

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) | 24 - 280Vac | |
| 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) | 10 | 25 |
| 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 ² T (50-60Hz) | 40-40 | 260-250 |
| Rjb (thermal res. Junction to baseplate, °C/W) | 2.2 | 1.7 |
| Static off-state dv/dt (V _{us} , 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* | 3-32Vdc | 90-280Vac |
| 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 | 84 134 901 | 84 137 901 |
| | | 3-32Vdc | 84 134 900 | 84 137 900 |
| 25 Amp | 24-280Vac | 90-280Vac | 84 134 911 | 84 137 911 |
| | | 3-32Vdc | 84 134 910 | 84 137 910 |

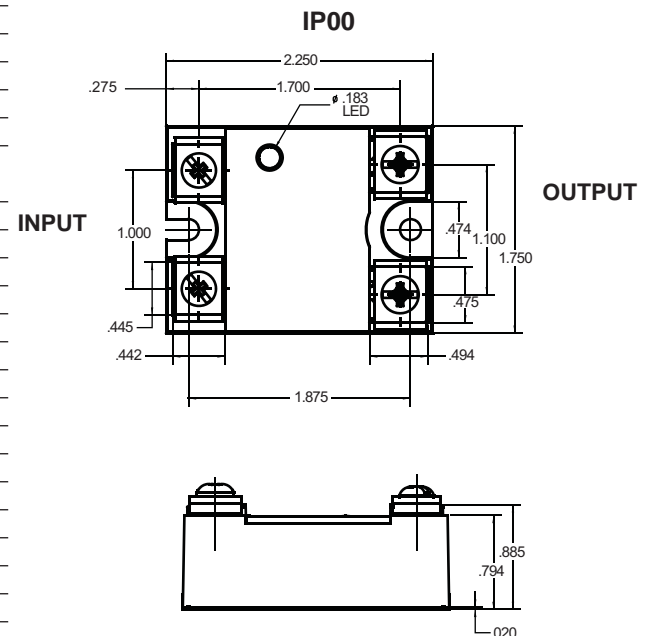
Quick connect terminals: 3/16" input and 1/4" output

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

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

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

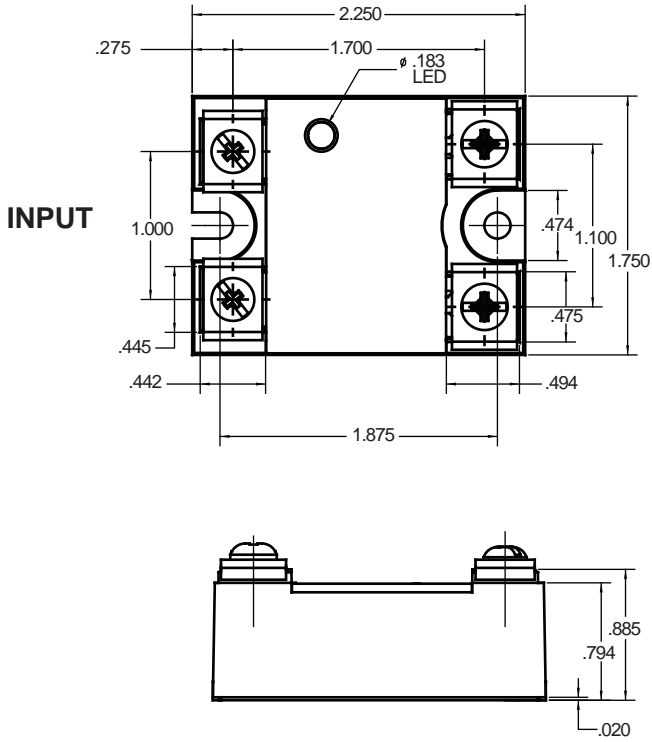
DIMENSIONS IN INCHES



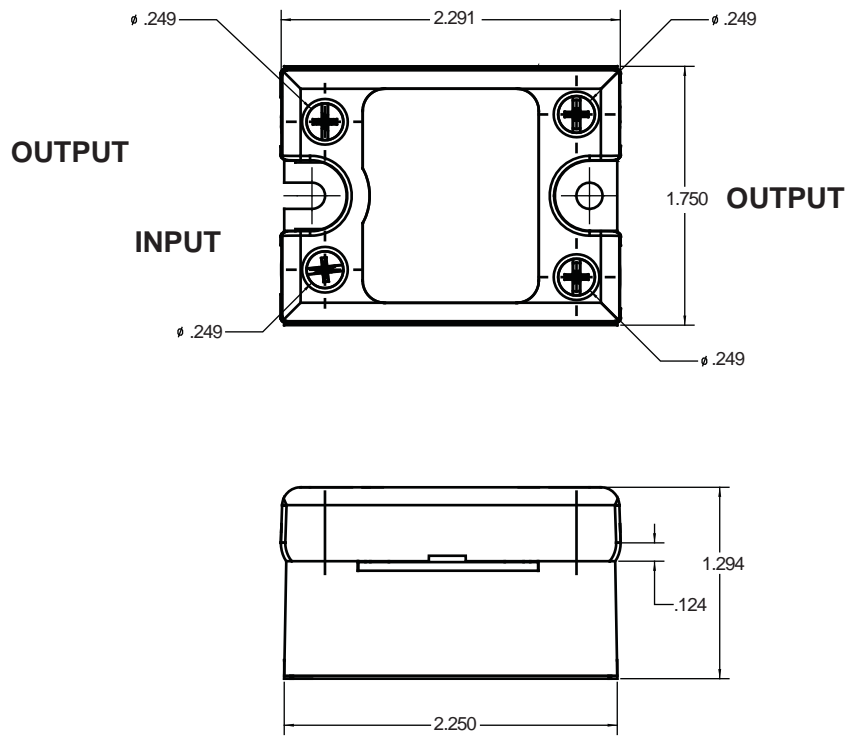
Products and specifications subject to change without notice.
Consult factory for application assistance.

DIMENSIONS IN INCHES

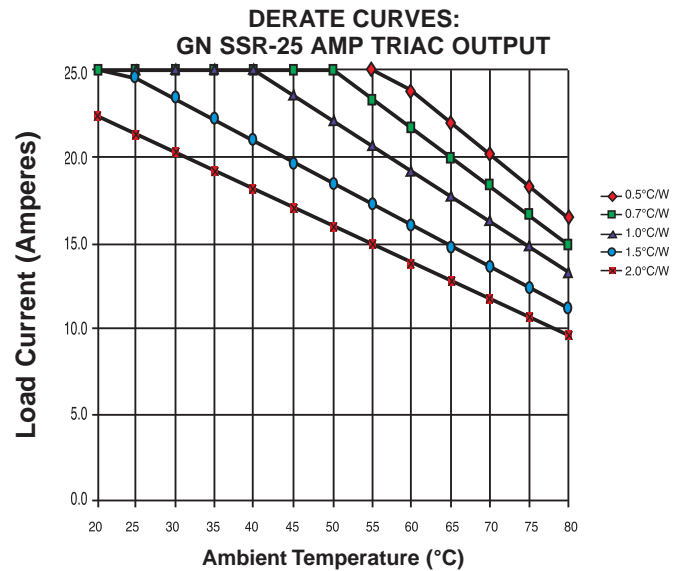
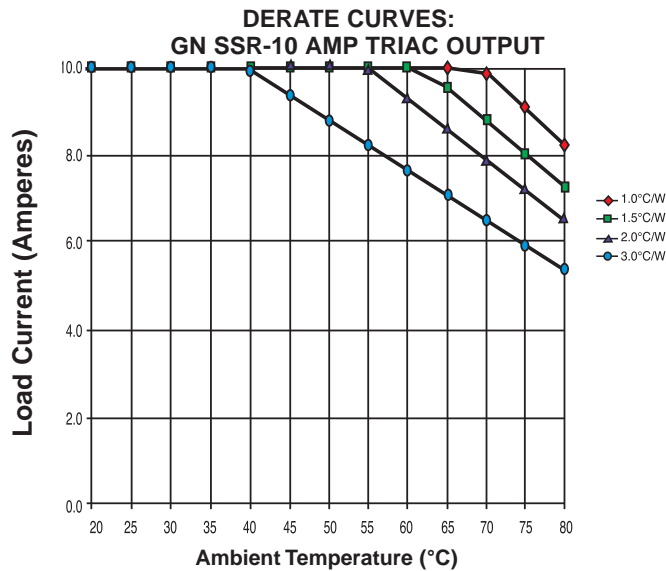
IP00



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