

SW10 series quick use guide

1. Basic Information

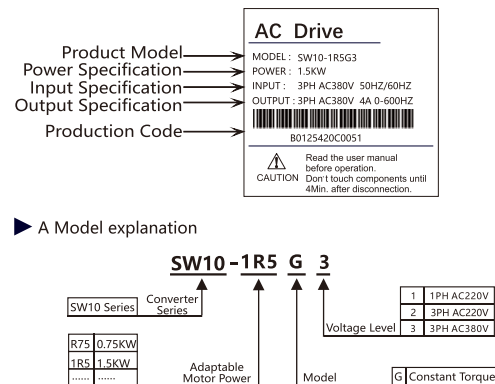
This document will guide the customer to complete the basic installation, wiring and debugging. If you need detailed instructions, please contact with the product distributors. Products all passed strict inspection before they completed and packed, if discover VFD damaged, model error, lack of additional accessories, such as abnormal situation, please contact this product distributors or relevant personnel of the company.

DANGER

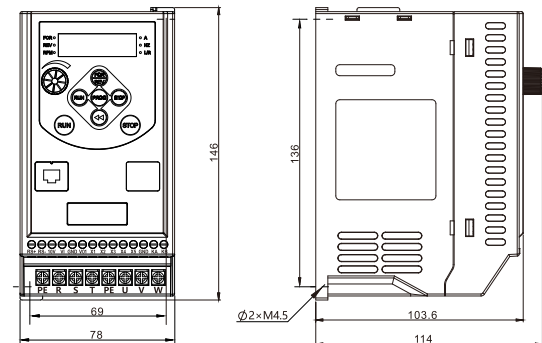
Before installing the converter ,please read and understand this instruction book.

- Before connect the converter,must cut off electricity
- When the power is cut off , VFD internal may still be residual energy, before handling the converter electronics, wait for at least 4 minutes, otherwise there is risk of electric shock.
- Forbid change any connector on the converter when power on, in order to avoid the converter damage and casualties.
- Converter earthing terminal, please be sure to properly grounded.
- Main circuit terminal wiring must be correct, R、S、T as power input terminals, forbid mix with U、V、W output terminals, or when power on will causes the damage of converter.
- Please be sure to follow the manual operation, otherwise may cause serious casualties.

2. Explanation of converter nameplate



3. Appearance and Mounting Dimension



Product Model	Power (kW)	Output Current (A)	outline dimension			installation dimension		
			H	W	D	H1	W1	D
SW10-R40G1	0.4	2.3	146	78	114	136	69	M45
SW10-R75G1	0.75	4						
SW10-1R5G1	1.5	7						
SW10-R75G3	0.75	2.1	146	78	114	136	69	M45
SW10-1R5G3	1.5	3.8						
SW10-2R2G3	2.2	5.1						

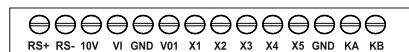
4. VFD control loop connection

※ Description of main terminal wiring



Terminal marking	Terminal function
R, S, T	380V power supply input. The input of 220V power supply is connected to R and T terminals.
U, V, W	The output end of the VFD is connected to the motor.
PE	Ground terminal.

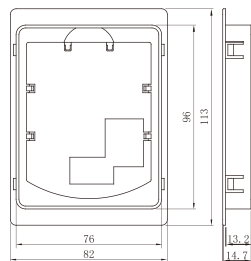
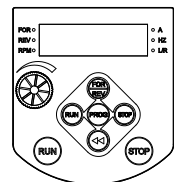
※ Description of control terminal wiring



Terminal Name	Specification	Function Description
X1-X5	Input Digital	1.Digital: >DC19V Digital 0; the terminal function is invalid. <DC14V Digital 1; the terminal function is valid. 2.Input Voltage range: 0~30V 3.Input Impedance: 3.6KΩ
RS+,RS-	RS485	Maximum baud rate 115200bit/s
KA-KB	Output Relay	1.Resistive load250VAC 3A/30V DC 3A; 2.Inductive load: 250VAC 0.2A/24V DC 0.1 A; ($\cos\phi=0.4$) 3.KA and KB NO Terminal
+10V	10V Power Supply	Maximum output current 10mA
VI	Analog input terminal	Standard: VI is voltage input (0~10V) Voltage input: the input impedance is about 10kΩ.
V01	Analog output terminal	1.0~10V voltage output 2 The voltage output: the load impedance is greater than 500Ω.
GND	Analog signal ground	Two signals are internally connected.

5. Operation and display

5.1 Dimensions of operation panel and external keyboard



Keyboard tray opening size (H * W): 96 x 76mm

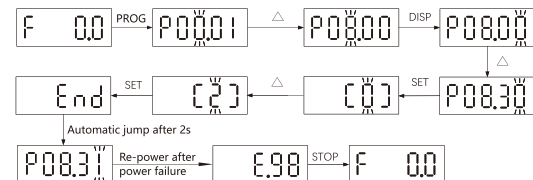
5.2 Operation panel

Button	Name	Function
RUN	Run Button	Start VFD directly by the button on panel
STOP	Stop Button	Stop VFD or Reset when VFD break down
DISP	Shift Key	To display digital
△/▽	Up/down key	Increment or decrement of data or function code
PROG	Menu Button	Enter into Menu and back
SET	Confirm key	Enter the menu interface step by step, and set parameters for confirmation when debugging parameters.
	Encoder	Used to adjust the speed of VFD (P00.03-10).

6. Parameter setting and fault code handling

6.1 parameters are restored to factory settings

1. set the parameter P08.30=2.
2. The inverter is powered off (digital display is required) and powered on again.
3. Power on the display E.98 again, and press the STOP key to complete the parameter initialization.



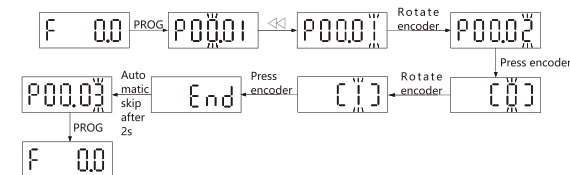
6.2 Start and Stop by button on panel

1. Press the RUN button to start and FOR / REV indicator lighting.
2. Adjust the speed by potentiometer (P00.03=10) or increment and decrement keys (P00.03=0).
3. Press stop button to stop converter.

6.3 Start and stop by input digital

After power up,set program P00.02=1 or 3,digital from digital input or communication function

Action Process:



After set program,short circuit digital input X1 and GND to start converter, on the contrary to stop.

6.4 Failure warning

Warning	Error Code	Error name	Solution
-	E.01	Output short circuit	Check motor connection motor wire and motor insulation situation
A.02	E.02	Accelerated over current	1.Increase the acceleration time 2.Improve torque by hand 3.Exclude outside faults 4.Choose speed tracking start or stop and start 5.Cancel sudden load Choose a bigger power VFD
A.03	E.03	Decelerated over current	1.Exclude outside faults 2.Motor Auto-tuning 3.Add the deceleration time 4.Cancel sudden load or add braking unit and resistor
A.04	E.04	Constant over current	1.Exclude outside faults 2.Motor Auto-tuning 3.Cancel sudden load 4.Choose a bigger power VFD
A.05	E.05	Accelerated over voltage	1.Check power,adjust voltage to normal range 2.Increase the acceleration time. 3.Cancel sudden load 4.Choose a bigger power VFD
A.06	E.06	Decelerated over voltage	1.Adjust voltage to normal range 2.Cancel sudden load 3.Add the deceleration time 4.change to free stop mode
A.07	E.07	Constant over voltage	1.Adjust voltage to normal range 2.Cancel sudden load 3.Choose a bigger power VFD
A.09	E.09	Under-voltage	Ensure the normal power grid voltage
A.10	E.10	Converter overload	1.Choose bigger power product 2.set up correctly according to motor nameplate
A.11	E.11	Motor overload	1. Choose higher power products 2. Set correctly according to the motor nameplate
A.12	E.12	Input Phase loss	Check connection of input power wire
-	E.13	Motor Phase loss	1.check motor connector 2.check motor
A.14	E.14	IGBT excess temperature	1.clean air duct 2.change fan
-	E.16	Internal Warning	Return to factory maintenance
-	E.19	Motor parameter self learning failure	Set up motor nameplate parameter correctly
-	E.23	Grounded warning	1.motor for short circuit 2.change motor wire or change motor
A.24	E.24	Torque limitation	Set up motor digital correctly or adjust P09.04 digital
A.25	E.25	Current limitation	Set up motor digital correctly or adjust P09.05 digital
A.27	E.27	Eternal warning	Set up terminal digital correctly
A.31	E.31	Feedback warning	Check feedback wire or feedback source
A.45	E.45	Motor Overload	1.Choose bigger power product 2.set up correctly according to motor nameplate
A.46	E.46	High-voltage warning	Check hydraulic pressure or pressure gauge
A.47	E.47	Low-voltage warning	Check whether leak water or air leak
-	E.48	Total work time to failure	Reset parameter to clean recorded information
-	E.49	Parameter copy error	Check the software version or keyboard copy operation error
	E.88	Control board and drive board communication abnormal	Return to factory maintenance
-	E.89	Button using forbidden	Set P10.01/P10.02/P10.04 digital according to current situation

Warning	Error Code	Error name	Solution
	E.91	Parameter error	Not according to stipulations set parameters correctly
	E.92	Parameter ultralimit	Not according to stipulations set parameters correctly
A.95	E.95	Power warning	Check network voltage
A.96	E.96	Wire break warning	Check terminals whether analog connection wire and signal normal
A.97	E.97	Communication control overtime	1.Check master computer program 2.Check communication wire connection 3.Correctly set communication parameter 4.Using shielding line
-	E.98	Reset factory setting	Press STOP button to reset
-	E.99	Open braking resistor to brake	Set P09.20 digital according to current situation
-	E.100	Drive voltage warning	Reserved
-	E.101	Rotor locked	Synchronous motor stalling
The above action not solve warning please ask for technical support			

7. Basic function parameter list

P00-P11 Function Parameter

P00 Function Parameter		
P00.01 Control model 0: VF control * 1: Vector control	P00.09 Preset reference ~100%~100% * 0	
P00.02 Option of order source 0: Order channel of panel 1: Order channel of terminal 2: Order channel of communication	P00.10 Maximum frequency 0~655.35Hz * 50	
P00.03 Main frequency source X option 0: Digital set 2: VI 4: UP/DOWN 6: Order of multi-speed 7: Simple PLC 8: PID 9: Communication given * 10: Keyboard potentiometer	P00.12 Limited frequency 0~P00.10 * 50	
P00.04 Assistant frequency source Y option 0: Digital set 2: VI 4: UP/DOWN 6: Order of multi-speed 7: Simple PLC 8: PID 9: Communication given * 10: Keyboard potentiometer	P00.14 Floor frequency 0~P00.10 * 0	
P00.05 Option range of assistant frequency source Y 0: Relative maximum frequency 1: Relative main frequency source X	P00.15 Below floor frequency operation model * 0: Floor frequency operation 1: Motor stop 2: No speed operation	
P00.06 Range of assistant frequency source 0~200% * 100	P00.16 Rotation Direction Selection * 0: default direction 1: opposite default direction	
P00.07 Biased frequency of assistant frequency source Y 0~P0.10 * 0	P00.17 Forbid REV * 0: Invalid 1: Valid	
P00.08 Option of main frequency operation Decade:relation of main and assistant source operation * 0: Main+assistance 1: Main -assistance 2: Maximum 3: Minimum Unit:Option of main frequency operation * 0: Main frequency source X 1: Result of main and assistant frequency operation (relations determined by decade) 2: Main frequency source X switch with assistant frequency Y 3: Main frequency source X switch with result of main and assistant frequency operation 4: Assistance frequency Y switch with result of main and assistant frequency operation	P00.20 Time accuracy 0: 1s * 1: 0.1s 2: 0.01s	
	P00.22 Speed up time 1 0~65535s * 10	
	P00.23 Speed cut time 1 0~65535s * 10	
	P00.40 UP/DOWN memory option of power down * 0: No 1: Yes	
	P00.41 Whether UP/DOWN have memory * 0: No 1: Yes	
	P00.42 Running frequency UP/DOWN basic * 0: Operation frequency 1: Setting frequency	
	P00.43 UP/DOWN Value 0.01~100.00Hz * 0.05	
	P00.47 Inching frequency 0~P00.12 * 5	
	P00.48 Acceleration time of inching 0~65535s (connect with P00.20) * 10	
	P00.49 Inching speed cut time 0~65535s (connect with P00.20) * 10	

P00.60 Delayed start time 0~100s * 0	P01.20 System Inertia 0~65.535s * Depend on motor digital	P02.43 High speed synchronous motor compensation filtering time 0.01~20s * 0.8	24: Total power on time arrived 25: Frequency Horizontal Detect FDT2 Output
P00.61 Delayed start function 0: DC clamping * 2: Free revolve	P01.37 Automatic Motor Adaption * 0: Invalid 1: All parameter learn self 2: Stator resistance learn self	P02.44 Synchronous motor current filtering time 0.001~1s * 0.5	26: Frequency 1 Arrived 27: Frequency 2 Arrived 28: Current 1 Arrived 29: Current 2 Arrived 33: REV Running 34: 0 Current 35: Module temperature arrived 36: Output current over limited 37: Still output even floor frequency arrived
P00.62 Frequency tracking start * 0: Invalid 1: Valid	P02 Method of control	P02.45 Synchronous motor high-speed compensation ~400~400% * 10	38: Failure or warning 39: Over temperature warning 40: Running time arrived 41: Failure no under-voltage
P00.63 Minimum start frequency setting value 0~50Hz * 0	P02.00 V/F Characteristic setting * 0: Straight line V/F	P03 Output Terminals	P04.09 DO Logic 0~255
P00.64 Minimum operation frequency 0~20Hz * 0	P02.01 V/F torsional moment promotion 0~30% * 0	P03.00 Terminal DI Filtering time 2~16ms * 4	P04.10 Relay 1 On Delay Time 0~600s * 0
P00.65 PM Start Mode 0: Initial position detection of start * 1: Start with magnet	P02.02 V/F torsional moment promotion stop frequency 0~655.35Hz * 50	P03.01 DI logic 0~65535s * 0	P04.20 Terminal VO1 Mode * 3: 0~10V
P00.66 Power down start delayed 0~3600S * 0	P02.03 Frequency point of multi-V/F 1 0.00Hz~P02-05 * 0	P03.04 DI 1 Input 0: Invalid * 1: Forward rotation operation 2: Running REV 3: Switch REV 4: Inch forward rotation 5: Inching REV 6: UP 7: DOWN 8: Slow down and stop (anti-logic) 9: Free parking (anti-logic) 10: Reset+free operation stop 11: Reset 13: Stop quickly 15: Multi- paragraph set value bit 1 16: Multi- paragraph set value bit 2 20: Open pulse 21: Pulse REV 24: Frequency source switch 34: Outside failure	P04.21 Terminal VO1 Analog Output * 10: Output frequency 11: Reference value 12: Feedback value 13: Motor current 16: Output power 17: Motor Rotational Speed 18: Voltage output
P00.70 DC clamping current 0~150% * 50	P02.04 Voltage point of multi-V/F 1 0.0%~100.0% * 0	P02.05 Frequency point of multi-V/F 2 0.00Hz~P02-07 * 0	P04.22 Terminal VO1 Min output proportion 0~200% * 0
P00.71 Shutdown braking current 0~150% * 50	P02.06 Voltage point of multi-V/F 2 0.0%~100.0% * 0	P02.07 Frequency point of multi-V/F 3 0.00Hz~P02-09 * 0	P04.23 Terminal VO1 Max output proportion 0~200% * 100
P00.72 Shutdown braking time 0~60s * 0	P02.08 Voltage point of multi-V/F 3 0.0%~100.0% * 0	P02.09 Frequency point of multi-V/F 4 0.00Hz~P02-12 * 0	P04.24 Terminal VO1 Minimum output 0~10
P00.73 Cut-over frequency run out brake 0~500Hz * 0	P02.10 Voltage point of multi-V/F 4 0.0%~100.0% * 0	P02.11 Frequency point of multi-V/F 5 0.00Hz~P01.03 * 0	P04.25 Terminal VO1 Maximum output 0.01~10
P00.74 Current synchronous motorstart to magnet 0~150% * 80	P02.12 Voltage point of multi-V/F 5 0.0%~100.0% * 0	P02.20 Automatic voltage regulation function 0: off * 1: on	P05 PID parameter
P00.75 Time synchronous motor start to magnet 0.1~60s * 3	P01 Motor Parameter	P03.21 Interrupt signal action * 0: Invalid 2: Stop 3: Inching running 4: Running with MAX frequency 5: Stop then warning	P05.00 PID setting source * 0: Set P05.01 parameter 1: VI 5: Communication given 6: Multistage speed 7: P05.01 + Up/Down 10: Potentiometer
P00.80 Motor sop function * 0: Free to stop motor 1: DC clamping	P01.01 Motor type * 0: Asynchronous Motor 1: SMT Asynchronous Motor 2: Unsaturated internal synchronous motor 3: Saturated internal synchronous motor	P03.30 Terminal VI Model * 0: Voltage	P05.01 PID value given 0~9.99V * 0.20
P00.81 Mininum stop frequency 0~400Hz * 0	P01.02 Motor Power Depend on motor digital	P03.31 Terminal VI Min current 0~9.99V * 0.20	P05.02 Feedback source of process control * 0: VI
	P01.03 Motor Voltage Depend on motor digital	P03.32 Terminal VI Max current 0.01~10V * 10	P05.03 Positive and negative logic of process PI * 0: Forward 1: Reverse
	P01.04 Motor Frequency Depend on motor digital	P03.35 Terminal VI Min reference /feedback value ~200~200% * 0	P05.04 PID Feedback basic value given 0.1~6553.5s * 10
	P01.05 Motor Speed Depend on motor digital	P03.36 Terminal VI Max reference /feedback value ~200~200% * 100	P05.05 Process PI Proportional Gain 0~1000 * 20
	P01.06 Rated Motor Torque Depend on motor digital	P03.37 Terminal VI Filtering time 0.001~10s * 0.01	P05.06 Process PI Integral Time 0.01~655.35s * 2
	P01.07 Stator Resistance (Rs) Depend on motor digital	P03.38 Terminal VI Zero Dead Band 0~20V/mA * 0	P05.07 Process PI Differential Time 0~10.000s * 0
	P01.08 Rotor Resistance(Rr) Depend on motor digital	P04 Output Terminals	P05.08 PID Reverse stop frequency 0~655.35Hz * 0
	P01.09 Stator Leakage Reactance Depend on motor digital	P04.00 Relay 1 Function 0: Invalid 1: Running * 2: Failure 3: Frequency horizontal detect FDT1 output 4: Frequency arrived 5: Ospeed running 6: Motor overload protection 7: Converter overload protection 12: Total power on time arrived 15: Converter ready 17: Limited frequency arrived 18: Floor frequency arrived 19: Under-voltage condition output 20: Communication set 23: 0 Speed Running 2	P05.09 Deviation Limit 0~200% * 0
	P01.10 Main Reactance (Xh) Depend on motor digital	P04.01 Invald 1: Running * 2: Failure 3: Frequency horizontal detect FDT1 output 4: Frequency arrived 5: Ospeed running 6: Motor overload protection 7: Converter overload protection 12: Total power on time arrived 15: Converter ready 17: Limited frequency arrived 18: Floor frequency arrived 19: Under-voltage condition output 20: Communication set 23: 0 Speed Running 2	P05.12 PID time of filter feedback 0~60s * 0
	P01.11 D-axis Inductance Depend on motor digital	P04.02 Invald 1: Running * 2: Failure 3: Frequency horizontal detect FDT1 output 4: Frequency arrived 5: Ospeed running 6: Motor overload protection 7: Converter overload protection 12: Total power on time arrived 15: Converter ready 17: Limited frequency arrived 18: Floor frequency arrived 19: Under-voltage condition output 20: Communication set 23: 0 Speed Running 2	P05.13 PID time of filter output 0~60s * 0
	P01.12 Q-axis Inductance Depend on motor digital	P04.03 Invald 1: Running * 2: Failure 3: Frequency horizontal detect FDT1 output 4: Frequency arrived 5: Ospeed running 6: Motor overload protection 7: Converter overload protection 12: Total power on time arrived 15: Converter ready 17: Limited frequency arrived 18: Floor frequency arrived 19: Under-voltage condition output 20: Communication set 23: 0 Speed Running 2	P05.15 Process PI proportion gain 0~10s
	P01.13 Motor Poles 2~100 * 4	P04.04 Invald 1: Running * 2: Failure 3: Frequency horizontal detect FDT1 output 4: Frequency arrived 5: Ospeed running 6: Motor overload protection 7: Converter overload protection 12: Total power on time arrived 15: Converter ready 17: Limited frequency arrived 18: Floor frequency arrived 19: Under-voltage condition output 20: Communication set 23: 0 Speed Running 2	
	P01.14 Counter electromagnetic force 5~9000 * Depend on motor digital	P04.05 Invald 1: Running * 2: Failure 3: Frequency horizontal detect FDT1 output 4: Frequency arrived 5: Ospeed running 6: Motor overload protection 7: Converter overload protection 12: Total power on time arrived 15: Converter ready 17: Limited frequency arrived 18: Floor frequency arrived 19: Under-voltage condition output 20: Communication set 23: 0 Speed Running 2	

P05.16 Process PI Integration time 0.1~655.35	P05.17 Process PI Calculus time 0~10
P05.18 PID parameter switchover condition * 0: No switch 1: Switch by DI 2: Deviation switch 3: Frequency switch	P05.19 Process PID Parameter Switchover Deviation 1 0~100% * 0
P05.20 Process PID Parameter Switchover Deviation 2 0~100% * 0	P05.21 PID Starting value 0~10.00 * 0
P05.22 PID Time of starting value keeping 0~650.00s * 0	P05.23 Output FOR deviation MAX value 0~100% * 1
P05.24 Output REV deviation MAX value 0~100% * 1	P05.25 PID Integral attribute 00~11 * 0
P05.26 PID Detection value of feedback lost 0~100% * 0	P05.27 PID Detection time of feedback lost 0~100% * 0
P05.28 PID Run out and operation * 0: Run out but no operation 1: Run out and operation	P05.29 Wake up pressure 0~6500 * 2
P05.30 Wake up delayed time 0~6500s * 0	P05.31 Dormant pressure 0~6500 * 4
P05.32 Dormant delayed time 0~6500s * 60	P05.33 Dormant mode set 0: Forbid dormant * 1: Pressure arrived 2: Frequency arrived 3: Pressure and frequency arrived at same time
P05.34 Dormant frequency 0~655.35Hz * 30	P05.35 Pressure proportion linkage 0: workable * 1: forbid
P05.36 Wake up pressure linkage setting value 0~6500 * 1	P05.37 Dormant pressure linkage setting value 0~6500 * 1
P05.38 High pressure alarm difference set 0~6500 * 0	P05.39 High pressure alarm delay time 0~6500s * 0
P05.40 Low pressure alarm difference set 0~6500s * 0	P05.41 Low pressure alarm delay time 0~6500s * 0

P05 PID parameter
P05.00 PID setting source * 0: Set P05.01 parameter 1: VI 5: Communication given 6: Multistage speed 7: P05.01 + Up/Down 10: Potentiometer
P05.01 PID value given 0~9.99V * 0.20
P05.02 Feedback source of process control * 0: VI
P05.03 Positive and negative logic of process PI * 0: Forward 1: Reverse
P05.04 PID Feedback basic value given 0.1~6553.5s * 10
P05.05 Process PI Proportional Gain 0~1000 * 20
P05.06 Process PI Integral Time 0.01~655.35s * 2
P05.07 Process PI Differential Time 0~10.000s * 0
P05.08 PID Reverse stop frequency 0~655.35Hz * 0
P05.09 Deviation Limit 0~200% * 0
P05.12 PID time of filter feedback 0~60s * 0
P05.13 PID time of filter output 0~60s * 0
P05.15 Process PI proportion gain 0~10s

P05.16 Process PI Integration time 0.1~655.35	P05.17 Process PI Calculus time 0~10
P05.18 PID parameter switchover condition * 0: No switch 1: Switch by DI 2: Deviation switch 3: Frequency switch	P05.19 Process PID Parameter Switchover Deviation 1 0~100% * 0
P05.20 Process PID Parameter Switchover Deviation 2 0~100% * 0	P05.21 PID Starting value 0~10.00 * 0
P05.22 PID Time of starting value keeping 0~650.00s * 0	P05.23 Output FOR deviation MAX value 0~100% * 1
P05.24 Output REV deviation MAX value 0~100% * 1	P05.25 PID Integral attribute 00~11 * 0
P05.26 PID Detection value of feedback lost 0~100% * 0	P05.27 PID Detection time of feedback lost 0~100% * 0
P05.28 PID Run out and operation * 0: Run out but no operation 1: Run out and operation	P05.29 Wake up pressure 0~6500 * 2
P05.30 Wake up delayed time 0~6500s * 0	P05.31 Dormant pressure 0~6500 * 4
P05.32 Dormant delayed time 0~6500s * 60	P05.33 Dormant mode set 0: Forbid dormant * 1: Pressure arrived 2: Frequency arrived 3: Pressure and frequency arrived at same time
P05.34 Dormant frequency 0~655.35Hz * 30	P05.35 Pressure proportion linkage 0: workable * 1: forbid
P05.36 Wake up pressure linkage setting value 0~6500 * 1	P05.37 Dormant pressure linkage setting value 0~6500 * 1
P05.38 High pressure alarm difference set 0~6500 * 0	P05.39 High pressure alarm delay time 0~6500s * 0
P05.40 Low pressure alarm difference set 0~6500s * 0	P05.41 Low pressure alarm delay time 0~6500s * 0

P06 Multistage Command
P06.00 Multistage speed commands 0 ~100~100% * 0
P06.01 Multistage speed commands 1 ~100~100% * 0
P06.02 Multistage speed commands 2 ~100~100% * 0

P06.03 Multistage speed commands 3 ~100~100% * 0	P06.04 Multistage speed commands 4 ~100~100% * 0
P06.05 Multistage speed commands 5 ~100~100% * 0	P06.06 Multistage speed commands 6 ~100~100% * 0
P06.07 Multistage speed commands 7 ~100~100% * 0	P06.08 Multistage speed commands 8 ~100~100% * 0
P06.09 Multistage speed commands 9 ~100~100% * 0	P06.10 Multistage speed commands 10 ~100~100% * 0
P06.11 Multistage speed commands 11 ~100~100% * 0	P06.12 Multistage speed commands 12 ~100~100% * 0
P06.13 Multistage speed commands 13 ~100~100% * 0	P06.14 Multistage speed commands 14 ~100~100% * 0
P06.15 Multistage speed commands 15 ~100~100% * 0	P06.16 Multistage speed commands 16 ~100~100% * 0

P07 Communication Parameter
P07.03 Communication Timeout Time 0.1~650.00s * 1
P07.04 Communication Timeout Function * 0: Invalid 1: Reset communication cut
P07.05 Communication Timeout Time 0.1~650.00s * 1
P07.06 Reset Communication Timeout * 0: Invalid 1: Reset communication cut
P07.07 Protocol * 0: MODBUS-RTU 2: Reserve
P07.31 Address 1~247 * 1
P07.32 Baud Rate 4: 4800b * 5: 9600b 6: 19200b 7: 38400b
P07.33 Communication baud rate * 0: No parity (1Position Stop) 1: Even parity (1Position Stop) 2: Odd parity (1Position Stop) 3: No parity (2Position Stop)
P07.35 Min. Response Delay 0~0.5s * 0
P07.36 Max. Response Delay 0.1~10s * 0.1
P07.38 Message Response * 0: Every time 1: Only response abnormal message 2: No response

P07.39 Programme control * 0: Parameter do not save when power off 1: Parameter save when power off	P08 Assistant Parameter
P08.01 Over Modulation Function 90~105.5% * 100	P08.02 Deadband Compensation 0~200 * 100
P08.07 Max Deadband Compensation 20~1000Hz * 500	P08.10 DC Circuit Voltage Compensation * 0: No compensation 1: Compensation 1 2: Compensation 2
P08.20 Switching Frequency 2~16kHz * 5	P08.30 Operating mode * 0: Normal operating 2: Reset
P08.40 Frequency detected value 1 0~655.35Hz * 50	P08.41 Frequency detected value 1 hysteresis of instrument 0~100% * 5
P08.42 Frequency reach to detection width 0~100% * 0	P08.43 Frequency detected value 2 0~655.35Hz * 50
P08.44 Frequency detected value 2 hysteresis of instrument 0~100% * 5	P08.45 Any reach frequency detected value 1 0~655.35Hz * 50
P08.46 Any reach frequency detected width 1 0~100% * 0	P08.47 Any reach frequency detected value 2 0~655.35Hz * 50
P08.48 Any reach frequency detected width 2 0~100% * 0	P08.49 0 current detection level 0~300% * 5
P08.50 0 current detection delayed time 0~600s * 0.1	P08.51 Output current over limited 0~300% * 200
P08.52 Output current over limited detection delayed 0~600s * 0	P08.53 Any arrived electron flow 1 0~300% * 100
P08.54 Width of any arrived electron flow 1 0~300% * 0	P08.55 Any arrived electron flow 2 0~300% * 100
P08.56 Width of any arrived electron flow 2 0~300% * 0	P08.57 Modular temperature display 0~200°C * 75
P08.58 Running time from this start 0~6500min * 0	P08.59 Accumulated running time 0~6500h * 0

P09 Malfunction and Protect Parameter
P09.00 Limited value prevent over current losing speed 0~300% * 200
P09.01 Current controller 1 proportion 0~300% * 100
P09.02 Current controller 1 integral 0.005~2s * 0.02
P09.04 Torque limited when motor on 0~1000% * 180
P09.05 Torque limited when generate electricity 0~1000% * 180
P09.08 Over current losing speed alarm delayed 0~60s * 60
P09.09 Torque reached to limited alarm delayed 0~60s * 60
P09.20 Braking function * 0: Invalid 1: Rheostatic brake 2: Alternating braking
P09.21 Resistance Brake Depends on the voltage specification
P09.24 Overpressure stall threshold Depends on the voltage specification
P09.25 Over voltage control * 0: Invalid 2: Model 1 3: Model 2
P09.26 Overvoltage control integral coefficient 0.01~0.1s * 0.05
P09.27 Overvoltage control proportion coefficient 0~200% * 100
P09.28 Alternating braking integral coefficient 10~2.0 * 1.4
P09.29 Maximum current of alternating braking 0~150% * 100
P09.40 Motor phases detection * 0: Off * 1: On
P09.46 Cocnverter action after voltage failure * 0: Failure locked 1: Speed start
P09.50 Motor overload protection option 0: Prohibition 1: Warning after motor overload * 2: Alarm after motor overload
P09.51 Motor Overload Protection Factor 0.2~60 * 1
P09.52 Motor Overheating Protection/Warning Factor 50~100% * 80
P09.58 Synchronous motor stalling protection * 0: Off 1: On
P09.59 Time of Synchronous motor stalling protection 0.05~1s * 0.1
P09.60 Malfunction warning display 0: Blank 1: Normally display * 2: Power on failure clearance
P09.61 Malfunction locked * 0: Unlocked 1: Locked
P09.62 Actions when converter breakdown 0: Display fault and Stop motor * 1: Sop motor after warning

P09.70 Time of automatic reset	
0:	Manual reset
1:	Automatic reset1 time
12:	Automatic reset 20 times
13:	Automatic reset unlimited times
P09.71 automatic reset time	
0~600s	* 10
P10 Failure Record	
P10.00 LCP menu options	
1:	Motor voltage
2:	Motor rotational peed
4:	DC voltage
8:	Temperature
128:	Input VI
1024:	Customize
P10.01 RUN button	
0:	Invalid
1:	Valid
P10.02 STOP button	
0:	Invalid
1:	Valid
2:	Reset valid
P10.04 Parameter locked	
0:	Invalid
1:	Protect
P10.05 Copy parameter	
1:	Sectional parameter up load
2:	All parameter up load
3:	Down load parameter (To be on again when the power is cut off of the electricity)
P10.10 Days of running	
0~9999d	
P10.11 Hours of running	
0~60000h	
P10.12 Total power	
0~65535kw	
P10.13 Time of electricity on	
0~65535	
P10.14 Number of overheating	
0~65535	
P10.15 Number of overvoltage	
0~65535	
P10.16 Number of reset power	
0:	No reset
1:	Reset
P10.17 Hours of reset running	
0:	No reset
1:	Reset
P10.20 Type of first failure	
Reference Fault Table	
P10.21 Type of Second failure	
Reference Fault Table	
P10.22 Type of third failure	
Reference Fault Table	
P10.30 First failure frequency	
P10.31	First failure current
P10.32	First failure voltage
P10.40 Second failure frequency	
P10.41	Second failure current
P10.42	Second failure voltage
P10.50 Third failure frequency	
P10.51	Third failure current
P10.52	Third failure voltage
P10.70 Software version	
P10.71	mainboard Software version
P11 Digital Monitoring	
P11.00 Frequency output	
P11.01	Set digital
P11.02	DC voltage
P11.03	Motor voltage
P11.04	Motor current
P11.05	Frequency output
P11.06	Torsional moment output
P11.07	DI input condition
P11.08	DO output condition
P11.09	VC digital input
P11.14	Motor rotational speed
P11.15	PID reference value
P11.16	Feedback value
P11.19	Frequency feedback (Hz)
P11.20	Rest of running time
P11.25	Current time of power on
P11.26	Total time of power on
P11.27	Current running time
P11.35	converter temperature
Attention:	
*labeled**is tolerant parameter	
*P010, P011 parameter is subject to	