



"Hockey Puck" Solid State Relay With Paired SCR Output

cUL[®] US File E81606

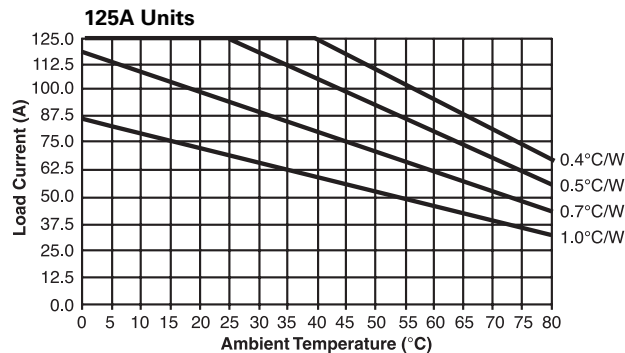
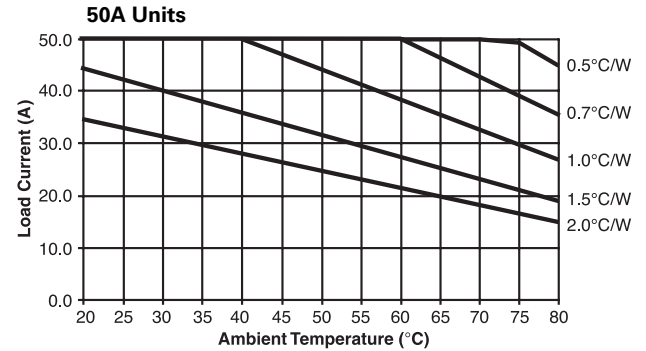
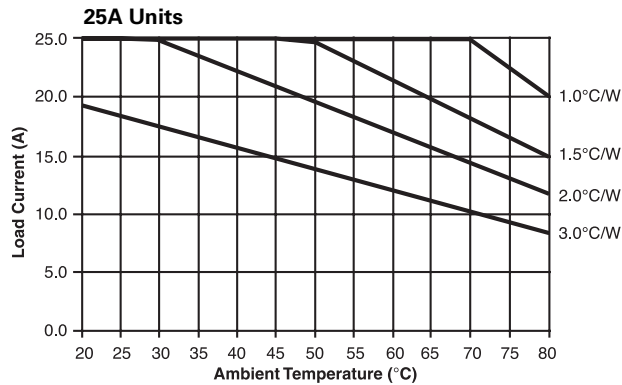
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Technical support:
Refer to inside back cover.

Output Specifications (@ 25° C, unless otherwise specified)

Parameter	Nom. Line Voltage	Conditions	Units	25A Models	50A Models	125A Models
Load Voltage Range V_L	120/240V Model		V rms	24 - 280		
	480V Model		V rms	48 - 660		
Repetitive Blocking Voltage (Min.)	120/240 Model		V peak	±600		
	480V Model		V peak	±1200		
Load Current Range I_L^*	120/240 & 480V Models	Resistive	A rms	.05 - 25	.1 - 50	.1 - 125
Single Cycle Surge Current (Min.)	120/240 & 480V Models		A peak	250	750	1,700
Leakage Current (Off-State) (Max.)	120/240V Model	$f = 60 \text{ Hz}$, $V_L = 240\text{V rms}$	mA rms	.1		
	480V Model	$f = 60 \text{ Hz}$, $V_L = 480\text{V rms}$		.25		
On-State Voltage Drop (Max.)	120/240 & 480V Models	$I_L = \text{Max.}$		1.35		
Static dv/dt (Off-State) (Min.)	120/240 & 480V Models		V/μs	500		
Thermal Resistance, Junction to Case ($R_{\theta JC}$) (Max.)	120/240 & 480V Models		°C/W	0.4	0.25	.15
Turn-On Time (Max.)	120/240 & 480V Models	$f = 60 \text{ Hz}$	ms	8.3 for Zero Voltage Turn-On DC input types, 20 for Zero Voltage Turn-On AC input types, 0.02 for Random Voltage Turn-On Models		
Turn-Off Time (Max.)	120/240 & 480V Models	$f = 60 \text{ Hz}$	ms	8.3 for DC input types, 30 for AC input types		
I^2T Rating	120/240 & 480V Models	$t = 8.3 \text{ ms}$	A ² Sec.	937	2,458	12,000
Load Power Factor Rating	120/240 & 480V Models	$I_L = \text{Max.}$		0.5 - 1.0		

*See Derating Curves

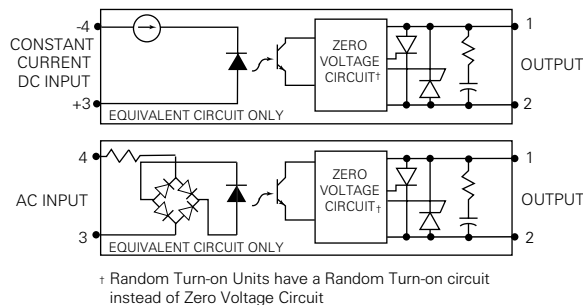
Electrical Characteristics (Thermal Derating Curves)



Heatsink Recommendations

- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch flatness across mating area), un-painted surface which is clean and free of oxidation.
- An even coating of thermal compound (Dow Corning DC340 or equivalent) should be applied to both the heatsink and module mounting surfaces and spread to a uniform depth of .002" to eliminate all air pockets.
- The module should be mounted to the heatsink using two #10 screws.

Operating Diagrams



Outline Dimensions

