

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 Pennswitch 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 | 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. 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 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 | | | |
| P74EA | | | | |
| 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 | | | |
| P74FA | | | | |
| 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 | | | |
| P74JA | | | | |
| 1 Amp; 24 VAC Class 2; 50/60 Hz | | | | |