JOHNSON CONTROLS

P74 Series

Differential Pressure Control

Description

Series P74 measures the pressure difference between two sources: supply lines and return lines. A change in differential pressure will reposition the switching mechanism to cause corrective action of the supplementary control equipment.

Features

- field-proven Penn switch with a completely enclosed contact mechanism
- pressure differential setting is easily changed without removing the cover

Applications

- differential pressure sensing on chillers or water-cooled condensers
- lube oil failure cutout for refrigeration compressors (same as the P28, but does not incorporate time delay)
- positioning M100 Series motor-actuated valves (P74JA-2)
- to prove pump operation

Accessories

All models on this page include a universal mounting bracket.

P74EA-8

Selection Chart

Code Number	Switch Action	Range Pressure Differential psi (kPa) 1	Switch Differential	Pressure Connections	Bellows Material
FOR ALL NON-CORROSIVE LIQUIDS					
P74AA-1C	SPST Closes On Decreases in Pressure Difference	8 to 70 Adjustable (55 to 483)	8 to 30 Adjustable	36 in. Cap. with 1/4 in. Flare Nut	Stainless Steel
P74BA-1C	SPST Opens On Decrease in Pressure Difference				
P74EA-8C	SPDT (Snap-Acting)	2 to 26 Adjustable (14 to 207)	3.5 Fixed	36 in. Cap. with 1/4 in. Flare Nut	Brass
P74EA-10C				1/4 in. Male Flare	
P74FA-1C		8 to 60 Adjustable (55 to 414)	1.5 Fixed		
P74FA-5C				1/4 in. FNPT	
P74FA-10C		2 to 26 Adjustable (14 to 207)		36 in. Cap. with 1/4 in. Flare Nut	
P74JA-2C	SPDT (Floating)	8 to 60 Adjustable (55 to 414)	2.5 Fixed	1/4 in. Male Flare	

1. Maximum continuous pressure to low pressure bellows - 180 psig (1241 kPa)

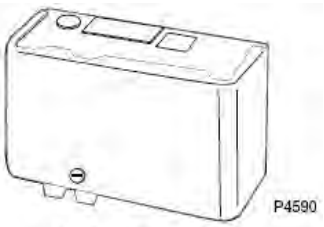
Technical Specifications

Electrical Ratings

Motor Ratings	120 V	208 V	240 V	277 V
P74AA, P74BA - 1 Phase				
AC Full Load Amp	20.0	18.7	17.0	—
AC Locked Rotor Amp	120.0	112.2	102.0	—
AC Non-Inductive Amp	22.0	22.0	22.0	—
Pilot Duty	125 VA, 120 to 600 VAC; 57.5 VA, 120 to 300 VDC			
P74EA				
AC Full Load Amp	16.0	9.2	8.0	—
AC Locked Rotor Amp	96.0	55.2	48.0	—
AC Non-Inductive Amp	16.0	16.0	16.0	16.0
Pilot Duty	125 VA, 120 to 600 VAC			
P74FA				
AC Full Load Amp	6.0	3.4	3.0	—
AC Locked Rotor Amp	36.0	20.4	18.0	—
AC Non-Inductive Amp	10.0	10.0	10.0	10.0
Pilot Duty	125 VA, 120 to 277 VAC			
P74JA				
1 Amp; 24 VAC Class 2; 50/60 Hz				

JOHNSON CONTROLS - P12 SERIES DIFFERENTIAL PRESSURE CONTROLS

SELECTION CHART



P12AA Differential Pressure Control

DESCRIPTION

The P12 Series Differential Pressure Controls are suitable for use with oil and/or non-corrosive refrigerants. The switch is actuated by a difference in pressure between the two sensing elements. The control is factory-set to open the switch (COM to 1) at a differential pressure of 18 psi (124 kPa) and close the switch (COM to 1) at a differential pressure of 12 psig (82 kPa). The control is not field-adjustable. This control may be connected to a P28 oil failure cutout control, with time delay, to give complete monitoring of lubrication on two refrigeration compressors driven by one motor.

SELECTION CHART

	DIFFERENTIAL PRESSURE COM to 1		
PART NO	Opens	Closes	MAXIMUM ALLOWABLE PRESSURE, psig (kPa)
P12AA-3C	18 psi (124 kPa)	12 psi (821 kPa)	425 (2390)