

# CS12

## COMPRESSOR PRESSURE SWITCHES

The CS12 from Orion offers you Peace of Mind and Unbeatable Features!

### Salient Features

Ready to Use, Easy to Fit,  
No Special Mounting

2 Ground Screws enable you to  
"Just Fit it, Set it and Forget it!"

Corrosion Resistant  
Non Metallic Cover

Protects and Lasts...

Non Additional Relays,  
No Extra Circuitry

Three Phase Pressure Switches can  
be used instead of a motor starter  
pressure switch combination.  
No need for additional relay or  
any other circuitry.

### Manual Cut-Off

Separate an auto-off disconnect lever  
for manual cut off of the compressor.

### Salient Feature

- Available in ready to use condition.
- Special Unloader valve is provided which prevents compressor from starting under load.
- No Special Mounting required.

### Technical Specifications

- Sensing Element - Nitrile Rubber.
- Factory setting 6~ 8 bar.
- Input Pressure Port 1/2" BSP Female
- Relief valve 6 mm dia.
- Cable Leading 11.5 & 14.5 mm diameter.
- Electrical Rating 16 A, 500 V AC
- Protection - IP 44.

### How to order CS12 Compressor Pressure Switches

Please specify the Range Code as **CS12**



### Range Selection Table

Range Code (Orion)	Adjustment range (bar)	Switching differential (bar)
CS12	2 - 12	1.5 ~ 4.0

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*NK Instruments Pvt. Ltd.*

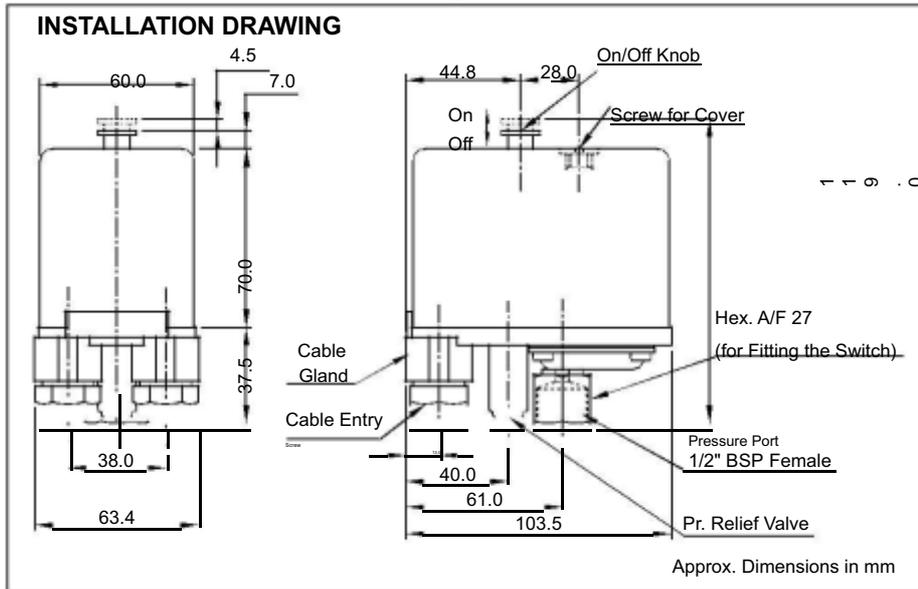
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## INSTALLATION AND OPERATING INSTRUCTIONS

Fig. 1.1



**Mounting** Please refer Fig. 1.1

1. Pressure switches can be mounted directly on process connection 1/2" BSP F nut with external size of 27 mm A/F.
2. In case, any other process connection is required then the same can be achieved using adaptor.
3. Please don't tighten the switch by holding the top cover. Use appropriate spanner for turning the process connection nut.



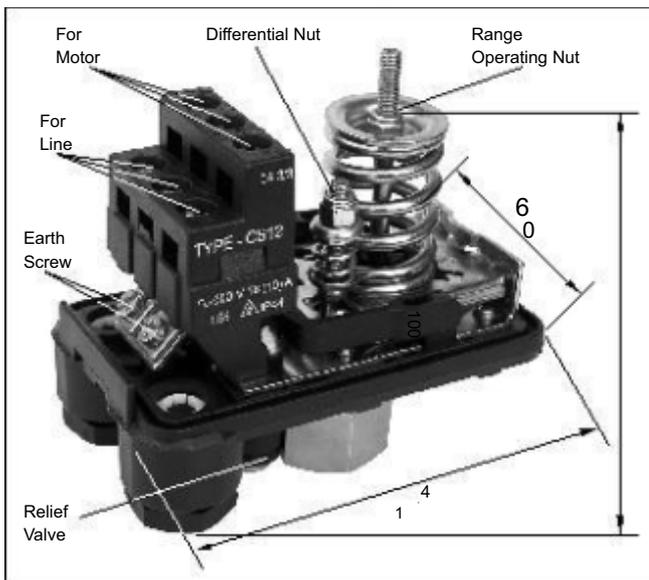
### Electrical Connections & Wiring (Refer fig 1.2)

Wiring is to be carried out only when the switch is mounted and voltage free.

- (a) Remove the top cover by unscrewing the black screw.
- (b) Pass the cable through the cable gland and connect the wiring.
- (c) Basically there are two connection as shown in the figure 1.2 one for Line and another for Motor. Each has three wires for three phase. Please ensure appropriate connection of phase wires. Two earthing screws are provided to connect earthing wires from line and motor.



Fig. 1.2



### Set Point Adjustment: Refer fig 1.2

Adjustment is to be carried out only when the switch is mounted, under pressure and voltage free

- a. Remove the top cover.
- b. Decide the cut-in (lower) pressure (P1) and cut-out (upper) pressure (P2). (Pressure switch is closed when the pressure is between pressure P1 and P2.)
- c. Turn the Range nut and differential nut to extreme top position.
- d. Apply the desired cut-in pressure (P1) to pressure port.
- e. Turn the Range nut slowly till contacts changeover.
- f. Turn the differential nut to the extreme positive end (bottom position)
- g. Apply the desired cut-out (upper) pressure (P2) to pressure port.
- h. Turn the differential nut till the contacts changeover.
- i. Some minor adjustment will be required to achieve the exact cutting (lower) / output (higher) point, which can be checked with the help of proper pressure measurement device.

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