



Data Sheet

System Monitoring Solid State Relays

RS stock number 228-0696 & 228-0703

- 25-50 Amp
- 120/240 Vac
- AC output
- System Monitoring Solid State Relay
- LED status Indicators
- Alarm Output Signal

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 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.

Output specifications ①

RS stock no.	DC Control	228-0696	228-0703
Operating voltage (47-63 Hz) [Vrms]		48-280	48-280
Max. Load Current ③ [Arms]		25	50
Min. Load Current, [mArms]		40	40
Transient Overvoltage [Vpk]		600	600
Max. Surge Current, (16.6ms) [Apk]		250	625
Max. on-state voltage drop @ rated current (Vpk)		1.6	1.6
Thermal resistance junction to case ($R_{\theta JC}$) [°C/W]		1.02	0.63
Max. $I^2 t$ for fusing, (8.3 msec.) [A ² sec]		260	1620
Max. Off-state leakage current @ rated voltage (mArms)		10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec]②		500	500
Max. turn-on time		1/2 Cycle	1/2 Cycle
Max. turn-off time		1/2 Cycle	1/2 Cycle
Power Factor (Min.) with Max. Load		0.5	0.5

Input specifications ①

	DC Control
DC Supply Voltage Range	8-32 Vdc
DC Control voltage range	8-32 Vdc
Min. turn-off voltage	1.0 Vdc
DC Supply Current @ 12 Vdc	8mA
DC Control Current @ 12 Vdc	6mA
Max. Alarm Output Current	100mA
Alarm Output Voltage (Open)	Supply Voltage
Max. Alarm Output Voltage @ 100mA	1.5 Vdc
Alarm Delay (Min.-Max.)	30-100 msec

General notes

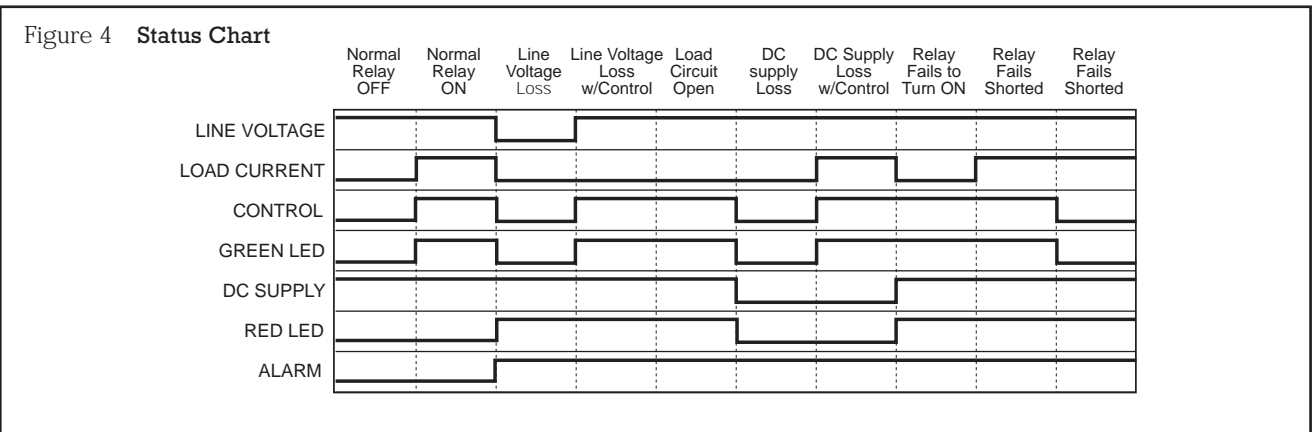
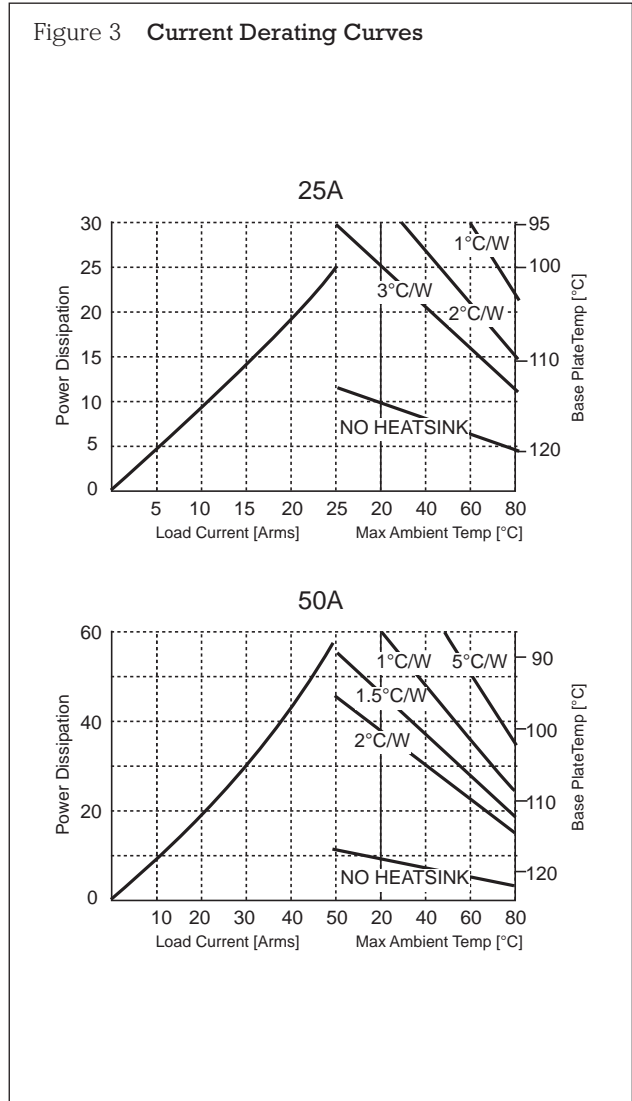
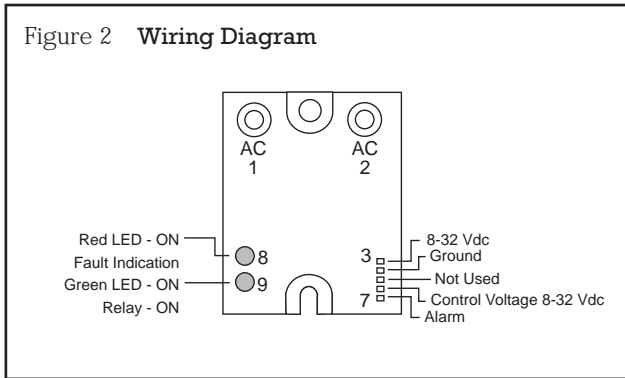
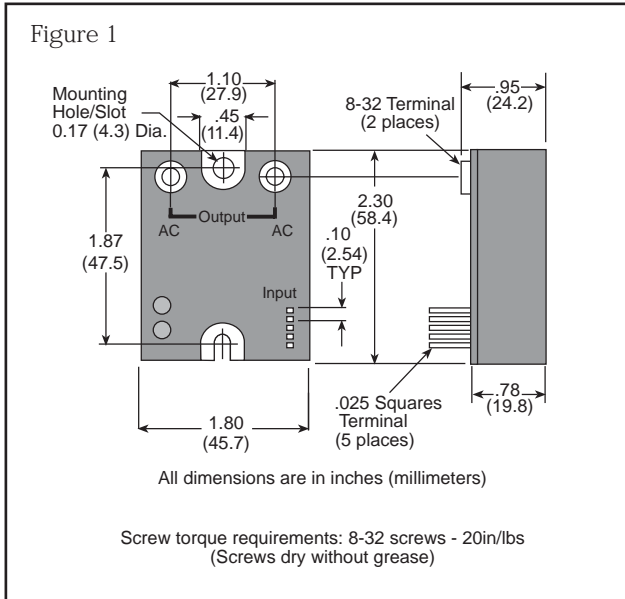
- ① All parameters at 25°C unless otherwise specified.
 ② Off-State dv/dt test method per EIA/NARM standard RS-443. paragraph 13.11.1
 ③ Heat sinking required, for derating curves see page 2.

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)	3.0oz (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



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