

RHS542, RHS542D



Accessories: Heatsinks



Main features

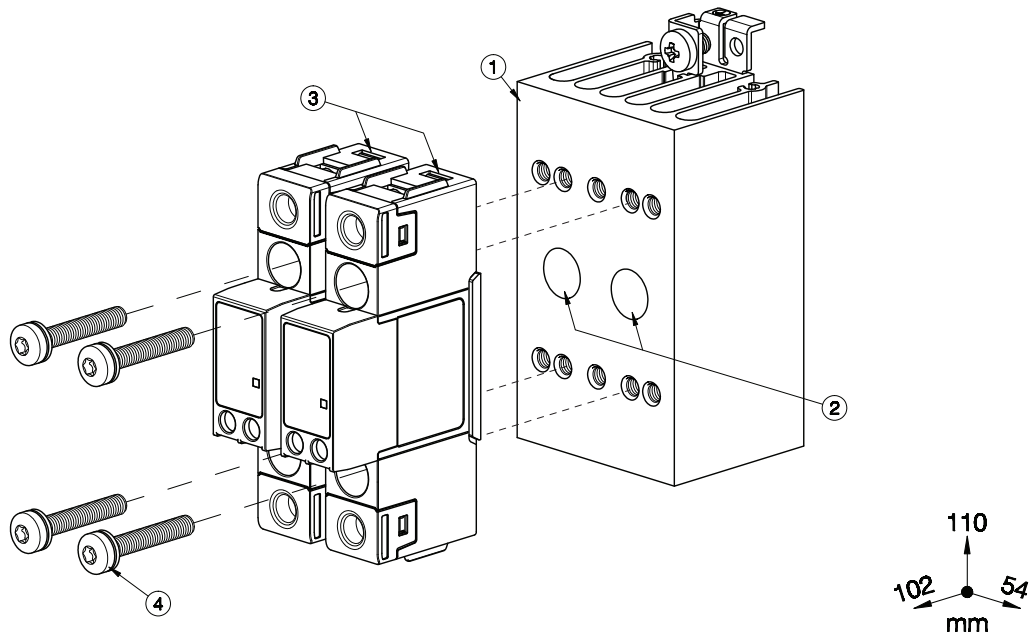
- 1.85°C/W thermal resistance
- Suitable for mounting of 2x 1-phase SSRs
- DIN rail mounting
- Suitable for panel mounting
- Dimensions W x H x D: 54 x 110 x 51 mm
- RoHS compliant

Description

Heatsink assembly suitable for mounting of 2x 1-phase solid state relay (SSR).
Suffix H66 added to SSR part no. refers to factory mounted heatsink. Conditions apply. Please ask your sales representative for further details.

Structure

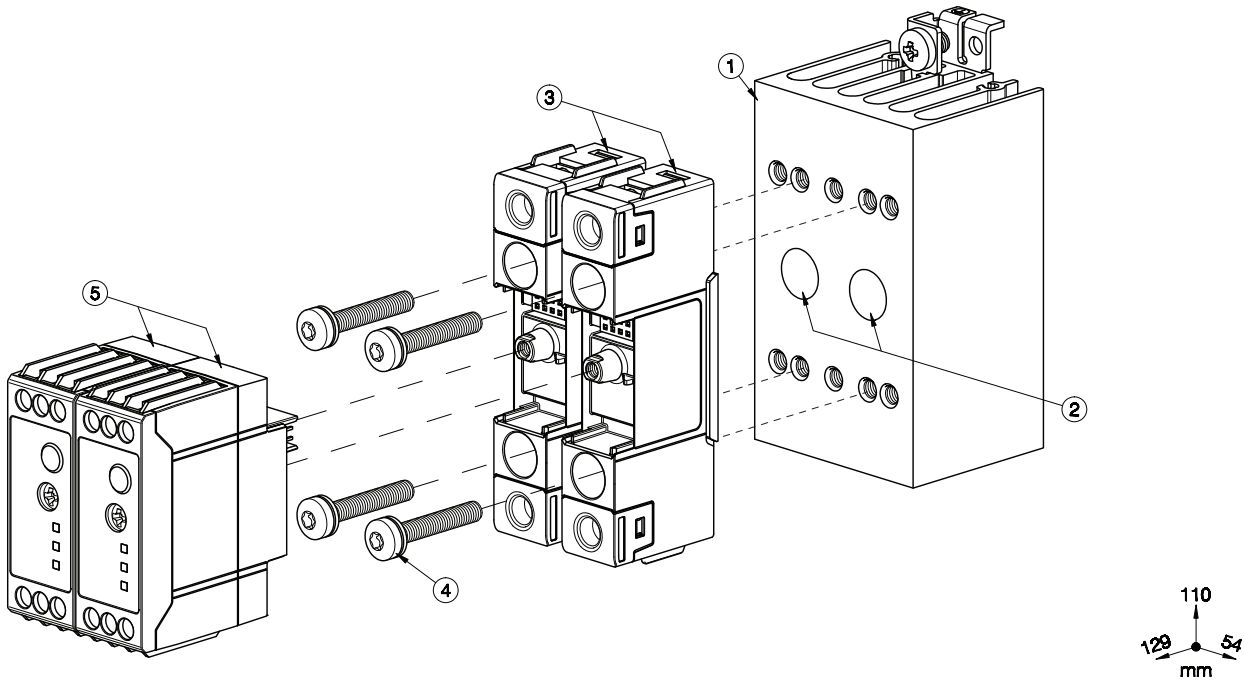
RGS1 18mm Module



Element	Component	Qty	RHS542	RHS542D
1	RHS542 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 SSR 18x90mm (max.)	2	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x4)	Provided (x4)

Note:
Dimensions including the SSR.

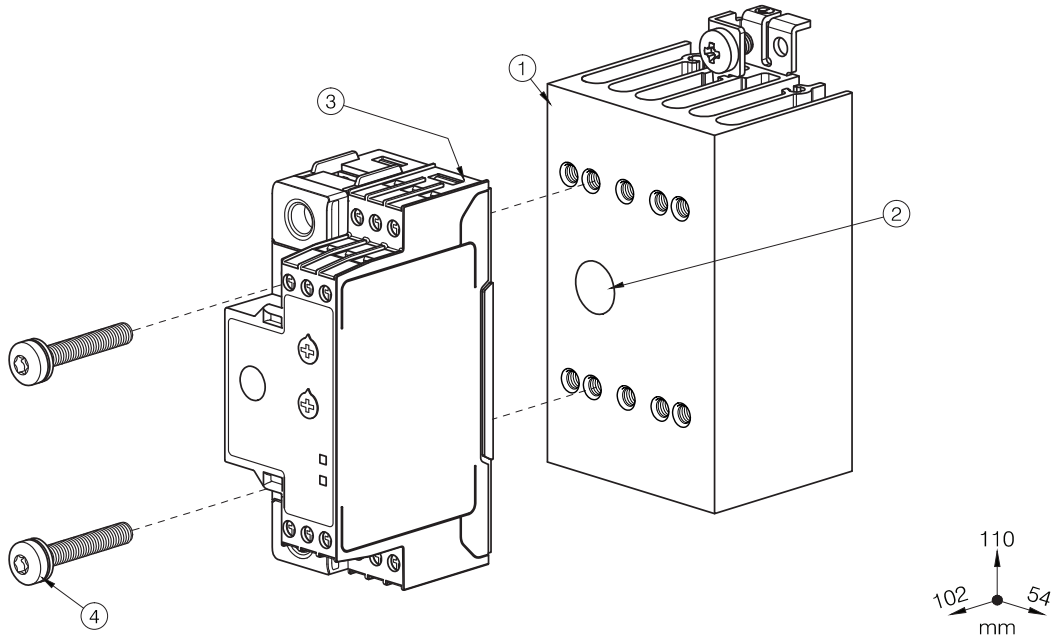
RGS1 22.5mm Module



Element	Component	Qty	RHS542	RHS542D
1	RHS542 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 Power Module 18x90mm	1	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x4)	Provided (x4)
5	RGS1S Control Module 22.5x65mm	1	Not provided	Not provided

Note:
Dimensions including the SSR.

RGS1P 35mm Module



Element	Component	Qty	RHS542	RHS542D
1	RHS542 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1P SSR 35x90mm	1	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x4)	Provided (x4)

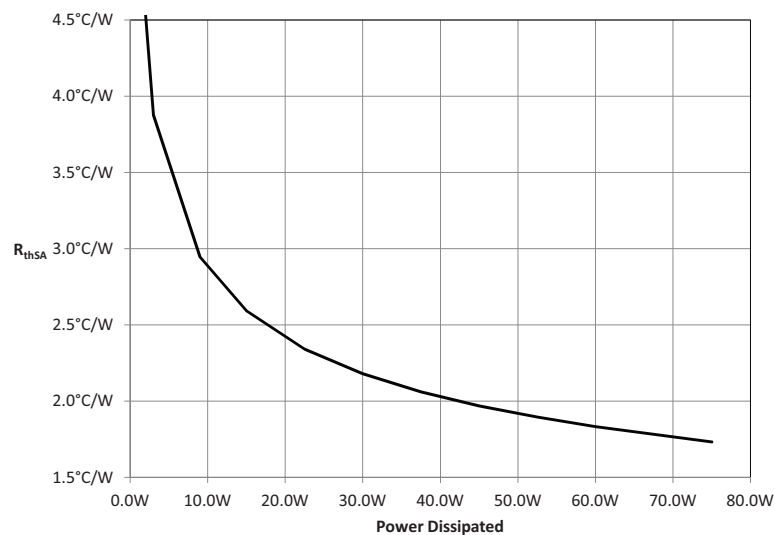
Note:
Dimensions including the SSR.

Features

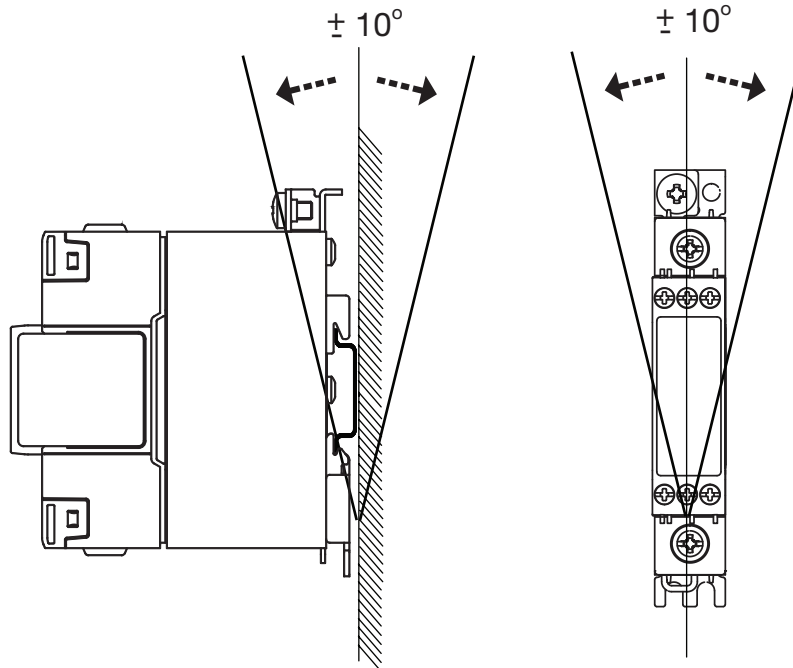
General

SSR max. mounting torque	1.5Nm (13.3 lb-in)
PE screw (Not provided with assembly)	M5, max. 1.5Nm (13.3 lb-in)
Weight (excl. SSR)	approx. 325g
Material	Aluminium
Finish	Black anodization
Fan mounting	Possible Refer to RHS542F40-24

Thermal resistance curve



Mounting position



Installation

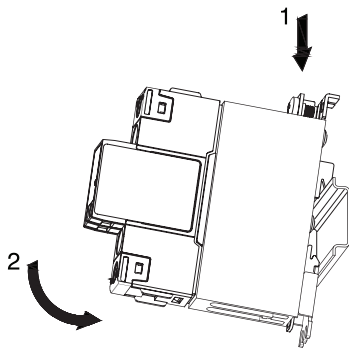


Fig. 1 Mounting on DIN rail

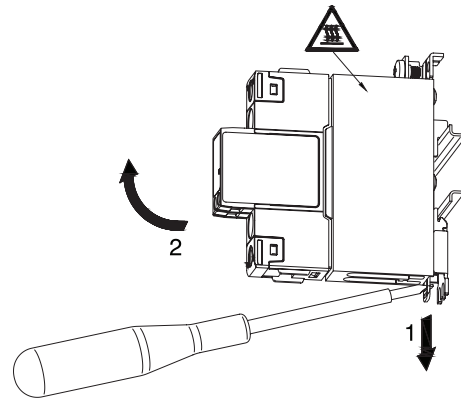


Fig. 2 Dismounting from DIN rail

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 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 1-phase SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RGS1..E RGS1P..E*	25	25	23.5	21	18	15.5	12.5	10
	50	28.5	27	23.5	20.5	17	14	11
	51	28.5	27	24	20.5	17.5	14.5	11
	75	31.5	29.5	26	22.5	19	15.5	12
	90 91 92	33	31	27.5	23.5	20	16	12.5
RGS1..U	20	20	20	20	18	15.5	12.5	10
	30	28.5	27	23.5	20.5	17	14	11
RGS1S..E	20	23	23	21	18	15.5	12.5	-
	30	28.5	27	23.5	20.5	17	14	-
	31	30	30	27.5	23.5	20	16	-
	92	33	31	27.5	23.5	20	16	-
RGS1D..	15	15	15	13.5	12	10	8.5	6.5
	25	16	15.5	13.5	12	10	8.5	6.5

* max. 70 °C / 158 °F for RGS1P..E, 1x 1-phase SSR


 Thermal pad, RGHT

1x 1-phase SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RGS1..E RGS1P..E*	25	22.5	21.5	19	16.5	14	11.5	9
	50	26	24.5	21.5	18.5	15.5	13	10
	51	26	24.5	21.5	19	16	13	10.5
	75	29	27	24	20.5	17.5	14	11
	90 91 92	30.5	29	25.5	22	18.5	15	11.5
RGS1..U	20	20	20	19	16.5	14	11.5	9
	30	26	24.5	21.5	18.5	15.5	13	10
RGS1S..E	20	22.5	21.5	19	16.5	14	11.5	-
	30	26	24.5	21.5	18.5	15.5	13	-
	31	30	29	25.5	22	18.5	15	-
	92	30.5	29	25.5	22	18.5	15	-
RGS1D..	15	14	13.5	12	10.5	9	7.5	6
	25	14	13.5	12	10.5	9	7.5	6

* max. 70 °C / 158 °F for RGS1P..E, 1x 1-phase SSR



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
Fans	RHSF40-24	24 VDC, 40x40mm
Screw Kits	SRWKITM5X30MM	Packing qty. 20 pcs

Further reading

Information	Where to find it
Online heatsink selector tool	https://gavazziautomation.com/nsc/HQ/EN/solid_state_relays
Accessories	https://gavazziautomation.com/images/PIM/DATASHEET/ENG/SSR_Accessories.pdf

Order code



RHS542



Enter the code entering the corresponding option instead of

Code	Option	Description
R	-	
H	-	
S	-	
5	-	
4	-	
2	-	
<input type="checkbox"/>		With thermal compound
	D	Thermal compound not included



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