

CROUZET SOLID STATE RELAYS - DIN RAIL MOUNT PRODUCTS have been developed to offer all the advantages of electronic switching technology. The 89.8 mm 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

**GNR3**

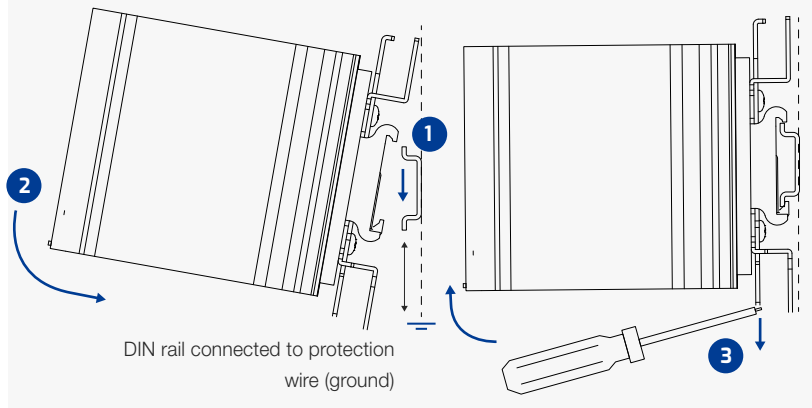


### DIN Rail - AC Output Three Phase

- 25 Amps
- Zero Cross & Special Zero Cross (for resistive, inductive and capacitive loads)
- AC and DC control
- 3 legs control
- Output overvoltage protection
- cRUus, CE and UKCA Recognized

## MOUNTING INSTRUCTIONS

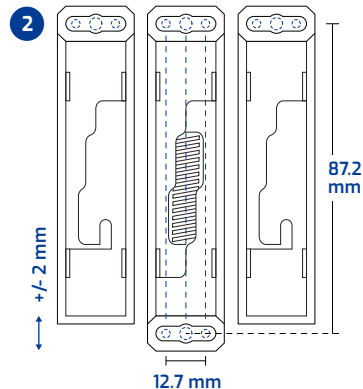
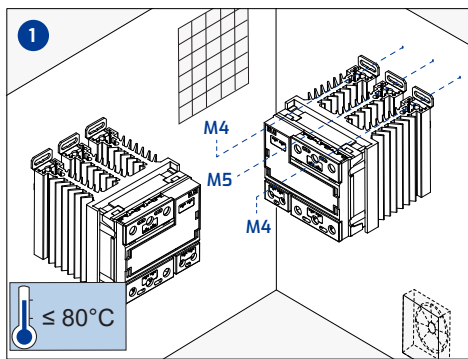
### MOUNTING ON DIN RAIL



1. Locate rail and align with the top part of the DIN clip in the back of the SSR
2. Using reasonable force, push the SSR in the direction of the arrows
3. To remove, place the screwdriver on the clip and push in the direction shown

**WARNING:** Removing product from RAIL DIN incorrectly by not using the appropriate tool will damage the latching system

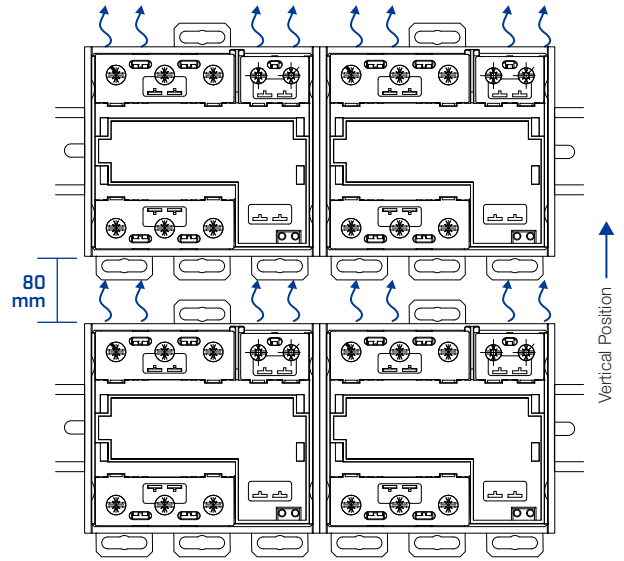
### MOUNTING ON PANEL



### DIN Rail SSR includes tabs for panel mounting

1. Align the SSR tabs with panel surface, screw top and bottom sides
2. Drill can be vertically adjusted +/- 2 mm

### DISMOUNTING



**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.

## PART NUMBER NOMENCLATURE

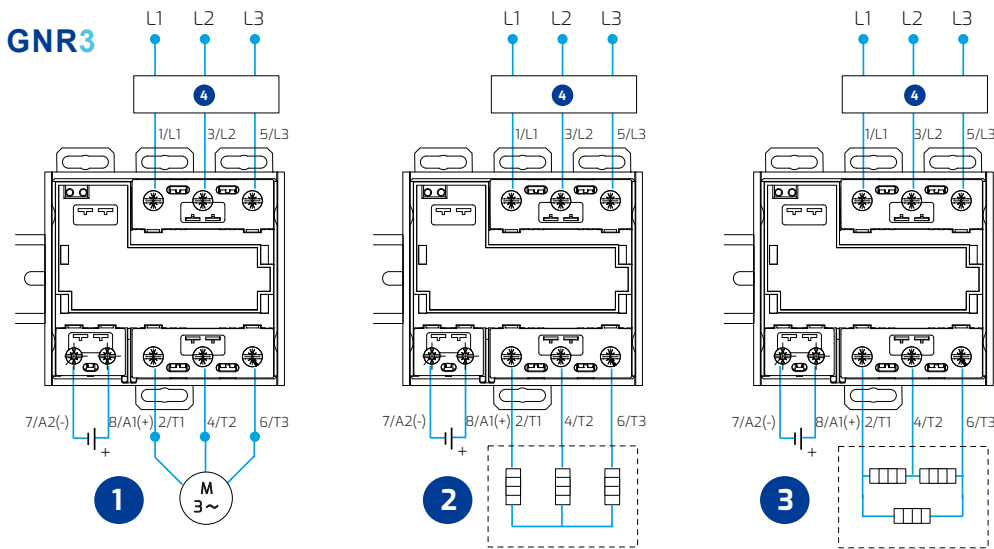
	Series	Output Current	Control Voltage	Layout	Switching Type	Output Voltage
	<b>GNR</b>	<b>25</b>	<b>D</b>	<b>C</b>	<b>Z</b>	<b>H</b>
<b>GNR</b>	GNR3: Three Phase	25: 25 A	A: 24-255 V~ D: 4-32 V~	C: Contactor	Z: Zero Cross	H: 660 V~

## 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.

**WIRING DIAGRAMS**



1. Wiring to control a 3-phase motor
2. Wiring to control heaters connected in star
3. Wiring to control heaters connected in delta
4. Protection Equipment

**CONNECTION**

**OUTPUT WIRING**

NUMBER OF WIRES - Direct connection with wires with or without ferrules

1		2	
SOLID (No ferrule)	STRANDED (With ferrule)	SOLID (No ferrule)	STRANDED (With ferrule)
1.5..10 mm <sup>2</sup> AWG16..AWG8	1.5..6 mm <sup>2</sup> AWG16..AWG10	1.5..10 mm <sup>2</sup> AWG16..AWG8	1.5..6 mm <sup>2</sup> AWG16..AWG10

**RECOMMENDED TIGHTENING TORQUE:** M5 SCREW N.M  
Min 2 / Typ 2.5 / Max 3

**INPUT WIRING**

NUMBER OF WIRES - Direct connection with wires with or without ferrules

1		2	
SOLID (No ferrule)	STRANDED (With ferrule)	SOLID (No ferrule)	STRANDED (With ferrule)
0.75..2.5 mm <sup>2</sup> AWG18..AWG14	0.75..2.5 mm <sup>2</sup> AWG18..AWG14	0.75..2.5 mm <sup>2</sup> AWG18..AWG14	0.75..2.5 mm <sup>2</sup> AWG18..AWG14

**RECOMMENDED TIGHTENING TORQUE:** M5 SCREW N.M  
Min 1.2 / Typ 1.7 / Max 2

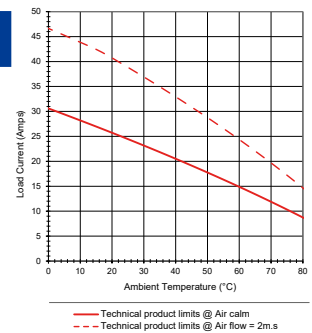
**SCREWDRIVER TYPE:** POZIDRIV 2

**RECOMMENDED ACCESSORIES**

TYPE	DESCRIPTION	P/N
ID Tag For DIN- Rail Mount	Label for SSR Identification	26532004

**DERATING CURVES**

**GNR3 - 25 A**



**PROTECTION**

In case of a short-circuit on the load, the SSR protection must be made by fast fuses or fast circuit breaker according with the I<sup>2</sup>t value given in the datasheet. Generally, we take the I<sup>2</sup>t value of the fuse = 1/2 I<sup>2</sup>t value of the SSR. A test has been made with FERRAZ SCHAWMUT fuses. It is possible to protect the SSR with a MCB (miniature circuit breaker) by using a SSR with high I<sup>2</sup>t value (5000A<sup>2</sup>s minimum). Immunity levels are according to the main standard for these products: IEC/EN61000-4-4 & IEC/EN61000-4-5. As well as IEC/EN61000-4-2, IEC/EN61000-4-6 in compliance with IEC/EN60947-4-3.

**WARNING**

**RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE**

- Confirm that the product power supply voltage and its tolerances are compatible with those of the 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.