HCFa

Parameter List for E380/220 Series Inverter

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Basic parameters setting

Function code	Name	Description
P00.00	Motor operation mode	Select the operation mode for the motor.
P00.02	Command source selection	Select the command source for the inverter.
P00.03	Frequency source A	Select the setting mode and setting value for the set frequency.
P00.04	Frequency source B	
P00.05	Frequency command operation relationship	
P00.06	Range base of frequency source B	
P00.07	Range of frequency source B	
P00.08	Maximum output frequency	
P00.09	Frequency upper limit source	
P00.10	Frequency upper limit digital setting	
P00.11	Frequency lower limit	
P00.12	Setting frequency	
P00.13	Acceleration time 0	Select the acceleration/deceleration time.
P00.14	Deceleration time 0	
P00.23	Parameter initialization	Parameters will be initialized.
P00.24	Rotation direction selection of motor 1	Select the rotation direction for the motor.
P00.25	Carrier frequency setting	Select the carrier frequency and carrier frequency adjustment.
P00.26	Carrier frequency adjustment	
P00.27	PWM method	Select the PWM method.
P00.33	Motor auto tuning	Select the auto tuning mode for the motor.
P01.00	Start mode	Select the start mode and the related parameters.
P01.01	Startup frequency	
P01.02	Startup frequency holding time	
P01.03	Startup DC braking current	
P01.04	Startup DC braking holding time	
P01.05	Stop mode	Select the stop mode and the related parameters.
P01.06	Initial frequency of stop DC braking	
P01.07	Stop DC braking current	
P01.08	Stop DC braking holding time	

Parameter for vector control mode

Function code	Name	Description
P03.01	Speed loop proportional gain 1	Select the parameters for speed loop.
P03.02	Speed loop integral time 1	
P03.03	Switchover frequency 1	
P03.04	Speed loop proportional gain 2	
P03.05	Speed loop integral time 2	
P03.06	Switchover frequency 2	
P03.07	Speed loop filter time	
P03.08	Fielding weakening torque compensation gain	Select the braking gain and fielding weakening compensation.
P03.09	Motor slip gain	
P03.10	Braking slip gain	
P03.11	Torque upper limit source in speed control mode	Select the torque limit in speed control mode.
P03.12	Digital setting of torque upper limit in speed control mode	
P03.13	Current loop proportional coefficient	Parameters for current loop.
P03.14	Current loop integral coefficient	

Parameters for V/F control mode

Function code	Name	Description
P04.00	V/F curve setting	Select the V/F control curve.
P04.02	Multi-point V/F frequency 1	
P04.03	Multi-point V/F voltage 1	
P04.04	Multi-point V/F frequency 2	
P04.05	Multi-point V/F voltage 2	
P04.06	Multi-point V/F frequency 3	
P04.07	Multi-point V/F voltage 3	
P04.08	Multi-point V/F frequency 4	
P04.09	Multi-point V/F voltage4	
P04.10	Automatic torque boost compensation coefficient	Select automatic torque boost compensation coefficient
P04.11	V/F manual torque boost	Select the torque boost method and value.
P04.13	Field weakening torque compensation coefficient	Select field weakening torque compensation coefficient
P04.15	Slip compensation gain	Select the slip gain.
P04.17	Oscillation suppression gain	Select the oscillation suppression gain.
P04.19	Flux braking	Select the flux braking value.
P04.26	Current limit	Select the current limit value.
P04.27	Current limit switch	Select current limit switch
P04.28	VF torque filter coefficient	Select VF torque filter coefficient

Parameters for analog set frequency

Function code	Name	Description
P00.03	Frequency source A	Set to 2, 3, 4 and 5(AI1, AI2, AI3 and high-speed pulse input)
P05.13	AI1 voltage lower limit	Select the AI1 input setting.
P05.14	AI1 lower setting	
P05.15	AI1 voltage upper limit	
P05.16	AI1 upper limit setting	
P05.17	AI1 input filter time	
P05.18	AI2 input selection	Select the AI2 input setting.
P05.19	AI2 voltage lower limit	
P05.20	AI2 lower setting	
P05.21	AI2 voltage upper limit	
P05.22	AI2 upper limit setting	
P05.23	AI2 input filter time	
P05.24	AI2 current lower limit	
P05.25	AI2 lower setting	
P05.26	AI2 current upper limit	
P05.27	AI2 upper limit setting	
P05.28	AI3 voltage lower limit	Select the AI3 input setting.
P05.29	AI3 lower setting	
P05.30	AI3 voltage upper limit	
P05.31	AI3 upper limit setting	
P05.32	AI3 input filter time	
P05.33	High-speed pulse input minimum frequency	Select the high-speed pulse input setting.
P05.34	High-speed pulse input minimum frequency setting	
P05.35	High-speed pulse input maximum frequency	
P05.36	High-speed pulse input maximum frequency setting	
P05.37	High-speed pulse input filter time	

Parameters for analog output

Function code	Name	Description
P06.14	Ao1 function selection	Function selection for analog and high-speed pulse output
P06.15	Ao2 function selection	
P06.16	HDO pulse output function selection	
P06.17	Ao1output voltage lower limit	Select the related setting for AO1 output.
P06.18	Ao1 output voltage lower limit setting	
P06.19	Ao1 output voltage upper limit	
P06.20	Ao1 output voltage upper limit setting	
P06.21	Ao2 output voltage lower limit	Select the related setting for AO2 output.
P06.22	Ao2 output voltage lower limit setting	
P06.23	Ao2 output voltage upper limit	
P06.24	Ao2 output voltage upper limit setting	
P06.25	HDO1 mini. output setting frequency	elect the related setting for HDO output.
P06.26	HDO1 mini. output setting value	
P06.27	HDO1 max. output setting frequency	
P06.28	HDO1 max. output setting value	

Parameters for digital input terminal

Value	Function	Description
0	No function	Disabled: No operation Enabled: No operation
1	Forward RUN (FWD)	Disabled: No operation Enabled: The inverter starts forward RUN.
2	Reverse RUN (REV)	Disabled: No operation Enabled: The inverter starts reverse RUN.
3	Three-line control	Disabled: No operation Enabled: Three-line control is enabled.
4	Forward JOG (FJOG)	Disabled: No operation Enabled: The inverter starts forward JOG.
5	Reverse JOG (RJOG)	Disabled: No operation Enabled: The inverter starts reverse JOG.
6	Coast to stop	Disabled: No operation Enabled: The running inverter coasts to stop.

Value	Function	Description
7	RUN pause	Disabled: The inverter continues to run. Enabled: The inverter runs with frequency 0.
8	Fault reset (RESET)	Disabled: No operation Enabled: Reset faults occur in inverter
9	External fault input	Disabled: No operation Enabled: Fault occurs by external input
10	Frequency setting UP	Disabled: No operation Enabled: The set frequency increases when the frequency source is digital setting + UP/DOWN
11	Frequency setting DOWN	Disabled: No operation Enabled: The set frequency decreases when the frequency source is digital setting + UP/DOWN
12	Frequency UP/DOWN setting clear	Disabled: No operation Enabled: Clear the modification by using the UP/DOWN function or the turn button on the operation panel.
13	Frequency UP/DOWN setting temporary clear	Disabled: The frequency restores to the value of P00. 12 and modification by using the UP/DOWN function or the turn button on the operation panel Enabled: Clear the modification by using the UP/DOWN function or the turn button on the operation panel temporarily
14	Multi-reference terminal 1	The setting of 16 speeds or 16 other references can be implemented through combinations of 16 states of these four terminals.
15	Multi-reference terminal 2	
16	Multi-reference terminal 3	
17	Multi-reference terminal 4	
18	Terminal 1 for acceleration/ deceleration time selection	Totally four groups of acceleration/ deceleration time can be selected through combinations of two states of these two terminals.
19	Terminal 2 for acceleration/ deceleration time selection	
20	PID pause	Disabled: The output frequency of inverter changes with PID adjustment and PID adjustment of frequency source is normal. Enabled: PID is invalid temporarily. The Inverter maintains the current frequency output without supporting PID adjustment of frequency source
21	Reverse PID action direction	Disabled: The PID action direction is same to the direction set in P08. 03. Enabled: The PID action direction is reversed to the direction set inP08. 03.
22	PID parameter switchover	Disabled: The PID parameters of the first group works. Enabled: The PID parameters of the second group works.
23	Immediate DC braking	Disabled: The inverter returns to the normal operation state Enabled: The inverter directly switches over to the DC braking state.
24	Deceleration DC braking	Disabled: The inverter decelerates to stop normally in decelerate to stop mode Enabled: The inverter decelerates to the initial frequency of stop DC braking and then switches over to DC braking state
25	External STOP	Disabled: No operation Enabled: In any control mode , it can be used to make the inverter stop
26	Emergency stop	Disabled: No operation Enabled: In any control mode , it can be used to make the inverter stop directly.
27	PLC status reset	Disabled: No operation Enabled: Restore to operation stage of PLC and clear PLC running time
28	PLC RUN pause	Disabled: Restore the original status of PLC control and continue to operate Enabled: The inverter maintains frequency 0 output.
29	Counter input	This terminal is used to count pulses.
30	Counter reset	Disabled: No operation Enabled: This terminal is used to clear the counter status
31	Length count input	This terminal is used to count the length
32	Length reset	Disabled: No operation Enabled: This terminal is used to clear the length.
33	High-speed pulse input (only for HDI)	Receive the high-speed pulse input signal.
34	Swing pause (Pause at the current frequency)	Disabled: Swing frequency operates. Enabled: The inverter operates at the current output frequency
35	Swing reset (Return to center frequency)	Disabled: No operation Enabled: The inverter outputs central frequency and the swing frequency function works.
36	Acceleration/Deceleration prohibited	Disabled: No effect on the acceleration/ deceleration. Enabled: The acceleration/ deceleration process stops in the acceleration/ deceleration mode.
37	Run prohibited	Disabled: The inverter starts and operates normally Enabled: The inverter cannot start operation or immediate stop
38	Speed control/Torque control switchover	Disabled: Speed control mode Enabled: Torque control mode
39	Torque control prohibited	Disabled: No effect on the current control mode Enabled: The current mode cannot be torque control mode
40	Command source switchover terminal	Disabled: No effect on the current frequency setting source Enabled: The current frequency setting source switches to other setting source
41	Switch running commands to operation panel	Disabled: No effect on the current command setting mode Enabled: The setting mode of current command switches to operation panel setting.
42	Switch running commands to terminal	Disabled: No effect on the current command setting mode Enabled: The setting mode of current command switches to terminal setting.
43	Switch running commands to communication	Disabled: No effect on the current command setting mode Enabled: The setting mode of current command switches to communication setting.
44	Motor selection	Disabled: Motor 1 is enabled. Enabled: Motor 2 is enabled.
45	Clear the current running time	Disabled: No operation Enabled: Clear the running time of motor.

Parameters for digital output

Value	Function	Description
0	No output	The terminal has no function.
1	Ready for RUN	If the inverter main circuit and control circuit become stable, and the inverter detects no fault and is ready for RUN, the terminal becomes ON.
2	Inverter running	When the inverter is running and has output frequency (can be zero), the terminal becomes ON.
3	Inverter forward rotation	When the inverter is in forward rotation and has output frequency, the terminal becomes ON.
4	Inverter reverse rotation	When the inverter is in reverse rotation and has output frequency, the terminal becomes ON.
5	Zero-speed running 1 (no output at stop)	If the inverter runs with the output frequency of 0, the terminal becomes ON. If the inverter is in the stop state, the terminal becomes OFF.
6	Zero-speed running 2 (output at stop)	If the output frequency of the inverter is 0, the terminal becomes ON. In the state of stop, the signal is still ON
7	Fault output	When the inverter stops due to a fault, the terminal becomes ON
8	Overload pre-warning	When the inverter main circuit and control circuit exceed the overload pre-warning threshold before performing the protection action, if the pre-warning threshold is exceeded, the terminal becomes ON. For motor overload parameters, see the descriptions of P13. 01 to P13. 03.
9	Lightload pre-warning	When the inverter and motor exceeds the lightload threshold or has no load, the terminal becomes ON. For motor lightload parameters, see the descriptions of P13.05 to P13.07.
10	Undervoltage state output	If the inverter is in undervoltage state, the terminal becomes ON.
11	Reserved	
12	Inverter overheat warning	If the inverter temperature reaches the overheat warning threshold the terminal becomes ON.
13	PLC stage complete	When simple PLC completes one stage, the terminal outputs a pulse signal with width of 250 ms
14	PLC cycle complete	When simple PLC completes one cycle, the terminal outputs a pulse signal with width of 250 ms
15	Frequency limited	If the set frequency exceeds the frequency upper limit or lower limit and the output frequency of the inverter reaches the upper limit or lower limit, the terminal becomes ON.
16	Torque limited (in speed control)	In speed control mode, if the output torque reaches the torque limit, the terminal becomes ON.
17	Speed limited (in torque control)	In the toque control mode, if the motor speed reaches the speed limit, the terminal becomes ON.
18	Frequency upper limit reached	If the running frequency reaches the upper limit, the terminal becomes ON.
19	Frequency lower limit reached	If the running frequency reaches the lower limit, the terminal becomes ON. In the stop state, the terminal becomes OFF.

Value	Function	Description
20	Frequency reached	When the set frequency reaches the detection range, the terminal becomes ON. For details, refer to P09. 04.
21	Frequency-level detection FDT1 output	Refer to the descriptions of P09. 00 and F09. 01
22	Frequency-level detection FDT2 output	Refer to the descriptions of P09. 02 and P09. 03
23	Arbitrary frequency reached	Refer to the descriptions of P09. 21 and P09. 22
24	PID feedback loss	Refer to the descriptions of P08. 16 and P08. 17
25	Set count value reached	The terminal becomes ON when the count value reaches the value set in P09.13. For the counting function, refer to Group P09 parameters.
26	Designated count value reached	The terminal becomes ON when the count value reaches the value set in P09.14. For the counting function, refer to Group P09 parameters.
27	Length reached	The terminal becomes ON when the detected actual length exceeds the value set in P09. 10.
28	PID feedback overlimit	Refer to the description of P08. 18 and P08. 19
29	Current running time reached	If the current running time of inverter exceeds the value of P09. 18, the terminal becomes ON
30	Current power-on time reached	If the current power-on time of inverter exceeds the value of P09. 19, the terminal becomes ON
31	Accumulative running time reached	If the accumulative running time of the inverter exceeds the time set in P09. 16, the terminal becomes ON.
32	Accumulative power-on time reached	If the inverter accumulative power-on time exceeds the value set in P09. 17, the terminal becomes ON
33	Communication	Refer to the communication protocol. Communication setting DO1,HDO1,T1 output
34	Fault output 2	The terminal becomes ON when error occurs to the inverter and not reset(including undervoltage error and the inverter in undervoltage state)

Parameters for analog output signal

Value	Function	Description
0	Running frequency	0 to maximum output frequency
1	Set frequency	0 to maximum output frequency
2	Output current	0 to 2 times of rated motor current
3	Output voltage	0 to 1.2 times of rated inverter voltage
4	Output torque	0 to 2 times of rated motor torque
5	Output power	0 to 2 times of rated power
6	Pulse input	0.01kHz~100.00kHz
7	ABS (AI1)	0.00V~10.00V
8	ABS (AI2)	0.00V~10. 00V (or 0. 00mA~20. 00mA)
9	ABS(AI3)	-10.00V ~ 10.00V
10	Length	0 to maximum set length
11	Count value	0 to maximum count value
12	Motor rotational speed	0 to rotational speed corresponding to maximum output frequency
13	Output current (absolute value)	0.0A~1000.0A
14	Output voltage (absolute value)	0.0V~1000.0V
15	Communication setting percentage	0~100. 0%. For details, refer to communication protocol.

Error codes description]

Value	Function	Description
Er001	Short-circuit to ground	1: The motor insulation is abnormal. 2: The output circuit is grounded or short circuited 3: The inverter module is faulty. 4: The leakage current to the ground is too large.
Er002	Overcurrent during acceleration	1: The acceleration time is too short. 2: Motor parameters are incorrect. 3: The voltage is too low. 4: The power of inverter is too low. 5: V/F curve is not appropriate. 6: The load is too heavy. 7: The startup operation is performed on the rotating motor.
Er003	Overcurrent at constant speed	1: A sudden load is added during operation. 2: The voltage is too low. 3: The inverter model is of too small power class.
Er004	Overcurrent during deceleration	1: The deceleration time is too large 2: The deceleration time is too short. 3: The voltage is too low.
Er005	Overvoltage during acceleration	1: The input voltage is abnormal. 2: The startup operation is performed on the rotating motor upon instantaneous power-failure
Er006	Overvoltage at constant speed	1: The input voltage is abnormal. 2: Input voltage changes abnormally 3: The inertia of load is too large
Er007	Overvoltage during deceleration	1: The deceleration time is too short. 2: The inertia of load is too large 3: The input voltage is abnormal.
Er008	Inverter overload	1: The acceleration/deceleration time is too short. 2: The startup operation is performed on the rotating motor. 3: The voltage is too low. 4: The load is too large 5: Torque boost is too large at V/F control 6: The motor parameters is not appropriate
Er009	Motor overload	1: The voltage is too low. 2: The motor parameters is not appropriate 3: The load is too heavy or lockedrotor occurs on the motor.
Er010	Current detection fault	1: The control board connector is in bad contact. 2: Auxiliary power supply is faulty. 3: The HALL device is faulty. 4: Amplifying circuit is faulty.
Er011	Power output phase loss	1: U, V, W output phase loss 2: The inverter's three-phase outputs are unbalanced
Er012	Hardware overcurrent	1: Overcurrent 2: Input power is abnormal. 3: Motor output is abnormal. 4: The inverter module is faulty.
Er013	Parameter fault	1: The motor and inverter do not match 2: The motor parameters are set incorrectly 3: The deviation between auto-tuning parameters and standard parameters is too large 4: The auto-tuning times out.
Er014	Contactor fault	1: The voltage is too low 2: The buffer resistance is faulty upon power-on 3: The contactor is faulty 4: The control circuit is faulty
Er015	Power input phase loss	Input R, S, T phase loss
Er 021	Software version not compatible	1: The number of parameters stored in panel and displayed on inverter is different 2: Software version No. is different
Er022	Bus undervoltage	1: The voltage is too low. 2: Instantaneous power-failure
Er023	External equipment fault	External fault signal is input via DI.
Er024	Communication fault	1: The baud rate between host computer and inverter is different. 2: The communication parameters of inverter are set improperly. 3: The communication cable is disconnected 4: The host computer works or not
Er025	Module overheat	1: The inverter overcurrent instantaneously. 2: The output circuit is grounded or short circuited 3: The air filter is blocked or the fan is damaged. 4: The ambient temperature is too high. 5: Control board connection or components loosen 6: The auxiliary power is damaged and the voltage is too low 7: Power module bridge arm is shoot-through 8: Control board is faulty.
Er026	EEPROM read-write fault	1: Parameters read-write fault occur. 2: The EEPROM chip is damaged.
Er027	Accumulative running time reached	The accumulative running time reaches the setting value
Er028	Accumulative power-on time reached	The accumulative power-on time reaches the setting value.
Er029	PID feedback overlimit during running	The feedback reaches the upper limit.
Er030	PID feedback loss	1: PID feedback loss 2: PID feedback source disappear
Er031	Overload warning	1: The load is too heavy. 2: Overload warning threshold value and time is set improperly. 3: The motor parameters are set improperly
Er032	Lightload warning	1: Load becoming 0 2: Lightload warning threshold value and time is set improperly. 3: The motor parameters are set improperly
Er099	Software error	Software error
Er100	Hardware error	Hardware error

▶ Parameter list

The symbols in the function code list described as follows:
- ○── The setting value can be modified in the running state;
- ◎── The setting value cannot be modified in the running state;
- ●── The parameters are the monitoring parameters and reserved parameters and cannot be modified.

P00 Standard function parameters group

Function code	Name	Property	Communication address
P00.00	Motor operation mode	◎	0x0000
P00.02	Command source selection	◎	0x0002

Function code	Name	Property	Communication address
P00.03	Frequency source A	◎	0x0003
P00.04	Frequency source B	○	0x0004
P00.05	Frequency command operation relationship	○	0x0005
P00.06	Range base of frequency source B	○	0x0006
P00.07	Range of frequency source B	○	0x0007
P00.08	Max. output frequency	◎	0x0008
P00.09	Frequency upper limit source	○	0x0009
P00.10	Frequency upper limit digital setting	○	0x000A
P00.11	Frequency lower limit	○	0x000B
P00.12	Setting frequency	○	0x000C
P00.13	Acceleration time 0	○	0x000D
P00.14	Deceleration time 0	○	0x000E
P00.15	Acceleration time 1	○	0x000F
P00.16	Deceleration time 1	○	0x0010
P00.17	Acceleration time 2	○	0x0011
P00.18	Deceleration time 2	○	0x0012
P00.19	Acceleration time 3	○	0x0013
P00.20	Deceleration time 3	○	0x0014
P00.21	Acceleration/deceleration time unit	○	0x0015
P00.22	Acceleration/deceleration time Base frequency	◎	0x0016
P00.23	Parameter initialization	○	0x0017
P00.24	Motor 1 Rotation direction selection	○	0x0018
P00.25	Carrier frequency setting	○	0x0019
P00.26	Carrier frequency adjustment	◎	0x001A
P00.27	PWM method	○	0x001B
P00.28	Operation panel and terminal UP/DOWN Frequency control	○	0x001C
P00.29	Length of operation panel and terminal UP/DOWN per step	○	0x001D
P00.30	Terminal UP/DOWN integral speed	○	0x001E
P00.31	Parameter lock	○	0x001F
P00.33	Motor parameter auto-tuning	○	0x0021
P00.34	Motor selection	◎	0x0022
P00.35	Parameter copy	◎	0x0023

P01 Start/stop control parameter group

Function code	Name	Property	Communication address
P01.00	Start mode	◎	0x0100
P01.01	Startup frequency	○	0x0101
P01.02	Startup frequency holding time	○	0x0102
P01.03	Startup DC braking current	○	0x0103
P01.04	Startup DC braking holding time	○	0x0104
P01.05	Stop mode	○	0x0105
P01.06	Initial frequency of stop DC braking	○	0x0106
P01.08	Stop DC braking current	○	0x0108
P01.09	Stop DC braking time	○	0x0109
P01.10	JOG running frequency	○	0x010A
P01.11	JOG running acceleration time	○	0x010B
P01.12	JOG running deceleration time	○	0x010C
P01.13	Emergency stop deceleration time	○	0x010D
P01.14	Acceleration/Deceleration mode	◎	0x010E
P01.15	Time proportion of S-curve start segment	◎	0x010F
P01.16	Time proportion of S-curve end segment	◎	0x0110
P01.17	Jump frequency	○	0x0111
P01.18	Frequency jump amplitude (+, -)	○	0x0112
P01.19	Forward/Reverse rotation dead-zone time	○	0x0113
P01.20	Running mode when set frequency lower than frequency lower limit (Valid when lower limit larger than 0)	○	0x0114
P01.21	Run command selection at power-on	○	0x0115
P01.26	Restart after power failure	○	0x011A
P01.27	Waiting time for restart	○	0x011B

P02 Motor 1 parameter group

Function code	Name	Property	Communication address
P02.00	Motor 1 type selection	◎	0x0200
P02.01	Rated power for motor 1	◎	0x0201
P02.02	Rated voltage for motor 1	◎	0x0202
P02.03	Rated current for motor 1	◎	0x0203
P02.04	Rated frequency for motor 1	◎	0x0204
P02.05	Rated speed for motor 1	◎	0x0205
P02.06	Stator resistance for motor 1	○	0x0206
P02.07	Rotor resistance for motor 1	○	0x0207
P02.08	Leakage inductive reactance for motor 1	○	0x0208
P02.09	Mutual inductive reactance for motor 1	○	0x0209
P02.10	No-load current for motor 1	◎	0x020A
P02.17	Mini. excitation at field weakening	○	0x0211
P02.18	Inductance coefficient 1 at field weakening	○	0x0212
P02.19	Inductance coefficient 2 at field weakening	○	0x0213
P02.20	Overload time coefficient	○	0x0214
P02.21	Overcurrent threshold	○	0x0215
P02.22	Protection selection	◎	0x0216

P03 Motor 1 vector control parameter group

Function code	Name	Property	Communication address
P03.01	Speed loop proportional gain 1	○	0x0301
P03.02	Speed loop integral time 1	○	0x0302
P03.03	Switchover frequency 1	○	0x0303
P03.04	Speed loop proportional gain 2	○	0x0304
P03.05	Speed loop integral time 2	○	0x0305
P03.06	Switchover frequency 2	○	0x0306
P03.07	Time constant of speed loop filter	○	0x0307
P03.08	Field weakening torque compensation gain	○	0x0308
P03.09	Motor slip gain	○	0x0309
P03.10	Braking slip gain	○	0x030A
P03.11	Upper limit source in speed control mode	○	0x030B
P03.12	Upper limit value in speed control mode	○	0x030C
P03.13	Current loop proportional coefficient	○	0x030D
P03.14	Current loop integral coefficient	○	0x030E

P04 Motor 1 V/F control parameters group

Function code	Name	Property	Communication address
P04.00	V/F curve setting	◎	0x0400
P04.02	Multi-point V/F frequency 1	◎	0x0402
P04.03	Multi-point V/F voltage 1	◎	0x0403
P04.04	Multi-point V/F frequency 2	◎	0x0404
P04.05	Multi-point V/F voltage 2	◎	0x0405
P04.06	Multi-point V/F frequency 3	◎	0x0406
P04.07	Multi-point V/F voltage 3	◎	0x0407
P04.08	Multi-point V/F frequency 4	◎	0x0408
P04.09	Multi-point V/F voltage 4	◎	0x0409
P04.11	V/F manual torque boost	○	0x040B
P04.13	Field weakening torque compensation coefficient	○	0x040D
P04.15	Slip compensation gain	○	0x040F
P04.17	Oscillation suppression gain	○	0x0411
P04.19	Flux braking	○	0x0413
P04.20	Voltage source for V/F separation	○	0x0414
P04.21	Voltage digital setting for V/F separation	○	0x0415
P04.22	Voltage rise time of V/F separation	○	0x0416
P04.23	Voltage decline time of V/F separation	○	0x0417
P04.24	Voltage lower limit of V/F separation	○	0x0418
P04.25	Voltage upper limit of V/F separation	○	0x0419
P04.26	Current limit	○	0x041A
P04.27	Current limit switch	○	0x041B
P04.28	VF torque filter coefficient	○	0x041C

P05 input terminal function parameters group

Function code	Name	Property	Communication address
P05.00	DI1(Digital input) function selection	◎	0x0500
P05.01	DI2(Digital input) function selection	◎	0x0501
P05.02	DI3(Digital input) function selection	◎	0x0502
P05.03	DI4(Digital input) function selection	◎	0x0503
P05.04	DI5(Digital input) function selection	◎	0x0504
P05.05	DI6(Digital input) function selection	◎	0x0505
P05.06	HDI1 Digital input function selection (optional high-speed pulse input)	○	0x0506
P05.07	DI1~DI4 Digital input Logic selection	◎	0x0507
P05.08	DI 5~HDI 1 Digital input Logic selection	◎	0x0508
P05.10	DI filter time	○	0x050A
P05.11	Terminal command mode	◎	0x050B
P05.13	AI1 voltage lower limit	○	0x050D
P05.14	AI1 lower limit setting	○	0x050E
P05.15	AI1 voltage upper limit	○	0x050F
P05.16	AI1 upper limit setting	○	0x0510
P05.17	AI1input filter time	○	0x0511
P05.18	AI2 input selection	○	0x0512
P05.19	AI2 voltage lower limit	○	0x0513
P05.20	AI2 voltage lower limit setting	○	0x0514
P05.21	AI2 voltage upper limit	○	0x0515
P05.22	AI2 voltage upper limit setting	○	0x0516
P05.23	AI2 input filter time	○	0x0517

Function code	Name	Property	Communication address
P05.24	AI2 current lower limit	○	0x0518
P05.25	AI2 current lower limit setting	○	0x0519
P05.26	AI2 current upper limit	○	0x051A
P05.27	AI2 current upper limit setting	○	0x051B
P05.28	AI3 voltage lower limit	○	0x051C
P05.29	AI3 voltage lower limit setting	○	0x051D
P05.30	AI3 voltage upper limit	○	0x051E
P05.31	AI3 voltage upper limit setting	○	0x051F
P05.32	AI3 input filter time	○	0x0520
P05.33	High-speed pulse input mini. frequency	○	0x0521
P05.34	High-speed pulse input mini. frequency setting	○	0x0522
P05.35	High-speed pulse input max. frequency	○	0x0523
P05.36	High-speed pulse input max. frequency setting	○	0x0524
P05.37	High-speed pulse input filter time	○	0x0525

P06 output terminal parameter group

Function code	Name	Property	Communication address
P06.00	HDO1 output mode selection	○	0x0600
P06.02	Digital output logic selection	○	0x0602
P06.03	Digital output(DO1)	○	0x0603
P06.04	Relay T1 digital output	○	0x0605
P06.05	Digital output (HDO1)	○	0x0604
P06.07	DO1 Digital output delay ON	○	0x0607
P06.08	DO1 Digital output delay OFF	○	0x0608
P06.09	Relay T1 output delay ON	○	0x0609
P06.10	Relay T1 output delay OFF	○	0x060A
P06.11	HDO1 Digital output delay ON	○	0x060B
P06.12	HDO1 Digital output delay OFF	○	0x060C
P06.14	AO1 function selection	○	0x060E
P06.15	AO2 function selection	○	0x060F
P06.16	HDO1 pulse output function selection	○	0x0610
P06.17	AO1 output voltage lower limit	○	0x0611
P06.18	AO1 output voltage lower limit setting	○	0x0612
P06.19	AO1 output voltage upper limit	○	0x0613
P06.20	AO1 output voltage upper limit setting	○	0x0614
P06.21	AO2 output voltage lower limit	○	0x0615
P06.22	AO2 output voltage lower limit setting	○	0x0616
P06.23	AO2 output voltage upper limit	○	0x0617
P06.24	AO2 output voltage upper limit setting	○	0x0618
P06.25	HDO1 mini. output set frequency	○	0x0619
P06.26	HDO1 mini. output set value	○	0x061A
P06.27	HDO1 max. output set frequency	○	0x061B
P06.28	HDO1 max. output set value	○	0x061C

P08 Process Control PID Function

Function code	Name	Property	Communication address
P08.00	PID setting source	○	0x0800
P08.01	PID digital setting	○	0x0801
P08.02	PID feedback source	○	0x0802
P08.03	PID action direction	○	0x0803
P08.04	PID setting feedback range	○	0x0804
P08.05	Proportional gain 1	○	0x0805
P08.06	Integral time1	○	0x0806
P08.07	Differential time 1	○	0x0807
P08.08	Proportional gain 2	○	0x0808
P08.09	Integral time2	○	0x0809
P08.10	Differential time 2	○	0x080A
P08.11	PID parameter switchover condition	○	0x080B
P08.12	PID parameter switchover deviation	○	0x080C
P08.13	PID deviation limit	○	0x080D
P08.14	PID preset output value	○	0x080E
P08.15	PID preset output value holding time	○	0x080F
P08.16	Detection value of feedback loss	○	0x0810
P08.17	Detection time of feedback loss	○	0x0811
P08.18	Detection value of feedback over-limit	○	0x0812
P08.19	Detection time of feedback over-limit	○	0x0813
P08.20	PID operation at stop	○	0x0814
P08.21	Maximum value of PID outputs in reverse direction	○	0x0815

P09 special function parameter group

Function code	Name	Property	Communication address
P09.00	Frequency detection value 1 (FDT1)	○	0x0900
P09.01	Frequency detection hysteresis (FDT hysteresis 1)	○	0x0901
P09.02	Frequency detection value 2 (FDT2)	○	0x0902
P09.03	Frequency detection hysteresis (FDT hysteresis 2)	○	0x0903
P09.04	Detection range of frequency reached	○	0x0904
P09.05	Swing frequency setting mode	○	0x0905
P09.06	Swing frequency amplitude	○	0x0906
P09.07	Jump frequency amplitude	○	0x0907
P09.08	Swing frequency rising time	○	0x0908
P09.09	Swing frequency falling time	○	0x0909
P09.10	Set length	○	0x090A
P09.11	Number of pulses per length unit (unit 0.1)	○	0x090B
P09.12	Reserved	●	0x090C
P09.13	Set count value	○	0x090D
P09.14	Designated count value	○	0x090E
P09.15	Droop control	○	0x090F
P09.16	Accumulative running time reached	○	0x0910
P09.17	Accumulative power-on time reached	○	0x0911
P09.18	Current running time reached	○	0x0912
P09.19	Current power-on time reached	○	0x0913
P09.20	Action after accumulative power-on/running time reached	○	0x0914
P09.21	Frequency reached	○	0x0915
P09.22	Detection range of frequency reached	○	0x0916

P10 Operation panel and display parameters group

Function code	Name	Property	Communication address
P10.00	User password	○	
P10.01	STOP/RESET key function	○	0x0A01
P10.02	FUN Key function selection	○	0x0A02
P10.03	LED running display	○	0x0A03
P10.04	LED stop display	○	0x0A04
P10.05	Load speed display coefficient	○	0x0A05

P11 Multi-Reference parameters group

Function code	Name	Property	Communication address
P11.00	Multi-Reference source 0	◎	0x0B00
P11.01	Reference 0	○	0x0B01
P11.02	Reference 1	○	0x0B02
P11.03	Reference 2	○	0x0B03
P11.04	Reference 3	○	0x0B04
P11.05	Reference 4	○	0x0B05
P11.06	Reference 5	○	0x0B06
P11.07	Reference 6	○	0x0B07
P11.08	Reference 7	○	0x0B08
P11.09	Reference 8	○	0x0B09
P11.10	Reference 9	○	0x0B0A
P11.11	Reference 10	○	0x0B0B
P11.12	Reference 11	○	0x0B0C
P11.13	Reference 12	○	0x0B0D
P11.14	Reference 13	○	0x0B0E
P11.15	Reference 14	○	0x0B0F
P11.16	Reference15	○	0x0B10

P12 Simple PLC function parameters group

Function code	Name	Property	Communication address
P12.00	Simple PLC running mode	○	0x0C00
P12.01	Simple PLC retentive selection	○	0x0C01
P12.02	Time unit of simple PLC running	○	0x0C02
P12.04	Running time of simple PLC reference 0	○	0x0C04
P12.05	Acceleration/deceleration time of simple PLC reference 0	○	0x0C05
P12.06	Running time of simple PLC reference 1	○	0x0C06
P12.07	Acceleration/deceleration time of simple PLC reference 1	○	0x0C07
P12.08	Running time of simple PLC reference 2	○	0x0C08
P12.09	Acceleration/deceleration time of simple PLC reference 2	○	0x0C09
P12.10	Running time of simple PLC reference 3	○	0x0C0A
P12.11	Acceleration/deceleration time of simple PLC reference 3	○	0x0C0B
P12.12	Running time of simple PLC reference 4	○	0x0C0C
P12.13	Acceleration/deceleration time of simple PLC reference 4	○	0x0C0D
P12.14	Running time of simple PLC reference 5	○	0x0C0E
P12.15	Acceleration/deceleration time of simple PLC reference 5	○	0x0C0F
P12.16	Running time of simple PLC reference 6	○	0x0C10
P12.17	Acceleration/deceleration time of simple PLC reference 6	○	0x0C11
P12.18	Running time of simple PLC reference 7	○	0x0C12
P12.19	Acceleration/deceleration time of simple PLC reference 7	○	0x0C13
P12.20	Running time of simple PLC reference 8	○	0x0C14
P12.21	Acceleration/deceleration time of simple PLC reference 8	○	0x0C15
P12.22	Running time of simple PLC reference 9	○	0x0C16
P12.23	Acceleration/deceleration time of simple PLC reference 9	○	0x0C17
P12.24	Running time of simple PLC reference 10	○	0x0C18

Function code	Name	Property	Communication address
P12.25	Acceleration/deceleration time of simple PLC reference 10	○	0x0C19
P12.26	Running time of simple PLC reference 11	○	0x0C1A
P12.27	Acceleration/deceleration time of simple PLC reference 11	○	0x0C1B
P12.28	Running time of simple PLC reference 12	○	0x0C1C
P12.29	Acceleration/deceleration time of simple PLC reference 12	○	0x0C1D
P12.30	Running time of simple PLC reference 13	○	0x0C1E
P12.31	Acceleration/deceleration time of simple PLC reference 13	○	0x0C1F
P12.32	Running time of simple PLC reference 14	○	0x0C20
P12.33	Acceleration/deceleration time of simple PLC reference 14	○	0x0C21
P12.34	Running time of simple PLC reference 15	○	0x0C22
P12.35	Acceleration/deceleration time of simple PLC reference 15	○	0x0C23

P13 Fault and protection function parameter group

Function code	Name	Property	Communication address
P13.01	Overload warning selection	○	0x0D01
P13.02	Overload warning detection level	○	0x0D02
P13.03	Detection time of overload warning	○	0x0D03
P13.04	Phase loss protection	○	0x0D04
P13.05	Light load warning selection	○	0x0D05
P13.06	Light load warning detection level	○	0x0D06
P13.07	Detection time of light load warning	○	0x0D07
P13.09	Short-circuit to ground upon power-on	○	0x0D09
P13.10~P13.16			
P13.17	Cooling fan control	○	0x0D11
P13.18	Reserved		
P13.19	Under-voltage setting	○	0x0D13
P13.20	Fault auto reset times	○	0x0D14
P13.21	DO action during fault auto reset	○	0x0D15
P13.22	Time interval of fault auto reset	○	0x0D16
P13.23	voltage adjustment selection	○	0x0D17
P13.24	Overvoltage stall protective voltage	○	0x0D18
P13.25	Energy braking action selection	○	0x0D19
P13.26	Energy braking protective voltage	○	0x0D1A
P13.27	Overvoltage stall gain	○	0x0D1B
P13.30	Fault record selection	○	0x0D1E
P13.31	Fault code	●	0x0D1F
P13.32	Running frequency upon fault	●	0x0D20
P13.33	Output current upon fault	●	0x0D21
P13.34	Bus voltage upon fault	●	0x0D22
P13.35	Output voltage upon fault	●	0x0D23
P13.36	Input terminal status upon fault	●	0x0D24
P13.37	Output terminal status upon fault	●	0x0D25
P13.38	Module temperature	●	0x0D26
P13.39	Accumulative running time upon fault (hour)	●	0x0D27
P13.40	Accumulative running time upon fault (second)	●	0x0D28

P14 communication parameters group

Function code	Name	Property	Communication address
P14.01	Baud rate	○	0x0E01
P14.02	Data format	○	0x0E02
P14.03	Local address	○	0x0E03
P14.04	Response delay	○	0x0E04
P14.05	Communication timeout	○	0x0E05
P14.06	Communication fault processing	○	0x0E06

P26 Status monitoring parameters group

Function code	Name	Property	Communication address
P26.00	Running frequency	●	0x1A00
P26.01	Set frequency	●	0x1A01
P26.02	Bus voltage	●	0x1A02
P26.03	Output voltage	●	0x1A03
P26.04	Output current	●	0x1A04
P26.05	Output power	●	0x1A05
P26.06	Set torque (%)	●	0x1A06
P26.07	Output torque (%)	●	0x1A07
P26.08	PID setting	●	0x1A08
P26.09	PID feedback	●	0x1A09
P26.10	Output speed	●	0x1A0A
P26.11	DI state	●	0x1A0B
P26.12	DO state	●	0x1A0C
P26.13	AI1 input	●	0x1A0D
P26.14	AI2 input	●	0x1A0E
P26.15	AI3 input	●	0x1A0F
P26.16	AO1 output	●	0x1A10
P26.17	AO2 output	●	0x1A11
P26.18	Reserved	●	0x1A12
P26.19	PULSE-IN frequency (0.01KHz)	●	0x1A13
P26.20	PULSE-OUT frequency (0.01KHz)	●	0x1A14
P26.21	Count value	●	0x1A15
P26.23	Length value	●	0x1A17
P26.24	Load speed lower byte	●	0x1A18
P26.25	Load speed high byte	●	0x1A19
P26.26	PLC stage	●	0x1A1A
P26.27	PLC stage	●	0x1A1B
P26.28	Frequency source B	●	0x1A1C
P26.29	Output synchronous frequency	●	0x1A1D
P26.30	Current running time	●	0x1A1E
P26.31	Current power-on time	●	0x1A1F
P26.32	Accumulative running time	●	0x1A20
P26.33	Accumulative power-on time	●	0x1A21
P26.34	Product code	●	0x1A22
P26.35	Software version No. of drive	●	0x1A23
P26.36	Rated power of inverter	●	0x1A24
P26.37	Rated voltage of inverter	●	0x1A25
P26.38	Rated current of inverter	●	0x1A26
P26.39	Module temperature 1	●	0x1A27
P26.40	Module temperature 2	●	0x1A28
P26.41	Software version No. of operation panel	●	0x1A29
P26.42	Software code	●	0x1A2A

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