

RHS301, RHS301D



Accessories: Heatsinks



Main features

- 0.82°C/W thermal resistance
- Suitable for mounting of 1-phase SSRs or 3-phase SSRs
- DIN rail mounting
- Dimensions W x H x D: 119 x 82 x 94 mm
- RoHS compliant

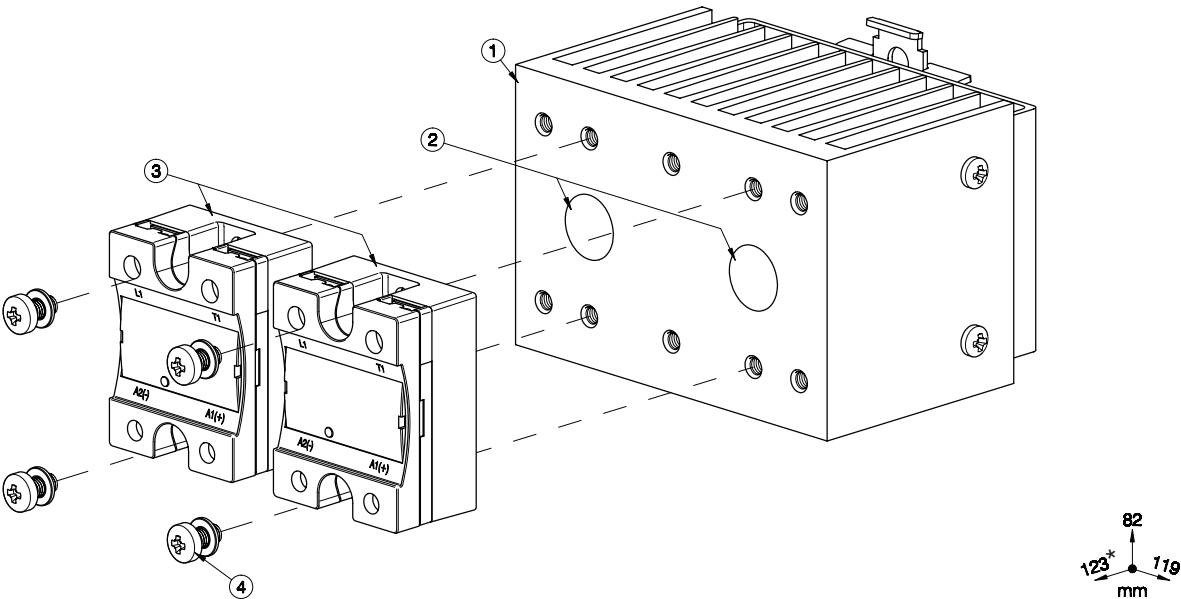
Description

Heatsink assembly suitable for mounting of maximum 3x 1- phase solid state relay (SSR) or 1x 3-phase SSR. Suffix H2 added to SSR part no. refers to factory mounted heatsink. Conditions apply. Please ask your sales representative for further details.



Structure

1-phase SSR

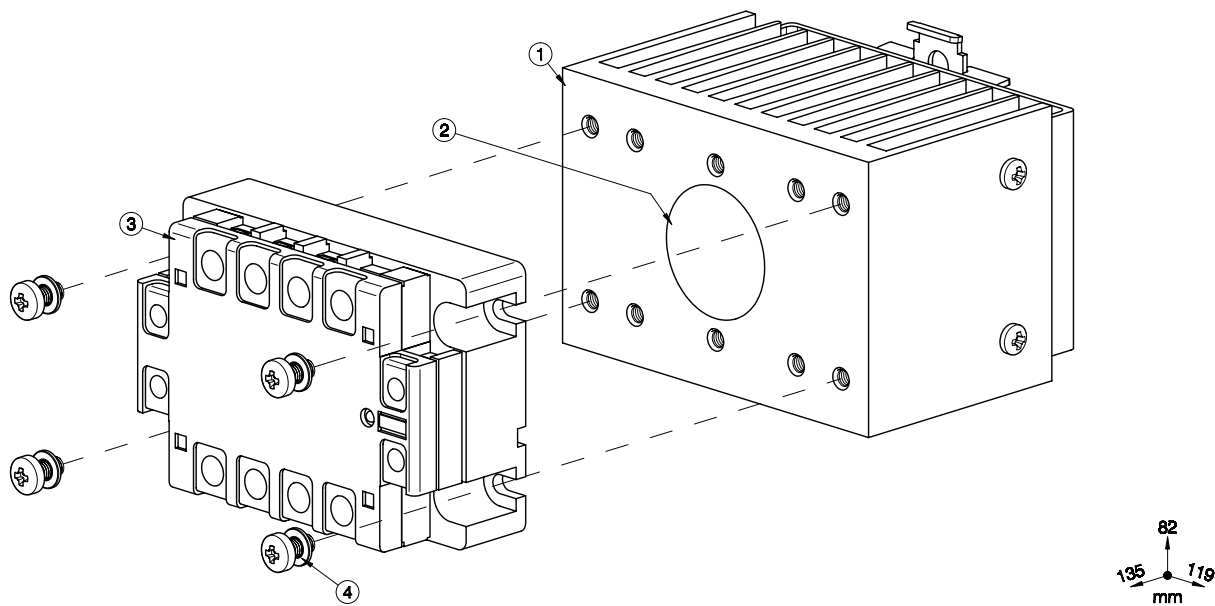


Element	Component	Qty	RHS301	RHS301D
1	RHS301 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	1-phase SSR 45x59mm (max.)	2	Not provided	Not provided
4	M5x10mm PZ2 + Washer (per SSR)	2	Provided (x4)	Provided (x4)

Note:
* 127mm for RK..C, 138mm for RK..P (including plug).
Dimensions including the SSR.
When only 1 SSR is utilized it shall be mounted at the centre of the heatsink.



3-phase SSR



Element	Component	Qty	RHS301	RHS301D
1	RHS301 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	3-phase SSR 104x74mm	2	Not provided	Not provided
4	M5x10mm PZ2 + Washer (per SSR)	4	Provided (x4)	Provided (x4)

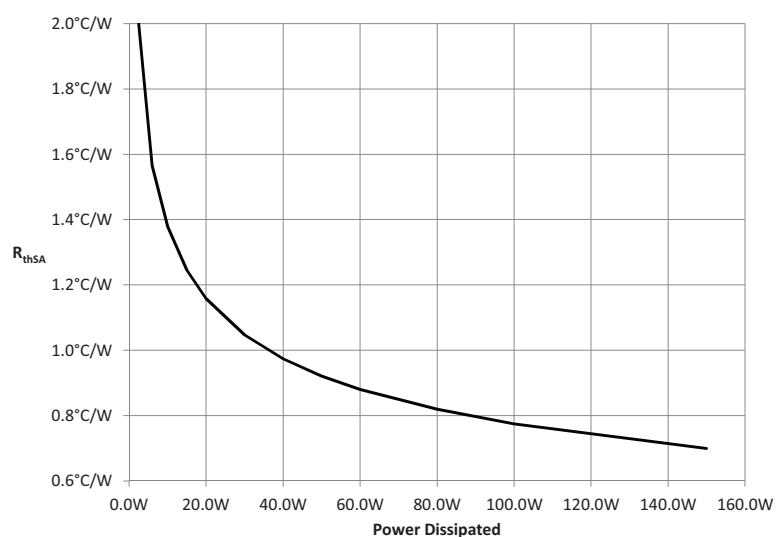
Dimensions including the SSR.

Features

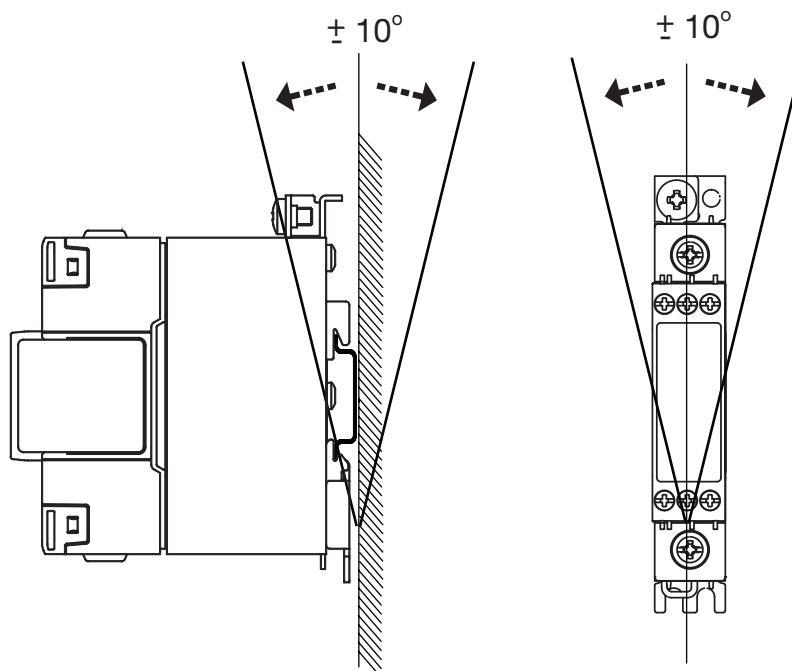
General

SSR max. mounting torque	1.5Nm (13.3 lb-in)
Weight (excl. SSR)	approx. 805g
Material	Aluminium
Finish	Black anodization
Fan mounting	refer to models: RHS301F115C or RHS301F230C

Thermal resistance curve



Mounting position



Installation

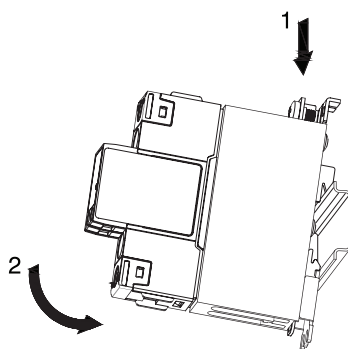


Fig. 1 Mounting on DIN rail

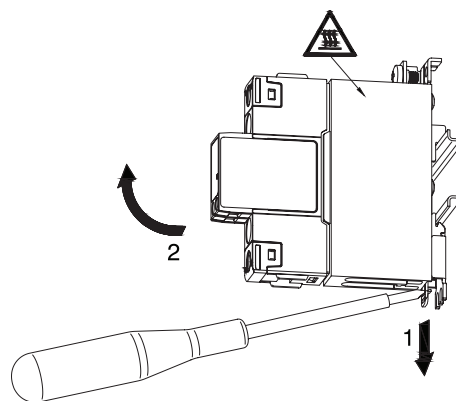


Fig. 2 Dismounting from DIN rail

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.

Pre-attached phase change paste

1x 2-pole SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RK 2.. (per pole)	50	47	42	37	32	27	21.5	16.5
	51	50	47	41	35.5	29.5	23.5	18
	75	60	53.5	47	40.5	33.5	26.5	20

Thermal compound, HTS02S

1x 3-phase SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RZ3..	25	25	24	21	17.5	13	8	3.5
	55	34.5	33	28	22.5	16.5	11	6
	75	42.5	39.5	33.5	27	21	15	9

Ratings per pole

Thermal pad, RZHT

1x 3-phase SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RZ3..	25	22.5	21.5	18.5	16	13	8.5	3.5
	55	30.5	29	26	22.5	17.5	11.5	6.5
	75	41.5	39.5	34	27.5	21.5	15	9.5

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
RA..L RA..T	10	10	10	10	10	10	10	-
	25	25	25	23.5	20.5	17.5	14	-
RA..	25	25	25	25	23.5	19	14.5	-
	50	47	44	38	32	26	19.5	-
	90	63.5	59.5	51.5	43	34.5	26	-
	110	72.5	68	58	48.5	38.5	29	-
RA60..	50	46	43.5	38	32	26	20	-
RA2A.. (per pole)	25	25	25	25	24	20	13.5	-
	40	36.5	34.5	30.5	27	22	14.5	-
	25M	25	25	25	24	20	13.5	-
	40M	37	35.5	31.5	27.5	22	14.5	-
RS1A..	10	10	10	10	10	8	5.5	-
	25	25	25	25	25	25	20.5	-
	40	40	40	40	40	32	22	-
RS1A..E	25	24	22.5	19.5	17	14.5	11.5	-
	40	29	27	24	20.5	17	14	-
RM1A.. RM1B.. RM1C..	25	25	25	25	25	25	20.5	-
	50	50	50	50	41.5	32	22	-
	75	75	73	63	50.5	38.5	26.5	-
	100	89.5	83	69.5	55.5	41.5	28.5	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	50	49	44	39	32.5	22.5	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	25	25	20.5	11.5
	50	50	50	50	41.5	32	22	12.5
	75	75	73	63	50.5	38.5	26.5	14.5
	100	77	73	63	50.5	38.5	26.5	14.5
	125	89.5	83	69.5	55.5	41.5	28.5	15.5
RM1D060	10	10	10	10	10	10	10	8.5
	20	20	20	20	20	20	17	8.5
	50	50	50	50	45.5	37	27	13.5
	100	96	91	80.5	69	56	40.5	20
RM1D200	20	20	20	20	19	17	14.5	11.5
	50	43.5	42	38.5	34.5	30.5	26	20
RM1D500	10	10	10	10	10	10	9.5	8

 Thermal pad, KK071CUT

1x 1-phase SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RA..L RA..T	10	10	10	10	10	10	10	-
	25	25	23.5	21	18	15.5	12.5	-
RA..	25	25	25	25	21.5	17.5	13.5	-
	50	41.5	39	33.5	28.5	23	17.5	-
	90	52	49	42	35.5	28.5	21.5	-
	110	58.5	54.5	47	39.5	31.5	23.5	-
RA60..	50	41	38.5	33.5	28.5	23	18	-
RA2A.. (per pole)	25	25	25	24.5	21.5	18.5	14	-
	40	32.5	31	27.5	24	20.5	15	-
	25M	25	25	24.5	21.5	18.5	14	-
	40M	33	31.5	28	24.5	21	15	-
RS1A..	10	10	10	10	9	7.5	5.5	-
	25	25	25	25	25	23.5	16.5	-
	40	40	40	40	33	25.5	17.5	-
RS1A..E	25	21	20	18	15	12.5	10.5	-
	40	25	23.5	21	17.5	15	12	-
RM1A.. RM1B.. RM1C..	25	25	25	25	25	23.5	16.5	-
	50	50	47.5	40.5	33	25.5	17.5	-
	75	59.5	55	46.5	38	29	20	-
	100	65.5	60.5	51	41	31.5	21.5	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	45.5	43	39	33.5	26	18.5	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	25	23.5	16.5	9.5
	50	50	47.5	40.5	33	25.5	17.5	10
	75	59.5	55	46.5	38	29	20	11.5
	100	59.5	55	46.5	38	29	20	11.5
	125	65.5	60.5	51	41	31.5	21.5	12
RM1D060	10	10	10	10	10	10	10	8
	20	20	20	20	20	20	16	8
	50	50	50	49.5	43	35	26	13
	100	88.5	84.5	75	64.5	52.5	38.5	19.5
RM1D200	20	20	20	19.5	18	16	13.5	11
	50	40	38.5	35.5	32	38.5	34.5	20
RM1D500	10	10	10	10	10	10	9	7.5



References

CARLO GAVAZZI compatible components

Purpose	Component name/code	Notes
Thermal pads	KK071CUT	Packing qty. 50 pcs, suitable for 1-phase SSRs
Thermal pads	RZHT	Packing qty. 10 pcs, suitable for 3-phase SSR
Thermal compound	HTS02S	2.38 ml sachet of silicon based thermal compound
Screw Kits	SRWKITM5X10MM	Packing qty. 20 pcs.
Fans	RHS301F115, RHS301F230	115 VAC, 230 VAC, 120x120mm including bracket

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



RHS301



Enter the code entering the corresponding option instead of ☐

Code	Option	Description
R	-	
H	-	
S	-	
3	-	
0	-	
1	-	
☐		With thermal compound
	D	Thermal compound not included



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