



crydom

DataSheet **Control Relays**

RPC Series



- Proportional controller
- Ratings from 15A to 40A @ 480 VAC
- 500k or 1M Ohm potentiometer control

PRODUCT SELECTION

| Description | 15 A | 25 A | 40 A |
|-------------|---------|---------|---------|
| 120 VAC | RPC1215 | RPC1225 | RPC1240 |
| 240 VAC | RPC2415 | RPC2425 | RPC2440 |
| 480 VAC | RPC4815 | RPC4825 | RPC4840 |

OUTPUT SPECIFICATIONS (voltage) (1)

| Description | 120 VAC | 240 VAC | 480 VAC |
|--|---------|---------|---------|
| Operating Voltage (47-63Hz) [Vrms] | 90-130 | 200-240 | 400-480 |
| Transient Overvoltage [Vpk] | 400 | 600 | 1200 |
| Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}] | 10 | 7 | 3 |
| Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2) | 5000 | 500 | 500 |
| Snubber (Internal) | yes | yes | no |

OUTPUT SPECIFICATIONS (current) (1)

| Description | 15 A | 25 A | 40 A |
|---|------|------|------|
| Maximum Load Current [Arms] (3) | 15 | 25 | 40 |
| Minimum Load Current [mA _{rms}] | 70 | 80 | 90 |
| Maximum Surge Current (16.6ms) [A _{pk}] | 150 | 250 | 625 |
| Maximum On-State Voltage Drop @ Rated Current [Vpk] | 1.6 | 1.6 | 1.6 |
| Thermal Resistance Junction to Case (R _{jc}) [°C/W] | 1.48 | 1.02 | 0.63 |
| Maximum I ² t for Fusing (8.3 msec) [A ² sec] | 94 | 260 | 1620 |

INPUT SPECIFICATIONS (1)

| Description | RPC12XX | RPC24XX | RPC48XX |
|----------------------------|-----------|-----------|-----------|
| Variable Resistor Size (4) | 150K (1W) | 1M (1/2W) | 1M (1/2W) |

GENERAL SPECIFICATIONS

| Description | |
|--|---|
| Minimum Power Factor (with Maximum Load) | 0.6 |
| Dielectric Strength, Input/Output/Base (50/60Hz) | 2500 Vrms |
| Ambient Operating Temperature Range | -30 to 80 °C |
| Ambient Storage Temperature Range | -40 to 125 °C |
| Weight (typical) | 3.2 oz (90g) |
| Encapsulation | Thermally conductive Epoxy |
| Terminals | Screws and saddle Clamps Furnished, Unmounted |
| Recommended Terminal Screw Torque Range: | 6-32 Screws -10 in. lbs. 8-32 and 10-32 Screws -20 in. lbs. (Screws dry without grease) |

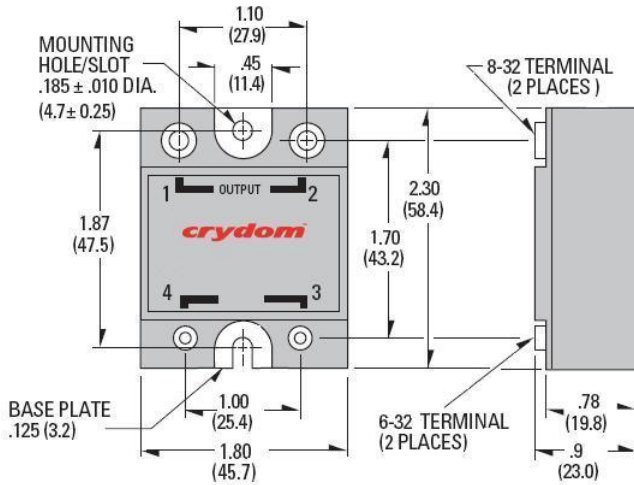
GENERAL NOTES

- 1) All parameters at 25°C unless otherwise specified.
- 2) Off-State dv/dt test method per EIA/NARM standard RS-443
- 3) Heat sinking required, see derating curves.
- 4) Potentiometer should be line voltage rated.



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MECHANICAL SPECIFICATIONS



All dimensions are in inches (millimeters)

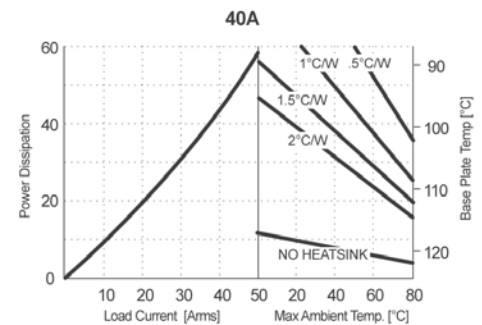
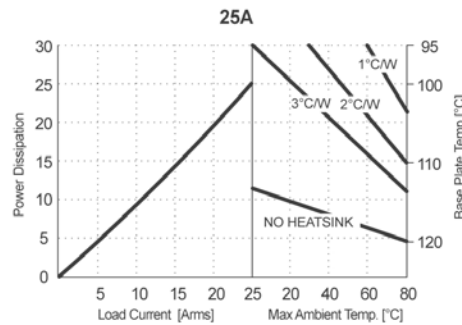
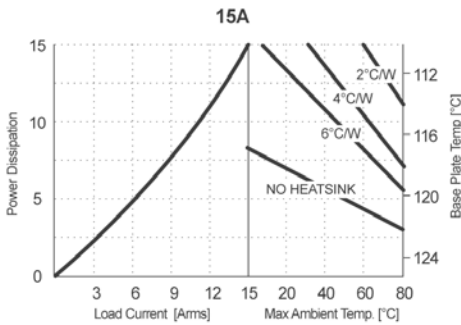
WIRING DIAGRAM



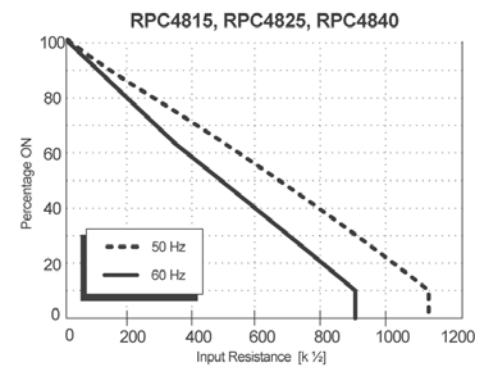
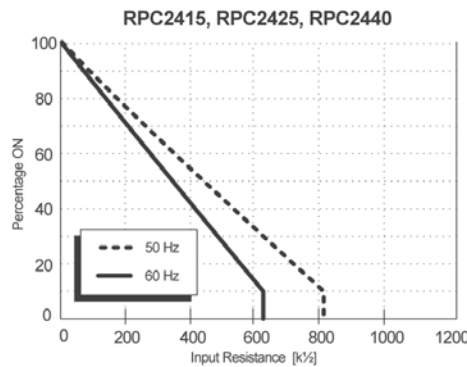
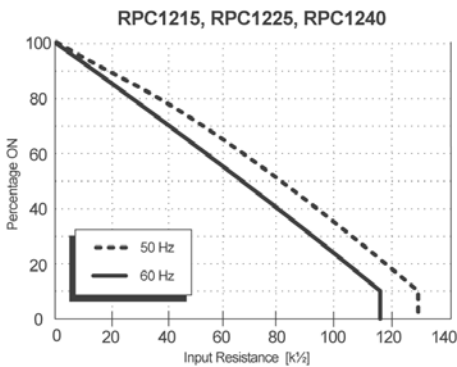
All terminals are at Line Voltage Potential.

Variable Resistance

THERMAL DERATE INFORMATION



PERCENTAGE ON VS INPUT RESISTANCE



AGENCY APPROVALS

