

RHS540, RHS540D



Accessories: Heatsinks



Main features

- 1.85°C/W thermal resistance
- Suitable for mounting of 3x 1-phase SSRs
- DIN rail mounting
- Suitable for panel mounting
- Dimensions W x H x D: 54 x 110 x 51 mm
- RoHS compliant

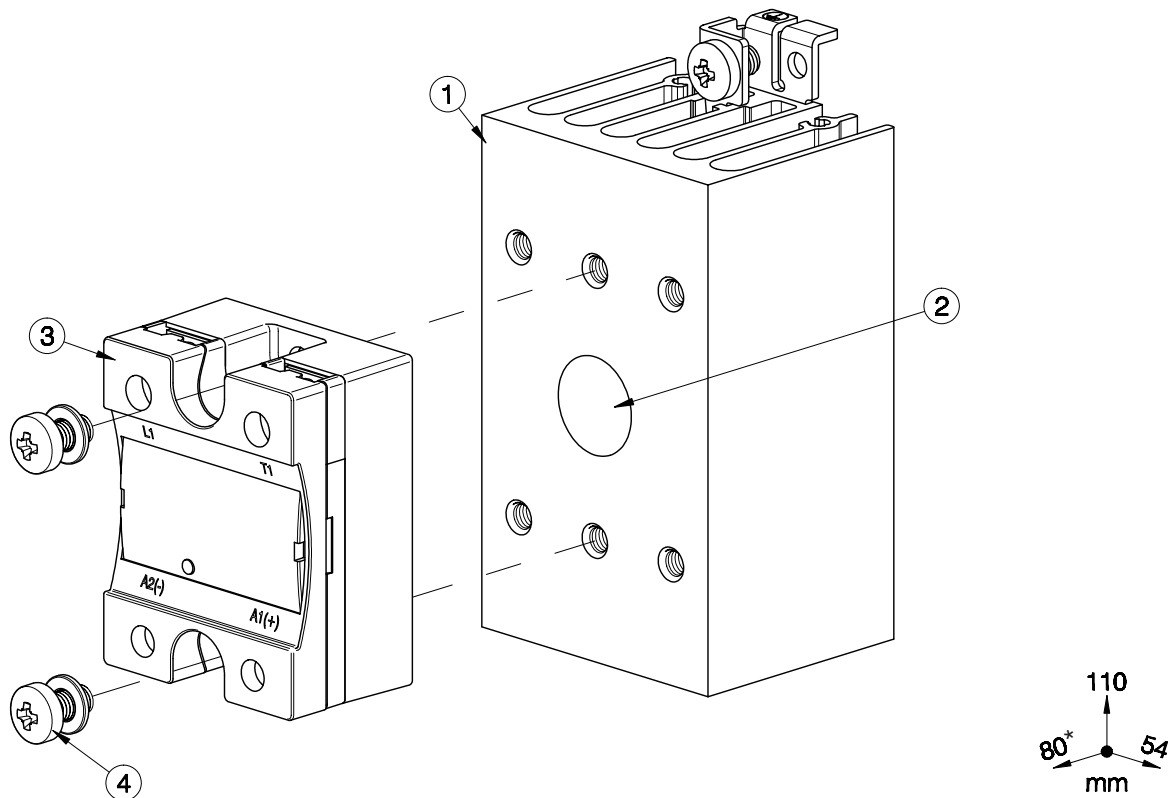
Description

Heatsink assembly suitable for mounting of maximum 3x 1- phase solid state relay (SSRs). Suffix H65 added to SSR part no. refers to factory mounted heatsink. Conditions apply. Please ask your sales representative for further details.



Structure

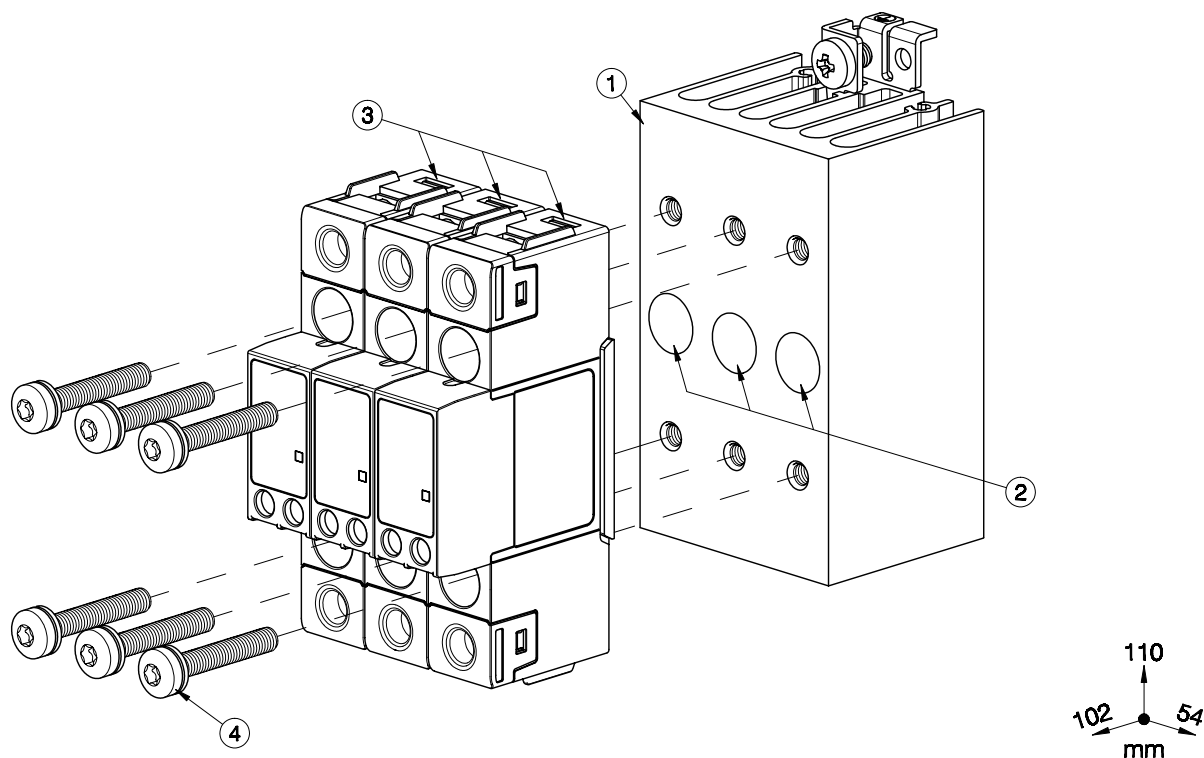
1-phase SSR



Element	Component	Qty	RHS540	RHS540D
1	RHS540 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	1-phase SSR 45x59mm	1	Not provided	Not provided
4	M5x10mm PZ2 + Washer	2	Provided	Provided

Note:
* 84mm for RK..C, 95mm for RK..P (including plug).
Dimensions including the SSR.

RGS1 18mm Module



Element	Component	Qty	RHS540	RHS540D
1	RHS540 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 SSR 18x90mm (max.)	3	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)	Provided (x6)

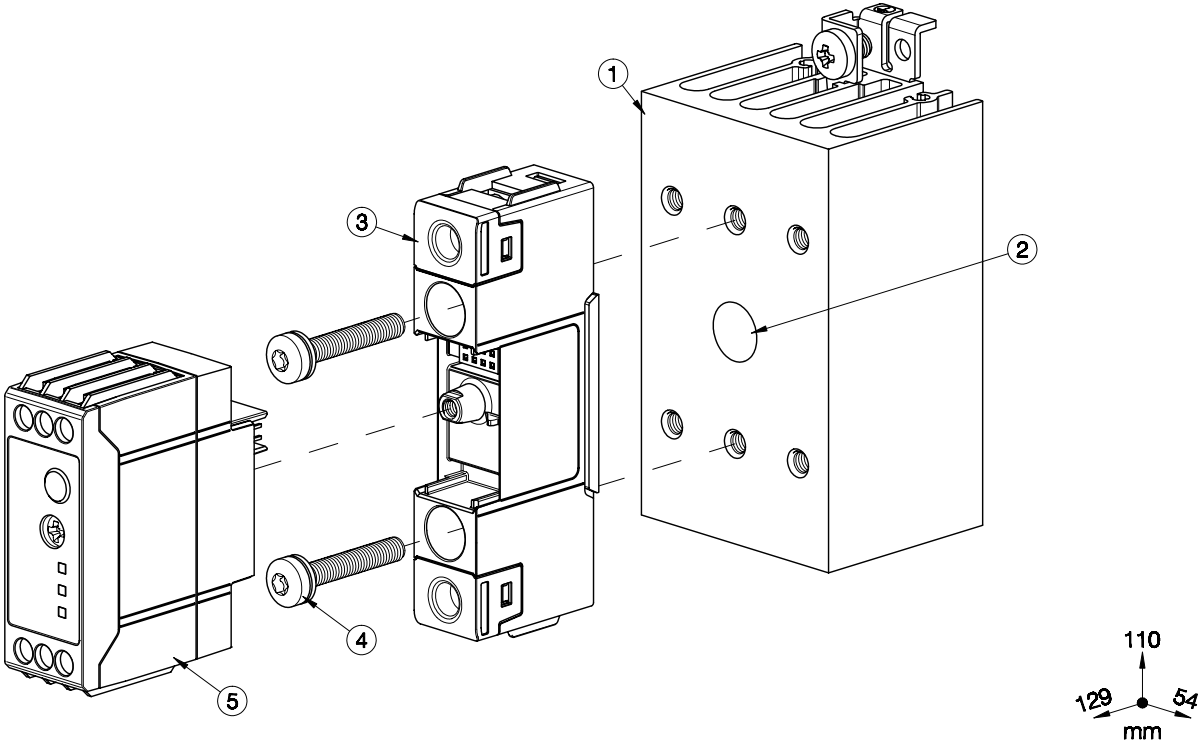
Note:

Dimensions including the SSR.

When only 1 SSR is utilized it shall be mounted at the centre of the heatsink.



RGS1 22.5mm Module

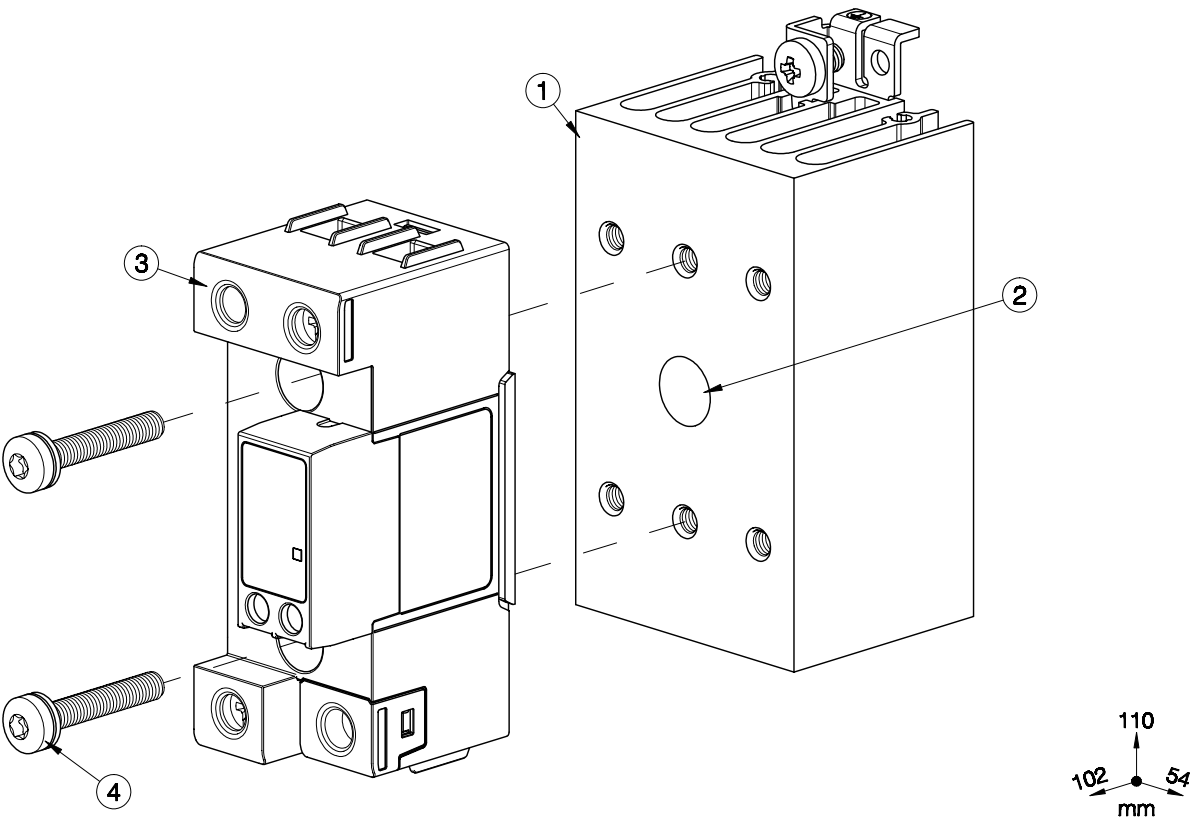


Element	Component	Qty	RHS540	RHS540D
1	RHS540 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 Power Module 18x90mm	1	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)	Provided (x6)
5	RGS1S Control Module 22.5x65mm	1	Not provided	Not provided

Note:
Dimensions including the SSR.



RGS1 35mm Module

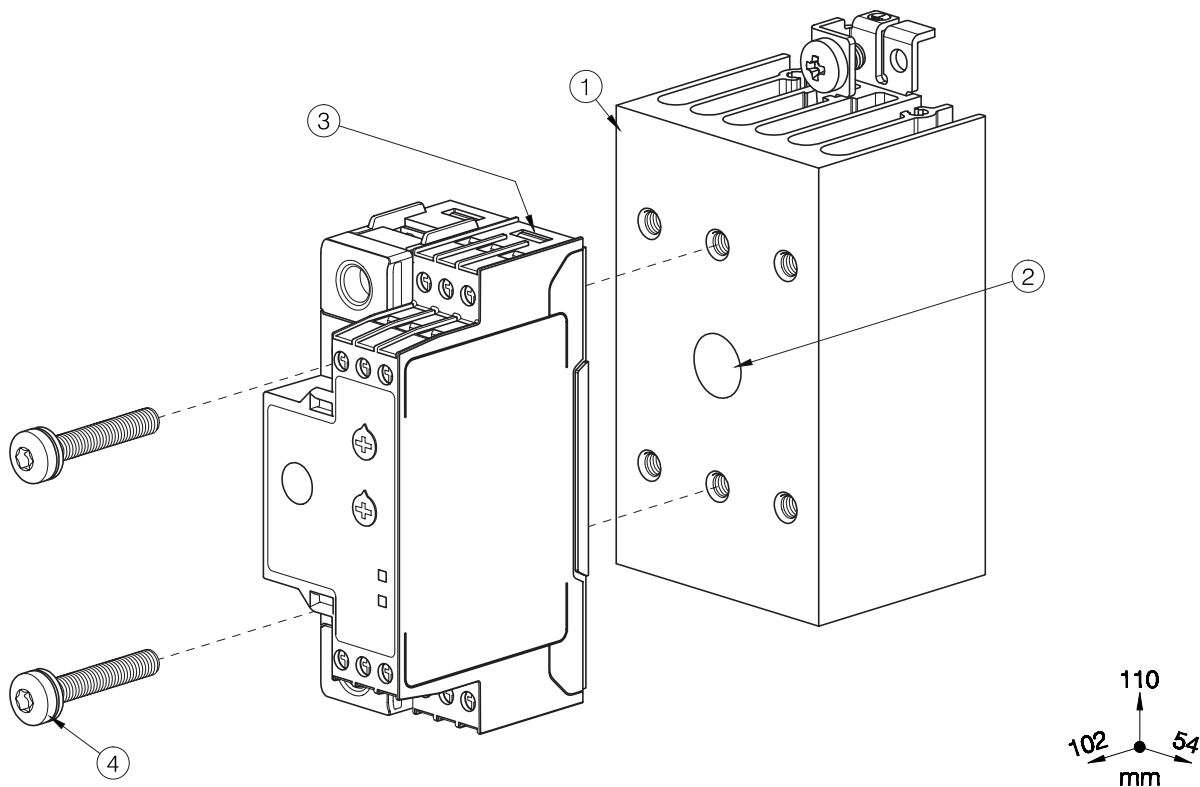


Element	Component	Qty	RHS540	RHS540D
1	RHS540 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 or RGS1S SSR 36x90mm	1	Not provided	Not provided
4	M5x30mm Torx T20 + Washer	2	Provided (x6)	Provided (x6)

Note:
Dimensions including the SSR.



RGS1P 35mm Module



Element	Component	Qty	RHS540	RHS540D
1	RHS540 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	2	Provided (x6)	Provided (x6)

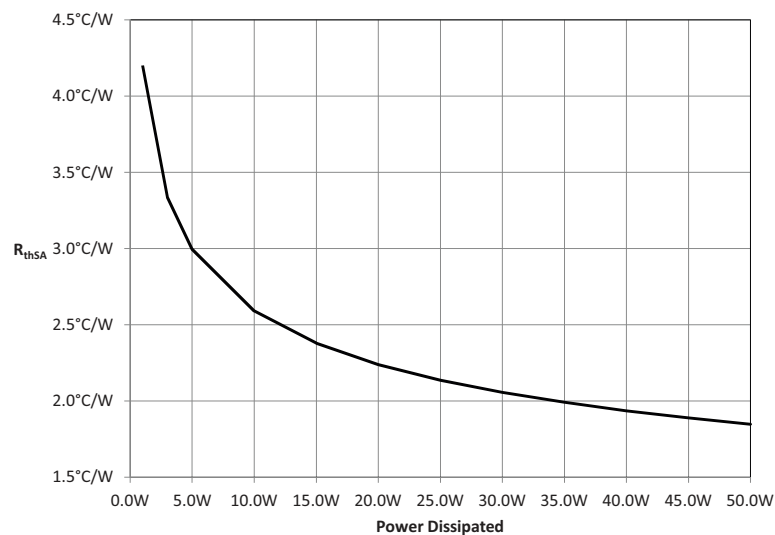
Note:
Dimensions including the SSR.

Features

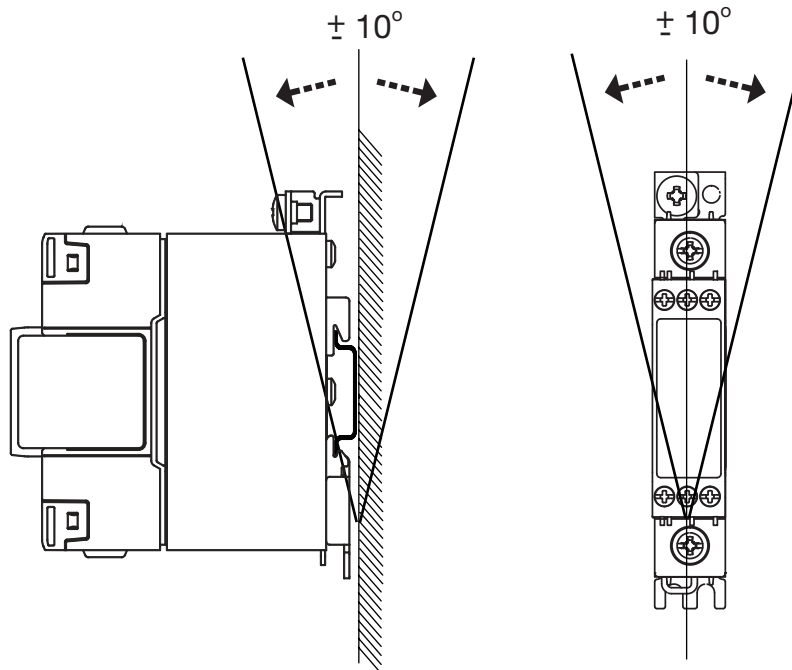
General

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 RHS540F40-24

Thermal resistance curve



Mounting position



Installation

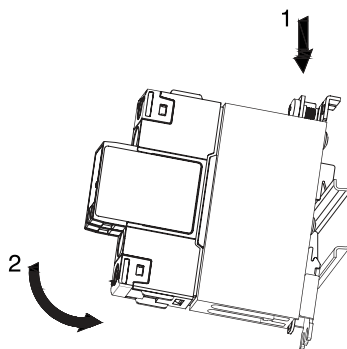


Fig. 1 Mounting on DIN rail

Illustrations are for example only.

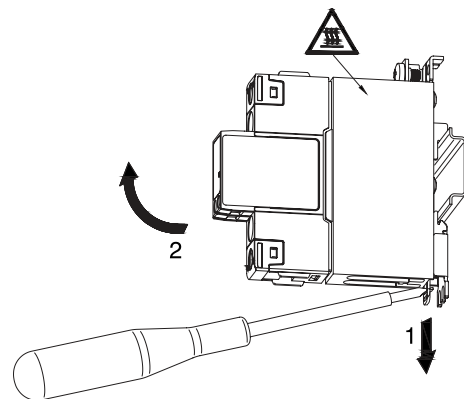


Fig. 2 Dismounting from DIN rail

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 pad, RKHT

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	27	24	21	17.5	14.5	11.5	8.5
	51	29	25.5	22	19	15.5	12.5	9
	75	32	28.5	24.5	20.5	17	13	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
RD..	1	1	1	1	1	1	1	-
	5	5	5	5	5	5	5	-
RA..L RA..T	10	10	10	10	10	10	8	-
	25	21	20	17.5	15	12.5	8	-
RA..	25	25	24.5	21	17.5	14	10.5	-
	50	33	31	26.5	22	17.5	13	-
	90	41	38	32.5	26.5	21	15.5	-
	110	45	42	35.5	29	23	17	-
RA60..	50	33	31	26.5	22.5	18	13.5	-
RA2A.. (per pole)	25	20.5	19	16	12.5	9.5	6	-
	40	23	21	17.5	13.5	10	6.5	-
	25M	20.5	19	16	12.5	9.5	6	-
	40M	23	21	17.5	13.5	10	6.5	-
RS1A..	10	10	10	9.5	8	6	4.5	-
	25	25	25	25	20.5	15.5	10.5	-
	40	23.5	21.5	17.5	14	10.5	7	-
RS1A..E	25	17.5	16.5	14.5	12.5	10	8	-
	40	20	19	16.5	14	11.5	9	-
RM1A.. RM1B.. RM1C..	25	25	25	25	20.5	15.5	10.5	-
	50	36.5	33.5	28	22.5	16.5	11.5	-
	75	43	39.5	32.5	26	19.5	13	-
	100	46.5	43	35.5	28	21	14	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	36.5	34	28.5	23	17.5	12	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	20.5	15.5	10.5	6
	50	36.5	33.5	28	22.5	16.5	11.5	6
	75	43	39.5	32.5	26	19.5	13	7
	100	43	39.5	32.5	26	19.5	13	7
	125	46.5	43	35.5	28	21	14	7.5
RGS1..E RGS1P..E*	25	25	25	25	25	22	18.5	14.5
	50	41.5	39	34.5	30	25.5	21	16.5
	51	40.5	38.5	34.5	30	25.5	21.5	17
	75	46	43.5	38.5	33	28	23	18
	90 91 92	48.5	46	40.5	35.5	30	24.5	19
RGS1..U	20	20	20	20	20	20	18.5	14.5
	30	30	30	30	30	25.5	21	16.5
RGS1S..E	20	23	23	23	23	22	18.5	-
	30	30	30	30	30	25.5	21	-
	31	30	30	30	30	30	24.5	-
	92	48.5	46	40.5	35.5	30	24.5	-
RGS1S..U	61	48.5	46	40.5	35.5	30	24.5	-
RGS1D..	15	15	15	15	15	15	12.5	10
	25	23	22	19.5	17.5	15	12.5	10

* max. 70 °C / 158 °F for RGS1P..E

Thermal pad KK071CUT for 1-phase SSRs, RGHT for RG SSRs

1x 1-phase SSR	Surrounding temperature							
	°C °F	20 68	30 86	40 104	50 122	60 140	70 158	80 176
RD..	1	1	1	1	1	1	1	-
	5	5	5	5	5	5	5	-
RA..L RA..T	10	10	10	10	10	10	8	-
	25	19.5	18.5	16	14	11.5	8	-
RA..	25	24.5	23	20	16.5	13.5	10	-
	50	30.5	28.5	24.5	20.5	16	12	-
	90	36.5	34	29	24	19	14	-
	110	40.5	37.5	32.0	26.5	21	15.5	-
RA60..	50	30.5	29	25	21	16.5	12.5	-
RA2A.. (per pole)	25	20.5	19	16	13	9.5	6.5	-
	40	22.5	21.5	17.5	14	10.5	7	-
	25M	20.5	19	16	13	9.5	6.5	-
	40M	23.0	21.5	17.5	14	10	7	-
RS1A..	10	10	10	9	7.5	6	4	-
	25	25	25	23	18.5	14	9.5	-
	40	22	20	16.5	13.5	10	6.5	-
RS1A..E	25	16	15	13	11	9.5	7.5	-
	40	18	17	14.5	12.5	10.5	8.5	-
RM1A.. RM1B.. RM1C..	25	25	25	23	18.5	14	9.5	-
	50	32.5	30	25	20	15	10	-
	75	37	34.5	28.5	23	17.5	11.5	-
	100	40.5	37	31	24.5	18.5	12.5	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	32.5	30	25.5	20.5	15.5	10.5	-
RAM1A.. RAM1B.. RM1E..	25	25	25	23	18.5	14	9.5	5.5
	50	32.5	30	25	20	15	10	5.5
	75	37	34.5	28.5	23	17.5	11.5	6.5
	100	37	34.5	28.5	23	17.5	11.5	6.5
	125	40.5	37	31	24.5	18.5	12.5	7
RGS1..E RGS1P..E*	25	25	25	25	22	19	16	12.5
	50	35	33	29.5	25.5	22	18	14
	51	34.5	33	29.5	25.5	22	18.5	14.5
	75	39	37	33	28.5	24	20	15.5
	90 91 92	41.5	39	34.5	30	25.5	21	16.5
RGS1..U	20	20	20	20	20	19	16	12.5
	30	30	30	29.5	25.5	22	18	14
RGS1S..E	20	23	23	23	22	19	16	-
	30	30	30	30	25.5	22	18	-
	31	30	30	30	30	25.5	21	-
	92	41.5	39	34.5	30	25.5	21	-
RGS1S..U	61	42	39	34.5	30	25.5	21	-
RGS1D..	15	15	15	15	14	12	10	8
	25	18.5	17.5	16	14	12	10	8

* max. 70 °C / 158 °F for RGS1P..E



References

CARLO GAVAZZI compatible components

Purpose	Component name/code	Notes
Thermal pads	KK071CUT	Packing qty. 50 pcs, suitable for 1-phase SSRs
	RGHT	Packing qty. 10 pcs, suitable for RG SSRs
Phase change thermal pad	RKHT	Packing qty. 10 pcs, suitable for RK series
Thermal compound	HTS02S	2ml syringe of silicone based thermal compound
Fans	RHSF40-24	24 VDC, 40x40mm
Screw Kits	SRWKITM5X10MM	Packing qty. 20 pcs.
	SRWKITM5X30MM	Packing qty. 20 pcs.

Further reading

Information	Where to find it
Online heatsink selector tool	http://www.productselection.net/heatsink/heatsinkSelector.php?LANG=UK
Accessories	http://www.productselection.net/Pdf/UK/SSR_Accessories.pdf

Order code



RHS540



Enter the code entering the corresponding option instead of ☐

Code	Option	Description
R	-	
H	-	
S	-	
5	-	
4	-	
0	-	
☐		With thermal compound
	D	Thermal compound not included



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