JOHNSON CONTROLS

Controls Group 507 E. Michigan Street
P.O. Box 423, Milwaukee, WI 53202
Code No. LIT-1927240

P70 Series

Single Pole Dual Pressure Control

P70LB-1
Universal Mounting Bracket Included

Description

This P70 Series of dual pressure controls employs a SPST switch, that is opened when either high pressure or low pressure beyond the control settings is sensed at the control's two bellows sensing elements. The load-carrying contacts provide direct control of AC motors within the control's rating. These controls provide close high–open low (low pressure) or open high–close low (high pressure) contact action.

Features

- full adjustability through all pressure ranges
- minimum differential
- long life contact structure...no bounce on make
- manual reset models are "trip-free"

Accessories

- includes a universal mounting bracket.

Applications

- air conditioning and refrigeration applications
- control of air, water, and oil pressure

To Order

Specify the code number from the following selection chart. Also refer to *P170 Series Single Pole Dual Pressure Control*.

Cross Reference

Ranco	JCI/PENN
012-1502	P70LB-6
012-1549	P70LB-1
012-1554	P70LB-6
012-1594	P70NA-1
012-4834	P70SA-1

Selection Chart

Code Number	Switch Action	Low Pressure psig (kPa)		High Pressure psig (kPa)		Pressure Connector	Limited Knob Adj.	Maximum Over-pressure psig (kPa)
		Range	Diff	Range	Diff (Non-Adj)			
MICRO-SET™ FOR R-12, R-22, R-134A, R-500, R-502 (R)								
P70LB-6C (a)	SPST	12 in. to 80 (-41 to 552)	Min 5 (34) Max 35 (241)	100 to 500 (690 to 3447)	65 psi at < 300 psig 75 psi at 300-400 psig 95 psi at > 400 psig	36 in. Cap. with 1/4 in. Flare Nut	Cut-out (b)	325 Low 525 High (2241 Low) (3620 High)
P70MA-18C					Lockout (Requires Manual Reset)	36 in. Cap. with 1/4 in. Flare Nut	None	
"ALL RANGE" FOR R-12, R-22, R-134A, R-500, R-502 (R)								
▲ **P70LB-1C** (c)	SPST	20 in. to 100 (-68 to 690)	Min 7 (48) Max 50 (345)	100 to 500 (690 to 3447)	65 psi < 300 psig 75 psi 300-400 psig 95 psi > 400 psig	36 in. Cap. with 1/4 in. Flare Nut	Cut-out (b)	325 Low 525 High (2241 Low) (3620 High)
▲ **P70MA-1C**					Lockout (Requires Manual Reset)	36 in. Cap. with 1/4 in. Flare Nut	None	
▲ **P70NA-1C** (d)			Lockout (Manual Reset)		Lockout (Requires Manual Reset)	36 in. Cap. with 1/4 in. Flare Nut		
P70SA-1C (e)	Two independent SPDT switches	12 in. to 80 (-41 to 552)	Min 5 (34) Max 35 (241)	100 to 500 (690 to 3445)	Switchable between Manual and Automatic Reset	36 in Cap. with 1/4 in. Flare Nut	None	525 Low 525 High
FOR AMMONIA								
P70LA-2C	SPST	20 in. to 100 (-68 to 690)	Min. 7 (48) Max 50 (345)	100 to 500 (690 to 3445)	65 psi < 300 psig 75 psi 300-400 psig 95 psi > 400 psig	1/4 in. Female NPT Conn.	None	325 Low 525 High (2241 Low) (3620 High)
P70MA-2C					Lockout (Requires Manual Reset)	1/4 in. Female NPT Conn.		

(a) Replaces Ranco 012-1505, 012-1506, 012-1554
(b) Adjusting knob supplied on differential (low side cutout setting) to limit adjustment 5 psi (34 kPa) above or below setting.
(c) Replaces Ranco 012-1549
(d) Replaces Ranco 012-1594.
(e) Replaces Ranco 012-4834.

▲ Universal Replacement ★ Non-Stock Item. Built to Order. (R) For Refrigerants Not Listed, Contact Application Engineering

P70 Series Single Pole Dual Pressure Control (Continued)

SPDT Electrical Ratings (per switch) (P70S models)

	Standard Single-Phase Ratings			
	120 VAC	**208 VAC**	**240 VAC**	**277 VAC**
Motor Full-Load Amp	16.0	9.2	8.0	7.0
Motor Locked-Rotor Amp	96.0	55.2	48.0	42.0
Non-Inductive Amp	16.0	9.2	8.0	7.0
Pilot Duty	125 VA at 24 VAC; 720 VA at 277 VAC			

SPST Electrical Ratings (P70L, P70M, and P70N models)

	Standard Single-Phase Ratings			Hermetic Compressor Single-Phase Ratings
	120 VAC	**208 VAC**	**240 VAC**	**208/240 VAC**
Motor Horsepower	1.5	3	3	—
Motor Full-Load Amp	20	18.7	17	20
Motor Locked-Rotor Amp	120	112.2	102	120
Non-Inductive Amp	22	22	22	—
Pilot Duty	125 VA at 120 to 600 VAC; 57.5 VA at 120 to 300 VDC			