YC1800

YC1800 Low-Voltage General-Purpose Frequency Converter

Flexible configuration with customization support to meet diverse customer requirements

Product Name and Illustration

YC1800-Silver Moon

YC1800-dark

Product Introduction：

Universal frequency converter, with superior performance, rich functions, and beautiful appearance; **E**xcellent heat dissipation performance, smaller size, and more reasonable structural design; **F**lexible and versatile configuration, supporting customization to meet different customer needs.

Technical Parameter:

Name	Date
Input Voltage	Single-phase power supply: 220V, 50Hz/60Hz
	Three-phase power supply: 380V, 50Hz/60Hz
Rated voltage of motor	0~2000V
Motor rated power	0.1 ~ 1000.0kW
Rated current of motor	0.1 ~ 6553.5A
Motor stator resistance	0.001~65.535Ω
Motor rotor resistance	0.001~65.535Ω
Maximum Frequency Range	50.00Hz ~ 630.00Hz(Factory value 50.00Hz)
Carrier Frequency	1.0 ~ 15.0kHz
No-load Cur	0.1~6553.5A

For more detailed parameters, please refer to the "Function Parameter List" on page 9 of the "Product Manual" below.

Application scope:

● Metal processing, CNC machine tools, wire drawing machines and other mechanical equipment
● Food machinery
● Boiler blower, induced draft fan, coal mine underground exhaust fan
● Municipal engineering and energy-saving renovation of central air conditioning
● For cyclone fans, centrifugal fans, etc
● Circulating water pump, make-up water pump, oilfield water injection pump, oil transfer pump, music fountain
● Paper making equipment, chemical industry, pharmaceutical industry, textile industry, etc

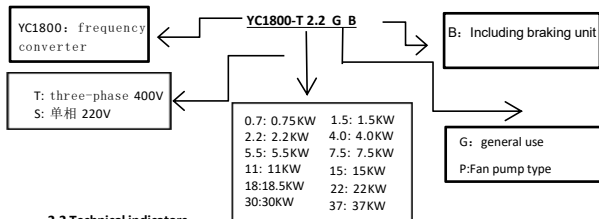# Contents

Chapter 1 Safety precautions

Safety Precautions:

Users must carefully read this section before installing, commissioning, or maintaining the system. Strictly adhere to all safety instructions provided. The company shall not be liable for any injuries or damages resulting from non-compliance with these operational requirements.

1.Do not use in flammable or explosive environments, as this may cause explosion hazards.

2.Do not touch terminals while power is on, as electric shock may occur.

3.Never connect the inverter output terminals (U, V, W) to the power supply to avoid equipment damage.

4.Ensure proper wire gauge for external wiring to prevent loose connections, short circuits, or poor contacts.

5.Do not directly short PB and P+ – a braking resistor (200W or higher) must be connected here.

6.Unauthorized disassembly or modification of the inverter is strictly prohibited and will void warranty and return eligibility.

7.Do not perform wiring work while the inverter is powered on to avoid electrical hazards.

8.Prevent foreign objects, especially conductive materials like metal, from entering the inverter.

9.Avoid installing the inverter in areas with water splashing or excessive moisture to prevent internal damage.

10.The grounding terminal must be securely connected to a proper earth ground for safety.

11.Do not touch the heat sink or braking resistor during operation or within 10 minutes after power-off to prevent burns.

12.Our company continuously improves products and updates features; specifications may change without prior notice.

Chapter II Product Information

2.1 Naming rules

| YC1800: frequency converter |

YC1800-T 2.2 G B

B: Including braking unit

T: three-phase 400V
S: 单相 220V

0.7: 0.75KW 1.5: 1.5KW
2.2: 2.2KW   4.0: 4.0KW
5.5: 5.5KW   7.5: 7.5KW
11: 11KW   15: 15KW
18:18.5KW   22: 22KW
30:30KW   37: 37KW

G: general use
P:Fan pump type

2.2 Technical indicators

Frequency converter model	Power capacity KVA	input currenton A	output A	Adapter motor kW	Adapter motor HP
Single phase power supply: 220V,50HZ/60HZ					
YC1800-S0.7GB	1.5	5.1	4.2	0.75	1
YC1800-S1.5GB	3.0	7.8	7.5	1.5	2
YC1800-S2.2GB	4.0	11.3	10.0	2.2	3
Three-phase power supply: 380V,50HZ/60HZ					
YC1800-T0.7GB	1.5	3.4	2.5	0.75	1
YC1800-T1.5GB	3.0	5.0	4.2	1.5	2
YC1800-T2.2GB	4.0	5.8	5.5	2.2	3
YC1800-T4.0GB	5.9	13.3	9.5	4.0	5
YC1800-T5.5GB	8.9	19.6	14.0	5.5	7.5
YC1800-T7.5GB	11.0	24.0	18.5	7.5	10
YC1800-T11GB	17.0	32.0	25.0	11.0	15
YC1800-T15GB	21.0	40.0	32.0	15.0	20
YC1800-T18.5GB	24.0	46	38.0	18.5	25
YC1800-T22GB	30.0	49.5	45.0	22	30
YC1800-T30GB	40.0	68.0	60.0	30	40

Chapter 3 Installation Guide

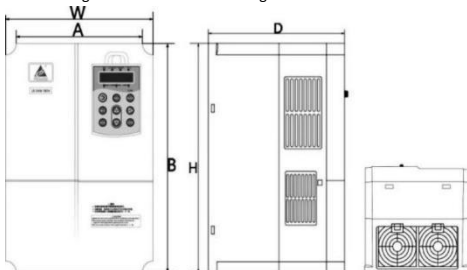## 3.1 Product size diagram and installation diagram

Table 3-1 YC1800 Series external dimensions and installation dimensions

Product type Number	Install the hole position (mm)		outline dimension (mm)				install aperture (mm)	Net quantity (Kg)	remarks
	A	B	H	H1	W	D			
Single phase 220V									
YC1800-S1.5GB									
YC1800-S2.2GB									
Three phase 380V									
YC1800-T0.7GB	67.5	160	155	170	85	140	φ5.0		D (includes knob height: 10mm)
YC1800-T1.5GB									
YC1800-T2.2GB									

4.2 Refer to the wiring diagram
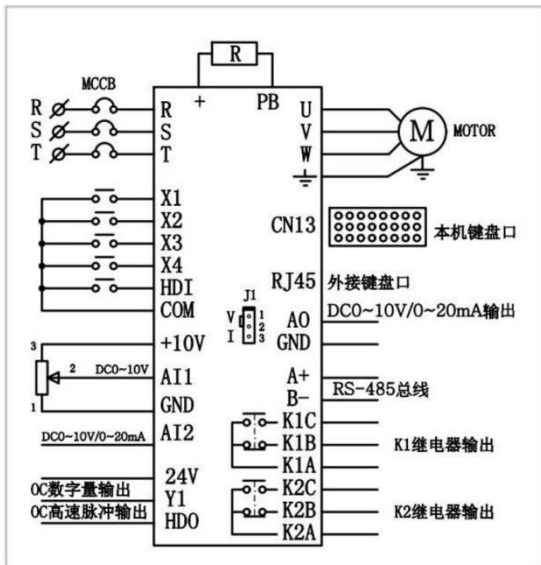
Chapter V   Operation Panel

5.1 Appearance diagram

5.2 Indicator light Description

1) RUN: When the light is on, the frequency converter is running; When the light goes out, the frequency converter is in a shutdown state.

2) F/R: Forward and reverse indicator light. When the light is on, it indicates that the machine is in reverse operation.

3) L/R: Keyboard operation, terminal operation, and remote operation (communication control) indicator lights.

4) ERR: Alarm indicator light

5) Hz, A, V: Unit indicator lights, used to indicate the unit of the current displayed data, with the following units: Hz: Frequency Unit A: Current Unit V: Voltage Unit Hz+A: Speed Unit A+V:% Percentage

5.3 Key Description

key	Key Product name	Key function
PRG/ESC	Programming keys	Go to menu parameter Settings and switching functions
MFK/JOG	Multi-function selection key	Switch selection based on MFK function
▲/UP	Incremental key	Increment of data or Function code
▼/DOWN	The decrement key	Decrease in data or Function code
SHIFT	shift key	Under the shutdown display interface and operation display interface, display parameters can be cyclically selected; When modifying parameters, you can choose the modification bit of the parameter
DATA/ENTER	Confirm key	Gradually enter the menu screen, set parameters and confirm
RUN	Run key	In keyboard operation mode, used for running operations
STOP	break key	In the running state, this key can be used to stop the operation; in the fault alarm state, it can be used to reset the operation.

Chapter 6 List of functional parameters

6.1 Description of functional parameters

"o"The set value of this parameter can be changed when the frequency converter is in both shutdown and operation states

"●" The set value of this parameter cannot be changed when it is in operation in the frequency converter

"※"The value of this parameter represents the actual detection record value and cannot be changed

Table 6-1 A brief list of basic functional parameters

Function code	Product name	Description	Factory value	Attribute
00 basic parameters				
00-00	Frequency converter type G/P	0: G-type: constant torque load 1: P-type: Fan pump type load	0	●
00-01	Motor control mode	O: retained 1: Vector control without speed sensor 2 (with torque control) 2: VF control	2	●
00-02	Run command source selection	0: Keyboard command (L/R lights off) 1: Terminal command (L/R flashing) 2: Communication command (L/R lights on)	0	●

00-03	Frequency source A is selected	Digital Settings (preset frequency 00-08, UP/DOWN Or the keyboard encoder can be modified, power down memory) 1: AI1 2: AI2 3: AI3 4: HDI 5: Simple PLC 6: Multi-speed 7: PID 8: RS-485 communication 9: Keyboard analog potentiometer	0	●
00-04	Frequency source B selection	Ibid. (00-03)	3	●
00-05	Frequency source B is the reference model and the selection is made	0: maximum frequency 1: Frequency source A	0	○
00-07	Frequency source combination	0: Frequency source A 1: Frequency source B	0	○

Function code	Product name	Description	Factory value	Attribute
		2: Frequency source A + frequency source B 3: Frequency source A- frequency source B 4: The maximum value of the two MAX (A, B) 5: The minimum value of the two MIN (A, B)		
00-08	Set the keyboard preset frequency	0.00Hz ~ (00-08)	50.00Hz	○
00-09	Motor direction of operation	0: Same direction 1: In the opposite direction 2: Do not flip	0	●
00-10	maximun-frequency	00-09 ~ 630.00Hz	50.00Hz	●
00-12	upper limiting frequency	00-10 ~ (00-08)	50.00Hz	●
00-14	Lower limit frequency	0.00Hz ~ (00-09)	0.00Hz	●
00-15	carrier frequency	1.0 ~ 15.0kHz	The model is determined	○
00-16	Zero frequency output selection	0: No output 1: There is output 2: DC braking output (from 05-11 Set the size)	0	○
00-17	Acceleration time 1	0.0 ~ 3600.0s	The model is determined	○
00-18	Deceleration time 1	0.0 ~ 3600.0s	The model is determined	○
00-19	Industry application macro selection	0~65535	0	○
01 Group motor parameters				
01-01	Automatic measurement of motor parameters	0: No function 1. Dynamic testing 2: Static test 1 3: Static Test 2 (recommended)	0	●
01-02	Rated power of motor	0.1 ~ 1000.0kW	Model determination	●

01-03	Rated frequency of motor	0.01Hz~ maximum frequency (00-08)	50.00Hz	●
01-04	Rated speed of motor	1~36000rpm	Model determination	●
01-05	Rated voltage of motor	0~2000V	Model determination	●
01-06	Rated current of motor	0.1 ~ 6553.5A	Model determination	●
01-07	Motor stator resistance	0.001~65.535 Ω	Model determination	○
01-08	Motor rotor resistance	0.001~65.535 Ω	Model determination	○
01-09	Motor leakage inductance resistance	0.1~6553.5mH	Model determination	○
01-10	Motor mutual inductance resistance	0.1~6553.5mH	Model determination	○
01-11	Motor no-load current	0.1~6553.5A	Model determination	○
02 Group VF control				
02-00	VF curve setting	0: Straight VF 1: multi-point VF (V1<V<V3, F1<F2<F3) 2: 1.3 Power VF 3: 1.7 power VF 4: 2.0 power VF 5: VF separation 6: Reserved	0	●
02-01	VF torque boost	0.0%: Automatic torque boost 0.1~10.0%: manually set	0.0%	○
02-02	VF torque boost cutoff frequency position	0.0 ~ 50.0%	20.0%	○
02-03	Multiple points VF maximum frequency F3	0.00Hz ~ (01-02)	0.00Hz	
02-04	Maximum voltage of multi-point VF is V3	0.0% ~ 110.0%	0.0%	○
02-05	Multiple points in the VF intermediate	0.00Hz ~ F3	0.00Hz	○

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	frequency F2			
02-06	Multi point VF intermediate voltage V2	0.0% ~ V3	0.0%	○
02-07	Multi point VF minimum frequency F1	0.00Hz ~ F2	0.00Hz	○
02-08	Multiple points VF minimum voltage V1	0.0% ~ V2	0.0%	○
02-09	VF slip compensation gain	0.0 ~ 200.0%	100.0%	○
02-10	VF Low frequency oscillation suppression coefficient	0~100	10	○
02-11	VF High frequency oscillation suppression coefficient	0 ~ 100	10	○
02-12	VF oscillation suppression frequency switching	0.00Hz~ maximum frequency	30.00Hz	○
02-13	Automatic voltage regulation function AVR	0: Cancel AVR 1: Full AVR 2: Keep	1	○
02-14	Automatic power saving operation	0: No function 1. Turn on automatic power saving operation	0	○
02-15	VF constant power weak magnetic constant	1.00~1.30	1.00	○
02-16	VF separated voltage source	0: Digital Settings (02-17) 1：AI1	0	○

Function code	Product name	Description	Factory value	Attribute
		2: AI2 3: AI3 4: HDI 5: Multi-speed 6: PID 7: RS-485 communication 8: Keyboard analog potentiometer		
02-17	VF Separation voltage digital setting	0.0~100.0%	0.0%	○
02-18	VF separates voltage acceleration time	0.0 ~ 3600.0s	0.0s	○
02-19	VF separates voltage deceleration time	0.0 ~ 3600.0s	0.0s	○
02-20	VF separates the upper voltage limit	(02-21)~100.0%	100.0%	●
02-21	VF is the lower limit of separation voltage	0.0~ (02-20)	0.0%	●
03 Group motor vector control parameters				
03-00	ASR proportional gain P1	0.0~200.0	20.0	○
03-01	ASR integration time I1	0.000 ~ 10.000s	0.200s	○
03-02	ASR ratio gain P2	0.0~200.0	20.0	○
03-03	ASR integration time I2	0.000 ~ 10.000s	0.200s	○
03-04	ASR switching frequency 1	0.00Hz~ (03-22)	5.00Hz	○
03-05	ASR switching frequency 2	(03-21) ~ maximum frequency	10.00Hz	○
03-06	ASR low-pass filter constant	0~10	0	○
03-07	Electric slip compensation gain	50~200%	100%	○

03-08	Brake slip compensation gain	50~200%	100%	○
03-09	ACR, current loop KP	0~65535	1000	○
03-10	ACR, current loop KI	0~65535	1000	○
03-11	Vector 2 constant power weak magnetic constant	0.1~2.0	0.3	○
03-12	Constant power minimum weak magnetic level	10%~100%	20%	○
03-13	Weak magnetic proportional gain	0~8000	1000	○
03-14	Upper limit of vector output voltage	0.0~120.0%	100.0%	○
03-15	Motor pre-excitation time	0.000~10.000s	0.300s	○
04 Torque control parameters of the group				
04-00	Selection of torque setting source	0: Speed control (invalid torque) 1: Torque digital setting (04-01) 2: The torque is set by AI1 3: The torque is set by AI2 4: The torque is set by AI3 5: The torque is set by HDI 6: Torque is set at multiple speeds 7: Torque RS-485 communication settings 8: Keyboard simulation potentiometer setting	0	○
04-01	Torque time setting	-300.0~300.0%	50.0%	○
04-02	Torque filtering time	0.000~10.000s	0.010s	○

04-03	Positive torque upper limit frequency source	0: Torque upper limit frequency digital setting (04-05 and 04-06) 1: AI1 2: AI2 3: AI3 4: HDI 5: Multi-speed 6: RS-485 communication 7: Keyboard analog potentiometer	0	o
04-04	Reverse torque upper limit frequency source	ditto	0	o
04-05	Positive torque upper limit frequency Digital Settings	0.00Hz ~ maximum frequency	50.00Hz	o
04-06	Reverse torque upper limit rate, digital setting	0.00Hz ~ maximum frequency	50.00Hz	o
04-07	Selection of methods for limiting electric torque	0: Numerical setting of torque upper limit value (04-09 and 04-10) 1:AI1 2:AI2 3:AI3 4:HDI 5: RS-485 communication 6: Keyboard analog potentiometer		o
04-08	Selection of Braking Torque Limitation Method	ditto		o

Function code	Product name	Description	Factory value	Attribute
04-09	Electric torque limit digital setting	0.0~300.0%	180.0%	○
04-10	Brake torque limit is set digitally	0.0~300.0%	180.0%	○
04-11	Vector low frequency torque compensation	0.0~100.0%	0.0%	○
04-12	Vector high frequency torque compensation	0.0~100.0%	0.0%	○
05 Start and stop control parameters				
05-00	starting mode	0: Directly start 1: DC brake first before starting 2: Speed tracking start	0	●
05-01	Start frequency	0.00~50.00Hz	0.50Hz	●
05-02	Start frequency holding time	00.0~50.0s	0.0s	●
05-03	Start the DC braking current	0.0~100.0%	0.0%	●
05-4	Start the DC braking time	0.00~50.00s	0.00s	●
05-05	Acceleration and deceleration mode	0: linear acceleration and deceleration 1: S curve acceleration and deceleration	0	○
05-06	The acceleration time of the beginning of the S curve	0.0~50.0s	0.1s	○
05-07	Deceleration time at the end of the S -curve	0.0~50.0s	0.1s	○
05-08	Shutdown mode	0: Slow down and stop the machine 1: Free shutdown	0	○

05-09	**Starting frequency of shutdown DC braking**	0.00~ maximum frequency	0.00Hz	○
05-10	Shutdown DC braking waiting time	0.00~50.00s	0.00s	○
05-11	Shutdown DC braking waiting time	0.0~100.0%	0.0%	○
05-12	Shutdown DC brake current	0.00~50.00s	0.00s	○
05-16	Dead time of forward and reverse rotation	0.0~3600.0s	0.00s	○

05-17	Forward and reverse switching mode	0: Zero frequency switching 1: Start frequency switching 2: Stop speed switching	0	●
05-18	Stop the speed	0.00~100.00Hz	0.50Hz	●
05-19	Stop speed detection method	0: Detection according to the speed setting value 1: Detection according to the speed feedback value	1	●
05-20	Feedback speed detection time	0.00~100.00s	0.05s	●
05-21	Start delay	0.0~60.0s	0.0s	○
05-22	Stop speed delay	0.0~100.0s	0.0s	○
05-23	The braking unit acts	0: Disabled 1: Enabled	1	○
05-24	Action voltage of the braking unit	200.0~2000.0V (220V machine: 380V,380V machine: 700V)	The model is determined	○
05-25	Excitation braking intensity	0~150 0: Disabled Greater than 0: the greater the value, the better the braking effect	0	○
06 Group input terminal parameters				
06-00	HDI input pattern	0: High-speed pulse input 1: Terminal switch input	1	●

FC	Product name	Description	Factory value	Attribute
06-01	X1 terminal function selection	0: No functionality 1: Forward running (FWD) 2: Reverse Run (REV) 3: Three line operation control 4: Forward Rotation Inching (FJOG) 5: Reverse Inching (RJOG) 6: Free parking 7: Fault reset 8: Operation paused 9: External fault input 10: Frequency setting increment (UP) 11: Reduce frequency setting (downward) 12: The frequency increase/decrease setting has been cleared	1	●
06-02	X2 terminal function selection	13: Switch between setting A and setting B 14: Switching between combination setting and A setting 15: Switching between combination setting and B setting 16: Multi speed terminal 1 17: Multi speed terminal 2 18: Multi speed terminal 3 19: Multi speed terminal 4 20: Multi speed pause 21: Acceleration and deceleration time selection 1 22: Acceleration and deceleration time selection 2 23: Simple PLC shutdown and reset 24: Simple PLC pause 25: PID control pause 26: Pause the swing	2	●

		frequency (stop at the current frequency) 27: Frequency Reset (Return to Center Frequency) 28: Counter reset 29: Torque/speed control switch 30: Do not accelerate or decelerate 31: Counter triggered		

		32: Length reset 33: Frequency increase/decrease setting temporarily cleared 34: DC braking 35: Keep (switch motor 1 to motor 2) 36: Command to switch to keyboard command 37: Command to switch to terminal 38: Command to switch to communication command		
06-03	X3 terminal function selection		4	●
06-04	X4 terminal function selection	39: Pre excitation command 40: Zero electricity consumption	5	●
06-09	HDI terminal function selection	41: Electricity consumption remains unchanged	16	●
06-10	Input terminal logic selection	Bit0~3: X1~X4, Bit8: HDI 0 is positive logic, 1 is negative logic;	000	○
06-11	Input terminal filtering time	0.000~1.000s	0.010s	○
06-12	Virtual terminal Settings	0x000~0x1FF 0: disable, 1: use Bit0~bit3: X1~X4 Bit8: HDI	0x000	●

06-13	Terminal command mode	0: two-line 1 1: Two-line type 2 2: Three-line style 1 3: Three-line style 2	0	●
06-14	X1 terminal opening delay	0.00~50.000s	0.000s	○
06-15	X1 terminal disconnection delay	0.00~50.000s	0.000s	○
06-16	X2 terminal opening delay	0.00~50.000s	0.000s	○
06-17	X2 terminal disconnection delay	0.00~50.000s	0.000s	○

06-18	X3 terminal opening delay	0.00~50.000s	0.000s	○
06-19	X3 terminal disconnection delay	0.00~50.000s	0.000s	○
06-20	X4 terminal opening delay	0.00~50.000s	0.000s	○
06-21	X4 terminal disconnection delay	0.00~50.000s	0.000s	○
06-30	HDI terminal opening delay	0.00~50.000s	0.000s	○
06-31	HDI terminal disconnection delay	0.00~50.000s	0.000s	○
06-33	When power is applied, the terminal starts to protect the selection	0: Protect 1: No protection	0	○
06-34	UP/DOWN terminal control setting	Unit: UP/DOWN terminal enabled 0: Effective 1: Invalid 10: Select frequency source control 0: Only the digital settings of frequency sources A and B are valid 1: All frequency	000	○

		sources are valid 2: When multi speed priority is enabled, multi speed is invalid Hundred positions: Shutdown selection 0: Set as valid 1: Effective work, dismantled after shutdown 2: Effective operation, clear shutdown command		
06-35	UP terminal frequency change rate	0.01~50.00Hz/s	0.50Hz/s	○
06-36	DOWN terminal frequency change rate	0.01~50.00Hz/s	0.50Hz/s	○
06-18	X3 terminal opening delay	0.00~50.000s	0.000s	○
06-19	X3 terminal disconnection delay	0.00~50.000s	0.000s	○
06-20	X4 terminal opening delay	0.00~50.000s	0.000s	○
06-21	X4 terminal disconnection delay	0.00~50.000s	0.000s	○
06-30	HDI terminal opening delay	0.00~50.000s	0.000s	○
06-31	HDI terminal disconnection delay	0.00~50.000s	0.000s	○
06-33	Protection selection is started at the terminal when power is applied	0: Protect 1: No protection	0	○
06-34	UP/DOWN terminal control setting	Unit: UP/DOWN terminal enable 0: valid 1: Invalid Ten: Frequency source control is selected 0: Only the digital setting of frequency sources A and B is valid 1: All frequency sources are valid 2: When multi-speed	000	○

		priority is enabled, multi-speed is invalid Hundreds: Shutdownoptions 0: Set effective 1: It works effectively and is removed after shutdown 2: The operation is effective and the shutdown instruction is cleared		
06-35	UP terminal frequency change rate	0.01~50.00Hz/s	0.50Hz/s	○
06-36	Down terminal frequency change rate	0.01~50.00Hz/s	0.50Hz/s	○
06-37	HDI input lower limit	0.000kHz~ (06-35)	0.000kHz	○
06-38	Set the lower limit of HDI	-100.0%~100.0%	0.0%	○
06-39	HDI input upper limit	(06-33)~50.000kHz	50.000kHz	○
06-40	The upper limit of HDI corresponds to the setting	-100.0%~100.0%	100.0%	○
06-41	HDI filter time	0.000~10.000s	0.100s	○
06-42	AI1, lower limit value	0.00V~ (06-44)	0.00V	○
06-43	AI1 lower limit corresponding setting	-100.0%~100.0%	0.0%	○
06-44	AI1, upper limit	(06-42)~10.00V	10.00V	○
06-45	AI1 upper limit corresponds to the setting	-100.0%~100.0%	100.0%	○
06-46	AI1 input filter time	0.000s~10.000s	0.100s	○
06-47	AI2, lower limit value	0.00V~ (06-39)	0.00V	○
06-48	AI2 lower limit corresponding setting	-100.0~100.0%	0.0%	○

Fault code	Product name	Description	Factory value	Attribute
06-49	AI2, upper limit	(06-47)~10.00V	10.00V	○
06-50	AI2 upper limit corresponding setting	-100.0~100.0%	100.0%	○
06-51	AI2 input filter time	0.000s~10.000s	0.100s	○
06-52	AI3, lower limit value	-10.00V~ (06-54)	0.00V	○
06-53	AI3 lower limit corresponds to the setting	-100.0~100.0%	0.0%	○
06-56	AI3, upper limit	(06-54)~10.00V	10.00V	○
06-57	AI3 upper limit corresponding setting	-100.0~100.0%	100.0%	○
06-58	AI3 Input filter time	0.000s~10.000s	0.100s	○
06-59	AI input type selection IV	Unit: AI1 Ten: AI2 0: AI terminal voltage input, 1: AI terminal current input	10	○
07 Group output terminal parameters				
07-00	HDO terminal output mode	0: High-speed pulse output 1: Terminal switch output	1	●
07-01	Select terminal output function Y1	0: Invalid 1: Running 2: Running forward	0	○
07-02	HDO terminal output function selection	3: Reverse operation 4: Moving point operation 5: Inverter fault 6: Frequency level detection FDT1 7: Frequency level detection FDT2 8: Frequency arrival 9: zero speed operation 10: The upper frequency is reached	**0**	○

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07-03	K1 relay output function selection	11: The lower frequency has been reached	1	○
07-04	K2 relay output function selection	12: Operation is ready 13: Pre-excitation 14: Overload alarm 15: Underload alarm 16: The simple PLC phase is completed 17: Simple PLC cycle is completed 18: Set the value of the count 19: The specified value has been reached 20: External fault 22: The running time has arrived 23: Communication virtual terminal output	5	○

Fault code	Product name	Description	Factory value	Attribute
07-05	AO1 Output function selection	0: Operating frequency 1: Set the frequency 2: The slope is given frequency 3: Running speed 4: Output current (2 times rated value of frequency converter) 5: Output current (two times the rated value of motor) 6: Output voltage 7: Output power 8: Set the torque 9: Output torque 10: Simulate the input value of AI1 11: Simulate the input value of AI2 12: Simulate the input value of AI3	4	○
07-07	HDO pulse output function selection	13: High-speed pulse HDI input value 14: Communication set value output 15: Retain 22: Torque current (3 times the rated value of motor)	0	○
07-08	AO1 Output lower limit	-100.0%~ (07-10)	0.0%	
07-09	AO1 Output lower limit corresponds to value	0.00~10.00V	0.00V	○
07-10	AO1 Output upper limit	(07-08)~100.0%	100.0%	○
07-11	AO1 output upper limit corresponds to value	0.00~10.00V	10.00V	○

Fault code	Product name	Description	Factory value	Attribute
07-12	AO1 Output filter time	0.000s~10.000s	0.000s	○
07-18	HDO bottoming	-100.0%~ (07-20)	0.0%	○
07-19	Value corresponding to the lower limit of HDO output	0.00~50.00kHz	0.00kHz	○
07-20	HDO output upper limit	(07-18)~100.0%	100.0%	○
07-21	The HDO output upper limit corresponds to the value	0.00~50.00kHz	50.00kHz	○
07-22	HDO output filter time	0.000s~10.000s	0.000s	○
07-23	Y1 activation delay	0.00~50.000s	0.000s	○
07-24	Y1 is disconnected for a delay	0.00~50.000s	0.000s	○
07-25	HDO activation delay	0.00~50.000s	0.000s	○
07-26	HDO disconnection delay	0.00~50.000s	0.000s	○
07-27	K1 activation delay	0.00~50.000s	0.000s	○
07-28	K1 disconnection delay	0.00~50.000s	0.000s	○
07-29	K2 opening delay	0.00~50.000s	0.000s	○
07-30	K2 disconnection delay	0.00~50.000s	0.000s	○
07-31	Output terminal polarity selection	0~F (Bit0~3：Y1, HDO, K1, K2)	0	○
08 Group keyboard display parameters				
08-00 User password				00○0
08-01	MFK/JOG key function selection	0: No function 1: Jog the operation 2: Shift key (SHIFT) 3: Forward/reverse switch 4: Clear UP/DOWN Settings 5: Free parking 6: The command source is switched in sequence (08-02)	1	●

Fault code	Product name	Description	Factory value	Attribute
08-02	MFK key run command source is switched	0: keyboard control → terminal control → communication control 1: Keyboard control <> terminal control 2: Keyboard control <> Communication control 3: Terminal control ←→ Communication control	0	○
08-03	Stop/reset key function	0: Only the panel control is valid 1: The control of the opposite panel and terminal is valid at the same time 2: The opposite panel and communication control are valid at the same time 3: Effective for all control modes	0	○
08-04	Restore factory parameters	0: No operation 1. Restore the default value	0	●

Fault code	Product name	Description	Factory value	Attribute
		2: Clear the fault record 3: The keyboard is locked		
08-05	Keyboard digital control setting	0000~1223 Unit: Frequency enable selection 0: Both the AND/NOT key and the encoder are valid 1: Only the ∧/∨ keys are valid 2: Only the encoder 3: The AND/OR key and encoder are invalid Ten: Frequency control selection 0: Only the keyboard number setting is valid 1: All frequency modes are valid 2: Multi-speed priority is invalid for multi-speed 100: Action selection when the machine is stopped. 0: Set effective 1: Effective during operation and removed after shutdown 2: Effective during operation and cleared after receiving the shutdown command Thousand: AND/OR key and encoder integration function 0: The points function is valid 1: The points function is invalid	0000	○
08-06	Keyboard encoder and UP/DOWN key resolution, adjustment, selection	1~4	2	○

Fault code	Product name	Description	Factory value	Attribute
08-07	Frequency setting power off action selection	00~11 Unit: Action selection when the encoder adjustment frequency drops out of power Ten: Communication setting frequency power failure Time action selection 0: store when power failure occurs 1: reset when power failure occurs	00	○
08-08	Function code parameter copy	0: No operation 1: Function parameters are uploaded to the keyboard 2: Download the keyboard function parameters to this machine (including motor parameters) 3: Keyboard function parameters are downloaded to the local machine (excluding motor parameters) 4: Download the keyboard function parameters to this machine (only motor parameters)	0	●

08-09	LED operating status display parameter 1	0000~FFFF BIT0: Operating frequency (Hz on) BIT1: Setting frequency (Hz off) BIT2: bus voltage (V) BIT3: output voltage (V) BIT4: output current (A) BIT5: running speed (rpm) BIT6: Output power (%) BIT7: Output torque (%) BIT8: PID set value (%) BIT9: PID feedback value (%) brightness BIT10: input terminal status BIT11: output terminal status BIT12: torque setting value (%) bright BIT13: Pulse count value BIT15: PLC and multi-speed current segment number	033F	○
08-10	LED operating status display parameter 2	0000~FFFF BIT0: Analog AI1 value (V on) BIT1: Analog AI2 value (V on) BIT2: Analog AI3 value (V bright) BIT3: HDI frequency of high-speed pulse BIT4: Motor overload percentage (%) BIT5: Percentage of inverter overload (%) BIT6: Ramp frequency set value (Hz bright) BIT7: linear velocity	0000	○

Fault code	Product name	Description	Factory value	Attribute
08-11	LED shutdown display parameters	BIT8: AC incoming line current BIT9: Upper frequency 0000~FFFF BIT0: Set the frequency (Hz for bright, slow flashing) BIT1: Bus voltage (V bright) BIT2: Input terminal status BIT3: Output terminal status BIT4: PID set value (%) flash BIT5: PID feedback value (%) brightness BIT6: Torque set value (%) bright) BIT7: Analog AI1 value (V bright) BIT8: Analog AI2 value (V bright) BIT9: Analog AI3 value (V bright) BIT10: HDI frequency of high-speed pulse BIT11: PLC and current number of multiple speed segments BIT12: Pulse count value BIT13: Length value BIT14: Upper frequency limit	038B	○
08-12	software release	0.00~655.35	–	※
08-13	Rectifier temperature	0~120.0℃	-	※
08-14	Inverter temperature	0~120.0℃	–	※
08-15	Frequency display coefficient	0.01~10.00	1.00	○
08-16	Speed display coefficient	0.1~999.9%	97.3%	○
08-17	Linear speed display coefficient	0.1~999.9%	1.0%	○

08-18	Input power factor display coefficient	0.00~1.00	0.56	○
08-19	Cumulative running time	0~65535h	-	※
08-20	Monitor high cumulative power consumption	Total power consumption = (08-20) *1000 + (08-21)	0kWh	※
08-21	Monitor the cumulative power consumption at a low level		0.0kWh	※
08-22	Set high electricity consumption	The initial value of electricity consumption = (08-	0kWh	○

FC	Product name	Description	Factory value	Attribute
	starter	22)*1000+(08-23)		
08-23	Set the initial value of electricity consumption at a low level		0.0kWh	○
08-24	Barcode1			※
08-25	Barcode2			※
08-26	Barcode3			※
08-27	Barcode4			※
08-28	Barcode5			※
08-29	Barcode6			※
08-30	Motor power display correction factor	0.00~3.00	1.00	○

09 Group fault record parameters

09-00	Current fault code	Fault code	Product name of the fault	Fault code	Product name of fault	※
09-01	Previous previous fault code					※
09-02	Previous two previous fault codes	0	trouble-free	29	–	※
09-03	Fault codes before the third time					※
09-04	The first four fault codes	1	Inverter unit protection	30	Overload causes failure	※
09-05	Top five fault codes					※
		2	Accelerat	31	PID	

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			e the overcurrent		feedback line		※
09-06	Current fault operation frequency	3	Slow down the overcurrent	40	Fast limit, flow fault		※
09-07	The current fault slope gives the frequency	4	Constant speed overcurrent	42	The speed is too fast and the difference is too large		※
09-08	Current fault output voltage						※
09-09	Current fault output current	5	Accelerate overvoltage	48	Electronic overload fault		※
09-10	Current fault bus voltage	6	Slow down overvoltage	51	Initial position, set out of balance		※
09-11	Current fault module temperature	7	Constant speed overvoltage	60	Brake tube protection		※
		8	_				
09-12	Current fault input end substate	9	Busbar under voltage				※
		10	Frequency converter overload				
09-13	Current fault output end substate	11	Motor overload				※
09-14	Frequency of previous failed operation	12	Enter a missing phase				※
		13	Output is out of phase				
	The previous						

	fault slope is given by the frequency	14	IGBT superheat			

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Fault code	Product name	Description	Factory value	Attribute
09-16	Output voltage of the previous fault	15 External fault		※
		16 Communication failure		
09-17	Output current of the previous fault	17		※
		18 Current detection fault		
09-18	Voltage of the previous faulty busbar	19 Motor tuning fault		※
09-19	Previous fault module temperature	20 -		※
09-20	The previous fault input terminal status	21 EEPROM failure		※
09-21	The previous fault output terminal status	23 Ground short circuit fault		※
09-22	Frequency of previous two faulty operations			※
		26 Runtime Arrive		
09-23	The previous two fault slopes are given at a constant frequency			※
09-24	Output voltage of the first two faults			※
09-25	Output current for the first two faults			※
09-26	Voltage of the previous faulty busbar			※
09-27	Temperature of the first two fault modules			※
09-28	The status of the previous two fault input terminals			※

09-29	Status of the output terminals for the first two faults			※
10 sets of protection parameters				
10-00	Motor overload protection selection	0: No action 1: Ordinary motor 2: frequency conversion motor	2	●

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Fault code	Product name	Description	Factory value	Attribute
10-04	Overcurrent protection selection	Unit: Overcurrent protection enabled 0 invalid, 1 valid Ten: Hardware current limiting protection enabled 0 is valid, 1 is invalid 100: Overcurrent fault of inverter unit and selection to remove the lockout 0: can be released 1: It can be released after 60 seconds of blocking 2: Keep blocking and reset power on	101	●
10-05	Protect against loss of flow rate	50.0~200.0%	The model is determined	●
10-06	The rate of loss of flow decreases	0.00~50.00Hz (value per second change)	10.00Hz	●
10-07	Input and output phase fault protection	Unit: Enable phase loss protection input Ten: output phase missing protection enabled 0 invalid, 1 valid	11	○
10-08	Underload and overload protection action	Unit: Overload warning selection 0: Motor overload warning 1: Inverter under overload warning Ten: Select underload, overload and dynamic actions 0: The frequency converter has an underload warning and continues to run 1: Inverter underload warning, overload and shutdown 2: The frequency converter has overload warning and continues to run, and stops after underload 3: The inverter stops after underload 100: Overload protection is possible 0: Valid for the whole journey 1: Effective at constant speed	000	○

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Fault code	Product name	Description	Factory value	Attribute
10-09	Overload detection threshold	(10-11)~200%	The model is determined	○
10-10	Overload detection time	0.1~3600.0s	1.0s	○
10-11	Underload detection threshold	0~ (10-09)	50%	○
10-12	Time of underload detection	0.1~3600.0s	1.0s	○
10-13	Number of automatic reset failures	0~10	0	○
10-14	The fault is automatically reset between	0.1~3600.0s	1.0s	○
FC	Product name	Description	Factory value	Attribute
	partition			
10-15	Overvoltage point setting	0~2500.0V	The model is determined	○
10-16	Under-voltage point setting	0~2000.0V	The model is determined	○
10-17	Special function selection	Unit: voltage instability automatic frequency reduction Ten: Frequency reaches the second acceleration and deceleration time 0: invalid, 1: valid	00	○
10-18	Output terminal fault action selection	Unit: Under-voltage fault action Ten: Action during automatic reset 0: valid, 1: invalid	00	○
10-19	Instantaneous power failure and operation options	0: Do not continue to run 1: Keep running	0	○
10-20	Instantaneous power failure and waiting time	0.0~3600.0s	1.0s	○
10-21	Instantaneous power failure reduces frequency	0: invalid, 1: valid	0	○
10-22	Instantaneous power drop frequency constant	0.00Hz~ maximum frequency (second change value)	10.00Hz	○
10-23	Speed deviation detection value	0.0~50.0%	10.0%	○
10-24	Time of detection of speed deviation	0.0~10.0s	0.5s	○

11 Group Auxiliary function parameters

11-00	Point-to-point operation frequency	0.00Hz~ maximum frequency	5.00Hz	○
11-01	Point motion acceleration time	0.0~3600.0s	The model is determined	○
11-02	Jogging deceleration time	0.0~3600.0s	The model is determined	○
11-03	Acceleration time 2	0.0~3600.0s	The model is determined	○
11-04	Deceleration time 2	0.0~3600.0s	The model is determined	○
11-05	Acceleration time 3	0.0~3600.0s	The model is determined	○
11-06	Deceleration time 3	0.0~3600.0s	The model is determined	○
11-07	Acceleration time 4	0.0~3600.0s	The model is determined	
11-08	Deceleration time 4	0.0~3600.0s	The model is determined	
11-09	Operating frequency is lower Lower frequency operation mode	0: The following frequencies are limited 1: Shutdown 2: Hibernation	0	○
11-10	Sleep recovery delay	0.0~3600.0s	0.0s	○
11-11	The frequency of sagging	0.00~10.00Hz	0.00Hz	○
11-12	Fan cooling control	0: Follow the frequency converter	0	○

Fault code	Product name	Description	Factory value	Attribute
		1: Always running		
11-19	Set the count value	(11-20)~65535	0	○
11-20	Specify the count value	0~ (11-19)	0	○
11-21	Set the running time on a regular basis	0~65535min	0min	○
11-22	Jump frequency 1	0.00~ maximum frequency	0.00Hz	○
11-23	The amplitude of the jump frequency is 1	0.00~ maximum frequency	0.00Hz	○
11-24	Jump frequency 2	0.00~ maximum frequency	0.00Hz	○
11-25	The amplitude of the jump frequency is 2	0.00~ maximum frequency	0.00Hz	○
11-26	Jump frequency 3	0.00~ maximum frequency	0.00Hz	○
11-27	The amplitude of the jump frequency is 3	0.00~ maximum frequency	0.00Hz	○
11-28	Frequency swing amplitude	0.0~100.0% (relative to the set frequency)	0.0%	○
11-29	The amplitude of the jump frequency	0.0~50.0% (swing frequency amplitude)	0.0%	○
11-30	Frequency rise time	0.1~3600.0s	5.0s	○
11-31	Frequency drop time	0.1~3600.0s	5.0s	○
11-32	FDT1, frequency check value	0.00~ P00.03	50.00Hz	○
11-33	FDT1 Frequency detection lag value	0.0~100.0%	5.0%	○
11-34	FDT2, frequency check value	0.00~ maximum frequency	50.00Hz	○
11-35	FDT2 Frequency detection lag value	0.0~100.0%	5.0%	○
11-36	Frequency reaches detection value	0.0~ maximum frequency	0.00Hz	○
11-37	Overmodulation selection	Unit: Overmodulation enabled 0: invalid, 1: valid Ten: Overmodulation intensity selection 0: mild, 1: deep	01	○

11-38	PWM mode selection	Unit: PWM mode selection 0: two-phase and three-phase modulation 1: Three-phase modulation Ten: Low speed carrier frequency limit selection 0: 2kHz limit 1:4kHz limit 2: No restrictions	00	○

12 sets of process PID parameters

12-00	PID, given source	0: The number is given 1: AI1 2: AI2 3: AI3	0	○
		4: HDI 5: Multi-speed 6: RS-485 communication 7: Keyboard analog potentiometer		
12-01	PID is given as a number	-100.0 ~ 100.0%	0.0%	○
12-02	PID, feedback source	0: AI1 1: AI2 2: AI3 3: HDI 4: RS-485 communication 5: Keyboard analog potentiometer	0	○
12-03	PID application direction	0: positive effect 1: Reaction	0	○
12-04	Proportional gain KP1	0.00 ~ 100.00	1.00	○
12-05	Integrate time TI1	0.01 ~ 10.00s	0.10s	○
12-06	Differentiation time TD1	0.00s ~ 10.00s	0.00s	○
12-07	PID sampling period T1	0.000~10.000s	0.100s	○
12-08	PID parameter switching deviation	0.0 ~ 100.0%	0.0%	○
12-09	PID output upper limit	(12-10) ~ 100.0%	100.0%	○

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Fault code	Product name	Description	Factory value	Attribute
12-10	PID bottoming	-100.0% ~ (12-09)	0.0%	○
12-11	PID command acceleration and deceleration time	0.0~1000.0s	0.0s	○
12-12	PID output filter time	0.000~10.000s	0.000s	○
12-13	Low frequency proportional gain	0.00~100.00	1.00	○
12-14	PID feedback loss detection value	0.0% (not detected) ~ 100.0%	0.0%	○
12-15	PID feedback loss detection time	0.0s (not detected) ~3600.0s	1.0s	○
12-16	PID regulating function	the unit： 0: Continue integral regulation when the frequency reaches the upper and lower limits 1: Frequency reaches the upper and lower limits and stops Ten-digit adjustment of credits: 0: in the same direction as the set direction 1: in the opposite direction to the set direction Hundred: 0: Refer to the maximum frequency limit. 1: Refer to the frequency source A limit	0001	○

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Fault code	Product name	Description	Factory value	Attribute
		kilobit : 0: A+B, the frequency source A is added and decelerated. The time is invalid 1: A+B, the frequency source A is determined by addition and subtraction, and the speed time 4		
13 sets of multi-speed and simple PLC parameters				
13-00	Multi-speed 0 frequency setting value	-100.0%~100.0%	0.0%	○
13-01	Multiple speed 1 frequency setting value	-100.0%~100.0%	0.0%	○
13-02	Multi-speed 2 frequency setting value	-100.0%~100.0%	0.0%	○
13-03	Multi-speed 3 frequency setting value	-100.0%~100.0%	0.0%	○
13-04	Multi-speed 4 frequency setting value	-100.0%~100.0%	0.0%	○
13-05	Multi-speed 5 frequency setting value	-100.0%~100.0%	0.0%	○
13-06	Multi-speed with 6 frequency settings	-100.0%~100.0%	0.0%	○
13-07	Multi-speed with 7 frequency settings	-100.0%~100.0%	0.0%	○
13-08	Multi-speed 8 frequency setting value	-100.0%~100.0%	0.0%	○
13-09	Multi-speed 9 frequency setting value	-100.0%~100.0%	0.0%	○
13-10	Multi-speed 10 frequency setting value	-100.0%~100.0%	0.0%	○
13-11	Multi-speed 11 frequency setting value	-100.0%~100.0%	0.0%	○

Fault code	Product name	Description	Factory value	Attribute
13-12	Multi-speed 12 frequency setting value	-100.0%~100.0%	0.0%	○
13-13	Multi-speed 13 frequency setting value	-100.0%~100.0%	0.0%	○
13-14	Multi-speed 14 frequency setting value	-100.0%~100.0%	0.0%	○
13-15	Multi-speed 15 frequency setting value	-100.0%~100.0%	0.0%	○
FC	Product name	Description	Factory value	Attribute
13-16	PLC run time for the 0th section	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-17	PLC section 1 running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-18	PLC second stage running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-19	PLC third stage running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-20	PLC operates for the fourth period	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-21	PLC operates for 5 seconds	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-22	PLC section 6 running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-23	PLC section 7 running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-24	PLC section 8 running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-25	PLC section 9 running time	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-26	PLC is running for 10 minutes	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-27	PLC is running for 11 minutes	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-28	PLC is running for 12 minutes	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-29	PLC is running for 13 minutes	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-30	PLC is running for 14 minutes	0.0 ~ 6553.5 s(min)	0.0s(min)	○

Fault code	Product name	Description	Factory value	Attribute
13-31	PLC is running for 15 minutes	0.0 ~ 6553.5 s(min)	0.0s(min)	○
13-32	PLC 0~7, add/subtract segments, speed and time	Value range: 0x0000~0xFFFF 0 segment: Bit0-1: two bits are selected to select acceleration and deceleration time 1,2,3,4 1 stage: Bit2-3: two bits are selected to select acceleration and deceleration time 1,2,3,4 2 stages: Bit4-5: two bits are selected to select acceleration and deceleration time 1,2,3,4 3 stages: Bit6-7: two bits are selected to select acceleration and deceleration time 1,2,3,4 4 stages: Bit8-9: two bits select acceleration and deceleration time 1,2,3,4 5 stages: Bit11-10: Two bits are selected to select the acceleration and deceleration time 1,2,3,4 6 stages: Bit12-13: Two bits are selected to select the acceleration and deceleration time 1,2,3,4 Stage 7: Bit14-15: Two bits are selected to select the acceleration and deceleration time 1,2,3,4	0000	○

Fault code	Product name	Description	Factory value	Attribute
13-33	PLC add speed reduction time from 8 to 15	Value range: 0x0000~0xFFFF 8 stages: Bit0-1: two bits are selected to select acceleration and deceleration time 1,2,3,4 9 stages: Bit2-3: two bits are selected to select acceleration and deceleration time 1,2,3,4 10 segments: Bit4-5: two bits are selected to select acceleration and deceleration time 1,2,3,4 11. Step: Bit6-7: Two bits are selected to select acceleration and deceleration time 1,2,3,4 12 stages: Bit8-9: two bits select acceleration and deceleration time 1,2,3,4 13 stages: Bit11-10: Two bits are selected to select the acceleration and deceleration time 1,2,3,4 14 stages: Bit12-13: Two bits are selected to select the acceleration and deceleration time 1,2,3,4 15 stages: Bit14-15: Two bit values select the acceleration and deceleration time 1,2,3,4	0000	○
13-34	PLC running time unit	0: seconds (s) 1: minute (min)	0	●
13-35	PLC run mode	0: Stop after a single run 1: The final value of the closing speed is maintained during a single run 2: It runs in a loop	0	●
13-36	PLC power failure memory selection	0: Power failure does not remember 1: Power off memory	0	○

13-37	PLC shutdown memory start selection	0: Restart from the first paragraph 1: Continue to operate at the stage frequency from the shutdown moment	0	○
13-38	Multiple speed 0 frequency given source	0: 13-00 given 1: AI1 2: AI2 3: AI3 4: HDI 5: PID 6: Keyboard analog potentiometer 7: Reserve	0	○
14 groups of SCI communication parameters				
14-00	Local communication address	0 Broadcast address, 1~247	1	○
14-01	Communication baud rate	0: 1200BPS 1: 2400BPS 2: 4800BPS 3: 9600BPS 4: 19200BPS 5: 38400BPS 6: 57600BPS	3	○
14-02	MODBUS data format	0: No check (N, 8,1) for RTU 1: Even parity (E, 8, 1) for RTU 2: Odd parity (O, 8, 1) for RTU 3: No verification (N, 8,2) for RTU 4: Even parity (E, 8,2) for RTU 5: Odd parity (O, 8, 2) for RTU	3	○
14-03	MODBUS communication response delay	0~200ms	5	○
14-04	Serial port communication timeout	0.0: Invalid, 0.1~60.0s	0.0s	○

Fault code	Product name	Description	Factory value	Attribute
14-05	Communication error action selection	0: Alarm and free shutdown 1: Do not alarm and continue to run 2: Stop by pressing the stop button without alarm (only communication control mode) 3: Stop by pressing the stop button without alarm (all control modes)	0	○
14-06	Communication processing action selection	LED the unit : 0: Write operation has a response 1: Write operation has no response	0	○
14-07	Communication protocol selection	0: Compatible with 380 protocol (including 00 group and 30 group partial menu) 1) Compatible with GD protocol (only communication control)	0	○

Fault code	Product name	Description	Factory value	Attribute
30 sets of monitoring parameters				
30-00 running frequency	running frequency	0.01Hz	0x7000	28672
30-01	Set the frequency	0.01Hz	0x7001	28673
30-02	busbar voltage	0.1V	0x7002	28674
30-03	output voltage	1V	0x7003	28675
30-04	output	0.1A	0x7004	28676
30-05	power of motor（%）	0.1%	0x7005	28677
30-06	output torque（%）	0.1%	0x7006	28678
30-07	Input terminal status	See group 30 for details	0x7007	28679
30-08	Output terminal status	See group 30 for details	0x7008	28680
30-09	AI1 input voltage	0.01V	0x7009	28681
30-10	AI2 input voltage	0.01V	0x700A	28682
30-11	AI3 input voltage	0.01V	0x700B	28683
30-12	count value	1	0x700C	28684
30-13	Length value	1	0x700D	28685
30-14	motor speed	1rpm	0x700E	28686
30-15	PID，set point	0.1%	0x700F	28687
30-16	PID, feedback value	0.1%	0x7010	28688
30-17	PLC and multi-speed current front section number	1	0x7011	28689
30-18	HDI incoming frequency	0.01kHz	0x7012	28690
30-19	continue to have		0x7013	28691
30-20	Frequency converter model	1	0x7014	28692
30-21	Rated power of the inverter	0.1KW	0x7015	28693
30-22	Rated voltage of inverter	1V	0x7016	28694
30-23	Rated current of inverter	0.1A	0x7017	28695
30-24	linear velocity	1m/Min	0x7018	28696
30-25	This is the running time	1Min	0x7019	28697

30-26	The slope is given frequency	0.01Hz	0x701A	28698
30-27	The torque is given in units	0.1%	0x701B	28699
30-28	output torque	0.1Nm	0x701C	28700
30-29	Digital adjustment	0.01Hz	0x701D	28701
30-30	torque current	0.1A	0x701E	28702
30-31	exciting current	0.1A	0x701F	28703
30-32	Motor power factor	0.01	0x7020	28704
30-33	Estimate the motor frequency	0.01Hz	0x7021	28705
30-34	Transfer incoming line current	0.1A	0x7022	28706
30-35	Motor overload count value	1	0x7023	28707

Chapter seven Fault diagnosis

7.1 Fault Description

The CY1800 inverter features dozens of warning messages and protection functions. When a fault occurs, the protection function activates, causing the inverter to immediately stop output. The fault relay contacts will also activate, and the inverter panel will display the fault code "Err" followed by the fault code number. Before seeking service, users can first follow the instructions in this section to perform a self-check and analyze the cause of the fault. If the issue cannot be resolved, please contact your product agent or our company.

7.2 Fault information

Fault code	Product name of fault	Cause of failure troubleshooting	Fault handling countermeasures
Err01 (Out)	Inverter unit protection	Short circuit of the inverter output circuit	1. Excluding peripheral faults
		2. The wiring of the motor and frequency converter is too long	2. Install reactor or output filter
		3. Module overheating	3. Check the air duct and fan and eliminate existing problems
		4. Loose internal wiring of the frequency converter	4. Plug in all the connecting wires
		5. Abnormal main control board	5. Seek technical support
			6. Seek technical support
			7. Seek technical support
			8. Check the motor wire or motor to ensure that it is normal
Err02 (OC1)	Accelerate		
Err03 (OC2)	Slow down the overcurrent	1. There is a ground or short circuit in the output circuit of the frequency converter 2. The control mode is vector and no parameter identification is carried out 3. The deceleration time is too short 4. Low voltage 5. Load is suddenly added	1. Excluding peripheral faults 2. Identify motor parameters 3. Increase the deceleration time 4. Adjust the voltage to the normal range 5. Cancel sudden load increase 6. Install brake unit and

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		1. There is a ground or short circuit in the output circuit of the frequency converter	resistor
		during deceleration 6. No brake unit and brake resistor are installed	

Err04 (OC3)	Constant speed overcurrent	1. There is a ground or short circuit in the output circuit of the frequency converter 2. The control mode is vector and no parameter identification is carried out 3. Low voltage 4. Whether there is sudden load increase during operation 5. The frequency converter is selected too small	1. Excluding peripheral faults 2. Identify motor parameters 3. Adjust the voltage to the normal range 4. Cancel sudden load increase 5, choose a higher power level of frequency converter
Err05 (Ov1)	Accelerate overvoltage	1. The input voltage is too high 2. There is an external force dragging the motor during acceleration 3. The acceleration time is too short 4. No brake unit and brake resistor are installed	1. Adjust the voltage to the normal range 2. Cancel the additional power or install brake resistor 3. Increase the acceleration time 4. Install brake unit and resistor
Err06 (Ov2)	Slow down overvoltage	1. The input voltage is too high 2. There is an external force dragging the motor during the deceleration process 3. The deceleration time is too short 4. No brake unit and brake resistor are installed	1. Adjust the voltage to the normal range 2. Cancel the additional power or install brake resistor 3. Increase the deceleration time 4. Install brake unit and resistor
Err07 (Ov3)	Constant speed overvoltage	1. The input voltage is too high 2. There is external force dragging the motor during operation	1. Adjust the voltage to the normal range 2. Cancel the additional power or install brake resistor

Fault code	Product name of the fault	Cause of failure troubleshooting	Fault handling countermeasures
Err09 (Uv)	Busbar under voltage	1. Instantaneous power failure 2. The input voltage of the frequency converter is not within the range required by the specification 3. Abnormal bus voltage 4. The rectifier bridge and buffer resistor are abnormal 5. Abnormal driver board 6. Abnormal control board	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 (oL2)	Frequency converter overload	1. Whether the load is too large or the motor is blocked 2. The frequency converter is selected too small	1. Reduce the load and check the motor and machinery 2. Select a frequency converter with a higher power level
Err11 (oL1)	Motor overload	1. Whether the motor protection parameter setting is appropriate 2. Whether the load is too large or the motor is blocked 3. The motor is too small	1. Set this parameter correctly 2. Reduce the load and check the motor and machinery 3. Select a motor with a higher power rating
Errl2 (SPI)	Enter a missing phase	1. The three-phase input power supply is abnormal 2. Abnormal driver board 3. Abnormal lightning protection plate 4. Abnormal main control board	1. Check and eliminate problems in peripheral lines 2. Seek technical support 3. Seek technical support 4. Seek technical support
Errl3 (Spo)	Output is out of phase	1. The lead from the frequency converter to the motor is abnormal 2. The three-phase output of the frequency converter is unbalanced when the motor is running 3. Abnormal driver board 4. Module exception	1. Excluding peripheral faults 2. Check whether the motor winding is normal and troubleshoot 3. Seek technical support 4. Seek technical support
Errl4 (oH2)	IGBT superheat	1. The ambient temperature is too high 2. Air duct blockage 3. Fan damage 4. The module thermistor is damaged 5. Inverter module is damaged	1. Reduce the ambient temperature 2. Clean the air duct 3. Replace the fan 4. Replace the thermistor 5. Replace the inverter module

Fault code	Product name of the fault	Cause of failure troubleshooting	Fault handling countermeasures
Err15 (EF)	External fault	The Xi terminal inputs external fault signals	Check external wiring and clear faulty operation
Err16 (CE)	485 Communication failure	1. The upper computer does not work properly 2. The communication line is not normal 3. The communication parameter group is not set correctly	1. Check the wiring of the upper computer 2. Check the communication connection line 3. Set communication parameters correctly
Err18 (ItE)	Current detection fault	1. Check for abnormalities in the Hall device 2. Abnormal driver board 3. Abnormal main control board	1. Replace the Hall device 2. Replace the driver board 3. Seek technical support
Err19 (tE)	Motor tuning fault	1. Motor parameters are not set according to the Product nameplate 2. The parameter identification process is timeout	1. Set the motor parameters correctly according to the Product nameplate 2. Check the frequency converter to the motor lead
Err21 (EEP)	EEPROM read/write failure	1. EEPROM is operated too frequently 2. EEPROM chip damage	1. The upper computer operates the EEPROM reasonably 2. Replace the main control board
Err23 (ETH)	Ground short circuit fault	The motor is short circuit to the ground Motor wiring UVW grounding is damaged. Inverter module is damaged	Replace the motor Replace the motor wire or troubleshoot short circuit fault Replace the module or drive board
Err26 (End)	Cumulative running time has been reached	The cumulative running time reaches the set value	Reset the running time
Err30 (LL)	Underload fault	1. The running current of the frequency converter is less than the set parameter	1. Confirm whether the load is off 2. Whether the parameter setting is in line with the actual operating conditions

Fault code	Product name of the fault	Cause of failure troubleshooting	Fault handling countermeasures
Err31 (PIdE)	PID feedback is disconnected	1. PID feedback signal is disconnected 2. The PID feedback loss detection value is not set reasonably	1. Check the PID feedback signal 2. Check that the PID feedback loss setting is reasonable
Err40 (oL4)	Fast current limiting fault	1. Whether the load is too large or the motor is blocked 2. The frequency converter is selected too small	1. Reduce the load and check the motor and machinery 2. Select a frequency converter with a higher power level
Err42 (dEU)	The speed deviation is too large	1. Parameter identification is not performed 2. The speed deviation is too large and the detection parameter setting is unreasonable 3. Overload or blockage	1. Identify motor parameters 2. The detection parameters of speed deviation are reasonably re-set 3. Check the load to ensure that the load is normal
Err48 (oL3)	Electronic overload fault	The inverter reports an overload fault according to the set value of the electronic overload parameter	Test the load or adjust the electronic load value reasonably
Err51 (Sto)	Initial position misalignment fault	1. The motor parameter setting is unreasonable 2. Parameter identification is not performed 3. The motor wire is not connected properly	1. Set the motor parameters and identify the motor parameters 2. Identify motor parameters 3. Check the motor wiring to ensure normal operation
Err60 (bCE)	Brake pipe protection fault	The brake resistor is short circuit or the brake module is abnormal	Check the brake resistor or seek technical support
P-Lu	Power under-voltage	The inverter is underpowered The internal switching power supply or bus of the inverter detects a fault The power segment or voltage segment of the motherboard does not match the current supply	Check the power supply of the frequency converter Check the internal power supply or bus circuit of the inverter Check if the rated voltage matches and seek support

Warranty Agreement

1. This product is covered by an 18-month warranty (based on the barcode information on the device). During this period, if the product malfunctions or is damaged under normal use as per the user manual, our company will provide free repair services.

2. Non-Covered Damages (Charges Apply) :

- Damage caused by misuse, unauthorized repairs, or modifications.
- Damage due to fire, flooding, abnormal voltage, lightning strikes, or other natural disasters and secondary damages.
- Damage from dropping, impacts, or improper handling (including during transportation).
- Damage resulting from incorrect operation, improper wiring, or failure to follow the user manual.
- Damage caused by excessive dust, oil contamination, moisture, or harsh environmental conditions.

3. If a malfunction occurs, please accurately and completely fill out the warranty card.

4. Any applicable repair fees will be based on the latest repair price list issued by our company.

5. This warranty card will not be reissued under normal circumstances. Please keep it safe and intact.

6. For any issues during service, please contact your distributor or our company directly.

Product warranty card

customer information	Product name of organization:			
	Office address:			
	contacts：		telephone:	
	zip code：		portraiture:	
on-product information	product model:			
	Body code:			
	agent：			
fault message	Maintenance information: Maintenance personnel:			