

Group P3: Auxiliary running parameters					
Code	Name	Setting range	Unit	Default setting	Note
P3.00	Combination setting of frequency input	4:External pulse reference+CI 5:External pulse reference-CI 8:RS485 + CI + Increase/Decrease key reference 9:RS485 - CI - Increase/Decrease key reference 10:RS485+CI+External pulse reference 11:RS485-CI-External pulse reference	1	0	×
P3.01	Lock on initialization of parameters	Unit's place: 0:All parameters can be modified. 1:Only P3.01 can be modified 2:Only P0.02 and P3.01 can be modified Ten's place: 0:Disabled 1:Restore to default setting 2:Clear fault record	1	00	×
P3.03	Auto energy-saving function	0:Disabled 1:Enable	1	0	×
P3.04	AVR function	0:Disabled 1:Enable all the time 2:Disabled in Dec process	1	0	×
P3.05	Gain of slip compensation	0~150%	1%	0%	×
P3.06	Jog operating frequency	0.10~50.00Hz	0.01Hz	5.00Hz	○
P3.07	Acc time of jog operation	0.1~60.0s	0.1s	5.0s	○
P3.08	Dec time of jog operation	0.1~60.0s	0.1s	5.0s	○
P3.09	Communication setting	LED unit's place: baud rate selection 0:1200BPS 1:2400BPS 2:4800BPS 3:9600BPS 4:19200BPS 5:38400BPS LED ten's place: data format 0:1-7-2 format, no parity check 1:1-7-1 format, Odd 2:1-7-1 format, Even 3:1-8-2 format, None 4:1-8-1 format, Odd 5:1-8-1 format, Even 6:1-8-1 format, None (Please select data mode 3~6 during Modbus-RTU communication LED hundred's place: undefined	1	054	×
P3.10	Station address	0~248 0:Broadcast address 248:Take inverter as the host (in developing)	1	1	×
P3.11	Communication detection overtime	0.0~1000.0s 0.0: Detection is not available	0.1s	0.0s	×
P3.12	Delay time of response	0~1000ms	1	5ms	×
P3.13	proportion of communication frequency	0.01~1.00	0.01	1.00	×
P3.14	ACC time2	0.1~6000.0	0.1	10.0	○
P3.15	Dec time2	0.1~6000.0	0.1	10.0	○
P3.16	ACC time3	0.1~6000.0	0.1	10.0	○
P3.17	Dec time 3	0.1~6000.0	0.1	10.0	○
P3.18	ACC time4	0.1~6000.0	0.1	10.0	○
P3.19	Dec time 4	0.1~6000.0	0.1	10.0	○
P3.20	ACC time 5	0.1~6000.0	0.1	10.0	○
P3.21	Dec time 5	0.1~6000.0	0.1	10.0	○
P3.22	ACC time 6	0.1~6000.0	0.1	10.0	○
P3.23	Dec time 6	0.1~6000.0	0.1	10.0	○
P3.24	ACC time 7	0.1~6000.0	0.1	10.0	○
P3.25	Dec time 7	0.1~6000.0	0.1	10.0	○
P3.26	Multi-frequency 1	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	5.00Hz	○
P3.27	Multi-frequency 2	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	10.00Hz	○
P3.28	Multi-frequency 3	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	20.00Hz	○
P3.29	Multi-frequency 4	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	30.00Hz	○
P3.30	Multi-frequency 5	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	40.00Hz	○
P3.31	Multi-frequency 6	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	45.00Hz	○
P3.32	Multi-frequency 7	Lower-limit frequency ~ Upper-limit frequency	0.01Hz	50.00Hz	○
P3.33	Skip frequency1	0.00~500.00Hz	0.01Hz	0.00Hz	×
P3.34	Range of Skip frequency1	0.00~30.00Hz	0.01Hz	0.00Hz	×
P3.35	Skip frequency2	0.00~500.00Hz	0.01Hz	0.00Hz	×
P3.36	Range of Skip frequency 2	0.00~30.00Hz	0.01Hz	0.00Hz	×
P3.37	Skip frequency 3	0.00~500.00Hz	0.01Hz	0.00Hz	×
P3.38	Range of Skip frequency 3	0.00~30.00Hz	0.01Hz	0.00Hz	×
P3.39	Runtime setting	0~65.535K hours	0.001K	0.000K	○
P3.40	Runtime Accumulating time	0~65.535K hours	0.001K	0.000K	*
P3.41	Parameters display setting1	0000~FFFF Unit's place: b-09~b-12 Ten's place: b-13~b-16 Hundred's place: b-17~b-20 Thousand's place: b-21~b-24	1	0000	○
P3.42	Parameters display setting 2	0000~FFFF Unit's place: b-25~b-28 Ten's place: b-29~b-32 Hundred's place: b-33~b-36 Thousand's place: b-37~b-40	1	0000	○
P3.43	Parameters display setting 3	0000~4040 Ten's place, unit's place : stop Parameters display setting Thousand's place, hundred's place : run Parameters display setting	1	0001	○
P3.44	Display coefficient without unit	0.1~60.0	0.1	1.0	○
P3.45	JOG/REV shift control mode	0: select JOG to start jog 1: select REV start reverse	1	0	×

Parameters of Terminal function (Group4)

P4: Parameters of Terminal Function					
Code	Name	Setting range	Unit	Default setting	Note
P4.00	Terminal function setting X1	0: Idle 1:Multi-segment speed control terminal 1 2: Multi-segment speed control terminal 2 3: Multi-segment speed control terminal3 4:External terminal for forward jog operation 5: External terminal for reverse jog operation 6: Acc/Dec time terminal 1 7: Acc/Dec time terminal 2 8: Acc/Dec time terminal 3 9: control with 3-leads 10: Input for coasting to a stop(FRS) 11: External stop command 12: DC injection braking command DB 13:Prohibit of Inverter running. 14:Increase frequency reference (UP) 15: Frequency reference(down) (DOWN) Decrease 16:Acc/Dec prohibit 17:External resetting input(remove alarm) 18:Alarm of external device input(open contact) 19:Frequency setting selection 1 20: Frequency setting selection 2 21: Frequency setting selection 3 22: Change control mode from command to terminal 23:command control mode1 24: command control mode1 2 25: Start Pendulum Frequency 26: Reset Pendulum Frequency 27: Close-loop is not available 28: stop reference by PLC 29: PLC is not available 30:Reset the PLC stop status 31: Frequency reference is input via CI 32: Counter trigger signal input 33: Counter clean signal input 34: External interrupt input	1	1	×
P4.01	Function setting for terminal X2	As above	1	2	×
P4.02	Function setting for terminal X3	As above	1	3	×
P4.06	Fwd function setting for X7	As above	1	0	×
P4.07	REV function setting for X8	As above	1	0	×
P4.08	FWD/REV running mode	0:control mode with 2-leads1 1:control mode with 2-leads 2 2:control mode with 3-leads 1 3:control mode with 3-leads 2	1	0	×
P4.09	UP/DOWN speed setting	0.01~99.99Hz/s	0.01	1.00Hz/s	○
P4.11	Relay output	0:Inverter running (RUN) 1:Frequency arriving signal (FAR) 2:Frequency detection threshold (FDT1) 3:Frequency detection threshold (FDT2) 4:Overload pre-alarm (OL.) 5: Locking status by under-voltage (LU) 6:Stop by external alarm (EXT) 7:Output frequency at upper-limit value (FH) 8:Output frequency at lower-limit value (FL) 9:Running at zero-speed 10:Simple PLC Pause running finished 11:PLC stops after one cycle running 12:Specified counting value arriving 13:Mid counting value arriving 14:Inverter is ready to start (RDY) 15:Fault 16:Running at start frequency 17:Start DC injection braking time 18:Stop in a braking status 19:Pendulum Frequency limited by upper & lower limit value 20:Specified running time arriving	1	0	×
P4.12	Frequency arrive at detecting range(FAR)	0.00~50.00Hz	0.01Hz	5.00Hz	○
P4.13	FDT1 (Frequency) Level	0.00~upper-limit frequency	0.01Hz	10.00Hz	○
P4.14	FDT1 lag	0.00~50.00Hz	0.01Hz	1.00Hz	○
P4.15	FDT2 (Frequency) Level	0.00~upper-limit frequency	0.01Hz	10.00Hz	○
P4.16	FDT2 lag	0.00~50.00Hz	0.01Hz	1.00Hz	○
P4.22	Specified counting value arriving set value	P4.23~9999	1	0	○
P4.23	Mid counting value arriving set value	0~P4.22	1	0	○
P4.24	Overload pre-alarm detection level	20%~200%	1	130%	○
P4.25	Delay time of over load pre-alarm	0.0~20.0s	0.1s	5.0s	○

Protective function parameters (Group P5)

Group P5:Protective function parameters					
Code	Name	Setting value	Unit	Default setting	Note
P5.00	Motor overload protection mode	0:Output of inverter is locked 1:Not available	1	0	×
P5.01	Motor's overload protection coefficient	20~120%	1	100%	×
P5.02	Protection of over load at stall	0:Disable 1:Enabled	1	1	×

P5.03	Over voltage point at stall	380V: 120~150% 220V: 110~130%	1%	140% 120%	○
P5.04	Auto current limiting threshold	110%~200%	1%	150%	×
P5.05	Frequency decrease rate when current limiting	0.00~99.99Hz/s	0.01Hz/s	10.00Hz/s	○
P5.06	Auto current limiting selection	0:constant speed is not available 1:constant speed is available Note: Acc/Dec is available all the time	1	1	×
P5.07	Restart setting after power off	0:Not available 1:Available	1	0	×
P5.08	Holding time of restart after power off	0.0~10.0s	0.1s	0.5s	×
P5.09	Times for auto-restoring from alarm	0~10 0: function of auto-restoring is not available (Note : auto-restoring function is not available at overload and overheat status)	1	0	×
P5.10	Auto reset interval of fault	0.5~20.0s	0.1s	5.0s	×

Fault recording parameter (Group P6)

Group P6:Fault recording parameter					
Code	Name	Description	Unit	Default setting	note
P6.00	Record of previous fault	Previous fault record	1	0	*
P6.01	Output frequency of Previous fault	Output frequency of previous fault record	0.01Hz	0	*
P6.02	Setting frequency of previous fault	Setting frequency of previous fault	0.01Hz	0	*
P6.03	Output current of previous fault	Output current of previous fault	0.1A	0	*
P6.04	Output voltage of previous fault	Output voltage of previous fault	1V	0	*
P6.05	DC-bus voltage of previous fault	DC-bus voltage of previous fault	1V	0	*
P6.06	Module temperature of previous fault	Module temperature of previous fault	10C	0	*
P6.07	2 latest fault record	2 latest fault record	1	0	*
P6.08	3 latest fault record	3 latest fault record	1	0	*
P6.09	4 latest fault record	4 latest fault record	1	0	*
P6.10	5 latest fault record	5 latest fault record	1	0	*
P6.11	6 latest fault record	6 latest fault record	1	0	*

Close-loop control parameters (Group P7)

Group P7: Close-loop control parameters					
Code	Name	Setting range	Unit	Default setting	Not e
P7.00	Close-loop control mode	0:Close-loop control is not available 1:Close-loop control is available	1	0	×
P7.01	Reference channel	0:set by digital input 1:set by VI analog signal (0~10V) 2:set by CI analog signal	1	1	○
P7.02	Feedback channel	0:set by VI analog signal(0~10V) 1:et by CI analog signal 2:VI+CI 3:VI-CI 4:Min (VI, CI) 5:Max (VI, CI)	1	1	○
P7.03	Reference filter	0.01~50.00s	0.01s	0.50s	○
P7.04	Feedback filter	0.01~50.00s	0.01s	0.50s	○
P7.05	Set reference in digital mode	0.00~10.00V	0.01V	0.00V	○
P7.06	Min reference	0.0~P7.08 Max reference P7.08	0.1%	0.0%	○
P7.07	Feedback value corresponding to min reference	0.0~100.0%	0.1%	0.0%	○
P7.08	Max reference	Min reference P7.06~100.0%	0.1%	100.0%	○
P7.09	Feedback value corresponding to max reference	0.0~100.0%	0.1%	100.0%	○
P7.10	Proportional gain KP	0.000~999.9	0.001	5.0	○
P7.11	Integral gain KI	0.001~999.9	0.001	5.0	○
P7.12	Sampling cycle T	0.01~10.00S	0.01	1.00	○
P7.13	Limits of deviation	0.0~20.0%	1%	2.0%	○
P7.14	Close loop adjustment characteristic	0:Forward 1:Reverse Note: relationship between reference temperature and speed	1	0	×
P7.15	Integral adjustment selection	0:Stop integral adjustment selection when the frequency reaches upper limit or lower limits 1: Continue the integral adjustment selection when the frequency reaches high limit or lower limits	1	0	×
P7.16	Close loop preset frequency	0~upper limit of of frequency	0.01Hz	0.00Hz	○
P7.17	Holding time of close loop	0.0~250.0s	0.1s	0.1s	×
P7.18	Threshold of zero-frequency operation	0.00~500.00Hz	0.01Hz	0.01Hz	×
P7.19	Hysteresis of zero-frequency operation	0.00~500.00Hz	0.01Hz	0.01Hz	×

Simple PLC operation parameters (Group P8)

Group P8: Simple PLC operation parameters					
Code	Name	Setting range	Unit	Default setting	Note
P8.00	Simple PLC operation mode selection	0000~1113 Unit's place: mode selection 0:Disabled 1:Stop after single cycle of operation 2:Holding at the final value after single cycle of operation 3:Operate continuously Ten's place: PLC restarting mode after stopping 0:Run again from stage 1 1:Continue to run from the stopping stage Hundred's place: Save at power off 0:Not saving 1:Save the time and frequency at power off Thousand's place :Selecting the unit of time	1	0000	×

		0:second 1:minute			
P8.01	Stage 1 setup	000~621 Unit's place of LED: frequency setup 0: Multi i (i=1~7) 1: Frequency is decided by P0.01 Ten's place of LED : Operating direction selection 0: Run forward 1: Run reverse 2: Decided by operating instructions Hundred's place of LED: Acc/Dec time selection 0: Acc/Dec time 1 1: Acc/Dec time 2 2: Acc/Dec time 3 3: Acc/Dec time 4 4: Acc/Dec time 5 5: Acc/Dec time 6 6: Acc/Dec time 7	1	000	○
P8.02	Operating time in stage 1	0.1~6000.0	0.1	10.0	○
P8.03	Stage 2 setup	000~621	1	000	○
P8.04	Operating time in stage 1	0.1~6000.0	0.1	10.0	○
P8.05	Stage 2 setup	000~621	1	000	○
P8.06	Operating time in stage 1	0.1~6000.0	0.1	10.0	○
P8.07	Stage 2 setup	000~621	1	000	○
P8.08	Operating time in stage 1	0.1~6000.0	0.1	10.0	○
P8.09	Stage 2 setup	000~621	1	000	○
P8.10	Operating time in stage 1	0.1~6000.0	0.1	10.0	○
P8.11	Stage 2 setup	000~621	1	000	○
P8.12	Operating time in stage 1	0.1~6000.0	0.1	10.0	○
P8.13	Stage 2 setup	000~621	1	000	○
P8.14	Operating time in stage 1	0.1~6000.0	0.1	10.0	○

Wobble and measure function parameters (Group 9)

Group 9: Traverse and measure function parameters (Group 9)					
Code	Name	Setting range	Unit	Default setting	Note
P9.00	Wobble function selection	0:Disabled 1: Enabled	1	0	×
P9.01	Wobble operation control mode	00~11 Unit's place of LED: Start mode 0:Auto mode 1:Manual mode Ten's place of LED: Amplitude control 0:Variable amplitude 1:Fixed amplitude	1	00	×
P9.02	Pre-wobble frequency	0.00~500.00Hz	0.01Hz	0.00Hz	○
P9.03	Waiting time for pre-traverse frequency	0.0~3600.0s	0.1s	0.0s	○
P9.04	Wobble operating amplitude	0.0~50.0% (with reference to P9.04)	0.1%	0.0%	○
P9.05	Jitter frequency	0.0~50.0% (with reference to P9.04)	0.1%	0.0%	○
P9.06	Traverse operating cycle	0.1~999.9s	0.1s	10.0s	○
P9.07	Rising time of triangle wave	0.0~98.0% (period of wobble)	0.1%	50.0%	○

Special Application function parameters PB

Group PB: Special Application function parameters					
Code	Name	Setting range	Unit	Default setting	Note
PB.00	Jog frequency source	0~4 0:P3.06 1:Panel potentiometer 2:P0.02 3:VI 4:CI	0	0	○
PB.01	Selection of forward/ reverse dead time	0, 1 0:Dead time is enabled (Min 0.1S) 1:Dead time can be set to 0 (P0.05~0.0S, P0.20≥0.5Hz is needed)	1	0	○
PB.02	Inverter selection type	0:G type(normal) 1:P type(wind machine, water pump, power increases 1 level) Note: set as 1, P0.22 must set to 3.	1	0	×
PB.03	Short the run point before power on, set the run mode	0:after inverter is power on, run immediately 1:after inverter is power on, cut off the point and connect again to run	1	1	×

Factory setting (Group PF)

Group PF: Factory Setting					
Code	Name	Setting range	Unit	Default setting	Note
PF.00	Default password	-	-	-	*
PF.01	User's password	0:With no password protection 0001 ~ 9999: password protection	1	0000	○
PF.02	Software version	-			

b-00	Output frequency	Present output frequency	0.01Hz		*
b-01	Reference frequency	Present reference frequency	0.01Hz		*
b-02	Output voltage	Valid value of present output voltage	1V		*
b-03	Output current	Valid value of present output current	0.1A		*
b-04	Bus voltage	Present DC bus voltage	1V		*
b-05	Module temperature	IGBT Temperature of radiator	10C		*
b-06	Motor overload speed	Current speed of motor	1r/min		*
b-07	Operating time	One continues operating time of inverter	1hour		*
b-08	Input/output terminal's status	Digital input/output terminal's status	——		*
b-10	Analog input C1	Value of analog input C1	0.01V		*
b-11	External pulse input	Input value of external pulse range	1ms		*
b-12	Inverter rated current	Inverter rated current	0.1A		*
b-13	Inverter rated voltage	Inverter rated voltage	1V		*
b-14	Display without unit	Display without unit	1		*
b-15	Inverter power class	Inverter power class	-		*
b-16	Display present counter value	Display present counter value	-		*
b-17	Reserve	-	-		*
.....	Reserve	-	-		*
b-40	Reserve	-	-		*

7 Communication parameter

Name	Address	Function	
Internal parameters setting	GGnnH	GG means parameter group NO., nn means parameters NO.	
Command to inverter (06H)	2000H	0001H:Run command (forward)	
		0002H:Forward running command	
		0003H:Reverse running command	
		0004H:Jog command(forward)	
		0005H: Jog forward running command	
		0006H: Jog reverse running command	
		0007H:Dec to a stop	
		0008H: Emergency stop command	
		0009H: Jog stop command	
		000AH: Fault reset command	
	2001H	Frequency command setting via port	
	2100H	Read Inverter's alarm code	
Monitoring status (03H)	2101H	Read Inverter's status	
		BIT0:Stop indicates. 0:stop; 1:run	
		BIT1: Under-voltage indication,1:under-voltage;0:normal	
		BIT2: Forward/reverse indicate,1:Reverse;0: forward	
		BIT3: Forward/reverse indicate, 1: Jog;0:none	
		BIT4:Close loop control selection,1:close loop;0:none	
		BIT5: wobble mode running flag,1:traverse;0:none	
		BIT6:PLC running flag,1:PLC running;0: none	
		BIT7:Multi-speed running flag of terminals 1: Multi-speed; 0: None	
		BIT8: Common running flag 1:run as normal;0: none	
		BIT9: Main frequency from communication interface;1:yes; 0:no	
		BIT10: Main frequency from analog input. 1:yes;0: no	
		BIT11: Running command from communication interface 1: yes; 0: no	
BIT12: Password protection for parameters. 1:yes;0: no			
	2102H	Read inverter's reference frequency	
	2103H	Read inverter's output frequency	
	2104H	Read inverter's output current	
	2105H	Read inverter's bus voltage	
	2106H	Read inverter's output voltage	
	2107H	Read motor's speed	
	2108H	Read module temperature	
	2109H	Read analog input via V1	
	210AH	Read analog input via C1	
	210BH	Read inverter's software version	
		210CH	I/O terminal status
			Bit0: X1
			Bit1: X2
			Bit2: X3
			Bit6: FWD
Bit7: REV			
Read data from function code (03H)	GGnnH (GG: Group No. of function code, nn: function code)	Inverter responses to the data,When use Modbus address, the nn must be turned into hex	
	GGnnH (GG: Group No. of function code, nn: function code)	Data be wrote in the inverter, When use Modbus address, the nn must be turned into hex.	

Take the following as examples:

Read function code P1.02
01H, 03H, 01H, 02H, 00H, 01H, CRC1, CRC2
Read the reference frequency of inverter
01H, 03H, 21H, 02H, 00H, 01H, CRC1, CRC2
Write function code P1.02 with value 1
01H, 06H, 01H, 02H, 00H, 01H, CRC1, CRC2
Running command
01H, 06H, 20H, 00H, 00H, 01H, CRC1, CRC2

Definition of fault code

Fault code	Instruction
01H	Fault function code, Inverter can not find 03H, 06H, 08H.
02H	Fault data address, Inverter can not find data address
03H	Fault data, data over the limit

Note: The parameter address must be in hex format, as the function codes of parameters are in decimal system, so make sure turn them to hex format. For example, the Modbus address of function code P2.11 is 020BH.