



## P74 Series Differential Pressure Control

LIT-1927260

2020-04-22

### 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

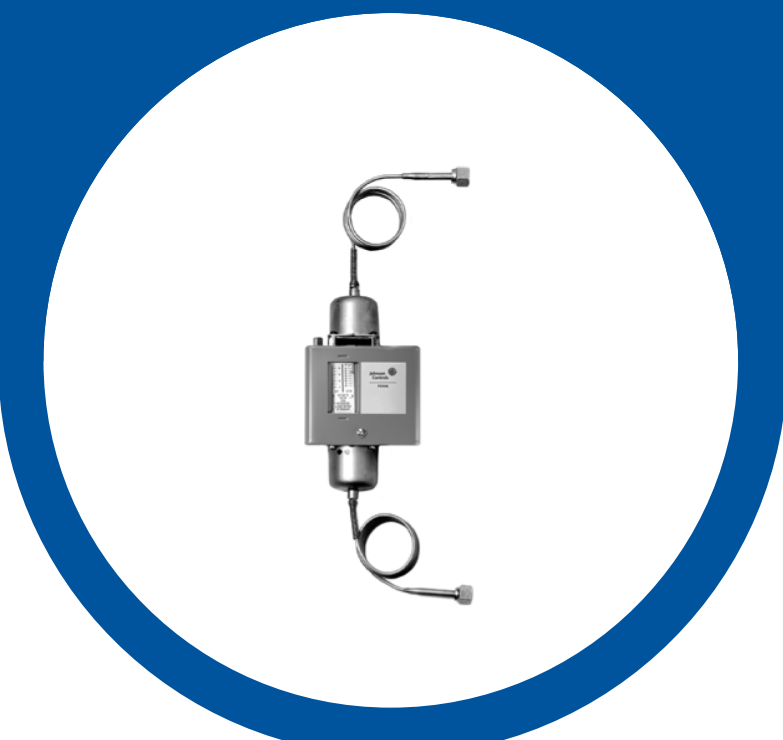
- field-proven Penn switch with a completely enclosed contact mechanism
- pressure differential setting is easily changed without removing the cover

### 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 include a universal mounting bracket.



P74AA, P74BA, P74EA, P74FA, P74JA

## 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.

## Selection chart

**Table 1: P74 Series 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-10 C					
P74FA-1C		1/4 in. FNPT			
P74FA-5C					
P74FA-10 C		2 to 26 adjustable (14 to 207)	2.5 fixed	36 in. capillary with 1/4 in. flare nut	
P74JA-2C	8 to 60 adjustable (55 to 414)	1/4 in. external flare			

<sup>1</sup> Maximum continuous pressure to low pressure bellows - 180 psig (1,241 kPa)

## Technical specifications

**Table 2: 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			

**Table 2: Electrical ratings**

Motor ratings	120 V	208 V	240 V	277 V
<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				

## Product warranty

This product is covered by a limited warranty, details of which can be found at [www.johnsoncontrols.com/buildingswarranty](http://www.johnsoncontrols.com/buildingswarranty).

Contact Johnson Controls:  
[www.johnsoncontrols.com/contact-us](http://www.johnsoncontrols.com/contact-us)

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## Single point of contact

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## Contact information

Contact your local branch office:  
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