

- **120 & 240 Vac Models**
- **0-5 Vdc Phase Control**

Models CPV120 and CPV240 auxiliary function modules provide control of the phased turn-on of a solid state relay, in response to the application of a 0-5 Vdc control signal. They must be used with

Crydom Series 1 (-10) random turn-on solid state relays. Consult factory about use with 480 Vac loads. For a complete set (control module and solid state relay) order 10CPV120, 25CPV120, etc.

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

MODEL NUMBERS	120 Vac	10CPV120	25CPV120	40CPV120		
	240 Vac	10CPV240	25CPV240	50CPV240	75CPV240	90CPV240
<b>RELAY OUTPUT SPECIFICATIONS</b> ①						
Operating Voltage Range (47-63 Hz) [Vrms]				90-140 (120 Vac Models) 180-280 (240 Vac Models)		
Load Current Range ③ [Arms]		.04-10	.04-25	.04-50	.04-75	.04-90
Transient Overvoltage [Vpk]				400 (120 Vac models) 600 (240 Vac models)		
Max. Surge Current, (16.6ms) [Apk]		120	250	625	1000	1200
Max. On-State Voltage Drop @ Rated Current [Vpk]		1.6	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case [R <sub>qJC</sub> ] °C/W		1.48	1.02	0.63	0.31	0.28
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec]		60	260	1620	4150	6000
Max. Off-State Leakage Current @ Rated Voltage [mArms]		10.0	10.0	10.0	10.0	10.0
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②		500	500	500	500	500
Max. Turn-On Time [msec]		0.02	0.02	0.02	0.02	0.02
Max. Turn-Off Time		1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle
Power Factor (Min.) with Max. Load		0.5	0.5	0.5	0.5	0.5

### CONTROL MODULE INPUT SPECIFICATIONS ①

Logic Supply Range (Terminal 3A)	DC CONTROL 3.5-10Vdc
Typical Supply Current	1.6mA @ 5Vdc
Control Voltage Range (Terminal 3B)	0-5 Vdc
Nominal Control Input Impedance	1500Ωms
Min. Turn-Off Voltage	1.0

### CONTROL MODULE OUTPUT (Terminal 4B - Input to Relay) ①

Max. Off-State Operating Voltage	36 Vdc
Max. Load Current (Sink)	3.0 mA
Max. On-State Voltage @ 3mA	0.5 Vdc
Max. Off-State Leakage @ 10Vdc	1.0 μAdc

### GENERAL NOTES

- ① All parameters at 25°C unless otherwise specified.  
 ② Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1  
 ③ Heat sinking required (Relay Only), see Series 1 data sheet.

© 2007 CRYDOM Inc., Specifications subject to change without notice.

### GENERAL SPECIFICATIONS

Dielectric Strength, Signal to Load	4000 Vrms
Dielectric Strength, Signal to Base	4000 Vrms
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

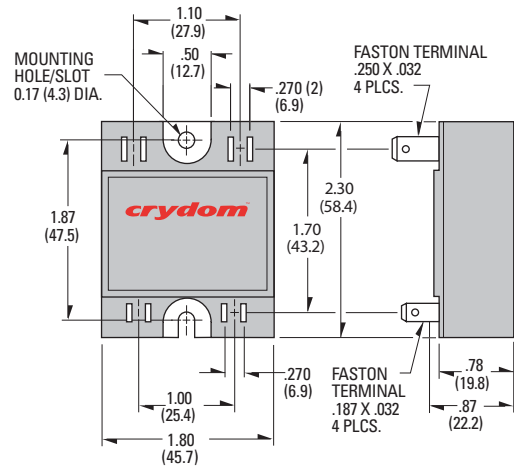
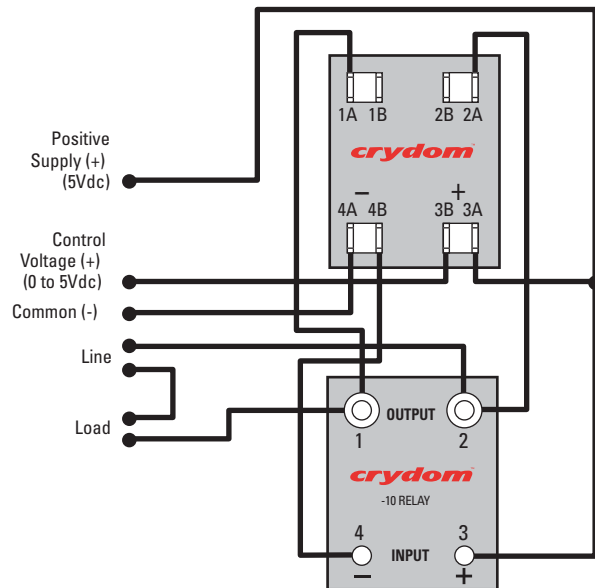
### MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (43g)
Encapsulation:	Thermally Conductive Epoxy

### AVAILABLE OPTIONS

- CPV120 Control Module Only (120 Vac line)
- CPV240 Control Module Only (120 Vac line)

### DERATING CURVES - See Series 1



All dimensions are in inches (millimeters)

### Notes

1. Following pins may be interchanged: 1A & 1B, 2A & 2B.
2. Pin 4A & 4B may not be interchanged, nor may pins 3A & 3B.
3. The line and load may be interchanged.

© 2007 CRYDOM Inc., Specifications subject to change without notice.

## ANNEX – ENVIRONMENTAL 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	O	O	O	O	O
Solder	X	O	O	O	O	O

### 附件 - 环保信息:

此附件所标示的包括电子信息产品污染图标的环保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	O	O	O	O	O
焊接点	X	O	O	O	O	O

