

# RHS52A



## Accessories: Heatsinks



### Main features

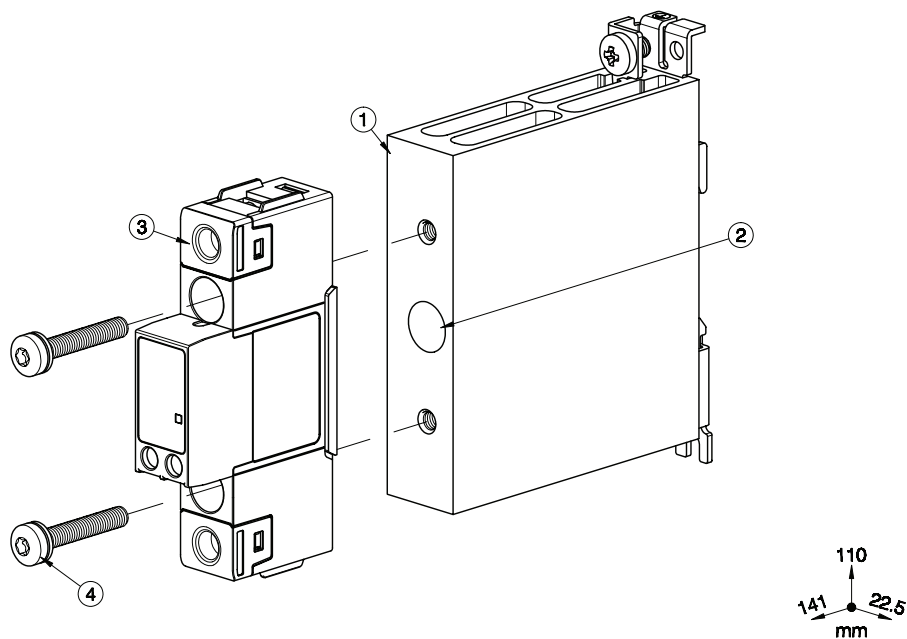
- 2°C/W thermal resistance
- Suitable for mounting of 1-phase RG SSRs
- DIN rail mounting
- Suitable for panel mounting
- Dimensions W x H x D: 22.5 x 110 x 90 mm
- RoHS compliant

### Description

Heatsink assembly suitable for mounting of 1x 1-phase RG solid state relay (SSR). Suffix H61 added to SSR part no. refers to factory mounted heatsink. Conditions apply. Please ask your sales representative for further details.

# Structure

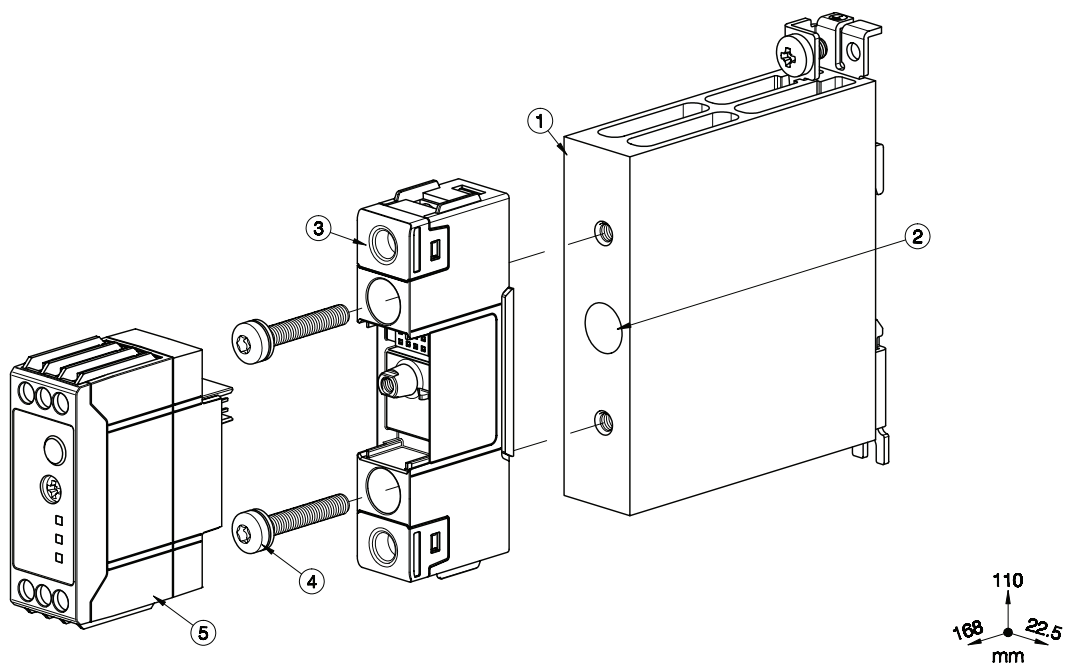
## RGS1 18mm Module



| Element | Component                 | Qty | RHS52A       |
|---------|---------------------------|-----|--------------|
| 1       | RHS52A heatsink assembly  | 1   | Provided     |
| 2       | Thermal Compound HTS02S   | 1   | Provided     |
| 3       | RGS1 SSR 18x90mm          | 1   | Not provided |
| 4       | M5x30mm Torx T20 + Washer | 2   | Provided     |

Note:  
Dimensions including the SSR.

## RGS1 22.5mm Module



| Element | Component                      | Qty | RHS52A       |
|---------|--------------------------------|-----|--------------|
| 1       | RHS52A heatsink assembly       | 1   | Provided     |
| 2       | Thermal Compound HTS02S        | 1   | Provided     |
| 3       | RGS1 Power Module 18x90mm      | 1   | Not provided |
| 4       | M5x30mm Torx T20 + Washer      | 2   | Provided     |
| 5       | RGS1S Control Module 22.5x65mm | 1   | Not provided |

Note:

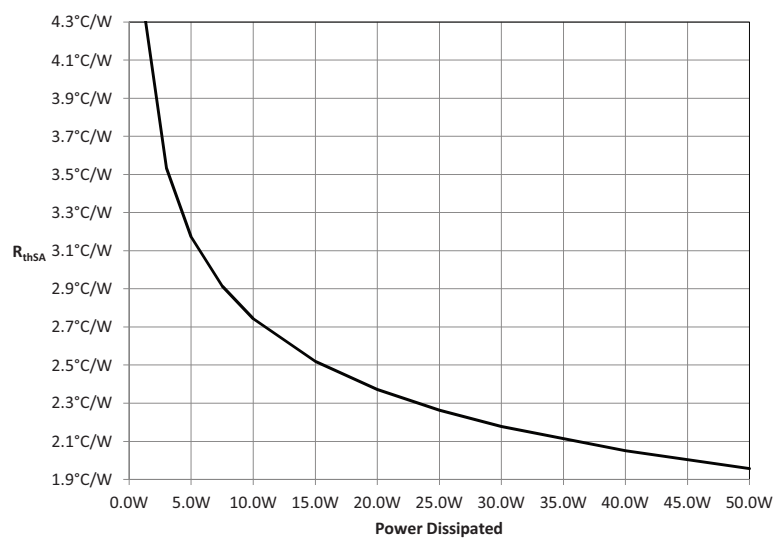
Dimensions including the SSR.

## Features

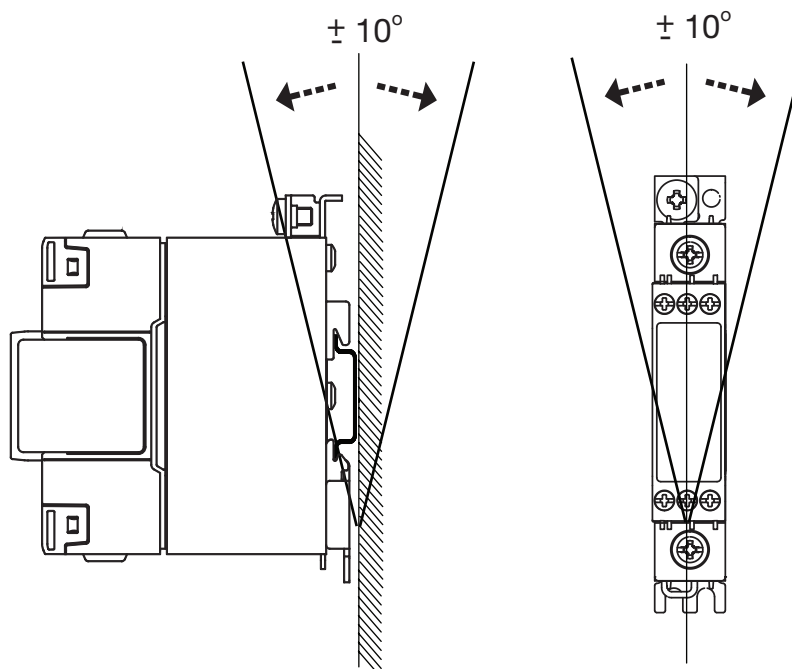
### General

|  |                             |
|--|-----------------------------|
| <b>SSR max. mounting torque</b>                  | 1.5Nm (13.3 lb-in)          |
| <b>PE screw<br/>(Not provided with assembly)</b> | M5, max. 1.5Nm (13.3 lb-in) |
| <b>Weight (excl. SSR)</b>                        | approx. 265g                |
| <b>Material</b>                                  | Aluminium                   |
| <b>Finish</b>                                    | Black anodization           |
| <b>Fan mounting</b>                              | Not possible                |

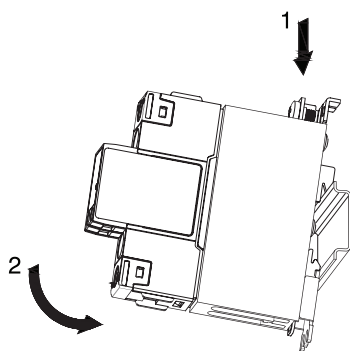
### Thermal resistance curve



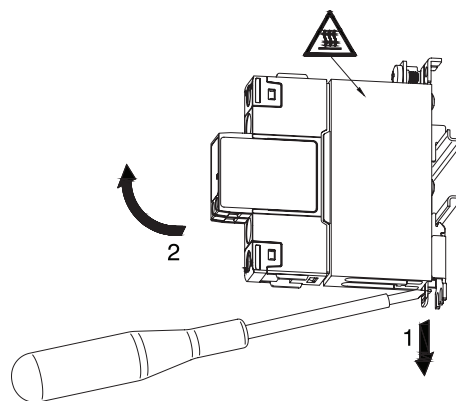
## Mounting position



## Installation



**Fig. 1** Mounting on DIN rail



**Fig. 2** Dismounting from DIN rail

Illustrations are for example only.

## Recommended maximum current rating (per SSR)

1. The below recommendations are only valid when the assembly (SSR + heatsink) is mounted as shown in the mounting instructions unless otherwise indicated.
2. The indicated ratings are applicable to one SSR, one pole. Please refer to the online selector tool at [www.productselection.net](http://www.productselection.net) for different load currents, surrounding temperatures or multiple units on one heatsink.
3. These recommendations are applicable only with the indicated Carlo Gavazzi thermal interface material between SSR and heatsink. In case a different thermal interface is utilised these recommendations may no longer be valid.

### Thermal compound, HTS02S

| 1x<br>1-phase<br>SSR | Surrounding temperature |          |          |           |           |           |           |           |
|----------------------|-------------------------|----------|----------|-----------|-----------|-----------|-----------|-----------|
|                      | °C<br>°F                | 20<br>68 | 30<br>86 | 40<br>104 | 50<br>122 | 60<br>140 | 70<br>158 | 80<br>176 |
| RGS1..E              | 25                      | 25       | 25       | 25        | 25        | 22.5      | 18.5      | 15        |
|                      | 50                      | 41       | 39       | 34.5      | 30.5      | 26        | 21.5      | 17        |
|                      | 51                      | 40.5     | 38.5     | 34.5      | 30        | 26        | 21.5      | 17.5      |
|                      | 75                      | 45.5     | 43       | 38.5      | 33.5      | 28.5      | 23.5      | 18.5      |
|                      | 90<br>91<br>92          | 48.5     | 46       | 40.5      | 35.5      | 30        | 25        | 19.5      |
| RGS1..U              | 20                      | 20       | 20       | 20        | 20        | 20        | 18.5      | 15        |
|                      | 30                      | 30       | 30       | 30        | 30        | 26        | 21.5      | 17        |
| RGS1S..E             | 20                      | 23       | 23       | 23        | 23        | 22.5      | 18.5      | -         |
|                      | 30                      | 30       | 30       | 30        | 30        | 26        | 21.5      | -         |
|                      | 31                      | 30       | 30       | 30        | 30        | 30        | 25        | -         |
|                      | 92                      | 48.5     | 46       | 40.5      | 35.5      | 30        | 25        | -         |
| RGS1D..              | 15                      | 15       | 15       | 15        | 15        | 15        | 12.5      | 10.5      |
|                      | 25                      | 23       | 22       | 19.5      | 17.5      | 15        | 12.5      | 10.5      |

### Thermal pad, RGHT

| 1x<br>1-phase<br>SSR | Surrounding temperature |          |          |           |           |           |           |           |
|----------------------|-------------------------|----------|----------|-----------|-----------|-----------|-----------|-----------|
|                      | °C<br>°F                | 20<br>68 | 30<br>86 | 40<br>104 | 50<br>122 | 60<br>140 | 70<br>158 | 80<br>176 |
| RGS1..E              | 25                      | 25       | 25       | 25        | 22.5      | 19.5      | 16        | 13        |
|                      | 50                      | 35       | 33       | 29.5      | 26        | 22        | 18.5      | 14.5      |
|                      | 51                      | 34.5     | 33       | 29.5      | 26        | 22.5      | 18.5      | 15        |
|                      | 75                      | 39       | 37       | 33        | 28.5      | 24.5      | 20.5      | 16        |
|                      | 90<br>91<br>92          | 41.5     | 39.5     | 35        | 30.5      | 26        | 21.5      | 17        |
| RGS1..U              | 20                      | 20       | 20       | 20        | 20        | 19.5      | 16        | 13        |
|                      | 30                      | 30       | 30       | 29.5      | 26        | 22        | 18.5      | 14.5      |
| RGS1S..E             | 20                      | 23       | 23       | 23        | 22.5      | 19.5      | 16        | -         |
|                      | 30                      | 30       | 30       | 29.5      | 26        | 22        | 18.5      | -         |
|                      | 31                      | 30       | 30       | 30        | 30        | 26        | 21.5      | -         |
|                      | 92                      | 41.5     | 39.5     | 35        | 30.5      | 26        | 21.5      | -         |
| RGS1D..              | 15                      | 15       | 15       | 15        | 14        | 12.5      | 10.5      | 8.5       |
|                      | 25                      | 18.5     | 17.5     | 16        | 14        | 12.5      | 10.5      | 8.5       |



## References

### CARLO GAVAZZI compatible components

| Purpose          | Component name/code | Notes  |
|------------------|---------------------|--|
| Thermal pads     | RGHT                | Packing qty. 10 pcs, suitable for RG SSRs        |
| Thermal compound | HTS02S              | 2.38 ml sachet of silicon based thermal compound |
| Screw Kits       | SRWKITM5X30MM       | Packing qty. 20 pcs                              |

### Further reading

| Information                   | Where to find it  |
|-------------------------------|---|
| Online heatsink selector tool | <a href="https://gavazziautomation.com/nsc/HQ/EN/solid_state_relays">https://gavazziautomation.com/nsc/HQ/EN/solid_state_relays</a>                                 |
| Accessories                   | <a href="https://gavazziautomation.com/images/PIM/DATASHEET/ENG/SSR_Accessories.pdf">https://gavazziautomation.com/images/PIM/DATASHEET/ENG/SSR_Accessories.pdf</a> |

### Order code



RHS52A



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