

Chapter 5 Function Code Table

If PP-00 is set to a non-zero number, parameter protection is enabled. You must enter the correct user password to enter the menu.

To cancel the password protection function, enter with password and set PP-00 to 0.

Group P and Group H are standard function parameters. Group S includes the monitoring function parameters.

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

"☆": The parameter can be modified when the AC drive is in either stop or running state. "★": The parameter cannot be modified when the AC drive is in the running state.

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

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

Standard Function Parameters

Function Code	Parameter Name	Setting Range	Default	Property
Group P0: Standard Function Parameters				
P0-00	G/P type display	1: G type (constant torque load) 2: P type (variable torque load e.g. fan and pump)	Model dependent	●
P0-01	Motor 1 control mode	0: Sensorless flux vector control (SFVC) 1: Closed-loop vector control (CLVC) 2: Voltage/Frequency (V/F) control	0	★
P0-02	Command source selection	0: Operation panel control (LED off) 1: Terminal control (LED on) 2: Communication control (LED blinking)	0	☆
P0-03	Main frequency source X selection	0: Digital setting (non-retentive at power failure) 1: Digital setting (retentive at power failure) 2: AI1 3: AI2 4: AI3	0	★

Function Code	Parameter Name	Setting Range	Default	Property
P0-03	Main frequency source X selection	5: Pulse setting (DI5) 6: Multi-reference 7: Simple PLC 8: PID 9: Communication setting	0	★
P0-04	Auxiliary frequency source Y selection	The same as F0-03 (Main frequency source X selection)	0	★
P0-05	Range of auxiliary frequency Y for X and Y operation	0: Relative to maximum frequency 1: Relative to main frequency X	0	☆
P0-06	Range of auxiliary frequency Y for X and Y operation	0%~150%	100%	☆
P0-07	Frequency source selection	Unit's digit (Frequency source selection) 0: Main frequency source X 1: X and Y operation (operation relationship determined by ten's digit) 2: Switchover between X and Y 3: Switchover between X and "X and Y operation" 4: Switchover between Y and "X and Y operation" Ten's digit (X and Y operation relationship) 0: X+Y 1: X-Y 2: Maximum 3: Minimum	00	☆
P0-08	Preset frequency	0.00 to maximum frequency (valid when frequency source is digital setting)	50.00 Hz	☆
P0-09	Rotation direction	0: Same direction 1: Reverse direction	0	☆
P0-10	Maximum frequency	50.00~320.00 Hz	50.00 Hz	★
P0-11	Source of frequency upper limit	0: Set by P0-12 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Communication setting	0	★

Function Code	Parameter Name	Setting Range	Default	Property
P0-12	Frequency upper limit	Frequency lower limit (P0-14) to maximum frequency (P0-10)	50.00 Hz	☆
P0-13	Frequency upper limit offset	0.00 Hz to maximum frequency (P0-10)	0.00 Hz	☆
P0-14	Frequency lower limit	0.00 Hz to frequency upper limit (P0-12)	0.00 Hz	☆
P0-15	Carrier frequency	0.5–16.0 kHz	Model dependent	☆
P0-16	Carrier frequency adjustment with temperature	0: No 1: Yes	1	☆
P0-17	Acceleration time 1	0.00–650.00s (P0-19 = 2) 0.0–6500.0s (P0-19 = 1) 0–65000s (P0-19 = 0)	Model dependent	☆
P0-18	Deceleration time 1	0.00–650.00s (P0-19 = 2) 0.0–6500.0s (P0-19 = 1) 0–65000s (P0-19 = 0)	Model dependent	☆
P0-19	Acceleration/Deceleration time unit	0: 1s 1: 0.1s 2: 0.01s	1	★
P0-20	Retaining			
P0-21	Frequency offset of auxiliary frequency source for X and Y operation	0.00 Hz to maximum frequency (P0-10)	0.00 Hz	☆
P0-22	Frequency reference resolution	1: 0.1 Hz 2: 0.01 Hz	2	★
P0-23	Retentive of digital setting frequency upon power failure	0: Not retentive 1: Retentive	2	☆
P0-24	Motor parameter group selection	0: Motor parameter group 1 1: Motor parameter group 2 2: Motor parameter group 3 3: Motor parameter group 4	0	★
P0-25	Acceleration/Deceleration time base frequency	0: Maximum frequency (P0-10) 1: Set frequency 2: 100 Hz	0	★
P0-26	Base frequency for UP/ DOWN modification during running	0: Running frequency 1: Set frequency	0	★

Function Code	Parameter Name	Setting Range	Default	Property
P0-27	Binding command source to frequency source	Unit's digit (Binding operation panel command to frequency source)	000	☆
		0: No binding 1: Frequency source by digital setting 2: AI1 3: AI2 4: AI3 5: Pulse setting (DI5) 6: Multi-reference 7: Simple PLC 8: PID 9: Communication setting		
		Ten's digit (Binding terminal command to frequency source)		
		0–9, same as unit's digit		
		Hundred's digit (Binding communication command to frequency source)		
		0–9, same as unit's digit		
P0-28	Serial communication protocol	0: Modbus protocol 1: Profibus-DP bridge 2: CANopen bridge	0	☆
Group P1: Motor 1 Parameters				
P1-00	Motor type selection	0: Common asynchronous motor 1: Variable frequency asynchronous motor 2: Permanent magnetic synchronous motor	1	★
P1-01	Rated motor power	0.1–1000.0 kW	Model dependent	★
P1-02	Rated motor voltage	1–2000 V	Model dependent	★
P1-03	Rated motor current	0.01–655.35 A (AC drive power ≤ 55 kW) 0.1–6553.5 A (AC drive power > 55 kW)	Model dependent	★
P1-04	Rated motor frequency	0.01 Hz to maximum frequency	Model dependent	★
P1-05	Rated motor rotational speed	1–65535 RPM	Model dependent	★

Function Code	Parameter Name	Setting Range	Default	Property
P1-06	Stator resistance (asynchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
P1-07	Rotor resistance (asynchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
P1-08	Leakage inductive reactance (asynchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
P1-09	Mutual inductive reactance (asynchronous motor)	0.1–6553.5 mH (AC drive power ≤ 55 kW) 0.01–655.35 mH (AC drive power > 55 kW)	Model dependent	★
P1-10	No-load current (asynchronous motor)	0.01 to F1-03 (AC drive power ≤ 55 kW) 0.1 to F1-03 (AC drive power > 55 kW)	Model dependent	★
P1-16	Stator resistance (synchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
P1-17	Shaft D inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
P1-18	Shaft Q inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
P1-20	Back EMF (synchronous motor)	0.1–6553.5 V	Model dependent	★
P1-27	Encoder pulses per revolution	1–65535	1024	★
P1-28	Encoder type	0: ABZ incremental encoder 1: UVW incremental encoder 2: Resolver 3: SIN/COS encoder 4: Wire-saving UVW encoder	0	★
P1-30	A/B phase sequence of ABZ incremental encoder	0: Forward 1: Reserve	0	★

Function Code	Parameter Name	Setting Range	Default	Property
P1-31	Encoder installation angle	0.0°~359.9°	0.0°	★
P1-32	U, V, W phase sequence of UVW encoder	0: Forward 1: Reverse	0	★
P1-33	UVW encoder angle offset	0.0°~359.9°	0.0°	★
P1-34	Number of pole pairs of resolver	1~65535	1	★
P1-36	Encoder wire-break fault detection time	0.0s: No action 0.1~10.0s	0.0s	★
P1-37	Auto-tuning selection	0: No auto-tuning 1: Asynchronous motor static auto-tuning 2: Asynchronous motor complete auto-tuning 11: Synchronous motor with-load auto-tuning 12: Synchronous motor no-load auto-tuning	0	★
Group P2: Vector Control Parameters				
P2-00	Speed loop proportional gain 1	0~100	30	☆
P2-01	Speed loop integral time 1	0.01~10.00s	0.50s	☆
P2-02	Switchover frequency 1	0.00 to F2-05	5.00 Hz	☆
P2-03	Speed loop proportional gain 2	0~100	20	☆
P2-04	Speed loop integral time 2	0.01~10.00s	1.00s	☆
P2-05	Switchover frequency 2	P2-02 to maximum output frequency	10.00 Hz	☆
P2-06	Vector control slip gain	50%~200%	100%	☆
P2-07	Time constant of speed loop filter	0.000~0.100s	0.000s	☆
P2-08	Vector control over-excitation gain	0~200	64	☆
P2-09	Torque upper limit source in speed control mode	0: P2-10 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Communication setting	0	☆
P2-10	Digital setting of torque upper limit in speed control mode	0.0%~200.0%	150.0%	☆

Function Code	Parameter Name	Setting Range	Default	Property
P2-13	Excitation adjustment proportional gain	0–20000	2000	☆
P2-14	Excitation adjustment integral gain	0–20000	1300	☆
P2-15	Torque adjustment proportional gain	0–20000	2000	☆
P2-16	Torque adjustment integral gain	0–20000	1300	☆
P2-17	Speed loop integral property	Unit's digit: integral separation 0: Disabled 1: Enabled	0	☆
P2-18	Field weakening mode of synchronous motor	0: No field weakening 1: Direct calculation 2: Automatic adjustment	1	☆
P2-19	Field weakening depth of synchronous motor	50%–500%	100%	☆
P2-20	Maximum field weakening current	1%–300%	50%	☆
P2-21	Field weakening automatic adjustment gain	10%–500%	100%	☆
P2-22	Field weakening integral multiple	2–10	2	☆
Group P3: V/F Control Parameters				
P3-00	V/F curve setting	0: Linear V/F 1: Multi-point V/F 2: Square V/F 3: 1.2-power V/F 4: 1.4-power V/F 6: 1.6-power V/F 8: 1.8-power V/F 9: Reserved 10: V/F complete separation 11: V/F half separation	0	★
P3-01	Torque boost	0.0% (fixed torque boost) 0.1%–30.0%	Model dependent	☆
P3-02	Cut-off frequency of torque boost	0.00 Hz to maximum output frequency	50.00 Hz	★
P3-03	Multi-point V/F frequency 1 (F1)	0.00 Hz to P3-05	0.00 Hz	★
P3-04	Multi-point V/F voltage 1 (V1)	0.0%–100.0%	0.0%	★

Function Code	Parameter Name	Setting Range	Default	Property
P3-05	Multi-point V/F frequency 2 (F2)	P3-03 to P3-07	0.00 Hz	★
P3-06	Multi-point V/F voltage 2 (V2)	0.0%–100.0%	0.0%	★
P3-07	Multi-point V/F frequency 3 (F3)	P3-05 to rated motor frequency (P1-04) Note: The rated frequencies of motors 2, 3, and 4 are respectively set in H2-04, H3-04, and H4-04.	0.00 Hz	★
P3-08	Multi-point V/F voltage 3 (V3)	0.0%–100.0%	0.0%	★
P3-09	V/F slip compensation gain	0%–200.0%	0.0%	☆
P3-10	V/F over-excitation gain	0–200	64	☆
P3-11	V/F oscillation suppression gain	0–100	Model dependent	☆
P3-13	Voltage source for V/F separation	0: Digital setting (P3-14) 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Multi-reference 6: Simple PLC 7: PID 8: Communication setting 100.0% corresponds to the rated motor voltage (P1-02, H4-02, H5-02, H6-02).	0	☆
P3-14	Voltage digital setting for V/F separation	0 V to rated motor voltage	0 V	☆
P3-15	Voltage rise time of V/F separation	0.0–1000.0s It indicates the time for the voltage rising from 0 V to rated motor voltage.	0.0s	☆
P3-16	Voltage decline time of V/F separation	0.0–1000.0s It indicates the time for the voltage to decline from rated motor voltage to 0 V.	0.0s	☆
P3-17	Stop mode selection upon V/F separation	0: Frequency and voltage declining to 0 independently 1: Frequency declining after voltage declines to 0	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
Group P4: Input Terminals				
P4-00	DI1 function selection	0: No function 1: Forward RUN (FWD) 2: Reverse RUN (REV) 3: Three-line control 4: Forward JOG (FJOG) 5: Reverse JOG (RJOG) 6: Terminal UP 7: Terminal DOWN 8: Coast to stop 9: Fault reset (RESET) 10: RUN pause 11: Normally open (NO) input of external fault 12: Multi-reference terminal 1 13: Multi-reference terminal 2 14: Multi-reference terminal 3 15: Multi-reference terminal 4 16: Terminal 1 for acceleration/ deceleration time selection 17: Terminal 2 for acceleration/ deceleration time selection 18: Frequency source switchover 19: UP and DOWN setting clear (terminal, operation panel) 20: Command source switchover terminal 1 21: Acceleration/Deceleration prohibited 22: PID pause 23: PLC status reset 24: Swing pause 25: Counter input 26: Counter reset 27: Length count input 28: Length reset 29: Torque control prohibited	1	★
P4-01	DI2 function selection		4	★
P4-02	DI3 function selection		9	★
P4-03	DI4 function selection		12	★
P4-04	DI5 function selection		13	★

Function Code	Parameter Name	Setting Range	Default	Property
P4-05	DI6 function selection	30: Pulse input (enabled only for DI5) 31: Reserved 32: Immediate DC braking 33: Normally closed (NC) input of external fault 34: Frequency modification forbidden 35: Reverse PID action direction 36: External STOP terminal 1 37: Command source switchover terminal 2 38: PID integral pause	0	★
P4-06	DI7 function selection	39: Switchover between main frequency source X and preset frequency 40: Switchover between auxiliary frequency source Y and preset frequency 41: Motor selection terminal 1 42: Motor selection terminal 2 43: PID parameter switchover 44: User-defined fault 1 45: User-defined fault 2	0	★
P4-07	DI8 function selection	46: Speed control/Torque control switchover 47: Emergency stop 48: External STOP terminal 2 49: Deceleration DC braking 50: Clear the current running time 51: Switchover between two-line mode and three-line mode 52-59: Reserved	0	★
P4-08	DI9 function selection		0	★
P4-09	DI10 function selection		0	★
P4-10	DI filter time	0.000–1.000s	0.010s	☆
P4-11	Terminal command mode	0: Two-line mode 1 1: Two-line mode 2 2: Three-line mode 1 3: Three-line mode 2	0	★
P4-12	Terminal UP/DOWN rate	0.01–65.535 Hz/s	1.00 Hz/s	☆
P4-13	AI curve 1 minimum input	0.00 V to P4-15	0.00 V	☆

Function Code	Parameter Name	Setting Range	Default	Property
P4-14	Corresponding setting of AI curve 1 minimum input	-100.00%~100.0%	0.0%	☆
P4-15	AI curve 1 maximum input	P4-13 to 10.00 V	10.00 V	☆
P4-16	Corresponding setting of AI curve 1 maximum input	-100.00%~100.0%	100.0%	☆
P4-17	AI1 filter time	0.00~10.00s	0.10s	☆
P4-18	AI curve 2 minimum input	0.00 V to P4-20	0.00 V	☆
P4-19	Corresponding setting of AI curve 2 minimum input	-100.00%~100.0%	0.0%	☆
P4-20	AI curve 2 maximum input	P4-18 to 10.00 V	10.00 V	☆
P4-21	Corresponding setting of AI curve 2 maximum input	-100.00%~100.0%	100.0%	☆
P4-22	AI2 filter time	0.00~10.00s	0.10s	☆
P4-23	AI curve 3 minimum input	0.00 V to P4-25	0.00 V	☆
P4-24	Corresponding setting of AI curve 3 minimum input	-100.00%~100.0%	0.0%	☆
P4-25	AI curve 3 maximum input	P4-23 to 10.00 V	10.00 V	☆
P4-26	Corresponding setting of AI curve 3 maximum input	-100.00%~100.0%	100.0%	☆
P4-27	AI3 filter time	0.00~10.00s	0.10s	☆
P4-28	Pulse minimum input	0.00 kHz to P4-30	0.00 kHz	☆
P4-29	Corresponding setting of pulse minimum input	-100.00%~100.0%	0.0%	☆
P4-30	Pulse maximum input	P4-28 to 50.00 kHz	50.00 kHz	☆
P4-31	Corresponding setting of pulse maximum input	-100.00%~100.0%	100.0%	☆
P4-32	Pulse filter time	0.00~10.00s	0.10s	☆

Function Code	Parameter Name	Setting Range	Default	Property
P4-33	AI curve selection	Unit's digit (AI1 curve selection)	321	☆
		Curve 1 (2 points, see P4-13 to P4-16)		
		Curve 2 (2 points, see P4-18 to P4-21)		
		Curve 3 (2 points, see P4-23 to P4-26)		
		Curve 4 (4 points, see H6-00 to H6-07)		
		Curve 5 (4 points, see H6-08 to H6-15)		
P4-34	Setting for AI less than minimum input	Ten's digit (AI2 curve selection)	000	☆
		Curve 1 to curve 5 (same as AI1)		
		Hundred's digit (AI3 curve selection)		
		Curve 1 to curve 5 (same as AI1)		
		Unit's digit (Setting for AI1 less than minimum input)		
		0: Minimum value 1: 0.0%		
P4-35	DI1 delay time	Ten's digit (Setting for AI2 less than minimum input)	0.0s	★
		0, 1 (same as AI1)		
		Hundred's digit (Setting for AI3 less than minimum input)		
P4-36	DI2 delay time	0, 1 (same as AI1)	0.0s	★
P4-37	DI3 delay time	Hundred's digit (Setting for AI3 less than minimum input)	0.0s	★
P4-38	DI valid mode selection 1	Unit's digit (DI1 valid mode)	00000	★
		0: High level valid 1: Low level valid		
		Ten's digit (DI2 valid mode)		
		0, 1 (same as DI1)		
		Hundred's digit (DI3 valid mode)		
		0, 1 (same as DI1)		

Function Code	Parameter Name	Setting Range	Default	Property
P4-38	DI valid mode selection 1	Thousand's digit (DI4 valid mode)	00000	★
		0, 1 (same as DI1)		
		Ten thousand's digit (DI5 valid mode)		
		0, 1 (same as DI1)		
P4-39	DI valid mode selection 2	Unit's digit (DI6 valid mode)	00000	★
		0, 1 (same as DI1)		
		Ten's digit (DI7 valid mode)		
		0, 1 (same as DI1)		
		Hundred's digit (DI8 state)		
		0, 1 (same as DI1)		
		Thousand's digit (DI9 valid mode)		
		0, 1 (same as DI1)		
		Ten thousand's digit (DI10 valid mode)		
		0, 1 (same as DI1)		
P4-40	AI2 input signal selection	0: Voltage signal 1: Current signal	0	★
Group P5: Output Terminals				
P5-00	FM terminal output mode	0: Pulse output (FMP) 1: Switch signal output (FMR)	0	☆
P5-01	FMR function (open- collector output terminal)	0: No output 1: AC drive running 2: Fault output (stop) 3: Frequency-level detection FDT1 output 4: Frequency reached 5: Zero-speed running (no output at stop) 6: Motor overload pre-warning 7: AC drive overload pre-warning 8: Set count value reached 9: Designated count value reached 10: Length reached 11: PLC cycle complete 12: Accumulative running time reached 13: Frequency limited	2	☆
P5-02	Relay function (T/A-T/B-T/C)		2	☆

Function Code	Parameter Name	Setting Range	Default	Property
P5-03	Extension card relay function (P/A-P/B-P/C)	14: Torque limited 15: Ready for RUN	0	☆
P5-04	O1 function selection (open- collector output terminal)	16: AI1 larger than AI2		
P5-04	DO1 function selection (open-collector output terminal)	17: Frequency upper limit reached 18: Frequency lower limit reached (no output at stop) 19: Undervoltage state output 20: Communication setting 21: Reserved 22: Reserved 23: Zero-speed running 2 (having output at stop) 24: Accumulative power-on time reached 25: Frequency level detection FDT2 output	1	☆
P5-05	Extension card DO2 function	26: Frequency 1 reached 27: Frequency 2 reached 28: Current 1 reached 29: Current 2 reached 30: Timing reached 31: AI1 input limit exceeded 32: Load becoming 0 33: Reverse running 34: Zero current state 35: Module temperature reached 36: Software current limit exceeded 37: Frequency lower limit reached (having output at stop) 38: Alarm output 39: Motor overheat warning 40: Current running time reached 41: Fault output (There is no output if it is the coast to stop fault and undervoltage occurs.)	4	☆

Function Code	Parameter Name	Setting Range	Default	Property
P5-06	FMP function selection	0: Running frequency 1: Set frequency 2: Output current 3: Output torque (absolute value) 4: Output power 5: Output voltage 6: Pulse input 7: AI1 8: AI2 9: AI3 10: Length 11: Count value 12: Communication setting 13: Motor rotational speed 14: Output current 15: Output voltage 16: Output torque (actual value)	0	☆
P5-07	AO1 function selection		0	☆
P5-08	AO2 function selection		1	☆
P5-09	Maximum FMP output frequency	0.01–100.00 kHz	50.00 kHz	☆
P5-10	AO1 offset coefficient	-100.0%–100.0%	0.0%	☆
P5-11	AO1 gain	-10.00–10.00	1.00	☆
P5-12	AO2 offset coefficient	-100.0%–100.0%	0.00%	☆
P5-13	AO2 gain	-10.00–10.00	1.00	☆
P5-17	FMR output delay time	0.0–3600.0s	0.0s	☆
P5-18	Relay 1 output delay time	0.0–3600.0s	0.0s	☆
P5-19	Relay 2 output delay time	0.0–3600.0s	0.0s	☆
P5-20	DO1 output delay time	0.0–3600.0s	0.0s	☆
P5-21	DO2 output delay time	0.0–3600.0s	0.0s	☆

Function Code	Parameter Name	Setting Range	Default	Property
P5-22	DO valid mode selection	Unit's digit (FMR valid mode)	00000	☆
		0: Positive logic 1: Negative logic		
		Ten's digit (Relay 1 valid mode)		
		0, 1 (same as FMR)		
		Hundred's digit (Relay 2 valid mode)		
		0, 1 (same as FMR)		
		Thousand's digit (DO1 valid mode)		
		0, 1 (same as FMR)		
		Ten thousand's digit (DO2 valid mode)		
		0, 1 (same as FMR)		
P5-23	AO1 output signal selection	0: Voltage signal 1: Current signal	0	★
Group P6: Start/Stop Control				
P6-00	Start mode	0: Direct start 1: Rotational speed tracking restart 2: Pre-excited start (asynchronous motor)	0	☆
P6-01	Rotational speed tracking mode	0: From frequency at stop 1: From zero speed 2: From maximum frequency	0	★
P6-02	Rotational speed tracking speed	1–100	20	☆
P6-03	Startup frequency	0.00–10.00 Hz	0.00 Hz	☆
P6-04	Startup frequency holding time	0.0–100.0s	0.0s	★
P6-05	Startup DC braking current/ Pre-excited current	0%–100%	0%	★
P6-06	Startup DC braking time/ Pre-excited time	0.0–100.0s	0.0s	★
P6-07	Acceleration/Deceleration mode	0: Linear acceleration/ deceleration 1: S-curve acceleration/ deceleration A 2: S-curve acceleration/ deceleration B	0	★

Function Code	Parameter Name	Setting Range	Default	Property
P6-08	Time proportion of S-curve start segment	0.0% to (100.0% – F6-09)	30.0%	★
P6-09	Time proportion of S-curve end segment	0.0% to (100.0% – F6-08)	30.0%	★
P6-10	Stop mode	0: Decelerate to stop 1: Coast to stop	0	☆
P6-11	Initial frequency of stop DC braking	0.00 Hz to maximum frequency	0.00 Hz	☆
P6-12	Waiting time of stop DC braking	0.0–36.0s	0.0s	☆
P6-13	Stop DC braking current	0%–100%	0%	☆
P6-14	Stop DC braking time	0.0–36.0s	0.0s	☆
P6-15	Brake use ratio	0%–100%	100%	☆
Group P7: Operation Panel and Display				
P7-01	MF.K Key function selection	0: MF.K key disabled 1: Switchover between operation panel control and remote command control (terminal or communication) 2: Switchover between forward rotation and reverse rotation 3: Forward JOG 4: Reverse JOG	0	★
P7-02	STOP/RESET key function	0: STOP/RESET key enabled only in operation panel control 1: STOP/RESET key enabled in any operation mode	1	☆
P7-03	LED display running parameters 1	0000–FFFF Bit00: Running frequency 1 (Hz) Bit01: Set frequency (Hz) Bit02: Bus voltage (V) Bit03: Output voltage (V) Bit04: Output current (A) Bit05: Output power (kW) Bit06: Output torque (%) Bit07: DI input status	1F	☆

Function Code	Parameter Name	Setting Range	Default	Property
P7-03	LED display running parameters 1	Bit08: DO output status Bit09: AI1 voltage (V) Bit10: AI2 voltage (V) Bit11: AI3 voltage (V) Bit12: Count value Bit13: Length value Bit14: Load speed display Bit15: PID setting	1F	☆
P7-04	LED display running parameters 2	0000~FFFF Bit00: PID feedback Bit01: PLC stage Bit02: Pulse setting frequency (kHz) Bit03: Running frequency 2 (Hz) Bit04: Remaining running time Bit05: AI1 voltage before correction (V) Bit06: AI2 voltage before correction (V) Bit07: AI3 voltage before correction (V) Bit08: Linear speed Bit09: Current power-on time (Hour) Bit10: Current running time (Min) Bit11: Pulse setting frequency (Hz) Bit12: Communication setting value Bit13: Encoder feedback speed (Hz) Bit14: Main frequency X display (Hz) Bit15: Auxiliary frequency Y display (Hz)	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
P7-05	LED display stop parameters	0000~FFFF Bit00: Set frequency (Hz) Bit01: Bus voltage (V) Bit02: DI input status Bit03: DO output status Bit04: AI1 voltage (V) Bit05: AI2 voltage (V) Bit06: AI3 voltage (V) Bit07: Count value Bit08: Length value Bit09: PLC stage Bit10: Load speed Bit11: PID setting Bit12: Pulse setting frequency (kHz)	33	☆
P7-06	Load speed display coefficient	0.0001~6.5000	1.0000	☆
P7-07	Heatsink temperature of inverter module	0.0~100.0°C	-	●
P7-08	Temporary software version	-	-	●
P7-09	Accumulative running time	0~65535 h	-	●
P7-10	Product number	-	-	●
P7-11	Software version	-	-	●
P7-12	Number of decimal places for load speed display	0: 0 decimal place 1: 1 decimal place 2: 2 decimal places 3: 3 decimal places	1	☆
P7-13	Accumulative power-on time	0~65535 h	0 h	●
P7-14	Accumulative power consumption	0~65535 kWh	-	●
Group P8: Auxiliary Functions				
P8-00	JOG running frequency	0.00 Hz to maximum frequency	2.00 Hz	☆
P8-01	JOG acceleration time	0.0~6500.0s	20.0s	☆
P8-02	JOG deceleration time	0.0~6500.0s	20.0s	☆
P8-03	Acceleration time 2	0.0~6500.0s	Model dependent	☆
P8-04	Deceleration time 2	0.0~6500.0s	Model dependent	☆

Function Code	Parameter Name	Setting Range	Default	Property
P8-05	Acceleration time 3	0.0–6500.0s	Model dependent	☆
P8-06	Deceleration time 3	0.0–6500.0s	Model dependent	☆
P8-07	Acceleration time 4	0.0–500.0s	Model dependent	☆
P8-08	Deceleration time 4	0.0–6500.0s	Model dependent	☆
P8-09	Jump frequency 1	0.00 Hz to maximum frequency	0.00 Hz	☆
P8-10	Jump frequency 2	0.00 Hz to maximum frequency	0.00 Hz	☆
P8-11	Frequency jump amplitude	0.00 Hz to maximum frequency	0.00 Hz	☆
P8-12	Forward/Reverse rotation dead-zone time	0.0–3000.0s	0.0s	☆
P8-13	Reverse control	0: Enabled 1: Disabled	0	☆
P8-14	Running mode when set frequency lower than frequency lower limit	0: Run at frequency lower limit 1: Stop 2: Run at zero speed	0	☆
P8-15	Droop control	0.00–10.00 Hz	0.00 Hz	☆
P8-16	Accumulative power-on time threshold	0–65000 h	0 h	☆
P8-17	Accumulative running time threshold	0–65000 h	0 h	☆
P8-18	Startup protection	0: No 1: Yes	0	☆
P8-19	Frequency detection value (FDT1)	0.00 Hz to maximum frequency	50.00 Hz	☆
P8-20	Frequency detection hysteresis (FDT hysteresis 1)	0.0%–100.0% (FDT1 level)	5.0%	☆
P8-21	Detection range of frequency reached	0.00–100% (maximum frequency)	0.0%	☆
P8-22	Jump frequency during acceleration/deceleration	0: Disabled 1: Enabled	0	☆
P8-25	Frequency switchover point between acceleration time 1 and acceleration time 2	0.00 Hz to maximum frequency	0.00 Hz	☆
P8-26	Frequency switchover point between deceleration time 1 and deceleration time 2	0.00 to maximum frequency	0.00 Hz	☆
P8-27	Terminal JOG preferred	0: Disabled 1: Enabled	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
P8-28	Frequency detection value (FDT2)	0.00 to maximum frequency	50.00 Hz	☆
P8-29	Frequency detection hysteresis (FDT hysteresis 2)	0.0%–100.0% (FDT2 level)	5.0%	☆
P8-30	Any frequency reaching detection value 1	0.00 Hz to maximum frequency	50.00 Hz	☆
P8-31	Any frequency reaching detection amplitude 1	0.0%–100.0% (maximum frequency)	0.0%	☆
P8-32	Any frequency reaching detection value 2	0.00 Hz to maximum frequency	50.00 Hz	☆
P8-33	Any frequency reaching detection amplitude 2	0.0%–100.0% (maximum frequency)	0.0%	☆
P8-34	Zero current detection level	0.0%–300.0% (rated motor current)	5.0%	☆
P8-35	Zero current detection delay time	0.00–600.00s	0.10s	☆
P8-36	Output overcurrent threshold	% (no detection) %–300.0% (rated motor current)	200.0%	☆
P8-37	Output overcurrent detection delay time	0.00–600.00s	0.00s	☆
P8-38	Any current reaching 1	0.0%–300.0% (rated motor current)	100.0%	☆
P8-39	Any current reaching 1 amplitude	0.0%–300.0% (rated motor current)	0.0%	☆
P8-40	Any current reaching 2	0.0%–300.0% (rated motor current)	100.0%	☆
P8-41	Any current reaching 2 amplitude	0.0%–300.0% (rated motor current)	0.0%	☆
P8-42	Timing function	0: Disabled 1: Enabled	0	☆
P8-43	Timing duration source	0: P8-44 1: AI1 2: AI2 3: AI3 (100% of analog input corresponds to the value of P8-44)	0	☆
P8-44	Timing duration	0.0–6500.0 min	0.0 min	☆
P8-45	AI1 input voltage lower limit	0.00 V to P8-46	3.10 V	☆
P8-46	AI1 input voltage upper limit	P8-45 to 10.00 V	6.80 V	☆

Function Code	Parameter Name	Setting Range	Default	Property
P8-47	Module temperature threshold	0–100°C	75°C	☆
P8-48	Cooling fan control	0: Fan working during running 1: Fan working continuously	0	☆
P8-49	Wakeup frequency	Dormant frequency (P8-51) to maximum frequency (P0-10)	0.00 Hz	☆
P8-50	Wakeup delay time	0.0–6500.0s	0.0s	☆
P8-51	Dormant frequency	0.00 Hz to wakeup frequency (P8-49)	0.00 Hz	☆
P8-52	Dormant delay time	0.0–6500.0s	0.0s	☆
P8-53	Current running time reached	0.0–6500.0 min	0.0 min	☆
P8-54	Output power correction coefficient	0.00%–200.0%	100.0%	☆
Group P9: Fault and Protection				
P9-00	Motor overload protection selection	0: Disabled 1: Enabled	1	☆
P9-01	Motor overload protection gain	0.20–10.00	1.00	☆
P9-02	Motor overload warning coefficient	50%–100%	80%	☆
P9-03	Overvoltage stall gain	0 (no stall overvoltage)–100	0	☆
P9-04	Overvoltage stall protective voltage	120%–150%	130%	☆
P9-05	Overcurrent stall gain	0–100	20	☆
P9-06	Overcurrent stall protective current	100%–200%	150%	☆
P9-07	Short-circuit to ground upon power-on	0: Disabled 1: Enabled	1	☆
P9-09	Fault auto reset times	0–20	0	☆
P9-10	DO action during fault auto reset	0: Not act 1: Act	0	☆
P9-11	Time interval of fault auto reset	0.1s–100.0s	1.0s	☆
P9-12	Input phase loss protection/ contactor energizing protection selection	Unit's digit: Input phase loss protection Ten's digit: Contactor energizing protection 0: Disabled 1: Enabled	11	☆

Function Code	Parameter Name	Setting Range	Default	Property
P9-13	Output phase loss protection selection	0: Disabled 1: Enabled	1	☆
P9-14	1st fault type	0: No fault 1: Reserved 2: Overcurrent during acceleration 3: Overcurrent during deceleration 4: Overcurrent at constant speed 5: Overvoltage during acceleration 6: Overvoltage during deceleration 7: Overvoltage at constant speed 8: Buffer resistance overload 9: Undervoltage 10: AC drive overload 11: Motor overload 12: Power input phase loss 13: Power output phase loss 14: Module overheat 15: External equipment fault 16: Communication fault 17: Contactor fault 18: Current detection fault 19: Motor auto-tuning fault 20: Encoder/PG card fault 21: EEPROM read-write fault 22: AC drive hardware fault 23: Short circuit to ground 24: Reserved 25: Reserved 26: Accumulative running time reached 27: User-defined fault 1 28: User-defined fault 2 29: Accumulative power-on time reached 30: Load becoming 0 31: PID feedback lost during running	-	●
P9-15	2nd fault type		-	●

Function Code	Parameter Name	Setting Range	Default	Property
P9-16	3rd (latest) fault type	40: With-wave current limit fault 41: Motor switchover fault during running 42: Too large speed deviation 43: Motor over-speed 45: Motor overheat 51: Initial position fault	-	●
P9-17	Frequency upon 3rd fault	-	-	●
P9-18	Current upon 3rd fault	-	-	●
P9-19	Bus voltage upon 3rd fault	-	-	●
P9-20	DI status upon 3rd fault	-	-	●
P9-21	Output terminal status upon 3rd fault	-	-	●
P9-22	AC drive status upon 3rd fault	-	-	●
P9-23	Power-on time upon 3rd fault	-	-	●
P9-24	Running time upon 3rd fault	-	-	●
P9-27	Frequency upon 2nd fault	-	-	●
P9-28	Current upon 2nd fault	-	-	●
P9-29	Bus voltage upon 2nd fault	-	-	●
P9-30	DI status upon 2nd fault	-	-	●
P9-31	Output terminal status upon 2nd fault	-	-	●
P9-32	Frequency upon 2nd fault	-	-	●
P9-33	Current upon 2nd fault	-	-	●
P9-34	Bus voltage upon 2nd fault	-	-	●
P9-37	DI status upon 1st fault	-	-	●
P9-38	Output terminal status upon 1st fault	-	-	●
P9-39	Frequency upon 1st fault	-	-	●
P9-40	Current upon 1st fault	-	-	●
P9-41	Bus voltage upon 3rd fault	-	-	●
P9-42	DI status upon 1st fault	-	-	●
P9-43	Output terminal status upon 1st fault	-	-	●
P9-44	Frequency upon 1st fault	-	-	●

Function Code	Parameter Name	Setting Range	Default	Property
P9-47	Fault protection action selection 1	Unit's digit (Motor overload, Err11)	00000	☆
		0: Coast to stop 1: Stop according to the stop mode 2: Continue to run		
		Ten's digit (Power input phase loss, Err12)		
		Same as unit's digit		
		Hundred's digit (Power output phase loss, Err13)		
		Same as unit's digit		
		Thousand's digit (External equipment fault, Err15)		
		Same as unit's digit		
		Ten thousand's digit (Communication fault, Err16)		
		Same as unit's digit		
P9-48	Fault protection action selection 2	Unit's digit (Encoder fault, Err20)	00000	☆
		0: Coast to stop 1: Switch over to V/F control, stop according to the stop mode 2: Switch over to V/F control, continue to run		
		Ten's digit (EEPROM read-write fault, Err21)		
		0: Coast to stop 1: Stop according to the stop mode		
P9-48	Fault protection action selection 2	Hundred's digit: reserved	00000	☆
		Thousand's digit (Motor overheat, Err25)		
		Same as unit's digit in P9-47		
		Ten thousand's digit (Accumulative running time reached)		
		Same as unit's digit in P9-47		

Function Code	Parameter Name	Setting Range	Default	Property
P9-49	Fault protection action selection 3	Unit's digit (User-defined fault 1, Err27)	00000	☆
		Same as unit's digit in P9-47		
		Ten's digit (User-defined fault 2, Err28)		
		Same as unit's digit in P9-47		
		Hundred's digit (Accumulative power-on time reached, Err29)		
		Same as unit's digit in P9-47		
		Thousand's digit (Load becoming 0, Err30)		
		0: Coast to stop 1: Stop according to the stop mode 2: Continue to run at 7% of rated motor frequency and resume to the set frequency if the load recovers		
		Ten thousand's digit (PID feedback lost during running, Err31)		
		Same as unit's digit in P9-47		
P9-50	Fault protection action selection 4	Unit's digit (Too large speed deviation, Err42)	00000	☆
		Same as unit's digit in P9-47		
		Ten's digit (Motor over-speed, Err43)		
		Same as unit's digit in P9-47		
		Hundred's digit (Initial position fault, Err51)		
		Same as unit's digit in P9-47		
		Thousand's digit (Speed feedback fault, Err52)		
		Same as unit's digit in P9-47		
		Ten thousand's digit: Reserved		
P9-54	Frequency selection for continuing to run upon fault	0: Current running frequency 1: Set frequency 2: Frequency upper limit 3: Frequency lower limit 4: Backup frequency upon abnormality	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
P9-55	Backup frequency upon abnormality	0.0%–100.0% (maximum frequency)	100.0%	☆
P9-56	Type of motor temperature sensor	0: No temperature sensor 1: PT100 2: PT1000	1	☆
P9-57	Motor overheat protection threshold	0–200°C	110°C	☆
P9-58	Motor overheat warning threshold	0–200°C	90°C	☆
P9-59	Action selection at instantaneous power failure	0: Invalid 1: Decelerate 2: Decelerate to stop	0	☆
P9-60	Action pause judging voltage at instantaneous power failure	80.0%–100.0%	90.0%	☆
P9-61	Voltage rally judging time at instantaneous power failure	0.00–100.00s	0.50s	☆
P9-62	Action judging voltage at instantaneous power failure	60.0%–100.0% (standard bus voltage)	80.0%	☆
P9-63	Protection upon load becoming 0	0: Disabled 1: Enabled	0	☆
P9-64	Detection level of load becoming 0	0.0%–100.0% (rated motor current)	10.0%	☆
P9-65	Detection time of load becoming 0	0.0–60.0s	1.0s	☆
P9-67	Over-speed detection value	0.0%–50.0% (maximum frequency)	20.0%	☆
P9-68	Over-speed detection time	0.0–60.0s	1.0s	☆
P9-69	Detection value of too large speed deviation	0.0%–50.0% (maximum frequency)	20.0%	☆
P9-70	Detection time of too large speed deviation	0.0–60.0s	5.0s	☆
Group PA: Process Control PID Function				
PA-00	PID setting source	0: PA-01 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Communication setting 6: Multi-reference	0	☆
PA-01	PID digital setting	0.0%–100.0%	50.0%	☆

Function Code	Parameter Name	Setting Range	Default	Property
PA-02	PID feedback source	0: AI1 1: AI2 2: AI3 3: AI1 – AI2 4: Pulse setting (DI5) 5: Communication setting 6: AI1 + AI2 7: MAX (AI1 , AI2) 8: MIN (AI1 , AI2)	0	☆
PA-03	PID action direction	0: Forward action 1: Reverse action	0	☆
PA-04	PID setting feedback range	0–65535	1000	☆
PA-05	Proportional gain Kp1	0.0–100.0	20.0	☆
PA-06	Integral time Ti1	0.01–10.00s	2.00s	☆
PA-07	Differential time Td1	0.00–10.000	0.000s	☆
PA-08	Cut-off frequency of PID reverse rotation	0.00 to maximum frequency	2.00 Hz	☆
PA-09	PID deviation limit	0.0%–100.0%	0.0%	☆
PA-10	PID differential limit	0.00%–100.00%	0.10%	☆
PA-11	PID setting change time	0.00–650.00s	0.00s	☆
PA-12	PID feedback filter time	0.00–60.00s	0.00s	☆
PA-13	PID output filter time	0.00–60.00s	0.00s	☆
PA-14	Reserved	-	-	☆
PA-15	Proportional gain Kp2	0.0–100.0	20.0	☆
PA-16	Integral time Ti2	0.01–10.00s	2.00s	☆
PA-17	Differential time Td2	0.000–10.000s	0.000s	☆
PA-18	PID parameter switchover condition	0: No switchover 1: Switchover via DI 2: Automatic switchover based on deviation	0	☆
PA-19	PID parameter switchover deviation 1	0.0% to FA-20	20.0%	☆
PA-20	PID parameter switchover deviation 2	PA-19 to 100.0%	80.0%	☆
PA-21	PID initial value	0.0%–100.0%	0.0%	☆
PA-22	PID initial value holding time	0.00–650.00s	0.00s	☆
PA-23	Maximum deviation between two PID outputs in forward direction	0.00%–100.00%	1.00%	☆

Function Code	Parameter Name	Setting Range	Default	Property
PA-24	Maximum deviation between two PID outputs in reverse direction	0.00%–100.00%	1.00%	☆
PA-25	PID integral property	Unit's digit (Integral separated)	00	☆
		0: Invalid 1: Valid		
		Ten's digit (Whether to stop integral operation when the output reaches the limit)		
		0: Continue integral operation 1: Stop integral operation		
PA-26	Detection value of PID feedback loss	0.0%: Not judging feedback loss 0.1%–100.0%	0.0%	☆
PA-27	Detection time of PID feedback loss	0.0–20.0s	0.0s	☆
PA-28	PID operation at stop	0: No PID operation at stop 1: PID operation at stop	0	☆
Group PB: Swing Frequency, Fixed Length and Count				
PB-00	Swing frequency setting mode	0: Relative to the central frequency 1: Relative to the maximum frequency	0	☆
PB-01	Swing frequency amplitude	0.0%–100.0%	0.0%	☆
PB-02	Jump frequency amplitude	0.0%–50.0%	0.0%	☆
PB-03	Swing frequency cycle	0.0–3000.0s	10.0s	☆
PB-04	Triangular wave rising time coefficient	0.0%–100.0%	50.0%	☆
PB-05	Set length	0–65535 m	1000 m	☆
PB-06	Actual length	0–65535 m	0 m	☆
PB-07	Number of pulses per meter	0.1–6553.5	100.0	☆
PB-08	Set count value	1–65535	1000	☆
PB-09	Designated count value	1–65535	1000	☆
Group PC: Multi-Reference and Simple PLC Function				
PC-00	Reference 0	-100.0%–100.0%	0.0%	☆
PC-01	Reference 1	-100.0%–100.0%	0.0%	☆
PC-02	Reference 2	-100.0%–100.0%	0.0%	☆
PC-03	Reference 3	-100.0%–100.0%	0.0%	☆
PC-04	Reference 4	-100.0%–100.0%	0.0%	☆

Function Code	Parameter Name	Setting Range	Default	Property
PC-05	Reference 5	-100.0%~100.0%	0.0%	☆
PC-06	Reference 6	-100.0%~100.0%	0.0%	☆
PC-07	Reference 7	-100.0%~100.0%	0.0%	☆
PC-08	Reference 8	-100.0%~100.0%	0.0%	☆
PC-09	Reference 9	-100.0%~100.0%	0.0%	☆
PC-10	Reference 10	-100.0%~100.0%	0.0%	☆
PC-11	Reference 11	-100.0%~100.0%	0.0%	☆
PC-12	Reference 12	-100.0%~100.0%	0.0%	☆
PC-13	Reference 13	-100.0%~100.0%	0.0%	☆
PC-14	Reference 14	-100.0%~100.0%	0.0%	☆
PC-15	Reference 15	-100.0%~100.0%	0.0%	☆
PC-16	Simple PLC running mode	0: Stop after the AC drive runs one cycle 1: Keep final values after the AC drive runs one cycle 2: Repeat after the AC drive runs one cycle	0	☆
PC-17	Simple PLC retentive selection	Unit's digit (Retentive upon power failure)	00	☆
		0: No 1: Yes		
		Ten's digit (Retentive upon stop)		
		0: No 1: Yes		
PC-18	Running time of simple PLC reference 0	0.0~6553.5s (h)	0.0s (h)	☆
PC-19	Acceleration/deceleration time of simple PLC reference 0	0~3	0	☆
PC-20	Running time of simple PLC reference 1	0.0~6553.5s (h)	0.0s (h)	☆
PC-21	Acceleration/deceleration time of simple PLC reference 1	0~3	0	☆
PC-22	Running time of simple PLC reference 2	0.0~6553.5s (h)	0.0s (h)	☆
PC-23	Acceleration/deceleration time of simple PLC reference 2	0~3	0	☆
PC-24	Running time of simple PLC reference 3	0.0~6553.5s (h)	0.0s (h)	☆
PC-25	Acceleration/deceleration time of simple PLC reference 3	0~3	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
PC-26	Running time of simple PLC reference 4	0.0–6553.5s (h)	0.0s (h)	☆
PC-27	Acceleration/deceleration time of simple PLC reference 4	0–3	0	☆
PC-28	Running time of simple PLC reference 5	0.0–6553.5s (h)	0.0s (h)	☆
PC-29	Acceleration/deceleration time of simple PLC reference 5	0–3	0	☆
PC-30	Running time of simple PLC reference 6	0.0–6553.5s (h)	0.0s (h)	☆
PC-31	Acceleration/deceleration time of simple PLC reference 6	0–3	0	☆
PC-32	Running time of simple PLC reference 7	0.0–6553.5s (h)	0.0s (h)	☆
PC-33	Acceleration/deceleration time of simple PLC reference 7	0–3	0	☆
PC-34	Running time of simple PLC reference 8	0.0–6553.5s (h)	0.0s (h)	☆
PC-35	Acceleration/deceleration time of simple PLC reference 8	0–3	0	☆
PC-36	Running time of simple PLC reference 9	0.0–6553.5s (h)	0.0s (h)	☆
PC-37	Acceleration/deceleration time of simple PLC reference 9	0–3	0	☆
PC-38	Running time of simple PLC reference 10	0.0–6553.5s (h)	0.0s (h)	☆
PC-39	Acceleration/deceleration time of simple PLC reference 10	0–3	0	☆
PC-40	Running time of simple PLC reference 11	0.0–6553.5s (h)	0.0s (h)	☆
PC-41	Acceleration/deceleration time of simple PLC reference 11	0–3	0	☆
PC-42	Running time of simple PLC reference 12	0.0–6553.5s (h)	0.0s (h)	☆
PC-43	Acceleration/deceleration time of simple PLC reference 12	0–3	0	☆
PC-44	Running time of simple PLC reference 13	0.0–6553.5s (h)	0.0s (h)	☆
PC-45	Acceleration/deceleration time of simple PLC reference 13	0–3	0	☆
PC-46	Running time of simple PLC reference 14	0.0–6553.5s (h)	0.0s (h)	☆

Function Code	Parameter Name	Setting Range	Default	Property
PC-47	Acceleration/deceleration time of simple PLC reference 14	0-3	0	☆
PC-48	Running time of simple PLC reference 15	0.0-6553.5s (h)	0.0s (h)	☆
PC-49	Acceleration/deceleration time of simple PLC reference 15	0-3	0	☆
PC-50	Time unit of simple PLC running	0: s (second)1:h (hour)	0	☆
PC-51	Reference 0 source	0: Set by PC-00 1: AI1 2: AI2 3: AI3 4: Pulse setting 5: PID 6: Set by preset frequency (P0- 08), modified via terminal UP/ DOWN	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
Group PD: Communication Parameters				
PD-00	Baud rate	Unit's digit (Modbus baud rate)	6005	☆
		0: 300 BPs 1: 600 BPs 2: 1200 BPs 3: 2400 BPs 4: 4800 BPs 5: 9600 BPs 6: 19200 BPs 7: 38400 BPs 8: 57600 BPs 9: 115200 BPs		
		Ten's digit (PROFIBUS-DP baud rate)		
		0: 115200 BPs 1: 208300 BPs 2: 256000 BPs 3: 512000 Bps		
		Hundred's digit (reserved)		
		Thousand's digit (CANlink baud rate)		
PD-01	Data format	0: 20 1: 50 2: 100 3: 125 4: 250 5: 500 6: 1 M	0	☆
		0: No check, data format <8,N,2> 1: Even parity check, data format <8,E,1> 2: Odd Parity check, data format <8,O,1> 3: No check, data format <8,N,1> Valid for Modbus		
PD-02	Local address	0: Broadcast address 1–247 Valid for Modbus, PROFIBUS-DP and CANlink	1	☆

Function Code	Parameter Name	Setting Range	Default	Property
PD-03	Response delay	0–20 ms Valid for Modbus	2 ms	☆
PD-04	Communication timeout	0.0s (invalid) 0.1–60.0s Valid for Modbus, PROFIBUS-DP and CANopen	0.0s	☆
PD-05	Modbus protocol selection and PROFIBUS-DP data format	Unit's digit: Modbus protocol	30	☆
		0: Non-standard Modbus protocol 1: Standard Modbus protocol		
		Ten's digit: PROFIBUS-DP data format		
		0: PPO1 format 1: PPO2 format 2: PPO3 format 3: PPO5 format		
PD-06	Communication reading current resolution	0: 0.01A 1: 0.1A	0	☆
PD-08	CANlink communication timeout time	0.0s: Invalid 0.1–60.0s	0	☆
Group PE: User-defined Parameters				
PE-00	User-defined function code 0	P0-00 to PP-xx H0-00 to Hx-xx S0-xx to S0-xx	P0-10	☆
PE-01	User-defined function code 1		P0-02	☆
PE-02	User-defined function code 2		P0-03	☆
PE-03	User-defined function code 3		P0-07	☆
PE-04	User-defined function code 4		P0-08	☆
PE-05	User-defined function code 5		P0-17	☆
PE-06	User-defined function code 6		P0-18	☆
PE-07	User-defined function code 7		P3-00	☆
PE-08	User-defined function code 8		P3-01	☆
PE-09	User-defined function code 9		P4-00	☆
PE-10	User-defined function code 10		P4-01	☆
PE-11	User-defined function code 11		P4-02	☆
PE-12	User-defined function code 12		P5-04	☆
PE-13	User-defined function code 13		P5-07	☆
PE-14	User-defined function code 14		P6-00	☆

Function Code	Parameter Name	Setting Range	Default	Property
PE-15	User-defined function code 15	P0-00 to PP-xx H0-00 to Hx-xx S0-xx to S0-xx	P6-10	☆
PE-16	User-defined function code 16		P0-00	☆
PE-17	User-defined function code 17		P0-00	☆
PE-18	User-defined function code 18		P0-00	☆
PE-19	User-defined function code 19		P0-00	☆
PE-20	User-defined function code 20		P0-00	☆
PE-21	User-defined function code 21		P0-00	☆
PE-22	User-defined function code 22		P0-00	☆
PE-23	User-defined function code 23		P0-00	☆
PE-24	User-defined function code 24		P0-00	☆
PE-25	User-defined function code 25		P0-00	☆
PE-26	User-defined function code 26		P0-00	☆
PE-27	User-defined function code 27		P0-00	☆
PE-28	User-defined function code 28		P0-00	☆
PE-29	User-defined function code 29	P0-00	☆	
Group PP: Function Code Management				
PP-00	User password	0-65535	0	☆
PP-01	Restore default settings	0: No operation 01: Restore factory settings except motor parameters 02: Clear records 04: Restore user backup parameters 501: Back up current user parameters	0	★
PP-02	AC drive parameter display property	Unit's digit (Group U display selection)	11	★
		0: Not display 1: Display		
		Ten's digit (Group A display selection)		
		0: Not display 1: Display		

Function Code	Parameter Name	Setting Range	Default	Property
PP-03	Individualized parameter display property	Unit's digit (User-defined parameter display selection)	00	☆
		0: Not display 1: Display		
		Ten's digit (User-modified parameter display selection)		
		0: Not display 1: Display		
PP-04	Parameter modification property	0: Modifiable 1: Not modifiable	0	☆
Group H0: Torque Control and Restricting Parameters				
H0-00	Speed/Torque control selection	0: Speed control 1: Torque control	0	★
H0-01	Torque setting source in torque control	0: Digital setting (A0-03) 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Communication setting 6: MIN (AI1, AI2) 7: MAX (AI1, AI2) Full range of values 1–7 corresponds to the digital setting of A0-03.	0	★
H0-03	Torque digital setting in torque control	-200.0%–200.0%	150.0%	☆
H0-05	Forward maximum frequency in torque control	0.00 Hz to maximum frequency (P0-10)	50.00 Hz	☆
H0-06	Reverse maximum frequency in torque control	0.00 Hz to maximum frequency (P0-10)	50.00 Hz	☆
H0-07	Acceleration time in torque control	0.00–65000s	0.00s	☆
H0-08	Deceleration time in torque control	0.00–65000s	0.00s	☆
Group H1: Virtual DI (VDI)/Virtual DO (VDO)				
H1-00	VDI1 function selection	0–59	0	★
H1-01	VDI2 function selection	0–59	0	★
H1-02	VDI3 function selection	0–59	0	★
H1-03	VDI4 function selection	0–59	0	★

Function Code	Parameter Name	Setting Range	Default	Property
H1-04	VDI5 function selection	0-59	0	★
H1-05	VDI state setting mode	Unit's digit (VDI1)	00000	★
		0: Decided by state of VDOx 1: Decided by A1-06		
		Ten's digit (VDI2)		
		0, 1 (same as VDI1)		
		Hundred's digit (VDI3)		
		0, 1 (same as VDI1)		
		Thousand's digit (VDI4)		
		0, 1 (same as VDI1)		
		Ten thousand's digit (VDI5)		
		0, 1 (same as VDI1)		
H1-06	VDI state selection	Unit's digit (VDI1)	00000	★
		0: Invalid 1: Valid		
		Ten's digit (VDI2)		
		0, 1 (same as VDI1)		
		Hundred's digit (VDI3)		
		0, 1 (same as VDI1)		
		Thousand's digit (VDI4)		
		0, 1 (same as VDI1)		
		Ten thousand's digit (VDI5)		
		0, 1 (same as VDI1)		
H1-07	Function selection for AI1 used as DI	0-59	0	★
H1-08	Function selection for AI2 used as DI	0-59	0	★
H1-09	Function selection for AI3 used as DI	0-59	0	★
H1-10	State selection for AI used as DI	Unit's digit (AI1)	000	★
		0: High level valid 1: Low level valid		
		Ten's digit (AI2)		
		0, 1 (same as unit's digit)		
		Hundred's digit (AI3)		
		0, 1 (same as unit's digit)		

Function Code	Parameter Name	Setting Range	Default	Property
H1-11	VDO1 function selection	0: Short with physical Dlx internally 1–40: Refer to function selection of physical DO in group P5.	0	☆
H1-12	VDO2 function selection	0: Short with physical Dlx internally 1–40: Refer to function selection of physical DO in group P5.	0	☆
H1-13	VDO3 function selection	0: Short with physical Dlx internally 1–40: Refer to function selection of physical DO in group P5.	0	☆
H1-14	VDO4 function selection	0: Short with physical Dlx internally 1–40: Refer to function selection of physical DO in group P5.	0	☆
H1-15	VDO5 function selection	0: Short with physical Dlx internally 1–40: Refer to function selection of physical DO in group P5.	0	☆
H1-16	VDO1 output delay	0.0–3600.0s	0.0s	☆
H1-17	VDO2 output delay	0.0–3600.0s	0.0s	☆
H1-18	VDO3 output delay	0.0–3600.0s	0.0s	☆
H1-19	VDO4 output delay	0.0–3600.0s	0.0s	☆
H1-20	VDO5 output delay	0.0–3600.0s	0.0s	☆
H1-21	VDO state selection	Unit's digit (VDO1)	00000	☆
		0: Positive logic 1: Reverse logic		
		Ten's digit (VDO2)		
		0, 1 (same as unit's digit)		
		Hundred's digit (VDO3)		
		0, 1 (same as unit's digit)		
		Thousand's digit (VDO4)		
		0, 1 (same as unit's digit)		
		Ten thousand's digit (VDO5)		
		0, 1 (same as unit's digit)		

Function Code	Parameter Name	Setting Range	Default	Property
Group H2: Motor 2 Parameters				
H2-00	Motor type selection	0: Common asynchronous motor 1: Variable frequency asynchronous motor 2: Permanent magnetic synchronous motor	0	★
H2-01	Rated motor power	0.1–1000.0 kW	Model dependent	★
H2-02	Rated motor voltage	1–2000 V	Model dependent	★
H2-03	Rated motor current	0.01–655.35 A (AC drive power ≤ 55 kW) 0.1–6553.5 A (AC drive power > 55 kW)	Model dependent	★
H2-04	Rated motor frequency	0.01 Hz to maximum frequency	Model dependent	★
H2-05	Rated motor rotational speed	1–65535 RPM	Model dependent	★
H2-06	Stator resistance (asynchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H2-07	Rotor resistance (asynchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H2-08	Leakage inductive reactance (asynchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H2-09	Mutual inductive reactance (asynchronous motor)	0.1–6553.5 mH (AC drive power ≤ 55 kW) 0.01–655.35 mH (AC drive power > 55 kW)	Model dependent	★
H2-10	No-load current (asynchronous motor)	0.01 A to A2-03 (AC drive power ≤ 55 kW) 0.1 A to A2-03 (AC drive power > 55 kW)	Model dependent	★
H2-16	Stator resistance (synchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★

Function Code	Parameter Name	Setting Range	Default	Property
H2-17	Shaft D inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H2-18	Shaft Q inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H2-20	Back EMF (synchronous motor)	0.1–6553.5 V	Model dependent	★
H2-27	Encoder pulses per revolution	1–65535	1024	★
H2-28	Encoder type	0: ABZ incremental encoder 1: UVW incremental encoder 2: Resolver 3: SIN/COS encoder 4: Wire-saving UVW encoder	0	★
H2-30	A, B phase sequence of ABZ incremental encoder	0: Forward 1: Reserve	0	★
H2-31	Encoder installation angle	0.0°–359.9°	0.0°	★
H2-32	U, V, W phase sequence of UVW encoder	0: Forward 1: Reverse	0	★
H2-33	UVW encoder angle offset	0.0°–359.9°	0.0°	★
H2-34	Number of pole pairs of resolver	1–65535	1	★
H2-36	Encoder wire-break fault detection time	0.0s: No action 0.1–10.0s	0.0s	★
H2-37	Auto-tuning selection	0: No auto-tuning 1: Asynchronous motor static auto-tuning 2: Asynchronous motor complete auto-tuning 11: Synchronous motor with-load auto-tuning 12: Synchronous motor no-load auto-tuning	0	★
H2-38	Speed loop proportional gain 1	0–100	30	☆
H2-39	Speed loop integral time 1	0.01–10.00s	0.50s	☆
H2-40	Switchover frequency 1	0.00 to H2-43	5.00 Hz	☆
H2-41	Speed loop proportional gain 2	0–100	15	☆

Function Code	Parameter Name	Setting Range	Default	Property
H2-42	Speed loop integral time 2	0.01–10.00s	1.00s	☆
H2-43	Switchover frequency 2	H2-40 to maximum output frequency	10.00 Hz	☆
H2-44	Vector control slip gain	50%–200%	100%	☆
H2-45	Time constant of speed loop filter	0.000–0.100s	0.000s	☆
H2-46	Vector control over- excitation gain	0–200	64	☆
H2-47	Torque upper limit source in speed control mode	0: H2-48 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Via communication 6: MIN(AI1,AI2) 7: MIN(AI1,AI2)	0	☆
H2-48	Digital setting of torque upper limit in speed control mode	0.0%–200.0%	150.0%	☆
H2-51	Excitation adjustment proportional gain	0–20000	2000	☆
H2-52	Excitation adjustment integral gain	0–20000	1300	☆
H2-53	Torque adjustment proportional gain	0–20000	2000	☆
H2-54	Torque adjustment integral gain	0–20000	1300	☆
H2-55	Speed loop integral property	Unit's digit: Integral separated 0: Disabled 1: Enabled	0	☆
H2-56	Field weakening mode of synchronous motor	0: No field weakening 1: Direct calculation 2: Adjustment	0	☆
H2-57	Field weakening degree of synchronous motor	50%–500%	100%	☆
H2-58	Maximum field weakening current	1%–300%	50%	☆
H2-59	Field weakening automatic adjustment gain	10%–500%	100%	☆
H2-60	Field weakening integral multiple	2–10	2	☆

Function Code	Parameter Name	Setting Range	Default	Property
H2-61	Motor 2 control mode	0: Sensorless flux vector control (SFVC) 1: Closed-loop vector control (CLVC) 2: Voltage/Frequency (V/F) control	0	☆
H2-62	Motor 2 acceleration/ deceleration time	0: Same as motor 1 1: Acceleration/Deceleration time 1 2: Acceleration/Deceleration time 2 3: Acceleration/Deceleration time 3 4: Acceleration/Deceleration time 4	0	☆
H2-63	Motor 2 torque boost	0.0%: Automatic torque boost 0.1%~30.0%	Model dependent	☆
H2-65	Motor 2 oscillation suppression gain	0~100	Model dependent	☆
Group H3: Motor 3 Parameters				
H3-00	Motor type selection	0: Common asynchronous motor 1: Variable frequency asynchronous motor 2: Permanent magnetic synchronous motor	0	★
H3-01	Rated motor power	0.1~1000.0 kW	Model dependent	★
H3-02	Rated motor voltage	1~2000 V	Model dependent	★
H3-03	Rated motor current	0.01~655.35 A (AC drive power ≤ 55 kW) 0.1~6553.5 A (AC drive power > 55 kW)	Model dependent	★
H3-04	Rated motor frequency	0.01 Hz to maximum frequency	Model dependent	★
H3-05	Rated motor rotational speed	1~65535 RPM	Model dependent	★
H3-06	Stator resistance (asynchronous motor)	0.001~65.535 Ω (AC drive power ≤ 55 kW) 0.0001~6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H3-07	Rotor resistance (asynchronous motor)	0.001~65.535 Ω (AC drive power ≤ 55 kW) 0.0001~6.5535 Ω (AC drive power > 55 kW)	Model dependent	★

Function Code	Parameter Name	Setting Range	Default	Property
H3-08	Leakage inductive reactance (asynchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H3-09	Mutual inductive reactance (asynchronous motor)	0.1–6553.5 mH (AC drive power ≤ 55 kW) 0.01–655.35 mH (AC drive power > 55 kW)	Model dependent	★
H3-10	No-load current (asynchronous motor)	0.01 A to A2-03 (AC drive power ≤ 55 kW) 0.1 A to A2-03 (AC drive power > 55 kW)	Model dependent	★
H3-16	Stator resistance (synchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H3-17	Shaft D inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H3-18	Shaft Q inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H3-20	Back EMF (synchronous motor)	0.1–6553.5 V	Model dependent	★
H3-27	Encoder pulses per revolution	1–65535	1024	★
H3-28	Encoder type	0: ABZ incremental encoder 1: UVW incremental encoder 2: Resolver 3: SIN/COS encoder 4: Wire-saving UVW encoder	0	★
H3-30	A, B phase sequence of ABZ incremental encoder	0: Forward 1: Reserve	0	★
H3-31	Encoder installation angle	0.0°–359.9°	0.0°	★
H3-32	U, V, W phase sequence of UVW encoder	0: Forward 1: Reverse	0	★
H3-33	UVW encoder angle offset	0.0°–359.9°	0.0°	★

Function Code	Parameter Name	Setting Range	Default	Property
H3-34	Number of pole pairs of resolver	1–65535	1	★
H3-36	Encoder wire-break fault detection time	0.0s: No action 0.1–10.0s	0.0s	★
H3-37	Auto-tuning selection	0: No auto-tuning 1: Asynchronous motor static auto-tuning 2: Asynchronous motor complete auto-tuning 11: Synchronous motor with-load auto-tuning 12: Synchronous motor no-load auto-tuning	0	★
H3-38	Speed loop proportional gain 1	0–100	30	☆
H3-39	Speed loop integral time 1	0.01–10.00s	0.50s	☆
H3-40	Switchover frequency 1	0.00 to A2-43	5.00 Hz	☆
H3-41	Speed loop proportional gain 2	0–100	15	☆
H3-42	Speed loop integral time 2	0.01–10.00s	1.00s	☆
H3-43	Switchover frequency 2	H2-40 to maximum output frequency	10.00 Hz	☆
H3-44	Vector control slip gain	50%–200%	100%	☆
H3-45	Time constant of speed loop filter	0.000–0.100s	0.000s	☆
H3-46	Vector control over-excitation gain	0–200	64	☆
H3-47	Torque upper limit source in speed control mode	0: H2-48 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Via communication 6: MIN (AI1, AI2) 7: MAX (AI1, AI2)	0	☆
H3-48	Digital setting of torque upper limit in speed control mode	0.0%–200.0%	150.0%	☆
H3-51	Excitation adjustment proportional gain	0–20000	2000	☆
H3-52	Excitation adjustment integral gain	0–20000	1300	☆

Function Code	Parameter Name	Setting Range	Default	Property
H3-53	Torque adjustment proportional gain	0–20000	2000	☆
H3-54	Torque adjustment integral gain	0–20000	1300	☆
H3-55	Speed loop integral property	Unit's digit: Integral separated 0: Disabled 1: Enabled	0	☆
H3-56	Field weakening mode of synchronous motor	0: No field weakening 1: Direct calculation 2: Adjustment	0	☆
H3-57	Field weakening degree of synchronous motor	50%–500%	100%	☆
H3-58	Maximum field weakening current	1%–300%	50%	☆
H3-59	Field weakening automatic adjustment gain	10%–500%	100%	☆
H3-60	Field weakening integral multiple	2–10	2	☆
H3-61	Motor 2 control mode	0: Sensorless flux vector control (SFVC) 1: Closed-loop vector control (CLVC) 2: Voltage/Frequency (V/F) control	0	☆
H3-62	Motor 2 acceleration/ deceleration time	0: Same as motor 1 1: Acceleration/Deceleration time 1 2: Acceleration/Deceleration time 2 3: Acceleration/Deceleration time 3 4: Acceleration/Deceleration time 4	0	☆
H3-63	Motor 2 torque boost	0.0%: Automatic torque boost 0.1%–30.0%	Model dependent	☆
H3-65	Motor 2 oscillation suppression gain	0–100	Model dependent	☆
Group H4: Motor 4 Parameters				
H4-00	Motor type selection	0: Common asynchronous motor 1: Variable frequency asynchronous motor 2: Permanent magnetic synchronous motor	0	★
H4-01	Rated motor power	0.1–1000.0 kW	Model dependent	★

Function Code	Parameter Name	Setting Range	Default	Property
H4-02	Rated motor voltage	1–2000 V	Model dependent	★
H4-03	Rated motor current	0.01–655.35 A (AC drive power ≤ 55 kW) 0.1–6553.5 A (AC drive power > 55 kW)	Model dependent	★
H4-04	Rated motor frequency	0.01 Hz to maximum frequency	Model dependent	★
H4-05	Rated motor rotational speed	1–65535 RPM	Model dependent	★
H4-06	Stator resistance (asynchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H4-07	Rotor resistance (asynchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H4-08	Leakage inductive reactance (asynchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H4-09	Mutual inductive reactance (asynchronous motor)	0.1–6553.5 mH (AC drive power ≤ 55 kW) 0.01–655.35 mH (AC drive power > 55 kW)	Model dependent	★
H4-10	No-load current (asynchronous motor)	0.01 A to A2-03 (AC drive power ≤ 55 kW) 0.1 A to A2-03 (AC drive power > 55 kW)	Model dependent	★
H4-16	Stator resistance (synchronous motor)	0.001–65.535 Ω (AC drive power ≤ 55 kW) 0.0001–6.5535 Ω (AC drive power > 55 kW)	Model dependent	★
H4-17	Shaft D inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★
H4-18	Shaft Q inductance (synchronous motor)	0.01–655.35 mH (AC drive power ≤ 55 kW) 0.001–65.535 mH (AC drive power > 55 kW)	Model dependent	★

Function Code	Parameter Name	Setting Range	Default	Property
H4-20	Back EMF (synchronous motor)	0.1–6553.5 V	Model dependent	★
H4-27	Encoder pulses per revolution	1–65535	1024	★
H4-28	Encoder type	0: ABZ incremental encoder 1: UVW incremental encoder 2: Resolver 3: SIN/COS encoder 4: Wire-saving UVW encoder	0	★
H4-30	A, B phase sequence of ABZ incremental encoder	0: Forward 1: Reserve	0	★
H4-31	Encoder installation angle	0.0°–359.9°	0.0°	★
H4-32	U, V, W phase sequence of UVW encoder	0: Forward 1: Reverse	0	★
H4-33	UVW encoder angle offset	0.0°–359.9°	0.0°	★
H4-34	Number of pole pairs of resolver	1–65535	1	★
H4-36	Encoder wire-break fault detection time	0.0s: No action 0.1–10.0s	0.0s	★
H4-37	Auto-tuning selection	0: No auto-tuning 1: Asynchronous motor static auto-tuning 2: Asynchronous motor complete auto-tuning 11: Synchronous motor with-load auto-tuning 12: Synchronous motor no-load auto-tuning	0	★
H4-38	Speed loop proportional gain 1	0–100	30	☆
H4-39	Speed loop integral time 1	0.01–10.00s	0.50s	☆
H4-40	Switchover frequency 1	0.00 to H4-43	5.00 Hz	☆
H4-41	Speed loop proportional gain 2	0–100	15	☆
H4-42	Speed loop integral time 2	0.01–10.00s	1.00s	☆
H4-43	Switchover frequency 2	H4-40 to maximum output frequency	10.00 Hz	☆
H4-44	Vector control slip gain	50%–200%	100%	☆
H4-45	Time constant of speed loop filter	0.000–0.100s	0.000s	☆

Function Code	Parameter Name	Setting Range	Default	Property
H4-46	Vector control over- excitation gain	0~200	64	☆
H4-47	Torque upper limit source in speed control mode	0: H2-48 1: AI1 2: AI2 3: AI3 4: Pulse setting (DI5) 5: Via communication 6: MIN(AI1,AI2) 7: MIN(AI1,AI2)	0	☆
H4-48	Digital setting of torque upper limit in speed control mode	0.0%~200.0%	150.0%	☆
H4-51	Excitation adjustment proportional gain	0~20000	2000	☆
H4-52	Excitation adjustment integral gain	0~20000	1300	☆
H4-53	Torque adjustment proportional gain	0~20000	2000	☆
H4-54	Torque adjustment integral gain	0~20000	1300	☆
H4-55	Speed loop integral property	Unit's digit: Integral separated 0: Disabled 1: Enabled	0	☆
H4-56	Field weakening mode of synchronous motor	0: No field weakening 1: Direct calculation 2: Adjustment	0	☆
H4-57	Field weakening degree of synchronous motor	50%~500%	100%	☆
H4-58	Maximum field weakening current	1%~300%	50%	☆
H4-59	Field weakening automatic adjustment gain	10%~500%	100%	☆
H4-60	Field weakening integral multiple	2~10	2	☆
H4-61	Motor 2 control mode	0: Sensorless flux vector control (SFVC) 1: Closed-loop vector control (CLVC) 2: Voltage/Frequency (V/F) control	0	☆

Function Code	Parameter Name	Setting Range	Default	Property
H4-62	Motor 2 acceleration/ deceleration time	0: Same as motor 1 1: Acceleration/Deceleration time 1 2: Acceleration/Deceleration time 2 3: Acceleration/Deceleration time 3 4: Acceleration/Deceleration time 4	0	☆
H4-63	Motor 2 torque boost	0.0%: Automatic torque boost 0.1%~30.0%	Model dependent	☆
H4-65	Motor 2 oscillation suppression gain	0~100	Model dependent	☆
Group H5: Control Optimization Parameters				
H5-00	DPWM switchover frequency upper limit	0.00~15.00 Hz	12.00 Hz	☆
H5-01	PWM modulation mode	0: Asynchronous modulation 1: Synchronous modulation	0	☆
H5-02	Dead zone compensation mode selection	0: No compensation 1: Compensation mode 1 2: Compensation mode 2	1	☆
H5-03	Random PWM depth	0: Random PWM invalid 1~10	0	☆
H5-04	Rapid current limit	0: Disabled 1: Enabled	1	☆
H5-05	Current detection compensation	0~100	5	☆
H5-06	Undervoltage threshold	60.0%~140.0%	100.0%	☆
H5-07	SFVC optimization mode selection	0: No optimization 1: Optimization mode 1 2: Optimization mode 2	1	☆
H5-08	Dead-zone time adjustment	100%~200%	150%	☆
H5-09	Overvoltage threshold	200.0~2500.0 V	2000.0 V	☆
Group H6: AI Curve Setting				
H6-00	AI curve 4 minimum input	-10.00 V to H6-02	0.00 V	☆
H6-01	Corresponding setting of AI curve 4 minimum input	-100.0%~100.0%	0.0%	☆
H6-02	AI curve 4 inflexion 1 input	H6-00 to H6-04	3.00 V	☆
H6-03	Corresponding setting of AI curve 4 inflexion 1 input	-100.0%~100.0%	30.0%	☆
H6-04	AI curve 4 inflexion 1 input	H6-02 to H6-06	6.00 V	☆
H6-05	Corresponding setting of AI curve 4 inflexion 1 input	-100.0%~100.0%	60.0%	☆
H6-06	AI curve 4 maximum input	H6-06 to 10.00 V	10.00 V	☆

Function Code	Parameter Name	Setting Range	Default	Property
H6-07	Corresponding setting of AI curve 4 maximum input	-100.0%~100.0%	100.0%	☆
H6-08	AI curve 5 minimum input	-10.00 V to H6-10	0.00 V	☆
H6-09	Corresponding setting of AI curve 5 minimum input	-100.0%~100.0%	0.0%	☆
H6-10	AI curve 5 inflexion 1 input	H6-08 to H6-12	3.00 V	☆
H6-11	Corresponding setting of AI curve 5 inflexion 1 input	-100.0%~100.0%	30.0%	☆
H6-12	AI curve 5 inflexion 1 input	H6-10 to H6-14	6.00 V	☆
H6-13	Corresponding setting of AI curve 5 inflexion 1 input	-100.0%~100.0%	60.0%	☆
H6-14	AI curve 5 maximum input	H6-14 to 10.00 V	10.00 V	☆
H6-15	Corresponding setting of AI curve 5 maximum input	-100.0%~100.0%	100.0%	☆
H6-16	Jump point of AI1 input corresponding setting	-100.0%~100.0%	0.0%	☆
H6-17	Jump amplitude of AI1 input corresponding setting	0.0%~100.0%	0.5%	☆
H6-18	Jump point of AI2 input corresponding setting	-100.0%~100.0%	0.0%	☆
H6-19	Jump amplitude of AI2 input corresponding setting	0.0%~100.0%	0.5%	☆
H6-20	Jump point of AI3 input corresponding setting	-100.0%~100.0%	0.0%	☆
H6-21	Jump amplitude of AI3 input corresponding setting	0.0%~100.0%	0.5%	☆
Group H7: User Programmable Function				
H7-00	User programmable function selection	0: Disabled 1: Enabled	0	★

Function Code	Parameter Name	Setting Range	Default	Property
H7-01	Selection of control mode of the output terminals on the control board	Unit's digit: FMR (FM used as digital output)	0	★
		0: Controlled by the AC drive 1: Controlled by the user programmable card		
		Ten's digit: relay (T/A-T/B-T/C)		
		Same as unit's digit		
		Hundred's digit: DO1		
		Same as unit's digit		
		Thousand's digit FMR (FM used as pulse output)		
		Same as unit's digit		
		Ten thousand's digit: AO1		
		Same as unit's digit		
H7-02	AI/AO function selection of the user programmable card	0: AI3 (voltage input), AO2 (voltage output) 1: AI3 (voltage input), AO2 (current output) 2: AI3 (current input), AO2 (voltage output) 3: AI3 (current input), AO2 (current output) 4: AI3 (PTC input), AO2 (voltage output) 5: AI3 (PTC input), AO2 (current output) 6: AI3 (PTC100 input), AO2 (voltage output) 7: AI3 (PTC100 input), AO2 (current output)	0	★
H7-03	FMP output	0.0%—100.0%	0.0%	☆
H7-04	AO1 output	0.0%—100.0%	0.0%	☆
H7-05	Digital output	Binary setting Unit's digit: FMR Ten's digit: Relay1 Hundred's digit: DO	1	☆
H7-06	Frequency setting through the user programmable card	-100.00% to 100.00%	0.0%	☆
H7-07	Torque setting through the user programmable card	-200.00% to 200.00%	0.0%	☆

Function Code	Parameter Name	Setting Range	Default	Property
H7-08	Command given by the user programmable card	1: Forward RUN 2: Reverse RUN 3: Forward JOG 4: Reverse JOG 5: Coast to stop 6: Decelerate to stop 7: Fault reset	0	☆
H7-09	Faults given by the user programmable card	0: No fault 80–89: Fault codes	0	☆
Group H8: Point-point Communication				
H8-00	Point-point communication selection	0: Disabled 1: Enabled	0	☆
H8-01	Master and slave selection	0: Master 1: Slave	0	☆
H8-02	Slave following master command selection	0: Slave not following running commands of the master 1: Slave following running commands of the master	0	☆
H8-03	Usage of data received by slave	0: Torque setting 1: Frequency setting	0	☆
H8-04	Zero offset of received data (torque)	-100.00%–100.00%	0.00%	★
H8-05	Gain of received data (torque)	-10.00–10.00	1.00	★
H8-06	Point-point communication interruption detection time	0.0–10.0s	1.0s	☆
H8-07	Master data sending cycle	0.001–10.000s	0.001s	☆
H8-08	Zero offset of received data zero offset (frequency)	-100.00%–100.00%	0.00%	★
H8-09	Gain of received data gain (frequency)	-10.00–10.00	1.00	★
H8-10	Runaway prevention coefficient	0.00%–100.00%	10.00%	★
Group HC: AI/AO Correction				
HC-00	AI1 measured voltage 1	0.500–4.000 V	Factory corrected	☆
HC-01	AI1 displayed voltage 1	0.500–4.000 V	Factory corrected	☆
HC-02	AI1 measured voltage 2	6.000–9.999 V	Factory corrected	☆

Function Code	Parameter Name	Setting Range	Default	Property
HC-03	AI1 displayed voltage 2	6.000–9.999 V	Factory corrected	☆
HC-04	AI2 measured voltage 1	0.500–4.000 V	Factory corrected	☆
HC-05	AI2 displayed voltage 1	0.500–4.000 V	Factory corrected	☆
HC-06	AI2 measured voltage 2	6.000–9.999 V	Factory corrected	☆
HC-07	AI2 displayed voltage 2	9.999–10.000 V	Factory corrected	☆
HC-08	AI3 measured voltage 1	9.999–10.000 V	Factory corrected	☆
HC-09	AI3 displayed voltage 1	9.999–10.000 V	Factory corrected	☆
HC-10	AI3 measured voltage 2	9.999–10.000 V	Factory corrected	☆
HC-11	AI3 displayed voltage 2	9.999–10.000 V	Factory corrected	☆
HC-12	AO1 target voltage 1	0.500–4.000 V	Factory corrected	☆
HC-13	AO1 measured voltage 1	0.500–4.000 V	Factory corrected	☆
HC-14	AO1 target voltage 2	6.000–9.999 V	Factory corrected	☆
HC-15	AO1 measured voltage 2	6.000–9.999 V	Factory corrected	☆
HC-16	AO2 target voltage 1	0.500–4.000 V	Factory corrected	☆
HC-17	AO2 measured voltage 1	0.500–4.000 V	Factory corrected	☆
HC-18	AO2 target voltage 2	6.000–9.999 V	Factory corrected	☆
HC-19	AO2 measured voltage 2	6.000–9.999 V	Factory corrected	☆
HC-20	AI2 measured current 1	0.000–20.000 mA	Factory corrected	☆
HC-21	AI2 sampling current 1	0.000–20.000 mA	Factory corrected	☆
HC-22	AI2 measured current 2	0.000–20.000 mA	Factory corrected	☆
HC-23	AI2 sampling current 2	0.000–20.000 mA	Factory corrected	☆

Function Code	Parameter Name	Setting Range	Default	Property
HC-24	AO1 ideal current 1	0.000–20.000 mA	Factory corrected	☆
HC-25	AO1 sampling current 1	0.000–20.000 mA	Factory corrected	☆
HC-26	AO1 ideal current 2	0.000–20.000 mA	Factory corrected	☆
HC-27	AO1 sampling current 2	0.000–20.000 mA	Factory corrected	☆

Monitoring Parameters

Function Code	Parameter Name	Min. Unit	Communication Address
Group S0: Standard Monitoring Parameters			
S0-00	Running frequency (Hz)	0.01 Hz	7000H
S0-01	Set frequency (Hz)	0.01 Hz	7001H
S0-02	Bus voltage	0.1 V	7002H
S0-03	Output voltage	1 V	7003H
S0-04	Output current	0.01 A	7004H
S0-05	Output power	0.1 kW	7005H
S0-06	Output torque	0.1%	7006H
S0-07	DI state	1	7007H
S0-08	DO state	1	7008H
S0-09	AI1 voltage (V)	0.01 V	7009H
S0-10	AI2 voltage (V)/current (mA)	0.01 V/0.01 mA	700AH
S0-11	AI3 voltage (V)	0.01 V	7007BH
S0-12	Count value	1	700CH
S0-13	Length value	1	700DH
S0-14	Load speed	1	700EH
S0-15	PID setting	1	700FH
S0-16	PID feedback	1	7010H
S0-17	PLC stage	1	7011H
S0-18	Input pulse frequency (Hz)	0.01 kHz	7012H
S0-19	Feedback speed	0.01 Hz	7013H
S0-20	Remaining running time	0.1 Min	7014H
S0-21	AI1 voltage before correction	0.001 V	7015H
S0-22	AI2 voltage (V)/current (mA) before correction	0.01 V/0.01 mA	7016H

Function Code	Parameter Name	Min. Unit	Communication Address
Group S0: Standard Monitoring Parameters			
S0-23	AI3 voltage before correction	0.001 V	7017H
S0-24	Linear speed	1 m/Min	7018H
S0-25	Accumulative power-on time	1 Min	7019
S0-26	Accumulative running time	0.1 Min	701AH
S0-27	Pulse input frequency	1 Hz	701BH
S0-28	Communication setting value	0.01%	701CH
S0-29	Encoder feedback speed	0.01 Hz	701DH
S0-30	Main frequency X	0.01 Hz	701EH
S0-31	Auxiliary frequency Y	0.01 Hz	701FH
S0-32	Viewing any register address value	1	7020H
S0-33	Synchronous motor rotor position	0.1°	7021H
S0-34	Motor temperature	1°C	7022H
S0-35	Target torque	0.1%	7023H
S0-36	Resolver position	1	7024H
S0-37	Power factor angle	0.1°	7025H
S0-38	ABZ position	1	7026H
S0-39	Target voltage upon V/F separation	1 V	7027H
S0-40	Output voltage upon V/F separation	1V	7028H
S0-41	DI state visual display	1	7029H
S0-42	DO state visual display	1	702AH
S0-43	DI function state visual display 1	1	702BH
S0-44	DI function state visual display 2	1	702CH
S0-45	Fault information	1	702DH
S0-58	Phase Z counting	1	703AH
S0-59	Current set frequency	0.01%	703BH
S0-60	Current running frequency	0.01%	703CH
S0-61	AC drive running state	1	703DH
S0-62	Current fault code	1	703EH
S0-63	Sent value of point-point communication	0.01%	703FH
S0-64	Received value of point-point communication	0.01%	7040H
S0-65	Torque upper limit	0.1%	7041H