

## Product Naming Rules

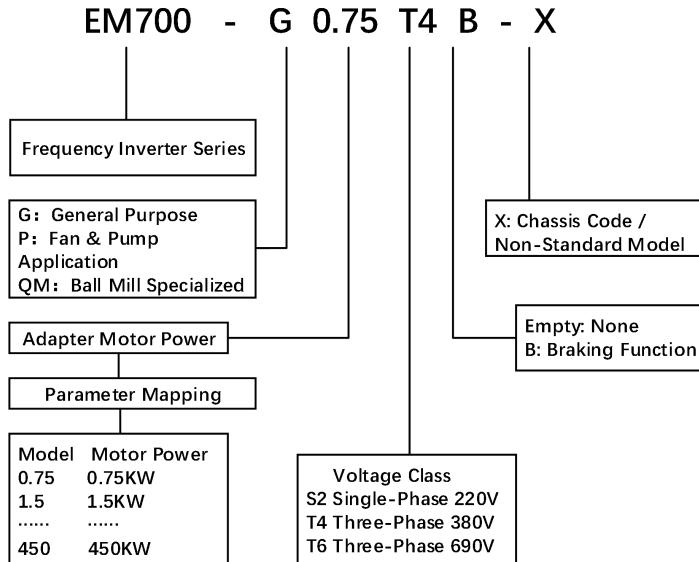


Fig.1-1 Naming conventions

## Nameplate

Machine Model  
 Compatible Motor Power  
 Input Specifications  
 Output Specifications  
 Barcode  
 Software Version / Firmware Code

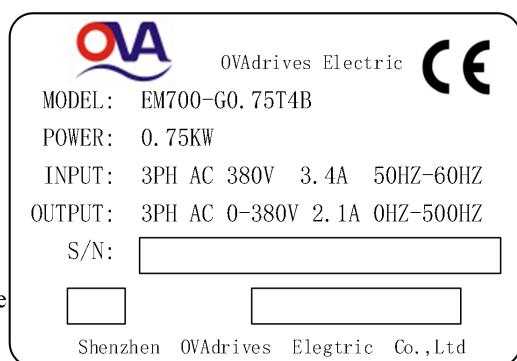


Fig.1-2 Nameplate

**EM700 Series Product Model, Electrical Parameters, and Dimensional Correspondence Table.**

Model	Input Current A	Output Current A	Adaptive Motor KW	Chassis Code
Single-phase power supply: AC220V,50HZ/60HZ				
EM700-G0.75S2	8.2	4	0.75	
EM700-G1.5S2	14	7	1.5	
EM700-G2.2S2	23	9.6	2.2	
Three-phase power supply: AC380V,50HZ/60HZ				
EM700-G0.75T4	3.4	2.1	0.75	101/201
EM700-G1.5T4	5	3.8	1.5	101/201
EM700-G2.2T4	6.8	5.1	2.2	101/201
EM700-G3.0T4	9	7.2	3.0	101/201
EM700-G4.0T4	10.5	9.0	4.0	102/202
EM700-G5.5T4	14.6	13	5.5	102/202
EM700-G7.5T4	20.5	15	7.5	203
EM700-G11T4	26	25	11	203/205
EM700-G15T4	35	32	15	203/205
EM700-G18.5T4	39.5	37	18.5	206
EM700-G22T4	46.5	45	22	206
EM700-G30T4	62	60	30	206/207
EM700-G37T4	76	75	37	207
EM700-G45T4	92	91	45	207/208
EM700-G55T4	113	112	55	208
EM700-G75T4	157	150	75	209
EM700-G93T4	180	176	93	209/210
EM700-G110T4	214	210	110	210
EM700-G132T4	256	253	132	210/212
EM700-G160T4	307	304	160	212
EM700-G185T4	350	340	185	212/213
EM700-G200T4	385	377	200	213
EM700-G220T4	430	426	220	213
EM700-G250T4	490	465	250	213/214
EM700-G280T4	555	520	280	214

Model	Input Current A	Output Current A	Adaptive Motor KW	Chassis Code
EM700-G315T4	610	585	315	214/215
EM700-G355T4	665	650	355	215
EM700-G400T4	785	725	400	215
EM700-G450T4	883	800	450	215
EM700-G500T4	950	860	500	215

## Schematic Diagram of the Chassis

### Schematic Diagram of Plastic Casing

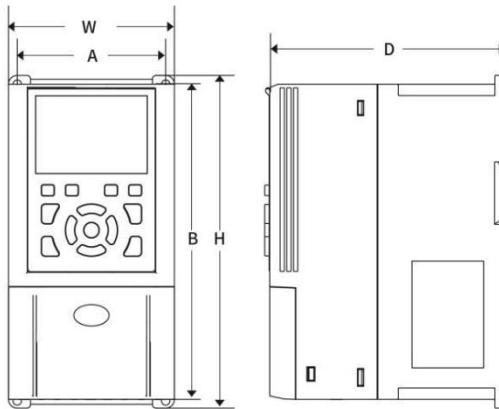


Fig.2-1 101~102 Diagram of the chassis code

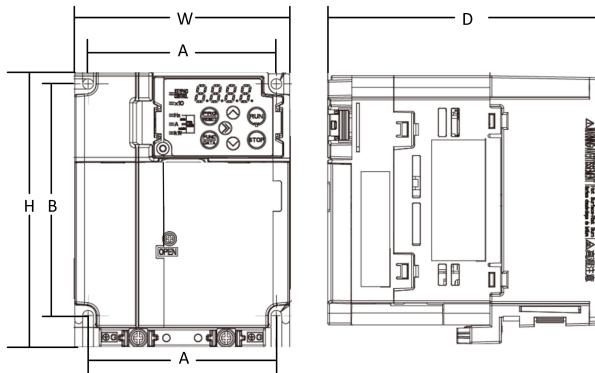


Fig.2-2 201~204 Diagram of the chassis code

### 101~102, 201~204 Chassis Size Table(Unit mm)

Chassis code	Installation dimensions		Physical dimensions			Mounting holes	Weight approximately
	A	B	W	D	H		
101	65.6	166	83	122	166	$\Phi 5.2$	1
102	85	180	95	137	190	$\Phi 5.2$	1.4
201	96.4	118	110	143	140	$\Phi 5.5$	1.48
202	126.4	118	140	143	140	$\Phi 5.5$	1.79
203	127	238	140	170	250	$\Phi 6$	3.3
204							

## Schematic Diagram of the Sheet Metal Chassis 1

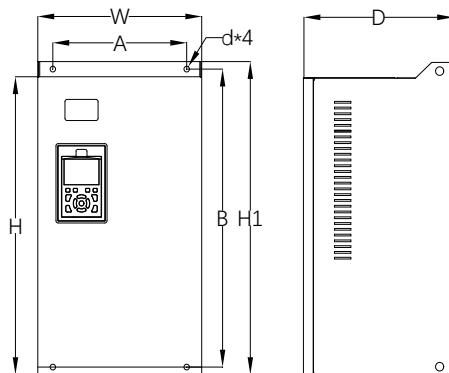


Fig.2-3 205~212 Schematic diagram of sheet metal chassis code

### 205~212 Chassis Size Table(Unit mm)

Chassis code	Installation dimensions		Physical dimensions				Mounting holes	Weight approximately
	A	B	W	D	H	H1		
205	130	266	180	179	266	280	Φ6	5.1
206	160	335	210	192	335	350	Φ6	8.7
207	190	382	250	220	382	400	Φ7	11.8
208	245	523	300	275	515	542	Φ10	23.8
209	220	530	380	243	530	556	Φ10	27.2
210	270	560	338	315	554	580	Φ10	37.7
212	320	890	400	320	876	915	Φ10	70

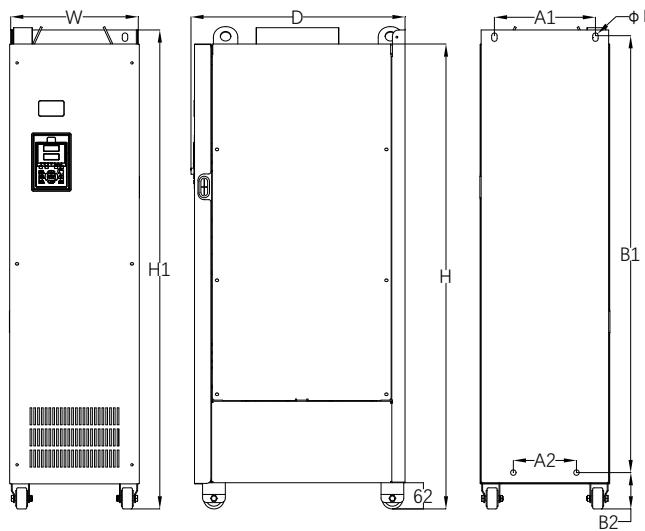
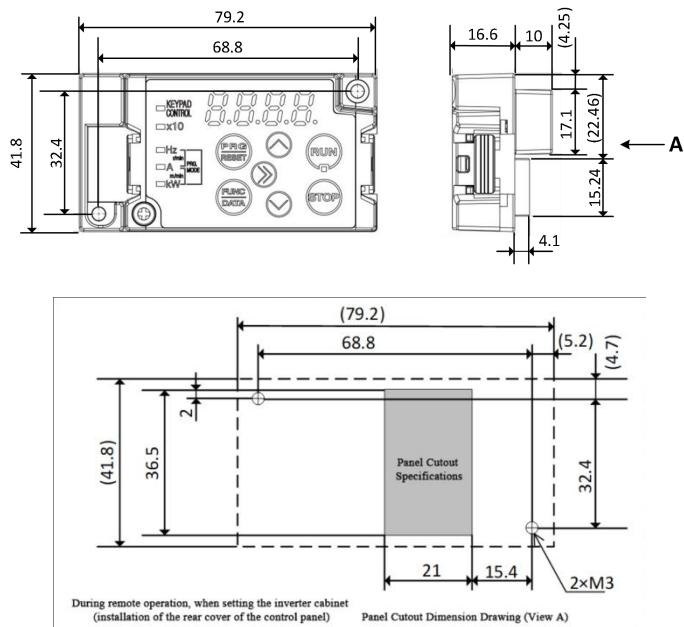
**Schematic Diagram of the Sheet Metal Chassis 1**

Fig.2-4 213~215 Schematic diagram of sheet metal chassis code

**213~215 Chassis Size Table(Unit mm)**

Chassis code	Installation dimensions				Physical dimensions				Mounting holes	Weight approximately
	A1	A2	B1	B2	W	D	H	H1		
213	240	150	1035	86	300	500	1100	1134	Φ13	108
214	260	185	1175	93	330	545	1248	1284	Φ13	133
215	270	200	1280	108	340	545	1370	1405	Φ16	169

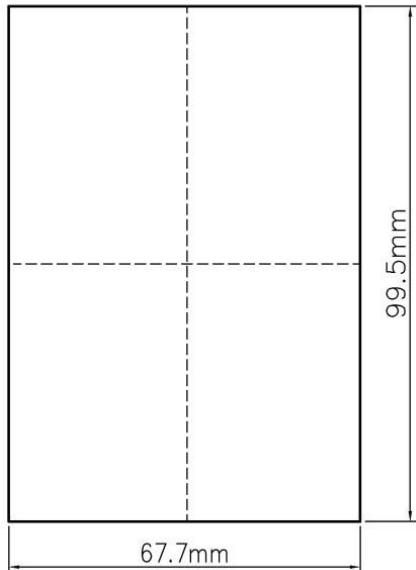
## Dimensions of the EM700 Series Mini Keyboard.(Model: K201)



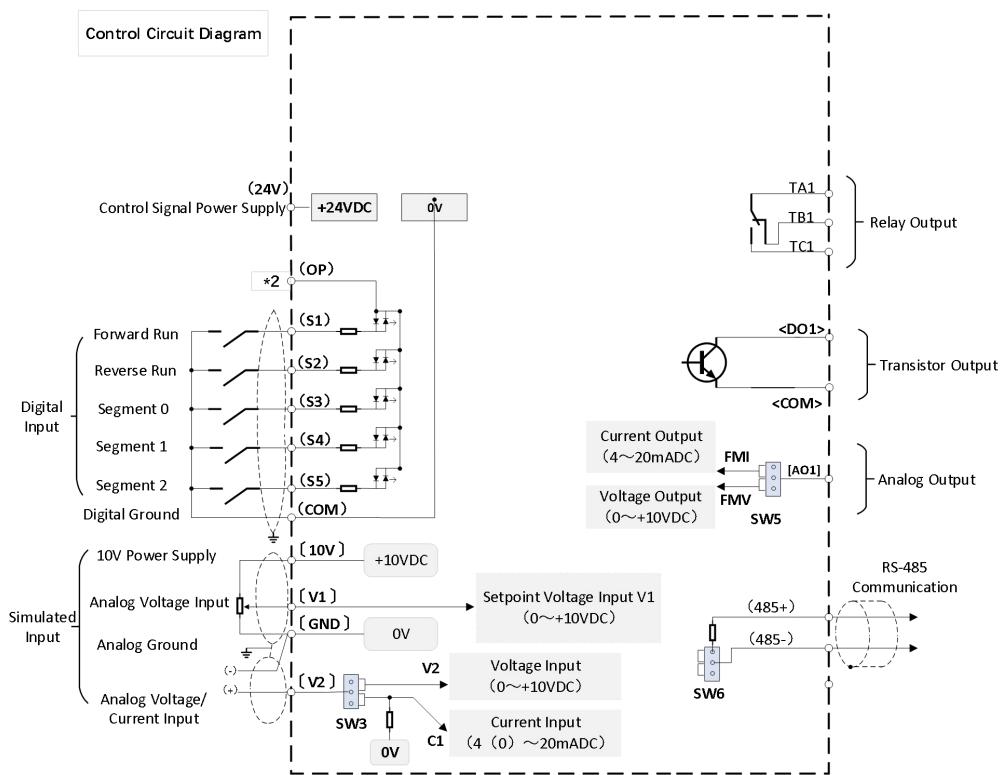
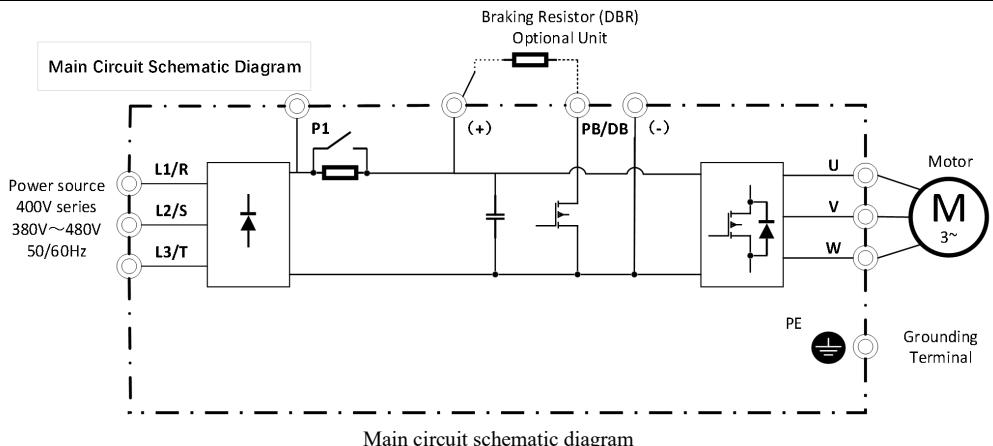
## Dimensions of the EM700 Series Large Keyboard(Model: K206)

The size of the opening is 67.7x99.5(mm)

Keypad External Cutout Dimensions



## Schematic Diagram of Wiring Principles



Control circuit diagram

## Schematic Diagram of Wiring Terminals and Jumpers of the Control Circuit

485+	485-	S1	S2	S3	OP	24V					
AO1	V2	+10V	V1	GND	S4	S5	DO	COM	TC1	TB1	TA1

101~102 Chassis control terminal block

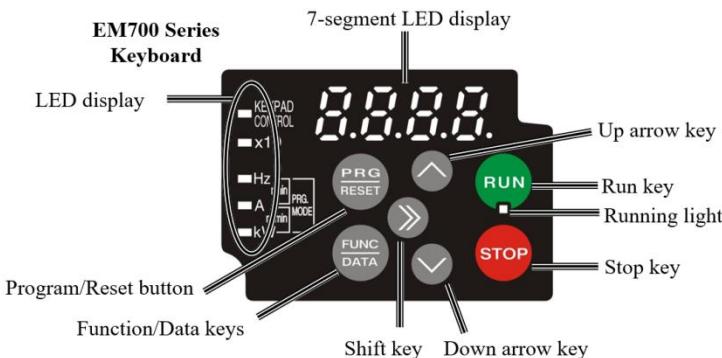
TC1	TB1	TA1	+10V	V1	V2	GND	S4	S5	COM	COM	OP	+24V
485+	485-	AO1	GND	S1	S2	S3	COM	COM	+24V	DO1		

201~215 Chassis control terminal block

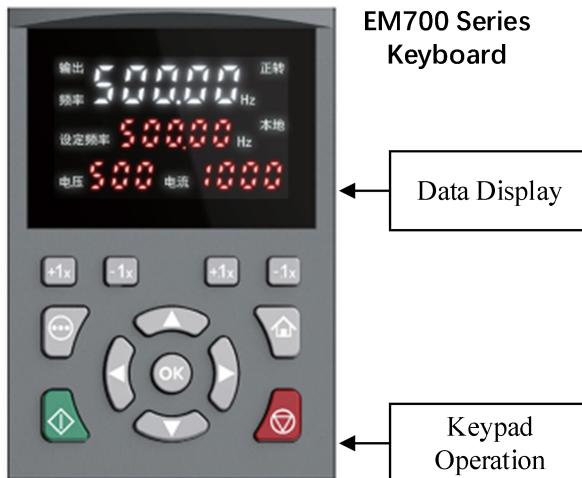
	SW3	SW5	SW6	J5	J6
Jumper type	V2 type selection	AO1 output selection	485 terminal resistors	EMC selection/GND	EMC selection/COM
Factory condition					

The positions of various jumpers on the control panel

## Introduction to Keyboard Operations



Project	Part	Functional Overview
Data shows		4-digit 7-segment LED display. Data display interface: Different content can be displayed Function code interface: Display function code data Fault interface: Alarm code
Button operation		Switch between the function code interface and the data display interface.
		Access the menu interface step by step and confirm the parameters set.
		Under keyboard operation mode, begin to run the motor.
		Used to stop the motor or reset faults.
		The increase or decrease of data or functional codes.
LED light display		When displaying the data interface, parameters can be cyclically selected; during parameter modification, the bits to be modified can be chosen.
	RUN	It lights up during operation.
	Unit	Hz, A, kW, r/min, m/min
LED light display	x10	When the displayed data exceeds 9999, the x10 LED lights up, indicating that the actual data is 'displayed data × 10'. For example, if the data is 12340, the LED display will show '1234', and the x10 LED will illuminate simultaneously.



## EM700 Series Keyboard

Project	Part	Functional Overview
Data shows		<p>First line: Main display line, capable of switching between function codes and data.</p> <p>Second line: Auxiliary display line, content to be displayed can be adjusted through parameters.</p> <p>The third row displays the fixed output voltage and current.</p>
Button operation		Switching between the function code interface and the data display interface.
		Parameter F8.12 can set the multifunctional key to the corresponding function. The default function displays the data content of the main display line and returns to the initial state.
		Rapid adjustment of the set frequency.
		Confirmation of the increase, decrease, or modification of data or function codes.
		Under keyboard operation mode, the motor begins to operate.
		Used to stop the motor or reset faults.

## Functional Parameter Table

The symbol “√” indicates that the parameters can be changed while in operation; “×” suggests that they cannot; “●” indicates actual test values or fixed parameters, which cannot be changed; “-” indicates parameters reserved by the manufacturer, which are prohibited from being changed, as doing so may lead to malfunction of the frequency converter.

### F0: Basic parameter group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F0.0x Basic Instructions (Control Method, Command, Frequency Instruction)					
F0.00	0x0000	Retain parameters	-	-	-
F0.01	0x0001	Motor control mode	0: Asynchronous open-loop vector 1: Asynchronous closed-loop vectors 2: Asynchronous V/F control 3: Synchronous open-loop vector 4: Synchronous closed-loop control 5: Synchronous V/F control	2	×
F0.02	0x0002	Command execution channel	0: Keyboard controls 1: Terminal control 2: Modbus communication control (RS485) 3: Expansion card(Retention)	0	√
F0.03	0x0003	Select the primary frequency source X	0: Keypad numeric settings 1: Analog Signal V1 2: Analog Signal V2 3: Analog Signal V3 4: HDI hed pulse given 5: Simple PLC	00	√
F0.04	0x0004	Auxiliary frequency source Y selection	6: Multi-stage speed 7: PID 8: Modbus communication control (RS485)	01	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			9: Expansion card(Retention) 10: Retention		
F0.05	0x0005	Auxiliary frequency source Y reference object	0: Relative to the maximum frequency 1: Relative to the main frequency source X 2: Retention	0	√
F0.06	0x0006	Frequency source combination	0: Main frequency X 1: Auxiliary frequency Y 2: Main frequency X+Auxiliary frequency Y 3: The minimum values of the main frequency X and the auxiliary frequency Y 4: The maximum value of the main frequency X and the auxiliary frequency Y 5: Main frequency X-Auxiliary frequency Y	0	√
F0.07	0x0007	Keyboard up and down key numeric setting memory selection	0: Do not remember 1: Remember	1	√
F0.08	0x0008	Maximum frequency	Upper limit frequency～500.00Hz	50.00Hz	✗
F0.09	0x0009	Upper limit frequency setting	Lower frequency～Maximum frequency	50.00Hz	√
F0.10	0x000A	Lower frequency	0.00～Upper limit frequency setting	0.00Hz	√
F0.11	0x000B	The keyboard number is given a frequency	0.00～Upper limit frequency setting	50.00Hz	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F0.12	0x000C	Rotation direction selection	0: The direction remains unchanged 1: The direction is reversed	0	✗
F0.13	0x000D	Acceleration time 1	0.01~650.00s	Model settings	✓
F0.14	0x000E	Deceleration time 1	0.01~650.00s	Model settings	✓
F0.15	0x000F	Jog operation frequency setting	0.00~Maximum frequency	5.00Hz	✓
F0.16	0x0010	Insufficient lower limit frequency action selection	0: Run according to the frequency command 1: Free operation stops and enters a suspended state 2: Operate at the following frequency limits 3: Zero-speed operation	2	✓
F0.17	0x0011	Upper-frequency source selection	0: Maximum Frequency Digital Reference 1: V1 Reference 2: V2 Reference 3: V3 Reference 4: HDI high-speed pulse given 5: Retention 6: Modbus communication control (RS485) 7: Expansion card	0	✓
F0.18	0x0012	Command source-to-frequency reference assignment	Units place: Keypad command macro Tens place: Terminal command macro assignment Hundreds place: Communication command macro	0000	✓

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			Thousands place: Expansion card command macro 0: No bundling 1: Keyboard number given frequency 2: Analog Signal V1 3: Analog Signal V2 4: Analog Signal V3 5: HDI high-speed pulse given 6: Simplified PLC program configuration 7: Multi-stage speed given 8: Terminal UP/DOWN control 9: Modbus communication control (RS485) A: Retention B: Retention C: Retention D: Retention		

## F0.2x Acceleration and Deceleration Time Extension

F0.20	0x0014	Frequency instruction resolution	0: 0.01Hz      1: 0.1Hz 2: 0.1Rpm      3: 1Rpm 4: 10Rpm	0	×
F0.21	0x0015	Acceleration and deceleration time reference frequency	0: Maximum frequency 1: Fixed frequency 50 Hz 2: Set frequency	0	×
F0.22	0x0016	Time unit for acceleration and deceleration	0: 1s (0 decimal places) 1: 0.1s (1 decimal places) 2: 0.01s (2 decimal places)	2	×
F0.23	0x0017	Acceleration time 1/2 switchover frequency	0.00~Maximum frequency	0.00Hz	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F0.24	0x0018	Acceleration time 2	0.01~650.00s	Model settings	√
F0.25	0x0019	Deceleration time 2	0.01~650.00s	Model settings	√
F0.26	0x001A	Acceleration time 3	0.01~650.00s	Model settings	√
F0.27	0x001B	Deceleration time 3	0.01~650.00s	Model settings	√
F0.28	0x001C	Acceleration time 4	0.01~650.00s	Model settings	√
F0.29	0x001D	Deceleration time 4	0.01~650.00s	Model settings	√
F0.30	0x001E	S-Ramp acceleration or deceleration	Units place: Regular operation of S-curve acceleration and deceleration 0: Invalid 1: Effective 2: Retention  Tens place: Seamless S-Ramp Transition 0: Invalid 1: Retention	01	×
F0.31	0x001F	S-Ramp initialization time	0.00~10.00	0.20s	×
F0.32	0x0020	S-Ramp finalization time	0.00~10.00	0.20s	×
F0.33	0x0021	S-Ramp deceleration initialization time	0.00~10.00	0.20s	×
F0.34	0x0022	S-Ramp deceleration finalization time	0.00~10.00	0.20s	×
F0.35	0x0023	Jog acceleration time	0.01~650.00s	10.00s	√
F0.36	0x0024	Jog deceleration time	0.01~650.00s	10.00s	√
F0.37	0x0025	Jog interval time	0.01~650.00s	10.00s	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F0.38	0x0026	Emergency stop time	0.01~650.00s	10.00s	√
F0.4x Other Commonly Used Parameters					
F0.40	0x0028	Carrier frequency	1.0~16.0	Model settings	√
F0.41	0x0029	PWM control mode	Units digit LED: The correlation between the carrier and temperature 0: Regardless of temperature 1: Related to temperature 2~F: Retention  Tens digit LED: The relationship between the carrier and the output frequency 0: Independent of the output frequency 1: Related to the output frequency 3: It is related to the output frequency, and the carrier switching does not undergo slow change processing 4~F: Retention  Hundreds digit LED: Random PWM Enable 0: Prohibited 1: VF is effective 3: Valid under vector conditions 4~F: Retention  Thousands digit LED: PWM modulation method 0: Only use three-phase modulation	1111	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			1: Automatic switching between dual-phase and three-phase modulation 2~F: Retention		
F0.45	0x002D	Main frequency source X gain	0.0~500.0%	100.0	×
F0.46	0x002E	Auxiliary frequency source Y gain	0.0~500.0%	100.0	×

## F1: Operational Control

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F1.0x Initiate Control					
F1.00	0x0100	Start operating mode	0: Activated by the initiation frequency  1: First, apply direct current braking and then start from the initial frequency  2: Start after tracking the rotational speed and determining the direction	0	×
F1.01	0x0101	Operating frequency	0.00~Upper limit frequency setting	0.00Hz	×
F1.02	0x0102	Maintain frequency at startup	0.00~Upper limit frequency setting	0.00Hz	×
F1.03	0x0103	Duration of startup frequency retention	0.00~60.00s	0.00s	×
F1.04	0x0104	Pre-start braking current	0.0~150.0%	60.0%	×
F1.05	0x0105	Pre-start braking time	0.0~60.0s	0.0s	×
F1.06	0x0106	Shutdown method	0: Ramp stop      1: Coast stop	0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F1.07	0x0107	Shutdown DC braking start frequency	0.00~50.00Hz	1.00Hz	×
F1.08	0x0108	Shutdown DC braking waiting time	0.00~60.00s	0.00s	×
F1.09	0x0109	Shutdown DC braking current	0.0~150.0%	60.0%	×
F1.10	0x010A	Downtime DC braking time	0.0~60.0s	0.0s	×
F1.11	0x010B	Downtime detection frequency	0.00~Upper limit frequency setting	0.50Hz	√
F1.12	0x010C	Maintain frequency during downtime	0.00~Upper limit frequency setting	0.50Hz	×
F1.13	0x010D	Maintain frequency time in the event of downtime	0.00~60.00s	0.00s	×
F1.14	0x010E	Shutdown and restart wait time	0.000~60.000s	0.010	×
F1.15	0x010F	Frequency direction alters the operating direction	0: Do not follow the direction of frequency changes 1: Follow the change in frequency direction	1	×
F1.16	0x0110	Anti-reversal selection	0: Allow forward and reverse rotation 1: Only forward rotation is allowed 2: Only reversal is permitted	0	×
F1.17	0x0111	Forward and reverse dead time	0.0~120.0s	0.0s	×
F1.20	0x0114	Power failure restart action selection	0: Invalid 1: Effective 2: Retention	0	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F1.21	0x0115	Power outage restart wait time	0.00~60.00s	0.50s	✗
F1.22	0x0116	Scheduled downtime	0.0~6500.0	0.0	✓
F1.23 0x0117 Timed shutdown settings					
Units place: Downtime sources 0: Timed downtime F1.22 1: V1      2: V2      3: V3 V1~V3 input 100% corresponds to time F1.22  Hundreds place: Units of downtime 0: Second      1: Minute  Thousands place: The timer suspension maintains operation 0: When stopped, the timer clears to zero 1: During downtime, the timer remains active  Note: When the timer time expires, the timer is forced to zero					
F1.24	0x0118	Runtime preset value	0.0~6500.0	0.0	✓
F1.3x Others and Additions					
F1.30	0x011E	Pre-excitation Time at Start	0.00~60.00s	0.00s	✗
F1.31	0x011F	Synchronous machine short-circuit braking time	0.00~60.00s	0.00s	✗
F1.34	0x0122	Zero-speed torque holds the current	0.0~150.0%	60.0%	✓
F1.35	0x0123	Zero-speed torque holding time	0.0~6000.0s	0.0	✓

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F1.37	0x0125	Select the jog shutdown mode	0: Only slow down and stop 1: Set according to F1.06	0	√
F1.40	0x0128	Jump frequency 1	0.00~Maximum frequency	0.00Hz	√
F1.41	0x0129	Jump frequency amplitude	0.00~Maximum frequency	0.00Hz	√
F1.42	0x012A	Jump frequency 2	0.00~Maximum frequency	0.00Hz	√
F1.43	0x012B	Jump frequency amplitude	0.00~Maximum frequency	0.00Hz	√
<b>F1.5x Frequency Swing Control</b>					
F1.50	0x0132	Frequency Swing Control	0: Swing frequency control is ineffective 1: Swing frequency control is effective	0	×
F1.51	0x0133	Swing frequency amplitude control	Units place: Starting mode (Retention) 0: Automatic 1: Terminal Manual Mode Tens place: Oscillation Amplitude Control: 0: Relative center frequency (Set the frequency) 1: Relative maximum frequency	00	×
F1.54	0x0136	Swing amplitude	0.0~50.0%	10.0%	×
F1.55	0x0137	Frequency of bounces	0.0~50.0%	10.0%	×
F1.56	0x0138	Triangle wave rise time	0.00~650.00	5.00s	×
F1.57	0x0139	Triangle wave descending time	0.00~650.00	5.00s	×

F2: Motor Parameter Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F2.0x Basic Parameters of The Motor and Self-Learning Selection					
F2.00	0x0200	The rated power of the motor	0.1~1000.0kW	Model settings	×
F2.01	0x0201	Rated current of the motor	0.1~3000.0A	Model settings	×
F2.02	0x0202	Rated Voltage of the Motor	0~1500V	Model settings	×
F2.03	0x0203	Rated frequency of the motor	0.01~Maximum frequency(Set F0.08~09 first)	Model settings	×
F2.04	0x0204	Rated speed of the motor	1~65000rpm	Model settings	×
F2.05	0x0205	Number of pole pairs in the motor	01~49(Note: number of pole pairs = actual number of stages of the motor ÷2); Or it can be calculated: number of pole pairs = 60x rated frequency ÷ rated speed	02	×
F2.06	0x0206	Type of motor	0: Asynchronous motors (AM) 1: Permanent magnet synchronous motor (PM)	0	●
F2.07	0x0207	Selection of motor parameter  Auto-tuning (Note: Auto-tuning requires F0.02 to be set to 0 first).	0: No operation 1: Static auto-tuning 2: Rotational auto-tuning 3: Stator resistance-only static tuning 4: Retention      5: Retention 6: Rotational Auto-Tuning 2 7: Inertia Identification 8~20: Retention	0	×
F2.09	0x0209	Motor configuration macro	0~65535	00000	×
F2.1x Advanced Motor Parameters					

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F2.10	0x020A	Asynchronous motor no-load current	0.1~3000.0A	Model settings	×
F2.11	0x020B	Asynchronous motor stator resistance	1mΩ~65535mΩ	Model settings	×
F2.12	0x020C	Asynchronous motor rotor resistance	1mΩ~65535mΩ	Model settings	×
F2.13	0x020D	Asynchronous motor stator leakage inductance	0.01mH~655.35mH	Model settings	×
F2.14	0x020E	Asynchronous motor stator inductance	0.1mH~6553.5mH	Model settings	×
F2.15	0x020F	Stator resistance per unit value	0.01~50.00%	Model settings	•
F2.16	0x0210	Normalized value of rotor resistance	0.01~50.00%	Model settings	•
F2.17	0x0211	Stator leakage mutual inductance per unit value	0.01~50.00%	Model settings	•
F2.18	0x0212	Normalized value of stator inductance	0.1~999.0%	Model settings	•
F2.19	0x0213	Actuals range selection	0~65535	Model settings	•
Synchronous Motor Parameters					
F2.20	0x0214	Synchronizer stator resistance	1mΩ~65535mΩ	Model settings	×
F2.21	0x0215	Synchronizer D-axis inductance	0.01mH~655.35mH	Model settings	×
F2.22	0x0216	Synchronizer Q-axis inductance	0.01mH~655.35mH	Model settings	×
F2.23	0x0217	Back EMF of synchronous machine	1~1500V	Model settings	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F2.24	0x0218	Encoder mounting offset angle	0.0°~360.0°	Model settings	√
F2.25	0x0219	Stator resistance per unit value		Model settings	●
F2.26	0x021A	Direct-axis reactance per unit		Model settings	●
F2.27	0x021B	Quadrature-axis reactance per unit		Model settings	●
F2.28	0x021C	Pulse width factor of synchronous motor	0.00~655.35	Model settings	×
F2.29	0x021D	Actuals unit selection	0~65535	Model settings	×

## F2.6x Motor Application Parameters

F2.60	0x023C	Synchronous motor pole search function	Units place: Closed-loop vectors 0: Close    1: Open 2: Turn on only at the first startup upon the power supply Tens place: Open-loop vector 0: Close    1: Open 2: Turn on only at the first startup upon the power supply	0010	×
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## F3: V/F Control Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F3.0x V/F Control					
F3.00	0x0300	VF curve selection	0: Straight VF curves; 1~9: The VF curves are res with powers from 1.1 to 1.9; 10: Square VF curve; 11: Custom VF curves;	00	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F3.01	0x0301	Torque boost	0.0%: Automatic torque boost 0.1~30.0%	00.0%	√
F3.02	0x0302	Torque increases the cutoff frequency	0.0~100.0%	100.0%	√
F3.03	0x0303	Slip compensation gain	0.0~200.0%	0.0%	√
F3.04	0x0304	Slip compensation limiting	0.0~300.0%	100.0%	√
F3.05	0x0305	Slip compensation filtering time	0.000~6.000s	0.200s	√
F3.06	0x0306	Oscillation suppression gain	0.0~900.0%	100.0%	√
F3.07	0x0307	Damping suppression filtering time	0.0~100.0S	1.0	√
F3.08	0x0308	Output voltage percentage	25.0~120.0%	100.0%	×
F3.09	0x0309	The lower cutoff frequency for the current limiting	0.00~50.00Hz	0.00Hz	√

## F3.1x Custom V/F Curves

F3.10	0x030A	Set voltage V1	0.0~100.0%	3.0%	×
F3.11	0x030B	Set frequency F1	0.00~Maximum frequency	1.00Hz	×
F3.12	0x030C	Set voltage V2	0.0~100.0%	28.0%	×
F3.13	0x030D	Set frequency F2	0.00~Maximum frequency	10.00Hz	×
F3.14	0x030E	Set voltage V3	0.0~100.0%	55.0%	×
F3.15	0x030F	Set frequency F3	0.00~Maximum frequency	25.00Hz	×
F3.16	0x0310	Set voltage V4	0.0~100.0%	78.0%	×
F3.17	0x0311	Set frequency F4	0.00~Maximum frequency	37.50Hz	×
F3.18	0x0312	Set voltage V5	0.0~100.0%	100.0%	×
F3.19	0x0313	Set frequency F5	0.00~Maximum frequency	50.00Hz	×

## F3.2x V/F Separation Control

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F3.20	0x0314	V/F separation voltage is given	Units place: Channel A: 0: Digital setting (F3.21 setpoint) 1: Retention 2: V1 Reference 3: V2 Reference 4: V3 Reference 5: HDI high-speed pulse given 6: PID output given 7: Modbus communication control (RS485) 8: Expansion card 9: Numerical setting (F3.25 setting)  Tens place: Channel B: Hundreds place: Method: 0: A      1: B      2: A+B 3: A-B      4: MIN(A,B) 5: MAX(A,B)	000	√
F3.21	0x0315	V/F split output voltage digital setting	0.00%-110.00%	0.00%	√
F3.22	0x0316	V/F separation voltage acceleration time	0.00-100.00s	10.00s	√
F3.23	0x0317	V/F separation voltage reduction time	0.00-100.00s	10.00s	√
F3.24	0x0318	V/F detached shutdown mode	0: The output voltage and output frequency can adjust their speeds without affecting each other 1: After the output voltage drops to 0V, the output frequency drops again	0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F3.25	0x0319	Voltage value setting	0.00-600.00V	0.00V	√

F4: Vector Control Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F4.0x Speed Loop Control					
F4.00	0x0400	Speed Loop (ASR) Proportional Gain 1	0.01～300.00	10.00	√
F4.01	0x0401	Speed Loop (ASR) Integration Time 1	0.000～6.000s	0.100	√
F4.02	0x0402	Speed Loop (ASR) switching frequency1	5.00～Maximum frequency	10.00	√
F4.03	0x0403	Speed Loop (ASR) Proportional Gain 2	0.01～300.00	10.00	√
F4.04	0x0404	Speed Loop (ASR) Integration Time 2	0.000～6.000s	0.050	√
F4.05	0x0405	Speed Loop (ASR) switching frequency2	0.00～10.00	5.00	
F4.06	0x0406	Speed Loop (ASR) Filtering Time 1	0.0～100.0ms	0.0ms	√
F4.07	0x0407	Speed Loop (ASR) Filtering Time 2	0.0～100.0ms	0.0ms	√
F4.08	0x0408	Retain parameters	-	-	-
F4.09	0x0409	Retain parameters	-	-	-
F4.1x Current Loop Control and Torque Limit Values					
F4.10	0x040A	D-axis Current loop proportional gain	0.001～8.000	1.000	√
F4.11	0x040B	D-axis Current loop integral gain	0.001～8.000	1.000	√
F4.12	0x040C	Q-axis Current loop proportional gain	0.001～8.000	1.000	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F4.13	0x040D	Q-axis Current loop integral gain	0.001~8.000	1.000	√
F4.14	0x040E	Retain parameters	-	-	-
F4.15	0x040F	Electric state torque limit	0.0~400.0%	250.0	√
F4.16	0x0410	Power generation state torque limit	0.0~400.0%	250.0	√
F4.17	0x0411	Vector IF controls the frequency	0.0~100.0%	0.0%	√
F4.18	0x0412	Vector IF controls the current	0.0~400.0%	60.0%	√
F4.19	0x0413	Retain parameters	-	-	-

## F4.2x Torque Optimization Control

F4.20	0x0414	Synchronous motor low-frequency pull current	0.0~50.0%	30.0	√
F4.21	0x0415	Synchronous motors draw current at a high frequency	0.0~50.0%	10.0%	√
F4.22	0x0416	The current frequency of synchronous motor	0.0~100.0%	10.0%	√
F4.23	0x0417	Asynchronous motor slip compensation	0.0~250.0%	100.0%	√
F4.24	0x0418	Initial value of starting torque	0.0~250.0%	0.0%	√
F4.25	0x0419	Flux controls the gain	0.0~1000.0	0.0%	√
F4.26	0x041A	Magnetic flux control integral gain	0.0~1000.0	0.0%	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F4.27	0x041B	Retain parameters	-	-	-
F4.28	0x041C	Retain parameters	-	-	-
F4.29	0x041D	Retain parameters	-	-	-

## F4.3x Magnetic Flux Optimization Control

F4.30	0x041E	Weak magnetic feed-forward coefficient	0.0~500.0	10.0%	√
F4.31	0x041F	Field-Weakening control gain	0.0~500.0%	10.0%	√
F4.32	0x0420	Field-Weakening current limit	0.0~250.0%	120.0%	√
F4.33	0x0421	Field-Weakening voltage coefficient	0.0~120.0%	100.0%	√
F4.34	0x0422	Field-Weakening voltage limit	0.0~400.0%	135.0%	√
F4.35	0x0423	Over-Excitation braking gain	0.0~500.0%	100.0%	√
F4.36	0x0424	Over-Excitation braking clamp	0.0~250.0%	100.0%	√
F4.37	0x0425	Energy-Saving operation	0: Close 1: Open 2: Retention	0	√
F4.38	0x0426	Energy-saving field weakening limit	0.0~80.0%	50.0%	√
F4.39	0x0427	Energy-Saving filter coefficient	0.000~6.000s	0.010s	√
F4.40	0x0428	Retain parameters	-	-	-

## F5: Torque Control Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F5.0x Torque Control					

F5.00	0x0500	Torque control selection	0: Speed control method limits torque 1: Torque control mode limits the speed.	0	x
F5.01	0x0501	Digital torque setting	-300.0~300.0%	0.0%	✓
F5.02	0x0502	Torque instruction is given to the source	0: The number is given F5.01 1: Analog Signal V1 2: Analog Signal V2 3: Analog Signal V3 4: HDI input 5: PID output given 6: Modbus communication control (RS485) 7: Extended communication card settings	0	x
F5.03	0x0503	Torque filtering time	0.000~6.000s	0.100s	✓
F5.04	0x0504	Torque is given a proportional factor	0.0~300.0	100.0	✓
F5.05	0x0505	Positive torque limiting channel	0: The number is given F5.01 1: Analog Signal V1 2: Analog Signal V2 3: Analog Signal V3 4: HDI input 5: PID output given 6: Modbus communication control (RS485) 7: Expansion card settings	0	✓
F5.06	0x0506	Negative torque limit channel	0: The number is given F5.01 1: Analog Signal V1 2: Analog Signal V2 3: Analog Signal V3 4: HDI input 5: PID output given 6: Modbus communication	0	✓

			control (RS485) 7: Expansion card settings		
F5.07	0x0507	Torque limit scale factor	0.0~300.0	100.0	√
F5.08	0x0508	Forward to the upper-frequency channel	0: The number is given F5.10 1: Analog Signal V1 2: Analog Signal V2 3: Analog Signal V3 4: HDI input 5: PID output given 6: Modbus communication control (RS485) 7: Expansion card settings	0	√
F5.09	0x0509	Inverts the upper-frequency channel	0: The number is given F5.11 1: Analog Signal V1 2: Analog Signal V2 3: Analog Signal V3 4: HDI input 5: PID output given 6: Modbus communication control (RS485) 7: Expansion card settings	0	√
F5.10	0x050A	Forward rotation upper limit frequency	0.0~100.0	100.0	√
F5.11	0x050B	Reversal upper limit frequency	0.0~100.0	100.0	√

## F6: Encoder Parameter Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F6.0x Encoder					
F6.00	0x0600	Velocity feedback encoder type	0: ABZ encoder 1: Rotating transformer 2: Absolute encoders 3: ABZ encoder (with UVW)	0	✗

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			4: ABZ incremental grid encoder (Linear Motor)		
F6.01	0x0601	Encoder orientation	0: Direction consistency 1: Direction inverted	0	×
F6.02	0x0602	ABZ encoder Z-pulse detection selection	0: Close      1: Open	1	×
F6.03	0x0603	Number of ABZ encoder lines	1~16384	2500	×
F6.04	0x0604	Number of resolver poles	1~49	1	×
F6.05	0x0605	Encoder ratio molecule	1~32767	1	×
F6.06	0x0606	Encoder drive denominator	1~32767	1	×
F6.07	0x0607	Encoder velocity filtering time	0.00~10.00ms	0.30	√
F6.08	0x0608	Encoder disconnection detection time	0.000~6.000	0.050	√
F6.09	0x0609	Encoder crossover output factor	00001~32767	1	√
F6.10	0x060A	Encoder UVW phase sequence	0: Positive direction 1: Opposite direction	0	×
F6.11	0x060B	Encoder UVW offset angle	0.0°~360.0°	0.0°	×
F6.12	0x060C	UVW anomaly detection time	0.000~60.000s	0.500s	×
F6.13	0x060D	Magnetic number blanking setting	0-8	2	√
F6.14	0x060E	Magnetic multi-turn zeroing	0-9999	0	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F6.15	0x060F	Retain parameters	-	-	-
F6.16	0x0610	Z-pulse loss detection revolutions	0~65535	4	√
F6.17	0x0611	Z-pulse tolerance range	0~65535	0	√
F6.18	0x0612	Z-pulse learning current	0~65535	0	√
F6.19	0x0613	Encoder debugging register	Units place: PG feedback monitoring 0: Monitor PG feedback only under closed-loop vector. 1: Enable PG feedback monitoring also under open-loop vector Tens place: Retention Hundreds place: Retention Thousands place: 1: Close the filter	0	√
F6.20	0x0614	Encoder signal bandwidth	0~8000	300	√
F6.21	0x0615	Speed measurement cycle	0~10.000	0	√
F6.22	0x0616	Speed measurement mode	0~65535	0	√
F6.23	0x0617	Linear motor pole pitch	0.01~300.00mm	20.00	×
F6.24	0x0618	Linear encoder magnetic period	0.01~300.00mm	2.00	×
F6.25	0x0619	Linear encoder resolution	0.00~300.00um	1.00	×
F6.26	0x061A	Linear scale encoder line count	1~10000	500	•

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F6.27	0x061B	Encoder gear ratio numerator	1~32767	1	•
F6.28	0x061C	Encoder gear ratio denominator	1~32767	10	•

## F7: Control Enhancement Parameter Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F7.0x Current/Voltage Protection Control					
F7.00	0x0700	Overcurrent suppression function	0: Inhibition has been effective 1: Acceleration and deceleration are effective; constant speed is invalid	0	√
F7.01	0x0701	Overcurrent threshold	0.0~300.0%	160.0%	√
F7.02	0x0702	Overcurrent suppression gain	0.0~500.0%	100.0%	√
F7.03	0x0703	DC bus overvoltage suppression	Units digit LED: Overvoltage suppression control 0: Prohibited 1: Open Tens digit LED: Over-excitation control 0: Close 1: Deceleration is on 2: Enabled while running	11	✗
F7.04	0x0704	Overvoltage threshold	T4: 650-800 T2: 340-400	T4: 750 T2: 370	✗
F7.05	0x0705	Overvoltage suppression gain	0.0~500.0%	100.0%	√
F7.06	0x0706	DC bus under voltage suppression	0: Prohibit 1: Enable	0	✗
F7.07	0x0707	Under voltage threshold	T4: 350-450 T2: 180-260	T4: 430 T2: 240	✗

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F7.08	0x0708	Under voltage suppression gain	0.0~500.0%	100.0%	√
F7.2x Speed Tracking Control					
F7.20	0x0714	Speed tracking mode	Units digit LED: Search Method 0: Search from the maximum frequency 1: Search from the frequency of downtime Tens digit LED: Reverse search 0: Close      1: Open Hundreds digit LED: Search for the source 0: Software Search 1: Hardware Search Thousands digit LED: Retention 0: Retention    1: Retention	0000	×
F7.21	0x0715	Speed tracking detection threshold	0.00~60.00s	0.50s	×
F7.22	0x0716	Speed tracking stop delay	0.00~60.00s	1.00s	×
F7.23	0x0717	Speed tracking excitation current	0.0~400.0%	120.0	×

## F8: Operator Parameter Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F8.0x Environmental Setting Mode					
F8.00	0x0800	User Password	00000~65535	00000	×
F8.02	0x0802	Parameter protection	0: All parameters except this function code cannot be modified 1: Except for the parameters modified by this function code and the up and down keys of the	2	√

			keyboard, it is forbidden to modify 2: All parameters can be modified		
F8.03	0x0803	Parameter restoration	0: Not initialized 11: Select the set value according to the application and select the parameters (excluding the motor parameters) 22: Initialization of the parameters used 33: Clear fault logs	0000	×
F8.04	0x0804	Keyboard parameter copy	0: Non-functional 11: Upload parameters to the keyboard 22: Download the parameters to the inverter	00	×
F8.06	0x0806	Load type selection	0: G type machine, general 1: P-type machine, fan, water pump	0	×
F8.07	0x0807	Expansion card settings	0: Not selected 1: ABZ PG card 2: Resolver PG card 3: Absolute PG card 10: CAN expansion card 11: 485 expansion card	0000	√
F8.1x Button Operation					
F8.10	0x080A	Key lock selection	0: Not locked 1: Keyboard function parameter modification lock 2: Functional parameters and non-start/stop key locking 3: Functional parameters and buttons are fully locked 4: Retention	0	√

F8.11	0x080B	Keyboard STOP key setting	Units digit LED: STOP double-click function 0: Non-functional 1: Free Parking (All Command Channels) Tens digit LED: STOP key change function selector 0: Non-keyboard control is invalid 1: Non-keyboard control mode is shut down by shutdown mode 2: Free shutdown in non-keyboard control mode	00	x
F8.12	0x080C	Multi-function key selection	0: Invalid 1: Keyboard point moves forward 2: Free parking (all command channels) 3: Keyboard point move backward 4: Keyboard reverse operation 5: Menu switch function (not saved after power off) 6: Command switch function (valid when stopped)(Pressing MFK must be followed by pressing the Enter key within 3 seconds to take effect) 7: Command switch function (valid during both operation and stopping) 8: The main display line shows that data content returns to its initial state.	8	x

			Units Place: Command Switching Order 0: Keyboard <-> Terminal 1: Keyboard <-> Communication 2: Terminal <-> Communication 3: Keyboard <-> Terminal <-> Communication 4: Keyboard <-> Terminal <-> Communication <-> Extended Communication Tens Place: Menu Switching Order 0: User Menu Mode <-> Advanced Menu Mode 1: User Menu Mode <-> Non-Factory Parameter Mode 2: User Menu Mode <-> Basic Menu Mode 3: Basic Menu Mode <-> Advanced Menu Mode <-> User Menu Mode 4: Basic Menu Mode <-> Advanced Menu Mode <-> User Menu Mode <-> Non-Factory Parameter Mode	0	x
F8.14	0x080E	Retain parameters			
F8.15	0x080F	Retain parameters			
F8.16	0x0810	Retain parameters			
F8.17	0x0811	Multi-line keyboard second-row digital tube display parameter address	Monitoring parameter number Dx.yy	002	✓
F8.2x Status interface cyclic monitoring					

F8.20	0x0814	Keyboard cyclic display parameter 1		002	√
F8.21	0x0815	Keyboard cyclic display parameter 2		000	√
F8.22	0x0816	Keyboard cyclic display parameter 3	Units digit and tens digit LED: Monitors the yy setting in the dx.yy parameter number 00~63	003	√
F8.23	0x0817	Keyboard cyclic display parameter 4		005	√
F8.24	0x0818	Keyboard cyclic display parameter 5	Hundreds digit LED: Monitors the xx setting in the parameter number dx.yy 0~7	008	√
F8.25	0x0819	Keyboard cyclic display parameter 6		000	√
F8.26	0x081A	Keyboard cyclic display parameter 7		000	√
F8.27	0x081B	Keyboard cyclic display parameter 8		000	√

## F8.3x Monitoring Parameter Control

F8.30	0x081E	Retain parameters	-	-	-
F8.31	0x081F	Retain parameters	-	-	-
F8.35	0x0823	Power display selection	Units digit LED: Power display dimension 0: Power Display Percentage (%) 1: Power display kilowatt (KW) Tens digit LED: Retention Hundreds digit LED: Retention Thousands digit LED: Retention	0002	√
F8.36	0x0824	Power display factor	0.0~500.0%	100.0%	√
F8.37	0x0825	Rotational speed display factor	0.0~500.0%	100.0%	√

## F9: Parameter Group Protection

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F9.0x Current Protection					

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F9.01	0x0901	Output ground fault protection	Short-to-ground detection 0: Close 1: Power-on detection 2: Tested before each run	1	×
F9.02	0x0902	Output phase loss /Imbalance protection	Units place: 0: Close 1: Turn on the output phase loss detection Tens place: Output Current Balance Detection: 0: Forbidden 1: Protect the action and park freely 2: Alarm and continue to run 3~F: Retention	11	×
F9.03	0x0903	Current imbalance threshold	0~500%	160%	×
F9.04	0x0904	Current imbalance filter time	0.0~60.0s	2.0s	×
F9.05	0x0905	Retain parameters	-	-	-
F9.06	0x0906	Output current limit warning detection time	0.0~60.0s	5.0s	×
F9.07	0x0907	Continuous current limit fault detection	0.0~400.0s	60.0s	×
F9.1x Voltage Protection					
F9.10	0x090A	Dynamic braking enable	0: Close 1: Turn on the energy consumption brake and turn off the overpressure suppression 2: Enable energy consumption braking and overvoltage	2	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			suppression functions at the same time		
F9.11	0x090B	Dynamic braking activation voltage	T4: 650-800 (default 750V) T2: 350-390 (default 360V)	T4:750V T2:360V	√
F9.12	0x090C	Braking IGBT fault protection	Braking IGBT anomaly action selection 0: No detection 1: Warning and continue running 2: Protective actions and free parking	0	√
F9.13	0x090D	DC bus undervoltage threshold	T4: 300-400(default 320) T2: 160-240(default 190)	T4: 320 T2: 190	×
F9.15	0x090F	Input phase loss protection	Units digit LED: Software input for out-of-phase action selection 0: No action 1: Protect the action and park freely 2: Alarm and continue to run Tens digit LED: Hardware input out-of-phase action selection 0: No action 1: Protect the action and park freely 2: Alarm and continue to run Hundreds digit LED: Abnormal action selection of buffer relays 0: No action 1: Protect the action and park freely 2: Alarm and continue to run	001	×
F9.16	0x0910	Phase loss detection threshold	0.0~30.0%	10.0%	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F9.2x Temperature Protection					
F9.20	0x0914	Fan control mode selection	0: After powering on, the fan keeps running 1: Control according to the operation command 2: Control according to temperature	1	√
F9.21	0x0915	Fan control delay time	0.00-600.00S	30.00	√
F9.22	0x0916	Inverter overheat pre-alarm threshold (oH1)	0.0-85.0°C	80.0	√
F9.23	0x0917	Overtemperature protection response	Units place: Temperature detection circuit fault action Tens place: PT100 fault action selection 0: No action 1: Protect the action and park freely 2: Alarm and continue to run	11	√
F9.25	0x0919	Motor overload protection model	0: Ordinary motor 1: Inverter motor (50Hz) 2: Inverter motor (60Hz) 3: No cooling fan motor	0	√
F9.26	0x091A	Motor insulation class	0: Insulation class A 1: Insulation class E 2: Insulation class B 3: Insulation class F 4: Insulation class H 5: Special Grade S	3	✗

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F9.27	0x091B	Motor duty cycle	0: S1 working system (continuous work); 1: Retention; 2: S2 working system 3: S3 working system 4: S4 working system 5: S5 working system 6: S6 working system 7: S7 working system 8: S8 working system 9: S9 working system	0	x
F9.28	0x091C	Motor overload threshold	0.0~130.0%	110.0%	x
F9.29	0x091D	Motor overload current factor	0.0~250.0%	100.0%	x

## F9.3x Load Protection

F9.30	0x091E	Load warning detection configuration	Units digit LED: Underload checkout selection (AL.07) 0: Not detected 1: Detect excessive load 2: Detect excessive load only at constant speed 3: Detect insufficient load 4: Detect insufficient load only at constant speed 5: Retention      6: Retention Tens digit LED: Alarm option 1 0: Alarm, continue to run 1: Fail-safe action and free stop Hundreds digit LED: Overload	0000	x
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Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			detection selection (AL.08) 0: Not detected 1: Detect excessive load 2: Detect excessive load only at constant speed 3: Detect insufficient load 4: Detect insufficient load only at constant speed 5: Retention      6: Retention Thousands digit LED: Alarm option 2 0: Alarm, continue to run 1: Fail-safe action and free stop		
F9.31	0x091F	Load warning level 1 threshold	0.0~200.0%	130.0%	×
F9.32	0x0920	Load warning level 1 delay time	0.0~60.0s	5.0sec	×
F9.33	0x0921	Load warning level 2 threshold	0.0~200.0%	30.0%	×
F9.34	0x0922	Load warning level 2 delay time	0.0~60.0s	5.0s	×
F9.35	0x0923	Stall detection response	0: Not detected 1: Alarm shutdown when detection is valid (A.Blo) 2: The alarm does not stop when the detection is valid (E.Blo)	2	×
F9.36	0x0924	Stall speed threshold	0.0~600.0rpm	3.0rpm	×
F9.37	0x0925	Stall detection time	0.0~600.0s	5.0s	×
F9.38	0x0926	PT100 temperature protection threshold	0~200°C	140	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F9.39	0x0927	PT100 temperature display gain	0~200.0%	100.0%	×
F9.4x Speed Protection					
F9.40	0x0928	Speed deviation protection response	Units digit LED: Check out the selection 0: Not detected 1: Detection at constant speed only 2: Always test  Tens digit LED: Alarm selection 0: Free shutdown and fault reporting 1: Alarm and continue running	00	×
F9.41	0x0929	Speed deviation threshold	0.0~60.0%	10.0%	×
F9.42	0x092A	Speed deviation detection time	0.0~60.0s	2.0s	×
F9.43	0x092B	Overspeed protection response	Units digit LED: Check out the selection 0: Not detected 1: Detection at constant speed only 2: Always test  Tens digit LED: Alarm selection 0: Free shutdown and fault reporting 1: Alarm and continue running	02	×
F9.44	0x092C	Overspeed threshold	0.0~150.0%	110.0%	×
F9.45	0x092D	Overspeed detection time	0.000~2.000s	0.100s	×
F9.5x Other Protections					

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
F9.50	0x0932	EEPROM error protection response	EEPROM abnormal action selection 0: Protect the action and park freely 1: Alarm and continue to run	0	√
F9.60	0x093C	Auto-Restart attempts	00~10	00	×
F9.61	0x093D	Auto-Restart delay time	0.1~100.0s	1.0s	×
F9.7x Maintenance Function					
F9.70	0x0946	Total operating time setting	Set in units of 10 hours 0~65535	00010	×
F9.71	0x0947	Total power-on-time setting	0~65535	00010	×
F9.72	0x0948	Component maintenance alarm mode	0; Invalid 1: Valid Units place: Cooling fan Tens place: The main contractor Hundreds place: Main capacitor Thousands place: IGBT modules	0000	√
F9.73	0x0949	Cooling fan maintenance threshold	It is set in hours 00000~65535	00100	×
F9.74	0x094A	Main contactor maintenance threshold	0.0~150.0%	0.1%	×
F9.75	0x094B	DC bus capacitor maintenance threshold	0.0~150.0%	0.1%	×
F9.76	0x094C	IGBT module maintenance threshold	0.0~150.0%	0.1%	×

## A0: Input Terminal(S, HDI)

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A0.0x Selection of Digital Input Terminal Functions					
A0.00	0x0A00	Terminal active state configuration	BIT0~BIT7: S1~S8 0 - Positive logic 1 - Negative logic	00	√
A0.01	0x0A01	Startup protection mode	Units digit LED: Terminal start protection in case of exit abnormality 0: Close 1: Open Tens digit LED: Jog terminal start protection in case of exit abnormality 0: Close 1: Open Hundreds digit LED: Terminal starting protection when switching the command channel to the terminal 0: Close 1: Open Thousands digit LED: Free shutdown, emergency shutdown, open terminal activation protection when forced shutdown command is in effect 0: Close 1: Open	1111	×
A0.02	0x0A02	Terminal S1 function selection	0: No function 1: 3-Wire operation control 2: Command switch to keypad 3: Command switch to terminals 4: Command switch to Modbus (RS485) 5: Command switch to extension card	06	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change	
A0.03	0xA03	Terminal S2 function selection	6: Forward run 8: Jog forward 10: External stop (controlled stop) 11: External coast-to-stop 12: External reset input 13: Run inhibit 14: Frequency setting X toggles to Y 15: Switch the frequency setting combination to X 16: Switch the frequency setting combination to Y 17: Frequency increase (UP) 18: Frequency decrease (DOWN) 19: Aux. frequency clear 20: Accel/Decel ramp 1 select 21: Accel/Decel ramp 2 select 22: Accel/Decel inhibit 23: Pre-Excitation command 24: DC braking input 25: Stop DC braking 26: Multi-Speed 1 / Position 1 27: Multi-Speed 2 / Position 2 28: Multi-Speed 3 / Position 3 29: Multi-Speed 4 / Position 4 30: Multi-Speed pause 31: PLC inhibit(Retention) 32: PLC stop memory clear 33: PLC operation pause 34: PID loop pause 35: PID integral pause 36: PID direct/reverse action 37: PID integral reset 38: Multi-Step closed-loop 1 39: Multi-Step closed-loop 2 40: Multi-Step closed-loop 3 41: Multi-Step closed-loop 4 42: Swing frequency pause 43: Swing frequency reset 44: Speed/Torque mode switch 45: Servo control switch 46: External fault input 47: External interrupt input 48: Motor 1/2 selection 49: Counter input (<200Hz)	07	x	
A0.04	0xA04	Terminal S3 function selection	17	x		
A0.05	0xA05	Terminal S4 function selection	18	x		
A0.06	0xA06	Terminal S5 function selection	12	x		

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A0.07	0x0A07	Terminal S6 function selection	50: Counter hold 51: Counter reset 52: Aux frequency disable 53: Frequency jog 54: Emergency stop 55: Process PID gain switch 56: Run time pause 57: Run time reset 58: S-Curve acceleration/deceleration disable 59: CAN master switch 60: High-Speed pulse input (S5/S6 only) 61: Pulse direction input (Servo mode) 62: Speed control position compensation is prohibited 63: Upper limit (FWD inhibit) 64: Lower limit (REV inhibit) 65~69: Retention 70: Retention 71: Pulse input inhibit 72: Position error clear 73: Gain switch (Retention) 74: Zero point input(Retention) 75: Homing enable(Retention) 76: Forward drive inhibit 77: Reverse drive inhibit 78: Electronic gear switch (Retention) 79: Multi-Position enable 80: Position is given to switch to a multi-segment position 81: Multi-Position reset 80~89: Retention 90~95: Retention	0	x
A0.08	0x0A08	Terminal S7 function selection		0	x
A0.09	0x0A09	Terminal S8 function selection		0	x
A0.1x Terminal Action Control					
A0.10	0x0A0A	Terminal start/stop mode selection	0: 2-Wire type 1 1: 2-Wire type 2 2: 3-Wire type 1 3: 3-Wire type 2	0	x

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A0.11	0x0A0B	Terminal UP/DOWN control selection	0: Frequency power-down storage 1: The frequency is not stored when the power is off 2: Adjustable during operation, zero shutdown	0	✗
A0.12	0x0A0C	UP/DOWN rate setting	0.01~50.00Hz/s	0.50Hz/s	✓
A0.13	0x0A0D	Counter preload value	00000~65000	500	✓
A0.14	0x0A0E	Counter target value	00000~65000	1000	✓
A0.15	0x0A0F	Counter input divider	0000-6000	0	✓
A0.16	0x0A10	Counter input source	0: Normal S terminal 1: HDI high-speed pulse input 2: Speed Feedback Card (PG Card)	0	✓

## A0.2x Detection Delay of S1-S8 Terminals

A0.20	0x0A14	Retain parameters	-	-	-
A0.21	0x0A15	Retain parameters	-	-	-
A0.22	0x0A16	S1 active detection delay	0.000~6.000s	0.010	✓
A0.23	0x0A17	S1 inactive detection delay	0.000~6.000s	0.010	✓
A0.24	0x0A18	S2 active detection delay	0.000~6.000s	0.010	✓
A0.25	0x0A19	S2 inactive detection delay	0.000~6.000s	0.010	✓
A0.26	0x0A1A	S3 active detection delay	0.000~6.000s	0.010	✓
A0.27	0x0A1B	S3 inactive detection delay	0.000~6.000s	0.010	✓

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A0.28	0x0A1C	S4 active detection delay	0.000~6.000s	0.010	√
A0.29	0x0A1D	S4 inactive detection delay	0.000~6.000s	0.010	√
A0.30	0x0A1E	S5 active detection delay	0.000~6.000s	0.010	√
A0.31	0x0A1F	S5 inactive detection delay	0.000~6.000s	0.010	√
A0.32	0x0A20	S6 active detection delay	0.000~6.000s	0.010	√
A0.33	0x0A21	S6 inactive detection delay	0.000~6.000s	0.010	√
A0.34	0x0A22	S7 active detection delay	0.000~6.000s	0.010	√
A0.35	0x0A23	S7 inactive detection delay	0.000~6.000s	0.010	√
A0.36	0x0A24	S8 active detection delay	0.000~6.000s	0.010	√
A0.37	0x0A25	S8 inactive detection delay	0.000~6.000s	0.010	√
A0.38	0x0A26	Retain parameters	-	-	-
A0.39	0x0A27	Retain parameters	-	-	-

## A0.4x HDI High-Speed Pulse Input Port

A0.40	0x0A28	High-Speed pulse input source	0: S5 (max 50.000KHz) 1: Expansion port S6 (max 100.00KHz)	1	×
A0.41	0x0A29	HDI minimum input frequency	0.00~50.00kHz (0 for A0.40) 0.00~100.00kHz (1 for A0.40)	0.00kHz	√
A0.42	0x0A2A	HDI Min.Freq. mapping value	0.00~100.00%	0.00%	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A0.43	0x0A2B	HDI maximum input Frequency	0.00~50.00kHz (0 for A0.40) 0.00~100.00kHz (1 for A0.40)	10.00	√
A0.44	0x0A2C	HDI Max.Freq. mapping value	0.00~100.00%	100.00 %	√
A0.45	0x0A2D	HDI filter time constant	0.000~9.000s	0.100s	√
A0.46	0x0A2E	HDI cutoff frequency	0.000~1.000kHz	0.010kHz	√

A1: Output Terminal(DO, TA-TB-TC)

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.0x Digital, Relay Output Terminal					
A1.00	0x0B00	Output terminal active state	BIT0~BIT3: DO1, TA1, TA2, TA3 relays 0 - Positive logic 1- Anti-logic	0	√
A1.01	0x0B01	DO1 function selection	0: Signal during inverter operation 1: Motor reverse indication 2: Frequency arrival 3: Frequency level detection signal 1 (FDT1) 4: Frequency level detection signal 2 (FDT2) 5: Zero speed operation 6: Frequency upper limit 7: Frequency lower limit 8: Overload warning 9: Underload warning 10: Current limit warning 11: Customize the alarm output	0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.02	0x0B02	Relay1 (TA1/TB1/TC1) function	12: Undervoltage blocking 13: External fault stop 14: Inverter warning 15: Inverter fault 16: Ready-to-Run 17: Completion of the simple PLC stage / Completion of the multi-stage positioning phase 18: Simple PLC cycle completion/Multi-stage position ring completion 19: Preset counter active 20: Target counter reached 21: Modbus control active 22: Expansion of communication card control actions (Retention) 23: PID hold detected 24: PID low feedback	15	√
A1.03	0x0B03	Relay2 (TA2/TC2) function	25: PID high feedback 26: Timed stop reached 27: Runtime preset met 28: Brake output(Retention) 29: Retention 30: Servo positioning done 31: Servo approaching 32: AO1 simulates detection action 1 33: AO1 simulates detection action 2 45: Over/Under Torque Warning Detection 1 (Retention) 46: Over/Under Torque Warning	0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.04	0x0B04	Expansion relay (TA3/TB3/TC3) function	Detection 2 (Retention) 47: Torque Control Frequency Limit 48: Torque control torque limit 50: Comparator 1 Output 51: Comparator 2 Output 52~63: Retention 60: High-speed pulse HDO output function (Dedicated to DO1)	63	√
A1.05	0x0B05	Frequency arrival detection band	0.00~50.00Hz	2.50Hz	√
A1.06	0x0B06	Zero-speed detection band	0.00~10.00Hz	0.50Hz	√
A1.07	0x0B07	FDT1 frequency threshold	0.00~Maximum frequency	50.00Hz	√
A1.08	0x0B08	FDT1 hysteresis band	0.00~Maximum frequency	49.00Hz	√
A1.09	0x0B09	FDT2 frequency threshold	0.00~Maximum frequency	25.00Hz	√
A1.10	0x0B0A	FDT2 hysteresis band	0.00~Maximum frequency	24.00Hz	√
A1.11	0x0B0B	Pulse output max frequency	00000~65535	00000	√
A1.12	0x0B0C	Pulse output filter time	00000~65535	00000	√
A1.13	0x0B0D	Simulated detection action 1 low value	0.0~100.0%	20.0	√
A1.14	0x0B0E	Simulated detection action 1 high value	0.0~100.0%	100.0	√
A1.15	0x0B0F	Simulated detection action 2 low value	0.0~100.0%	40.0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.16	0x0B10	Simulated detection action 2 high value	0.0~100.0%	100.0	√
A1.17	0x0B11	Simulated detection action 3 low value	0.0~100.0%	60.0	√
A1.18	0x0B12	Simulated detection action 3 high value	0.0~100.0%	100.0	√
A1.19	0x0B13	Custom alarm code mapping	00~20	00	√
A1.24	0x0B18	DO1 terminal closure delay	0.000~60.000s	0.010s	√
A1.25	0x0B19	TA1 relay closure delay	0.000~60.000s	0.010s	√
A1.26	0x0B1A	TA2 relay closure delay	0.000~60.000s	0.010s	√
A1.27	0x0B1B	TA3 relay closure delay	0.000~60.000s	0.010s	√
A1.28	0x0B1C	DO1 terminal disconnection delay	0.000~60.000s	0.010s	√
A1.29	0x0B1D	TA1 relay disconnect time	0.000~60.000s	0.010s	√
A1.30	0x0B1E	TA2 relay disconnect time	0.000~60.000s	0.010s	√
A1.31	0x0B1F	TA3 relay disconnect time	0.000~60.000s	0.010s	√

## A1.5x Monitor Parameter Comparator Output

A1.50	0x0B32	Comparator 1 monitoring source	Units place and tens place: Monitor the yy setting in the dx.yy parameter number 00~63 Hundreds place: Monitor the xx parameter number dx.yy and set it to 0~7	001	√
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Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.51	0x0B33	Comparator 1 upper threshold	0.00-655.35	30.00	√
A1.52	0x0B34	Comparator 1 lower threshold	0.00-655.35	10.00	√
A1.54	0x0B36	Comparator 1 action	0: Continue operation (digital terminal output only) 1: Call the police and park freely 2: Warn and continue running 3: Forced shutdown	0	√
A1.55	0x0B37	Comparator 2 monitoring source	Units place and tens place: Monitor the yy setting in the dx.yy parameter number 00~63 Hundreds place: Monitor the xx parameter number dx.yy and set it to 0~7	002	√
A1.56	0x0B38	Comparator 2 upper threshold	0.00-655.35	0.20	√
A1.57	0x0B39	Comparator 2 lower threshold	0.00-655.35	0.10	√
A1.59	0x0B3B	Comparator 2 action	0: Continue operation (digital terminal output only) 1: Call the police and park freely 2: Warn and continue running 3: Forced shutdown	0	√

## A1.6x Virtual Input and Output Terminals

A1.60	0x0B3C	Virtual VS1 terminal function selection	Same as the input S terminal function	00	×
A1.61	0x0B3D	Virtual VS2 terminal function selection		00	×
A1.62	0x0B3E	Virtual VS3 terminal function selection		00	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.63	0x0B3F	Virtual VS4 terminal function selection		00	✗
A1.64	0x0B40	VS terminal valid status source	0: Connects internally to the virtual VSn 1: Link with the physical terminal Sn 2: Whether the function code setting is valid (A1.65) Units digit LED: Virtual VS1 Tens digit LED: Virtual VS2 Hundreds digit LED: Virtual VS3 Thousands digit LED: Virtual VS4	0000	✓
A1.65	0x0B41	Setting the effective status of the virtual VS terminal function code	0: Invalid; 1: Effective Units place: Virtual VS1 Tens place: Virtual VS2 Hundreds place: Virtual VS3 Thousands place: Virtual VS4	0000	✓
A1.66	0x0B42	Virtual VY1 output selection	Same as the output terminal function	63	✓
A1.67	0x0B43	Virtual VY2 output selection		63	✓
A1.68	0x0B44	Virtual VY3 output selection		63	✓
A1.69	0x0B45	Virtual VY4 output selection		63	✓
A1.70	0x0B46	VY1 outputs ON delay time	0.000~60.000s	0.010s	✓
A1.71	0x0B47	VY2 outputs ON delay time	0.000~60.000s	0.010s	✓
A1.72	0x0B48	VY3 outputs ON delay time	0.000~60.000s	0.010s	✓

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A1.73	0x0B49	VY4 outputs ON delay time	0.000~60.000s	0.010s	√
A1.74	0x0B4A	VY1 outputs OFF delay time	0.000~60.000s	0.010s	√
A1.75	0x0B4B	VY2 outputs OFF delay time	0.000~60.000s	0.010s	√
A1.76	0x0B4C	VY3 outputs OFF delay time	0.000~60.000s	0.010s	√
A1.77	0x0B4D	VY4 outputs OFF delay time	0.000~60.000s	0.010s	√

A2: Analog Terminal(AI, AO)

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A2.0x Simulated Input Linear Processing					
A2.00	0x0C00	V1 lower limit	-10.00~10.00	0.00	√
A2.01	0x0C01	V1 lower threshold mapping	-100.0~100.00%	0.00%	√
A2.02	0x0C02	V1 upper threshold	-10.00~10.00	10.00	√
A2.03	0x0C03	V1 upper threshold action	-100.0~100.00%	100.00 %	√
A2.04	0x0C04	V1 filter time constant	0.000~6.000s	0.010s	√
A2.05	0x0C05	V2 lower limit	-10.00~10.00	0.00	√
A2.06	0x0C06	V2 lower threshold mapping	-100.0~100.00%	0.00%	√
A2.07	0x0C07	V2 upper threshold	-10.00~10.00	10.00	√
A2.08	0x0C08	V2 upper threshold action	-100.0~100.00%	100.00 %	√
A2.09	0x0C09	V2 filter time constant	0.000~6.000s	0.010s	√
A2.10	0x0C0A	V3 lower limit	0.00~10.00	0.00	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A2.11	0x0C0B	V3 lower threshold mapping	-100.0~100.00%	0.00%	√
A2.12	0x0C0C	V3 upper threshold	0.00~10.00	10.00	√
A2.13	0x0C0D	V3 upper threshold action	-100.0~100.00%	100.00 %	√
A2.14	0x0C0E	V3 filter time constant	0.000~6.000s	0.010s	√
A2.15	0x0C0F	Analog Input Curve Selection	Units digit LED: V1 0: Straight Line (default) 1: Curve 1      2: Curve 2 Tens digit LED: V2 (Voltage and current input selected via jumper) Hundreds digit LED: V3 Thousands digit LED: Retention	0000	√
A2.16	0x0C10	V2 input type selection	0:0~10V 1:-10V~10V	0	√
A2.2x Vx curve 1 processing					
A2.20	0x0C14	The lower limit of curve 1	-10.00~10.00	0.00	√
A2.21	0x0C15	Curve 1 lower threshold mapping	-100.0~100.00	0.00%	√
A2.22	0x0C16	Curve 1 inflection point 1 input voltage	-10.00~10.00	3.00	√
A2.23	0x0C17	Curve 1 Inflection Point 1 Setting	-100.0~100.00	30.00%	√
A2.24	0x0C18	Curve 1 inflection point 2 input voltage	-10.00~10.00	6.00	√
A2.25	0x0C19	Curve 1 Inflection Point 2 Setting	-100.0~100.00	60.00%	√
A2.26	0x0C1A	The upper limit of curve 1	-10.00~10.00	10.00	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A2.27	0x0C1B	Curve 1 upper threshold mapping	-100.0~100.00	100.00 %	√
A2.3x Vx curve 2 processing					
A2.30	0x0C1E	The lower limit of curve 2	-10.00~10.00	0.00	√
A2.31	0x0C1F	Curve 2 lower threshold mapping	-100.0~100.00	0.00%	√
A2.32	0x0C20	Curve 2 inflection point 1 input voltage	-10.00~10.00	3.00	√
A2.33	0x0C21	Curve 2 Inflection Point 1 Setting	-100.0~100.00	30.00%	√
A2.34	0x0C22	Curve 2 inflection point 2 input voltage	-10.00~10.00	6.00	√
A2.35	0x0C23	Curve 2Inflection Point 2 Setting	-100.0~100.00	60.00%	√
A2.36	0x0C24	The upper limit of curve 2	-10.00~10.00	10.00	√
A2.37	0x0C25	Curve 2 upper threshold mapping	-100.0~100.00	100.00 %	√
A2.4x Vx Digital Input Terminal Configuration					
A2.40	0x0C28	Vx port digital input mode selection	0: Valid low 1: Valid high  Units digit LED: V1 Tens digit LED: V2 Hundreds digit LED: Retention Thousands digit LED: Retention	0011	√
A2.41	0x0C29	V1 terminal function selection (as S)	Same as A0.02~A0.09	00	✗
A2.42	0x0C2A	V1 high-level threshold	0.00~100.00%	70.00%	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A2.43	0x0C2B	V1 low-level threshold	0.00~100.00%	30.00%	√
A2.44	0x0C2C	V1 terminal function selection (as S)	Same as the S terminal function	00	✗
A2.45	0x0C2D	V2 high-level threshold	0.00~100.00%	70.00%	√
A2.46	0x0C2E	V2 low-level threshold	0.00~100.00%	30.00%	√

## A2.5x AO (Analog Output, Frequency) Output

A2.50	0x0C32	AO1 output quantity selection	0: Output frequency 1: Command frequency 2: Output current 3: Input voltage 4: Output voltage 5: Mechanical speed 6: Output torque 7: Torque command 8: PID given quantity 9: PID feedback 10: Output power 11: DC bus voltage 12: V1 analog input 13: V2 analog input 14: V3 analog input 15: HDI input 16: IGBT temp 1 17: IGBT temp 2 18: Modbus communication control (RS485) 19: Virtual output terminal 1, OFF is 0, ON is 10V 20~31: Retention	00	√
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Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A2.51	0x0C33	AO1 output gain	0.0~300.0%	100.0%	√
A2.52	0x0C34	AO1 output offset	-100.0~100.0%	0.0%	√
A2.53	0x0C35	AO1 output filter	0.000~6.000s	0.010s	√
A2.54	0x0C36	AO2 output source selection	Same as AO1	00	√
A2.55	0x0C37	AO2 output gain	0.0~300.0%	100.0%	√
A2.56	0x0C38	AO2 output offset	-100.0~100.0%	0.0%	√
A2.57	0x0C39	AO2 output filter	0.000~6.000s	0.010s	√
A2.58	0x0C3A	HDO maximum output frequency	000~100KHz	10	√

A3: Multi-Speed and Simple PLC Function

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A3.00	0x0D00	PLC multi-stage speed 1	0.00~Maximum frequency	10.00Hz	√
A3.01	0x0D01	PLC multi-stage speed 2	0.00~Maximum frequency	20.00Hz	√
A3.02	0x0D02	PLC multi-stage speed 3	0.00~Maximum frequency	30.00Hz	√
A3.03	0x0D03	PLC multi-stage speed 4	0.00~Maximum frequency	40.00Hz	√
A3.04	0x0D04	PLC multi-stage speed 5	0.00~Maximum frequency	50.00Hz	√
A3.05	0x0D05	PLC multi-stage speed 6	0.00~Maximum frequency	40.00Hz	√
A3.06	0x0D06	PLC multi-stage speed 7	0.00~Maximum frequency	30.00Hz	√
A3.07	0x0D07	PLC multi-stage speed 8	0.00~Maximum frequency	20.00Hz	√
A3.08	0x0D08	PLC multi-stage speed 9	0.00~Maximum frequency	10.00Hz	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A3.09	0x0D09	PLC multi-stage speed 10	0.00~Maximum frequency	20.00Hz	√
A3.10	0x0D0A	PLC multi-stage speed 11	0.00~Maximum frequency	30.00Hz	√
A3.11	0x0D0B	PLC multi-stage speed 12	0.00~Maximum frequency	40.00Hz	√
A3.12	0x0D0C	PLC multi-stage speed 13	0.00~Maximum frequency	50.00Hz	√
A3.13	0x0D0D	PLC multi-stage speed 14	0.00~Maximum frequency	40.00Hz	√
A3.14	0x0D0E	PLC multi-stage speed 15	0.00~Maximum frequency	30.00Hz	√
A3.15	0x0D0F	PLC multi-stage speed 16	0.00~Maximum frequency	20.00Hz	√
A3.16	0x0D10	PLC operation mode selection	Units digit LED: Loop method 0: Stops after a single cycle 1: Continuous Cycle 2: Maintain the final value after a single cycle  Tens digit LED: Units of time 0: seconds 1: Points 2: hours  Hundreds digit LED:  Power-down storage method 0: Do not store 1: Storage  Thousands digit LED: Start method  0: Re-run from the first stage 1: Re-run from the phase of the moment of downtime 2: Continue running for the remainder of the Downtime phase	0000	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A3.17	0x0D11	PLC stage 1 running time	0.0~6500.0(s/m/h)	10.0	√
A3.18	0x0D12	PLC stage 2 running time	0.0~6500.0(s/m/h)	10.0	√
A3.19	0x0D13	PLC stage 3 running time	0.0~6500.0(s/m/h)	0.0	√
A3.20	0x0D14	PLC stage 4 running time	0.0~6500.0(s/m/h)	0.0	√
A3.21	0x0D15	PLC stage 5 running time	0.0~6500.0(s/m/h)	0.0	√
A3.22	0x0D16	PLC stage 6 running time	0.0~6500.0(s/m/h)	0.0	√
A3.23	0x0D17	PLC stage 7 running time	0.0~6500.0(s/m/h)	0.0	√
A3.24	0x0D18	PLC stage 8 running time	0.0~6500.0(s/m/h)	0.0	√
A3.25	0x0D19	PLC stage 9 running time	0.0~6500.0(s/m/h)	0.0	√
A3.26	0x0D1A	PLC stage 10 running time	0.0~6500.0(s/m/h)	0.0	√
A3.27	0x0D1B	PLC stage 11 running time	0.0~6500.0(s/m/h)	0.0	√
A3.28	0x0D1C	PLC stage 12 running time	0.0~6500.0(s/m/h)	0.0	√
A3.29	0x0D1D	PLC stage 13 running time	0.0~6500.0(s/m/h)	0.0	√
A3.30	0x0D1E	PLC stage 14 running time	0.0~6500.0(s/m/h)	0.0	√
A3.31	0x0D1F	PLC stage 15 running time	0.0~6500.0(s/m/h)	0.0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A3.32	0x0D20	PLC stage 16 running time	0.0~6500.0(s/m/h)	0.0	√
A3.33	0x0D20	PLC section 1 direction and acceleration/deceleration time	Units digit LED: Running direction (compared to command) 0: Same direction 1: Opposite direction Tens digit LED: Acceleration/deceleration time 0: Accel/Decel time 1 1: Accel/Decel time 2 2: Accel/Decel time 3 3: Accel/Decel time 4	00	√
A3.34	0x0D21	PLC section 2 direction and acceleration/deceleration time		00	√
A3.35	0x0D22	PLC section 3 direction and acceleration/deceleration time		00	√
A3.36	0x0D23	PLC section 4 direction and acceleration/deceleration time	0: Accel/Decel time 1 1: Accel/Decel time 2 2: Accel/Decel time 3 3: Accel/Decel time 4	00	√
A3.37	0x0D24	PLC section 5 direction and acceleration/deceleration time		00	√
A3.38	0x0D25	PLC section 6 direction and acceleration/deceleration time		00	√
A3.39	0x0D26	PLC section 7 direction and acceleration/deceleration time		00	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A3.40	0x0D27	PLC section 8 direction and acceleration/deceleration time		00	√
A3.41	0x0D28	PLC section 9 direction and acceleration/deceleration time		00	√
A3.42	0x0D29	PLC section 10 direction and acceleration/deceleration time		00	√
A3.43	0x0D2A	PLC section 11 direction and acceleration/deceleration time		00	√
A3.44	0x0D2B	PLC section 12 direction and acceleration/deceleration time		00	√
A3.45	0x0D2C	PLC section 13 direction and acceleration/deceleration time		00	√
A3.46	0x0D2D	PLC section 14 direction and acceleration/deceleration time		00	√
A3.47	0x0D2E	PLC section 15 direction and acceleration/deceleration time		00	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A3.48	0x0D2F	PLC section 16 direction and acceleration/deceleration time		00	√

A4: Process PID Control Parameter Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A4.00	0x0E00	Keyboard numeric PID setting	0.00～100.0%	50.0%	√
A4.01	0x0E01	PID control reference signal source	0: Keyboard numeric PID given (A4.00) 1: V1 Reference 2: V2 Reference 3: V3 Reference 4: HDI (High-Speed Pulse) given 5: Retention 6: Modbus communication control (RS485) 7: Retention 8: Retention 9: Maximum value of both (V1, V2) 10: Minimum value of both (V1, V2)	0	√
A4.02	0x0E02	PID reference change time	0.00～60.00s	1.00s	√
A4.03	0x0E03	PID control feedback signal source	0: Keyboard numeric PID given (A4.00) 1: V1 Reference 2: V2 Reference 3: V3 Reference 4: HDI (High-Speed Pulse) given	1	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			5: Retention 6: Modbus communication control (RS485) 7: Retention      8: Retention 9: Maximum value of both (V1, V2) 10: Minimum value of both (V1, V2)		
A4.04	0x0E04	Feedback signal low-pass filter time	0.000~6.000s	0.010s	√
A4.05	0x0E05	Feedback signal gain	0.00~10.00	1.00	√
A4.06	0x0E06	Feedback signal range	0.0~100.0	100.0	√
A4.07	0x0E07	Proportional gain (P1)	0.000~4.000	0.100	√
A4.08	0x0E08	Integral time (I1)	0.0~600.0s	1.0s	√
A4.09	0x0E09	Derivative gain (D1)	0.000~6.000s	0.000s	√
A4.10	0x0E0A	Proportional gain (P2)	0.000~4.000	0.100	√
A4.11	0x0E0B	Integral time (I2)	0.0~600.0s	1.0s	√
A4.12	0x0E0C	Derivative gain (D2)	0.000~6.000s	0.000s	√
A4.13	0x0E0D	PID parameter switching condition	0: Do not switch 1: Use the DI terminal to switch 2: Switch according to deviation	0	√
A4.14	0x0E0E	Switching deviation low value	0.0~100.0%	20.0%	√
A4.15	0x0E0F	Switching deviation high--value	0.0~100.0%	80.0%	√
A4.16	0x0E10	PID control selection	Units digit LED: Feedback feature selection 0: Positive trait 1: Negative trait	0100	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			Tens digit LED: Retention Hundreds digit LED: Retention Thousands of digit LEDs: Differential adjustment properties 0: Differentiation of deviations 1: Differentiate feedback		
A4.17	0x0E11	PID preset output	0.0~100.0%	100.0%	√
A4.18	0x0E12	PID preset output run time	0.0~6500.0s	0.0s	√
A4.19	0x0E13	PID control deviation limit	0.0~100.0%	0.0%	√
A4.20	0x0E14	Retain parameters	-	-	-
A4.21	0x0E15	Derivative limit	0.0~100.0%	5.0%	√
A4.22	0x0E16	PID output upper limit	0.0~100.0%	100.0%	√
A4.23	0x0E17	PID output lower limit	-100.0~A4.22	0.0%	√
A4.24	0x0E18	PID output filter time	0.000~6.000s	0.000s	√
A4.25	0x0E19	Feedback loss action selection	0:Continue PID operation without fault 1:Stop and trigger fault alarm 2:Continue PID operation, output alarm signal 3:Run at current frequency, an output alarm signal	0	√
A4.26	0x0E1A	Feedback loss detection time	0.0~120.0s	1.0s	√
A4.27	0x0E1B	Loss alarm upper limit	0.0~100.0%	100.0%	√
A4.28	0x0E1C	Loss alarm lower	0.0~100.0%	0.0%	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
		limit			
A4.29	0x0E1D	Sleep mode selection	0: Close 1: Effective	0	√
A4.30	0x0E1E	Sleep frequency	0.00~50.00Hz	10.00Hz	√
A4.31	0x0E1F	Sleep delay time	0.0~3600.0S	60.0	√
A4.32	0x0E20	Wake-up deviation	0.0~50.0%	5.0%	√
A4.33	0x0E21	Wake-up delay time	0.0~600.0S	1.0S	√

## A5: Parameter Initialization Group

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
<b>A5.0x Modbus Slave</b>					
A5.00	0x0F00	Communication protocol selection	0: Modbus 1~9: Retention 10: Host	00	√
A5.01	0x0F01	Modbus address	001~247	001	×
A5.02	0x0F02	Baud Rate selection	0: 1200 bps 1: 2400 bps 2: 4800 bps 3: 9600 bps 4: 19200 bps 5: 38400 bps 6: 57600 bps	3	×
A5.03	0x0F03	Modbus data format	0: (N,8,1) No parity, Data bits: 8, Stop bits: 1 1: (E,8,1) Even parity, Data bits: 8, Stop bits: 1 2: (O,8,1) Odd parity, Data bits: 8, Stop bits: 1 3: (N,8,2) No parity, Data bits: 8, Stop bits: 2 4: (E,8,2) Even parity, Data bits: 8, Stop bits: 2 5: (O,8,2) Odd parity, Data bits: 8, Stop bits: 2	0	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A5.04	0x0F04	Modbus transmission response handling	0: Write a response 1: Write without response	0	√
A5.05	0x0F05	Modbus response delay	0000~5000ms	0000	√
A5.06	0x0F06	Modbus timeout error period	0.1~100.0s	1.0s	√
A5.07	0x0F07	Communication disconnection handling	0: No timeout fault detection 1: Fault and coast to stop 2: Warning and continue running 3: Forced stop	0	√
A5.08	0x0F08	Received data (Addr. 0x3201) zero offset	-100.0-100.00	0.00	√
A5.09	0x0F09	Received data (Addr. 0x3201) gain	0.0~500.0%	100.0%	√
A5.1x Modbus Master					
A5.10	0x0F0A	Master cyclic transmission parameter selection	Units place, Units place, Hundreds place, Thousands place 0: Invalid 1: Master run command 2: Master frequency reference 3: Master output frequency 4: Master maximum frequency 5: Master torque reference 6: Master output torque 7-8: Retention 9: Master PID reference A: Master PID feedback B: Retention C: Active current component	0031	√
A5.11	0x0F0B	Frequency reference custom address setting	0000~FFFF	0000	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A5.12	0x0F0C	Command reference custom address setting	0000~FFFF	0000	√
A5.13	0x0F0D	Command reference - forward run value	00~FF	01	√
A5.14	0x0F0E	Command reference - reverse run value	00~FF	02	√
A5.15	0x0F0F	Command reference - stop command value	00~FF	05	√
A5.16	0x0F10	Command reference - reset command value	00~FF	07	√
A5.19	0x0F11	Master run command selection	0: Run Command 1: Run Status	0	√

## A5.2x Expansion Card MODBUS Functionality

A5.20	0x0F14	485 Expansion card communication mode selection	0: Modbus 1~9: Retention 10: Host	00	×
A5.21	0x0F15	485 Expansion card Modbus address	001~247	001	×
A5.22	0x0F16	485 Expansion card baud rate selection	0: 1200 bps 1: 2400 bps 2: 4800 bps 3: 9600 bps 4: 19200 bps 5: 38400 bps 6: 57600 bps	3	×
A5.23	0x0F17	Modbus data format	0: (N,8,1) No parity Data bits: 8 Stop bits: 1 1: (E,8,1) Even parity Data bits: 8 Stop bits: 1 2: (O,8,1) Odd parity Data bits: 8 Stop bits: 1 3: (N,8,2) No parity Data bits: 8 Stop bits: 2 4: (E,8,2) Even parity	0	×

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
			Data bits: 8 Stop bits: 2 5: (0,8,2) Odd parity Data bits: 8 Stop bits: 2		
A5.24	0x0F18	Modbus transmission response handling	0: Write with acknowledge 1: Write without acknowledge	0	√
A5.25	0x0F19	Modbus response delay	0000~5000ms	0000	√
A5.26	0x0F1A	Modbus timeout fault duration	0.1~100.0s	1.0s	√
A5.27	0x0F1B	Communication disconnection handling	0: Timeout detection disabled 1: Alarm & coast to stop 2: Warning & continue operation 3: Emergency stop	0	√
A5.28	0x0F1C	Retain parameters	-	-	-
A5.3x CAN Communication Functionality					
A5.30	0x0F1E	CAN master/slave control enable	0: Disabled 1: Enabled as master 2: Enabled as slave	0	✗
A5.31	0x0F1F	CAN baud rate	0: 20K 1: 50K 2: 100K 3: 125K 4: 250K 5: 500K 6: 1M	4	✗
A5.32	0x0F20	Connection loss detection time	0.000~10.000s	0.000	√
A5.35	0x0F23	Slave unit quantity	0~5	1	✗
A5.36	0x0F24	Master transmission cycle	0000~1000ms	0001	✗
A5.37	0x0F25	Master run command transmission	0: Transmit master run/stop status 1: Transmit master run/stop command	0	✗
A5.40	0x0F28	CAN slave station	0~5	1	✗

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
		address			
A5.41	0x0F29	Slave control mode	0: Torque control 1: Speed control 2: Terminal switching	0	✗
A5.42	0x0F2A	Slave control gain	0.000~10.000	1.000	✗
A5.43	0x0F2B	Slave following master's command	0: Standalone (No following) 1: Slave follows the master run command	1	✗
A5.44	0x0F2C	Speed limit during slave torque control	0.0~100.0%	10.0	✓
A5.45	0x0F2D	Speed limit increment during slave torque control	0.0~100.0%	5.0	✓

## A6: Communication Mapping

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A6.00~64 Free Mapping					
A6.00	0x1000	Address mapping function selection	0: Invalid      1: Effective	0	✓
A6.01	0x1001	Mapped Address 1	0x0000~0xFFFF	0x0000	✓
A6.02	0x1002	Parameter Address 1	0x0000~0xFFFF	0x0000	✓
A6.03	0x1003	Mapped Address 2	0x0000~0xFFFF	0x0000	✓
A6.04	0x1004	Parameter Address 2	0x0000~0xFFFF	0x0000	✓
A6.05		.....			
A6.61	0x103D	Mapped Address 31	0x0000~0xFFFF	0x0000	✓
A6.62	0x103E	Parameter address 31	0x0000~0xFFFF	0x0000	✓
A6.63	0x103F	Mapped Address 32	0x0000~0xFFFF	0x0000	✓
A6.64	0x1040	Parameter address 32	0x0000~0xFFFF	0x0000	✓
A6.65~94					
A6.65	0x1041	Mapped parameter 1	0x0000~0xFFFF	0x1041	✓
A6.66	0x1042	Mapped parameter 2	0x0000~0xFFFF	0x1042	✓

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A6.67	0x1043	Mapped parameter 3	0x0000~0xFFFF	0x1043	√
A6.68	0x1044	Mapped parameter 4	0x0000~0xFFFF	0x1044	√
A6.69		.....			
A6.90	0x105A	Mapped parameter 26	0x0000~0xFFFF	0x105A	√
A6.91	0x105B	Mapped parameter 27	0x0000~0xFFFF	0x105B	√
A6.92	0x105C	Mapped parameter 28	0x0000~0xFFFF	0x105C	√
A6.93	0x105D	Mapped parameter 29	0x0000~0xFFFF	0x105D	√
A6.94	0x105E	Mapped parameter 30	0x0000~0xFFFF	0x105E	√

## A8: Position Servo Control

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A8.00	0x1300	Position control mode selection	0: Position control disabled 1: Position control enabled	0	√
A8.01	0x1301	Pulse position reference source	0: Keypad 1: Terminal S5 (Custom order) 2: Expansion card terminal 3: AB phase input (Internal) 4: Multi-step position reference (Retention)	2	√
A8.02	0x1302	Pulse counting mode	0: AB      1: CW + CCW 2: Pulse + Direction 3: Direction + Pulse 4: AB Inverted 5: CW + CCW Inverted 6: Pulse + Direction Inverted 7: Direction + Pulse Inverted	2	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A8.03	0x1303	Position reference first-order filter time	0.0~600.0msec	0.0	√
A8.04	0x1304	Position reference smoothing filter time	0.0~512.0msec	1.0	√
A8.05	0x1305	Retain parameters	-	-	-
A8.06	0x1306	Electronic gear numerator 1	1~32767	1	√
A8.07	0x1307	Electronic gear denominator 1	1~32767	1	√
A8.08	0x1308	Electronic gear numerator 2	1~32767	1	√
A8.09	0x1309	Electronic gear denominator 2	1~32767	1	√
A8.10	0x130A	Retain parameters	-	-	-
A8.11	0x130B	Retain parameters	-	-	-
A8.12	0x130C	Position loop proportional gain 1	0.01~600.00Hz	30.00	√
A8.13	0x130D	Position loop proportional gain 2	0.01~600.00Hz	30.00	√
A8.14	0x130E	Position controller output limit	0.0~100.0%	100.0	√
A8.15	0x130F	Positioning completion condition	0: Positioning complete when  position error  < positioning completion amplitude 1: Positioning complete when ( position error  < positioning completion amplitude) and (position command = 0)	1	√
A8.16	0x1310	Positioning completion width	1~32767	10	√
A8.17	0x1311	Position close to the	1~32767	100	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
		width			
A8.18	0x1312	Retain parameters	-	-	-
A8.19	0x1313	Position error excess action selection	0: Position error excess detection disabled 1: Position error excess detection enabled (Alarm output) 2: Position error excess detection enabled (Fault output)	1	√
A8.20	0x1314	Position error excess detection frequency	0.0~200.0%	110.0	√
A8.21	0x1315	Position error excess detection time	0~6000msec	10	Y
A8.22	0x1316	Servo stop mode	0: Once the positioning is completed, it enters a shutdown state 1: Switch the control method to speed control mode for zero-speed shutdown	0	
A8.23	0x1317	Position feed-forward enable	0~1		
A8.24	0x1318	Position feed-forward gain	0.0~100.0%	0.0	√
A8.25	0x1319	Position feed-forward filter time	0.0~100.0msec	1.0	√
A8.26	0x131A	Gain switching mode	0: No switching 1: Terminal switching 2: Position error-based switching 3: Speed error-based switching	0	√
A8.27	0x131B	Switching filter time	0~6000msec	0	√
A8.28	0x131C	Switching position error	0~32767	0	√

Function Code	Correspondence Address	Name	Set the Scope	Factory value	Change
A8.29	0x131D	Switching speed command	0.00~Maximum frequency	0	√
A8.30	0x131E	Zero servo action error	0~1000	0	√

## d Monitoring Parameters

Function Code	Correspondence Address	Name	Description	Min Unit	Change
d0 Basic Monitoring					
d0.00	0x1E00	Output frequency		0.01Hz	•
d0.01	0x1E01	Output frequency		0.01Hz	•
d0.02	0x1E02	Reference frequency		0.01Hz	•
d0.03	0x1E03	Output current		0.1A	•
d0.04	0x1E04	Output voltage		0.1V	•
d0.05	0x1E05	Dc bus voltage		0.1V	•
d0.06	0x1E06	Output torque		0.1%	•
d0.07	0x1E07	Output power		0.1%(kW)	•
d0.08	0x1E08	Mechanical speed		1RPM	•
d0.09	0x1E09	Input voltage		0.1V	•
d0.10	0x1E0A	Power factor angle		0.1°	•
d0.11	0x1E0B	Input terminal status		0	•
d0.12	0x1E0C	Hdi frequency		0.01KHz	•
d0.13	0x1E0D	Hdi frequency percentage		0.1%	•
d0.14	0x1E0E	V1 voltage		0.01V	•
d0.15	0x1E0F	V2 voltage		0.01V	•
d0.16	0x1E10	V3 voltage		0.01V	•
d0.17	0x1E11	V1 percentage		0.1%	•
d0.18	0x1E12	V2 percentage		0.1%	•
d0.19	0x1E13	V3 percentage		0.1%	•
d0.20	0x1E14	Output terminal status		0	•
d0.21	0x1E15	Ao1 output		0.01V	•
d0.22	0x1E16	Ao2 output		0.01V	•
d0.23	0x1E17	Rectifier temperature		0.1°C	•
d0.24	0x1E18	Inverter temperature		0.1°C	•
d0.25	0x1E19	Inverter status 1	bit0: Forward and reverse direction 0: Forward 1: Reverse Bit4: Running status		•

Function Code	Correspondence Address	Name	Description	Min Unit	Change
			0: Downtime 1: Running Bit9: Operational readiness 0: Not ready 1: Ready		
d0.26	0x1E1A	Inverter status 2		0	●
d0.27	0x1E1B	Fault main code		0	●
d0.28	0x1E1C	Fault diagnostic information		0	●
d0.29	0x1E1D	Retain parameters		-	●
d0.30	0x1E1E	Pg feedback frequency		0.01Hz	●
d0.31	0x1E1F	Pg feedback angle		0.01°	●
d0.32	0x1E20	Z pulse error accumulation		1	●
d0.33	0x1E21	Z pulse count		1	●
d0.34	0x1E22	Rt feedback angle		1°	●
d0.35	0x1E23	Software version info 1			●
d0.36	0x1E24	Software version info 2			●
d0.37	0x1E25	Drive rated power		0.1KW	●
d0.38	0x1E26	Drive rated voltage		1V	●
d0.39	0x1E27	Drive rated current		0.1A	●

## d1 应用监控(通用)

d1.00	0x1F00	PID control status	bit0: PID control is active bit1: PID output is positive or negative bit2: The error is valid bit3: RSV bit4~5: Integral saturation bit6~7: The PID output is saturated	0~0xFFFF	●
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Function Code	Correspondence Address	Name	Description	Min Unit	Change
			bit8: Pausing the checkout is valid		
d1.01	0x1F01	PID reference		0.0~100.0	•
d1.02	0x1F02	PID feedback		0.0~100.0	•
d1.03	0x1F03	PID error		-100.0~100.0	•
d1.04	0x1F04	PID output		-100.00~100.00	•
d1.05	0x1F05	Retain parameters		-	•
d1.06	0x1F06	Motor temperature		0~200°C	•
d1.07	0x1F07	Retain parameters		-	•
d1.08	0x1F08	Retain parameters		-	•
d1.09	0x1F09	Retain parameters		-	•
d1.10	0x1F0A	The keypad received a frame count		0~65535	•
d1.11	0x1F0B	Keypad valid frame count		0~65535	•
d1.12	0x1F0C	Count of keyboard reception frame check errors		0~65535	•
d1.13	0x1F0D	Keypad serial error count		0~65535	•
d1.14	0x1F0E	Keypad DMA exception count		0~65535	•
d1.15	0x1F0F	Terminal 485 received the frame count		0~65535	•
d1.16	0x1F10	Terminal 485 valid frame count		0~65535	•
d1.17	0x1F11	Count of frame check errors for terminal 485		0~65535	•

Function Code	Correspondence Address	Name	Description	Min Unit	Change
		reception.			
d1.18	0x1F12	Terminal 485 serial error count		0~65535	•
d1.19	0x1F13	Terminal 485 DMA exception count		0~65535	•
d02 Application Monitoring (Customized Only)					
d2.00	0x2000	Current acceleration time		0~650.00s	•
d2.01	0x2001	Current deceleration time		0~650.00s	•
d2.02	0x2002	Frequency upper limit		0~500.00HZ	•
d2.03	0x2003	Maximum frequency		0~500.00HZ	•
d3 Maintenance Monitoring					
d3.00	0x2100	Power-on time - hours		1h	•
d3.01	0x2101	Power-on time - minutes		1m	•
d3.02	0x2102	Run time - hours		1h	•
d3.03	0x2103	Run time - minutes		1m	•
d3.04	0x2104	Fan operation time - hours		1h	•
d3.05	0x2105	Energy accumulation (High word)		10000kW h	•
d3.06	0x2106	Energy accumulation (Low word)		1kWh	•
d3.07	0x2107	Main contactor engagement count (High word) main contactor engagement count (Low word)		10000	•

Function Code	Correspondence Address	Name	Description	Min Unit	Change
d3.08	0x2108	Main contactor engagement count (High word) main contactor engagement count (Low word)		1	•
d3.09	0x2109	Current session power-on time		1h	•
d3.10	0x210A	Drive overload accumulation		0.1%	•
d3.11	0x210B	Motor overload accumulation		0.1%	•
d3.12	0x210C	Drive current overload value	The current output current percentage, with 100% corresponding to the rated current of the frequency converter, is used to assess the extent of overload of the current output current	0.1%	•
d3.13	0x210D	The drive overload coefficient 1	Derating factor for low-frequency operation	0.1	•
d3.14	0x210E	Drive overload coefficient 2	Derating factor caused by the carrier	1	•
d3.15	0x210F	Retain parameters		-	•
d3.16	0x2110	Retain parameters		-	•
d3.17	0x2111	Retain parameters		-	•
d3.18	0x2112	Retain parameters		-	•
d3.19	0x2113	Time-limited operation countdown		65535	•
d4 Fault Monitoring					

Function Code	Correspondence Address	Name	Description	Min Unit	Change
d4.00	0x2200	Fault diagnostic information		—	•
d4.01	0x2201	DC bus voltage at the fault		0.1V	•
d4.02	0x2202	Output current at fault		0.1A	•
d4.03	0x2203	Output voltage at fault		0.1V	•
d4.04	0x2204	Output frequency at fault		0.01Hz	•
d4.05	0x2205	Input terminal status at fault		0	•
d4.06	0x2206	Output terminal status at fault		0	•
d4.07	0x2207	Operation status at fault		0	•
d4.08	0x2208	Module temperature at fault		0.1°C	•
d4.09	0x2209	Main fault code (Most recent)		0	•
d4.10	0x220A	Fault diagnostic information		0	•
d4.11	0x220B	DC bus voltage at the fault		0.1V	•
d4.12	0x220C	Output current at fault		0.1A	•
d4.13	0x220D	Output voltage at fault		0.1V	•
d4.14	0x220E	Output frequency at fault		0.01Hz	•
d4.15	0x220F	Input terminal status at fault		0	•
d4.16	0x2210	Output terminal status at fault		0	•
d4.17	0x2211	Operation status at fault		0	•
d4.18	0x2212	Module temperature at fault		0.1°C	•
d4.19	0x2213	Main fault code (2nd)		0	•

Function Code	Correspondence Address	Name	Description	Min Unit	Change
		most recent)			
d4.20	0x2214	Diagnostic information		0	•
d4.21	0x2215	Main fault code (3rd most recent)		0	•
d4.22	0x2216	Fault diagnostic information		0	•
d4.23	0x2217	Main fault code (4th most recent)		0	•
d4.24	0x2218	Retain parameters		-	•
d4.25	0x2219	Overcurrent (OC) fault count		0	•
d4.26	0x221A	Short circuit (SC) fault count		0	•
d4.27	0x221B	Ovvoltage (OU) fault count		0	•
d4.28	0x221C	Overload (OL) fault count		0	•
d4.29	0x221D	Overtemperature (OH) fault count		0	•
d4.30	0x221E	Fault code		0	•
d4.31	0x221F	Fault diagnostic information		0	•
d4.33	0x2221	Fault auto-reset count		0	•
d4.35	0x2223	Alarm code		0	•
d4.36	0x2224	Alarm flag 1		0	•
d4.37	0x2225	Alarm flag 2		0	•
d5 Control Monitoring(Retention)					
d5.00	0x2300	Retain parameters		-	•
d5.01	0x2301	Retain parameters		-	•
d6 Retention Monitoring (Extended Card)					

Function Code	Correspondence Address	Name	Description	Min Unit	Change
d6.00～d6.14	0x2400～0x240E	Retain parameters		-	●
d6.15	0x240F	CAN master-slave control status	0: Control Invalid 1: Master Device 2: Slave Device - Torque (Command Follow) 3: Slave Device - Torque (Command Not Follow) 4: Slave Device - Speed Control (Command Follow) 5: Slave Device - Speed Control (Command Not Follow)	0	●
d6.16	0x2410	Master-slave operation command	0: Downtime 1: Forward rotation 2: Reverse run	0	●
d6.17	0x2411	Frequency command		0.01Hz	●
d6.18	0x2412	Torque command		-100.0～100.0%	●
d6.19	0x2413	Excitation command		-100.0～100.0%	●
d6.20	0x2414	Retain parameters		-	●
d6.21	0x2415	CAN frame reception count	This value is increased by 1 for each valid frame received, which is used to determine whether the current CAN communication is normal	0	●
d6.22	0x2416	Frame reception interval	Used to determine the current communication interval	1ms	●

Function Code	Correspondence Address	Name	Description	Min Unit	Change
d6.23	0x2417	Frame transmission duration		0.1ms	•
d6.24	0x2418	Can 1ms processing cycle count	When the CAN master-slave control is active, 1 is added every 1ms	1	•
d6.25	0x2419	Slave 1 output current		0.1A	•
d6.26	0x241A	Slave 2 output current		0.1A	•
d6.27	0x241B	Slave 3 output current		0.1A	•
d6.28	0x241C	Slave 4 output current		0.1A	•
d6.29	0x241D	Slave 5 output current		0.1A	•
d6.30	0x241E	Slave 1 output frequency		0.01Hz	•
d6.31	0x241F	Slave 2 output frequency		0.01Hz	•
d6.32	0x2420	Slave 3 output frequency		0.01Hz	•
d6.33	0x2421	Slave 4 output frequency		0.01Hz	•
d6.34	0x2422	Slave 5 output frequency		0.01Hz	•

485 Communication Address Table

Name	Correspondence Address	Parameter Description	Range
Control command	0x3200	1 - Forward run 2 - Reverse run 3 - Jog forward 4 - Jog reverse 5 - Coast stop (Valid for all command sources) 6 - Ramp stop (Valid for communication commands only) 7 - Fault reset 8 - Run inhibit 9 - Run enable	Accessing this value typically returns 0
Communication frequency setpoint	0x3201	0.00-655.35	Valid when frequency channel is set to communication reference
Communication PID reference	0x3208	0.00-655.35	Valid when frequency channel is set to PID mode
Communication PID feedback	0x3209	0.00-655.35	Valid when frequency channel is set to PID mode

**Note:** When the communication address of the function code bit15 is set to 1, it means that the parameter is written and saved; for example, the write address of F0.01 0x0001 is the address that is not saved when the power is off, and the 0x8001 is the address that is saved when the power is off.

**Fault Code Table**

Communication Code (Fault Main Code)	Fault Display	Fault Name	Attribute
0	--	No fault	
1	E.oC	Overcurrent fault	Self-recovery + Record
2	E.oU	Overvoltage fault	Self-recovery + Record
3	E.Fu	Module fault	Self-recovery + Record
4	E.LU	Undervoltage fault	Self-recovery + Record
5	E.oLi	Drive overload	Self-recovery + Record
6	E.PLi	Input phase loss	Self-recovery + Record
7	E.PLo	Output phase loss	Self-recovery + Record
8	E.oHr	Rectifier overheat	Self-recovery + Record
9	E.oHi	Inverter overheat	Self-recovery + Record
10	E.oH3	Motor overheat	Self-recovery + Record
11	E.ETT	External fault	Self-recovery + Record
12	E.Con	Communication fault	Self-recovery + Record
13	E.HAL	Hall sensor fault	Self-recovery + Record
14	E.Gnd	Ground fault	Self-recovery + Record
15	E.FnP	Fan failure	Self-recovery + Record
16	E.oLn	Motor overload	Self-recovery + Record
17	E.Pid	PID fault	Self-recovery + Record
18	E.PG	Encoder fault	Self-recovery + Record
19	E.dEu	Excessive speed deviation	Self-recovery + Record
20	E.oPd	Overspeed protection	Self-recovery + Record
21	E.Blo	Stall fault	Self-recovery + Record
22	E.Ld1	Load detection 1 fault	Self-recovery + Record
23	E.Ld2	Load detection 2 fault	Self-recovery + Record
24	E.CLE	Continuous current limit	Self-recovery + Record
25	E.cP1	Comparator fault 1	Self-recovery + Record
26	E.cP2	Comparator fault 2	Self-recovery + Record
27	Retention	-	-
28	Retention	-	-

Communication Code (Fault Main Code)	Fault Display	Fault Name	Attribute
29	E.CPY	Parameter copy error	Recording
30	E.Tun	Motor tuning fault	
31	E.cRG	Bootstrap driver fault	Self-recovery + Record
32	E.iPd	Pole search fault	Self-recovery + Record
33	E.StL	Step-out detection	Self-recovery + Record
34	E.UoL	CPU timeout	Self-recovery + Record
35	E.Loc	Internal fault	Self-recovery + Record
36	Retention	-	-
37	E.E2P	EEPROM fault	Self-recovery + Record
38	E.ddt	Watchdog fault	Self-recovery + Record
39	Retention	-	-
40	Retention	-	-
41	E.PAR	Parameter setting error	Self-recovery + Record
42	Retention	-	-
43	E.PoS	Position error excess	Self-recovery + Record

**Alarm Code Table**

Communication Codes (Alarm Codes)	Alarm Display (Digital)	Alarm Display (Characters)	Alarm Name	Attribute
128	AL.00	A.PI1	Input phase loss	Not recorded
129	AL.01	A.PI2	Output phase loss	Not recorded
130	AL.02	A.Eer	Memory warning	Not recorded
131	AL.03	A.LnF	485 communication warning	Not recorded
132	AL.04	A.brF	Braking IGBT fault	Not recorded
133	AL.05	A.LFb	PID feedback is too low	Not recorded
134	AL.06	A.hFb	PID feedback is too high	Not recorded
135	AL.07	A.LL	Load protection - underload	Not recorded
136	AL.08	A.oL	Load protection - overload	Not recorded
137	AL.09	A.CLE	Continuous current limit	Not recorded

Communication Codes (Alarm Codes)	Alarm Display (Digital)	Alarm Display (Characters)	Alarm Name	Attribute
138	AL.10	A.dEu	Excessive speed deviation	Not recorded
139	AL.11	A.ouS	Overspeed protection	Not recorded
140	AL.12	A.To1	-	-
141	AL.13	A.To2	-	-
142	AL.14	A.nt1	Temp sensor 1 break	Not recorded
143	AL.15	A.nt2	Temp sensor 2 break	Not recorded
144	AL.16	Retention	-	-
145	AL.17	Retention	-	-
146	AL.18	A.PoE		
147	AL.19	A.StL		
148	AL.20	A.oH	Overheat warning	Not recorded
149	AL.21	A.OU	Shutdown overvoltage	Not recorded
150	AL.22	A.Blo	Stall warning	Not recorded
151	AL.23	A.RUN	Invalid run command	Not recorded
152	AL.24	A.RUN	Invalid run command	Not recorded
153	AL.25	A.RUN	Invalid run command	Not recorded
154	AL.26	A.CP1	Comparator 1 trigger	Not recorded
155	AL.27	A.CP2	Comparator 2 trigger	Not recorded
156	AL.28	Retention	-	-
157	AL.29	Retention	-	-
158	AL.30	Retention	-	-
159	AL.31	Retention	-	-

**Fault attributes:**

Auto-reset allows bits. Otherwise, self-reset is not allowed

Fault logging will enable bits. Otherwise, failures are not logged

Repeat the fault record allowed bits, otherwise only once