

JOHNSON CONTROLS - Pressure Switch

P61 Series

Selection Chart



P61 Pressure Switch

DESCRIPTION

The P61 Series Pressure Switches automatically control residential water pumps, small air compressors (not requiring mechanical release valves), and other electrically-operated pressure equipment. They use a Double-Pole/Single-Throw (DPST) switch that opens on pressure rise. The P61 switches are enclosed in a compact NEMA 1 case and are available with a choice of four standard ranges.

FEATURES

- Small size, narrow design, and small turning radius allow control to fit in tightly-spaced applications
- Nylon-reinforced Buna-N diaphragm provides long life and trouble-free operation
- Large screw-type terminals allow quick and easy wiring

SELECTION CHART

PART NO	Factory Setting psig (kPa)		Cut-out Range psig (kPa)	Differential psi (kPa)		PRESSURE CONNECTOR	Pulsation Orifice	Max Overrun Pressure
	Cut-in	Opens		Min	Max			
P61AA-6C	40 (276)	20 (138)	15 to 70 (103 to 483)	15 (103)	30 (206)	1/4 in. NPTF	Yes(Snap-in)	175 psi
P61AA-35C	15 (103)	8 (55)	6 to 30 (41 to 207)	4 (28)	11 (76)	1/4 in. NPTF	Yes(Snap-in)	175 psi
P61NA-2C	85 (585)	60 (414)	40 to 100 (276 to 700)	16 (110)	38 (262)	1/4 in. NPTF	Yes(Snap-in)	250 psi
P61NA-4C	125 (860)	95 (655)	90 to 150 (600 to 1000)	25 (172)	40 (276)	1/4 in. NPTF	Yes(Snap-in)	250 psi

(a) Cut-in = Cut-out - Diff.

SPECIFICATIONS

P61 SERIES PRESSURE SWITCH			
	120 VAC (1, 2, 3 Phase)	240 VAC (1, 2, 3 Phase)	32 VDC
Contact Ratings	Horsepower	1	1/4
	Full Load Amps	16	8.6
	Locked Rotor Amps	96	48
Contact Unit	Snap-acting High Contact Force		
Material	Diaphragm	Nylon Reinforced Buna-N	
	Case	0.062 in. (1.57 mm) Cold Rolled Steel	
	Cover	0.032 in. (0.8 mm) Cold Rolled Steel	
	Finish	Gray Baked Enamel	
Conduit Openings	Two 0.88 in. (22 mm) Diameter Holes for 1/2 in. Conduit		
Enclosure	NEMA 1		
Wiring Connections	Screw Type Terminals		
Agency Listings	UL Guide No. NKPZ, NKPZ7, File EZ9374 CSA Class 3211 06, File LR948		
Ambient Operating Conditions	0 to 77°F (-18 to 25°C)		
Dimensions (H x W x D)	3.98 X in. (101 x 74 x 50 mm) x 2.92 x 1.97		

JOHNSON CONTROLS

P100 Series

Encapsulated Pressure Switches

Description

P100 Series switches are encapsulated, nonadjustable, SPST, direct mount switches for use with noncorrosive refrigerants. The switches are available with automatic reset in both open low and open high configurations and manual reset with open high action.

Features

- compact size and light weight allow for direct mounting
- trip-free manual reset (manual reset models)...contacts cannot be overridden by continued depression of the reset button
- use with all non-corrosive refrigerants
- encapsulated switch, dust tight

Applications

- low limit, high limit, and fan cycling control in commercial refrigeration
- ice machines
- food service equipment

Technical Specifications Electrical Ratings

Ratings	120 VAC	240 VAC
AC Full Load Amps (FLA)	5.8	2.9
AC Locked Rotor Amps (LRA)	34.8	15.0
Pilot Duty – 375 VA at 120/240/277 VAC; 2 amps at 28 VAC/VDC		



P100

- 1/4 in. female flare fitting with built-in Schrader type depressor is standard

- electrical connections are made to 48 in.

Selection Chart

Part Number	Switch Action	Application	Setting – psig (kPa)		Replaces:			
			Opens	Closes	Gemline	Ranco	Robertshaw	Saginomiya
P100AP-201C	Open On Pressure Drop	Low Cutout	10 (69)	32 (221)	–	MPL-7011	3100-050	–
P100AP-2C			35 (241)	60 (414)	–	MPF-7004	3100-004	–
P100AP-9C ¹			25 (172)	80 (52)	–	–	–	–
P100AP-3C		Fan Cycling	150 (1034)	225 (1551)	–	MPF-7008	–	ABC-AA01
P100AP-4C			170 (1172)	250 (1724)	–	–	–	–
P100AP-332C ²			300 (2068)	400 (2758)	–	–	–	–
P100AC-1C ³		Low Cutout	5 (34)	20 (138)	–	MPL-7001	–	–
P100AC-2C ³	15 (103)		30 (207)	–	MPL-7002	–	–	
P100CP-1C	Open On Pressure Rise	High Cutout	400 (2758)	300 (2068)	PC151	MPH-7107	3100-151	–
P100CP-2C			425 (2930)	325 (2241)	PC100	MPH-7108	3100-100	–
P100CC-9C ³			275 (1896)	175 (1207)	–	–	3100-112	–
P100DA-1C		High Limit	410 (2827)	Lockout Manual Reset	PC103	–	3100-103	–
P100DA-2C			475 (3275)		–	–	3100-106	–
P100DA-35C			350 (2413)		–	–	–	–
P100DA-81C ²			630 (4344)		–	–	–	–
P100DC-3C ⁴	375 (2586)	–	–	–	–	–		

1. 18 in. wire leads
2. Compatible with R410A refrigerant
3. Includes conduit clamp (shown above)
4. In conduit box