

See parameter *F 602* for detailed description of *F 772* and *F 773*.

6.9 Communication function parameter group

NO.	Parameter Name	Setting Range	Default
<i>F 800</i>	Modbus baud rate	0~1	1

0: 9600 bps. 1: 19200 bps. 2: 4800 bps. 3: 2400 bps. 4: 1200 bps.

Remarks: it only works after re-power on if we decide to modify *F 800*.

NO.	Parameter Name	Setting Range	Default
<i>F 801</i>	Modbus parity	1	1

0: NONE, datum format : < 8, N, 2 >. 1: EVEN, datum format :< 8, E, 2 >. 2: ODD, datum format :< 8, O, 2 >.

Remarks: it only works after re-power on if we decide to modify *F 801*.

NO.	Parameter Name	Setting Range	Default
<i>F 802</i>	Modbus address	0~247	1

NO.	Parameter Name	Setting Range	Default
<i>F 803</i>	Modbus timeout	0~100	0

0: timeout check disabled.

1-100: 1=1s.

NO.	Parameter Name	Setting Range	Default
<i>F 804</i>	Modbus transger waiting time	0~2.00s	0.00

NO.	Parameter Name	Setting Range	Default
<i>F 805</i>	Modbus behaviour on communication fault	0~4	4

0: frequency inverter stop, communication command, frequency mode open(by *F 002*, *F 003*)

1: None (continued operation) 2: Deceleration stop 3: Coast stop

4: Communication error (*E - 33* trip) or Network error (*E - 35* trip)

NO.	Parameter Name	Setting Range	Default
<i>F 806</i>	Number of motor poles for communication	1~8	2

The parameter setup will place the influence upon the display of *U0 I0*.

NO.	Parameter Name	Setting Range	Default
<i>F 813</i>	Module writes data 1	0~6	1
<i>F 814</i>	Module writes data 2	0~6	3

0: Off

1: Communication command control (FA05)

2: Reservations

3: Communication frequency setting (FA08)

4 ~ 6: reservations

Note: (1) the setting of *F8 13-F8 14* must be switched on after power off until the LED display is black.

(2) Block first address is 1813H (hexadecimal 1813).

NO.	Parameter Name	Setting Range	Default
<i>F8 15</i>	Module datas read 1	0~21	1
<i>F8 16</i>	Module datas read 2	0~21	2
<i>F8 17</i>	Module datas read 3	0~21	12
<i>F8 18</i>	Module datas read 4	0~21	18
<i>F8 19</i>	Module datas read 5	0~21	8

0: Off

1: Status Information (FD03)

2: Output frequency (FD12)

3: Output current (FE08)

4: Output voltage (FE10)

5: Fault information (FC39)

6: PID feedback value (FA36)

7: Input terminal information (FD01)

8: Output terminal information (FD02)

9: AI1 input (FE30)

10: AI2 input (FE31)

11: Motor speed (FE50)

12: Absolute value of output current (E002), unit 0.01a

13: Absolute value of output voltage (E006), unit V

14: Absolute value of input voltage of DC bus (E009), unit V

15: PID given value (FA35)

16: Output torque (FE20), 0.01% of rated torque per unit motor

17: Input power (FE28), 0.01kW

18: Output power (FE29), 0.01kW

19: Input power accumulation/input electric energy (FE44), the unit is determined according to the parameter *F5 17*

20: Output power accumulation/output electric energy (FE45), the unit is determined according to the parameter *F5 17*

21: Cumulative running time (FE17), unit h (hours)

Note: (1) the setting of f815-f819 must be switched on after power off until the LED display is black.

(2) Block first address 1815H (hexadecimal 1815)

(3) The range of the number of registers read is 2-5 (2-5).

NO.	Parameter Name	Setting Range	Default
<i>F821</i>	Factory reserved		
<i>F822</i>	Factory reserved		
<i>F823</i>	Factory reserved		
<i>F824</i>	Factory reserved		
<i>F825</i>	Factory reserved		
<i>F826</i>	Factory reserved		
<i>F827</i>	Factory reserved		
<i>F828</i>	Factory reserved		
<i>F829</i>	Factory reserved		

NO.	Parameter Name	Setting Range	Default
<i>F830</i>	PID setting of keypad	0~100%	0.0

F830=100% can make the sensor output the maximum value.

The 100% standard value of *F830* is the measurement range of sensor. If the measurement range of pressure sensor is 0.0~1.6Mpa for example, set *F830* =100% means that pressure setting is 1.6Mpa.

Note 1: When *F900*=0, *F830* is not effective.

Note 2: *F830* is completely corresponded to *F916*. When one has changed, the other will automatically updated.

6.10 Process PID parameter group

PID control is a common method used in process control. By carrying out proportional, integral and differential operations on the deviation between the feedback signal of the controlled quantity and the target quantity, the output frequency of the inverter can be adjusted to form a negative feedback system to stabilize the controlled quantity on the target quantity. Suitable for flow control, pressure control, temperature control and other process control. The control basic principle block diagram is as follows:

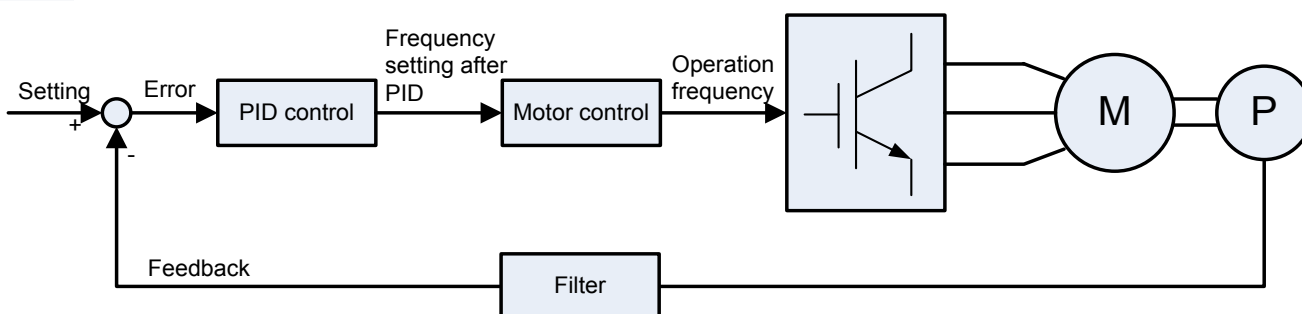


Figure 5.38 Block diagram of PID process control

F900~*F916* define built-in process PID control function parameters of the frequency inverter. The block diagram of process PID control function is shown as below: