

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 _{θJC}]	1.48	1.02	.63	1.48	1.02	.63	1.48	1.02	.63
Maximum I ² t for Fusing, (8.3 msec.) [A ² 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

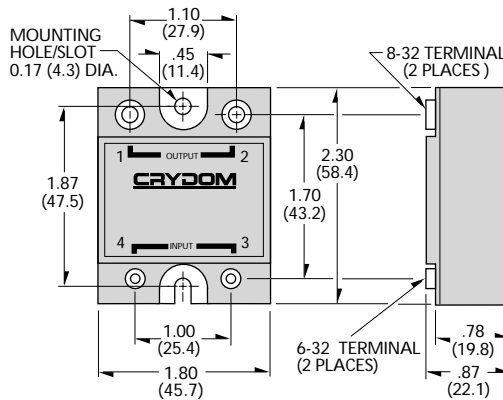
Weight: (typical)	3.2oz. (90g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Screws and Saddle Clamps Furnished, Unmounted

WIRING DIAGRAM



Variable Resistance

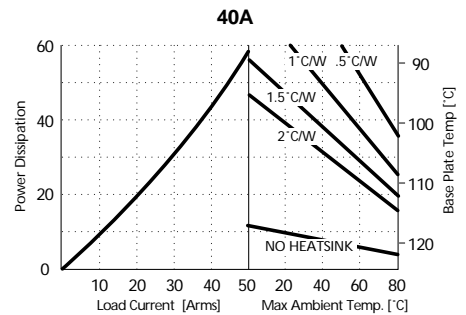
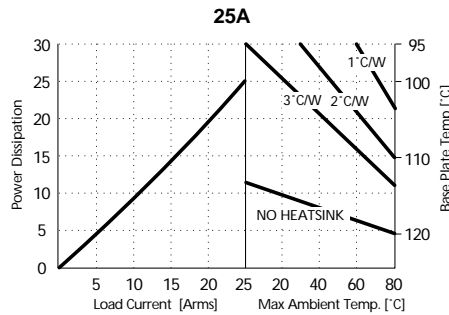
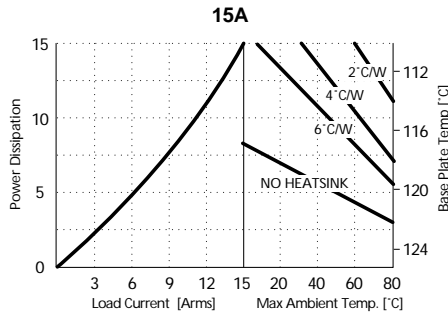
CAUTION
All terminals are at Line Voltage Potential.



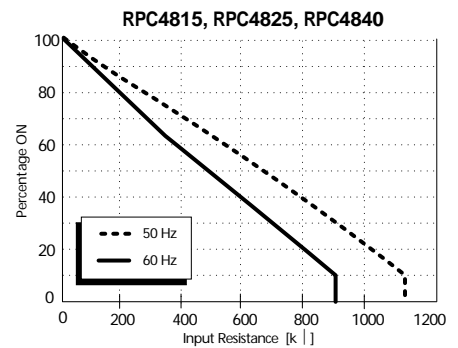
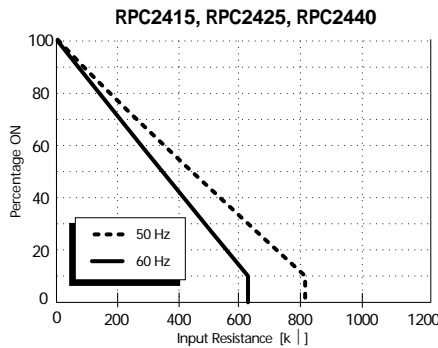
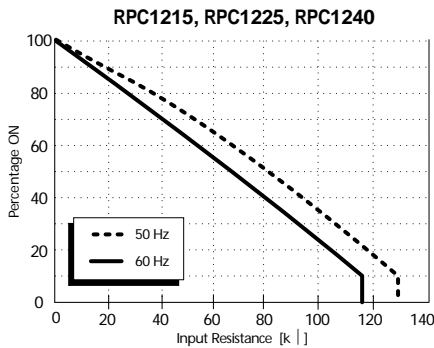
All dimensions are in inches (millimeters)

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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