



## 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.

Refer to the *P47 Series Steam Pressure Controls Product Bulletin (LIT-125450)* for important product application information.

### 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.

### Repair Information

If the P74 Series Differential Pressure Control fails to operate within its specifications, replace the unit. For a replacement control, contact the nearest Johnson Controls® representative.



**P74EA-8 Differential Pressure Control**

### Selection Chart

Product Code Number	Switch Action	Range Pressure Differential psig (kPa) <sup>1</sup>	Switch Differential	Pressure Connections	Bellows Material
<b>For All Non-Corrosive Liquids</b>					
P74AA-1C	Single-Pole, Single-Throw (SPST) closes on decreases in pressure difference	8 to 70 Adjustable (55 to 483)	8 to 30 Adjustable	36 in. capillary with 1/4 in. flare nut	Stainless steel
P74BA-1C	SPST opens on decrease in pressure difference				
P74EA-8C	Single-Pole, Double-Throw (SPDT) (snap-acting)	2 to 26 Adjustable (14 to 207)	3.5 Fixed	36 in. capillary with 1/4 in. flare nut	Brass
P74EA-10C				1/4 in. external flare	
P74FA-1C		8 to 60 Adjustable (55 to 414)	1.5 Fixed	1/4 in. FNPT	
P74FA-5C					
P74FA-10C		2 to 26 Adjustable (14 to 207)			
P74JA-2C	SPDT (floating)	8 to 60 Adjustable (55 to 414)	2.5 Fixed	1/4 in. external flare	

1. Maximum continuous pressure to low pressure bellows - 180 psig (1,241 kPa)

### Technical Specifications

#### Electrical Ratings

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

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