



## R800 LINE MOUNTING INSTRUCTIONS

- 240 Vac up to 600 Vac models
- 10 Amps up to 75 Amps models

### R810, R811& R820 INSTALLATION

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#### **Important.**

**When the SSR or SCR is installed inside a panel, the enclosure needs to be adequately louvered from proper ventilation and heat dissipation. Contact the factory for the derating amperage curves for these specific applications .**

**Electronic controls require special care for wiring and startup. To avoid problems, carefully follow the procedures below.**

Look at the wiring diagrams, and study them carefully. Be sure that you understand how the system is supposed to work.

#### **A) Location:**

- 1- Can be installed inside a louvered approved cabinet or with the heatsink mounted externally.
- 2- Respect mounting orientation ( this side up ).
- 3- Must be installed away from excessive heat source.
- 4- Do not restrict air circulation to the heatsink.

#### **B) In cabinet installation:**

- 1- Use the mounting tabs on the heatsink to secure the SCR to the back plate of the panel.
- 2- When the R810 or R820 is installed inside a panel, the enclosure needs to be adequately louvered for proper ventilation and heat dissipation. Contact the factory for the derating amperage curves for these specific applications .

#### **C) Heatsink mounted externally installation**

- 1- If installed with heatsink outside the cabinet, use the proper model mounting template for the cut out dimensions and to check for mounting obstructions.
- 2- Respect mounting orientation ( this side up ). Mount the heatsink vertically on the side of the cabinet for maximum heat dissipation. If mounted on top or bottom of the cabinet, derate maximum usable amperage by 25%.

#### **D) General cautions:**

- 1- High voltages are present on the terminals of these devices.
- 2- Do not relocate the power switching modules on the heatsink.
- 3- Please read all the instruction in this manual carefully.
- 4- The 45 & 75 Amps models need to be wired with the supplied high voltage lugs.  
**Attach the wire to the lug first**, then screw the lug to the power module.
- 5- Have the wiring done by a qualified a skilled professional.
- 6- High voltage and amperage can be fatal.
- 7- All wiring must conform with national electrical code regulations.
- 8- The instrument must be wired before applying power.
- 9- Protect circuits with semi conductor fuses.
- 10- Derating amperage curves are available from the factory.
- 11- Use with resistive loads only

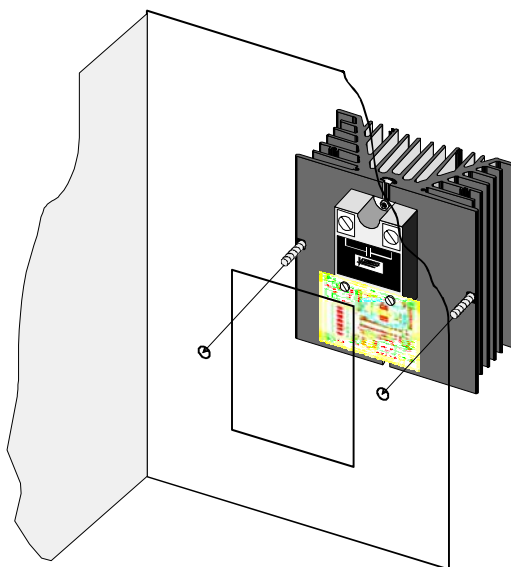
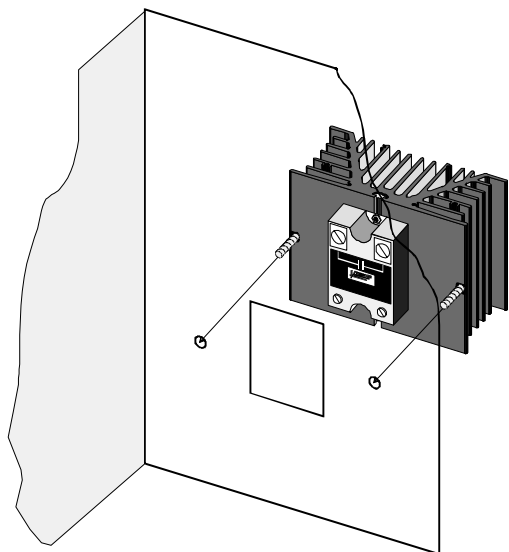
#### **Note:**

These instruments have undergone rigorous tests and verifications prior to shipment to ensure proper and reliable operation in the field. However, like other such products, they are subject to failure. It is therefore the responsibility of the installer / user / electrical panel designer to incorporate safety features and devices ( such as relays, flow switch, thermal protections, etc..... ) to protect the entire system from catastrophic failure.

## R810 TYPICAL INSTALLATION

## R820 TYPICAL INSTALLATION

- Respect mounting orientation ( this side up ).
- Mount the heatsink vertically on the side of the cabinet for maximum heat dissipation.



### R810 MODELS: TEMPLATE DIMENSIONS

Models Available	Template	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Dim. H
R810-211	A	3.0 in	1.50 in	0.250 in	2.0 in	2.5 in	1.625 in	N.A.	N.A.
R810-321	A	3.0 in	1.50 in	0.250 in	2.0 in	2.5 in	1.625 in	N.A.	N.A.
R810-341	B	6.5 in	1.50 in	0.375 in	2.0 in	2.5 in	1.625 in	3.625 in	3.5 in
R810-421	A	3.0 in	1.50 in	0.250 in	2.0 in	2.5 in	1.625 in	N.A.	N.A.
R810-441	B	6.5 in	1.50 in	0.375 in	2.0 in	2.5 in	1.625 in	3.625 in	3.5 in
R810-471	B	10.0 in	2.25 in	0.375 in	2.0 in	2.5 in	1.625 in	7.125 in	5.5 in
R810-621	A	3.0 in	1.50 in	0.250 in	2.0 in	2.5 in	1.625 in	N.A.	N.A.
R810-641	B	6.5 in	1.50 in	0.375 in	2.0 in	2.5 in	1.625 in	3.625 in	3.5 in
R810-671	B	10.0 in	2.25 in	0.375 in	2.0 in	2.5 in	1.625 in	7.125 in	5.5 in

### R820 MODELS: TEMPLATE DIMENSIONS

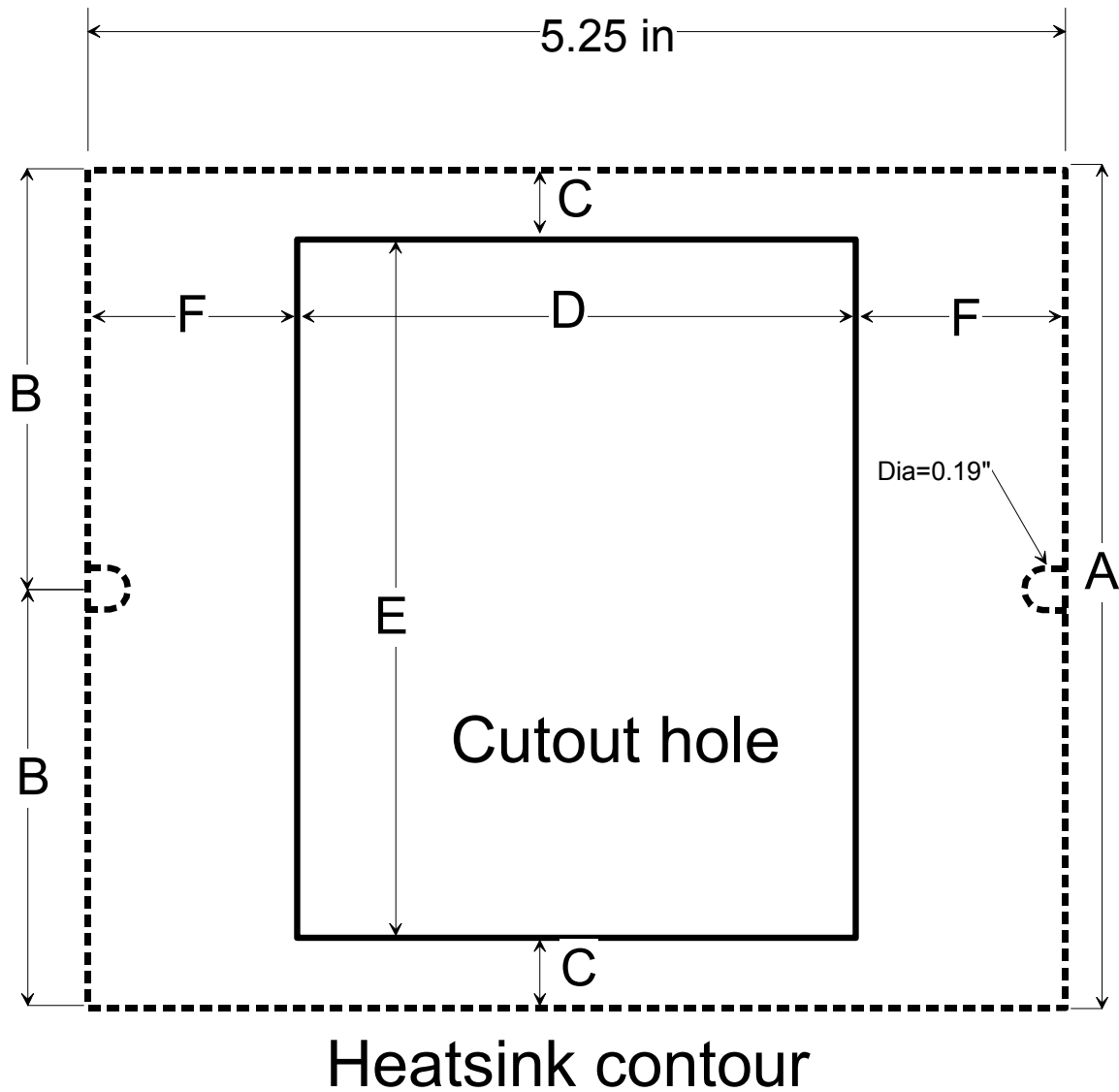
Models Available	Template	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Dim. H
R820-211	A	4.5 in	2.25 in	0.375 in	3.0 in	3.75 in	1.125 in	N.A.	N.A.
R820-213	B	6.5 in	1.50 in	0.375 in	3.0 in	5.75 in	1.125 in	0.375 in	3.5 in
R820-321	A	4.5 in	2.25 in	0.375 in	3.0 in	3.75 in	1.125 in	N.A.	N.A.
R820-323	B	10.0 in	2.25 in	0.375 in	3.0 in	5.75 in	1.125 in	0.375 in	5.5 in
R820-341	B	6.5 in	1.50 in	0.375 in	3.0 in	3.75 in	1.125 in	2.375 in	3.5 in
R820-343	B	10.0 in	2.25 in	0.375 in	3.0 in	5.75 in	1.125 in	3.875 in	5.5 in
R820-421	A	4.5 in	2.25 in	0.375 in	3.0 in	3.75 in	1.125 in	N.A.	N.A.
R820-423	B	6.5 in	1.50 in	0.375 in	3.0 in	5.75 in	1.125 in	0.375 in	3.5 in
R820-441	B	6.5 in	1.50 in	0.375 in	3.0 in	3.75 in	1.125 in	2.375 in	3.5 in
R820-443	B	10.0 in	2.25 in	0.375 in	3.0 in	5.75 in	1.125 in	3.875 in	5.5 in
R820-471	B	10.0 in	2.25 in	0.375 in	3.0 in	3.75 in	1.125 in	5.875 in	5.5 in
R820-621	A	4.5 in	2.25 in	0.375 in	3.0 in	3.75 in	1.125 in	N.A.	N.A.
R820-623	B	6.5 in	1.50 in	0.375 in	3.0 in	5.75 in	1.125 in	0.375 in	3.5 in
R820-641	B	6.5 in	1.50 in	0.375 in	3.0 in	3.75 in	1.125 in	2.375 in	3.5 in
R820-643	B	10.0 in	2.25 in	0.375 in	3.0 in	5.75 in	1.125 in	3.875 in	5.5 in
R820-671	B	10.0 in	2.25 in	0.375 in	3.0 in	3.75 in	1.125 in	5.875 in	5.5 in

## A TEMPLATE

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- Respect mounting orientation ( this side up ).
- Mount the heatsink vertically on the side of the cabinet for maximum heat dissipation.
- Do not relocate the power switching modules on the heatsink.

## "A" Template



- At all possible cost, respect mounting orientation ( this side up ).
- Mount the heatsink vertically on the side of the cabinet for maximum heat dissipation.
- Do not relocate the power switching modules on the heatsink.

**This side mounted up for proper heat dissipation**

