

| PCV SERIES

CONTROL RELAYS



Features

- Proportional controller
- Ratings from 15 A to 90 A @ 280 VAC
- 2-7 VDC or 2-10 VDC 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

SPECIFICATIONS ¹

Output

Description	15 A	25 A	50A	75 A	90 A
Operating Voltage (47-63Hz) [Vdc]	100-280	100-280	100-280	100-280	100-280
Transient Overvoltage [Vpk]	600	600	600	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}]	10	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	200	200	200	200	200
Maximum Load Current [A _{rms}]	15	25	50	75	90
Minimum Load Current [A _{rms}]	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

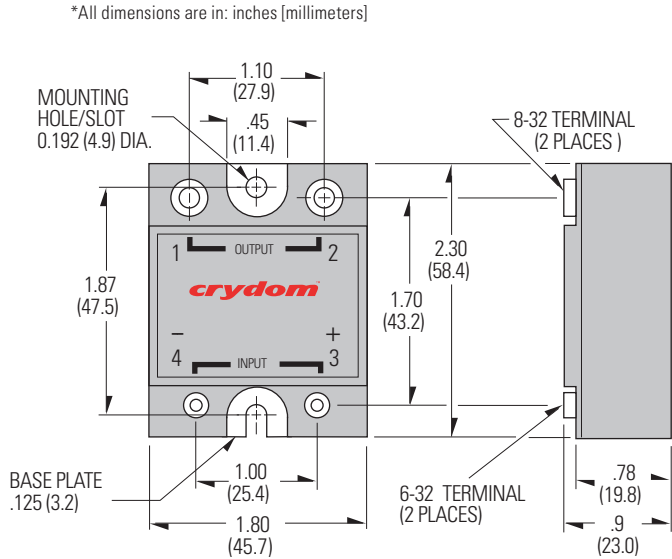
Input

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

General

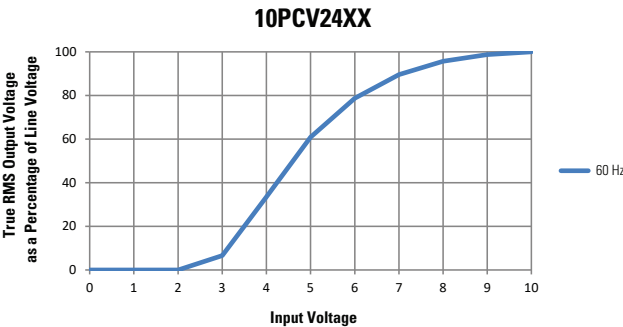
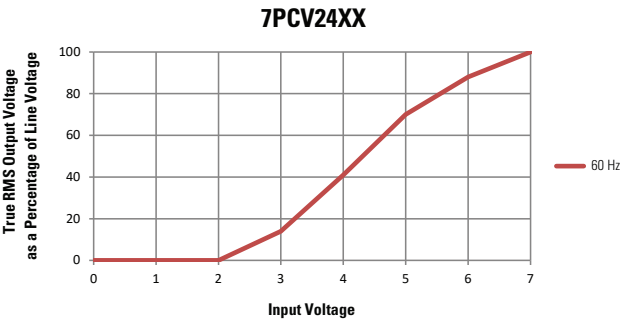
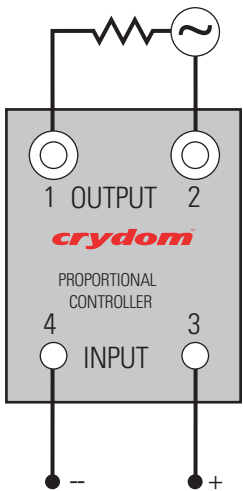
Description	Parameters
Dielectric Strength, Signal to Load (50/60Hz)	2500 Vrms
Dielectric Strength, Signal to Base	2500 Vrms
Ambient Operating Temperature Range	-30 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	3.5 oz. (100g)
Encapsulation	Themaly Conductive Epoxy
Terminals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

MECHANICAL SPECIFICATIONS ²

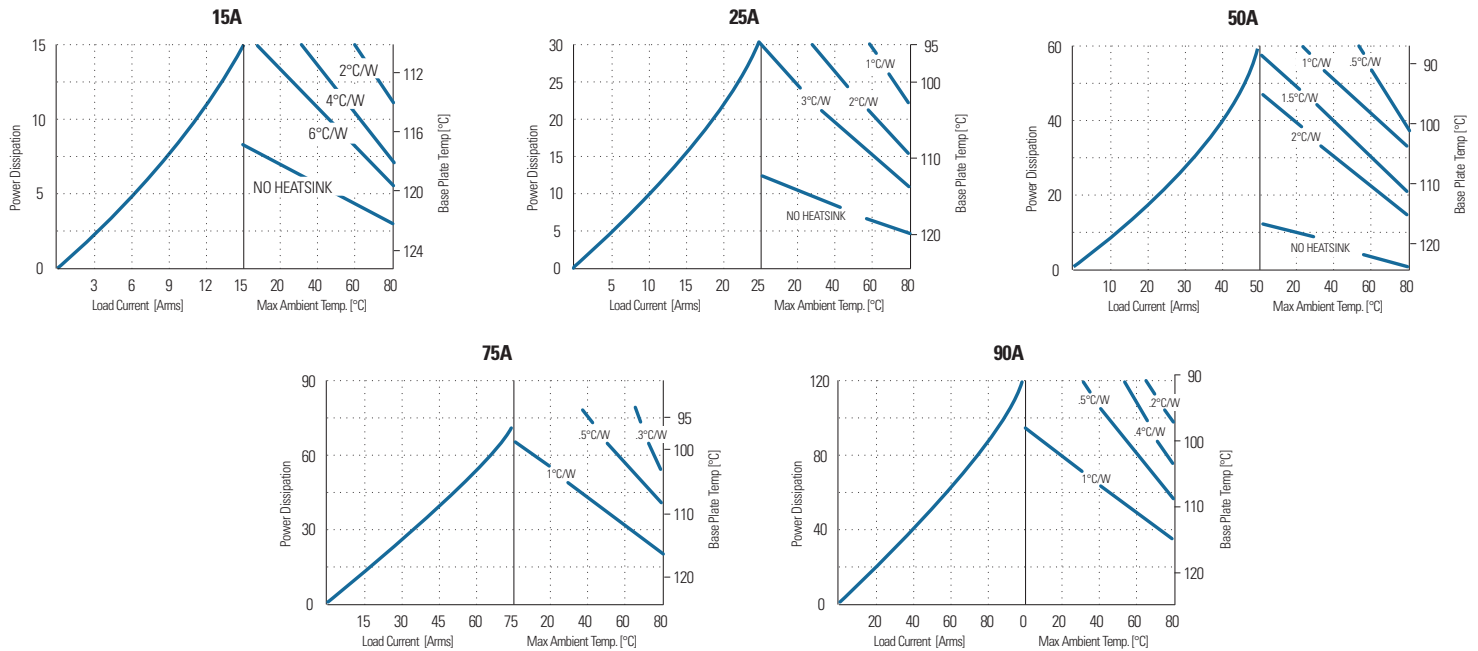


Screw Torque Requirements:
6-32 Screws - 10 in. lbs.,
8-32 and 10-32 Screws - 20 in. lbs.
(Screws dry without grease.)

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:

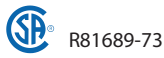
- AC motor control
- Three Phase motors
- Transformers requiring pure sine wave input
- Zero crossing applications

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

GENERAL NOTES

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

● AGENCY APPROVALS & CERTIFICATIONS



● WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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