



EVOLUTION DUAL SERIES

AC PANEL MOUNT SOLID STATE RELAYS

This installation sheet includes detailed mounting and wiring instructions which apply for Crydom Evolution Dual AC output SSRs. Be sure to visit the product series' datasheet available at the Sensata website to complement this information. If you have questions or need additional information please contact Tech Support. Please read all mounting instructions before using your Dual AC Output Panel Mount Solid State Relay (SSR)

MOUNTING INSTRUCTIONS (A)

Choose one of the two mounting options and follow the instructions.

Mounting on Heat Sink

- Select adequate heat sink (see thermal derating curves in product series' datasheet).
- Be sure to use a thermal pad or thermal compound (0.006 - 0.008 in layer thickness recommended) between the SSR and the selected heat sink.
- SSR mounting slots have a diameter of 0.2 in (5.0 mm). Two screws are needed to mount the SSR onto heat sink (See fig. 1). Mounting screws are sold separately as HK1 and are suitable for all Crydom heat sinks. Otherwise, recommended screw size is 8-32 (UNC standard) or M4 (metric) depending on the heat sink model, see product datasheet. Choose screw length considering the mounting surface hole depth and that SSR baseplate thickness is 0.125 in (3.2 mm).
- Before applying full torque tighten down both screws until they contact the baseplate. Then, tighten them to 20 in-lb (2.2 Nm).
- For optimal thermal performance heat sink fins should be oriented vertically to promote natural convection airflow.

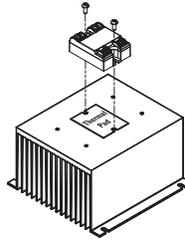


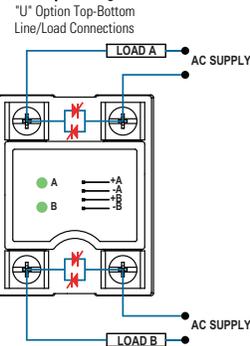
fig. 1 SSR mounted on HS053 heat sink (A)

Mounting on Panel

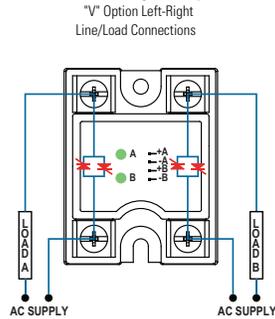
- Locate the panel section on which the SSR will be mounted. Panel mount surface must provide adequate heat sinking capability, uncoated, clean, flat (0.004 in/in recommended) and preferably aluminum.
- Be sure to use a thermal pad or thermal compound (0.006 - 0.008 in layer thickness recommended) between the SSR and the panel.
- SSR mounting slots have a diameter of 0.2 in (5.0 mm). Two screws are needed (not included) to mount the SSR onto panel. Choose screw length considering the mounting surface hole depth and that the SSR baseplate thickness is 0.125 in (3.2 mm).
- Before applying full torque tighten down both screws until they contact the baseplate. Then, tighten them to 20 in-lb (2.2 Nm).

WIRING DIAGRAM (B)

SSR Output Configuration



Contactor Output Configuration



Terminals

Standard screw terminals is for Output: 8-32, Combo Drive. Maximum screw torque is 20 in-lbs (2.2 Nm) on output.

Connections

Ensure that wires ends are stripped to a minimum length of 0.49 in (12.5 mm) for output.

Transient Protection

Transients are common on AC power lines, and in extreme cases, may pose a risk for the proper operation and reliability of the SSR and its load. The load which the SSR controls may also generate transients itself. Therefore, inclusion of transient protection for the SSR is highly recommended. The user may also install transient protection external to the SSR for additional protection. Contact technical support for additional information on use of transient protection for AC output SSRs.

Please read all mounting instructions before using your Dual AC Output Panel Mount Solid State Relay (SSR).

Important Considerations

Be sure to use input and output voltages within operating ranges.

Suggested Mating Connectors/Plugs

Visit the product datasheet for more information about suggested mating connectors/plugs.

GENERAL NOTES

(A) See compatible accessories in corresponding datasheet.

(B) Load can be wired to either terminal A1/ B1 or terminal A2./ B2 Proper polarity must be observed all the time for the DC control power supply , with terminal +A/+B being positive with respect to terminal A-/B-.

ACCESSORIES

TABLE 2. Recommended Accessories (A)

Hardware Kit	Heat Sink Part No	Thermal Resistance (°C/W)	Lug Terminal	Thermal Pad
HK1	HS01DR	5.0	TRM1	HSP-1
HK4	HS301 / HS301DR	3.0	TRM6	HSP-2
	HS251	2.5		
	HS202 / HS202DR	2.0		
	HS201 / HS201DR	2.0		
	HS172	1.7		
	HS151 / HS151DR	1.5		
	HS122	1.2		
	HS103 / HS103DR	1.0		
	HS101	1.0		
	HS073	0.7		
	HS072	0.7		
	HS053	0.5		
	HS033	0.36		
	HS023	0.25		

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