

SMR Series

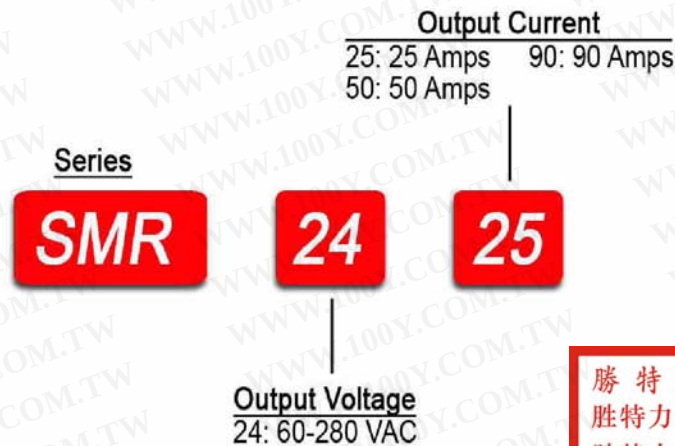


- System monitoring solid-state relay
- Ratings from 25A to 90A @ 60-280 V AC
- DC control
- LED status indicators
- Alarm output signal
- Inverting or non-inverting input
- Normally open or normally closed alarm output

PRODUCT SELECTION

Control Voltage	25A	50A	90A
8-32 VDC	SMR2425	SMR2450	SMR2490

AVAILABLE OPTIONS



勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

OUTPUT SPECIFICATIONS (1)

Description	60-280	60-280	60-280
Operating Voltage (47-63Hz) [Vrms]	60-280	60-280	60-280
Transient Overvoltage [Vpk]	600	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}]	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	500	500	500
Maximum Load Current (3) [A _{rms}]	25	50	90
Minimum Load Current [mA _{rms}]	40	40	40
Maximum Surge Current (16.6ms) [A _{pk}]	250	625	1200
Maximum On-State Voltage Drop @ Rated Current [V _{pk}]	1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{jc}) [°C/W]	1.02	0.63	0.28
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	260	1620	6000
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	DC Control
Control Voltage Range	8-32 VDC
Minimum 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
Maximum Turn-On Time [msec]	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

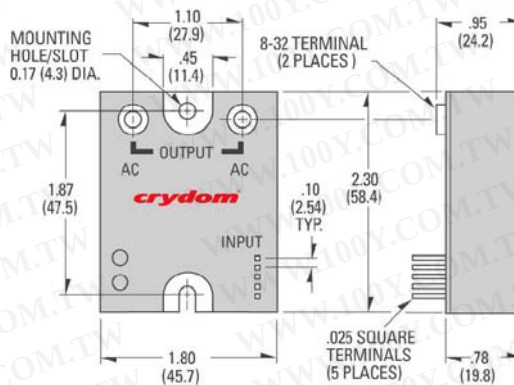
GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 V DC)	10 ⁹ Ohm
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125 °C
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. CT00F22-5 or Equivalent
Recommended Terminal Screw Torque Range:	8-32 & 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, paragraph 13.11.1
- 3) Heat sinking required, see derating curves.

MECHANICAL SPECIFICATIONS

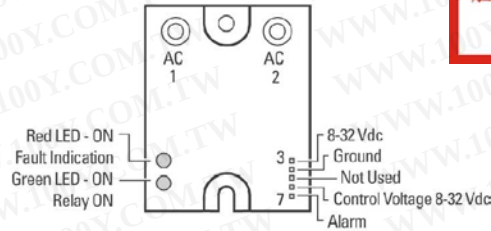


All dimensions are in inches (millimeters)

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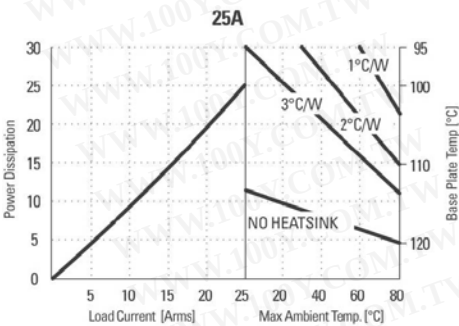
WIRING DIAGRAM

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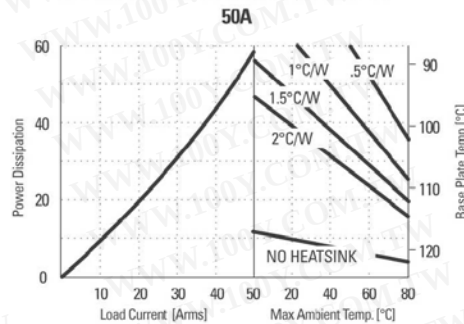
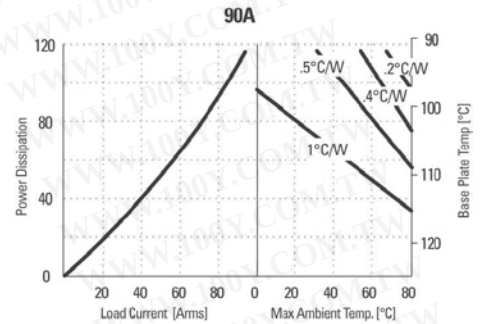


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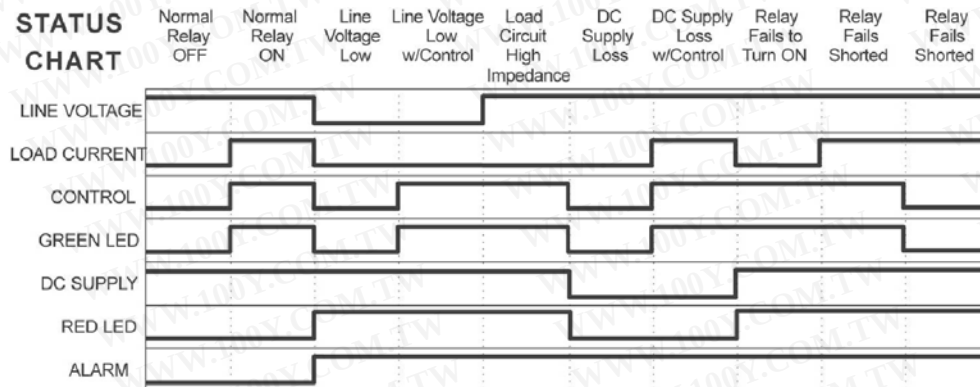
THERMAL DERATE INFORMATION



CURRENT DERATING CURVES



STATUS CHART



AGENCY APPROVALS

UL E116949
 CSA LR81689
 VDE 10143 UG
 CE

SMR -6 Series



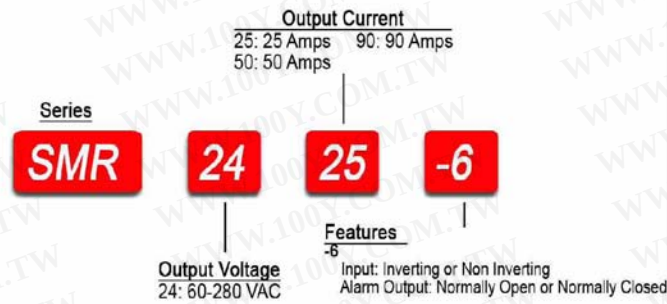
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PRODUCT SELECTION

Control Voltage	25A	50A	90A
8-32 VDC	SMR2425-6	SMR2450-6	SMR2490-6

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	25A	50A	90A
Operating Voltage (47-63Hz) [Vrms]	60-280	60-280	60-280
Transient Overvoltage [Vpk]	600	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mA]	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	500	500	500
Maximum Load Current (3) [A]	25	50	90
Minimum Load Current [mA]	40	40	40
Maximum Surge Current (16.6ms) [A]	250	625	1200
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.02	0.63	0.28
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	260	1620	6000
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5

CONTROL SPECIFICATIONS (1)(4)

Description	INVERTING	NON-INVERTING
Logic Supply Voltage Range	8-32 VDC (pin 3)	8-32 VDC (pin 3)
Logic Supply Current @ 12	8 mA	14 mA (plus pin 8 loading)
Input-On Voltage Range	8-32 VDC (pin 6)	0-1.0 VDC (pin 5)
Input-Off Voltage Range	0-0.4 VDC (pin 6)	8-32 VDC (pin 5)
Input-On Current @ 12 VDC[Logic Supply]	6 mA	1.0 mA
Maximum Turn-On Time [msec]	1/2 Cycle	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle

ALARM SPECIFICATIONS (1)(4)

Description	NORMALLY CLOSED	NORMALLY OPEN
Alarm-On Voltage	"Supply Voltage (with load) Open Col. NPN (pin 7)"	"Supply Voltage (minus 1.0 V) Active High PNP (pin 8)"
Alarm-Off Voltage	"1.5 VDC Active Low NPN (pin 7)"	"0.0 VDC (with load) Open Col. PNP (pin 8)"
Maximum Alarm Output Current	100 mA	100 mA
Alarm Delay (Min.-Max.)	30-100 msec	30-100 msec

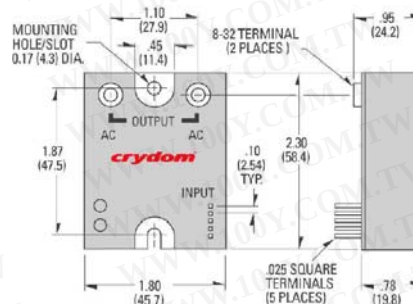
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Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohm
Maximum Capacitance, Input/Output	8 pF
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Encapsulation	Thermally conductive Epoxy
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Input Connector (locking):	Panduit No. MLSS100-6 or Equivalent
Mating Connector (supplied):	Panduit No. CT00F22-6 or Equivalent
Recommended Terminal Screw Torque Range:	8-32 & 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, paragraph 13.11.1
- 3) Heat sinking required, for derating curves see page 2.
- 4) All voltages are positive in respect to common (pin 4)

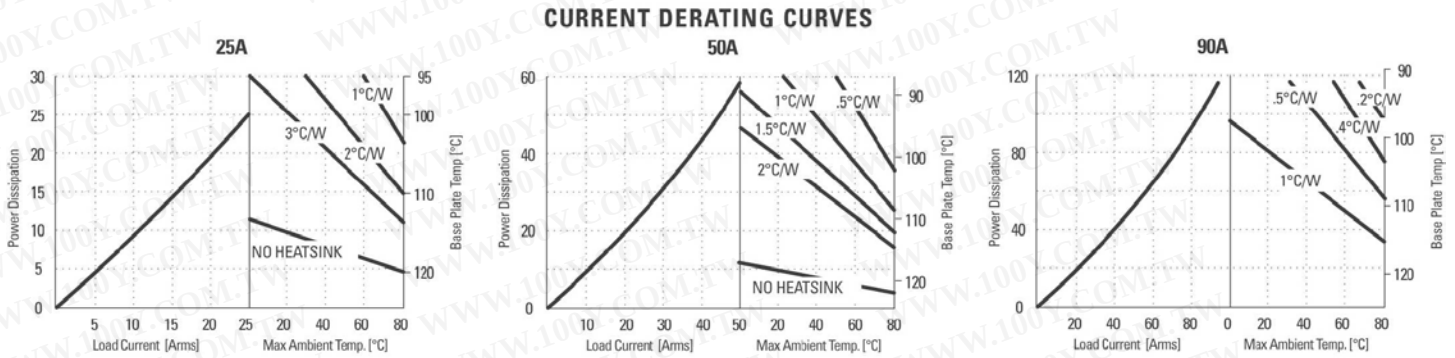
MECHANICAL SPECIFICATIONS



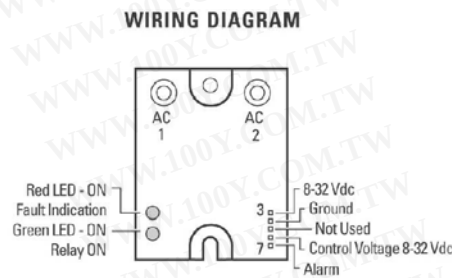
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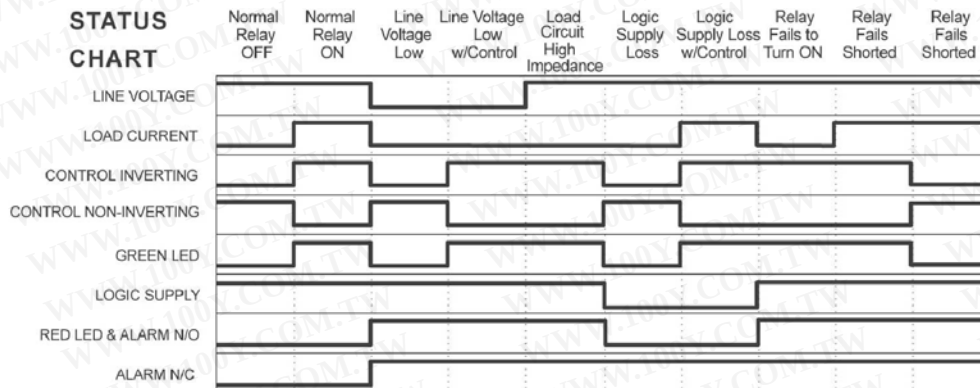
THERMAL DERATE INFORMATION



WIRING DIAGRAM



STATUS CHART



AGENCY APPROVALS



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