

# Solid State Relay

## SH Series Single Phase AC Output



- Zero-crossing or Random-on Switching
- Rated Load Current: 25A @ 24-660VAC
- DC Input
- SCR Output
- Built-in RC Snubber Circuit and TVS Optional
- RoHS Compliant

### Product Description

ASR-SH series industrial single phase relay with SCR output is widely used in industry applications, PCB mounted. The relay can be used for resistive, inductive or capacitive load. The control voltage is 4-32VDC, the load voltage is 240VAC, 480VAC, or 600VAC, output current is rated at 25A.

### Product Selection

<b>ASR</b>	<b>—</b>	<b>SH</b>	<b>240</b>	<b>D</b>	<b>25</b>	<b>R</b>	<b>W</b>
	Packing: - : Bulk Packing A-Z	SH Series	Load Voltage 240:240VAC 380:380VAC 480:480VAC 600:600VAC	Control Voltage Type D:DC Control A: AC Control	Load Current 10:10Amps 25:25Amps	Switching Mode Z:Zero Crossing R:Random-on	Control Voltage 4-32VDC

NOTE: Alternate control voltages: 18-36VAC, 4-15VDC, 15-32VDC are available as well as options for RC circuit and TVS. Consult with engineering to determine which combinations are available.

INPUT CIRCUIT		
Control Voltage Range	W	4-32VDC
Must Turn-on Voltage		4VDC
Must Turn-off Voltage	5/12/24	1.0VDC
Maximum Input Current	Random-on	25mA@32VDC
	Zero Crossing	18mA@32VDC

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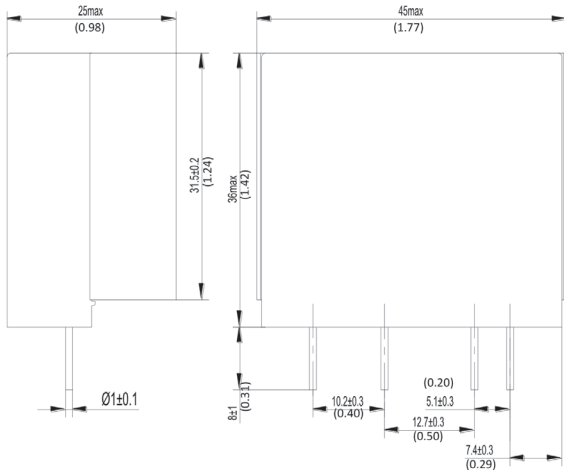
OUTPUT CIRCUIT		
Load Voltage Range	240VAC	24~280VAC
	380VAC	24~440VAC
	480VAC	24~530VAC
	600VAC	24~660VAC
Maximum Turn-on Time	Random-On	1ms
	Zero Crossing	10ms
Maximum Turn-off Time		10ms
Maximum Surge Current [@10 ms]		250A
Transient Overvoltage	240VAC	600Vpk
	380VAC	800Vpk
	480VAC/600VAC	1200Vpk
Maximum Off-state Leakage Current [@ Rated Voltage]	With RC	5mA
Maximum On-state Voltage Drop [@ Rated Current]		1.5Vrms
Minimum Off-state dv/dt [@ Maximum Rated Voltage]		500V/ $\mu$ s
GENERAL INFORMATION		
Dielectric Strength, [50/60Hz]	Input/Output	4000Vrms
	Input,Output/Base	2500Vrms
Power Factor		>0.5
Ambient Operating Temperature Range		-30°C +100°C
Ambient Stotage Temperature Range		-30°C +100°C
Weight [Typical]		50g

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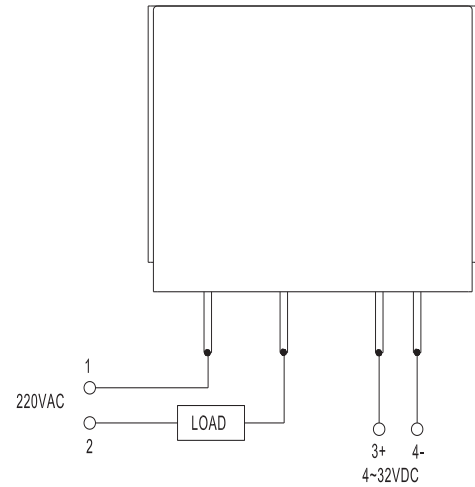
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### Application Note:

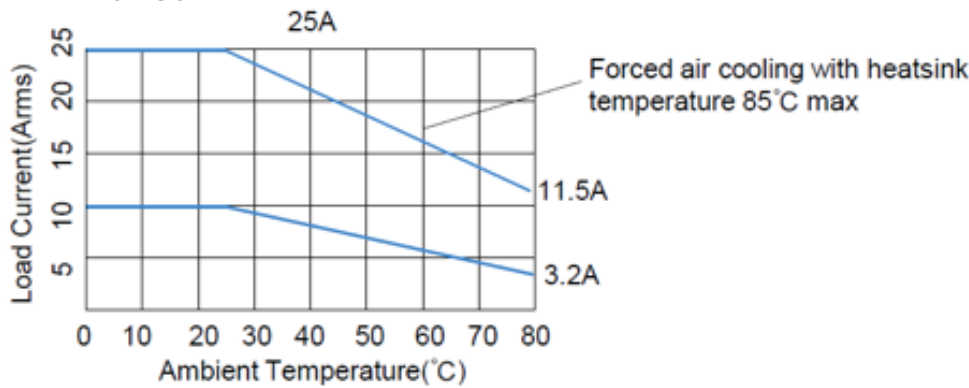
Lighting control, Medical equipment, Elevator, Electric control door.



### Wiring Diagram



### Thermal Curve



### Important Notice

1. Soldering must be finished within 10 seconds at 260°C, or finished within 5 seconds at 350°C. Otherwise it may cause damage to the relay.
2. Terminal polarity must be observed. Otherwise it may cause damage to the relay.
3. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.

### Product Certification



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