



PRESSURE

DIFFERENTIAL PRESSURE SWITCH

RH-3, RH-3-2

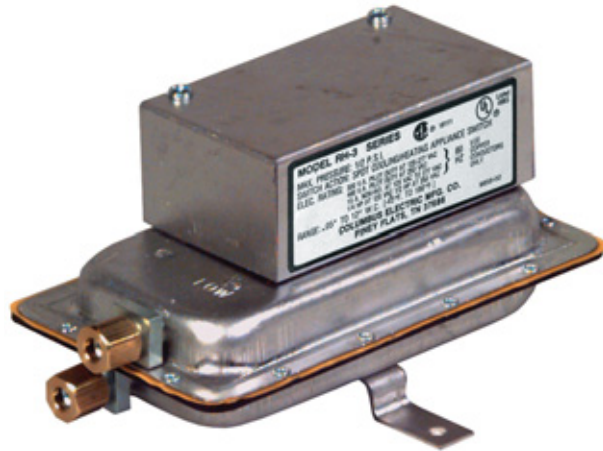
DESCRIPTION

Model RH-3 and RH-3-2 Differential Pressure Switches monitor low-air pressure, vacuum, or differentials of air pressure. These switches are commonly used to prove blower operation, to sense dirty filters, and to monitor pressure drop across coils.

Models RH-3 and RH-3-2 are shipped with 1/4" compression fittings, suitable for use with 1/4" OD copper or plastic tubing, and a 12" (30.5 cm) length of 1/4" plastic tubing.

OPERATION

When pressure is applied to the high side of the airflow switch or vacuum is applied to the low side, an internal diaphragm moves against and operates the lever of the snap-switch. When the airflow switch is at rest (not operating), the snap-switch N.C. (normally closed) contact is made to the common terminal. When an increase in differential pressure operates the snap-switch, the N.O. (normally open) contact is made to the common terminal. The action of the diaphragm on the snap-switch is the same whether pressure or vacuum is being sensed. The wiring from the air sensing switch to other devices depends upon the application.



RH-3



SPECIFICATIONS

Contact Rating	300 VA pilot duty @ 125-277 VAC, 15A resistive @ 125 VAC, 1/4 hp @ 125 VAC, 1/2 hp @ 250 VAC, 2.4A @ 24 VAC, 0.5A @ 24-125 VDC	Overpressure	0.5 psig (3.5 kPa)
Contact Type	SPDT	Operating Temperature	-40° to 180°F (-40° to 82°C)
Setpoint Range		Mounting	Any vertical plane
RH-3	0.05" to 12.0" W.C. (12.5 to 2989 Pa)	Process Connection	1/4" compression, suitable for use with 1/4" OD copper or plastic tubing
RH-3-2	0.05" to 2.0" W.C. (12.5 to 498 Pa)	Approvals	UL listed, file #MH10196, CSA
Differential	0.02" W.C. (5.0 Pa) @ minimum setting, 0.8" W.C. (199 Pa) @ maximum setting	Weight	2.0 lb (0.91 kg)
		Warranty	1 year

INSTALLATION

Mounting

The RH-3 and RH-3-2 may be used to sense pressure, vacuum, or differentials of pressure and vacuum. Using sheet metal screws, mount the control vertically on the duct or equipment. Avoid areas of high vibration. Connect the 1/4" tubing to the air flow switch using 1/4" compression fittings. Insert the other end of the tubing into area to be sensed. See ordering information for static pressure taps and duct impact (total pressure) tubes for use with **RH-3** and **RH-3-2** switches.

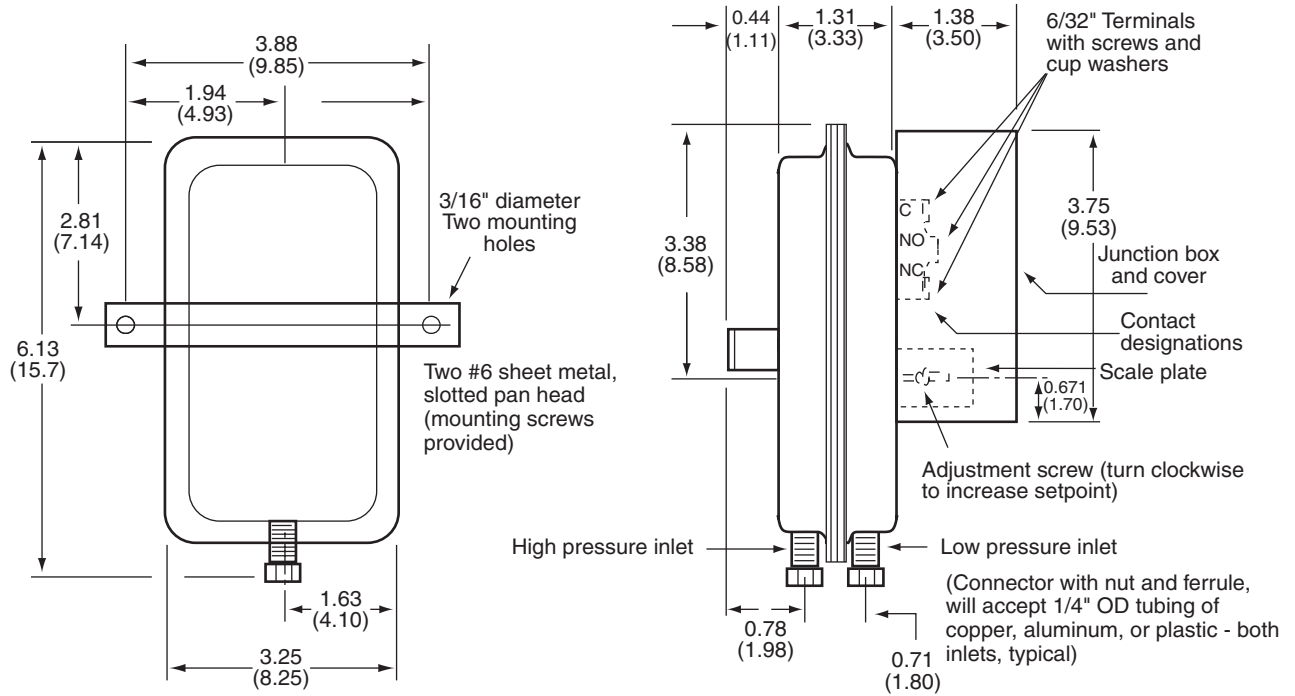
Adjustment

The adjusting screw located in the junction box may be used to change the operating point. The operating range is 0.05" to 12.0" W.C. for the RH-3, and 0.05" to 2.0" W.C. for the **RH-3-2**. The differential is 0.02" rising to 0.8" at the highest setting. The switch will operate at 0.05" and reset before 0.03" on the low end. It will operate at 12.0" and reset before 11.2" on the high end. Rotate the adjusting screw clockwise to increase setting.



DIMENSIONS

in
(cm)



ORDERING INFORMATION

MODEL	DESCRIPTION
RH-3	0.05" to 12.0" W.C. (12.5 to 2989 Pa)
RH-3-2	0.05" to 2.0" W.C. (12.5 to 2989 Pa)
RH-3-C	0.05" to 12.0" W.C. (12.5 to 498 Pa) custom calibration
RH-3-2-C	0.05" to 2.0" W.C. (12.5 to 498 Pa) custom calibration

	RELATED PRODUCTS	PAGE
21122	6" aluminum impact tube, 1/4" OD connection	925
21122-112	6" aluminum impact tube for 1/8" thru 1/4" ID flexible plastic tubing	925
60681	Static or total pressure sensing kit	925
A-301-K	Duct static pressure tip, 1/4" compression	925
A-302-K	Duct static pressure tip, 1/4" barb	925
A-345-K	Flange mounting kit (1 required for each A-301-K or A-302-K)	925
T-101	1/4" OD black poly tubing, 1 coil, 250 ft (76 m)	759