



## P45 Series Lube Oil Pressure Cutout Control with Time Delay

### Description

The P45 Control provides dependable, low lube oil pressure protection for refrigeration compressors. The low-adjustable factory-set pressure setting provides operation to the compressor manufacturer's specification. A built-in time delay relay, compensated for ambient temperature, allows for pressure pick-up on start and avoids nuisance shutdowns on short duration pressure losses during the running cycle.

Refer to the *P45 Series Oil Pressure Cutout Controls with Built-in Time Delay Relay Product Bulletin (LIT-125445)* for important product application information.

### Features

- universal mounting
- trip-free manual reset
- ambient compensated time delay

### Accessories

These controls are supplied without mounting brackets. If brackets are required, order kit number **BKT38A-600R**, which contains five **271-51** Angle Mounting Brackets with screws.

### Applications

The P45 control is used on semi-hermetic compressors. It measures net oil pressure available to circulate oil through the compressor's lubrication system. (Net oil pressure is the difference between oil pump pressure and the crank case pressure.)

### Repair Information

If the P45 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.



**P45NCALube Oil Pressure Cutout Control**

### Technical Specifications

For all non-corrosive refrigerants.

#### Electrical Rating – Pilot Duty

Time Delay Heat Circuit	Pilot Duty
120/240 VAC	750 VA, 120/240 VAC
24 VAC	125 VA, 24 VAC

### Selection Chart

Product Code Number	Time Delay <sup>1</sup>	Heater Circuit VAC	Type of Reset	Maximum Bellows Pressure, psig (kPa)	Factory Setting, psi (kPa) Fixed	Pressure Connection
<b>Copeland® Compressors</b>						
P45NAA-5C	120 seconds	24	Manual	425 (2,390)	9 (62) <sup>2</sup>	36 in. capillary with 1/4 in. flare nut
P45NAA-10C	90 seconds					48 in. capillary with 1/4 in. flare nut
P45NCA-12C <sup>3</sup>	120 seconds	120/240				36 in. capillary with 1/4 in. flare nut
P145NCA-12C <sup>4</sup>						1/4 in. external flare (Style 5)
P145NCB-12C <sup>5</sup>						
<b>Carlyle® Compressors</b>						
P45NCA-82C <sup>6</sup>	45 seconds	120/240	Manual	425 (2,390)	6.5 (45) <sup>7</sup>	36 in. capillary with 1/4 in. flare nut
P145NCA-82C <sup>8</sup>						1/4 in. external flare (Style 5)
P145NCB-82C <sup>9</sup>						

1. Relay is not field-replaceable
2. Switch differential is approximately 5 psi (34 kPa). Time delay relay energizes at 9 psi (61 kPa) pressure difference, de-energizes at 14 psi (97 kPa) difference.
3. Replaces Ranco® P30-5826
4. Replaces Ranco P30-5827
5. Replaces Ranco P30-5827 (Includes alarm wire)
6. Replaces Carlyle/Carrier® Code No. HKCA-500, 6342050
7. Switch differential is approximately 4.5 psi (34 kPa). Time delay relay energizes at 6.5 psi (45 kPa) pressure difference, de-energizes at 11 psi (76 kPa) difference.
8. Replaces Carlyle/Carrier Part No. HKCA-500, 6342050 with 36" SEC99A UltraCap®
9. Replaces Carlyle/Carrier Part No. HKCA-500, 6342050 with 36" SEC99A UltraCap (Includes alarm wire)