

# GNA5 Series Solid State Relays

- ▶ Current ratings 10 and 25 amps
- ▶ Output voltage 24 to 280 Vac
- ▶ Triac output
- ▶ Regulated AC and DC inputs
- ▶ 4000 Vac optical isolation
- ▶ UL E79183, CSA LR 38595, TUV Approved, CE Compliant



1

## Output Specifications

Voltage range (Vrms)	<b>24 - 280Vac</b>	
Peak Voltage (Vpk, t = 1 min.)	600	
Off-state leakage (@ max. line voltage & Ta = 25°C)	0.10mArms	
Output Current (Mounted on proper heat sink, see deratings)	<b>10</b>	<b>25</b>
Minimum Current (mArms)	100	100
1 cycle surge current 50 Hz	90	230
1 cycle surge current 60 Hz	100	250
Max. 1 second surge current 50/60 Hz (Apk, Ta = 25°C)	30	75
Forward voltage drop (Vpk @ Imax, Ta = 25°C)	1.5	1.3
I <sup>2</sup> T (50-60Hz)	40-40	260-250
Rjb (thermal res. Junction to baseplate, °C/W)	2.2	1.7
Static off-state dv/dt (Vµs, Ta = 25°C)	500	500
Minimum heat sink @ ambient (for max current = °C/W & Ta)	3.0@ 40°C	1.0@ 40°C

## Input Specifications

Input voltage*	<b>3-32Vdc</b>	<b>90-280Vac</b>
Drop out voltage	1Vdc	10Vrms
Max. input current	14mA	8.5mArms
Min. input current (for on-state)	9.5mA	5mArms
Input Resistance	Current Regulated	
Turn-on time**	8.33ms	20ms
Turn-off time	8.33ms	30ms

## General Characteristics

Operating Temperature (°C)	-20 to +80
Storage Temperature (°C)	-40 to +100
Input to output isolation	4000Vrms
Input/output to ground isolation	2500Vrms
Input to output capacitance	8pF (typical)
Operating Frequency	47 to 63 Hz
Housing Material	UL 94V0 (self extinguishing)

## Safety and Noise Immunity Compliance

CE Compliant with the LVD 73/23/EEC
UL / cUL Recognized per UL 508 and CSA C22.2 no. 14-M91 E46203
TUV EN60950
IEC 61000-4-2: Electrostatic Discharge – Level 3
IEC 61000-4-3: Radiated Electromagnetic Noise – Level 3
IEC 61000-4-4: Electrically Fast Transients – Level 3
IEC 61000-4-5: Electrical Surges – Level 3
IEC 61000-4-6: Conducted Electromagnetic Noise – Level 3
IEC 61000-4-11
CISPR 11 – Class A: Allowable Levels of Conducted and Radiated Noise for Industrial Environments

## Part Numbers

Rating	Output	Input	IP00	IP20
10 Amp	24-280Vac	90-280Vac	<b>84 134 901</b>	<b>84 137 901</b>
		3-32Vdc	<b>84 134 900</b>	<b>84 137 900</b>
25 Amp	24-280Vac	90-280Vac	<b>84 134 911</b>	<b>84 137 911</b>
		3-32Vdc	<b>84 134 910</b>	<b>84 137 910</b>

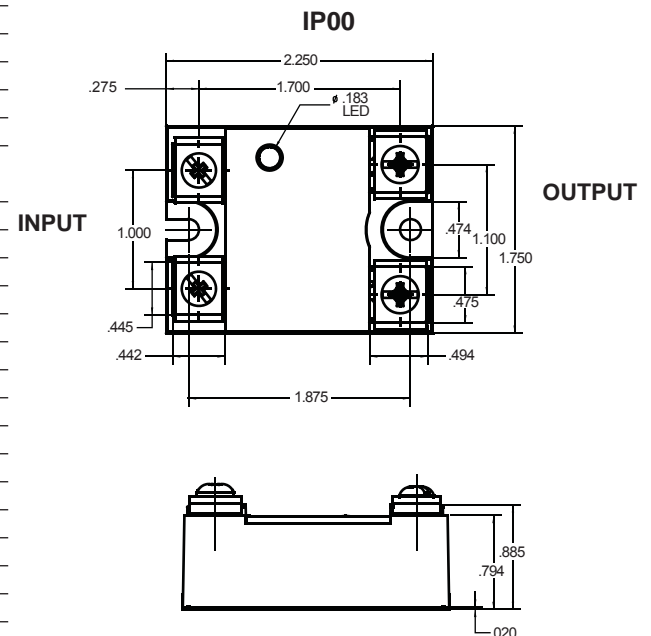
### Quick connect terminals: 3/16" input and 1/4" output

Rating	Output	Input	IP00
10 Amp	24-280Vac	90-280Vac	<b>84 134 905</b>
		3-32Vdc	<b>84 134 904</b>
25 Amp	24-280Vac	90-280Vac	<b>84 134 915</b>
		3-32Vdc	<b>84 134 914</b>

### Quick connect terminals: 1/4" input and 1/4" output

Rating	Output	Input	IP00
10 Amp	24-280Vac	90-280Vac	<b>84 134 909</b>
		3-32Vdc	<b>84 134 907</b>
25 Amp	24-280Vac	90-280Vac	<b>84 134 919</b>
		3-32Vdc	<b>84 134 917</b>

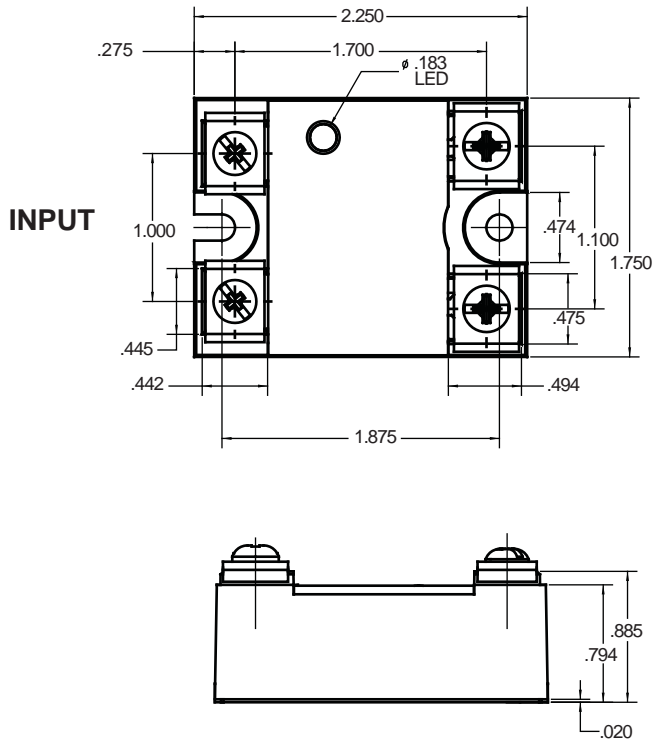
## DIMENSIONS IN INCHES



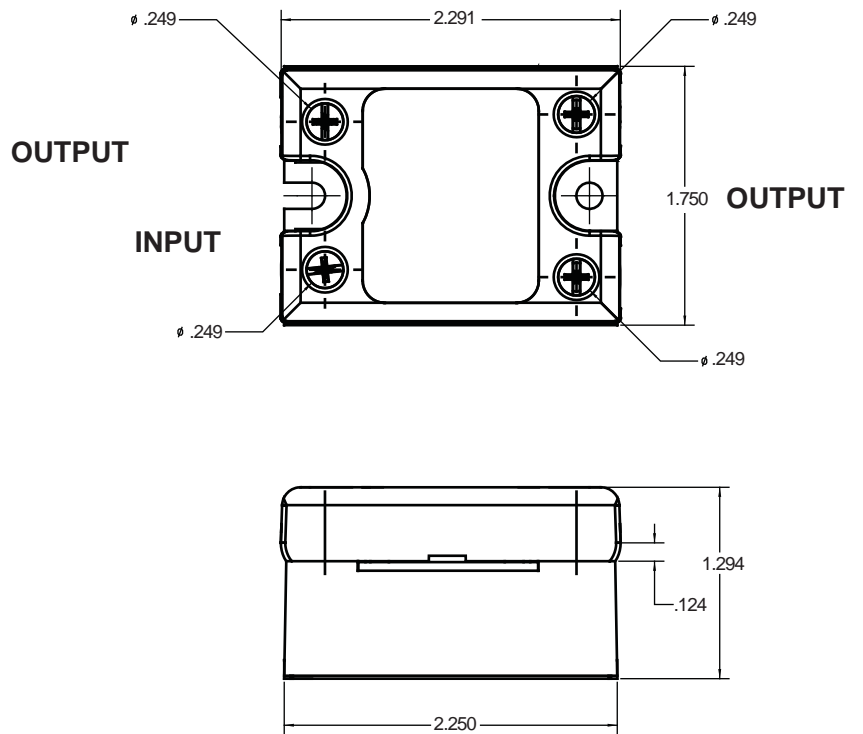
Products and specifications subject to change without notice.  
Consult factory for application assistance.

**DIMENSIONS IN INCHES**

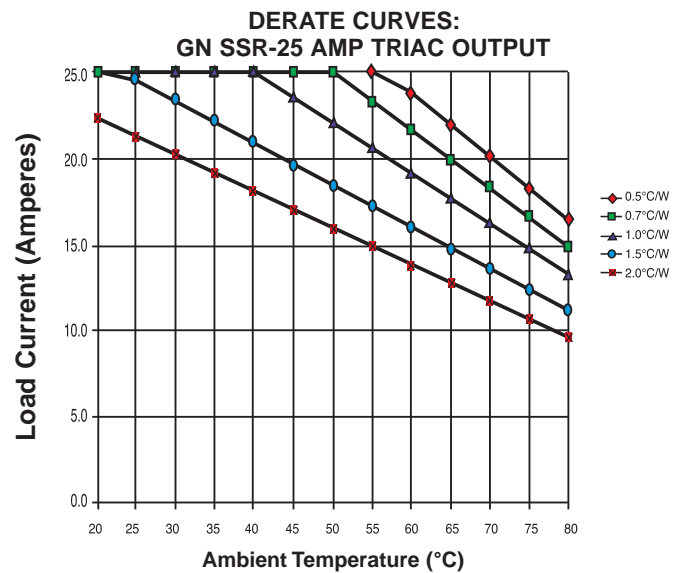
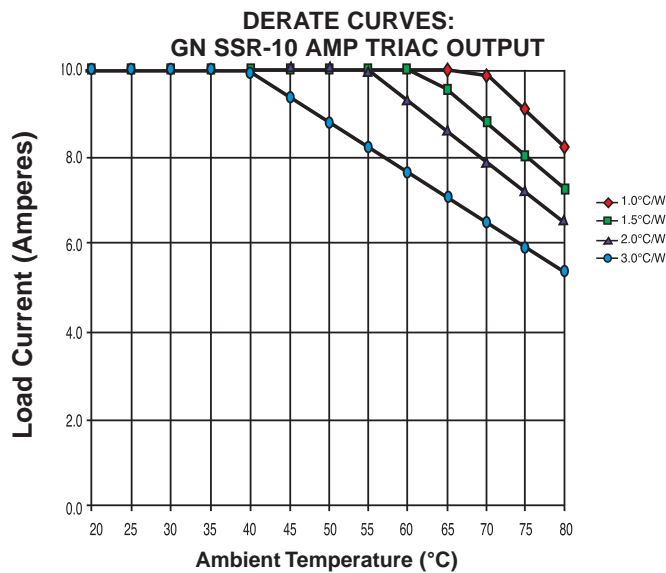
**IP00**



**IP20**



**DERATING CURVES**



Products and specifications subject to change without notice.

Order/Technical Support – Tel: (877) 502-5500 / FAX: (619) 710-8540 / [www.crouzet-usa.com](http://www.crouzet-usa.com)