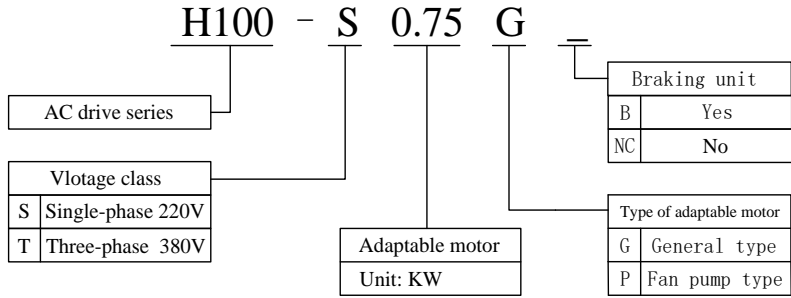


User Manual

Thank you for purchasing the H100 series AC drive developed by our company

1. Nameplate of the H100



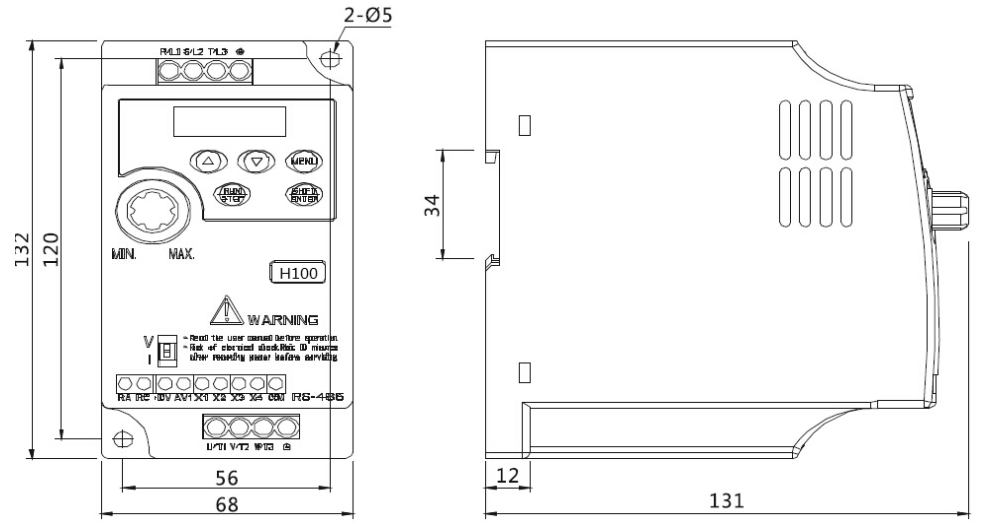
2. Electrical Specifications of the H100

Model	Power Capacity kVA	Current Input A	Current Output A	Adaptable Motor kW HP	
Single Phase: 200...240V, 50/60Hz					
H100S0.4G	1.0	5.4	2.3	0.4	0.5
H100S0.75G	1.5	8.2	4.0	0.75	1
H100S1.5G	3.0	14.0	7.0	1.5	2
H100S2.2G	4.0	23.0	9.6	2.2	3
Three Phase: 380V, 50/60Hz					
H100T0.75G	1.5	3.4	2.1	0.75	1
H100T1.5G	3.0	5.0	3.8	1.5	2
H100T2.2G	4.0	5.8	5.1	2.2	3

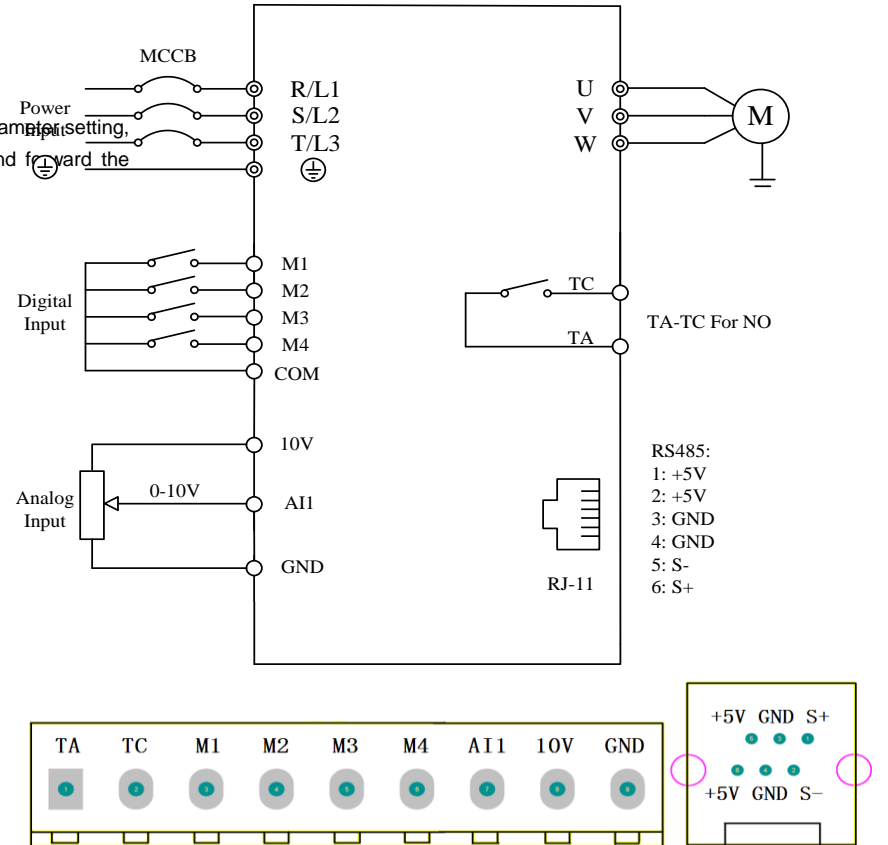
3. Product technical specification

Item	Specification
Maximum frequency	900Hz
Carrier frequency	0.5kHz~16kHz; The carrier frequency is automatically adjusted based on the load features.
Input frequency resolution	Digital setting: 0.01 Hz Analog setting: maximum frequency x 0.5%
Control mode	Voltage/Frequency (V/F) control
Overload capacity	60s for 150% of the rated current, 1s for 180% of the rated current
Torque boost	Customized boost 0.1%~30.0%
V/F curve	Straight-line V/F curve Multi-point V/F curve
Ramp mode	Four groups of acceleration/deceleration time with the range of 0.0~6500.0s
DC braking	DC braking frequency: 0.00 Hz to maximum frequency Braking time: 0.0~36.0s Braking action current value: 0.0%~100.0%
JOG control	JOG frequency range: 0.00~50.00 Hz JOG acceleration/deceleration time: 0.0~6500.0s
Onboard multiple preset speeds	It implements up to 16 speeds via the simple PLC function or combination of DI terminal states.
Onboard PID	It realizes process-controlled closed loop control system easily.
Auto voltage regulation (AVR)	It can keep constant output voltage automatically when the mains voltage changes.
Overvoltage/Overcurrent stall control	The current and voltage are limited automatically during the running process so as to avoid frequent tripping due to overvoltage/overcurrent.
Basic function	Running command source Control terminals Serial communication port You can perform switchover between these sources in various ways.
	Frequency source There are a total of 8 frequency sources, such as digital setting, analog voltage setting, analog current setting, pulse setting and serial communication port setting.
	Input terminal 4 digital input (DI) terminals 1 analog input (AI) terminals, which supports 0~10 V voltage input or 4~20 mA current input
	Output terminal 1 relay output terminal
RUN	Protection mode Motor short-circuit detection at power-on, output phase loss protection, overcurrent protection, overvoltage protection, undervoltage protection, overheat protection and overload protection
	Installation location Indoor, free from direct sunlight, dust, corrosive gas, combustible gas, oil smoke, vapour, drip or salt.
	Altitude Lower than 1000 m
	Ambient temperature -10°C to +40°C (de-rated if the ambient temperature is between 40°C and 50°C)
Environment	Humidity Less than 95%RH, without condensing
	Vibration Less than 5.9 m/s ² (0.6 g)

4. Physical Appearance and Overall Dimensions(mm)



5. Electrical Installation



6. Description of connection terminals

Terminal	Name	Description
R, S, T	Three-phase power supply input terminals	Connect to the three-phase AC power supply
L1, L2	Single-phase power supply input terminals	Connect to the single-phase 220 VAC power supply
U, V, W	AC drive output terminals	Connect to a three-phase motor
⊥	Grounding terminal	Must be grounded
+10V-GND	External +10V power supply	Provide +10 V power supply to external unit. Maximum output current: 40 mA
AI1-GND	Analog input 1	Input voltage range: 0~10 VDC
M1-GND	Digital input 1	1、 Normal open stand for "OFF" 2、 Connect to GND stand for "ON" 3、 Do not connect to external power source
M2-GND	Digital input 2	
M3-GND	Digital input 3	
M4-GND	Digital input 4	
TA-TC	NO terminal	250 VAC, 3 A, COSφ = 0.4; 30 VDC, 1 A
RS-485	Communication terminal	S+ S- RS485 Communication terminal, Support Modbus communication protocol

7. Description of Keys on the Operation Panel

Key	Name	Function
PRG	Programming	Enter or exit Level I menu
ENTER	Confirm	Enter the menu interfaces, and confirm the parameter setting
Δ	Increment	Increase data or function code, long press the key Select the displayed parameters in turn in the stop or running state, and select the digit to be modified when modifying parameters
∇	Decrement	Decrease data or function code, long press the key Select the displayed parameters in turn in the stop or running state, and select the digit to be modified when modifying parameters
RUN/STOP	Run/Stop/Reset	Start the AC drive in the operation panel control mode, perform the reset operation when it is in the fault state.

8. Function Code Table

The symbols in the function code table are described as follows:

"☆": The parameter can be modified when the AC drive is in either stop or running state.

"★": The parameter cannot be modified when the AC drive is in the running state.

"●": The parameter is the actually measured value and cannot be modified.

"*": The parameter is factory parameter and can be set only by the manufacturer.

Function Code	Name	Setting Range	Minimal Value	Default Value	Property
F0 Standard Function Parameters					
F0-00	Motor control mode	1: Voltage/Frequency (V/F) control	1	1	★
F0-01	Command source selection	0: Operation panel control (LED off) 1: Terminal control (LED on) 2: Communication control (LED blinking)	1	0	☆
F0-02	Main frequency source X selection	0: Digital setting (non-retentive at power failure) 1: Digital setting (retentive at power failure) 2: Keypad potentiometer 4: AI1 5: Multi-reference 6: Simple PLC 7: PID 8: Communication setting	1	2	★
F0-03	Auxiliary frequency source Y selection	The same as F0-02 (Main frequency source X selection)	1	0	★
F0-04	Range of auxiliary frequency Y for X and Y operation	0: Relative to maximum frequency 1: Relative to main frequency X	1	0	☆
F0-05	Range of auxiliary frequency Y for X and Y operation	0% ~ 150%	1%	100%	☆
F0-06	Frequency source selection	Unit's digit (Frequency source selection) 0: Main frequency source X 1: X and Y operation (operation relationship determined by ten's digit) 2: Switchover between X and Y 3: Switchover between X and "X and Y operation" 4: Switchover between Y and "X and Y operation" Ten's digit (X and Y operation relationship) 0: X+Y 1: X-Y 2: Maximum 3: Minimum	11	00	☆
F0-07	Preset frequency	0.00 to maximum frequency (valid when frequency source is digital setting)	0.1Hz	50.0Hz	☆
F0-08	Rotation direction	0: Same direction 1: Reverse direction	1	0	☆
F0-09	Maximum frequency	50.0Hz ~ 900.0Hz	0.1Hz	50.0Hz	★
F0-11	Frequency upper limit	Frequency lower limit (F0-13) to maximum frequency (F0-09)	0.1Hz	50.0Hz	☆
F0-12	Frequency upper limit offset	0.00 Hz to maximum frequency (F0-09)	0.1Hz	0.0Hz	☆
F0-13	Frequency lower limit	0.00 Hz to frequency upper limit (F0-11)	0.1Hz	0.0Hz	☆
F0-14	Running mode when set frequency lower than frequency lower limit	0: Run at frequency lower limit 1: Stop 2: Run at zero speed	1	0	☆
F0-15	Base frequency for UP/ DOWN modification during running	0: Running frequency 1: Set frequency	1	0	★
F0-16	Retentive of digital setting frequency upon power failure	0: Not retentive 1: Retentive	1	0	☆
F0-17	Acceleration time 1	0.0-6500.0s	0.01s	Model dependent	☆
F0-18	Deceleration time 1	0.0-6500.0s	0.01s	Model dependent	☆
F0-20	Carrier frequency	0.5-16.0 kHz	0.01kHz	Model dependent	☆
F0-21	Carrier frequency adjustment with temperature	0: No 1: Yes	1	1	☆
F0-22	Frequency reference resolution	1:0.1Hz 2:0.01Hz	1	2	★
Group F1: Start/Stop Control					
F1-00	Start mode	0: Direct start 1: Pre-excited start (asynchronous motor)	1	0	☆
F1-01	Startup frequency	0.00-10.00 Hz	0.1Hz	0.0Hz	☆
F1-02	Startup frequency holding time	0.0-100.0s	0.1s	0.0s	★
F1-03	Startup DC braking current	0%-100%	1%	0%	★
F1-04	Startup DC braking time	0.0-100.0s	0.1s	0.0s	★
F1-05	Acceleration/Deceleration mode	0: Linear acceleration/ deceleration 1: S-curve acceleration/ deceleration A	1	0	★
F1-06	Time proportion of S-curve start segment	0.0% to (100.0% - F1-09)	0.1%	30.0%	★
F1-07	Time proportion of S-curve end segment	0.0% to (100.0% - F1-08)	0.1%	30.0%	★
F1-08	Stop mode	0: Decelerate to stop 1: Coast to stop	1	0	☆
F1-09	Initial frequency of stop DC braking	0.00 Hz to maximum frequency	0.1Hz	0.0Hz	☆
F1-10	Waiting time of stop DC braking	0.0-36.0s	0.1s	0.0s	☆
F1-11	Stop DC braking current	0%-100%	1%	0%	☆
F1-12	Stop DC braking time	0.0-36.0s	0.1s	0.0s	☆
F1-13	Brake use ratio	0%-100%	1%	100%	☆
Group F2: Motor 1 Parameters					
F2-01	Motor type selection	0: Common asynchronous motor 1: Variable frequency asynchronous motor	1	0	★
F2-02	Rated motor power	0.1-1000.0 kW	0.1kW	Model dependent	★
F2-03	Rated motor voltage	1-2000 V	1V	Model dependent	★
F2-04	Rated motor current	0.01-99.99 A	0.01A	Model dependent	★
F2-05	Rated motor frequency	0.01 Hz to maximum frequency	0.1Hz	Model dependent	★
F2-06	Rated motor rotational speed	1-65535 RPM	1rpm	Model dependent	★

Group F4: V/F Control Parameters					
F4-00	V/F curve setting	0: Linear V/F 1: Multi-point V/F 2: Square V/F	1	0	★
F4-01	Torque boost	0.0% (No torque boost) 0.1%-30.0%	0.1%	Model dependent	☆
F4-02	Cut-off frequency of torque boost	0.00 Hz to maximum output frequency	0.1Hz	50.0Hz	★
F4-03	Multi-point V/F frequency 1 (F1)	0.00 Hz to F4-05	0.1Hz	0.0Hz	★
F4-04	Multi-point V/F voltage 1 (V1)	0.0%-100.0%	0.1%	0.0%	★
F4-05	Multi-point V/F frequency 2 (F2)	F4-03 to F4-07	0.1Hz	0.0Hz	★
F4-06	Multi-point V/F voltage 2 (V2)	0.0%-100.0%	0.1%	0.0%	★
F4-07	Multi-point V/F frequency 3 (F3)	F4-05 to rated motor frequency (F2-05)	0.1Hz	0.0Hz	★
F4-08	Multi-point V/F voltage 3 (V3)	0.0%-100.0%	0.1%	0.0%	★
F4-09	V/F slip compensation gain	0%-200.0%	0.1%	0.0%	☆
F4-10	V/F over-excitation gain	0-200	1	64	☆
F4-11	V/F oscillation suppression gain	0-100	1	Model dependent	☆
Group F5: Input Terminals					
F5-00	M1 function selection	0: No function 1: Forward RUN (FWD) 2: Reverse RUN (REV) 3: Three-line control 4: Forward JOG (FJOG) 5: Reverse JOG (RJOG) 6: Terminal UP 7: Terminal DOWN 8: Coast to stop 9: Fault reset (RESET)	1	1	★
F5-01	M2 function selection	10: RUN pause 11: Normally open (NO) input of external fault 12: Multi-reference terminal 1 13: Multi-reference terminal 2 14: Multi-reference terminal 3 15: Multi-reference terminal 4 16: Terminal 1 for ACC. / DEC. time selection 17: Terminal 2 for ACC. / DEC. time selection 18: Frequency source switchover 19: UP and DOWN setting clear (terminal, operation panel) 20: Command source switchover terminal 1	1	2	★
F5-02	M3 function selection	21: Acceleration/Deceleration prohibited 22: PID pause 23: PLC status reset 24: Swing pause 25: Counter input 26: Counter reset 27: Length count input 28: Length reset	1	4	★
F5-03	M4 function selection	32: Immediate DC braking 33: Normally closed (NC) input of external fault 34: Frequency modification forbidden 35: Reverse PID action direction 36: External STOP terminal 1 37: Command source switchover terminal 2 38: PID integral pause 39: Switchover between main frequency source X and preset frequency 40: Switchover between auxiliary frequency source Y and preset frequency 44: User-defined fault 1 45: User-defined fault 2 47: Emergency stop 48: External STOP terminal 2 49: Deceleration DC braking 50: Clear the current running time	1	9	★
F5-06	DI filter time	0.000-1.000s	0.001s	0.010s	☆
F5-07	Terminal command mode	0: Two-line mode 1 1: Two-line mode 2 2: Three-line mode 1 3: Three-line mode 2	1	0	★
F5-08	Terminal UP/DOWN rate	0.01Hz ~ 99.99Hz	0.01Hz	1.00Hz	☆
F5-09	AI curve 1 minimum input	0.00 V to F5-11	0.01	0.00V	☆
F5-10	Corresponding setting of AI curve 1 minimum input	-100.00%-100.0%	0.1%	0.0%	☆
F5-11	AI curve 1 maximum input	F5-09 to 10.00 V	0.01V	10.00V	☆
F5-12	Corresponding setting of AI curve 1 maximum input	-100.00%-100.0%	0.1%	100.0%	☆
F5-13	AI1 filter time	0.00-10.00s	0.01s	0.10s	☆
F5-14	DI1 delay time	0.0-3600.0s	0.1s	0.0s	★
F5-15	DI2 delay time	0.0-3600.0s	0.1s	0.0s	★
F5-16	DI3 delay time	0.0-3600.0s	0.1s	0.0s	★
F5-17	DI valid mode selection	0: high level 1: low level Unit's digit (M1 valid mode) Ten's digit (M2 valid mode) Hundred's digit (M3 state) Thousand's digit (M4 valid mode)	1111	0000	★

تهران، خیابان سعدی جنوبی، چهارراه اکباتان کوچه ناظم الاطبا شمالی، ابتدای کوچه، پلاک ۱۶۷

۳۶۶۱۹۳۹۰ - ۳۶۶۱۹۵۱۰ - ۳۳۵۳۲۱۹۴ - ۳۳۹۵۹۰۳۴ - ۳۳۹۵۹۷۵۶ - ۳۳۹۵۹۳۲۶

Group F6: Output Terminals					
F6-00	Relay function	0: No output 1: AC drive running 2: Fault output (stop) 3: Frequency-level detection FDT1 output 4: Frequency reached 5: Zero-speed running (no output at stop) 6: Motor overload pre-warning 7: AC drive overload pre-warning 8: Set count value reached 9: Designated count value reached 10: Length reached 11: PLC cycle complete 12: Accumulative running time reached 13: Frequency limited 14: Ready for RUN 15: Frequency upper limit reached 16: Frequency lower limit reached 17: Undervoltage state output 20: Zero-speed running 2 (having output at stop) 21: Accumulative power-on time reached 22: Frequency level detection FDT2 output 23: Frequency 1 reached 24: Frequency 2 reached 25: Timing reached 27: Software current limit 28: Frequency lower limit reached (having output at stop) 29: Alarm output 30: Current running time reached	1	2	☆
F6-02	Relay output delay time	0.0-3600.0s	0.1s	0.0s	☆
F6-04	DO valid mode selection	0: Positive logic 1: Negative logic	1	0	☆
Group F7: Operation Panel and Display					
F7-00	MF.K Key function selection	0: MF.K key disabled 1: Switchover between operation panel control and remote command control (terminal or communication) 2: Switchover between forward rotation and reverse rotation 3: Forward JOG 4: Reverse JOG	1	0	★
F7-01	STOP/RESET key function	0: STOP/RESET key enabled only in operation panel control 1: STOP/RESET key enabled in any operation mode	1	1	☆
F7-02	LED display running parameters 1	0000-FFFF Bit00: Running 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: DI input status Bit08: DO output status Bit10: AI1 voltage (V) Bit11: Count value Bit12: Length value Bit13: Load speed display Bit14: PID setting Bit15: PID feedback	1111	1F	☆
F7-03	LED display running parameters 2	0000 ~ FFFF Bit00: PLC stage Bit01: Running frequency 2(Hz) Bit02: Remaining running time Bit05: Linear speed Bit06: Current power-on time (Hour) Bit07: Current running time (Min) Bit08: Communication setting value Bit09: Main frequency X display (Hz) Bit10: Auxiliary frequency Y display (Hz)	1111	0	☆
F7-04	LED display stop parameters	0000-FFFF Bit00: Set frequency (Hz) Bit01: Bus voltage (V) Bit03: AI1 voltage (V) Bit04: Count value Bit05: Length value Bit06: PLC stage Bit07: Load speed Bit08: PID setting	1111	03	☆
F7-05	Heatsink temperature of inverter module	0.0°C ~ 100°C	0.1°C	-	☆
F7-06	Load speed display coefficient	0.0001-6.5000	1	1000	●
F7-07	Number of decimal places for load speed display	0: 0 decimal place 1: 1 decimal place 2: 2 decimal places 3: 3 decimal places	H.111	1	☆
F7-08	Accumulative running time	0-65535 h	1h	-	●
F7-09	Accumulative power-on time	0-65535 h	1h	-	●
F7-11	Software version	-	-	-	●
Group F8: Auxiliary Functions					
F8-00	JOG running frequency	0.00 Hz to maximum frequency	0.1Hz	2.0Hz	☆
F8-01	JOG acceleration time	0.0-6500.0s	0.1s	20.0s	☆
F8-02	JOG deceleration time	0.0-6500.0s	0.1s	20.0s	☆
F8-03	Acceleration time 2	0.0-6500.0s	0.1s	Model dependent	☆
F8-04	Deceleration time 2	0.0-6500.0s	0.1s	Model dependent	☆
F8-05	Acceleration time 3	0.0-6500.0s	0.1s	Model dependent	☆
F8-06	Deceleration time 3	0.0-6500.0s	0.1s	Model dependent	☆
F8-07	Acceleration time 4	0.0-500.0s	0.1s	Model dependent	☆
F8-08	Deceleration time 4	0.0-6500.0s	0.1s	Model dependent	☆
F8-09	Jump frequency 1	0.00 Hz to maximum frequency	0.1Hz	0.0Hz	☆
F8-10	Jump frequency 2	0.00 Hz to maximum frequency	0.1Hz	0.0Hz	☆
F8-11	Frequency jump amplitude	0.00 Hz to maximum frequency	0.1Hz	0.1Hz	☆
F8-12	Forward/Reverse rotation dead-zone time	0.0-3000.0s	0.1s	0.0s	☆
F8-13	Reverse control	0: Enabled 1: Disabled	1	0	☆
F8-14	Droop control	0.00-10.00 Hz	0.1Hz	0.0Hz	☆
F8-15	Accumulative power-on time threshold	0-9999 h	1h	0h	☆
F8-16	Accumulative running time threshold	0-9999 h	1h	0h	☆

F8-17	Startup protection	0: No 1: Yes	1	0	☆
F8-18	Frequency detection value (FDT1)	0.00 Hz to maximum frequency	0.1Hz	50.0Hz	☆
F8-19	Frequency detection hysteresis (FDT hysteresis 1)	0.0%-100.0% (FDT1 level)	0.1%	5.0%	☆
F8-20	Detection range of frequency reached	0.00-100% (maximum frequency)	0.1%	0.0%	☆
F8-21	Jump frequency during acceleration /deceleration	0: Disabled 1: Enabled	1	0	☆
F8-24	Frequency switchover point between acceleration time 1 and acceleration time 2	0.00 Hz to maximum frequency	0.1Hz	0.0Hz	☆
F8-25	Frequency switchover point between deceleration time 1 and deceleration time 2	0.00 to maximum frequency	0.1Hz	0.0Hz	☆
F8-26	Terminal JOG preferred	0: Disabled 1: Enabled	1	0	☆
F8-27	Frequency detection value (FDT2)	0.00 to maximum frequency	0.1Hz	50.0Hz	☆
F8-28	Frequency detection hysteresis (FDT hysteresis 2)	0.0%-100.0% (FDT2 level)	0.1%	5.0%	☆
F8-29	Any frequency reaching detection value 1	0.00 Hz to maximum frequency	0.1Hz	50.0Hz	☆
F8-30	Any frequency reaching detection amplitude 1	0.0%-100.0% (maximum frequency)	0.1%	0.0%	☆
F8-31	Any frequency reaching detection value 2	0.00 Hz to maximum frequency	0.1Hz	50.0Hz	☆
F8-32	Any frequency reaching detection amplitude 2	0.0%-100.0% (maximum frequency)	0.1%	0.0%	☆
F8-33	Output overcurrent threshold	% (no detection) %-300.0% (rated motor current)	0.1%	200.0%	☆
F8-34	Output overcurrent detection delay time	0.00-600.00s	0.01s	0.00s	☆
F8-35	Timing function	0: Disabled 1: Enabled	1	0	☆
F8-37	Timing duration	0.0-6500.0 min	0.1Min	0.0Min	☆
F8-40	Cooling fan control	0: Fan working during running 1: Fan working continuously	1	0	☆
F8-41	Current running time reached	0.0-6500.0 min	0.1Min	0.0Min	☆
Group F9: Process Control PID Function					
F9-00	PID setting source	0: F9-01 3: AI1 4: Communication setting 5: Multi-reference	1	0	☆
F9-01	PID digital setting	0.0% ~ 100.0%	0.1%	50.0%	☆
F9-02	PID feedback source	3: AI1 4: Communication setting	1	3	☆
F9-03	PID action direction	0: Forward action 1: Reverse action	1	0	☆
F9-04	PID setting feedback range	0-65535	1	1000	☆
F9-05	Proportional gain Kp1	0.0-100.0	0.1	20.0	☆
F9-06	Integral time Ti1	0.01-10.00s	0.01s	2.00s	☆
F9-07	Differential time Td1	0.00-10.000	0.001s	0.000s	☆
F9-08	Cut-off frequency of PID reverse rotation	0.00 to maximum frequency	0.1Hz	2.0Hz	☆
F9-09	PID deviation limit	0.0%-100.0%	0.1%	0.0%	☆
F9-10	PID differential limit	0.00%-100.00%	0.01%	0.10%	☆
F9-11	PID setting change time	0.00-650.00s	0.01s	0.00s	☆
F9-12	PID feedback filter time	0.00-60.00s	0.01s	0.00s	☆
F9-13	PID output filter time	0.00-60.00s	0.01s	0.00s	☆
F9-14	PID initial value	0.0%-100.0%	0.1%	0.0%	☆
F9-15	PID initial value holding time	0.00-650.00s	0.01s	0.00s	☆
F9-16	Maximum deviation between two PID outputs in forward direction	0.00%-100.00%	0.01%	1.00%	☆
F9-17	Maximum deviation between two PID outputs in reverse direction	0.00%-100.00%	0.01%	1.00%	☆
F9-18	PID integral property	Unit's digit (Integral separated) 0: Invalid 1: Valid Ten's digit (Whether to stop integral operation when the output reaches the limit) 0: Continue integral operation 1: Stop integral operation	11	00	☆
F9-19	Detection value of PID feedback loss	0.0%: Not judging feedback loss 0.1%-100.0%	0.1%	20.0%	☆
F9-20	Detection time of PID feedback loss	0.0-20.0s	0.1s	1.0s	☆
F9-21	PID operation at stop	0: No PID operation at stop 1: PID operation at stop	1	0	☆
F9-22	Wakeup frequency	F9-24 ~ F0-09	0.1Hz	0.0Hz	☆
F9-23	Wakeup delay time	0.0s ~ 6500.0s	0.1s	0.0s	☆
F9-24	Dormant frequency	0.00Hz ~ F9-22	0.1Hz	0.0Hz	☆
F9-25	Dormant delay time	0.0s ~ 6500.0s	0.1s	0.0s	☆
Group FA: Fault and Protection					
FA-00	Motor overload protection selection	0: Disabled 1: Enabled	1	1	☆
FA-01	Motor overload protection gain	0.20-10.00	0.01	1.00	☆
FA-02	Motor overload warning coefficient	50%-100%	1%	80%	☆
FA-03	Overvoltage stall gain	0 ~ 100	1	0	☆
FA-04	Overvoltage stall protective voltage	120% ~ 150%	1%	130%	☆
FA-05	Overcurrent stall gain	0 ~ 100	1	20	☆
FA-06	Overcurrent stall protective current	100% ~ 200%	1%	150%	☆
FA-07	Fault auto reset times	0-20	1	0	☆
FA-08	DO action during fault auto reset	0: Not act 1: Act	1	0	☆
FA-09	Time interval of fault auto reset	0.1s-100.0s	0.1s	1.0s	☆
FA-10	Rapid current limit	0: Disabled 1: Enabled	1	1	☆

Group FB: Swing Frequency, Fixed Length and Count					
Fb-00	Swing frequency setting mode	0: Relative to the central frequency 1: Relative to the maximum frequency	1	0	☆
Fb-01	Swing frequency amplitude	0.0%~100.0%	0.1%	0.0%	☆
Fb-02	Jump frequency amplitude	0.0%~50.0%	0.1%	0.0%	☆
Fb-03	Swing frequency cycle	0.0~3000.0s	0.1s	10.0s	☆
Fb-04	Triangular wave rising time coefficient	0.0%~100.0%	0.1%	50.0%	☆
Fb-05	Set length	0~65535 m	1m	1000m	☆
Fb-06	Actual length	0~65535 m	1m	0m	☆
Fb-07	Number of pulses per meter	0.1~6553.5	0.1	100.0	☆
Fb-08	Set count value	1~65535	1	1000	☆
Fb-09	Designated count value	1~65535	1	1000	☆
Group FC: Communication Parameters					
FC-00	Local address	0: Broadcast address 1~247	1	1	☆
FC-01	Baud rate	0: 300 BPs 1: 600 BPs 2: 1200 BPs 3: 2400 BPs 4: 4800 BPs 5: 9600 BPs 6: 19200 BPs 7: 38400 BPs	1	5	☆
FC-02	Data format	0: No check, <8,N,2> 1: Even parity check, <8,E,1> 2: Odd Parity check, <8,O,1> 3: No check, <8,N,1>	1	0	☆
FC-03	Response delay	0~20 ms Valid for Modbus	1ms	2	☆
FC-04	Communication timeout	0.0s (invalid) 0.1~60.0s	0.1s	0.0	☆
FC-05	Modbus protocol selection	0: Non-standard Modbus protocol 1: Standard Modbus protocol	1	0	☆
FC-06	Communication reading current resolution	0: 0.01A 1: 0.1A	1	0	☆
Group FD: Multi-Reference and Simple PLC Function					
Fd-00	Step 0	-100.0%~100.0%	0.1%	0.0%	☆
Fd-01	Step 1	-100.0%~100.0%	0.1%	0.0%	☆
Fd-02	Step 2	-100.0%~100.0%	0.1%	0.0%	☆
Fd-03	Step 3	-100.0%~100.0%	0.1%	0.0%	☆
Fd-04	Step 4	-100.0%~100.0%	0.1%	0.0%	☆
Fd-05	Step 5	-100.0%~100.0%	0.1%	0.0%	☆
Fd-06	Step 6	-100.0%~100.0%	0.1%	0.0%	☆
Fd-07	Step 7	-100.0%~100.0%	0.1%	0.0%	☆
Fd-08	Step 8	-100.0%~100.0%	0.1%	0.0%	☆
Fd-09	Step 9	-100.0%~100.0%	0.1%	0.0%	☆
Fd-10	Step 10	-100.0%~100.0%	0.1%	0.0%	☆
Fd-11	Step 11	-100.0%~100.0%	0.1%	0.0%	☆
Fd-12	Step 12	-100.0%~100.0%	0.1%	0.0%	☆
Fd-13	Step 13	-100.0%~100.0%	0.1%	0.0%	☆
Fd-14	Step 14	-100.0%~100.0%	0.1%	0.0%	☆
Fd-15	Step 15	-100.0%~100.0%	0.1%	0.0%	☆
Fd-16	Simple PLC running mode	0: Stop after the AC drive runs one cycle 1: Keep final values after the AC drive runs one cycle 2: Repeat after the AC drive runs one cycle	1	0	☆
Fd-17	Simple PLC retentive selection	Unit's digit (Retentive upon power failure) 0: No 1: Yes Ten's digit (Retentive upon stop) 0: No 1: Yes	11	00	☆
Fd-18	Running time of simple PLC step 0	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-19	Acc./Dec. time of simple PLC Step 0	0~3	1	0	☆
Fd-20	Running time of simple PLC step 1	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-21	Acc./Dec. time of simple PLC Step 1	0~3	1	0	☆
Fd-22	Running time of simple PLC step 2	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-23	Acc./Dec. time of simple PLC Step 2	0~3	1	0	☆
Fd-24	Running time of simple PLC step 3	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-25	Acc./Dec. time of simple PLC Step 3	0~3	1	0	☆
Fd-26	Running time of simple PLC step 4	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-27	Acc./Dec. time of simple PLC Step 4	0~3	1	0	☆
Fd-28	Running time of simple PLC step 5	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-29	Acc./Dec. time of simple PLC Step 5	0~3	1	0	☆
Fd-30	Running time of simple PLC step 6	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-31	Acc./Dec. time of simple PLC Step 6	0~3	1	0	☆
Fd-32	Running time of simple PLC step 7	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-33	Acc./Dec. time of simple PLC Step 7	0~3	1	0	☆
Fd-34	Running time of simple PLC step 8	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-35	Acc./Dec. time of simple PLC Step 8	0~3	1	0	☆
Fd-36	Running time of simple PLC step 9	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-37	Acc./Dec. time of simple PLC Step 9	0~3	1	0	☆
Fd-38	Running time of simple PLC step 10	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-39	Acc./Dec. time of simple PLC Step 10	0~3	1	0	☆
Fd-40	Running time of simple PLC step 11	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-41	Acc./Dec. time of simple PLC Step 11	0~3	1	0	☆
Fd-42	Running time of simple PLC step 12	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-43	Acc./Dec. time of simple PLC Step 12	0~3	1	0	☆

Fd-44	Running time of simple PLC step 13	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-45	Acc./Dec. time of simple PLC Step 13	0~3	1	0	☆
Fd-46	Running time of simple PLC step 14	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-47	Acc./Dec. time of simple PLC Step 14	0~3	1	0	☆
Fd-48	Running time of simple PLC step 15	0.0~6553.5s (h)	0.1s(h)	0.0s(h)	☆
Fd-49	Acc./Dec. time of simple PLC Step 15	0~3	1	0	☆
Fd-50	Time unit of simple PLC running	0: s (second) 1: h (hour)	1	0	☆
Fd-51	Reference 0 source	0: Set by FC-00 2: Operation panel potentiometer 4: AI1 5: PID 6: Set by preset frequency (F0-07), modified via terminal UP/ DOWN	1	0	☆
Group FE: Error record					
FE-00	1st fault type	0: No fault 1: Reserved 2: Overcurrent during acceleration 3: Overcurrent during deceleration 4: Overcurrent at constant speed 5: Overvoltage during acceleration 6: Overvoltage during deceleration 7: Overvoltage at constant speed 8: Buffer resistance overload 9: Undervoltage 10: AC drive overload	-	-	•
FE-01	2nd fault type	11: Motor overload 12: Power input phase loss 13: Power output phase loss 14: Module overheat 15: External equipment fault 16: Communication fault 17: Contactor fault 18: Current detection fault 19: EEPROM read-write fault 20: AC drive hardware fault 21: Short circuit to ground	-	-	•
FE-02	3rd (latest) fault type	22: Accumulative running time reached 23: User-defined fault 1 24: User-defined fault 2 25: Accumulative power-on time reached 26: PID feedback lost during running	-	-	•
Group FP: Function Code Management					
FP-00	User password	0~65535	1	0	☆
FP-01	Restore default settings	0: No operation 01: Restore factory settings except motor parameters 02: Clear records	1	0	★
FP-02	Parameter modification property	0: Modifiable 1: Not modifiable	1	0	☆