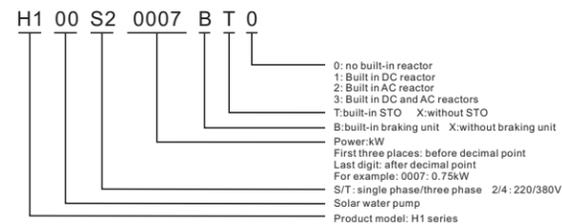




H1 Series Inverter USER MANUAL

1.2 H1 nameplate



1.3 H1 series specifications and models

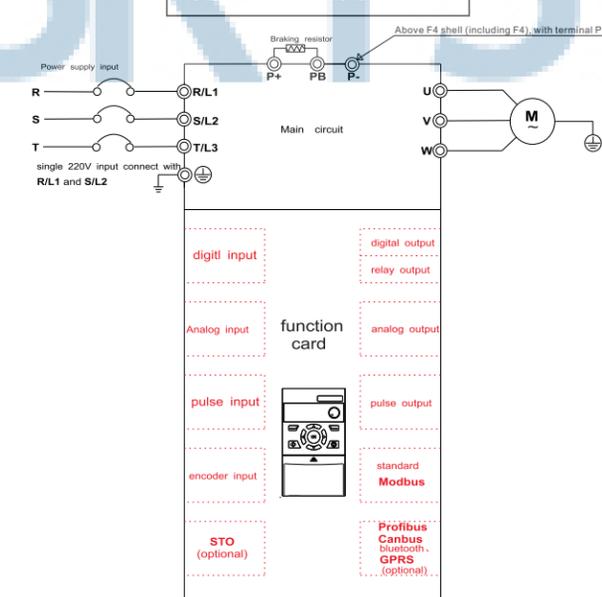
| Base No | Models | Input voltage | input current (A) | Power (kW) | output current (A) | Adaptive motor(kW) |
|---------|---------------|---------------|-------------------|------------|--------------------|--------------------|
| F1 | H100S20007BX0 | 1 phase 220V | 8.2 | 0.75 | 5.0 | 0.75 |
| | H100S20015BX0 | 1 phase 220V | 14.0 | 1.5 | 7.0 | 1.5 |
| F2 | H100T20022BX0 | 1 phase 220V | 23.0 | 2.2 | 12.5 | 2.2 |
| | H100T20037BX0 | 3 phase 220V | 13.5 | | | |
| F3 | H100T20055BX0 | 1 phase 220V | 38.6 | 3.7 | 15.2 | 3.7 |
| | H100T20055BX0 | 3 phase 220V | 24 | | | |
| F4 | H100T20075BX0 | 3 phase 220V | 37 | 7.5 | 31 | 7.5 |
| | H100T20110BX0 | 3 phase 220V | 52 | 11 | 45 | 11 |
| F1 | H100T40007BX0 | 3 phase 380V | 4.0 | 0.75 | 3.0 | 0.75 |
| | H100T40015BX0 | 3 phase 380V | 5.8 | 1.5 | 4.5 | 1.5 |
| | H100T40022BX0 | 3 phase 380V | 6.5 | 2.2 | 5.6 | 2.2 |
| F2 | H100T40040BX0 | 3 phase 380V | 12.6 | 4.0 | 10.5 | 4.0 |
| | H100T40055BX0 | 3 phase 380V | 16 | 5.5 | 14 | 5.5 |
| F3 | H100T40075BX0 | 3 phase 380V | 21 | 7.5 | 19 | 7.5 |
| | H100T40110BX0 | 3 phase 380V | 28 | 11 | 26 | 11 |
| F4 | H100T40150BX0 | 3 phase 380V | 36 | 15 | 33 | 15 |
| | H100T40185BX0 | 3 phase 380V | 42 | 18.5 | 40 | 18.5 |
| F5 | H100T40220BX0 | 3 phase 380V | 48 | 22 | 46 | 22 |
| | H100T40300BX0 | 3 phase 380V | 62 | 30 | 58 | 30 |
| F6 | H100T40370BX0 | 3 phase 380V | 76 | 37 | 75 | 37 |
| | H100T40450XX0 | 3 phase 380V | 92 | 45 | 90 | 45 |
| F7 | H100T40550XX0 | 3 phase 380V | 113 | 55 | 110 | 55 |
| | H100T40750XX0 | 3 phase 380V | 157 | 75 | 150 | 75 |
| F8 | H100T40900XX0 | 3 phase 380V | 180 | 90 | 170 | 90 |
| | H100T41100XX0 | 3 phase 380V | 214 | 110 | 210 | 110 |
| F9 | H100T41320XX0 | 3 phase 380V | 256 | 132 | 250 | 132 |
| | H100T41600XX0 | 3 phase 380V | 307 | 160 | 300 | 160 |

NO.1 Product introduction

1.1 Technical Features

| Items | Description |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| input | Rated voltage/frequency: 3ph: 380V~440V, 50Hz/60Hz; 1ph: 200V~240V, 50Hz/60Hz |
| Allowed voltage | 3ph: 320V~460V; 1ph: 180V~260V; voltage imbalance rate: <3%; frequency: ±5% |
| output | Voltage: 0~rated input voltage |
| Frequency | 0Hz~1000Hz |
| Overload capacity | 150% rated current 60s, 180% rated current 2s |
| control performance | Control mode: V/F, SVC |
| Modulation Mode | SVPWM |
| Motor type | asynchronous motor, synchronous motor, single phase motor (consult factory before using) |
| Start torque | 1Hz/150% |
| Speed range | 1:100(SVC) |
| Frequency accuracy | digital setting: maximum frequency±0.01%; analog setting: maximum frequency±1% |
| Frequency resolution | digital setting: 0.1Hz; analog setting: maximum frequency±1% |
| Acceleration/deceleration curve | line/ S-curve |
| Rapid current limit | limit current rapidly within the current protection value, to ensure the safety of the equipment |
| None-slip when instantaneous power off | none-stop when instantaneous power off, automatic frequency drop |
| Operation function | Command source: keypad, terminal, communication |
| Set value source | digital, analog, multi-speed, communication |
| PID | support main setting+PID |
| Operation panel | LED display: Can display: output frequency, output voltage, output current, Bus voltage, display value 1, display value 2, error, alarm |
| External keypad | YES |
| Protection function | over-current protection, over-voltage protection, under-voltage protection, overheating protection, over-load protection, phase lose protection, earth leakage, etc |
| Environment | Store environment: indoor, away from direct sunlight, no dust, no corrosive gas, no inflammable gas, no oil mist, no vapour, no drip and no salinity, etc |
| Altitude | derating use above 1000M, derating 10% per 1000M |
| Environment temperature | -10℃~+40℃(environment temperature around 40℃~50℃please derating use) |
| Humidity | 5%~95%RH, no condensation |
| Store temperature | -40℃~+70℃ |
| Vibration | <5.9M/S (0.6g) |

NO.2 Main circuit and function card



Notice: different function card corresponding to different terminals. Except standard function card, can customize any type of card. Reset parameters when using different function cards. An AC drive only can use one function card.
Warning: Do not use function card when power is on!

2.1 Main circuit terminal description

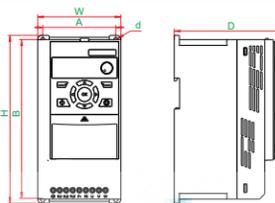
| Terminal identification | Name | Function description |
|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------|
| ⊕ | Grounding terminal | Safety grounding |
| R/L1, S/L2, T/L3 | Main circuit power input terminal | Connect three phase power supply, single phase power supply connect to R/L1, S/L2 |
| P+, PB | Braking terminal | Connect to external braking resistor |
| P+, P- | DC bus terminal | Two sets or more inverters use a common DC bus (Above F4 shell (including F4), with terminal P) |
| U, V, W | output terminl | Connect to three phase motor |

2.2 Function card configuration table

| Function card | H0100 | H0101 | H0102 | H0103 | H0104 | H0110 | H0120 | H0130 | H0131 | H0200 | H0201 | H0300 | H0310 | H0320 | H0350 | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------|-------|--------------|--------------|--------------|
| Digital input | 2 | 4 | 1 | 4 | 2 | 5 | 10 | 5 | 1 | 10 | 10 | | | 4 | 5 | 3 |
| Digital output | | | | | | 1 | | | | | | | | | | |
| Relay output | 1 | 1 | | 3 | 1 | 2 | 2 | 2 | 1 | | 3 | 3 | | 1 | 1 | 1 |
| Analog input | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 2 | 2 | | | 2 | 1 | |
| Analog output | | | | | | 2 | 1 | 2 | | 2 | 2 | | | 2 | 2 | |
| Pulse input | | | | | | | | | | | | | | | | |
| Pulse output | | | | | | | | | | | | | | | | |
| Encoder input | | | | | | | | | | | | | | | | |
| Modbus | 1 | 1 | 1 | 1 | 1 | 1 | optional | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 |
| STO | | | | | | | | | | | | | | | | |
| Display | Digital tube | | | Digital tube | Digital tube | Digital tube |
| Potentiometer | Analog | | | | | Analog | Analog | |
| Toggle switch | | | | | | | | | | | | | | 1 | 2 | 2 |
| 12V power supply | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | |
| 10V power supply | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | |

Note:
 1. the built-in function card with STO function must be equipped with AC drive of STO circuit, for example: H0200 built-in function card is equipped with AC drive with model H100T40040BTO (the second T represents built-in STO circuit).
 2. If need other types and numbers of terminals, contact the company for bulk customization

NO.3 Product Dimension



| Framework | Dimensions (mm) | | | | | |
|-----------|-----------------|-----------|----------|------|-----|----|
| | W(Width) | H(Height) | D(Depth) | A | B | d |
| F1 | 85 | 170 | 124 | 67.3 | 158 | 5 |
| F2 | 97 | 194 | 133 | 85 | 184 | 5 |
| F3 | 126 | 237 | 147 | 112 | 223 | 6 |
| F4 | 168 | 298 | 160 | 154 | 283 | 6 |
| F5 | 198 | 355 | 177 | 183 | 338 | 6 |
| F6 | 250 | 400 | 208 | 230 | 380 | 7 |
| F7 | 280 | 545 | 292 | 200 | 526 | 9 |
| F8 | 380 | 648 | 299 | 300 | 626 | 11 |
| F9 | 450 | 798 | 318 | 340 | 773 | 11 |

NO.4 Keypad description

| Item | Structure | Function description |
|------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 1 | Display | Display |
| 2 | Program/exit | Program/exit |
| 3 | Status display interface work as status switch key, other interface work as left shift key | Status display interface work as status switch key, other interface work as left shift key |
| 4 | Reserved key | Reserved key |
| 5 | RUN | RUN |
| 6 | Potentiometer: refer to parameter P01.63 | Potentiometer: refer to parameter P01.63 |
| 7 | In the mode of program, work as value change key, otherwise, UP/DOWN key, refer to parameter P01.63, P02.03, P02.04 | In the mode of program, work as value change key, otherwise, UP/DOWN key, refer to parameter P01.63, P02.03, P02.04 |
| 9 | Enter | Enter |
| 10 | STOP/RESET | STOP/RESET |
| 11 | Customization key | Customization key |

4.2 Indicator light description

| Indicator light | Status | Function description |
|-----------------|---------------------|----------------------------------------------------|
| RUN | light on/flickering | operating /decelerating |
| REV | light on | reverse operation |
| REM | light on | remote start stop |
| ALM | light on | fault indication |
| M | light on | customization indication, default alarm indication |

4.3 Display item description

| Display code | Item description |
|--------------|-------------------------|
| F | output frequency |
| C | output current |
| U | output voltage |
| d | DC bus voltage |
| H | display value 1(P10 98) |
| t | display value 2(P10 99) |
| R | current alarm |
| E | current fault |

NO.5 Function · Parameter Table

| Function | Function | Description (setting range) | Factory default |
|----------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| P00.09 | Parameter operation | 1: parameter initialization, initialize parameters except P0.XX, in normal condition, use mode 1 in initialization; 2: initialize all parameters | 0 |
| P00.10 | Setting(frequency) reference F1 | 0: keypad 1: multi-speed 2: AI1 3: AI2 5: communication | 0 |
| P00.11 | Setting(frequency) reference F2 | 0: keypad 1: multi-speed 2: AI1 3: AI2 5: communication | 0 |
| P00.12 | setting relation selection | 0:F1 1:F2 2:F1+F2 3:F1-F2 4:F1*F2/100 5:maximum value(F1,F2) 6:minimum value(F1,F2) 7:average value(F1,F2) 8:PID(F1,F2) * principle interpretation: set 0 choose F1 channel setting value; set 1 choose F2 channel setting value; set 2 choose the sum of F1 and F2 channel setting value; set 3 choose the difference of F1 and F2 channel setting value; set 4 choose the product of F1 and F2 channel setting value divide 100; set 5 choose larger value of F1 and F2; set 6 choose smaller value of F1 and F2; set 7 choose average value of F1 and F2; set 8 choose PID control(F1 is setting, F2 is feedback). | 0 |
| P00.13 | maximum setting value | 0.000~99999.000 * principle interpretation: limit setting value range. The unit of setting source is %, the maximum setting value(P00.13) stands for 100%, take maximum setting value as standard. | 50.000 |
| P00.14 | motor output frequency upper limit | ~1020.000Hz~1020.000Hz interpretation: motor operation frequency upper limit | 55.000Hz |
| P00.15 | multi-speed source | 0~11111111 units: S1 tens: S2 hundreds: digit: S3 thousands: digit: S4 * P00.15: multi-speed source, select to corresponding external terminal, multi-speed refer to P00.16-P00.23. * eg: select S2, S3, S4 as valid external terminal to control multi-speed set P00.15=1110, detailed 8 segment corresponding relationship as above table | 0 |
| P00.16 | multi-speed 0 | | 0.000% |
| P00.17 | multi-speed 1 | | 0.000% |
| P00.18 | multi-speed 2 | ~1000.000%~1000.000% | 0.000% |
| P00.19 | multi-speed 3 | function: multi-speed setting, corresponding to P00.13 maximum setting percentage | 0.000% |
| P00.20 | multi-speed 4 | | 0.000% |
| P00.21 | multi-speed 5 | | 0.000% |
| P00.22 | multi-speed 6 | | 0.000% |
| P00.23 | multi-speed 7 | | 0.000% |
| P00.24 | acceleration time | 0.050s~3600.000s * principle interpretation: as figure, acceleration time refer to the time from 0Hz accelerate to P00.74 motor frequency | ** |
| P00.25 | deceleration time | as figure, deceleration time refer to the time from P00.74 motor frequency decelerate to 0Hz | ** |
| P00.26 | Jog frequency | ~1000.000%~1000.000% function: set jog frequency, jog command refer to P00.33 | 10.000% |
| P00.30 | start command source | 0: invalid 1: keypad 2: communication 3: S1 4: S2 5: S3 6: S4 | 1 |
| P00.31 | reverse start command source | ... | 0 |
| P00.32 | reverse command source | function: select command source(select keypad as command source, then reverse start command, reverse command, jog command, free stop command, safe stop command, pause command all from multi-function key of keypad) | 0 |
| P00.33 | Jog command source | | 1 |
| P00.34 | stop command source | * reverse start command: setting value reversed, and give a start command * reverse command: setting value reversed. * jog command: jog command. Priority is higher than start command, lower than stop command. | 0 |
| P00.35 | free stop command source | | 0 |
| P00.36 | reset command source | | 1 |

| Function code | Function | Description(setting range) | Factory default | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| P00.37 | S1 type | <p>One place: 0: Positive logic 1: Reverse logic 2: Rising edge 3: Falling edge</p> <p>Tens place: 1: Rising edge toggle 2: Falling edge toggle</p> <p>Hundreds place: 1: The edge signal is not cleared by other edge signals</p> <p>Thousands place: 1: The edge signal is not cleared by the stop signal</p> <p>Function: select external terminal trigger type * Principle explanation: One place: 0: positive logic, High level is valid state, low level is invalid state; 1: Reverse logic, High level is invalid state, low level is valid state; 2: Rising edge, the rising edge is valid; 3: Falling edge, falling edge is valid.</p> <p>Tens place: 1: Rising edge ping-pong key; 2: Toggle on the falling edge.</p> <p>The tens position can control the edge signal and realize a reset button to control start and stop.</p> <p>Hundreds place: 1: The edge signal is not cleared by other edge signals; 2: The edge signal is not cleared by the stop signal.</p> <p>Thousands place: 1: The edge signal is not cleared by the stop signal.</p> <p>*two-line mode 1: the mode is most commonly used two-line mode, enable and direction combined, K1 and K2 control forward/reverse of motor</p> <table border="1"> <thead> <tr> <th>K1</th> <th>K2</th> <th>operation command</th> </tr> </thead> <tbody> <tr> <td>OFF</td> <td>OFF</td> <td>stop</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>reverse</td> </tr> <tr> <td>ON</td> <td>OFF</td> <td>forward</td> </tr> <tr> <td>ON</td> <td>ON</td> <td>stop</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>parameter no.</th> <th>setting value</th> <th>description</th> </tr> </thead> <tbody> <tr> <td>P00.30</td> <td>3</td> <td>start command source is S1</td> </tr> <tr> <td>P00.31</td> <td>4</td> <td>reverse start command source is S2</td> </tr> <tr> <td>P00.37</td> <td>0</td> <td>S1 type is positive logic</td> </tr> <tr> <td>P00.38</td> <td>0</td> <td>S2 type is negative logic</td> </tr> </tbody> </table> <p>*two-line mode 2: enable and direction separated, in this mode K1 is enable terminal, direction is controlled by K2.</p> <table border="1"> <thead> <tr> <th>K1</th> <th>K2</th> <th>operation command</th> </tr> </thead> <tbody> <tr> <td>OFF</td> <td>OFF</td> <td>stop</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>stop</td> </tr> <tr> <td>ON</td> <td>OFF</td> <td>forward</td> </tr> <tr> <td>ON</td> <td>ON</td> <td>reverse</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>parameter no.</th> <th>setting value</th> <th>description</th> </tr> </thead> <tbody> <tr> <td>P00.30</td> <td>3</td> <td>start command source is S1</td> </tr> <tr> <td>P00.32</td> <td>4</td> <td>reverse command source is S2</td> </tr> <tr> <td>P00.37</td> <td>0</td> <td>S1 type is positive logic</td> </tr> <tr> <td>P00.38</td> <td>0</td> <td>S2 type is positive logic</td> </tr> </tbody> </table> <p>*three line mode 1: this mode define SB2 as enable terminal, operation command is generated by SB1 or SB3, control operation direction at the same time. inverter is running and SB2 is in closed state, terminal SB1 or SB3 generates a rising edge signal to control inverter operation and direction; disconnection SB2 to stop inverter.</p> <table border="1"> <thead> <tr> <th>SB1</th> <th>SB2</th> <th>SB3</th> <th>operation command</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>0</td> <td>-</td> <td>stop</td> </tr> <tr> <td>-</td> <td>1</td> <td>-</td> <td>forward</td> </tr> <tr> <td>-</td> <td>1</td> <td>1</td> <td>reverse</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>parameter no.</th> <th>setting value</th> <th>description</th> </tr> </thead> <tbody> <tr> <td>P00.30</td> <td>3</td> <td>start command source is S1</td> </tr> <tr> <td>P00.31</td> <td>5</td> <td>reverse start command source is S3</td> </tr> <tr> <td>P00.34</td> <td>4</td> <td>stop command source is S2</td> </tr> <tr> <td>P00.37</td> <td>2</td> <td>S1 type is rising edge</td> </tr> <tr> <td>P00.38</td> <td>1</td> <td>S2 type is negative logic</td> </tr> <tr> <td>P00.39</td> <td>2</td> <td>S3 type is rising edge</td> </tr> </tbody> </table> <p>*three line mode 2: this mode define SB2 as enable terminal, operation command is generated by SB1, direction command is controlled by K. inverter is running and SB2 is in closed state, terminal B1 generates a rising edge signal to control inverter operation, K control operation direction; disconnection SB2 to stop inverter.</p> <table border="1"> <thead> <tr> <th>SB1</th> <th>SB2</th> <th>K</th> <th>operation command</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>0</td> <td>-</td> <td>stop</td> </tr> <tr> <td>-</td> <td>1</td> <td>OFF</td> <td>forward</td> </tr> <tr> <td>-</td> <td>1</td> <td>ON</td> <td>reverse</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>parameter no.</th> <th>setting value</th> <th>description</th> </tr> </thead> <tbody> <tr> <td>P00.30</td> <td>3</td> <td>start command source is S1</td> </tr> <tr> <td>P00.32</td> <td>5</td> <td>reverse command source is S3</td> </tr> <tr> <td>P00.34</td> <td>4</td> <td>stop command source is S2</td> </tr> <tr> <td>P00.37</td> <td>2</td> <td>S1 terminal command type is rising edge</td> </tr> <tr> <td>P00.38</td> <td>1</td> <td>S2 terminal command type is negative logic</td> </tr> <tr> <td>P00.39</td> <td>0</td> <td>S3 terminal command type is positive logic</td> </tr> </tbody> </table> | K1 | K2 | operation command | OFF | OFF | stop | OFF | ON | reverse | ON | OFF | forward | ON | ON | stop | parameter no. | setting value | description | P00.30 | 3 | start command source is S1 | P00.31 | 4 | reverse start command source is S2 | P00.37 | 0 | S1 type is positive logic | P00.38 | 0 | S2 type is negative logic | K1 | K2 | operation command | OFF | OFF | stop | OFF | ON | stop | ON | OFF | forward | ON | ON | reverse | parameter no. | setting value | description | P00.30 | 3 | start command source is S1 | P00.32 | 4 | reverse command source is S2 | P00.37 | 0 | S1 type is positive logic | P00.38 | 0 | S2 type is positive logic | SB1 | SB2 | SB3 | operation command | - | 0 | - | stop | - | 1 | - | forward | - | 1 | 1 | reverse | parameter no. | setting value | description | P00.30 | 3 | start command source is S1 | P00.31 | 5 | reverse start command source is S3 | P00.34 | 4 | stop command source is S2 | P00.37 | 2 | S1 type is rising edge | P00.38 | 1 | S2 type is negative logic | P00.39 | 2 | S3 type is rising edge | SB1 | SB2 | K | operation command | - | 0 | - | stop | - | 1 | OFF | forward | - | 1 | ON | reverse | parameter no. | setting value | description | P00.30 | 3 | start command source is S1 | P00.32 | 5 | reverse command source is S3 | P00.34 | 4 | stop command source is S2 | P00.37 | 2 | S1 terminal command type is rising edge | P00.38 | 1 | S2 terminal command type is negative logic | P00.39 | 0 | S3 terminal command type is positive logic |
| K1 | K2 | operation command | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | OFF | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | ON | reverse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON | OFF | forward | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON | ON | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| parameter no. | setting value | description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.30 | 3 | start command source is S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.31 | 4 | reverse start command source is S2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.37 | 0 | S1 type is positive logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.38 | 0 | S2 type is negative logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1 | K2 | operation command | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | OFF | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | ON | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON | OFF | forward | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON | ON | reverse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| parameter no. | setting value | description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.30 | 3 | start command source is S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.32 | 4 | reverse command source is S2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.37 | 0 | S1 type is positive logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.38 | 0 | S2 type is positive logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SB1 | SB2 | SB3 | operation command | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | 0 | - | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | 1 | - | forward | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | 1 | 1 | reverse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| parameter no. | setting value | description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.30 | 3 | start command source is S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.31 | 5 | reverse start command source is S3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.34 | 4 | stop command source is S2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.37 | 2 | S1 type is rising edge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.38 | 1 | S2 type is negative logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.39 | 2 | S3 type is rising edge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SB1 | SB2 | K | operation command | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | 0 | - | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | 1 | OFF | forward | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | 1 | ON | reverse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| parameter no. | setting value | description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.30 | 3 | start command source is S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.32 | 5 | reverse command source is S3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.34 | 4 | stop command source is S2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.37 | 2 | S1 terminal command type is rising edge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.38 | 1 | S2 terminal command type is negative logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.39 | 0 | S3 terminal command type is positive logic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Function code | Function | Description(setting range) | Factory default | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| P00.41 | AI1 low side voltage(current) | -99999.000~99999.000 function: analog input AI1 setting *AI1 low side voltage(current): set the lowest voltage(current) of input signal. *AI1 high side voltage(current): set the highest voltage(current) of input signal. | 0.000V(mA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.42 | AI1 high side voltage(current) | *AI1 low side setting: set corresponding value of low side voltage(current). *AI1 high side setting: set corresponding value of high side voltage(current). | 10.000V(mA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.43 | AI1 low side setting | range setting | 0.000% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.44 | AI1 high side setting | range setting | 100.000% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.45 | AO1 signal source | 0:always 0 1:always 10V/20mA 2:output frequency 3:motor current 4:output voltage 5:motor torque 6:output power 7:setting frequency 100~9999:high level parameter ** principal interpretation: AO1 signal source function description as below: | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>setting value</th> <th>function</th> <th>description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>always 0</td> <td>analog AO1 output always 0</td> </tr> <tr> <td>1</td> <td>always 10V/20mA</td> <td>analog AO1 output always 1</td> </tr> <tr> <td>2</td> <td>output frequency</td> <td>analog AO1 output is output frequency</td> </tr> <tr> <td>3</td> <td>motor current</td> <td>analog AO1 output is motor current</td> </tr> <tr> <td>4</td> <td>output voltage</td> <td>analog AO1 output is output voltage</td> </tr> <tr> <td>5</td> <td>motor torque</td> <td>analog AO1 output is motor torque</td> </tr> <tr> <td>6</td> <td>output power</td> <td>analog AO1 output is output power</td> </tr> <tr> <td>7</td> <td>setting frequency</td> <td>analog AO1 output is setting frequency</td> </tr> <tr> <td>100~9999</td> <td>high level parameter</td> <td></td> </tr> </tbody> </table> | setting value | function | description | 0 | always 0 | analog AO1 output always 0 | 1 | always 10V/20mA | analog AO1 output always 1 | 2 | output frequency | analog AO1 output is output frequency | 3 | motor current | analog AO1 output is motor current | 4 | output voltage | analog AO1 output is output voltage | 5 | motor torque | analog AO1 output is motor torque | 6 | output power | analog AO1 output is output power | 7 | setting frequency | analog AO1 output is setting frequency | 100~9999 | high level parameter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| setting value | function | description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | always 0 | analog AO1 output always 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | always 10V/20mA | analog AO1 output always 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | output frequency | analog AO1 output is output frequency | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | motor current | analog AO1 output is motor current | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | output voltage | analog AO1 output is output voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | motor torque | analog AO1 output is motor torque | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | output power | analog AO1 output is output power | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | setting frequency | analog AO1 output is setting frequency | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100~9999 | high level parameter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.46 | AO1 low side setting | -99999.000~99999.000 * AO1 low side setting: set AO1 source minimum value. * AO1 high side setting: set AO1 source maximum value. * AO1 low side voltage(current): set the lowest voltage(current) of output signal. * AO1 high side voltage(current): set the highest voltage(current) of output signal. | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.47 | AO1 high side setting | range setting | 50.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.48 | AO1 low side voltage(current) | range setting | 0.000V(mA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.49 | AO1 high side voltage(current) | range setting | 10.000V(mA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.50 | PID proportional gain | 0.000%~10.000% Determine the adjustment intensity of the whole PID regulator, bigger proportional gain is, bigger adjustment intensity is. | 0.010% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.51 | PID integral gain | 0.001s~9999.000s Determine PID regulator to the integral speed adjustment of the division of PID feedback quantity and given quantity, smaller integral gain is, greater adjustment intensity is. | 10.000s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.52 | PID output upper limit | -1000.000%~1000.000% PID adjust the output maximum value, if higher than maximum value, then output PID output upper limit, relative to P0.11 maximum setting value percentage. | 100.000% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.53 | PID output lower limit | -1000.000%~1000.000% PID adjust the output minimum value, if lower than minimum value, then output PID output lower limit, relative to P0.11 maximum setting value percentage. | 0.000% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.54 | PID range | 0.001%~9999.000% set according to actual feedback value, if lower than feedback value, then PID invalid. | 100.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.55 | PID dormancy frequency | 0.000%~500.000% set dormancy accurate frequency, relative to P0.11 maximum setting value percentage. | 0.000% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.56 | PID enter dormancy time | 0.000s~3600.000s inverter reach enter dormancy time and meet to dormancy time, enter dormancy. | 0.000s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.57 | PID wakeup deviation | 0.000%~100.000% percentage based on setting value. | 0.000% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.58 | PID enter wakeup time | 0.000s~3600.000s inverter reach wakeup deviation and meet to wakeup time, operation again. | 0.000s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.59 | PID dormancy action | 0:no dormancy; 1:PID stop; 2:decelerate to stop; 3:free stop; 4:pause; 5:operate in lowest frequency; PID enter dormancy according to setting dormancy action. | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>pressure sensor range:1.6MPa(1MPa~10kg)PIDcontrol parameter</p> <table border="1"> <thead> <tr> <th>parameter</th> <th>parameter name</th> <th>unit</th> <th>description</th> </tr> </thead> <tbody> <tr> <td>P01.63</td> <td>keyboard setting source</td> <td>0</td> <td>digital keypad(P02.92)setting</td> </tr> <tr> <td>P02.92</td> <td>setting value</td> <td>10</td> <td>PID digital keypad set time</td> </tr> <tr> <td>P00.11</td> <td>feedback value</td> <td>2</td> <td>PID analog AI1 feedback</td> </tr> <tr> <td>P00.12</td> <td>setting relationship selector</td> <td>8</td> <td>PID enable</td> </tr> <tr> <td>P00.44</td> <td>AI1 high side setting</td> <td>16</td> <td>AI1 high side set 16kg (0~10V corresponding to 0~16kg)</td> </tr> <tr> <td>P00.50</td> <td>PID proportional gain</td> <td>0.01%</td> <td>According to field adjustment, use PID dormancy parameter</td> </tr> <tr> <td>P00.51</td> <td>PID integral gain</td> <td>10s</td> <td>According to field adjustment, use PID dormancy parameter</td> </tr> <tr> <td>P00.54</td> <td>PID range</td> <td>16</td> <td>PID set feedback range 16kg</td> </tr> <tr> <td>P00.55</td> <td>PID dormancy frequency</td> <td>10%</td> <td>PID dormancy frequency set 5Hz (maximum default setting value 5Hz)</td> </tr> <tr> <td>P00.56</td> <td>PID dormancy time</td> <td>5s</td> <td>PID dormancy time 5s</td> </tr> <tr> <td>P00.57</td> <td>PID wakeup deviation</td> <td>20%</td> <td>PID wakeup deviation 20%</td> </tr> <tr> <td>P00.58</td> <td>PID enter wakeup time</td> <td>10s</td> <td>PID wakeup time 10s</td> </tr> <tr> <td>P00.59</td> <td>PID dormancy action</td> <td>2</td> <td>PID dormancy action set 0: no dormancy</td> </tr> <tr> <td>P01.68</td> <td>display value 1 source</td> <td>1090</td> <td>keyboard display PID setting pressure</td> </tr> <tr> <td>P01.69</td> <td>display value 2 source</td> <td>1091</td> <td>keyboard display PID feedback pressure</td> </tr> <tr> <td>P02.03</td> <td>UPI command source</td> <td>1</td> <td>(UP) command from keyboard</td> </tr> <tr> <td>P02.04</td> <td>DOWN command source</td> <td>1</td> <td>(DOWN) command from keyboard</td> </tr> </tbody> </table> | parameter | parameter name | unit | description | P01.63 | keyboard setting source | 0 | digital keypad(P02.92)setting | P02.92 | setting value | 10 | PID digital keypad set time | P00.11 | feedback value | 2 | PID analog AI1 feedback | P00.12 | setting relationship selector | 8 | PID enable | P00.44 | AI1 high side setting | 16 | AI1 high side set 16kg (0~10V corresponding to 0~16kg) | P00.50 | PID proportional gain | 0.01% | According to field adjustment, use PID dormancy parameter | P00.51 | PID integral gain | 10s | According to field adjustment, use PID dormancy parameter | P00.54 | PID range | 16 | PID set feedback range 16kg | P00.55 | PID dormancy frequency | 10% | PID dormancy frequency set 5Hz (maximum default setting value 5Hz) | P00.56 | PID dormancy time | 5s | PID dormancy time 5s | P00.57 | PID wakeup deviation | 20% | PID wakeup deviation 20% | P00.58 | PID enter wakeup time | 10s | PID wakeup time 10s | P00.59 | PID dormancy action | 2 | PID dormancy action set 0: no dormancy | P01.68 | display value 1 source | 1090 | keyboard display PID setting pressure | P01.69 | display value 2 source | 1091 | keyboard display PID feedback pressure | P02.03 | UPI command source | 1 | (UP) command from keyboard | P02.04 | DOWN command source | 1 | (DOWN) command from keyboard | |
| parameter | parameter name | unit | description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P01.63 | keyboard setting source | 0 | digital keypad(P02.92)setting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P02.92 | setting value | 10 | PID digital keypad set time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.11 | feedback value | 2 | PID analog AI1 feedback | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.12 | setting relationship selector | 8 | PID enable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.44 | AI1 high side setting | 16 | AI1 high side set 16kg (0~10V corresponding to 0~16kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.50 | PID proportional gain | 0.01% | According to field adjustment, use PID dormancy parameter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.51 | PID integral gain | 10s | According to field adjustment, use PID dormancy parameter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.54 | PID range | 16 | PID set feedback range 16kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.55 | PID dormancy frequency | 10% | PID dormancy frequency set 5Hz (maximum default setting value 5Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.56 | PID dormancy time | 5s | PID dormancy time 5s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.57 | PID wakeup deviation | 20% | PID wakeup deviation 20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.58 | PID enter wakeup time | 10s | PID wakeup time 10s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P00.59 | PID dormancy action | 2 | PID dormancy action set 0: no dormancy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P01.68 | display value 1 source | 1090 | keyboard display PID setting pressure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P01.69 | display value 2 source | 1091 | keyboard display PID feedback pressure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P02.03 | UPI command source | 1 | (UP) command from keyboard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P02.04 | DOWN command source | 1 | (DOWN) command from keyboard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Function code | Function | Description(setting range) | Factory default |
|---------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| P00.60 | startup function | 0:start frequency operation 1:speed start 2:DC injection * principle interpretation: 0:no frequency output startup mode, meet to P00.61 startup time setting, P00.62 start frequency start to startup operation. 1:speed start, search rotating motor speed, smooth start without impact from search speed. 2:DC injection, inverter startup by "DC injection before startup" mode. | 0 |
| P00.61 | startup time | 0.000s~60000.000s principle interpretation: when system startup, setting start function work within setting start time. | 0.000s |
| P00.62 | start frequency | 0.000Hz~100.000Hz principle interpretation: start function finish, if setting frequency bigger than start frequency, system start from start frequency; if setting frequency smaller than start frequency, system start from setting frequency. | 0.000Hz |
| P00.63 | DC injection current | 0.000%~200.000% function: set magnitude of DC injection current. (set P00.60*2 as DC injection) * principle interpretation: start mode is DC injection, need to set magnitude of DC braking current, 100% corresponding to inverter rated current. | 100.000% |
| P00.64 | stop function | units: 0:free stop; 1:DC braking; tens: 1:accurate stop * principle interpretation: during stop process, stop function starts work when output frequency smaller than stop frequency. accurate stop: stop at any speed motor rotation turns are same, realize consistent repeatability of stop position. To get the best efficiency, deceleration time not to trigger over pressure and over loss rate prevention function as long as possible. | 0 |
| P00.65 | stop frequency | 0.000Hz~1000.000Hz interpretation refer to 0.64 | 0.000Hz |
| P00.66 | DC braking current | 0.000%~300.000% set DC braking current. | 100.000% |
| P00.67 | DC braking time | 0.000s~1000.000s set DC braking time. | 0.000s |
| P00.68 | braking resistor mode | 0:invalid 1:valid function: braking resistor braking mode parameter set | 1 |
| P00.70 | control mode | 0:VF 1:vector control 1 function:select motor control algorithm | 1 |
| P00.71 | carrier frequency | 2kHz~16kHz function: set carrier frequency | *kHz |
| P00.72 | motor power | 0.000kW~100000.000kW function: set motor parameters | *kW |
| P00.73 | motor voltage | 0V~1000V function: set motor parameters | *V |
| P00.74 | motor frequency | 1Hz~3000Hz function: set motor parameters | *Hz |
| P00.75 | motor current | 0.00A~1000.00A function: set motor parameters | *A |
| P00.76 | motor speed | 10rpm~65535rpm function: set motor parameters | *rpm |
| P00.78 | VF curve-F1 | 0.0Hz~3000.0Hz | 50.0Hz |
| P00.79 | VF curve-F2 | * principle interpretation: set V/F curve under V/F control mode. When vector control 1 is adopted, set the corresponding frequency points of V/F curve to adjust control characteristics of the corresponding control points. | 50.0Hz |
| P00.80 | VF curve-F3 | 50.0Hz | 50.0Hz |
| P00.81 | VF curve-F4 | 50.0Hz | 50.0Hz |
| P00.82 | VF curve-V0 | 0V~1000V | 0V |
| P00.83 | VF curve-V1 | * principle interpretation: set V/F curve under V/F control mode. When vector control 1 is adopted, set the corresponding voltage points of V/F curve to adjust control characteristics of the corresponding control points. | *V |
| P00.84 | VF curve-V2 | *V | *V |
| P00.85 | VF curve-V3 | *V | *V |
| P00.86 | VF curve-V4 | *V | *V |
| P01.41 | local address | 0~247 function: set inverter local address | 1 |
| P01.42 | baud rate | 0:2400bps 1:4800bps 2:9600bps 3:19200bps 4:38400bps 5~10:reserved function: Communication port configuration | 3 |

| Function code | Function | Description(setting range) | Factory default |
|---------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| P01.43 | odd-even check | 0:no check 1:even check 2:odd check function: Communication port configuration | 0 |
| P01.44 | data bits | 7~8 function: Communication port configuration | 8bits |
| P01.45 | stop bits | 0.0~2.0 function: Communication port configuration | 1.0bit |
| P01.47 | parameter decimal place mode | 0~123 units: 0:remain decimal place,1:decimal place change to 2 places, 2:decimal place change to 1 place, 3:no decimal place tens:0:remain decimal place,1:decimal place change to 1 place, 2:no decimal place; hundreds' digit: 0:remain decimal place,1:no decimal place; * principle interpretation: parameter decimal place mode only work to communication, which change parameter value during communication transmission. * P01.47 units aim at parameters with 3 decimal places: 0:remain decimal place,1:decimal place change to 2 places, 2:decimal place change to 1, 3:no decimal place. * P01.47 tens aim to parameters with 2 decimal places: 0:remain decimal place,1:decimal place change to 1 place, 2:no decimal place. * P01.47 hundreds' digit aim to parameters with 1 place: 0:remain decimal place,1:no decimal place. | 0 |
| P01.63 | keyboard setting source | 0:keyboard digital setting; 1:keyboard potentiometer setting; select keyboard setting value source, digit setting:(P02.92) or keyboard potentiometer. | 1 |
| P02.03 | (UP) command source | units: keyboard; tens: communication; hundreds' digit: S1; thousands' digit: S2; ... | 0 |
| P02.04 | (DOWN) command source | units: keyboard; tens: communication; hundreds' digit: S1; thousands' digit: S2; ... | 0 |
| P10.61 | history fault no. 1 | - | 0 |
| P10.62 | history fault no. 2 | - | 0 |
| P10.63 | history fault no. 3 | - | 0 |
| P11.10 | output frequency upon current fault | - | 0.0Hz |
| P11.11 | output current upon current fault | - | 0.00A |
| P11.12 | bus voltage upon current fault | - | 0.0V |
| P11.13 | inverter temperature upon current fault | - | 0°C |
| P11.14 | S terminal status upon current fault | - | 0 |
| P11.15 | Y terminal status upon current fault | - | 0 |
| P11.16 | cumulative running time upon current fault | - | 0h |

NO.6 Fault code

| Fault Code | Protection function | Description |
|------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| E0001 | protection function | inverter components fault or software fault |
| E0004 | ground fault | Abnormal resistance to ground, cause electric leakage |
| E0005 | short circuit to ground | short circuit to ground |
| E0006 | output short circuit | inverter cut off output when inverter output current is 250% larger than inverter rated current. |
| E0007 | output over current | inverter cut off output when inverter output current is 200% larger than inverter rated current. |
| E0008 | DC bus over voltage | inverter cut off output if main circuit DC voltage is higher than 400V(220V motor type) or 800V(380V motor type) when motor decelerates. |
| E0009 | DC bus low voltage | input voltage decrease, inverter cut off output if main circuit DC voltage too low. |
| E0010 | inverter over heat | inverter cut off output if cooling fin is over heat. |
| E0011 | self-learning failure | self-learning parameter wrong or motor abnormal. |
| E0013 | rectifier over heat | rectifier module over heat. |
| E0014 | U phase loss | output U phase loss. |
| E0015 | V phase loss | output V phase loss. |
| E0016 | W phase loss | output W phase loss. |
| E0019 | no motor connect | motor lost connection during operation. |
| E0020 | input phase loss | power input phase loss. |
| E0021 | inverter over load | inverter cut off output when inverter output current exceed inverter rated level (150% 60S). |
| E0022 | over torque | motor over torque |
| E0024 | motor over heat | motor temperature is over heat. |
| E0025 | motor over load | inverter cut off output when inverter output current exceed motor rated level (150% 60S). |
| E0026 | current limit | output current exceed setting limit threshold. |
| E0027 | Input power down | The input voltage is lower than the power down standard value (P05.86) |
| E0033 | ST0 | Safe torque output stop function operation |
| E0034 | ST1 | Alarm of ST1 internal circuit diagnosis |
| E0035 | ST2 | Alarm of ST2 internal circuit diagnosis |
| E0036 | ST3 | Alarm of internal circuit diagnosis |
| E0063 | user fault | user defined fault(P03.08) |

Note: The alarm code is compared to the above table, for example: the keyboard displays "A0025" which means the motor overload alarm.