RVM3 Series SCR Power Controller

DIN Rail or Panel Mounted, Three Phase

Continental

CONTINENTAL INDUSTRIES INTERNATIONAL

- **Superior Surge Survival™ technology**
- **25 Amp rating**
- **575 or 660 Volt ratings**
- **Integrated heatsink**
- **Optically isolated**
- **L.E.D. input indicator**
- **Direct copper bonded SCRs**
- **1400 volt peak blocking voltage**
- **Meets EN60947-4-3**

SPECIFICATIONS:

Load type	Resistive
Input:	4-20mA, 10V max. drop @ 20mA
Output:	
Current ratings	25 amps (3 pole), 35 amps (2 pole)
Voltage ratings	5V option: 24V to 575V max. (internal MOV) 6V option: 24V to 660V max.
Frequency	47-63 Hz
Voltage drop	1.0 Vac per leg
I^2t Rating	1350 A^2sec
Leakage @ V_{out}	10mA max.
Holding current	100mA
Peak blocking voltage	1400V
Offstate dVdt	1000 V/µsec
Dielectric strength	4000 Vrms
Operating temperature	0°C to 40°C (up to 80°C with derating)

ORDERING CODES:

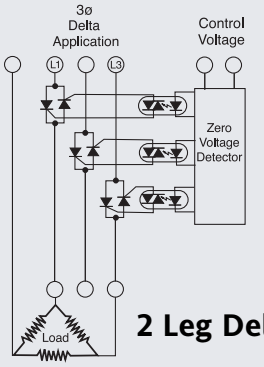
Model		Rating
RVM3	/	

Model	
RVM3	3 phase mA unit

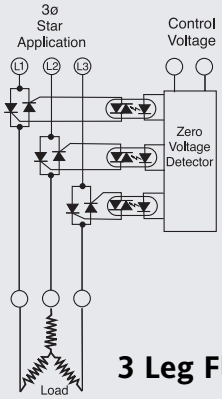
Rating	
5V75T	575 Vac, internal mov
6V75T	660 Vac

Semiconductor Fuse Accessories	
FUSE-KIT-14-330	External fuse kit
FUSE-EXT-14-030	Spare fuse
FUSE-HLDR-14-03	Spare fuse holder
FUSE-3HANDLE-00	Spare fuse handle

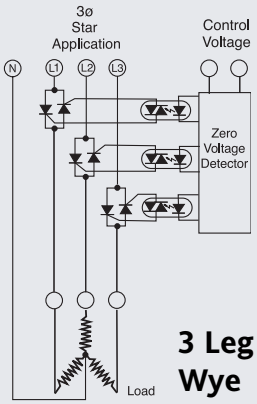
SCHEMATICS



2 Leg Delta



3 Leg Float Wye



3 Leg Grounded Wye

Transient Voltage Protection:

When operating a solid state relay in an electrically noisy environment, large voltage transients may damage the relay. To protect against this occurrence, it is advisable to install appropriate MOVs across the respective supply and load terminals of the relay output. The "5V" option is available for customers who want the MOVs to be supplied internally with the solid state relay.

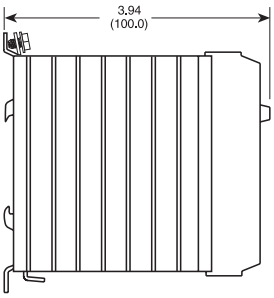
Short-Circuit Protection:

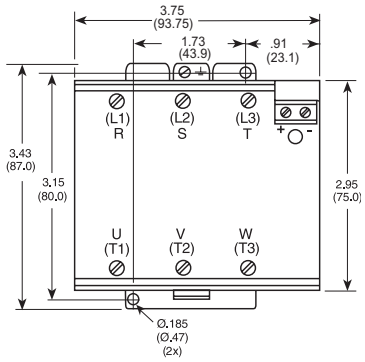
CII Continental recommends the use of an appropriately sized I^2t fuse on the supply side of the relay to protect the SCR devices. Although a semiconductor relay is designed for virtually countless operation cycles, it can be destroyed by an overvoltage or a short circuit, unless protected adequately by an I^2t fuse. NOTE: Overload protection should be provided by another slow acting fuse in series with the short circuit protection fuse. (An overload being an over-current condition that is not of high enough amplitude to be considered a short circuit).

Installation

The new model RV is equipped with finger-safe caged terminals, a universal mounting bracket for DIN Rail mounting or bolt-on mounting and a new more efficient heatsink that only requires 0.18 inches between relays for cooling (Fin to Fin) — an industry improvement that reduces your panel requirements by 30-60% compared to other DIN Rail, solid state relay products.

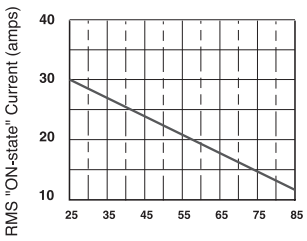
DIMENSIONS



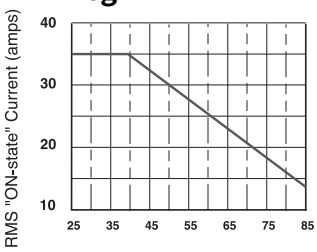


DERATING CURVE

3 Leg



2 Leg



Ambient temperature (degrees C), measured 1 inch (25mm) below relay when mounted to DIN rail or a vertical, 1/8th inch thick aluminum panel surface. Airflow is unrestricted up and through the heatsink.

For more information contact your local representative:

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EUROTHERM
Continental Industries International
741-F Miller Drive, Leesburg, VA, 20175, Phone 571 258 2105, Fax 703 669 1357, info@ciicontrols.com, www.ciicontrols.com