



P28 Series Lube Oil Pressure Cutout Control with Time Delay Catalog Page

LIT-1927185

2020-04-22

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

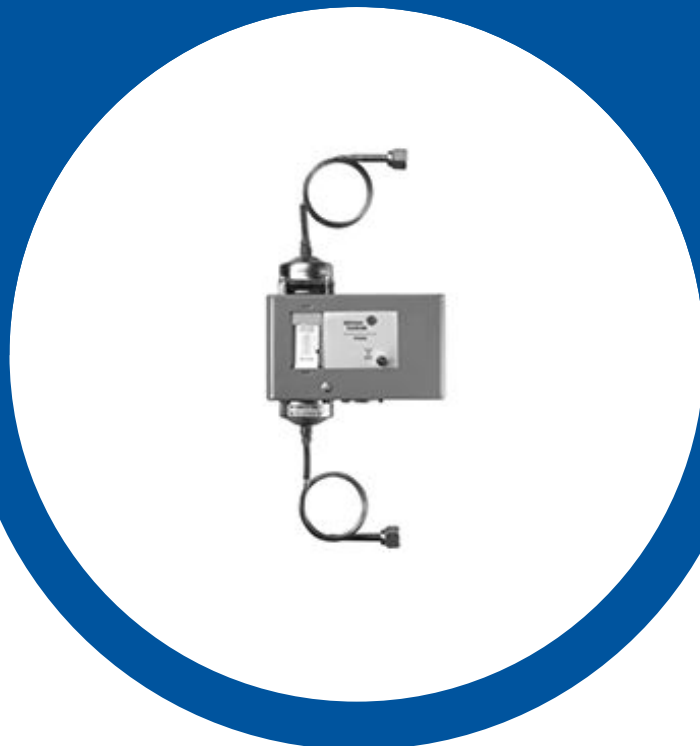
- Direct-reading scale indication
- Adjustable setpoint
- Trip-free manual reset
- Replacement timing relays available
- Dust-protected switch

Applications

- Semi-hermetic compressors
- P28 Control measures pressure available to circulate oil through 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



P28AA, P28AN, P28DN, P28DA, P28GA, P28NA

- Replacement timing relays— refer to *Replacement Timing Relays for P28 and P29 Lube Oil Controls Catalog Page, LIT-1927395 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.

Selection Chart

Table 1: 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 with	120/240	Manual	8 to 70 (55 to 483)	Non-corrosive ³	36 in. capillary with 1/4 in. flare nut
P28DA-1C	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

P28 Series Lube Oil Pressure Cutout Control with Time Delay technical specifications

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

Table 2: 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	---	

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

APAC	Europe	NA/SA
JOHNSON CONTROLS C/O CONTROLS PRODUCT MANAGEMENT NO. 32 CHANGJIJANG RD NEW DISTRICT WUXI JIANGSU PROVINCE 214028 CHINA	JOHNSON CONTROLS WESTENDHOF 3 45143 ESSEN GERMANY	JOHNSON CONTROLS 507 E MICHIGAN ST MILWAUKEE WI 53202 USA

Contact information

Contact your local branch office: www.johnsoncontrols.com/locations

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