Solid State Relays

AC/DC Input; 10, 25, 50, 75 Amp, 330 Vac Output; 50 and 75 Amp 660 Vac Output

SSR330 Series
$21
Basic Unit

Safety Cover Included

Shown actual size

- **Optically Isolated**
- **LED Status Indicator**
- **Clear Plastic Safety Cover Included**
- **4000 Volt Isolation**
- **Zero Voltage Turn-On**
- **Built-In Snubber**
- **High Surge Capability**
- **100% Tested at Rated Current**

OMEGA's SSR330 & SSR660 Series Solid State Relays (SSR) are single-pole, normally open switching devices with no moving parts, capable of millions of cycles of operation. By applying a control signal, the SSR switches "ON" the ac load current, just as moving contacts do on a mechanical contactor.

"Switching" takes place at the zero voltage crossover point of the alternating current cycle. Because of this, no appreciable noise is generated. Both dc and ac input control signal models are available.

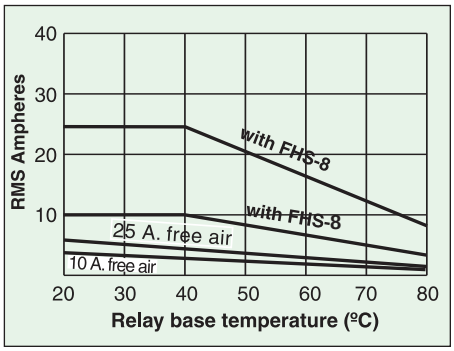
DC Control Specifications

Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Min Control Voltage & Current Draw	Max Control Voltage & Current Draw	Release Voltage (Vdc)
SSR330DC10	24 to 330 Vac	0.05 to 10	4 Vdc/5.4 mA	32 Vdc/10 mA	1 Vdc
SSR330DC25	24 to 330 Vac	0.10 to 25	4 Vdc/5.4 mA	32 Vdc/10 mA	1 Vdc
SSR330DC50	24 to 330 Vac	0.10 to 50	4 Vdc/3.5 mA	32 Vdc/8 mA	1 Vdc
SSR330DC75	24 to 330 Vac	0.10 to 75	4 Vdc/3.5 mA	32 Vdc/8 mA	1 Vdc
SSR660DC50	24 to 660 Vac	0.10 to 50	4 Vdc/3.5 mA	32 Vdc/8 mA	1 Vdc
SSR660DC75	24 to 660 Vac	0.10 to 75	4 Vdc/3.5 mA	32 Vdc/8 mA	1 Vdc

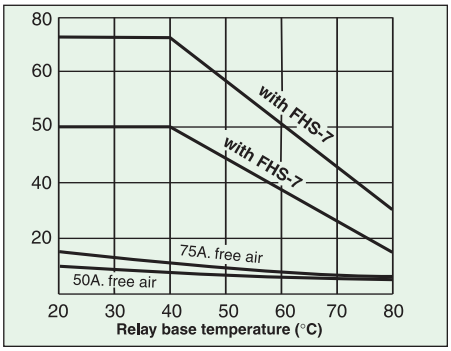
AC Control Specifications

Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Min Control Voltage & Current Draw	Max Control Voltage & Current Draw	Release Voltage (Vac)
SSR330AC10	24 to 330 Vac	0.05 to 10	100 Vac/2.0 mA	280 Vac/19 mA	20 Vac
SSR330AC25	24 to 330 Vac	0.10 to 25	100 Vac/2.0 mA	280 Vac/19 mA	20 Vac
SSR330AC50	24 to 330 Vac	0.10 to 50	100 Vac/2.0 mA	280 Vac/19 mA	20 Vac
SSR330AC75	24 to 330 Vac	0.15 to 75	100 Vac/2.0 mA	280 Vac/19 mA	20 Vac
SSR660AC50	24 to 660 Vac	0.15 to 50	100 Vac/2.0 mA	280 Vac/19 mA	20 Vac
SSR660AC75	24 to 660 Vac	0.15 to 75	100 Vac/2.0 mA	280 Vac/19 mA	20 Vac

10-AMP and 25-AMP (330 Vac)



50-AMP and 75-AMP (330 or 660 Vac)



Heat is developed in a Solid State Relay due to the nominal voltage drop across the switching device. To dissipate the heat, an SSR must be mounted vertically on a finned heat sink or an aluminum plate. An SSR should be located where the ambient temperature is relatively low, since the current switching rating is lowered as temperature increases. Refer to the thermal derating curves shown on the previous page to determine the proper heat sink required.

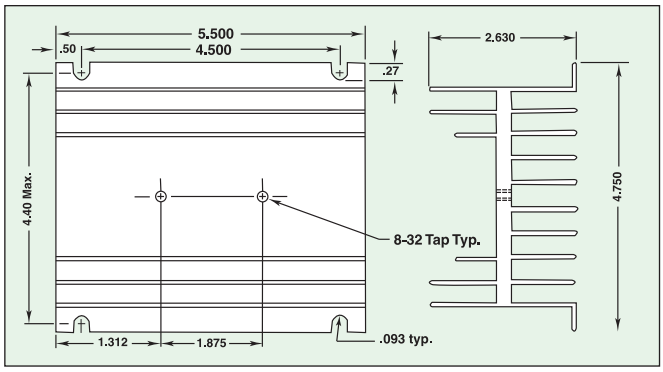
Solid State Relay cycle life is many times that of an equivalently priced mechanical contactor. OMEGA recommends Solid State Relays for use with proportional temperature controllers and other applications where long life and solid state reliability are needed.

In contrasting Solid State Relays with mechanical contactors, it should be noted that a Solid State Relay is more prone to failure due to overload and improper initial wiring. Solid State Relays can fail, contact closed, on overloaded circuits.

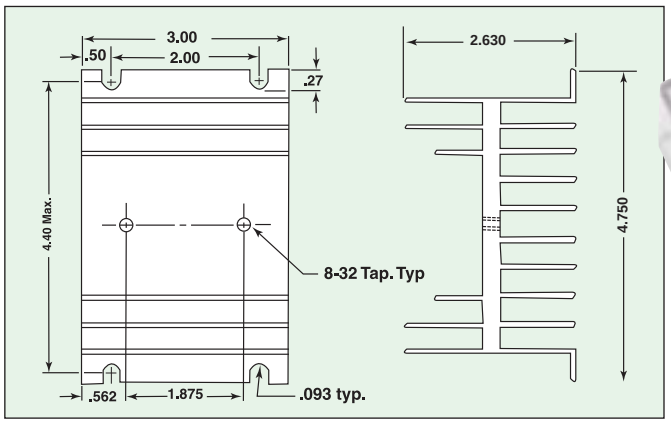
OMEGA® finned heat sinks (FHS) are aluminum fabrications and come complete with tapped mounting holes and screws. Refer to thermal derating curves for heat sink selection.

SSR baseplate to heat sink thermal resistance is affected by use of a thermally conducting compound. OMEGATHERM® OT-201 placed between the heat sink and SSR baseplate will significantly improve the thermal conductivity. It is also suggested that 10 inch-pounds of torque be used on the SSR mounting screws.

FHS-7
Finned Heat Sink

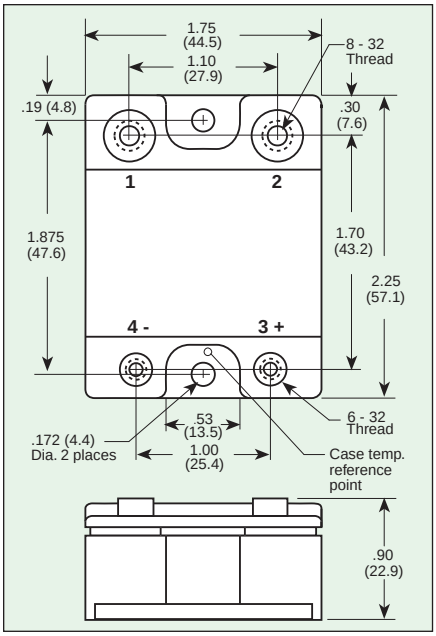


FHS-8
Finned Heat Sink



Safety Cover Included

Dimensions shown in inches (mm)



IN STOCK FOR FAST DELIVERY!

To Order *(Specify Model Number)*

Model Number	Price	Description	Nominal Rating
SSR330DC10	**$21**	dc control Signal (330 Vac line)	10 A
SSR330DC25	**26**		25 A
SSR330DC50	**37**		50 A
SSR330DC75	**61**		75 A
SSR660DC50	**45**	dc control Signal (660 Vac line)	50 A
SSR660DC75	**65**		75 A
SSR330AC10	**25**	ac control Signal (330 Vac line)	10 A
SSR330AC25	**30**		25 A
SSR330AC50	**40**		50 A
SSR330AC75	**65**		75 A
SSR660AC50	**48**	ac control Signal (660 Vac line)	50 A
SSR660AC75	**69**		75 A
FHS-7	**30**	Finned Heat Sink	1.0˚C/W
FHS-8	**22**		1.5˚C/W

For Additional Controllers and Indicators, See Section M

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