

RHS320



Accessories: Heatsinks



Main features

- 0.4°C/W thermal resistance
- Suitable for mounting of 1-phase SSRs or 3-phase SSRs
- Panel mounting
- Dimensions W x H x D: 240 x 100 x 93 mm
- RoHS compliant

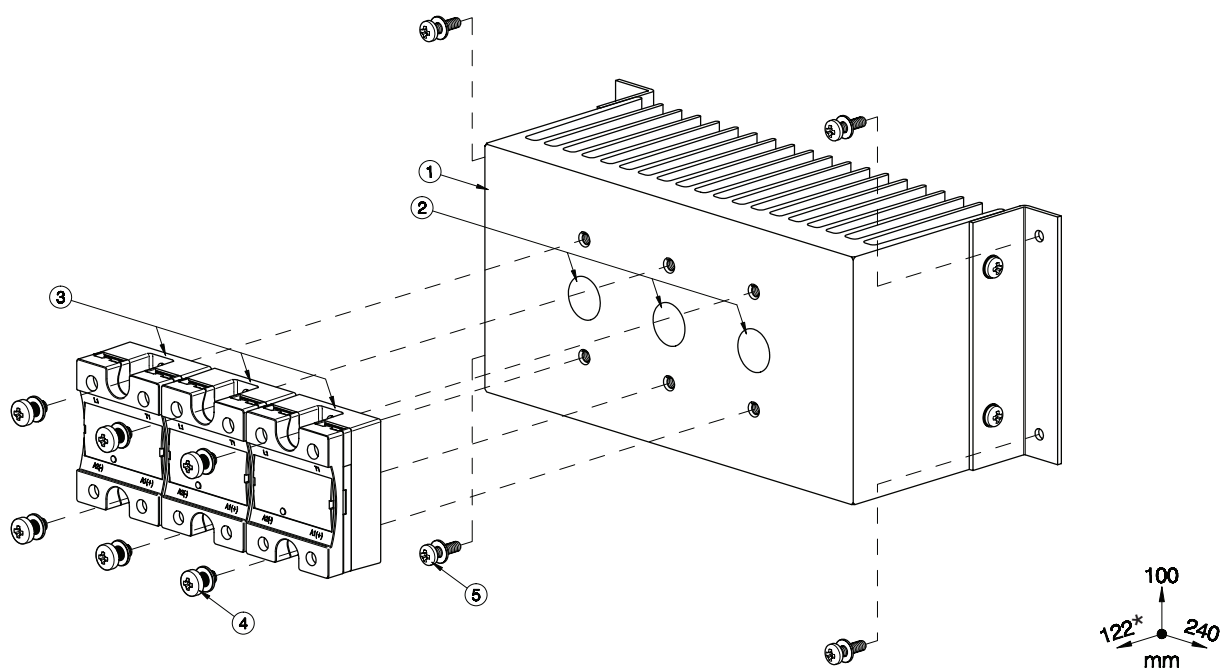
Description

Heatsink assembly suitable for mounting of maximum 3x 1- phase solid state relay (SSR) or 1x 3-phase SSR.

Suffix H13 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	RHS320
1	RHS320 heatsink assembly	1	Provided
2	Thermal Compound HTS02S	1	Provided
3	1-phase SSR 45x59mm (max.)	3	Not provided
4	M5x10mm PZ2 + Washer (per SSR)	2	Provided (x6)
5	Panel Mounting Screws Ø4mm max.	4	Not provided

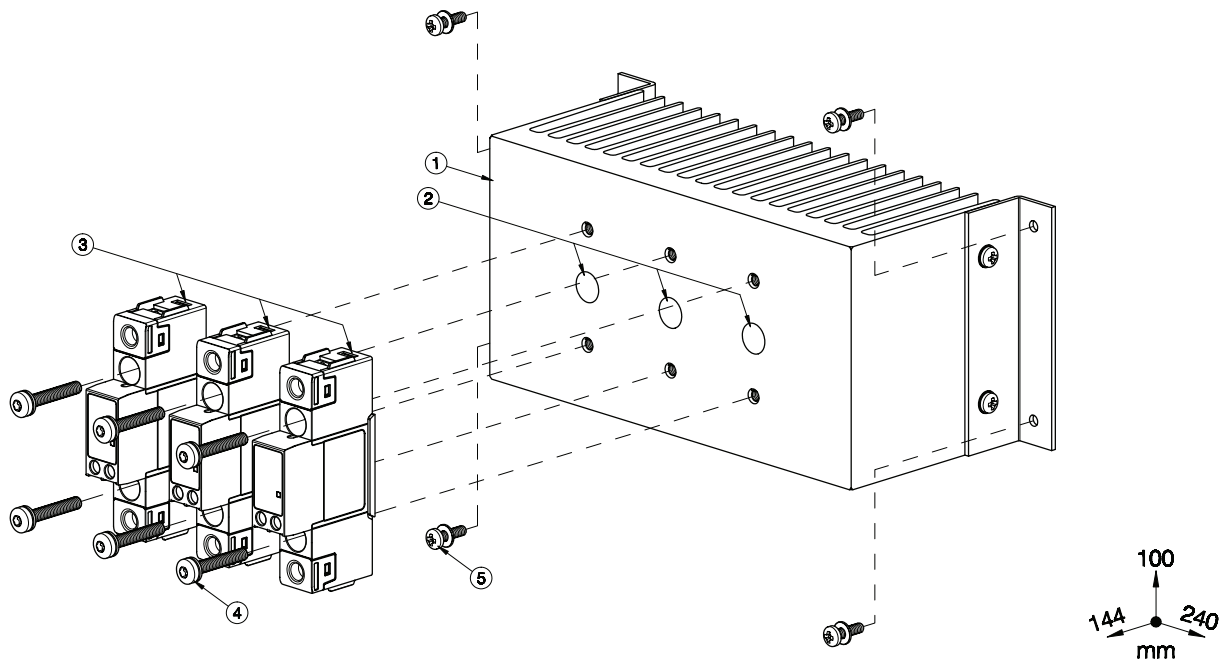
Note:

* 126mm for RK..C, 137mm 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.

RGS1 18mm Module



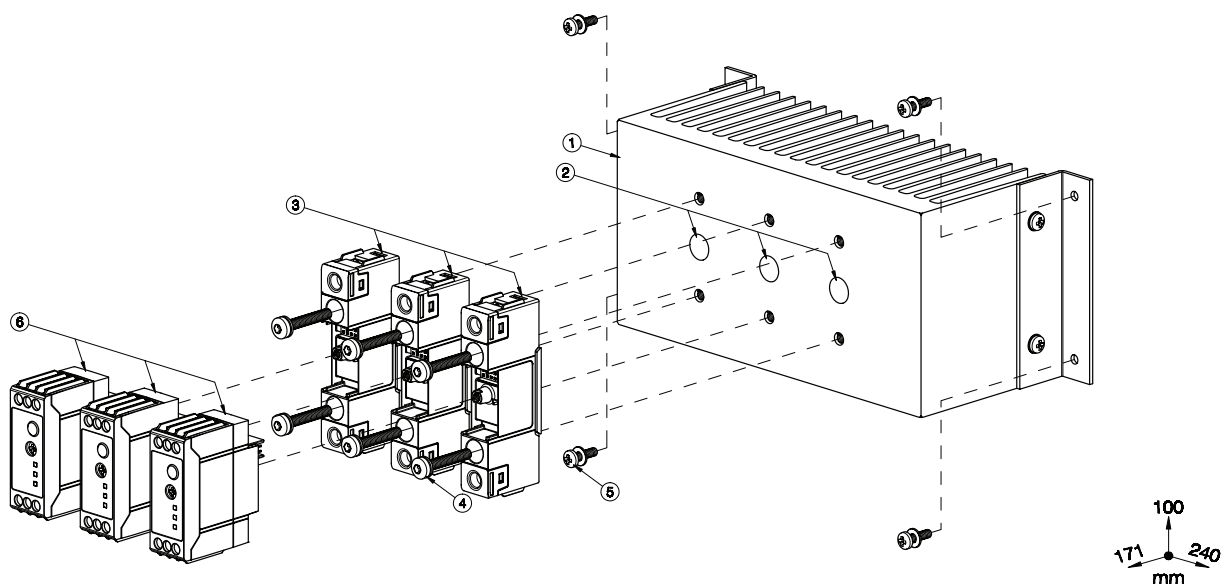
Element	Component	Qty	RHS320
1	RHS320 heatsink assembly	1	Provided
2	Thermal Compound HTS02S	1	Provided
3	RGS1 SSR 18x90mm (max.)	3	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)
5	Panel Mounting Screws Ø4mm max.	4	Not provided

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



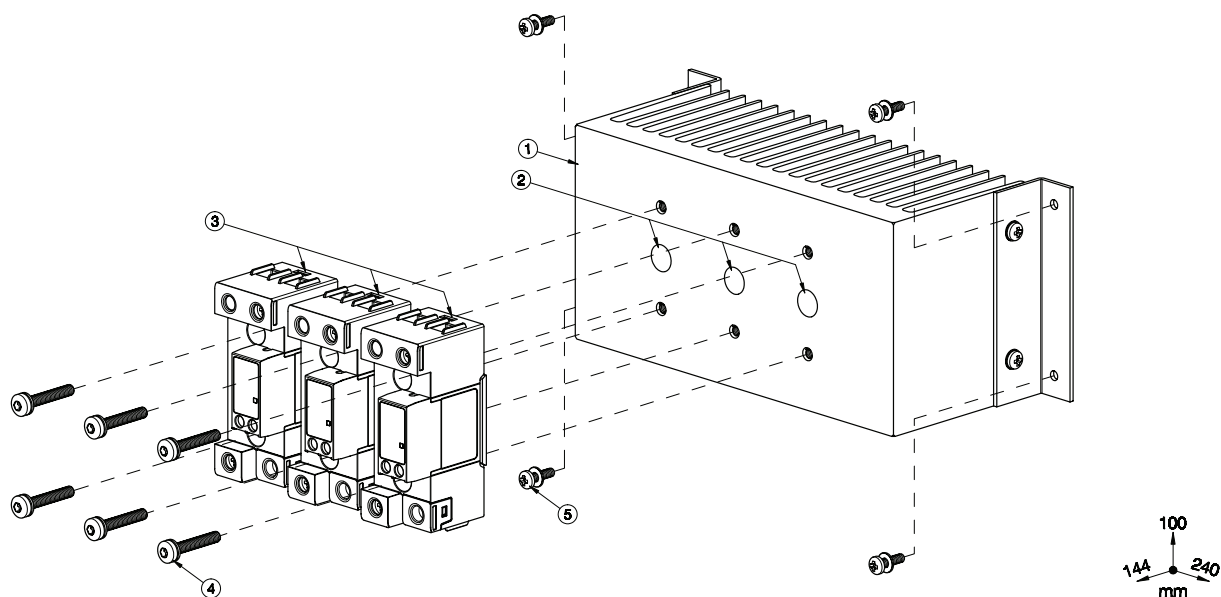
Element	Component	Qty	RHS320
1	RHS320 heatsink assembly	1	Provided
2	Thermal Compound HTS02S	1	Provided
3	RGS1 Power Module 18x90mm (max.)	3	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)
5	Panel Mounting Screws Ø4mm max.	4	Not provided
6	RGS1S Control Module 22.5x65mm (max.)	3	Not provided

Note:

Dimensions including the SSR.

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

RGS1 35mm Module



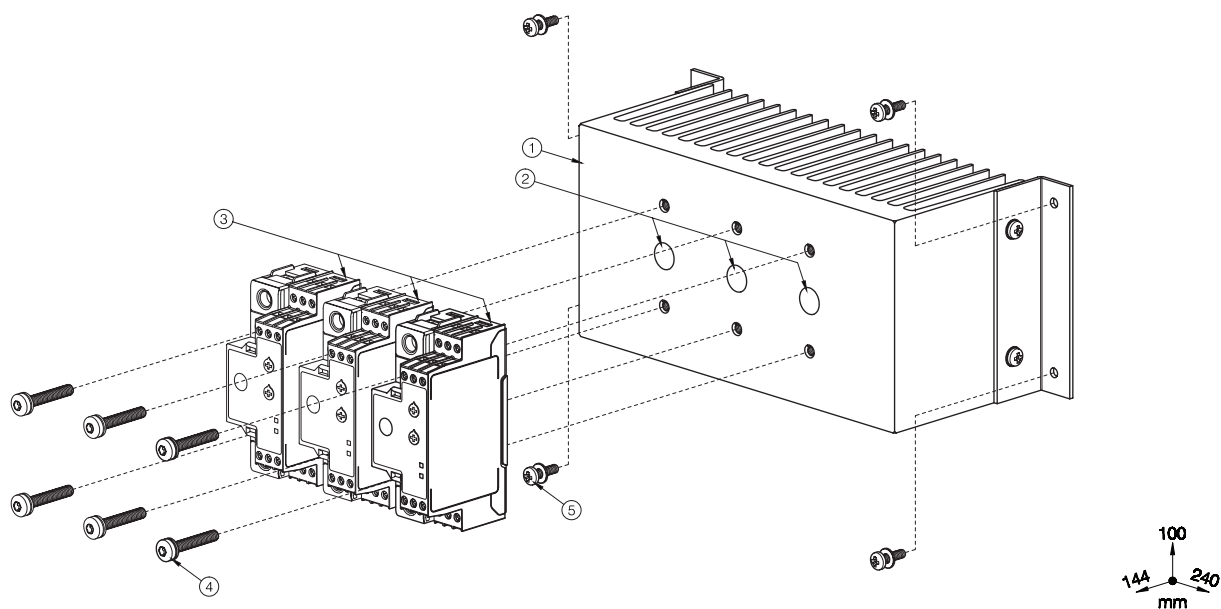
Element	Component	Qty	RHS320
1	RHS320 heatsink assembly	1	Provided
2	Thermal Compound HTS02S	1	Provided
3	RGS1 or RGS1S SSR 36x90mm (max.)	3	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)
5	Panel Mounting Screws Ø4mm max.	4	Not provided

Note:

Dimensions including the SSR.

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

RGS1P 35mm Module



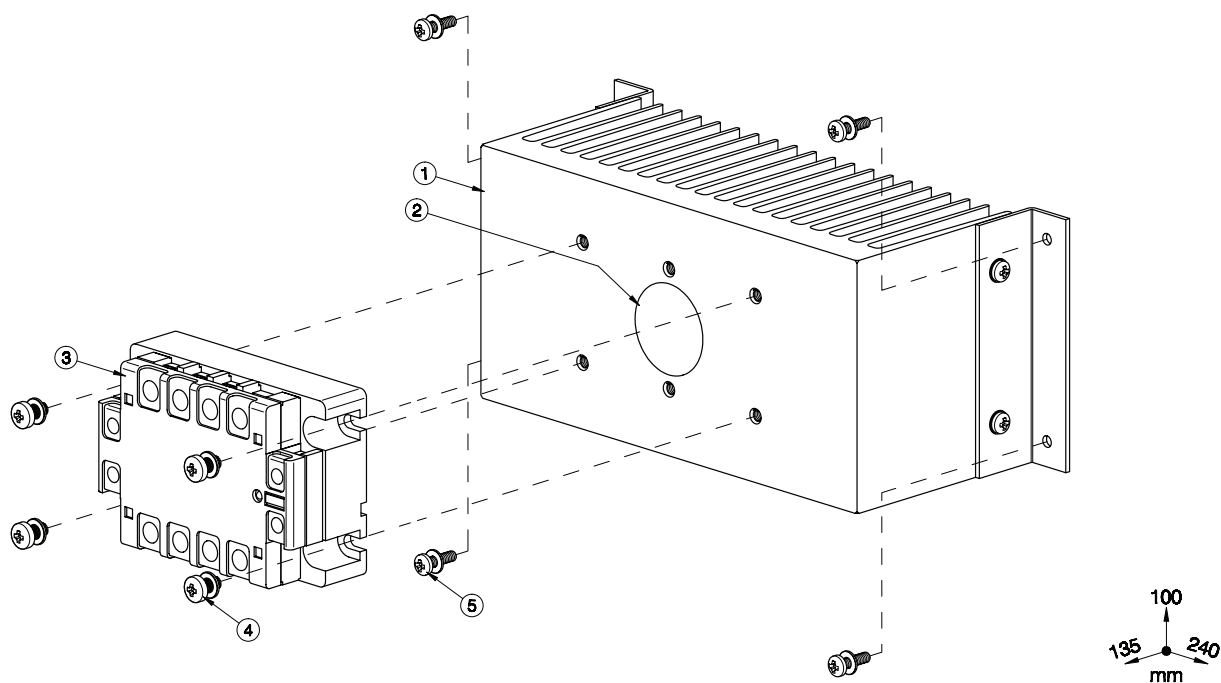
Element	Component	Qty	RHS320
1	RHS320 heatsink assembly	1	Provided
2	Thermal Compound HTS02S	1	Provided
3	RGS1P SSR 35x90mm (max.)	3	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)
5	Panel Mounting Screws Ø4mm max.	4	Not provided

Note:

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	RHS320
1	RHS320 heatsink assembly	1	Provided
2	Thermal Compound HTS02S	1	Provided
3	3-phase SSR 104 x 74mm	1	Not provided
4	M5x10mm PZ2 + Washer (per SSR)	4	Provided (x6)
5	Panel Mounting Screws Ø4mm max.	4	Not provided

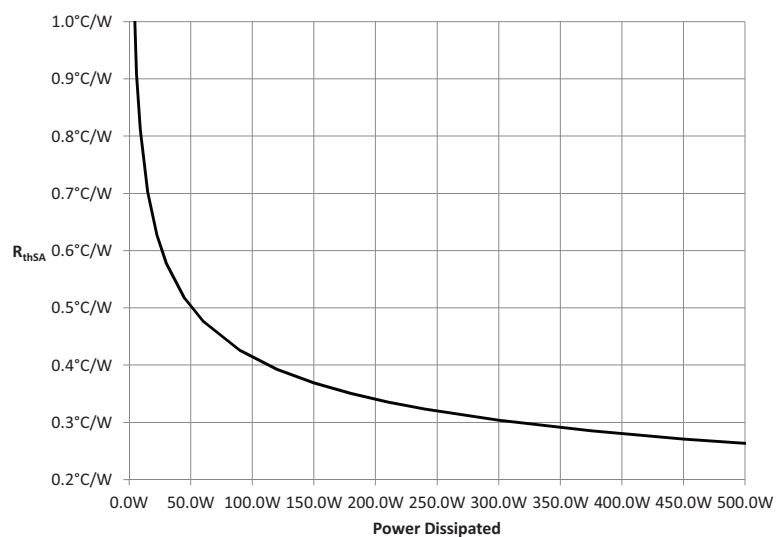
Dimensions including the SSR.

Features

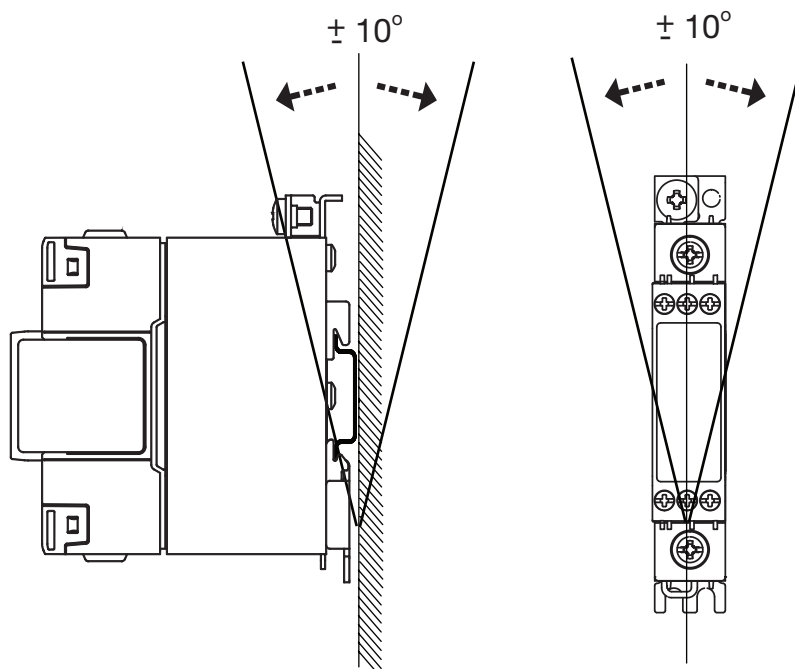
General

SSR max. mounting torque	1.5Nm (13.3 lb-in)
Weight (excl. SSR)	approx. 2300g
Material	Aluminium
Finish	Black anodization
Fan mounting	Not possible

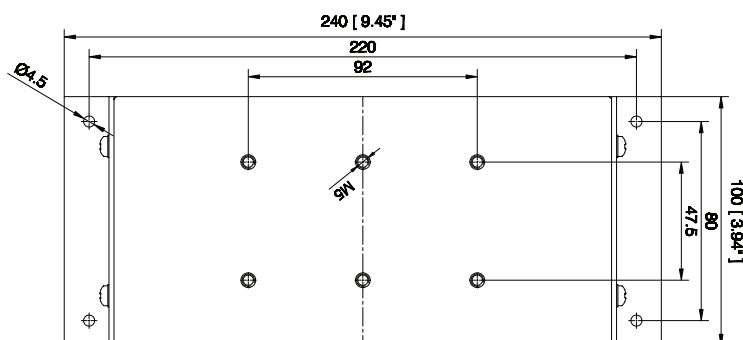
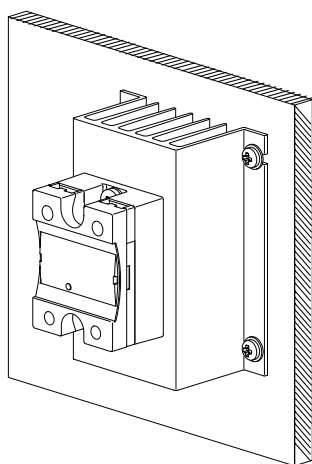
Thermal resistance curve



Mounting position



Installation



All dimensions in mm.
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 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	50	50	50	48.5	41	33.5	26
	51	50	50	50	50	47	38	29
	75	75	75	75	65.5	55	44.5	34

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
RZ3A..	25	25	25	25	24	20	15	6.5
	55	47.5	45	40.5	35.5	30.5	21.5	11.5
	75	65.5	62.5	56	49.5	40	28.5	17.5

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
RZ3A..	25	25	25	24	20.5	17	13	6.5
	55	39.5	37.5	33.5	29.5	25.5	21	12
	75	57.5	54.5	49	43.5	38	29	17.5

 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	10	-
	25	25	25	25	24	20.5	16.5	-
RA..	25	25	25	25	25	22.5	17.5	-
	50	50	50	47.5	40	33	25	-
	90	84.5	79.5	69	58.5	47.5	36.5	-
RA60..	110	99	93	80.5	67.5	54.5	41	-
	50	50	50	46.5	39.5	32.5	25.5	-
RA2A.. (per pole)	25	25	25	25	25	25	23	-
	40	40	40	40	35	30.5	25.5	-
	25M	25	25	25	25	25	23	-
	40M	40	40	40	36	31.5	26	-
RS1A..	10	10	10	10	10	9.0	6.5	-
	25	25	25	25	25	25	25	-
	40	40	40	40	40	40	35.5	-
RS1A..E	25	25	25	23	20	17	14	-
	40	35	33	29	25	21	17	-
RM1A.. RM1B.. RM1C..	25	25	25	25	25	25	25	-
	50	50	50	50	50	48.5	35.5	-
	75	75	75	75	75	66	45.5	-
	100	100	100	100	91	72.5	49.5	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	50	50	50	47.5	41.5	35	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	25	25	25	19
	50	50	50	50	50	48.5	35.5	20.5
	75	75	75	75	75	66	45.5	25.5
	100	100	98	88	77.5	66	45.5	25.5
	125	123	117	104	91	72.5	49.5	27.5
RGS1..E RGS1P..E*	25	25	25	25	25	25	25	25
	50	50	50	50	50	50	47.5	38.5
	51	50	50	50	50	50	46.5	38
	75	75	75	75	73	63.5	53.5	43
	90 91 92	90	90	89.5	79	68.5	58	46.5
RGS1..U	20	20	20	20	20	20	20	20
	30	30	30	30	30	30	30	30
RGS1S..E	20	23	23	23	23	23	23	-
	30	30	30	30	30	30	30	-
	31	30	30	30	30	30	30	-
	92	90	90	89.5	79	68.5	58	-
RGS1S..U	61	65	65	65	65	65	58	-
RGS1D..	15	15	15	15	15	15	15	15
	25	25	25	25	25	25	25	21

* 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	10	-
	25	25	25	23.5	20.5	17.5	14.5	-
RA..	25	25	25	25	24.5	20	15.5	-
	50	48.5	46	40	34	27.5	21	-
	90	64	60	52.5	44.5	36	27.5	-
	110	73	68.5	59	50	40.5	30.5	-
RA60..	50	47.5	45	39.5	34	28	21.5	-
RA2A.. (per pole)	25	25	25	25	25	23.5	20	-
	40	40	38	34	30	26	22	-
	25M	25	25	25	25	23.5	20	-
	40M	40	39	35	31	26.5	22.5	-
RS1A..	10	10	10	10	10	8	6	-
	25	25	25	25	25	25	23	-
	40	40	40	40	40	35	25	-
RS1A..E	25	24	22.5	20	17.5	14.5	12	-
	40	29	27.5	24	21	17.5	14.5	-
RM1A.. RM1B.. RM1C..	25	25	25	25	25	25	23	-
	50	50	50	50	45	35	25	-
	75	75	73	63.5	52	40.5	29	-
	100	88.5	82.5	70	57	44	31	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	50	50	45.5	40.5	35	25.5	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	25	25	23	14
	50	50	50	50	45	35	25	14.5
	75	75	73	63.5	52	40.5	29	16.5
	100	76.5	73	63.5	52	40.5	29	16.5
	125	88.5	82.5	70	57	44	31	18
RGS1..E RGS1P..E*	25	25	25	25	25	25	25	22
	50	50	50	50	44.5	38.5	32.5	26.5
	51	50	50	48.5	43.5	38	32.5	26.5
	75	66.5	63.5	57	50.5	43.5	36.5	29.5
	90 91 92	71	67.5	60.5	53.5	46.5	39	31.5
RGS1..U	20	20	20	20	20	20	20	20
	30	30	30	30	30	30	30	26.5
RGS1S..E	20	23	23	23	23	23	23	-
	30	30	30	30	30	30	30	-
	31	30	30	30	30	30	30	-
	92	71	67.5	61	53.5	46.5	39	-
RGS1S..U	61	65	65	60.5	53.5	46.5	39	-
RGS1D..	15	15	15	15	15	15	15	14
	25	25	25	24.5	22	19.5	16.5	14

* 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
	RZHT	Packing qty. 10 pcs, suitable for 3-phase SSR
	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
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



RHS320



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