

C6045D

GAS/AIR PRESSURE SWITCH

INSTRUCTION SHEET



APPLICATION

The C6045D international gas and air pressure switch can be used in positive pressure or differential pressure systems to indicate changes in pressure relative to a set point.

FEATURES

- Switch position indicator.
- Can be used in positive pressure or differential pressure applications.
- Set point and switch position indicators visible from outside.
- All models incorporate a single pole, double throw snap acting MICRO SWITCH.

SPECIFICATIONS

Model

C6045D gas/air pressure switch.

Ambient temperature

Minimum: -10 °C/14 °F

Maximum: 70 °C/158 °F

Connection

High pressure connection: 1/4" ISO 7/1 female tapping.

Low pressure or vent connection: 1/8" ISO 7/1 female tapping.

High pressure tapping connection: 9 mm

Electrical rating

Voltage: 220/240 Vac

Full load: 2.0 A

Locked motor: 12.0 A

Resistive: 10.0 A

Enclosure

IP 40

Maximum pressure

Scale range (mbar)	Maximum pressure (mbar)	
	Without loss of accuracy	Without device failure
0.2 ... 3	100	200
1 ... 10	100	200
5 ... 50	200	400
15 ... 150	300	600

Pressure rating

Scale range (mbar)	Differential		Sensed medium	Automatic recycling
	Low scale	High scale		
0.2 ... 3*	0.3	0.5	Air and combustion products	Yes
1 ... 10	0.5	1	Air and combustion products. Combustible gas	Yes
5 ... 50	1.2	2.5	Air and combustion products. Combustible gas	Yes
15 ... 150	3.5	10	Air and combustion products. Combustible gas	Yes

* Differential is additive

Accessories

Mounting bracket, order number 45.002.208-001

Contents

INSTALLATION

CAUTION

Installer must be a trained, experienced serviceman.

Disconnect power supply before beginning installation.

Perform all required checkout tests after installation is complete.

Connection

The bleed fitting is tapped $\frac{1}{8}$ " ISO 7/1 female.

In differential pressure control applications, the lower pressure should be connected to the vent fitting. (fig. 1.)

In applications using combustible gases, the vent tapping should be connected to the combustion chamber.

Mounting

The C6045 has an hexagonal fitting tapped $\frac{1}{4}$ " ISO 7/1 female, which is the high pressure connection in differential applications.

The C6045 can be mounted up to 90° from the horizontal position.

CAUTION

For types with ranges 0.2 ... 3 mbar and range 1 ... 10 mbar the full range can only be used when mounted within 20° from the horizontal position.

For all other positions the types with scale range 0.2 ... 3 mbar version may not be adjusted lower than 0.6 mbar and the types with scale range 1 ... 10 mbar may not be adjusted lower than 1.2 mbar.

Wiring

All wiring must comply with applicable national requirements. For wiring purposes a Pg 13.5 conduit connector is provided. An earth screw is located inside the cover.

SETTING AND ADJUSTMENT

Pressure set point adjustment

Remove the cover and turn the pressure adjustment screw toward "+" to increase pressure setting and toward "-" to decrease pressure setting.

OPERATION AND CHECKOUT

Operation

The C6045 is equipped with SPDT switching. Therefore when a control action occurs an annunciating action such as energizing an alarm can simultaneous be performed.

The C6045 automatic recycle type may be used for either High limit or Low limit applications.

IMPORTANT

Systems vary, so carefully study each application. The following outline is a guide for a typical low limit flame safe guard application using a manual reset switch.

Start up

- Set cut off pressure on numerical scale indicator by adjusting the screw. (see fig. 2.)
- Open main gas supply line. Actuate manual reset lever until switch remakes contact (common to normally open).
- Set the controller and limit switch to call for heat. A normal start up should occur.
- Allow system to operate through one complete cycle to ensure that all components function correctly.

Checking cut off pressure

- Slowly close manual main valve with the burner in operation. Shut down should occur when the pressure drops to set point and the alarm should energize (if connected).
- Re open the manual main valve. Pressure should rise and exceed the set point value, the burner system should start up and the alarm turn off when the reset button is depressed.

NOTE: For more accurate setting use pressure tapping with manometer.