

Controls Group 507 E. Michigan Street P.O. Box 423, Milwaukee, WI 53202 Code No. Lit-1927300

P170 Series

Single Pole Dual Pressure Control



P170LB

Description

The P170 Series controls employ a set of SPST or SPDT contacts that are opened and closed from pressure actuated bellows. The load-carrying contacts provide direct control of an AC motor within the control's electrical rating. (See P70 electrical rating chart.)

Accessories

All controls on this page include a universal mounting bracket.

Applications

• air conditioning and refrigeration applications

Features

- control
 - full adjustability throughout the pressure range
 - minimum differential
 - long life contact structure, no bounce on make
 - manual reset models are "trip-free"

To Order

Specify the code number from the following selection chart. Also refer to *P70 Series Single Pole Dual Pressure Control.*

Selection Chart

Code Number	Switch Action	Low Pressure psig (kPa)		High Pressure psig (kPa)		Pressure	Limited Knob	Max Bellows Overrun
		Range	Differential	Range	Differential	Connector	Adjustment	Pressure psig (kPa)
▲ P170LB-1C ^(a)	SPST	20 in. to 100 (-68 to 690)	Min 7 (48) Max 50 (345)	100 to 500 (690 to 3447)	65 psi at < 300 psig, 75 psi at 300-400 psig, 95 psi at > 400 psig,	1/4 in. Male Flared Conn.	Cutout ^(b)	325 (2241) Low 525 (3620) High
▲ P170LB-6C ^(c)		12 in. to 80 (-41 to 552)	Min 5 (34) Max 35 (241)					525 (3620) Low 525 (3620) High
▲ P170MA-1C ^(d)		20 in. to 100 (-68 to 690)	Min 7 (48) Max 50 (345)		Lockout (Manual Reset)		None	325 (2241) Low 525 (3620) High
A P170MA-18C (e)		12 in. to 80 (-41 to 552)	Min 5 (34) Max 35 (241)					525 (3620) Low 525 (3620) High
▲ P170NA-1C ^(f)		20 in. to 100 (-68 to 690)	Lockout (Manual Reset)					325 (2241) Low 525 (3620) High
P170SA-1C	Independent SPDT Switches	12 in. to 80 (-41 to 5521)	Min 5 (34) Max 35 (241)		Switchable between Manual and Automatic			525 (3620) Low 525 (3620) High

(a) Replacement for P170LB-1*. Replaces Ranco 012-1549, 012-1550.

(b) Adjusting knob supplied on differential (low side cutout setting) to limit adjustment 5 psi above or below setting.

(c) Replacement for P170LB-6*. Replaces Ranco 012-1505, 012-1506*, 012-1554, 012-1502, 012-4139.

(d) Replacement for P170MA-1*. Replaces Ranco 012-4834.

(e) Replacement for P170MA-18*. Replaces Ranco 012-4833.

(f) Replacement for P170NA-1*. Replaces Ranco 012-1594.

* Refrigerant hose must be ordered separately.

SPST Electrical Ratings (P170L, P170M, and P170N 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 VD						

SPDT Electrical Ratings (per switch) (P170S 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 120 to 600 VAC					

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

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