

## Model MC3082 Ex-proof Differential Pressure Switch (Differential Pressure Controller)



MC3082 Ex-proof Differential Pressure Switch (Differential Pressure Controller) is a type of explosion proof product for differential pressure measurement and control with 2 or 5 relay controllers and transmission output of 4-20mA and RS485. It is a full electronic structure, converting the signal from pressure sensor into standard output by high precise A/D microprocessor processing. It can display the differential pressure, and outputs the analog transmission and switching controllers. This smart digital differential pressure switch is flexible, safe, reliable easy to operate. It is widely used in hydroelectric, petroleum, chemical, mechanical, hydraulic and other industries.

### Features

Simple wiring

The product can work as ex-proof requirement

ExdIICT6 ex-proof grade

Easy to set and operate

100mm dial

4 bits LED display. MC30825 has dual indicators

The power supply is 24VDC and 220VAC optional

### Technical Parameters

Display: -1999~9999

Accuracy: 0.2%

Control output: relay, 4-20mA, RS485

Pressure control points and hysteresis: Can be set in full range

Contact capacity: 220V/3A, 24V/10A

Power consumption: 1W

Input voltage: 24V/220V optional

Working temperature: -20 -70°C

Compensation temperature: -10 -60°C

Stability:  $\pm 0.2\%$ FS/year

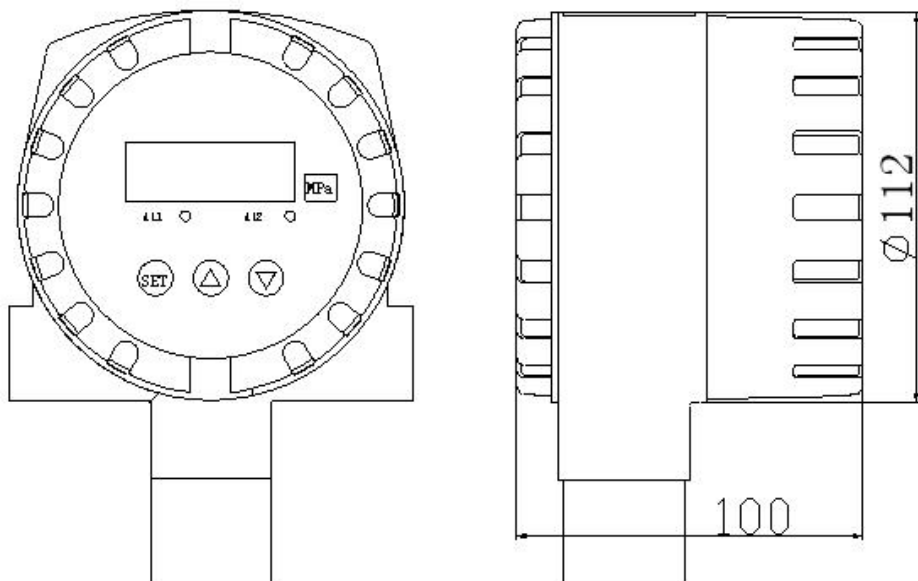
Overload capacity: 200-300%

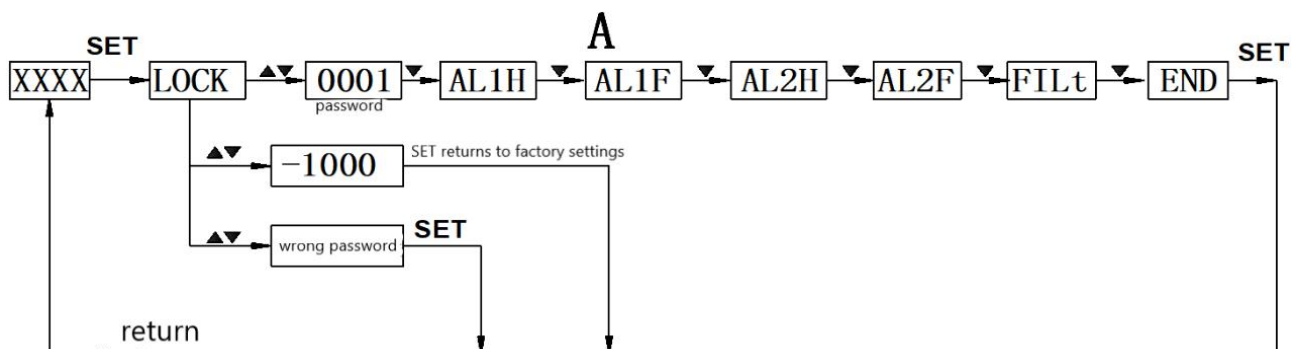
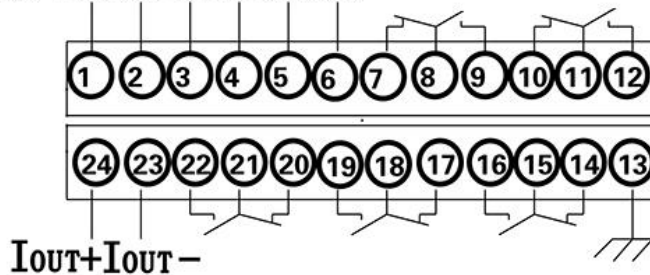
Housing Material: cast aluminum alloy

### Ordering Codes (Model selection)

| MC308 | Differential Pressure Switch (Controller) |   |
|-------|---|---|
| -     | Housing type                              | 2: Ex-proof cast alloy aluminum (2 relays output)<br>25: Ex-proof cast alloy aluminum (5 relays output) |
| -     | Pressure range                            | e.g. 0-10bar or 0-1MPa etc.   |
| -     | Wet Part Material                         | -S4: 304 Stainless Steel<br>-S6: 316 Stainless Steel  |
| -O    | Signal Output                             | 1: 4-20mA<br>2: RS485   |
| -V    | Power Supply                              | 1: 24VDC<br>2: 220VAC   |
| -A    | Installment type                          | 1: thread<br>4: customer specified  |
| -     | Size of installment                       | e.g. for A1, -1/2BSP or -M20*1.5 etc.;<br>for A3, -2" or 3" etc.  |

### Dimensions



**Controlling Points Preset Step (Take MC3082 as example):**
**485B 485ADC+ GND AC220**


AL1H is the pull-in value of switch 1,AL1F is the release value of switch 1

AL2H is the pull-in value of switch 2, AL2F is the release value of switch 2

FILt this value is the display filter coefficient to prevent the display from jumping due to pressure fluctuation. The larger the filtering coefficient is, the more stable the display is, but the more lagged it is. 3 ~ 10 options

END save exit

Note: the switch point is determined by the configuration of the pull in value and the release value. When the pull in value is greater than the release value, it is the upper limit alarm output (normally open function). When the pull in value is less than the release value, it is the lower limit alarm output (normally closed function). The difference between the pull in value and the release value is the return difference of the switch point.

For example: to set the switch point 1 as the upper limit alarm output (normally open function) to draw at 4MPa and to disconnect at less than 3.95mpa; the switch point 2 as the lower limit alarm output (normally closed function) to disconnect at 10MPa and to draw at less than 9.95mpa:

Enter the menu: settings

AL1H=4.00 AL1F=3.95 AL2H=9.95 AL2F=10.00

Press "set" key ● display "lock" (prompt for password)

Press the ▲ or ▼ key to input the password "1", ● press the "set" key to confirm.

Press the ▲ or ▼ key to scroll up or down for menu selection (al1h, al1f, al2h, al2f, end)

Press "set" key to enter the selected menu. Press the ▲ or ▼ key to change the setting.

Press the "set" key to confirm. If necessary, select other menus to modify.

After modification, select "end" and press "set" to confirm save and exit.

If no key is pressed for 30 seconds, it will exit the setting state automatically, but the modified data will not be saved.