



RSR1 SERIES

FEATURES

- Zero voltage turn-on, zero current turn-off (minize EMI/FRI)
- Input LED indicator
- Output snubber circuit protection
- TTL and CMOS compatible
- High dv/dt and high blocking voltage

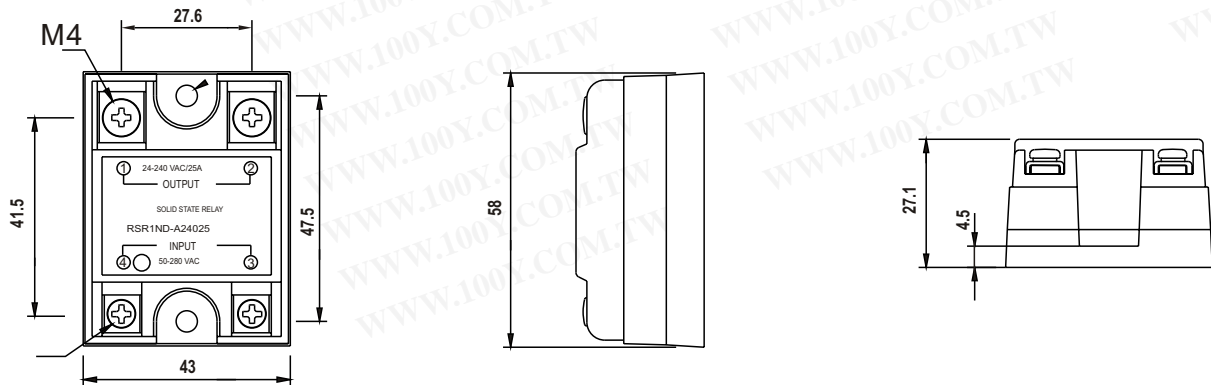


ORDERING INFORMATION

RSR 1 N D — A 240 25
 1 2 3 3-1 4 5 6 7

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| <p>1. Series Name</p> <p>2. Type Name</p> <p>3. N : With LED Indicate
 Nil : Without LED Indicate</p> <p>3-1D : DC In Put Control
 A : AC In Put Control</p> <p>4. Out Put Nominal Voltage Type :
 A : AC ; D : DC</p> | <p>5. Out Put Nominal Voltage :
 120 : 120V ; 240 : 240V ; 480 : 480V</p> <p>6. Load Current :
 10 : 10 Amps.
 25 : 25 Amps.
 40 : 40 Amps.</p> <p>7. Nil : Zero-on, Normal Open
 R : Random-on, Normal Open</p> |
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DIMENSIONS



INPUT CIRCUIT

Control Voltage Range	DC 4 - 32 V		AC 50-280 V
Control Current	15mA Max.	120mA Max.	15mA Max.
Min. Turn-off Voltage	1.5 VDC		40 VAC
Input Impedance	2.0K Ω Min.	270 Ω Min.	106K Ω Min.

OUTPUT CIRCUIT

Max. Load Current (rms)	10A	25A	40A	15A	25A	40A	10A	25A	40A	
Nominal Load Voltage (VAC)	120		240		440		120		240	
Load Voltage Range (VAC)	24-140		24-280		48 - 480		24-140		24-280	
Non-Repetitive Max. Peak Voltage (VAC)	400		600		800		400		600	
Non-Repetitive Max. Peak Current	125A	260A	315A	200A	250A	400A	125A	260A	315A	
Max. Off-state Leakage Current	1mA	7mA		2mA	1mA		1mA	7mA		
Max. Off-state Voltage Drop(V)	1.6		1.8		1.6		1.8		1.6	1.8
Min. Load Current(mA)	50		100		70		120		50	100
Max. Off-state Slew Rate(dv/dt)	250V/ μ s			700V/ μ s			900V/ μ s	250V/ μ s		
Operating Frequency Range	47 Hz ~ 63 Hz									

GENERAL CHARACTERISTICS

Zero-on	Zero-on	
Max. Turn-on Time (60Hz)	8.3 ms	10ms
Max. Turn-off Time (60Hz)	8.3 ms	20ms
Insulation Resistance	DC 500V 1,000 M Ω Min.(Between Input & Output, Input/Output & Case)	
Dielectric Strength	3.5K VAC(Between Input & Output)	
Capacitance(Input to Output)	15pF Max.(Between Input & Output)	
Operation Temperature	-20 $^{\circ}$ C~+ 80 $^{\circ}$ C	-20 $^{\circ}$ C~+ 75 $^{\circ}$ C
Storage Temperature	-40 $^{\circ}$ C~+ 100 $^{\circ}$ C	
Heatsink(Max. Load current)	3.5 $^{\circ}$ C/W	2.1 $^{\circ}$ C/W

FEATURES

- Zero voltage turn-on, zero current turn-off (minimize EMI/FRI)
- Input LED indicator
- Built-in snubber network
- Low input power consumption, TTL and CMOS compatible
- High dv/dt and high blocking voltage

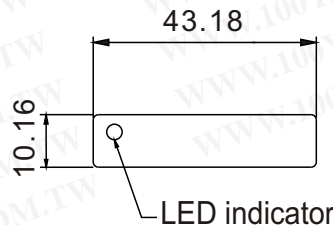
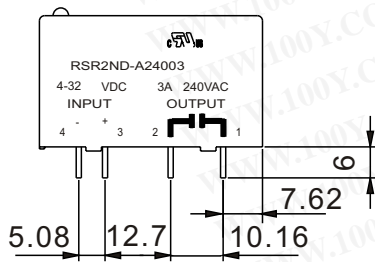
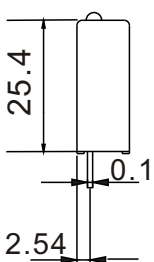


ORDERING INFORMATION

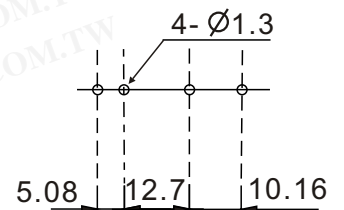
RSR 2 N D — A 240 03
 1 2 3 3-1 4 5 6 7

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| <ol style="list-style-type: none"> 1. Series Name 2. Type Name 3. N : With LED Indicate
Nil : Without LED Indicate 3-1D : DC In Put Control 4. Out Put Nominal Voltage Type :
A : AC ; D : DC | <ol style="list-style-type: none"> 5. Out Put Nominal Voltage :
120 : 120V ; 240 : 240V 6. Load Current :
03 : 3 Amps. 7. Nil : Zero-on, Normal Open
R : Random-on, Normal Open |
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DIMENSIONS



P.C.B LAYOUT (BOTTOM VIEW)



INPUT CIRCUIT

Control Voltage Range	DC 4 - 32 V
Control Current	15mA Max.
Min. Turn-off Voltage	1.5 VDC
Input Impedance	2.0KΩ Min.

OUTPUT CIRCUIT

Load Type	AC		DC
Max. Load Current (rms)	3A		
Nominal Load Voltage (VAC)	120	240	60
Load Voltage Range (VAC)	24-140	24-280	3-60
Non-Repetitive Max. Peak Voltage (VAC)	400	600	60
Non-Repetitive Max. Peak Current	80A		5A
Max. Off-state Leakage Current	5mA		1.0mA
Max. Off-state Voltage Drop(V)	1.5V		
Min. Load Current(mA)	50mA		10mA
Max. Off-state Slew Rate(dv/dt)	100V/μs		—
Operating Frequency Range	47 Hz ~ 63 Hz		—

GENERAL CHARACTERISTICS

Zero-on	Zero-on	
Max. Turn-on Time (60Hz)	8.3 ms	50 μs
Max. Turn-off Time (60Hz)	8.3 ms	100 μs
Insulation Resistance	DC 500V 1,00 MΩ Min.(Between Input & Output, Input/Output & Case)	
Dielectric Strength	2.5K VAC(Between Input & Output)	
Capacitance(Input to Output)	10pF Max.(Between Input & Output)	
Operation Temperature	-20°C ~+ 85°C	-20°C ~+ 80°C
Storage Temperature	-40°C ~+ 100°C	