

crydom

DataSheet **Control Relays**

PCV Series



- Proportional controller
- Ratings from 15A to 90A @ 240 VAC
- 2-7 V DC or 2-10 V DC analog input range
- For use with resistive loads only

PRODUCT SELECTION

Description	15 A	25 A	50 A	75 A	90 A
2-7 VDC Control	7PCV2415	7PCV2425			
2-10 VDC Control	10PCV2415	10PCV2425	10PCV2450	10PCV2475	10PCV2490

OUTPUT SPECIFICATIONS (1)

Description	15 A	25 A	50 A	75 A	90 A
Operating Voltage (47-63Hz) [Vrms]	100-240	100-240	100-240	100-240	100-240
Transient Overvoltage [Vpk]	600	600	600	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mA]	10	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	200	200	200	200	200
Maximum Load Current (3) [Arms]	15	25	50	75	90
Minimum Load Current [Arms]	0.15	0.15	0.15	0.15	0.15
Maximum Surge Current (16.6ms) [A _{pk}]	150	250	625	1000	1200
Maximum On-State Voltage Drop @ Rated Current [V _{pk}]	1.6	1.6	1.6	1.6	1.6
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	94	260	1620	4150	6000
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	7PCV24xx	10PCV24xx
Control Voltage Range	2-7 VDC	2-10 VDC
Typical Input Current @ 5 VDC	4 mA	4 mA

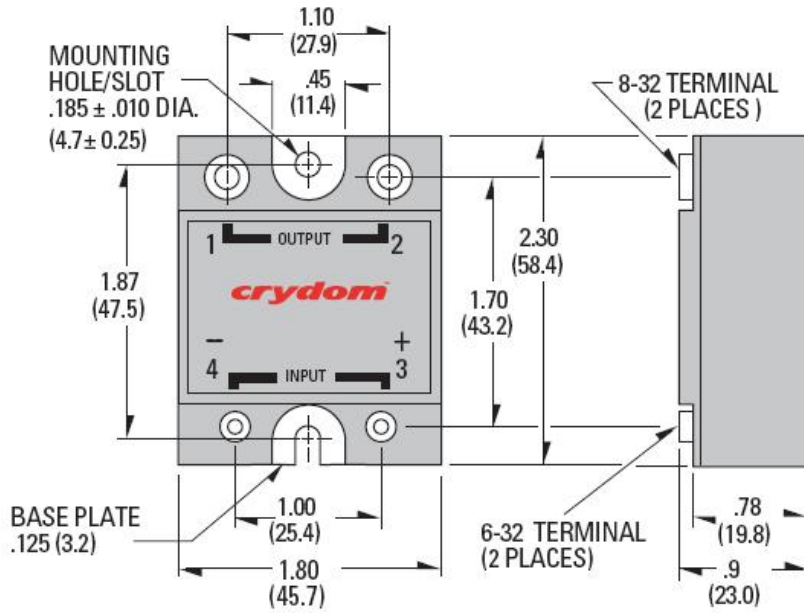
GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Signal to Load (50/60Hz)	2500 Vrms
Dielectric Strength, Signal to Base	2500 Vrms
Ambient Operating Temperature Range	-30 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	3.5 oz. (100g)
Encapsulation	Thermally Conductive Epoxy
Terminals	Screws and Saddle clamps Furnished, Unmounted

GENERAL NOTES

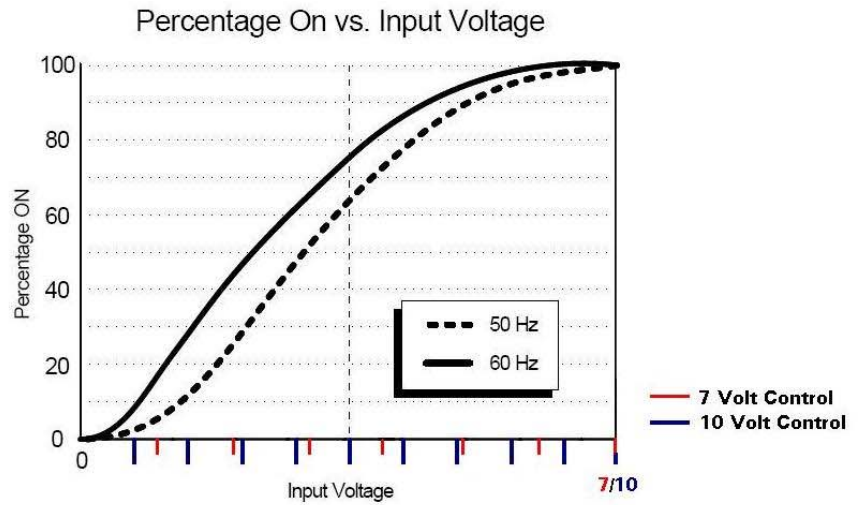
1) All parameters at 25°C unless otherwise specified.

MECHANICAL SPECIFICATIONS

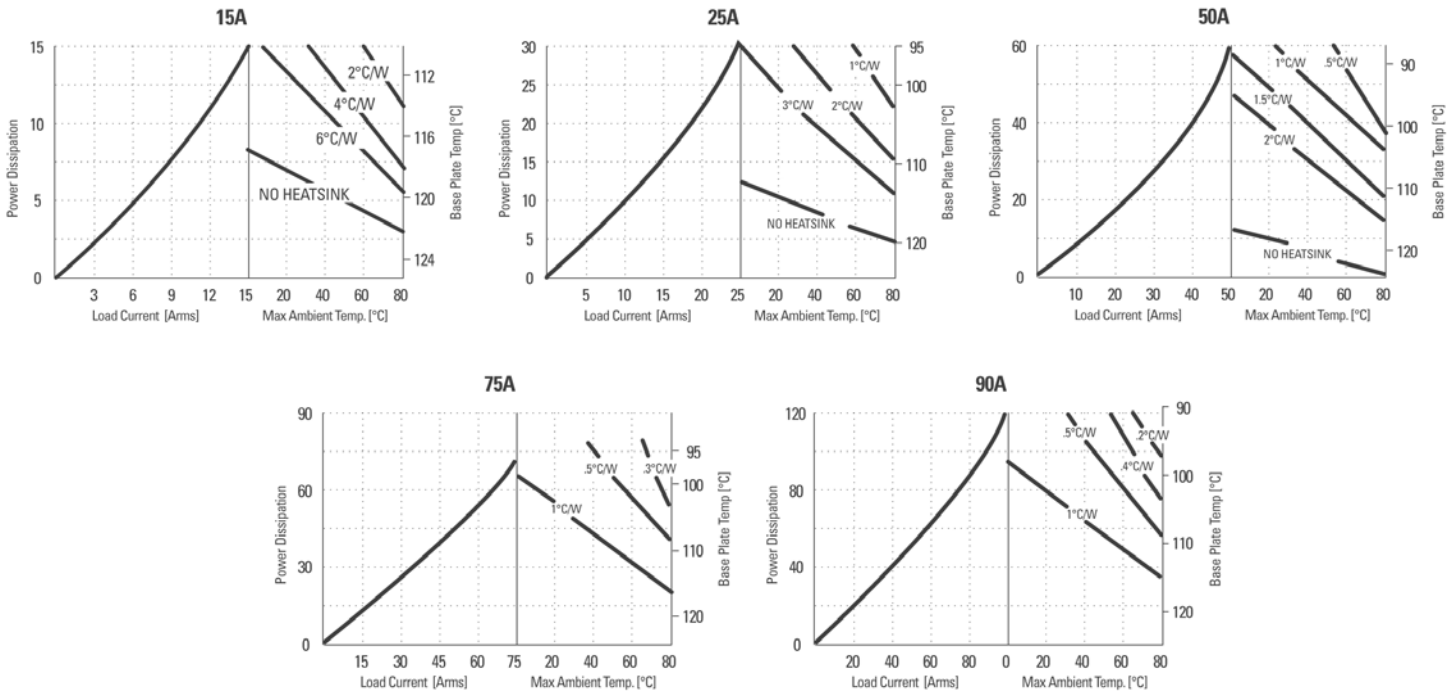


All dimensions are in inches (millimeters)

WIRING DIAGRAM



THERMAL DERATE INFORMATION



TYPICAL APPLICATIONS

- Industrial temperature controllers
- Light dimming
- Vibratory feeders
- Resistive heating elements
- Rectified DC motors
- Conveyor speed control

UNSUITABLE APPLICATIONS

The PCV is not suitable for some load applications including, but not limited to the following:

- AC motor control
- Three Phase motors
- Transformers requiring pure sine wave input
- Zero crossing applications

Please contact Crydom's application Engineering department for additional Information and specific application questions.

AGENCY APPROVALS

