



# Solid State Relay TH0C Mounting Instructions



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INSTALLATION MANUAL  
M.I.U. TH0C - 1/06.12 Cod. J30 - 478 - 1A TH0C I



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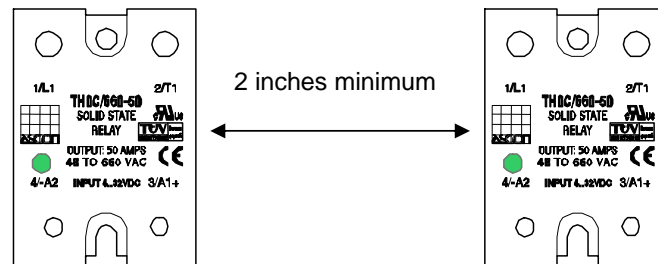
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# 1. Mounting instructions

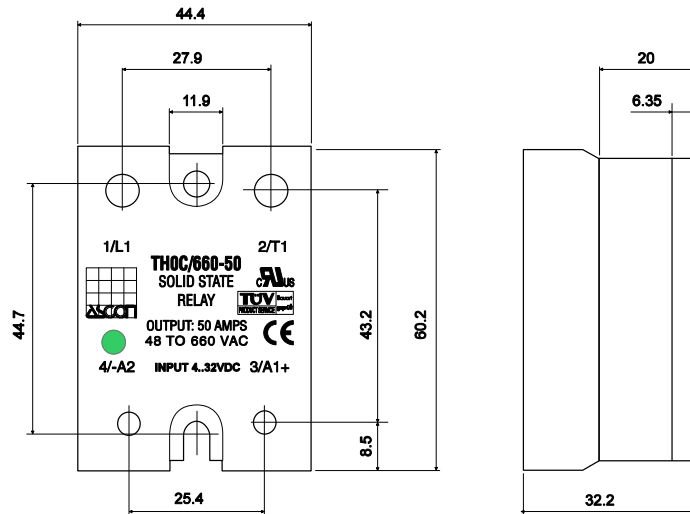
## 1.1 Clamping requirements

More than one TH0C solid state relay could be mounted side-by-side. It is important to keep in mind that to have better thermal dissipation, it is necessary to leave at least 2 inches (50 mm) between each SSR (see drawing below) and in a well ventilated area in the cabinet.

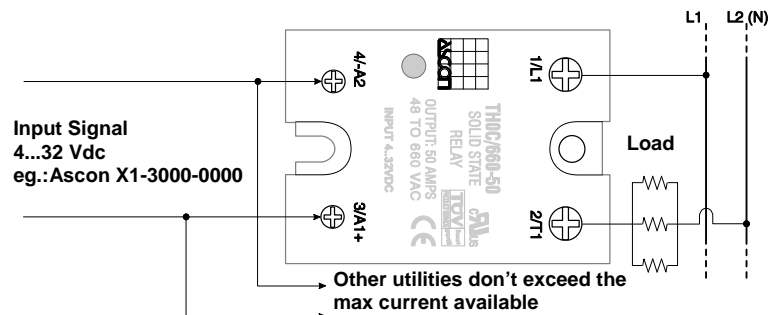
It is also important to evaluate properly the thermal dissipation related to working conditions.



## 2. Dimensions



## 3. Connections



## 4. General Characteristics

Storage Temperature	-40...212°F (-40...100°C)
Operating Temperature	-4...176°F (-20...80°C)
Input to Output Insulation Voltage	4000 V (rms)
Insulation Voltage between I/O and Ground	2500 V (rms)
Input/Output Capacitance	8 pF
Line Frequency	47... 80 Hz
Material Baseplate	ZAMAK
Material Housing	Polycarbonate UL-94V
Conformity to Standards	UL/cUL recognized UL508

### 4.1 Input Specifications

Control Voltage	4 - 32Vdc
Turn-off Voltage	1 Vdc
Max Controlled current	14 mA
Turn-on Time	8.33 mS (at 60 Hz)
Response Time on closing	8.33 mS (at 60 Hz)
Control Type	Zero crossing

### 4.2 Output Specifications

Voltage range	48 - 660 V (rms)			
Non-repetitive Peak voltage	1200 Vp			
	<b>Model</b>	<b>25 A</b>	<b>50 A</b>	<b>125 A</b>
Maximum current		25 A	50 A	125 A
Minimum current		100 mA		
Max non-repetitive 1 cycle surge (at 77°F)		500 A	780 A	1700 A
Max non-repetitive 1 sec surge (at 77°F)		150 A	235 A	510 A
Voltage drop at I max (at 77°F)		1.4 Vp	1.3 Vp	1.25 Vp
I <sup>2</sup> t (50 – 60 Hz) (A <sup>2</sup> s)		1250 - 1041	3042 - 2535	14450 - 12041
Static dv / dt		500 V/μS		
Operating Frequency		47... 80 Hz		
Thermal resistance junction to casing		0.4 °C/W	0.25 °C/W	0.15 °C/W

### 4.3 Thermal Derating Curves

