

Thermal Devices' RVx3 Series Solid State Contactors

FEATURES/BENEFITS

- Superior Surge Survival™
- 25 amp rating
- 575 or 660Vac designs
- Integrated heat sink
- Optically isolated
- LED input indicator
- Direct copper bonded SCRs
- 1400 volt peak blocking voltage
- Meets EN60947-4-3
- UL recognized, CSA listed



See page 2 for fuses and fuse holders

SPECIFICATIONS

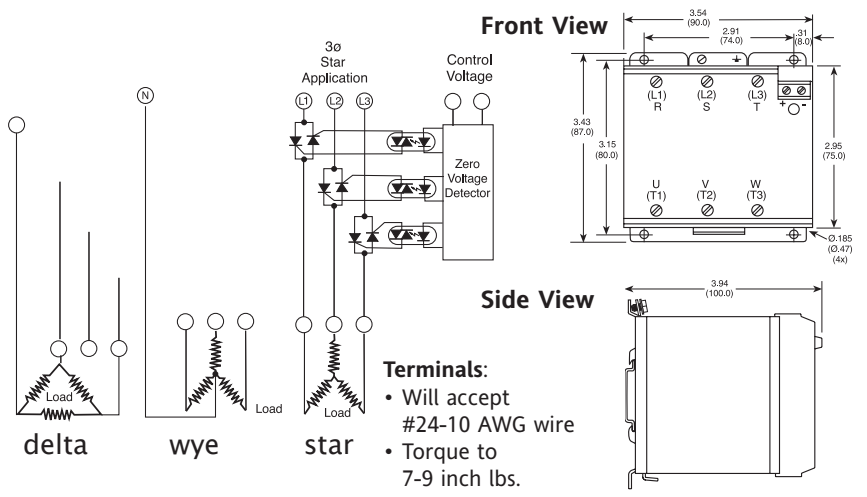
| | |
|-------------------------------|--|
| Load type | Resistive |
| Input: | |
| RVD3-DC Input (L): | ON ≥ 4Vdc/10mA, 32Vdc/15mA max, current limited OFF ≤ 1Vdc |
| RVD3-DC Input (H): | ON ≥ 10Vdc/3.5mA, 60Vdc/6mA max, current limited OFF ≤ 1Vdc |
| RVA3-AC Input (H): | ON ≥ 100V/9mA, 280Vac/30mA max. OFF ≤ 2mA, 10kΩ impedance |
| Output: | |
| Current ratings: | 25 amps (3 pole), 35 amps (2 pole): |
| Voltage ratings: | 5V-24V to 575V max. (internal MOV) 6V-24V to 660V max. |
| Frequency: | 47-63Hz |
| Voltage drop: | 1Vac per leg |
| I²t rating: | 1350 A ² sec |
| Leakage: | 1mA max |
| Holding current: | 100mA |
| Peak blocking voltage: | 1400V |
| Offstate dVdT: | 100V/μsec |
| Turn on/off time: | < 8.3ms @ 60Hz |
| Operating temperature: | 0°C to 40°C (up to 80°C with derating) |

ORDERING CODES

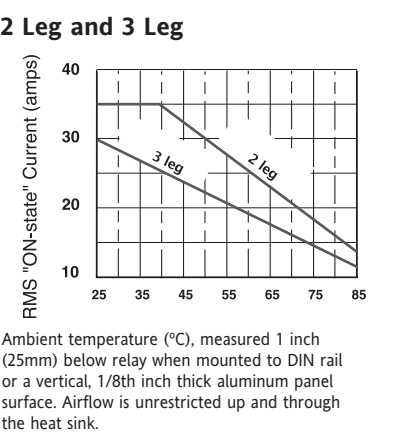
| Model | Rating | Input |
|-------|----------|-----------|
| RVD3 | DC logic | 4-32Vdc |
| RVA3 | AC logic | 10-60Vdc |
| | | 90-280Vac |

| Model | Rating |
|-------|----------------------------|
| RVD3 | 5V75T 575Vac, internal MOV |
| RVA3 | 6V75T 660Vac |

SCHEMATIC/DIMENSIONS



DERATING CURVES



Thermal Devices' Semiconductor Fuses & Fuse Holders

FEATURES/BENEFITS

- Touch safe design - No exposed contacts
- DIN rail mount (35mm)
- Excellent for switchboard panel, control consoles and similar applications
- Handle/fusepuller to install and remove fuses easily
- Available in single and 3 pole configurations
- UL recognized
- CSA listed



Use the solid state relay fuse code to select the correct fuse and fuse holder, or replacement fuse. Protecting solid state relays from short circuit conditions is the main job of an I²T semiconductor fuse, not providing overload protection. Continental Industries' recommended fuses have been selected to provide the best match of short circuit protection over a wide range of operating voltages and ambient temperatures. Applying overload protection is specific to every application. Always consult applicable electrical codes for guidance in selecting an appropriate "overload protection" device, fuse, or circuit breaker.

For a complete document on the application and installation of solid state relays, please contact technical support at 800-282-9100 or e-mail sales@thermaldevices.com

FUSE SELECTOR CHART

| Semiconductor Fuse Replacements & Accessories | | | Used with: |
|---|----------------------|----------------------|------------------------------------|
| External: | Fuse and Fuse Holder | | |
| | FUSE-KIT-14-010 | 10 AMP | SV Series |
| | FUSE-KIT-14-025 | 25 AMP | SV, RV Series |
| | FUSE-KIT-14-330 | 30 Amp/3 phase/3pole | RS 3 Phase |
| | FUSE-KIT-14-040 | 40 AMP | RV25, RV40, SV50 |
| | FUSE-KIT-14-050 | 50 AMP | SV50 |
| | FUSE-KIT-22-063 | 63 AMP | RS50 |
| | FUSE-KIT-22-075 | 80 AMP | SV75 |
| | FUSE-KIT-22-100 | 100 AMP | RS75, RS100 |
| Fuse only (I ² T fuse) | | | |
| Internal fuses ⁽¹⁾ : | FUSE-SEMIBR-63A | 63 AMP | RS50 |
| | FUSE-SEMIBR-100 | 100 AMP | RS75, RS100 |
| External fuses ⁽²⁾ : | FUSE-EXT-14-010 | 10 AMP | SV Series |
| | FUSE-EXT-14-025 | 25 AMP | SV, RV Series |
| | FUSE-EXT-14-030 | 30 AMP | RS 30 Amp/3Phase |
| | FUSE-EXT-14-040 | 40 AMP | RV40, SV50 |
| | FUSE-EXT-14-050 | 50 AMP | SV50 |
| | FUSE-EXT-22-063 | 63 AMP | RS50 |
| | FUSE-EXT-22-075 | 80 AMP | SV75 |
| | FUSE-EXT-22-100 | 100 AMP | RS75, RS100 |
| Fuse Holders Only | | | Dimensions H x W x D in (mm) |
| | FUSE-HLDR-14-01 | 10-50 AMP | 3.74 x 1.02 x 3.38 (95 x 26 x 86) |
| | FUSE-HLDR-22-01 | 75-100 AMP | 5.51 x 1.38 x 3.54 (140 x 35 x 90) |
| | FUSE-HLDR-14-03 | 30 AMP/3 PHASE | 3.74 x 3.11 x 3.38 (95 x 26 x 86) |
| Handle (Gang3) | FUSE-3HANDLE-00 | 30 AMP/3 PHASE | |

Notes:

(1) The internal fuses are used in the RS family of 50, 75, and 100 Amp relays. Due to local electrical codes or due to thermal stress on the fuse, some customers may choose to use the external fuse and fuse holder #FUSE-KIT-22-063 or -100.

(2) The external fuses are 14mm diameter x 51 mm long or 22mm diameter x 58mm long.

Contact Continental Industries for the internal bus bar, -B00 option.