

## PCV Series



- Proportional controller
- Ratings from 15A to 90A @ 240 VAC
- 2-7 V DC or 2-10 V DC analog input range

### 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 <sub>rms</sub> ]	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) [A <sub>rms</sub> ]	15	25	50	75	90
Minimum Load Current [A <sub>rms</sub> ]	0.15	0.15	0.15	0.15	0.15
Maximum Surge Current (16.6ms) [A <sub>pk</sub> ]	150	250	625	1000	1200
Maximum On-State Voltage Drop @ Rated Current [V <sub>pk</sub> ]	1.6	1.6	1.6	1.6	1.6
Maximum I <sup>2</sup> t for Fusing (8.3 msec) [A <sup>2</sup> 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	2-7 VDC	2-10 VDC
Control Voltage Range	2-7 VDC	2-10 VDC
Typical Input Current @ 5 VDC	4 mA	4 mA

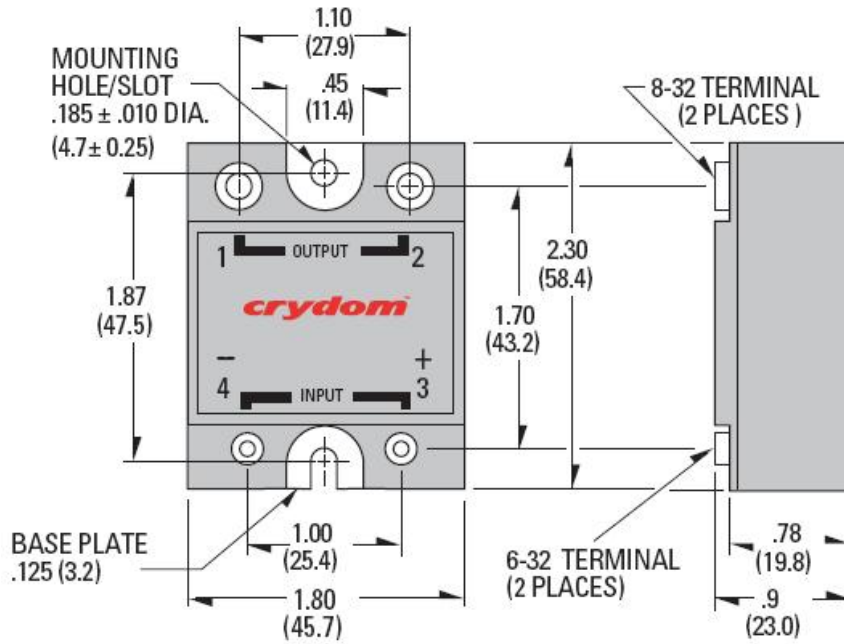
### GENERAL SPECIFICATIONS

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

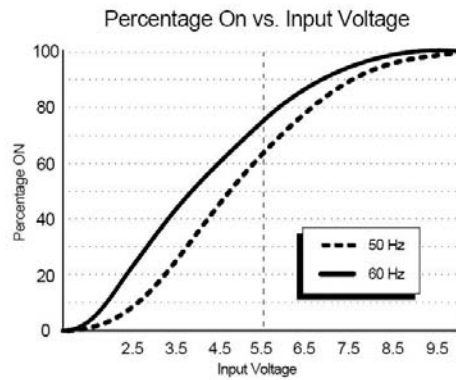
1) All parameters at 25°C unless otherwise specified.

**MECHANICAL SPECIFICATIONS**

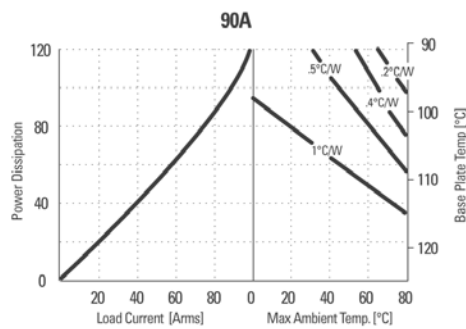
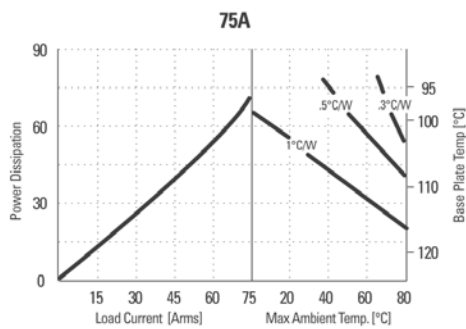
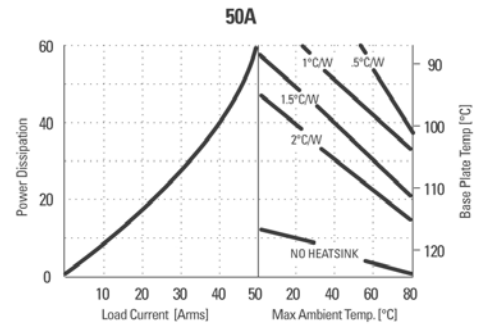
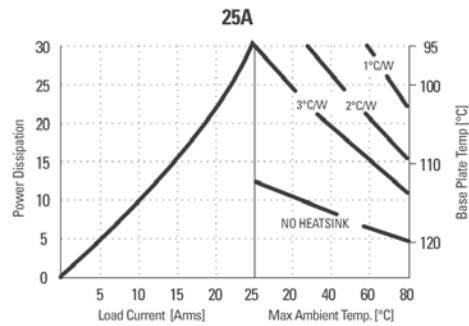
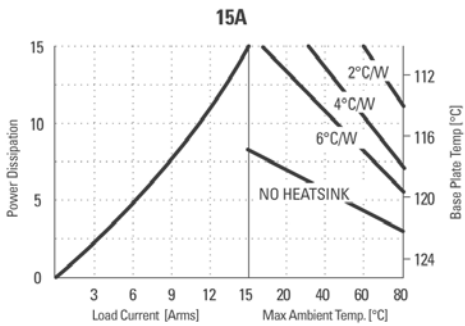


All dimensions are in inches (millimeters)

**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



Rev. 121108

**⚠ WARNING / AVERTISSEMENT / WARNUNG / ADVERTENCIA / AVVERTENZA / AVISO**

<p><b>RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE</b></p> <ul style="list-style-type: none"> <li>The product's side panels may be hot, allow time for product to cool before touching.</li> <li>Follow proper mounting instructions including torque values.</li> <li>Do not allow liquids or foreign objects to enter this product.</li> </ul> <p>Failure to follow this instruction can result in serious injury, or equipment damage.</p>	<p><b>RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER</b></p> <ul style="list-style-type: none"> <li>Les panneaux latéraux du produit peuvent être chauds. Laissez le produit refroidir avant de le toucher.</li> <li>Respecter les consignes de montage, et notamment les couples de serrage.</li> <li>Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit.</li> </ul> <p>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</p>	<p><b>GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG</b></p> <ul style="list-style-type: none"> <li>Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren.</li> <li>Beachten Sie die Montageanweisungen, Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein.</li> </ul> <p>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</p>
<p><b>RIESGO DE DAÑOS MATERIALES Y DE SOBRECIENTAMIENTO DE LA UNIDAD</b></p> <ul style="list-style-type: none"> <li>Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo.</li> <li>Respetar las instrucciones de montaje, y en particular los pares de apretado.</li> <li>No dejar que penetren líquidos o cuerpos extraños en el producto.</li> </ul> <p>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</p>	<p><b>RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO</b></p> <ul style="list-style-type: none"> <li>I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo.</li> <li>Seguire le istruzioni di montaggio corrette.</li> <li>Non far entrare liquidi o oggetti estranei in questo apparecchio.</li> </ul> <p>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</p>	<p><b>RISCO DE DANO MATERIAL E DE AQUECIMENTO</b></p> <ul style="list-style-type: none"> <li>Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar.</li> <li>Siga devidamente as instruções de montagem.</li> <li>Não permita a entrada de líquidos e de objectos estranhos no produto.</li> </ul> <p>A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.</p>

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**ANNEX - ENVIROMENTAL INFORMATION**

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	0	0	0	0	0
Solder	X	0	0	0	0	0

此附件所标示的包括电子信息产品污染图标的环境信息符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**, 电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	0	0	0	0	0
焊接点	X	0	0	0	0	0