H5000BF Series User's Manual

1. Preface

Thank you for choosing H5000BF Series of high-performance, IP65 inverter. Diagram of the operating instructions, is to facilitate the description, may be slightly different with the product. Please note that this manual will be handed the hands of end users, and retain for future maintenance, use and if in doubt, please contact with our company or agent of the company to get in touch, we will be happy to serve you.

2. Nameplate Description

MODEL: H5200P01D5K-BF
INPUT: 1PH 220V 50Hz/60Hz
OUTPUT: 3PH 220V 7.0A 150% 60S
FREQ RANGE: 0.1-400Hz 1.5KW

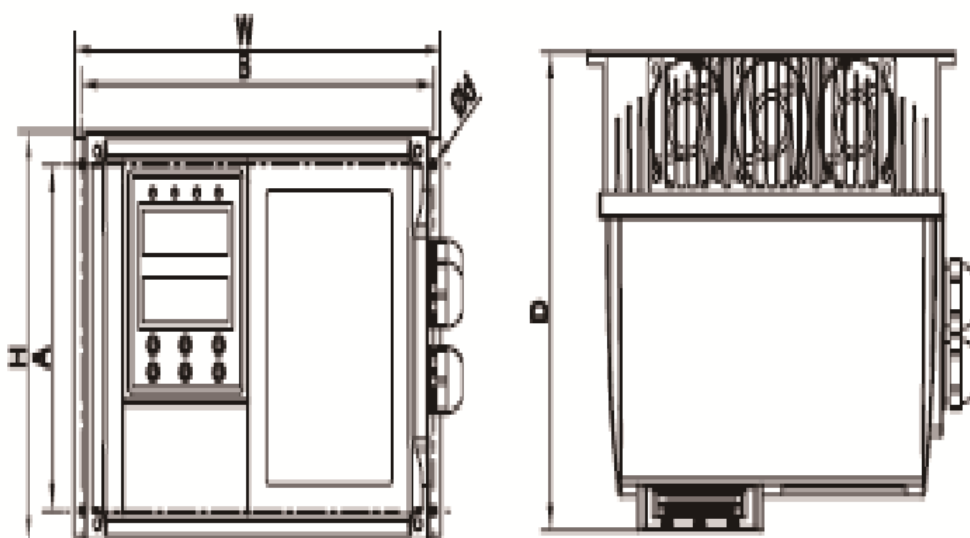CE

1105080001−3051

型号： H5200−P−01D5K−BF

- BF：IP65
- 01D5K：1.5kW
- P：Variable torque
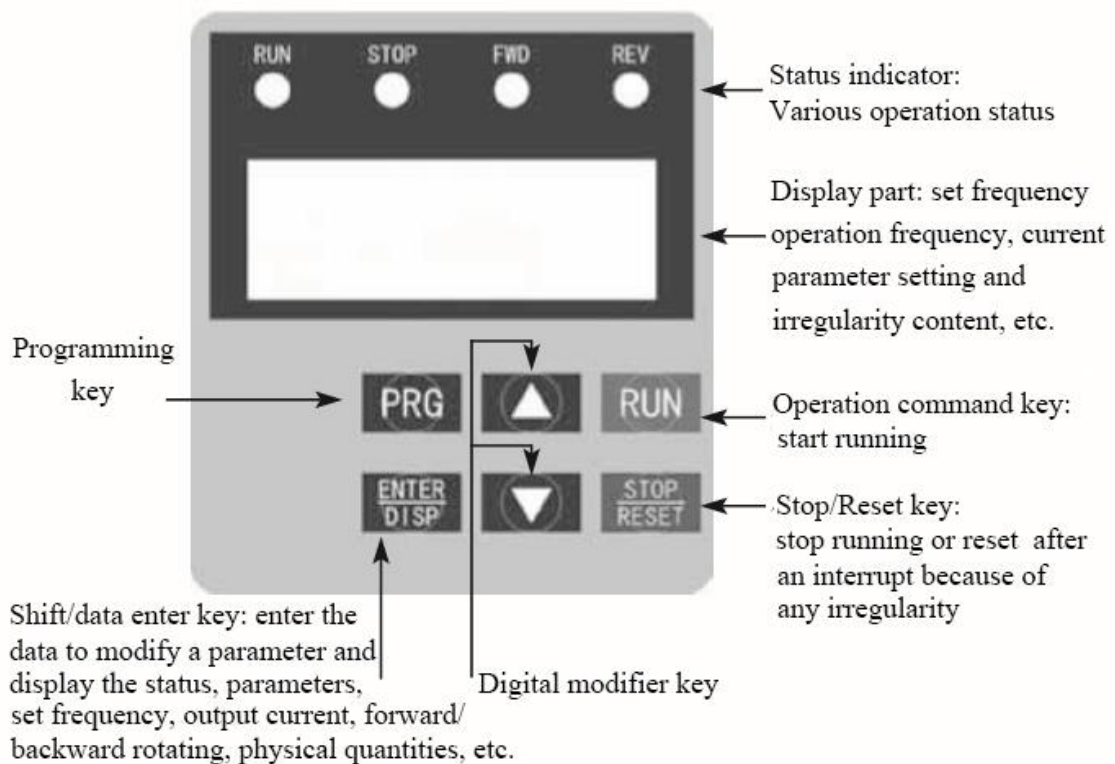- 200: 1PH AC220V
- 400: 3PH AC380V
- H5000：

3. Dimensions

Model	Motor Equipped	Output Current	Outline Dimension（mm)			Assembly Dimension（mm）		
			W	H	D	A	B	Ød
H5200P0D75K-BF	0.75kW	5	188	122	134	105	178	M4
H5200P01D5K-BF	1.5kW	7						
H5200P02D2K-BF	2.2kW	11						
H5400P0D75K-BF	0.75kW	2.7	188	122	134	105	178	M4
H5400P01D5K-BF	1.5kW	4						
H5400P02D2K-BF	2.2kW	5						
H5400P03D7K-BF	3.7kW	8.6	235	154	179	129	225	M4
H5400P05D5K-BF	5.5kW	12.5						
H5400P07D5K-BF	7.5kW	17.5						
H5400P0011K-BF	11kW	24						
H5400P0015K-BF	15kW	33	285	180	200	150	275	M5
H5400P0018K-BF	18kW	40						
H5400P0022K-BF	22kW	47						
H5400P0030K-BF	30kW	65						

4. Keyboard Description

Status indicator: Various operation status

Display part: set frequency operation frequency, current parameter setting and irregularity content, etc.

Programming key

Operation command key: start running

Stop/Reset key: stop running or reset after an interrupt because of any irregularity

Shift/data enter key: enter the data to modify a parameter and display the status, parameters, set frequency, output current, forward/ backward rotating, physical quantities, etc.

Digital modifier key

5. Technical Specifications

Model		H5000BF
Input	Rated voltage, Frequency	1PH/3PH AC 220V 50/60Hz; 3PH AC 380V 50/60 Hz
	Voltage Range	220V: 170~240V; 380V: 330V～440V
Output	Voltage Range	220V: 0~220V ; 380 V: 0～380 V
	Frequency Range	0.10～400.0 Hz
Control method		V/F control, Space vector control
Indication		Operating status/Alarm definition, interactive guidance; eg, frequency setting, the output frequency /current, rotating speed, fault and so on.
Control Specification	Output Frequency Range	0.10～400.00 Hz.
	Frequency Setting Resolution	Digital input: 0.01 Hz. Analog input:0,1% of maximum output frequency
	Output Frequency Accuracy	0.01 Hz.
	V/F Control	Setting V/F curve to satisfy various load requirements
	Torque Control	Auto increase: auto raise torque by loading condition; Manual increase: enable to set 0.0~20% of raising torque
	Multifunctional Input Terminal	4 multi-function input terminals, realizing functions including 15 section speed control, program running, 4 section acceleration/deceleration speed switch, UP/DOWN function and emergency stop and other functions
	Multifunctional Output Terminal	1 multi-function output terminals for displaying of running, zero speed, counter, external abnormity, program operation and other information and warnings
	Acceleration/deceleration Time Setting	0~999.9 s acceleration/deceleration time can be set individually
Other functions	PID Control	Built-in PID control
	RS485	Standard RS485 communication function (MODBUS)
	Frequency Setting	Analog input 0～10V, 0～20мA, can be selected; Digital input: input using the setting dial of the operation panel or RS 485 or UP/DOWN
	Multi-speed	4 multi-function input terminals,15 section speed can be set
	Automatic voltage regulation	Automatic voltage regulation function can be selected
	Counter	Built-in 2 group of counters
Protection Function	Overload	150%, 60s (Constant torque); 120%,60s (variable torque)
	Over Voltage	Over voltage protection can be set
	Under Voltage	Under voltage protection can be set
	Other Protections	Output short-circuit, over current, and parameter lock and so on.

Model		H5000BF
Environment	Ambient Temperature	−10℃~40℃(non-freezing)
	Ambient Humidity	Max. 95% (non-condensing)
	Altitude	Lower than 1000м.
	Vibration	Max. 0.5 g
Structure	Cooling Mode	Below 3.7 kW no have fan; Above 5.5 kW Forced air cooling
	Protective Structure	IP 65

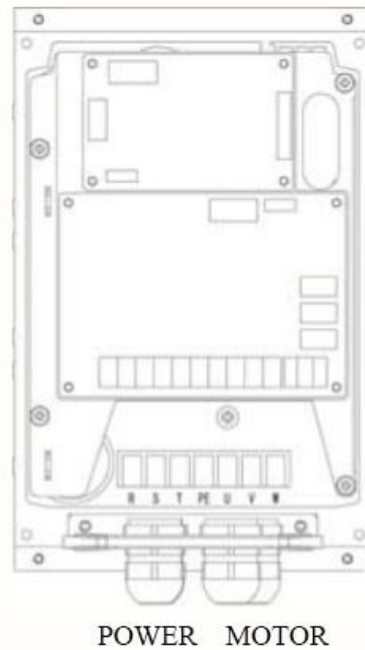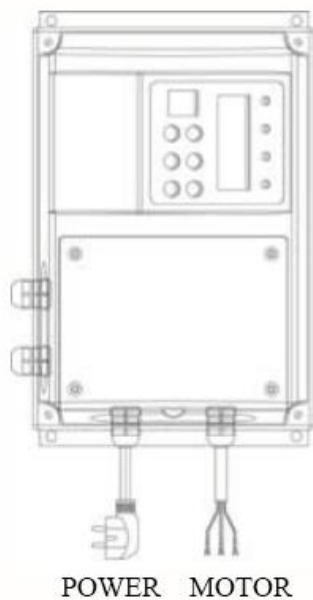## 6. Wiring

6-1 Specification of main circuit terminal

(1) Main circuit terminals is shown below:

① 0.75—2.2kW　　　　　　　　　　②3.7—22kW

POWER　MOTOR　　　　　POWER　MOTOR

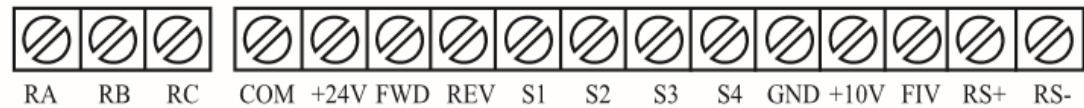Main circuit terminal description

| R/L1、S/L2、T/L3	AC power input
U/T1、V/T2、W/T3	Output terminal, connect to a three-phase motor
+/B1、 ⎯	DC positive and negative, connect to braking unit
+/B1 、B2	Connect to braking resistor
+、PR	
⏚	Ground

(2) Control terminals layout

①0.75-- 2.2kW

| MB | MA | RA | RB | 10V | AI | ACM | SG+ | SG- | S1 | S2 | S3 | S4 | DCM | P24 |

② 3.7—22kW

| RA | RB | RC | COM | +24V | FWD | REV | S1 | S2 | S3 | S4 | GND | +10V | FIV | RS+ | RS- |

Terminal Description

| Name of terminal	Instruction	Remark
S1	Multi-function of Input Terminal P315	Multifunctional Terminals S1-S4 can setting according to the P315-P318, when the terminal is cut with DCM/GND, it can work effectively
S2	Multi-function of Input Terminal P316	
S3	Multi-function of Input Terminal P317	
S4	Multi-function of Input Terminal P318	
DCM/GND	Digital Signal of Public Terminal	
P24/+24V	DC24V	Maximum 100mA
10V	Frequency Setting Power	
AI/FIV	The Analog Voltage of Input Terminal	0~10V/0~20mA
ACM/COM	Analog Earth Terminal	
MA,MB	Output Terminal (opening)	250VAC/3A
RA,RB	Output Terminal (opening)	250VAC/3A
SG+, SG-/RS+,RS-	RS485 Protocol	

Basic wiring diagram

(1) 1PH 220V INPUT/ 3PH 220V OUTPUT
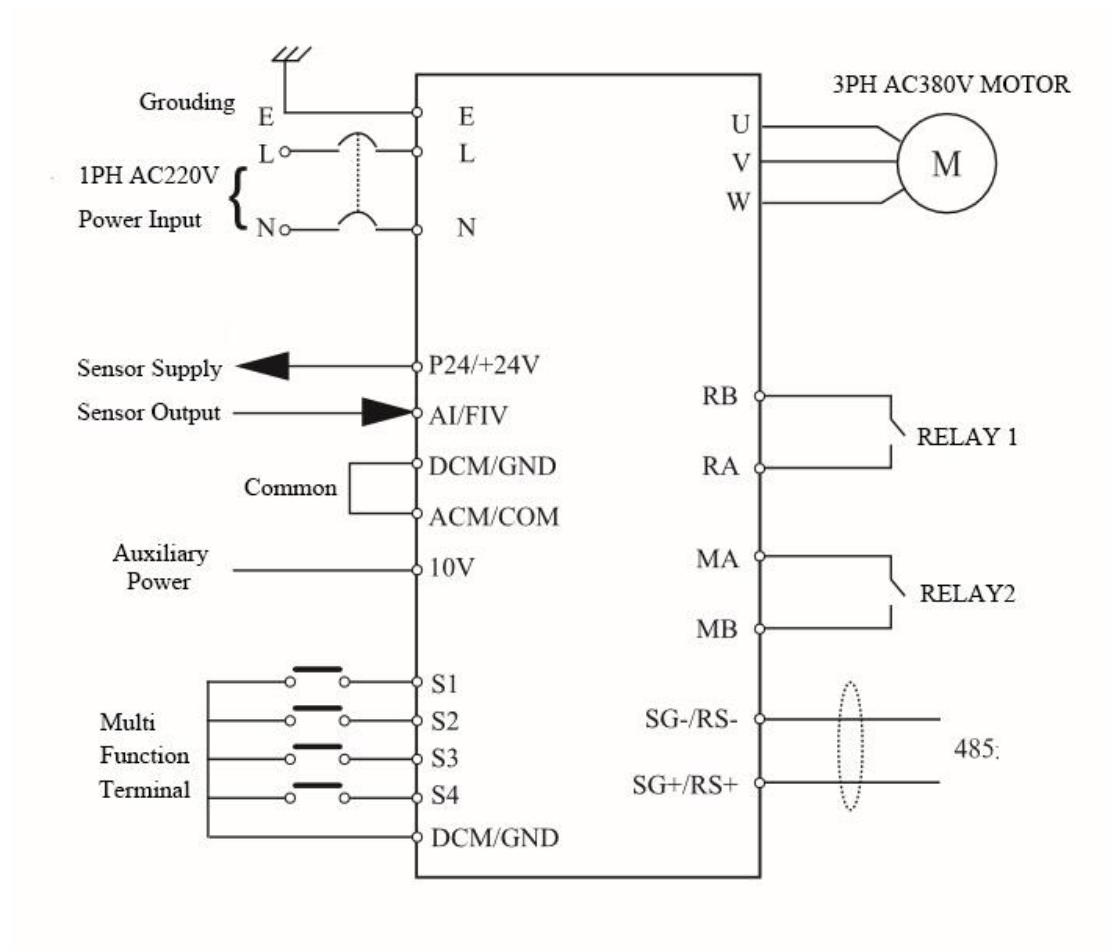
(2) 3PH 380V INPUT/ 3PH 380V OUTPUT
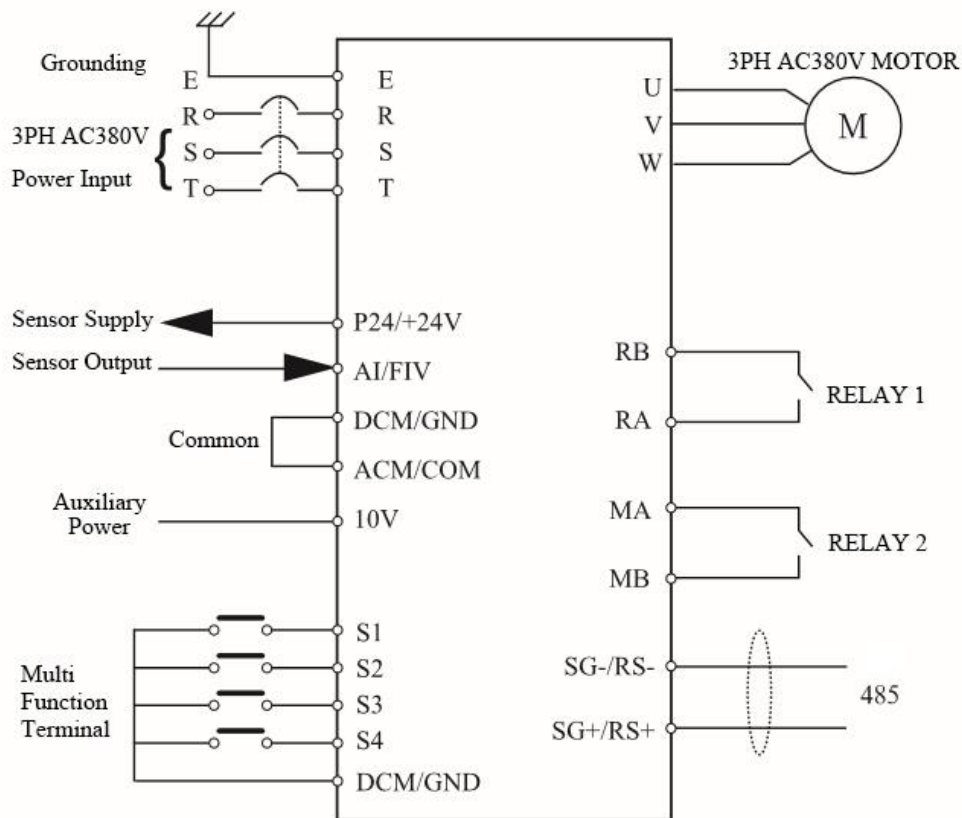
Precautions main circuit wiring

(1)Circuit wiring, refer to requirements of electrical codes.

(2)Application of supply power to output terminals (U,V,W)of the invert will damage it, so never perform such wiring.

(3)Power supply's wiring, please use isolated wire and wire pipe if possible, and make isolated wire and wire pipe link to the earth.

(4)The inverter and welding device, high-power motor, high-power load can't use a earth cable.

(5) The ground terminal E, ground impedance is lower than 100 Ω

(6)Use the shortest earth cable possible.

Control loop distribution NOTES:

(1) Please let the control signal lines and the main lines, and other power lines, power lines separate traces.

(2) In order to prevent interference caused by malfunction, use stranded or double-stranded shielded wire line, specifications for 0.5 ~ 2mm^2

(3) Make sure that each using terminal to allow conditions, such as: power supply, the maximum current.

(4) Correct ground terminal E, grounding resistance is less than 100 Ω .

(5) Each terminal's wiring requirements, the correct selection of accessories such as potentiometers, voltmeter, input power supplies.

(6) After completing the wiring correctly and check to make sure it is correct and then the power can be on.

7. Parameters

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
Monitor function	P000	Main display data selection	0-32	1	1
	P001	Display the set frequency	Read only	-----	-----
	P002	Display the output frequency	Read only	-----	-----
	P003	Display the output current	Read only	-----	-----
	P004	Display the motor speed	Read only	-----	-----
	P005	Display the DC bus voltage	Read only	-----	-----
	P006	Display the temperature of inverter	Read only	-----	-----
	P007	Display PID	Read only	-----	-----
	P010	Alarm record 1	Read only	-----	-----
	P011	Alarm record 2	Read only	-----	-----
	P012	Alarm record 3	Read only	-----	-----
	P013	Alarm record 4	Read only	-----	-----
	P014	The frequency setting in the last alarm	Read only	-----	-----
	P015	The output frequency in last alarm	Read only	-----	-----
	P016	The output current in last alarm	Read only	-----	-----
	P017	The output voltage in last alarm	Read only	-----	-----
	P018	The output DC bus voltage in last alarm	Read only	-----	-----
Basic functions	P100	Digital frequency setting	0.00—Maximum frequency	0.1	0.0
	P101	Frequency setting selection	0: Digital frequency setting (P100) 1: Analog voltage (0-10VDC) 2: Analog current (0-20Ma) 3: Setting dial (Operation panel) 4: UP/DOW frequency setting 5: RS485 communication frequency setting	1	3
	P102	Start signal selection	0: Operation panel (FWD/REV/ STOP) 1: I/O terminal 2: Communication (RS485)	1	0

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
Basic functions	P103	"Stop" key lock operation selection	0: "Stop" key lock mode invalid 1: "Stop" key lock mode valid	1	1
	P104	Reverse rotation prevention selection	0: Reverse rotation disallowed 1:Reverse rotation allowed	1	1
	P105	Maximum frequency	Minimum frequency~400.00Hz	0.1	50.0
	P106	Minimum frequency	0.00~ maximum frequency	0.1	0.00
	P107	Acceleration time 1	0~999.9s	0.1	Depends on models
	P108	Deceleration time 1	0~999.9s	0.1	
	P109	V/F maximum voltage	V/F intermediate voltage~ 500.0V	0.1	Depends on models
	P110	V/F base frequency	V/F intermediate frequency ~ max. frequency	0.1	50.00
	P111	V/F intermediate voltage	V/F minimum voltage ~ V/F maximum voltage	0.1	changing
	P112	V/F intermediate frequency	V/F minimum frequency ~ V/F based frequency	0.01	2.50
	P113	V/F minimum voltage	0~V/F intermediate voltage	0.1	15.0
	P114	V/F minimum frequency	0~V/F intermediate frequency	0.1	1.25
	P115	Carrier frequency	1.0K-15.0K	0.1	Changing
	P116	Automatic carrier line up	Reserved	1	0
	P117	Initialization of parameters	8: Initialization of Factory Setting	1	0
	P118	Parameter lock	0: Unlock parameters 1: Lock up parameters	1	0
Basic functions	P200	Start mode selection	0: regular start 1: restart after inspection	1	0
	P201	Stop mode selection	0: deceleration to a stop 1: coasting	1	0
	P202	Starting frequency	0.10~10.00Hz	0.01	0.5
	P203	Stopping frequency	0.10~10.00Hz	0.01	0.5
	P204	DC injection brake operation current (start)	0~150% rated motor current	1%	100%
	P205	DC injection brake operation time (start)	0~25.0S	0.1	0
	P206	DC injection brake operation current (stop)	0~150% rated motor current	1%	100%
	P207	DC injection brake operation time (stop)	0~25.0S	0.1	0
	P208	Torque boost	0~20.0%	1	0%

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
	P209	Rated motor voltage	0~500.0V	0.1	Changing
	P210	Rated motor current	0~current of system	0.1	Changing
	P211	No load current ratio of motor	0~100%	0.1	40%
	P212	Rated motor rotation speed	0~6000r/min	1	1420
	P213	Number of motor poles	0~20	2	4
	P214	Rated motor slip	0~10.00Hz	0.1	2.50
	P215	Rated motor frequency	0-400.00Hz	0.1	50.00
	P216	Resistance of stator	0-100 Ω	0.1	0
	P217	Resistance of rotor	0-100 Ω	0.1	0
	P218	Self-inductance of rotor	0-1.000H	0.1	0
	P219	Mutual inductance of rotor	0-1.000H	0.1	0
I/O functions	P300	FIV/AI minimum voltage input	0~AV maximum voltage	0.1	0
	P301	FIV/AI maximum voltage input	AV minimum voltage~10V	0.1	10.0
	P302	FIV/AI input filter time	0~25.0S	0.1	1.0
	P303	FIV/AI minimum current input	0~AI maximum current	0.1	4.0
	P304	FIV/AI maximum current input	AI minimum current input ~ 20mA	0.1	20.0
	P305	FIV/AI input filter time	0~25.0S	0.1	2.5
	P306	Reserved	0~FOV maximum voltage	0.1	0
	P307	Reserved	FOV maximum voltage output~10V	0.1	10.0
	P310	Frequency of low analog	0~600.00	0.1	0.00
	P311	Direction of low analog	0/1	1	0
	P312	Frequency of high analog	0~600.00	0.1	50.00
	P313	Direction of analog	0/1	1	0
	P314	Analog input reverse selection	0/1	1	0
	P315	Input terminal FWD (0~32)	0: Invalid 1: Jog 2: Jog forward 3: Jog reverse	1	6
	P316	Input terminal REV (0~32)	4: Forward/reverse 5: Run 6: Forward	1	7

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
	P317	Input terminal S1 (0~32)	7: Reverse 8: Stop 9: Multi-speed 1 10: Multi-speed 2	1	18
	P318	Input terminal S2 (0~32)	11: Multi-speed 3 12: Multi-speed 4 13: Acceleration/Deceleration terminal 1	1	9
	P319	Reserved	14: Acceleration/Deceleration terminal 2 15: Frequency increase signal (UP)	1	
	P320	Reserved	16: Frequency decrease signal (DOWN) 17: Emergency stop signal 18: Inverter reset signal	1	
	P321 (0~32)	Reserved	19: PID is running 20: PLC is running 21: Start signal for time 1 22: Start signal for time 2	1	
	P322 (0~32)	Reserved	23: Counter pulse signal 24: Counter reset signal 25: Memory clear 26: Start winding operation	1	
	P323	Reserved	0: Invalid 1: In running 2: Frequency reached 3: Alarm 4: Zero speed 5: Frequency 1 reached 6: Frequency 2 reached 7: Acceleration 8: Deceleration	1	

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
Secondary application	P324	Reserved	9: Indication for under voltage 10: Timer 1 reached 11: Timer 2 reached 12: Indication for completion of phase 13: Indication for completion of procedure 14: PID maximum 15: PID minimum	1	
	P325	Alarm output terminal RA,RC (0~32)	16: 4-20mA disconnection 17: Overload 18: Over torque 26: Winding operation completed 27: Counter reached 28: Intermediate counter reached 29: Water supply by constant voltage "1" turn on "0" turn off	1	03
	P326	Reserved	0: Frequency output 1: Current output 2: DC bus voltage 3: AC voltage	1	
	P327	Reserved	4: Pulse output, 1 pulse/Hz 5: 2 pulse/Hz 6: 3 pulse/Hz 7: 6 pulse/Hz	1	
	P400	Jog frequency setting	0.00~maximum frequency	0.1	5.00
	P401	Acceleration time 2	0 ~ 999.9s	0.1S	10.0
	P402	Deceleration time 2	0 ~ 999.9s	0.1S	10.0
	P403	Acceleration time 3	0 ~ 999.9s	0.1S	10.0
	P404	Deceleration time 3	0 ~ 999.9s	0.1S	10.0
	P405	Acceleration time 4/ Jog acceleration time	0 ~ 999.9s	0.1S	10.0
	P406	Deceleration time 4/ Jog deceleration time	0 ~ 999.9s	0.1S	10.0
	P407	Designated value of counter	0 ~ 999.9s	1	10.0
	P408	Intermediate	0 ~ 999.9s	1	50
	P409	Limitation of acceleration	0~200%	1%	150%

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
		torque			
	P410	Limitation of constant speed torque	0~200%	1%	00
	P411	Over voltage prevention selection in deceleration	0/1	1	1
	P412	Automatic voltage regulation selection	0~2	1	1
	P413	Automatic-energy-saving selection	0~100%	1%	00
	P414	DC braking voltage	Depends on models	0.1	Changing
	P415	Braking duty	40~100%	1	50%
	P416	Restart after instant power off	0~1	1	0
	P417	Allowable time of power cut	0~10s	1	5.0S
	P418	Flank restart current limited level	0~200%	1	150%
	P419	Flank restart times	0~10s	1	10
	P420	Fault restart times	0~5s	1	0
	P421	Delay time for restart after fault	0~100	2	2
	P422	Over torque action	0~3	1	0
	P423	Over torque detection level	0~200%	1	00
	P424	Over torque detection time	0~20.0S	0.1	00
	P425	Reaching frequency 1	0.00~maximum frequency	0.1	100
	P426	Reaching frequency 2	0.00~maximum frequency	0.1	5.0
	P427	Timer 1 setting	0~10.0s	0.1	0
	P428	Timer 2 setting	0~100s	1	0
	P429	Constant-speed torque limiting time	0~999.9s	0.1	Changing
	P430	Width of arrival of frequency in hysteretic loop	0.00~2.00	0.1	0.50
	P431	Jump frequency 1	0.00~maximum frequency	0.1	0
	P432	Jump frequency 2	0.00~maximum frequency	0.1	0
	P433	Jump frequency hysteresis loop width	0.00~2.00	0.1	0.50

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
	P434	UP/DOWN frequency step	0~10.00Hz	0.1	0.1
	P435	UP/DOWN frequency memory options	0: memory 1: no memory	1	0
PLC operation	P500	PLC memory mode	0~1	1	0
	P501	PLC starting mode	0~1	1	0
	P502	PLC running mode	0: PLC stops after running for one cycle 1: PLC stop mode, it stops after running for one cycle 2: PLC cycle running 3: PLC stop mode, cycle running mode 4: PLC operates at the last frequency after running for one cycle	1	0
	P503	Multi-speed 1	0.00~maximum frequency	0.1	20.0
	P504	Multi-speed 2	0.00~maximum frequency	0.1	10.0
	P505	Multi-speed 3	0.00~maximum frequency	0.1	20.0
	P506	Multi-speed 4	0.00~maximum frequency	0.1	25.0
	P507	Multi-speed 5	0.00~maximum frequency	0.1	30.0
	P508	Multi-speed 6	0.00~maximum frequency	0.1	35.0
	P509	Multi-speed 7	0.00~maximum frequency	0.1	40.0
	P510	Multi-speed 8	0.00~maximum frequency	0.1	45.0
	P511	Multi-speed 9	0.00~maximum frequency	0.1	50.0
	P512	Multi-speed 10	0.00~maximum frequency	0.1	10.0
	P513	Multi-speed 11	0.00~maximum frequency	0.1	10.0
	P514	Multi-speed 12	0.00~maximum frequency	0.1	10.0
	P515	Multi-speed 13	0.00~maximum frequency	0.1	10.0
	P516	Multi-speed 14	0.00~maximum frequency	0.1	10.0
	P517	Multi-speed 15	0.00~maximum frequency	0.1	10.0
	P518	PLC operation time 1	0~9999s	1S	100
	P519	PLC operation time 2	0~9999s	1S	100
	P520	PLC operation time 3	0~9999s	1S	100
	P521	PLC operation time 4	0~9999s	1S	100
	P522	PLC operation time 5	0~9999s	1S	0
	P523	PLC operation time 6	0~9999s	1S	0
	P524	PLC operation time 7	0~9999s	1S	0
	P525	PLC operation time 8	0~9999s	1S	0

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
	P526	PLC operation time 9	0~9999s	1S	0
	P527	PLC operation time 10	0~9999s	1S	0
	P528	PLC operation time 11	0~9999s	1S	0
	P529	PLC operation time 12	0~9999s	1S	0
	P530	PLC operation time 13	0~9999s	1S	0
	P531	PLC operation time 14	0~9999s	1S	0
	P532	PLC operation time 15	0~9999s	1S	0
	P533	PLC operation direction	0~9999	1	0
PID operation	P600	PID starting mode	0: PID disable 1: PID start 2: PID start by external terminal	1	0
	P601	PID operation mode selection	0: Negative feedback mode 1: Positive feedback mode	1	0
	P602	PID action set point	0: figure mode(P604) 1: AVI (0-10V) 2: AVI (0-20mA)	1	0
	P603	PID feedback value selection	0: AVI (0-10V) 1: AVI (0-20mA) 2: Reserved 3: Reserved	1	0
	P604	PID figure target value setting	0.0~100.0%	0.1%	50%
	P605	PID upper limit alarm value	0~100%	1%	100%
	P606	PID lower limit alarm value	0~100%	1%	0%
	P607	PID proportional band	10.0~200%	0.1%	100%
	P608	PID integral time	0.0~200.0 S.0 means closed	0.1s	0.3s
	P609	PID differential time	0.00.0~20.00 S.0 means closed	0.1s	0.0
	P610	PID action step-length	0.00~1.00Hz	0.1	0.5Hz
	P611	PID standby frequency	0.00~120.0Hz(0.00Hz) 0.00Hz means sleep function is closed	0.1	0.0Hz
	P612	PID standby duration	0~200s	1S	10s
	P613	PID wake-up value	0~100%	1%	0
	P614	PID corresponding value of display	0~9999	1	9999
	P615	PID digit of display	1~5	1	4
	P616	PID decimal digits of display	0~4	1	2

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
	P617	PID upper limit frequency	0~max.frequency	0.1	48.00
	P618	PID lower limit frequency	0~max.frequency	0.1	20.00
	P619	PID working mode	0: Always work(PID function open) 1: When feedback reaches upper limit (P605), it will work at Min-frequency. When feedback reaches lower limit(P606), PID will begin to work	1	0
RS-485 communication	P700	Communication mode	0: 4800bps 1: 9600bps 2: 19200bps 3: 38400bps		1
	P701	Communication mode	0: 8N1 FOR ASC 1: 8E1 FPR ASC 2: 8O1 FOR ASC 3: 8N1 FOR RTU 4: 8E1 FOR RTU 5: 8O1 FOR RTU		0
	P702	Communication address	0~240	1	0
Advance application	P800	Advanced application parameter lock	0: Locked 1: Unlocked	1	1
	P801	System 50Hz/60Hz setting	0~50Hz 1~60Hz	1	1
	P802	Constant torque or variable torque selection	0: Constant torque 1: Variable torque	1	1
	P803	Over-voltage protection setting	Changing	0.1	Changing
	P804	Under-temperature protection setting	Changing	0.1	Changing
	P805	Over-temperature protection setting	40~120℃	0.1	85/95℃
	P806	Current display filter time	0~10.0	0.1	2.0
	P807	0-10V analog output low end calibration coefAlient	0-9999	1	-
	P808	0-10V analog output high end calibration coefAlient	0-9999	1	-

Function	Parameters	Name	Setting Range	Minimum Setting increments	Initial value
	P809	0-20mA analog output low end calibration coefAlient	0-9999	1	-
	P810	0-20mA analog output high end calibration coefAlient	0-9999	1	-
	P811	Compensation frequency point for dead time	0.00~maximum frequency	0.01	0.00
	P812	UP/DOWN frequency memory options	0: memory 1: no memory	1	1

8. Troubleshooting

Operation Panel Indication	Name	Possible fault reason	Corrective action
OC0/UC0	Over current during stop	1: Inverter fault	Please contact your sales representative
OC1/UC1	Over current during acceleration	1: Acceleration time is too short 2: V/F curve is not set correctly 3: Motor or motor wire have short circuit to the ground 4: The torque boost is set too fast 5: The input voltage is too low 6: Directly start up the running motor 7: The inverter setting is not correct 9: The inverter fails	1: Increase acceleration time 2: Correctly set V/F curve 3: Check the insulation of motor and motor wire 4: Reduce the value f torque boost 5: Check input voltage 6: Check the load 7: Set tracing startup 8: Enlarge capacity of inverter 9: Sent for repairing
OC2/UC2	Over current during deceleration	1: Decelerate time is too high 2: Inverter capacity is inappropriately set 3: Whether there is any disturbing	1: Increase deceleration time 2: Enlarge inverter capacity 3: Solve disturbing resourse
OC3/UC3	Over current during constant speed	1: The insulation of motor and motor wire is not good 2: Load fluctuation 3: Fluctuation of input voltage and the voltage is low 4: Inverter capacity is inappropriately set	1: Check the insulation of motor and motor wire 2: Check load situation and mechanical lubrication 3: Check input voltage 4: Enlarge the capacity of inverter

Operation Panel Indication	Name	Possible fault reason	Corrective action
		5: Whether there is a large power motor starting up and leads the input voltage goes down 6: Whether there is a disturbing resource to disturb inverter	5: Increase the capacity of transformer 6: Solve disturbing resource
OU0	Over voltage during stop	1: The deceleration time is short 2: Inverter capacity incorrectly set 3: Disturbing	1: Check the power supply voltage 2. Sent for repairing
OU1	Over voltage during acceleration	1: Abnormal power supply 2: Peripheral circuitry is incorrectly set (switch control on or off, etc.) 3: Inverter fault	1: Check the power supply voltage 2. Sent for repairing
OU2	Over voltage during deceleration	1: Power supply voltage abnormal 2: Energy feedback load 3: Braking resistor incorrectly	1: Check the power supply voltage 2: Install braking unit and resistance 3: Affirm resistance setting again
OU3	Over voltage during constant speed	1: Decelerate time is too short 2: Power supply voltage abnormal 3: Over load 4: Braking resistor incorrectly set 5: Braking parameter is incorrectly set	1: Increase deceleration time 2: Check the power supply voltage 3: Check braking unit and resistance 4: Set braking resistor over again 5: Correctly set parameter, braking tube voltage etc.
LU0	Under voltage during stop	1: Power supply voltage abnormal 2: Phase missing	1: Check the power supply voltage 2: Check power supply and switch whether there is phase missing
LU1	Under voltage during acceleration	1: Power supply voltage abnormal 2: Phase missing 3: There is large load power start up in the input	2: Check whether peripheral setting bad connection leads phase missing 3: Please use independent power supply
LU2	Under voltage during deceleration		
LU3	Under voltage during constant speed		

Operation Panel Indication	Name	Possible fault reason	Corrective action
OL0 during stop OL1 during acceleration OL2 during deceleration OL3 during constant speed	Inverter overload	1: Overload 2: Acceleration time is too short 3: Torque boost is too fast 4: V/F curve incorrectly set 5: Under voltage of input 6: Before motor stops, inverter starts up 7: Fluctuation or blocking in loading	1: Reduce the load weight or replace larger capacity inverter 2: Increase acceleration time 3: Reduce torque boost rate 4: Set V/F curve over again 5: Check input voltage, increase inverter capacity 6: Adopt tracing startup mode 7: Check load condition
OT0 during stop OT1 during acceleration OT2 during deceleration OT3 during constant speed	Motor overload	1: The motor for use under overload 2: Acceleration time is too short 3: Motor protection setting is too small 4: V/F curve is incorrectly set 5: Torque boost is too fast 6: Bad motor insulation 7: Motor setting is too small	1: Reduce the load weight 2: Increase acceleration time 3: Increase protection setting 4: Correctly set V/F curve 5: Reduce torque boost rate 6: Check motor insulation and replace motor 7: Use larger inverter or motor
ES	Emergency stop	1: Inverter is in Emergency stop condition	1: After release Emergency stop, start up as regular procedure
CO	Communication error	1: Communication line connection has problem 2: Communication parameter is incorrectly set 3: Transmission format is wrong	1: Perform wiring of the RS-485 terminals property 2: Set parameter over again 3: Check data transmission format
20	4-20mA wire broken	1: Terminal is loose; signal input line is bad connected	1: Perform wiring of the 4-20mA terminals properly
Pr	Parameter wire error	Parameter setting is wrong	After stopping operation, make parameter setting
Err	Wrong parameter group	The parameter does not exist or the factory setting parameter	Quit this parameter