

**CRYDOM***Control over power*

# Series RPC

Solid State Proportional Controller  
15-40 Amp, 120/240/480 Vac Output

- **Uses Potentiometer for Economical Power Control**
- **Industry Standard Package**

The RPC series proportional controllers provide a cost effective method of controlling power in many different applications such as heaters, universal motors or incandescent lamps. A customer provided potentiometer is all that is required for control. All modules are supplied with KS100 protective cover.

8 MODEL NUMBERS RPC1215 RPC1225 RPC1240 RPC2415 RPC2425 RPC2440 RPC4815 RPC4825 RPC4840

## OUTPUT SPECIFICATIONS ①

	90-130	90-130	90-130	200-240	200-240	200-240	400-480	400-480	400-480
Operating Voltage (47-63 Hz) [Vac]	90-130	90-130	90-130	200-240	200-240	200-240	400-480	400-480	400-480
Max. Load Current ③ [Arms]	15	25	40	15	25	40	15	25	40
Min. Load Current, [mArms]	70	80	90	70	80	90	70	80	90
Transient Overvoltage [Vpk]	400	400	400	600	600	600	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	150	250	625	150	250	625	150	250	625
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case [R <sub>θJC</sub> ]	1.48	1.02	.63	1.48	1.02	.63	1.48	1.02	.63
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec]	94	260	1620	94	260	1620	94	260	1620
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	7	7	7	3	3	3
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec]②	500	500	500	500	500	500	500	500	500
Max. Turn-On Time ④ [msec]									
Max. Turn-Off Time [msec]									
Power Factor (Min.) with Max. Load	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Snubber (Internal)	yes	yes	yes	yes	yes	yes	no	no	no

## INPUT SPECIFICATIONS ①

Resistor, Variable [Ohms] ④ 150K (1W) 150K (1W) 150K (1W) 1M (1/2W) 1M (1/2W) 1M (1/2W) 1M (1/2W) 1M (1/2W) 1M (1/2W)

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## 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, for derating curves see page 2.
- ④ Potentiometer should be selected with regards to line voltage isolation.

## WARNING

Control to load is not isolated, exercise care in handling the RPC products to avoid the risk of electric shock.



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### GENERAL SPECIFICATIONS

Dielectric Strength, All Terminals to Base 2500 Vrms

Ambient Operating Temperature Range -30 to 80°C

Ambient Storage Temperature Range -40 to 125°C

### MECHANICAL SPECIFICATIONS

Weight: (typical) 3.2oz. (90g)

Encapsulation: Thermally Conductive Epoxy

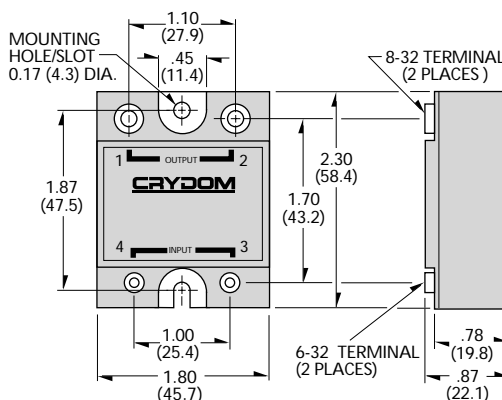
Terminals: Screws and Saddle Clamps Furnished, Unmounted

### WIRING DIAGRAM



Variable Resistance

**CAUTION**  
All terminals are at Line Voltage Potential.

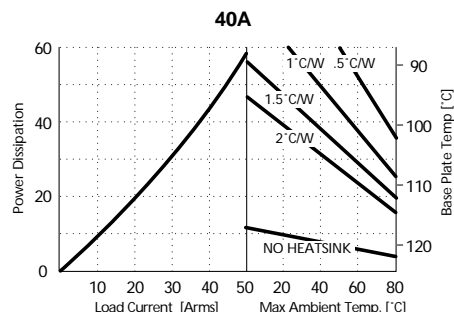
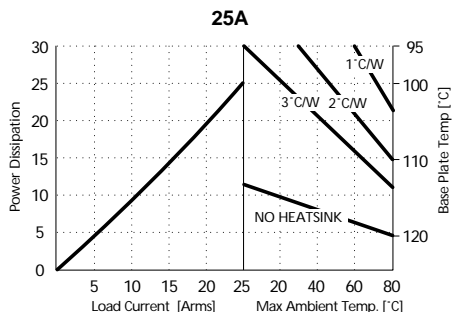
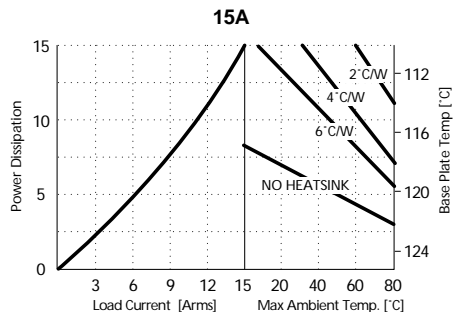


All dimensions are in inches (millimeters)

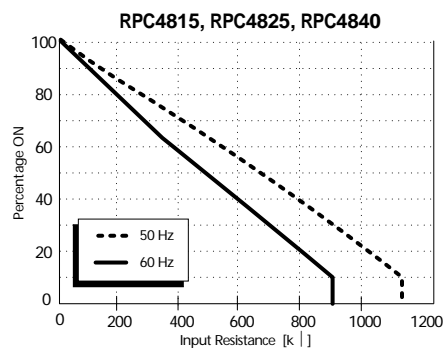
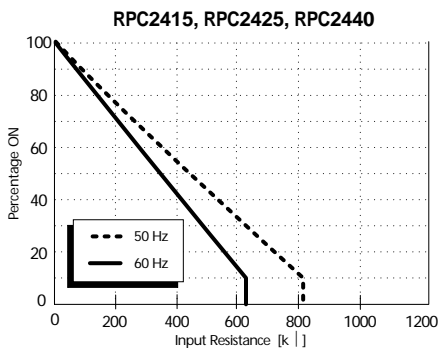
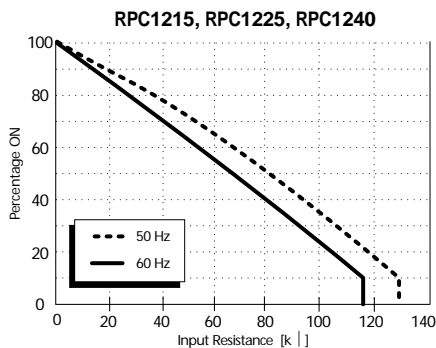
#### Screw Torque Requirements:

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

### CURRENT DERATING CURVES



### PERCENTAGE ON vs. INPUT RESISTANCE



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