

Solid State Relays

NEW

- Logic (3—32V dc) or 240V AC Input
- 10, 25 or 40 Amp Outputs
- Built-In Snubber Network
- DIN Rail Mounting Heatsinks Available
- LED Status Indicator
- 5000V Isolation
- CE Approved



The **NEW** range of Solid State Relays offers an improved specification at a considerably lower price over previous ranges. Solid State Relays are a cheap, high speed state-of-the-art semiconductor load switching device that, when used with 3-Term temperature controllers, give a much improved accuracy in controlling the temperature on your application.

When using an SSR, the cycle time of the controller can be reduced from the 15 seconds typically used with electro-mechanical devices like contactors, to 1 second, improving the accuracy and speed of response and making them ideal replacements for mechanical contactors.

The **NEW** Fast Heat SSR's have industry standard 'hockey puck' dimensions and incorporate a status LED which illuminates when the input has been triggered. Coupled with a controller which indicates that the control output is active, fault finding is considerably simplified.

A built-in snubber network provides protection against mains-borne voltage spikes.

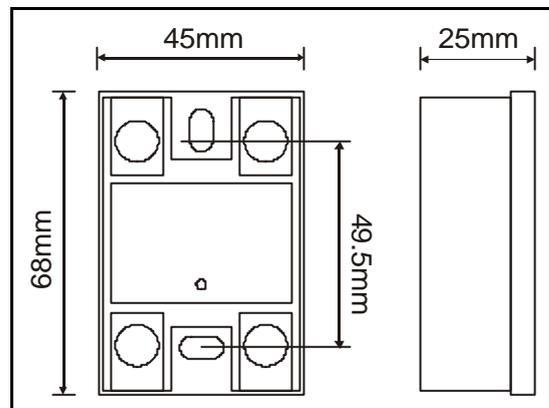
The SSR's are available with 10 Amp, 25 Amp or 40 Amp output rating and with either a logic or mains switching input.

The logic input can be used with controllers with a 3 - 32V DC pulse output. The mains input SSR is for use in applications which have 240V AC switching, perhaps due to an existing mechanical contactor being used in the application.

The current output of an SSR derates with temperature. For this reason, we recommend the mounting of the SSR to a heatsink or metal bulkhead in an area where air flows freely, and the use of heatsink compound.



Heatsink Mounted SSR



Input Options	Code	Voltage Range	Description
Logic	L	3—32V dc	For use with temperature controllers with dc voltage outputs.
Mains	M	90—250V ac	For use with temperature controllers with a relay output which is switching a high ac voltage. This option is typically for use in systems that previously used a contactor.

Solid State Relays

Model Number	SSRV-L-25A	SSRV-M-25A	SSRV-L-40A
Input Rating	4 - 32V dc	90 - 280V ac	4 - 32V dc
Must Operate Voltage	4.0V dc	80V ac	4.0V dc
Must Release Voltage	3.5V dc	60V ac	3.5V ac
Input Impedance	1500 R	40 kR	1500 R
Input Current	5 mA @ 24V dc	0.6 mA @ 240V ac	5 mA @ 24V dc

Operating Voltage (V ac @ 50/60Hz)	90—280	90—280	90—280
Max Peak Surge (A)	260	260	420
Min Load Current (A rms)	0.1	0.1	0.1
Max On State Voltage Drop @ Rated Current (V rms)	1.6	1.6	1.6
Max Off State Leakage Current @ Rated Voltage (mA rms)	1	1	1
Min Off State dv/dt @ Max Rated Voltage (V /usec)	1000	1000	500
Transient Over Voltage (V)	800	800	800
I ² t For Fusing (A ² s)	340	340	880
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

Isolation Voltage (Vrms, AC, 1 minute)	5000	5000	5000
Insulation Resistance (Min) (R @ 500V dc)	10 ¹²	10 ¹²	10 ¹²
Max Capacitance Input/Output (pF)	0.8	0.8	0.8
Ambient Operating Temperature Range	-40—80C	-40—80C	-40—80C
Ambient Storage Temperature Range	-40—125C	-40—125C	-40—125C
Status Indicating Display	Red LED	Red LED	Red LED
Weight	110g	110g	110g
Encapsulation	Thermally Conductive Epoxy	Thermally Conductive Epoxy	Thermally Conductive Epoxy

Prices	£12.50	£14.00	£14.00
Delivery	Ex-Stock	Ex-Stock	Ex-Stock

Heatsink Details

Size: 50 x 80 x 70mm (W x D x H)

Part Number: SSR-HEATSINK Price: £6.50 each—mounting screws included

DIN Clip Part Number: SSR-HEATSINK-CLIP Price: £1.00 each—mounting screws included

Fast Heat recommend the use of Infrakote Heat Transfer Compound when mounting SSR's to heatsinks or bulkheads.



fast heat



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