

P470

Electronic Pressure Control with Display



P470 Pressure Control with a P399 Transducer and WHA-P399 Wiring Harness (Control, transducer, and harness must be purchased separately.)

Description

The P470 Electronic Pressure Control with Display is a single-stage, On/Off, electronic pressure control with an SPDT (Single-Pole Double-Throw) output relay. The control may be field set to operate in

one of three pressure ranges (0 to 100 psi, 0 to 500 psi, or 50 to 750 psi), as either an open-high or open-low control.

The P470 control features a large LCD that displays the sensed pressure and other system-status indicators, as well as the adjustable setpoints in the programming mode. The P470 control has a lockable, 3-button touchpad for adjusting setpoints, and a front-panel LED (Light-Emitting Diode) that indicates the output relay status.

The P470 control uses a P399 Electronic Pressure Transducer to generate a pressure signal and WHA-P399 Wiring Harness, which eliminates many of the constraints of capillary-tube control applications.

Features

- easy-to-read liquid crystal display (LCD) clearly displays the sensed pressure (and other control information), and in many situations pressure may be monitored without applying gauges to the controlled equipment

- three field-selectable pressure ranges between 0-750 psi provide the flexibility to cover most HVAC/R pressure applications
- 24 VAC, and 120 or 208/2 4 0VAC models increase application options, with two controls that cover most common voltages
- lockable, 3-button, front-panel touchpad deters tampering and over adjustment of control settings by unauthorized personnel
- built-in, adjustable, anti-short cycle time-delay reduces compressor short cycling and nuisance lockouts, which can extend compressor life
- economical, versatile transducer and wiring harness eliminate many of the constraints of capillary control applications and allow up to a 100 ft (30.5m) cable between control and transducer

To Order

Specify the code number from the selection chart.

Specifications

P470 Electronic Pressure Control with Display				
Operating Pressure Ranges		0 to 100 psi	0 to 500 psi	50 to 750 psi
Minimum Differential Pressure		5 psi	20 psi	20 psi
Displayed Resolution		1 psi	3 psi	5 psi
Control Accuracy		± 1.5% of selected Operating Pressure Range plus transducer accuracy		
Supply Voltage	P470FB-1	24 VAC, 50/60 Hz, Class 2		
	P470EB-1	120 or 208/240 VAC, 50/60 Hz		
Power Consumption		1.8 VA Maximum		
	P470FB-1 (24 volt model)	100 VA, 30 VAC maximum, Class 2		
	P470EB-1 (120 or 208/240 volt model)	120V	208V	240V
Output Relay	Horsepower N.O. (N.C.):	1 (1/4) hp	1 (1/3) hp	1 (1/2) hp
	Full Load Amperes N.O. (N.C.):	16 (5.8)A	9.2 (4.0)A	8.0 (4.9)A
Contacts	Locked Rotor Amperes N.O. (N.C.):	96 (34.8)A	55.2 (24)A	48 (29.4)A
Electrical	Non-inductive Amperes N.O. (N.C.):	15 (10)A	10 (10)A	10 (10)A
Ratings	Pilot Duty:	125 VA (N.O.) @ 24 to 240 VAC 125 VA (N.C.) @ 120 to 240 VAC 50 VA (N.C.) @ 24 VAC		
Transducer Type		P399 Electronic Pressure Transducer		
Ambient Temperature at Control		Operating: -30 to 140°F (-34 to 60°C) Shipping: -40 to 185°F (-40 to 85°C)		
Ambient Humidity at Operating Control		0 to 95% RH non-condensing; Maximum Dew Point: 85°F (29°C)		
Enclosure, Case and Cover		NEMA 1 High-impact Thermoplastic		
Agency Information		UL: File SA516; CCN SDFY Canadian UL: File SA516; CCN SDFY7 FCC/DOC Part 15, Class A		

Selection Chart

Code Number	Description
P470FB-1C	Low Voltage (<30 VAC) Electronic Pressure Control with Display Supply Voltage: 24 VAC Class 2 Transformer
P470EB-1C	Line Voltage Electronic Pressure Control with Display Supply Voltage: 120 or 208/240 VAC

Note: P470 controls do not include a transducer or wiring harness. Transducer and wiring harness must be purchased separately. P399 transducer must be matched to the selected pressure range.

Accessories

P399AAA-1C	0 to 100 psi Pressure Transducer with 1/8 in. NPT Male Fitting
P399AAC-1C	0 to 100 psi Pressure Transducer with 1/4 in. SAE (Schrader) Female Fitting with integral valve depressor
P399BAA-1C	0 to 500 psi Pressure Transducer with 1/8 in. NPT Male Fitting
P399BAC-1C	0 to 500 psi Pressure Transducer with 1/4 in. SAE (Schrader) Female Fitting with integral valve depressor
P399CAA-1C	0 to 750 psi Pressure Transducer with 1/8 in. NPT Male Fitting
P399CAC-1C	0 to 750 psi Pressure Transducer with 1/4 in. SAE (Schrader) Female Fitting with integral valve depressor
WHA-P399-200C	6 ft 6-1/2 in. (2m) 3-Wire Cable with Plug-in Connector for P399 Transducer
WHA-P399-400C	13 ft 3 in. (4m) 3-Wire Cable with Plug-in Connector for P399 Transducer