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PCS SERIES HIGH PRECISION AC PHASE CONTROL

FEATURES

- Fully Solid State
- 0 to 100% Adjustment Range
- Extremely Stable Over Voltage @ Temperature Variations
- Insensitive to Tolerances in Potentiometer Value
- Standard 1/4" Quick Connect Termination
- Encapsulated to Withstand Harshest Environments
- Small Size

SPECIFICATIONS

1. Input

- 1.1 Operating Voltage: 24, 120, 230 VAC & Selecable 120/230 VAC
- 1.2 Tolerance: $\pm 20\%$ Of Nominal
- 1.3 Frequency: 50 - 60 Hertz

2. Output

- 2.1 Type: Solid State
- 2.2 Ratings:
 - Blank** - 1 Amp Steady State, (10 Amp Inrush, 50 mA Min.)
 - A** - 6 Amp Steady State, (60 Amp Inrush, 200 mA min.)
 - B** - 10 Amp Steady State, (100 Amp Inrush, 225 mA min.)
 - C** - 15 Amp Steady State, (150 Amp Inrush, 250 mA min.)
 - D** - 2.5 Amp Steady State, (50 Amp Inrush, 150 mA min.)
 - H** - 25 Amp Steady State, (250 Amp Inrush, 500 mA min.)
 - Maximum Plate Temperature: 85°C
 - Maximum Plate Temperature: 60°C
- For external output option, (3) 12" wire leads are provided to connect to an externally mounted output triac.
- Please consult factory for specific application assistance.
- 2.3 Voltage Drop: 2.5 Volts Typical At Rated Current
- 2.4 External Resistance: 1 Megohm = Minimum Output Voltage (24 VAC Units) 100K Ohm = Minimum Output Voltage
- 2.5 Range: 0 - 100% of Line Voltage, Minus Voltage Drop
- 2.6 Stability vs. Voltage & Temperature: $\pm 0.5\%$

3. Protection

- 3.1 Transient: ± 1500 Volts for 150 Microseconds
- 3.2 Dielectric Breakdown: 1500 Volts RMS Minimum

4. Mechanical

- 4.1 Mounting: One #8 or #10 Screw
- 4.2 Termination: 1/4" Quick Connect Terminals
- 4.3 Style: Surface Mount/Encapsulated With Heatsink Surface (See Dimension Diagram)

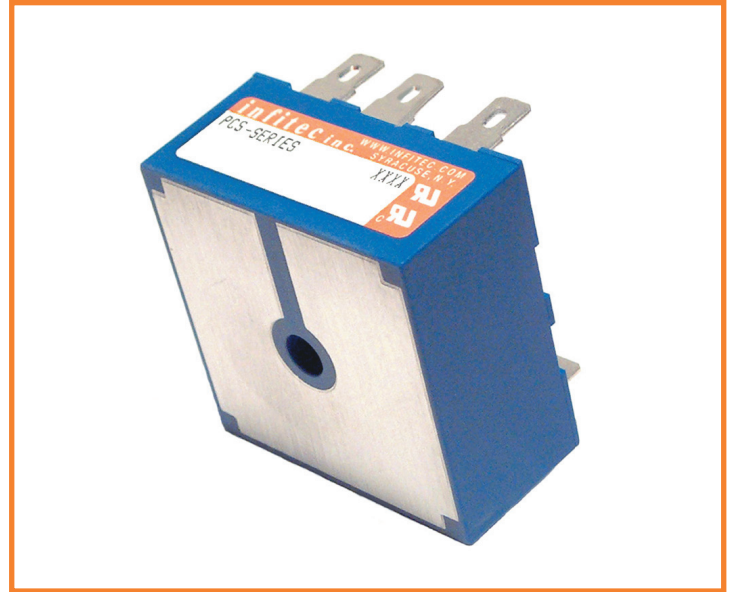
5. Environmental

- 5.1 Operating Temperature: -20°C to +80°C
- 5.2 Storage Temperature: -30°C to +85°C
- 5.3 Humidity: 95% Relative, Non-Condensing

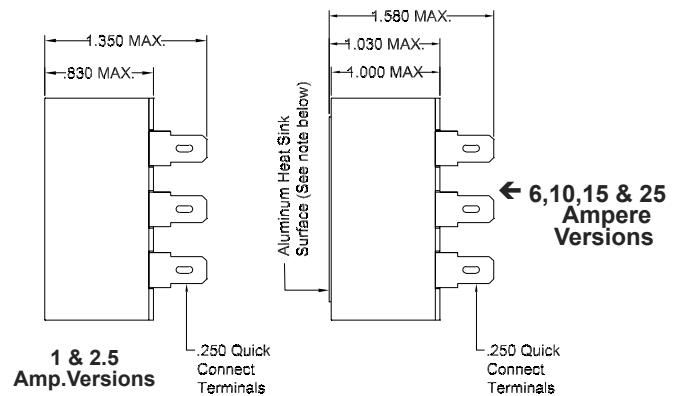
MODE OF OPERATION

AC PHASE CONTROL

Power is applied to the input terminals at all times. Adjusting the control potentiometer changes the voltage across the load. Adjustment range 0-100% minus (Vline - Vload)

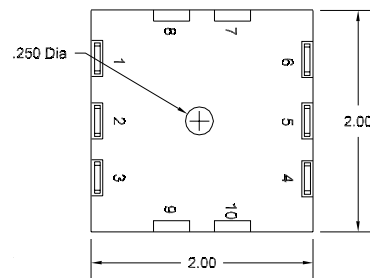


DIMENSIONS



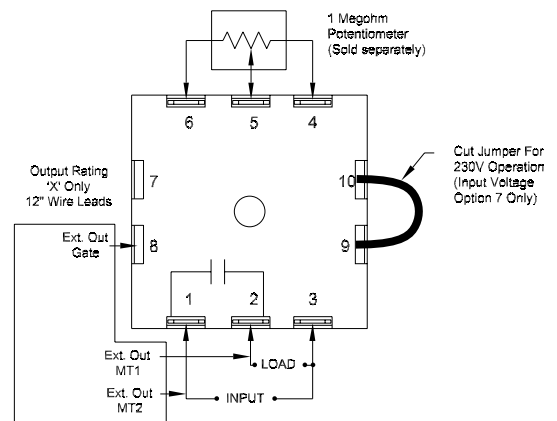
1 & 2.5 Amp Versions

6, 10, 15 & 25 Ampere Versions



NOTE: For maximum current rating the unit's metal backing must be installed against an aluminum surface of at least 1/16" thickness. A suitable thermal compound should be applied to the unit's metal surface prior to mounting. Refer to Application Note #AN1001 HEATSINKING HIGH CURRENT SOLID STATE CONTROLS.

CONNECTION DIAGRAM



ORDERING INFORMATION		
SERIES	INPUT VOLTAGE	OUTPUT RATING
PCS	4 - 24 VAC	(Blank) - 1 Amp
	5 - 120 VAC	A - 6 Amp
	6 - 230 VAC	B - 10 Amp
	7 - 120/230 VAC	C - 15 Amp
		D - 2.5 Amp
	H - 25 Amp	X - External Output Triac