



P28 Series Lube Oil Pressure Cutout Control with Time Delay

Description

The P28 series provides dependable lube oil protection on pressure of lubricated refrigeration compressors by sensing low lube oil pressure. A built-in time delay switch, accurately compensated for ambient temperature, allows for pressure pick up on start and avoids nuisance shutdowns on pressure drops of short duration during the running cycle.

Refer to the *P28 and P128 Series Lube Oil Controls with Built-in Time Delay Relay Product Bulletin (LIT-125420)* for important product application information.

Features

- direct-reading scale indication
- adjustable setpoint
- trip-free manual reset
- replacement timing relays available
- dust-protected switch

Applications

- semi-hermetic compressors
- P28 Control measures pressure available to circulate oil though the lubrication system (Net oil pressure is the difference between oil gauge and crankcase pressure.)

Accessories

- all models listed on this page include a universal mounting bracket
- replacement timing relays— refer to *Replacement Timing Relays for P28 and P29 Lube Oil Controls Catalog Page (LIT-1927395)*

Repair Information

If the P28 Series Lube Oil Pressure Cutout Control with Time Delay fails to operate within its specifications, replace the unit. For a replacement control, contact the nearest Johnson Controls® representative.



P28AA Lube Oil Pressure Cutout Control

Selection Chart

Product Code Number	Time Delay	Time Delay Heater Circuit VAC	Type of Reset	Range ¹ psi (kPa)	Refrigerant (R)	Pressure Connection
P28AA-1C ²	90 seconds	120/240	Manual	8 to 70 (55 to 483)	Non-corrosive ³	36 in. capillary with 1/4 in. flare nut
P28AA-2C ⁴	60 seconds					
P28AA-17C ⁵	120 seconds					
P28AA-18C	45 seconds					
P28AN-1C	90 seconds	120/240	Manual	8 to 70 (55 to 483)	Ammonia	1/4 in. internal NPT
P28DN-1C	90 seconds	120/240	Manual	8 to 70 (55 to 483)	Non-corrosive ³	36 in. capillary with 1/4 in. flare nut
P28DA-1C	With Runlight and Alarm Terminals					
P28GA-2C	90 seconds					
P28NA-5C	120 seconds	24 VAC or VDC	Manual			

1. Switch differential approximately 5 psig (34 kPa). Time delay relay energizes at 9 psig (61 kPa) pressure difference, de-energized at 14 psig (97 kPa) difference
2. Replaces Ranco® P30-3701
3. Non-corrosive refrigerants include R-12, R-22, R-134A, R-500, R-502 (R)
4. Replaces Ranco P30-3601
5. Replaces Ranco P30-3801

Technical Specifications

The maximum bellows pressure is 180 psig (2,241 kPa).

Electrical Ratings - Pilot Duty

Time Delay Heater Circuit	Pilot Circuit	Alarm Circuit (must be same voltage as pilot circuit)	P28DA-1 Contact Rating 2 to 1: 2 to 3 (must be same voltage as time delay circuit)	
			Crankcase Heater: Term 2 to 1	Runlight: Term 2 to 3
120/240 VAC	750 VA, 120/240 VAC	125 VA, 120/240 VAC	10 A 120 VAC, 5 A 240 VAC	10 W
24 VAC or VDC	125 VA, 24 VAC 57.5 VA, 24 VDC	125 VA, 24 VAC 57.5 VA, 24 VDC	---	

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products. © 2015 Johnson Controls, Inc.