration time 2 Switching frequency points	0.00Hz～Maximum frequency	0.00Hz	☆
F8-26	Deceleration time 1 and deceleration time 2 Switching frequency points	0.00Hz～Maximum frequency	0.00Hz	☆
F8-27	Terminal jog priority	0: Invalid 1: Valid	0	☆
F8-28	Frequency detection value (FDT2)	0.00Hz～Maximum frequency	50.00Hz	☆
F8-29	Frequency detection hysteresis value FDT2)	0.0%～100.0%(FDT2 level)	5.0%	☆
F8-30	Arbitrary frequency detection value 1	0.00Hz～Maximum frequency	50.00Hz	☆
F8-31	Any frequency detection width 1	0.0%～100.0%(maximum frequency)	0.0%	☆
F8-32	Arbitrary frequency detection value 2	0.00Hz～Maximum frequency	50.00Hz	☆
F8-33	Any frequency detection width 2	0.0%～100.0%(maximum frequency)	0.0%	☆
F8-34	Zero current detection level	0.0%～300.0% 100.0% corresponds to the rated current of the motor	5.0%	☆
F8-35	Zero current detection delay time	0.01s～600.00s	0.10s	☆
F8-36	Output current exceeds limit	0.0%(Not detected) 0.1%～300.0%(rated current of motor)	180.0%	☆
F8-37	Output current over-limit detection delay time	0.00s～600.00s	0.00s	☆
F8-38	Arbitrary current 1	0.0%～300.0%(rated current of motor)	100.0%	☆
F8-39	Arbitrary current 1 width	0.0%～300.0%(rated current of motor)	0.0%	☆
F8-40	Arbitrary current 2	0.0%～300.0%(rated current of motor)	100.0%	☆
F8-41	Arbitrary current 2 width	0.0%～300.0%(rated current of motor)	0.0%	☆
F8-42	Timing function selection	0: Invalid 1: Valid	0	☆

Function code	Functional Description	Setting range	Factory value	Change
F8-43	Scheduled running time selection	0: F8-44 setting 1：VI Analog input range corresponds to F8-44	0	☆
F8-44	Scheduled running time	0.0Min～6500.0Min	0.0Min	☆
F8-45	VI input voltage protection value lower limit	0.00V～F8-46	3.10V	☆
F8-46	VI input voltage protection value upper limit	F8-45～10.00V	6.80V	☆
F8-47	Module temperature reaches	0℃～100℃	75℃	☆
F8-48	Cooling fan control	0: Fan runs during operation 1: The fan is always running	0	☆
F8-49	Wake-up frequency	Sleep frequency (F8-51) ~ maximum frequency (F0-10)	0.00Hz	☆
F8-50	Wake-up delay time	0.0s～6500.0s	0.0s	☆
F8-51	Sleep frequency	0.00Hz～Wake-up frequency (F8-49)	0.00Hz	☆
F8-52	Sleep delay time	0.0s～6500.0s	0.0s	☆
F8-53	The arrival time of this operation is set Certainly	0.0Min～6500.0Min	0.0Min	☆
F9 Group PID Parameters				
F9-00	PID given source	0: F9-01 setting 1：VI 5: Communication setting 6: Multi-segment instruction setting	0	☆
F9-01	PID value given	0.0%～100.0%	50.0%	☆
F9-02	PID feedback source	0：VI 5: Communication setting	0	☆
F9-03	PID action direction	0: Positive effect 1: Counteraction	0	☆
F9-04	PID given feedback range	0～65535	1000	☆
F9-05	Proportional gain Kp1	0.0～100.0	20.0	☆
F9-06	Integration time Ti1	0.01s～10.00s	2.00s	☆
F9-07	Derivative time Td1	0.000s～10.000s	0.000s	☆
F9-08	PID reverse cut-off frequency	0.00～Maximum frequency	0.00Hz	☆

Function code	Functional Description	Setting range	Factory value	Change
F9-09	PID deviation limit	0.0%～100.0%	0.0%	☆
F9-10	PID differential limiting	0.00%～100.00%	0.10%	☆
F9-11	PID given change time	0.00～650.00s	0.00s	☆
F9-12	PID feedback filter time	0.00～60.00s	0.00s	☆
F9-13	PID output filter time	0.00～60.00s	0.00s	☆
F9-15	Proportional gain Kp2	0.0～100.0	20.0	☆
F9-16	Integration time Ti2	0.01s～10.00s	2.00s	☆
F9-17	Derivative time Td2	0.000s～10.000s	0.000s	☆
F9-18	PID parameter switching conditions	0: Do not switch 1: Switch via the MIn terminal 2: Automatically switch according to deviation	0	☆
F9-19	PID parameter switching deviation 1	0.0%～F9-20	20.0%	☆
F9-20	PID parameter switching deviation 2	F9-19～100.0%	80.0%	☆
F9-21	PID initial value	0.0%～100.0%	0.0%	☆
F9-22	PID initial value holding time	0.00～650.00s	0.00s	☆
F9-23	The maximum positive deviation of the two outputs Large value	0.00%～100.00%	1.00%	☆
F9-24	The two output deviations are reversed. Large value	0.00%～100.00%	1.00%	☆
F9-25	PID integral properties	Units: Integral separation 0: Invalid 1: Valid Tens: whether to stop integrating after the output reaches the limit point 0: Continue to accumulate points 1: Stop integration	00	☆
F9-26	PID feedback loss detection value	0.0%: No feedback loss is determined 0.1%～100.0%	0.0%	☆
F9-27	PID feedback loss detection time	0.0s～20.0s	0.0s	☆

Function code	Functional Description	Setting range	Factory value	Change
F9-28	PID shutdown calculation	0: Stop and do not operate 1: Operation during shutdown	1	☆
FA Group Protection and Fault Parameter Group				
FA-00	Motor overload protection selection	0: Disable 1: Allow	1	☆
FA-01	Motor overload protection gain	0.20～10.00	1.00	☆
FA-02	Motor overload warning factor	50%～100%	80%	☆
FA-03	Overvoltage stall gain	0～100	20	☆
FA-04	Overvoltage stall protection voltage	120%～150%	135%	☆
FA-05	Overcurrent stall gain	0～100	20	☆
FA-06	Over-current stall protection current	100%～200%	170%	☆
FA-07	Power-on short-circuit protection selection	0: Invalid 1: Valid	1	☆
FA-08	Overcurrent suppression enable	0: Disable 1: Allow	0	☆
FA-09	Fault automatic reset times	0～20	0	☆
FA-10	Fault during automatic fault reset MO action selection	0: No action 1: Action	0	☆
FA-11	Fault automatic reset interval	0.1s～100.0s	1.0s	☆
FA-13	Output phase loss protection selection	0: Disable 1: Allow	1	☆
FA-14	First failure type	See fault code table	—	●
FA-15	Second failure type		—	●
FA-16	The third (most recent) failure type		—	●
FA-17	The third (most recent) failure Time frequency	—	—	●
FA-18	The third (most recent) failure Current	—	—	●
FA-19	The third (most recent) failure Bus voltage	—	—	●
FA-20	The third (most recent) failure Input terminal status	—	—	●
FA-21	The third (most recent) failure Output terminal status	—	—	●
FA-22	The third (most recent) failure Inverter status	—	—	●
FA-23	The third (most recent) failure Power-on time	—	—	●
FA-24	The third (most recent) failure Running time	—	—	●

Function code	Functional Description	Setting range	Factory value	Change
FB Group Swing frequency and meter parameter group				
FB-00	Frequency setting method	0: relative to the center frequency 1: Relative to the maximum frequency	0	☆
FB-01	Swing frequency	0.0%～100.0%	0.0%	☆
FB-02	Jump frequency amplitude	0.0%～50.0%	0.0%	☆
FB-03	Swing frequency cycle	0.1s～3000.0s	10.0s	☆
FB-04	The rise time of the triangle wave of the swing frequency	0.1%～100.0%	50.0%	☆
FB-05	Set length	0m～65535m	1000m	☆
FB-06	Actual length	0m～65535m	0m	☆
FB-07	Pulses per meter	0.1～65535	100	☆
FB-08	Set the count value	1～65535	1000	☆
FB-09	Specifying count value	1～65535	1000	☆
FC Group 485 communication parameter group				
FC-00	Baud rate	MODBUS 0：300BPS 1：600BPS 2：1200BPS 3：2400BPS 4: 4800BPS 5：9600BPS 6：19200BPS 7：38400BPS 8：57600BPS 9：115200BPS	5	☆
FC-01	Data Format	0: No check (8-N-2) 1: Even parity (8-E-1) 2: Odd parity (8-O-1) 3: No check (8-N-1)	0	☆
FC-02	Local address	1 to 249, 0 is the broadcast address	1	☆
FC-03	Response delay	0ms～20ms	2	☆
FC-04	Communication timeout	0.0 (invalid), 0.1s to 60.0s	0.0	☆
FC-05	Data transfer format selection	MODBUS 0: Non-standard MODBUS protocol 1: Standard MODBUS protocol	1	☆
FC-06	Communication reading current resolution	0：0.01A 1：0.1A	0	☆

Function code	Functional Description	Setting range	Factory value	Change
FD group multi-speed and simple PLC parameter group				
FD-00	Multi-segment instruction 0	-100.0%～100.0%	0.0%	☆
FD-01	Multi-segment instruction 1	-100.0%～100.0%	0.0%	☆
FD-02	Multi-segment instruction 2	-100.0%～100.0%	0.0%	☆
FD-03	Multi-segment instruction 3	-100.0%～100.0%	0.0%	☆
FD-04	Multi-segment instruction 4	-100.0%～100.0%	0.0%	☆
FD-05	Multi-segment instruction 5	-100.0%～100.0%	0.0%	☆
FD-06	Multi-segment instruction 6	-100.0%～100.0%	0.0%	☆
FD-07	Multi-segment instruction 7	-100.0%～100.0%	0.0%	☆
FD-08	Multi-segment instruction 8	-100.0%～100.0%	0.0%	☆
FD-09	Multi-segment instruction 9	-100.0%～100.0%	0.0%	☆
FD-10	Multi-segment instruction 10	-100.0%～100.0%	0.0%	☆
FD-11	Multi-segment instruction 11	-100.0%～100.0%	0.0%	☆
FD-12	Multi-segment instruction 12	-100.0%～100.0%	0.0%	☆
FD-13	Multi-segment instruction 13	-100.0%～100.0%	0.0%	☆
FD-14	Multi-segment instruction 14	-100.0%～100.0%	0.0%	☆
FD-15	Multi-segment instruction 15	-100.0%～100.0%	0.0%	☆
FD-16	Simple PLC operation mode	0: Stop after a single run 1: Keep the final value after a single run 2: Keep looping	0	☆
FD-17	Simple PLC power-off memory selection	Units: Power-off memory selection 0: No memory after power failure 1: Power-off memory Tens: Stop memory selection 0: No memory when stopping 1: Shutdown memory	00	☆
FD-18	Simple PLC 0th stage running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-19	Simple PLC 0th stage acceleration and deceleration time selection select	0～3	0	☆
FD-20	Simple PLC first stage running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-21	Simple PLC first stage acceleration and deceleration time selection select	0～3	0	☆
FD-22	Simple PLC second stage running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-23	Simple PLC second stage acceleration and deceleration time selection select	0～3	0	☆

Function code	Functional Description	Setting range	Factory value	Change
FD-24	Simple PLC 3rd stage running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-25	Simple PLC 3rd stage acceleration and deceleration time selection	0～3	0	☆
FD-26	Simple PLC 4th stage running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-27	Simple PLC 4th stage acceleration and deceleration time selection	0～3	0	☆
FD-28	Simple PLC 5th stage running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-29	Simple PLC 5th stage acceleration and deceleration time selection	0～3	0	☆
FD-30	Simple PLC 6th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-31	Simple PLC 6th stage acceleration and deceleration time selection	0～3	0	☆
FD-32	Simple PLC 7th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-33	Simple PLC 7th stage acceleration and deceleration time selection	0～3	0	☆
FD-34	Simple PLC 8th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-35	Simple PLC 8th stage acceleration and deceleration time selection	0～3	0	☆
FD-36	Simple PLC 9th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-37	Simple PLC 9th stage acceleration and deceleration time selection	0～3	0	☆
FD-38	Simple PLC 10th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-39	Simple PLC 10th stage acceleration and deceleration time selection	0～3	0	☆
FD-40	Simple PLC 11th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-41	Simple PLC 11th stage acceleration and deceleration time selection	0～3	0	☆
FD-42	Simple PLC 12th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-43	Simple PLC 12th stage acceleration and deceleration time selection	0～3	0	☆
FD-44	Simple PLC 13th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-45	Simple PLC 13th stage acceleration and deceleration time selection	0～3	0	☆
FD-46	Simple PLC 14th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-47	Simple PLC 14th stage acceleration and deceleration time selection	0～3	0	☆
FD-48	Simple PLC 15th segment running time	0.0s(h)～6500.0s(h)	0.0s(h)	☆
FD-49	Simple PLC 15th stage acceleration and deceleration time selection	0～3	0	☆
FD-50	Simple PLC running time unit	0: s (seconds) 1: h (hour)	0	☆
FD-51	Multi-segment instruction 0 setting mode	0: Function code FD-00 given 1：VI 3: Panel potentiometer setting 5：PID 6: Preset frequency (F0-08) Fixed, UP/DOWN can be modified	0	☆

Function code	Functional Description	Setting range	Factory value	Change
FD-52	Multi-segment instruction 3 setting mode	0: Function code FD-03 given 1：VI 3: Panel potentiometer setting 5：PID 6: Preset frequency (F0-08) Fixed, UP/DOWN can be modified	0	☆
FD-53	Multi-segment instruction 6 setting mode	0: Function code FD-06 given 1：VI 3: Panel potentiometer setting 5：PID 6: Preset frequency (F0-08) given , UP/DOWN can be modified	0	☆
FD-54	Multi-segment instruction 9 setting mode	0: Function code FD-09 given 1：VI 3: Panel potentiometer setting 5：PID 6: Preset frequency (F0-08) Fixed, UP/DOWN can be modified	0	☆
FD-55	Multi-segment instruction 12 setting mode	0: Function code FD-12 given 1：VI 3: Panel potentiometer setting 5：PID 6: Preset frequency (F0-08) Fixed, UP/DOWN can be modified	0	☆
FE group torque control and optimization parameter group				
FE-15	DPWM switching upper limit frequency	0.00Hz～15.00Hz	12.00Hz	☆
FE-16	PWM modulation method	0: Asynchronous modulation 1: Synchronous modulation	0	☆
FE-17	Dead zone compensation mode selection	0: No compensation 1: Compensation mode 1 2: Compensation mode 2	1	☆
FE-18	Random PWM Depth	0: Random PWM is invalid 1~10: PWM carrier frequency random depth	0	☆
FE-19	Fast current limit enable	0: Disable 1: Enable	1	☆
FE-20	Current Sense Compensation	0～100	5	☆
FE-22	Undervoltage point setting	60.0%～140.0%	80.0%	☆
FF group factory parameter group				

Function code	name	Minimum unit
U0 Group Basic Monitoring Parameters		
U0-00	Operating frequency (Hz)	0.01Hz
U0-01	Set frequency (Hz)	0.01Hz
U0-02	Bus voltage (V)	0.1V
U0-03	Output voltage (V)	1V
U0-04	Output current (A)	0.01A
U0-05	Output power (kW)	0.1kW
U0-06	Output torque (%)	0.10%
U0-07	MIn input status	1
U0-08	MO output status	1
U0-09	VI voltage (V)	0.01V
U0-12	Count value	1
U0-13	Length value	1
U0-14	Load speed display	0.1
U0-15	PID Setting	0.1
U0-16	PID Feedback	0.1
U0-17	PLC stage	1
U0-20	Remaining running time	0.1Min
U0-21	VI voltage before correction	0.001V
U0-22	Voltage before CI correction	0.001V
U0-25	Current power-on time	1Min
U0-26	Current running time	0.1Min
U0-28	Communication setting value	0.01%
U0-30	Main frequency X display	0.01Hz
U0-31	Auxiliary frequency Y display	0.01Hz
U0-32	Number of PLC stages	1
U0-33	PLC stage running time	1S
U0-34	PLC stage running remaining time	1S

Chapter 5 Troubleshooting

Fault Generation	Fault type	Troubleshooting	Troubleshooting measures
Err01	Inverter unit protection Protection	1. The inverter output circuit is short-circuited 2. The wiring between the motor and the inverter is too long 3. Module overheating 4. The internal wiring of the inverter is loose 5. Main control board abnormality 6. Driver board abnormality 7. Inverter module abnormality	1. Eliminate peripheral faults 2. Install a reactor or output filter 3. Check whether the air duct is blocked and the fan is Check whether it is working properly and eliminate any problems 4. Plug in all cables 5. Seek technical support 6. Seek technical support 7. Seek technical support
Err02	Accelerating overcurrent	1. The inverter output circuit is grounded or Short Circuit 2. The acceleration time is too short 3. Manual torque boost or V/F Curve No suitable 4. Low voltage 5. Start the rotating motor 6. Sudden load during acceleration 7. The inverter is too small	1. Eliminate peripheral faults 2. Increase the acceleration time 3. Adjust manual lifting torque or V/F song Wire 4. Adjust the voltage to the normal range 5. Select speed tracking start or wait for the motor Stop and restart 6. Cancel sudden load 7. Choose a frequency converter with a higher power rating
Err03	Deceleration overcurrent	1. The inverter output circuit is grounded or Short Circuit 2. The deceleration time is too short 3. Low voltage 4. Sudden load during deceleration 5. No brake unit and brake motor installed Resistance	1. Eliminate peripheral faults 2. Increase the deceleration time 3. Adjust the voltage to the normal range 4. Cancel sudden load 5. Install brake unit and resistor
Err04	Constant speed overcurrent	1. The inverter output circuit is grounded or Short Circuit 2. Low voltage 3. Is there any sudden load during operation? 4. The inverter is too small	1. Eliminate peripheral faults 2. Adjust the voltage to the normal range 3. Cancel sudden load 4. Choose a frequency converter with a higher power rating
Err05	Accelerating overvoltage	1. Input voltage is too high 2. There is an external force dragging the motor during acceleration. Machine operation 3. Acceleration time is too short 4. No brake unit and brake motor installed Resistance	1. Adjust the voltage to the normal range 2. Cancel the additional power or add brake power Resistance 3. Increase acceleration time 4. Install brake unit and resistor

Fault Generation	Fault type	Troubleshooting	Troubleshooting measures
Err06	Deceleration overvoltage	1. Input voltage is too high 2. There is external force dragging the motor during deceleration Machine operation 3. Deceleration time is too short 4. No brake unit and brake motor installed Resistance	1. Adjust the voltage to the normal range 2. Cancel the additional power or add brake power Resistance 3. Increase deceleration time 4. Install brake unit and resistor
Err07	Constant speed overvoltage	1. Input voltage is too high 2. There is external force dragging the motor during operation. Machine operation	1. Adjust the voltage to the normal range 2. Cancel the additional power or add brake power Resistance
Err08	Control power failure barrier	1. The input voltage is not within the specified range. Within	1. Adjust the voltage to the range required by the specification Inside
Err09	Undervoltage fault	1. Momentary power outage 2. The voltage at the inverter input terminal is not within the specification Scope of requirements 3. Bus voltage is abnormal 4. The rectifier bridge and buffer resistor are abnormal 5. Driver board abnormality 6. Control panel abnormality	1. Reset fault 2. Adjust the voltage to the normal range 3. Seek technical support 4. Seek technical support 5. Seek technical support 6. Seek technical support
Err10	Inverter overload	1. Is the load too large or is the motor blocked? change 2. The inverter is too small	1. Reduce the load and check the motor and machinery Condition 2. Choose a frequency converter with a higher power rating
Err11	Motor overload	1. Whether the motor protection parameter settings are appropriate 2. Is the load too large or is the motor blocked? change 3. The inverter is too small	1. Set this parameter correctly 2. Reduce the load and check the motor and machinery Condition 3. Choose a frequency converter with a higher power rating
Err13	Output phase loss	1. The lead from the inverter to the motor is abnormal 2. Three-phase output of the inverter when the motor is running unbalanced 3. Driver board abnormality 4. Module abnormality	1. Eliminate peripheral faults 2. Check whether the three-phase winding of the motor is normal And troubleshoot 3. Seek technical support 4. Seek technical support
Err14	Module overheating	1. The ambient temperature is too high 2. Air duct is blocked 3. Fan damage 4. The module thermistor is damaged 5. Inverter module is damaged	1. Reduce ambient temperature 2. Clean the air duct 3. Replace the fan 4. Replace the thermistor 5. Replace the inverter module
Err15	External device failure barrier	1. Input external voltage through multi-function terminal MI Fault signal	1. Reset operation 2. Reset operation
Err16	Communication failure	1. The host computer is not working properly 2. The communication line is abnormal 3. Communication parameters FC group incorrect group settings	1. Check the host computer wiring 2. Check the communication cable 3. Set communication parameters correctly
Err17	Contactor failure	1. The driver board and power supply are abnormal 2. The contactor is abnormal	1. Replace the driver board or power board 2. Replace the contactor

Fault Generation	Fault type	Troubleshooting	Troubleshooting measures
Err18	Current detection barrier	1. Check if the Hall device is abnormal 2. Driver board abnormality	1. Replace the Hall device 2. Replace the driver board
Err19	Motor tuning failure barrier	1. The motor parameters are not set according to the nameplate 2. Parameter identification process timeout	1. Set the motor parameters correctly according to the nameplate 2. Check the leads from the inverter to the motor
Err21	EEPROM Read and write failure	1. EEPROM chip is damaged	1. Replace the main control board
Err22	Inverter Hardware Fault	1. Overvoltage exists 2. Overcurrent	1. Overvoltage fault handling 2. Handle according to overcurrent fault
Err23	Short circuit to ground barrier	1. The motor is short-circuited to ground	1. Replace the cable or motor
Err26	Cumulative running time Arrival Failure	1. The cumulative running time reaches the set value	1. Use the parameter initialization function to clear the memory Recording Information
Err29	Cumulative power-on time Arrival Failure	1. The cumulative power-on time reaches the set value	1. Use the parameter initialization function to clear the memory Recording Information
Err30	Load drop fault	1. The inverter operating current is less than FA-64	1. Check if the load is detached or FA-64. FA-65 Whether the parameter setting is in accordance with the actual Operating conditions
Err31	Runtime PID Feedback loss barrier	1.PID Feedback is less than the setting value of F9-26	1. Check PID feedback signal or settings F9-26 For a suitable value
Err40	Wave-by-wave current limiting barrier	1. Is the load too large or is the motor blocked? change 2. The inverter is too small	1. Reduce the load and check the motor and machinery Condition 2. Choose a frequency converter with a higher power rating
Err41	Runtime switch Motor failure	1. During the operation of the inverter, Change the current motor selection	1. Switch off the motor after the inverter stops. Change operation