



Series SMR

25-90Amp • 120/240 Vac • AC Output

- System Monitoring Solid State Relay
- LED Status Indicators
- Alarm Output Signal
- Zero Voltage Switching

constantly monitored by this unique Solid State Relay (SSR).

The alarm circuit output is a normally on NPN transistor capable of sinking current up to 100mA. State-of-the-art Surface Mount Technology assembly ensures reliability in a compact standard SSR package.

The SMR Series of System Monitoring Relays offer the user a number of fault condition alarms. Loss of voltage, open circuit load, damaged relay output and loss of DC supply current are

Manufactured in Crydom's ISO 9002 Certified facility for optimum product performance and reliability.

MODEL NUMBERS	DC CONTROL	SMR2425	SMR2450	SMR2490
OUTPUT SPECIFICATIONS ①				
Operating Voltage (47-63 Hz) [Vrms]		48-280	48-280	48-280
Max. Load Current ③ [Arms]		25	50	90
Min. Load Current, [mArms]		40	40	40
Transient Overvoltage [Vpk]		600	600	600
Max. Surge Current, (16.6ms) [Apk]		250	625	1200
Max. On-State Voltage Drop @ Rated Current [Vpk]		1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{θJC}) [°C/W]		1.02	0.63	0.28
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]		260	1620	6000
Max. Off-State Leakage Current @ Rated Voltage [mArms]		10	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec]②		500	500	500
Max. Turn-On Time		1/2 Cycle	1/2 Cycle	1/2 Cycle
Max. Turn-Off Time		1/2 Cycle	1/2 Cycle	1/2 Cycle
Power Factor (Min.) with Max. Load		0.5	0.5	0.5

INPUT SPECIFICATIONS

 ①

	DC CONTROL
Logic Supply Voltage Range (pin 3)	8-32 Vdc
Turn-On Control Voltage Range (pin 6)	8-32 Vdc
Min. Turn-Off Voltage (pin 6)	0.4 Vdc
DC Supply Current @ 12 Vdc	8 mA
DC Control Current @ 12 Vdc	6 mA
Maximum Alarm Output Current	100 mA
Alarm On Output Voltage (Open), (pin 7)	Supply Voltage
Maximum Alarm Off Output Voltage @ 100 mA (Active Low), (pin 7)	1.5 Vdc
Alarm Delay (Min.-Max.)	30-100 msec.

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.

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For recommended applications and more information contact:
USA: (800) 8 CRYDOM • (800) 827-9366 • (619) 715-7200 • fax (619) 715-7280
 Crydom Corp, 9525 Chesapeake Drive, San Diego, CA 92123 • e-mail: sales@crydom.com
WEB SITE: <http://www.crydom.com> **FASTFAX Product Information:** (888) 267-9191
UK: (44)1202 812300 • fax (44)1202 812340 Crydom International Ltd., 85, Condor Close,
 Woolsbridge Industrial Estate, Three-Legged Cross, Wimborne, Dorset, England BH21 6SU
GERMANY: (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH,
 Gewerbegebiet Im Schachen, D-66687 Nunkirchen, Germany • e-mail: vertrieb@crydom.com





Series SMR

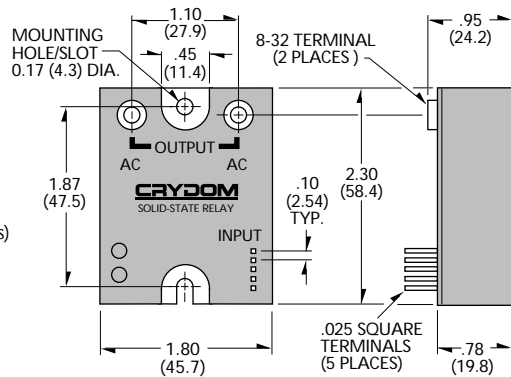
25-90Amp • 120/240 Vac • AC Output

GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

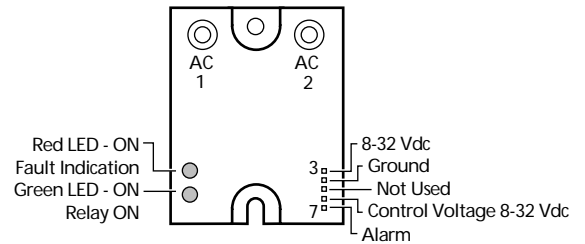
MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Output Terminals:	Screws and Saddle Clamps Furnished, Unmounted
Input Connector (locking):	Panduit No. MLSS100-5 or Equivalent
Mating Connector (supplied):	Panduit No. CT100F22-5 or Equivalent

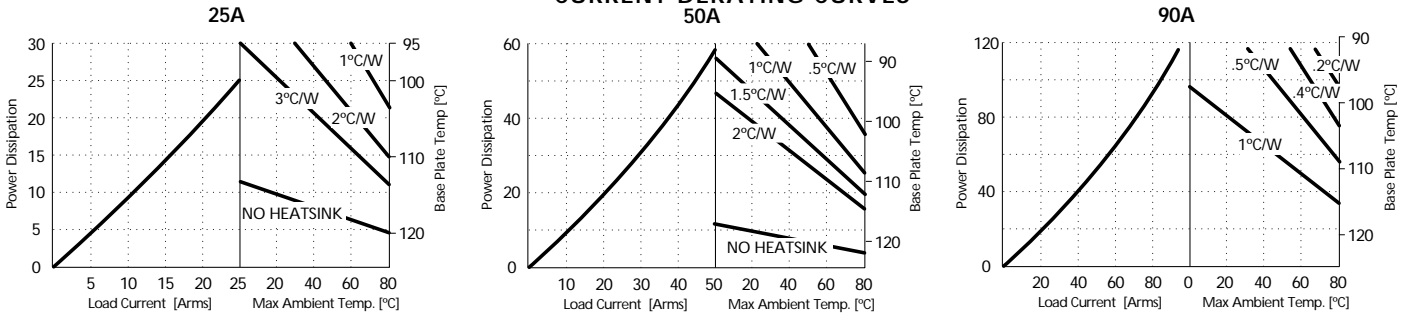


All dimensions are in inches (millimeters)
 Screw Torque Requirements:
 8-32 Screws - 20in./lbs.
 (Screws dry without grease.)

WIRING DIAGRAM

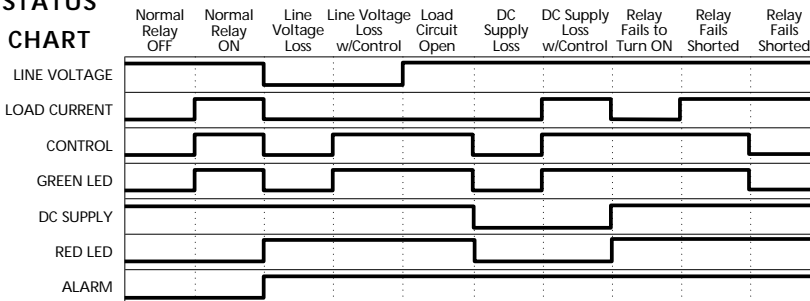


CURRENT DERATING CURVES



STATUS

CHART



Crydom Heat Sinks offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

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APPROVALS

UL E116949
 CSA LR81689
 VDE 10143 UG

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