

CROUZET SOLID STATE RELAYS - PANEL MOUNT PRODUCTS have been developed to offer all the advantages of electronic switching technology. The 44.3 mm hockey puck industrial housing is quick to install. The product is compact and reliable. Please refer to the data sheet available on [www.crouzet.com](http://www.crouzet.com)

AC OUTPUT

GNF



GN2F



GN4

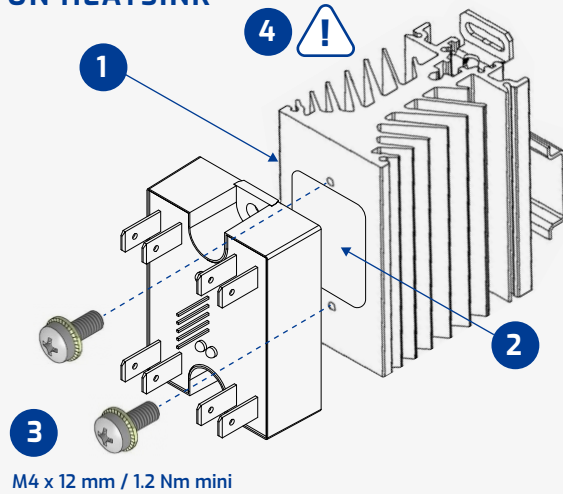


Panel mount - AC Output Single Phase

- 25 A in a Classic Hockey Puck package
- Fast-on terminals for easy installation
- GN2F & GN4 multichannel versions with 2 and 4 independent outputs
- Ideal for limited-space applications
- cRUus, CE and UKCA Recognized

### MOUNTING INSTRUCTIONS

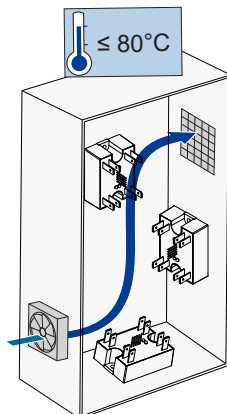
#### ON HEATSINK



1. Select the adequate heatsink (see thermal curves on product datasheet).
2. Use thermal pad or thermal grease between the SSR and heatsink (0.06 mm of thickness).
3. Two screws (Ø 4x12 mm) are needed to mount the SSR on the heatsink.
4. For optimal thermal performance heatsink fins should be oriented vertically to promote the perfect convection airflow.

### MOUNTING ON PANEL

1. Before mounting the SSR, locate the panel section. The surface must provide adequate heat sinking capability - preferably aluminum, uncoated, flat and clean.
2. Recommended to use a thermal pad or thermal grease between the SSR and the panel.
3. SSR mounting slots have a diameter of 4.7 mm. Please use two screws to mount on the panel.
4. Be sure to tighten both screws until they contact the baseplate before applying full torque (1.2 Nm).



### PART NUMBER NOMENCLATURE

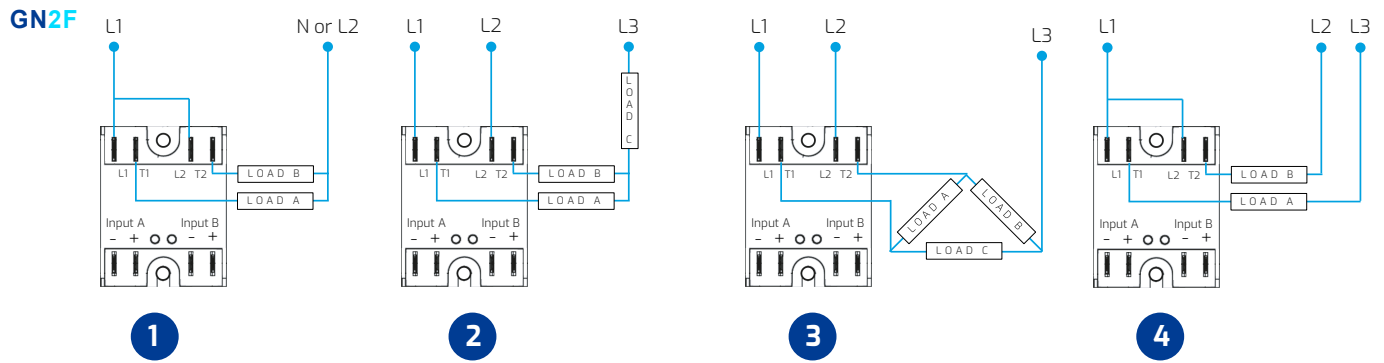
	Channels	Cover/ Layout	Switching Type	Output Current	Connectivity	Generation
	<b>8413</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>N</b>
<b>GNF</b>	8413: Single Channel	4: No cover	0: Zero Cross	1: 25A	7: Fast-on	N: New

	Channels	Output Current	Control Voltage	Connectivity	Generation
	<b>84140</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>N</b>
<b>GN2F</b>	84140: Dual Channel	8: 25A   Fast-on	0: 4-32 V...   Zero Cross	0: Fast-on   Zero Cross	N: New

	Channels	Cover/ Layout	Switching Type	Output Current	Control Voltage	Generation
	<b>8415</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>N</b>
<b>GN4</b>	8415: 4-Channel	4: No cover	0: Zero Cross	1: 25A	0: 4-32 V...	N: New

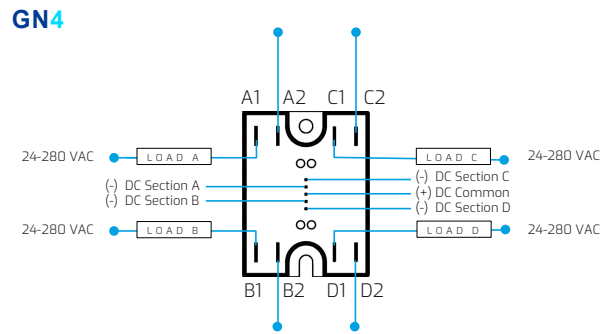
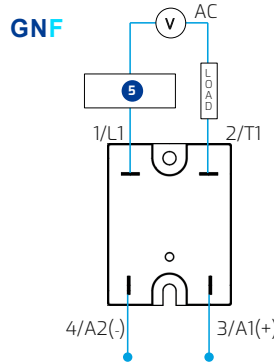
**WARNING:** The user should protect heat sensitive materials as well as people against any contact with the heatsink. For correct cooling, the SSR needs air convection. Less air convection produces an abnormal heating. In the event there is no space between two SSRs, reduce the load current. Forced cooling (ex. fan inside the cabinet) significantly improves the thermal performance. Heatsink temperature should never exceed 90 °C.

### WIRING DIAGRAMS



1. Single-phase wiring
2. Star connection (balanced low voltage loads without neutral)
3. Delta connection (high voltage loads)
4. Open Delta connection (high voltage loads)
5. Protection Equipment

It's recommended to use external overvoltage protection (Varistor / TVS Diode) and short-circuit protection (fuse / circuit breaker), if they are not already integrated.



### RECOMMENDED ACCESSORIES

TYPE	DESCRIPTION	P/N
<b>Heatsinks</b> For Panel Mount Versions	0.9 °C/W Thermal Resistance	26532752N
	1.1 °C/W Thermal Resistance	26532753N
	1.2 °C/W Thermal Resistance	26532754N
	1.75 °C/W Thermal Resistance	26532755N
	2.2 °C/W Thermal Resistance	26532756N
<b>DIN-Rail Adapter</b> For DIN Rail	For DIN Rail	26532764N

TYPE	DESCRIPTION	P/N
<b>Thermal Pads</b> Heatsink Mounting	Pre-cut thermal pad	26532720N
	Self-adhesive thermal pad	26532722N
<b>Screws</b> Heatsink Mounting	For 1-phase SSR	26532001
<b>Thermal Grease</b> Heatsink Mounting	Thermal Grease	26532003

### IMPORTANT CONSIDERATIONS

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Crouzet for any consequences arising out of use of this manual. Be sure to use input and output voltage within operating ranges.

**WARNING:** The product's side panels may be hot, allow the product to cool before touching. Please follow mounting instructions. Failure to follow these instructions can result in serious injury or equipment damage.

### TRANSIENT VOLTAGE

In AC power lines, transient voltages are common and may pose a risk for the operation, load and reliability of the SSR. In Crouzet SSR, the transient protection can rise 1600 V (please refer to product datasheet).

User may also use external transient protection to the SSR for additional protection (please refer to product datasheet).

### WARNING

#### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- Confirm that the product power supply voltage and its tolerances are compatible with those of the electrical network.
- The product's side panels may be hot, allow the product to cool before touching.
- Follow proper mounting instructions including torque values.
- Do not allow liquids or foreign objects to enter this product.

# DANGER

**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**  
Turn off power supply before working on this equipment.  
Failure to follow these instructions can result in death, serious injury or equipment damage.