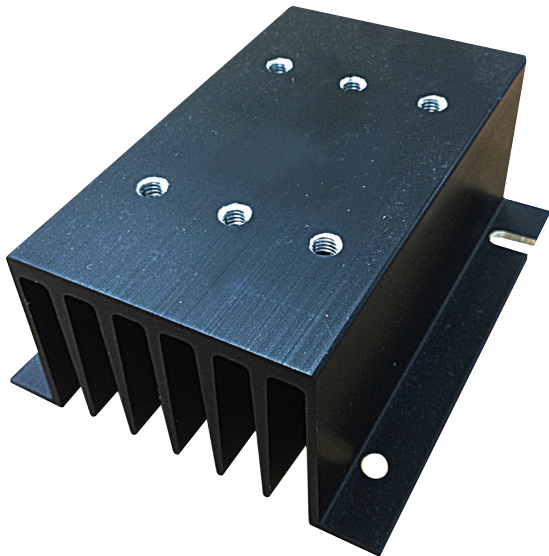


# RHS5840D



## Accessories: Heatsinks



### Main features

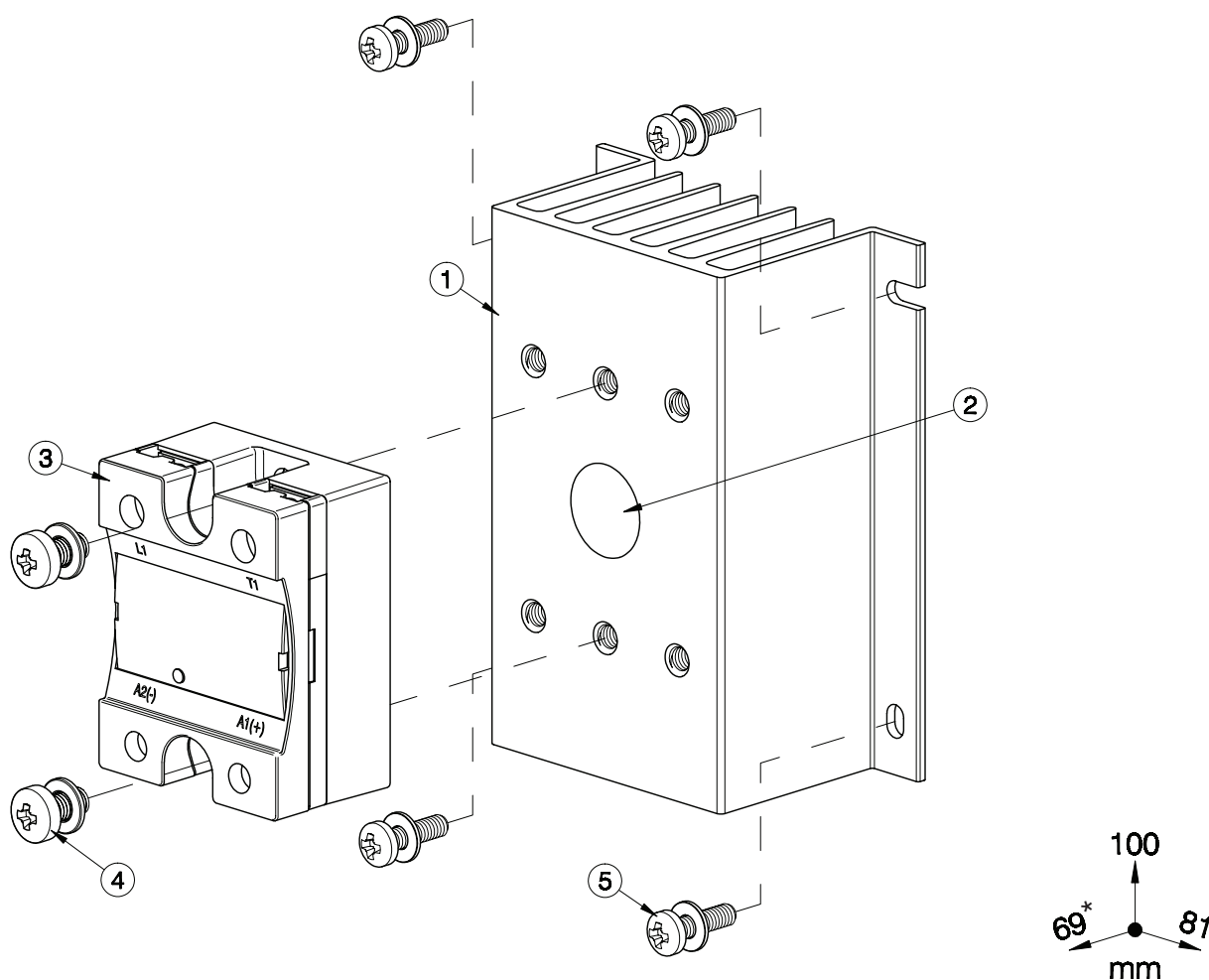
- 1.8°C/W thermal resistance
- Suitable for mounting of 3x 1-phase SSRs
- Panel mounting
- Dimensions W x H x D: 81 x 100 x 40 mm
- RoHS compliant

### Description

Heatsink assembly suitable for mounting of maximum 3x 1- phase solid state relay (SSRs). Suffix H48 added to SSR part no. refers to factory mounted heatsink. Conditions apply. Please ask your sales representative for further details.

# Structure

## 1-phase SSR



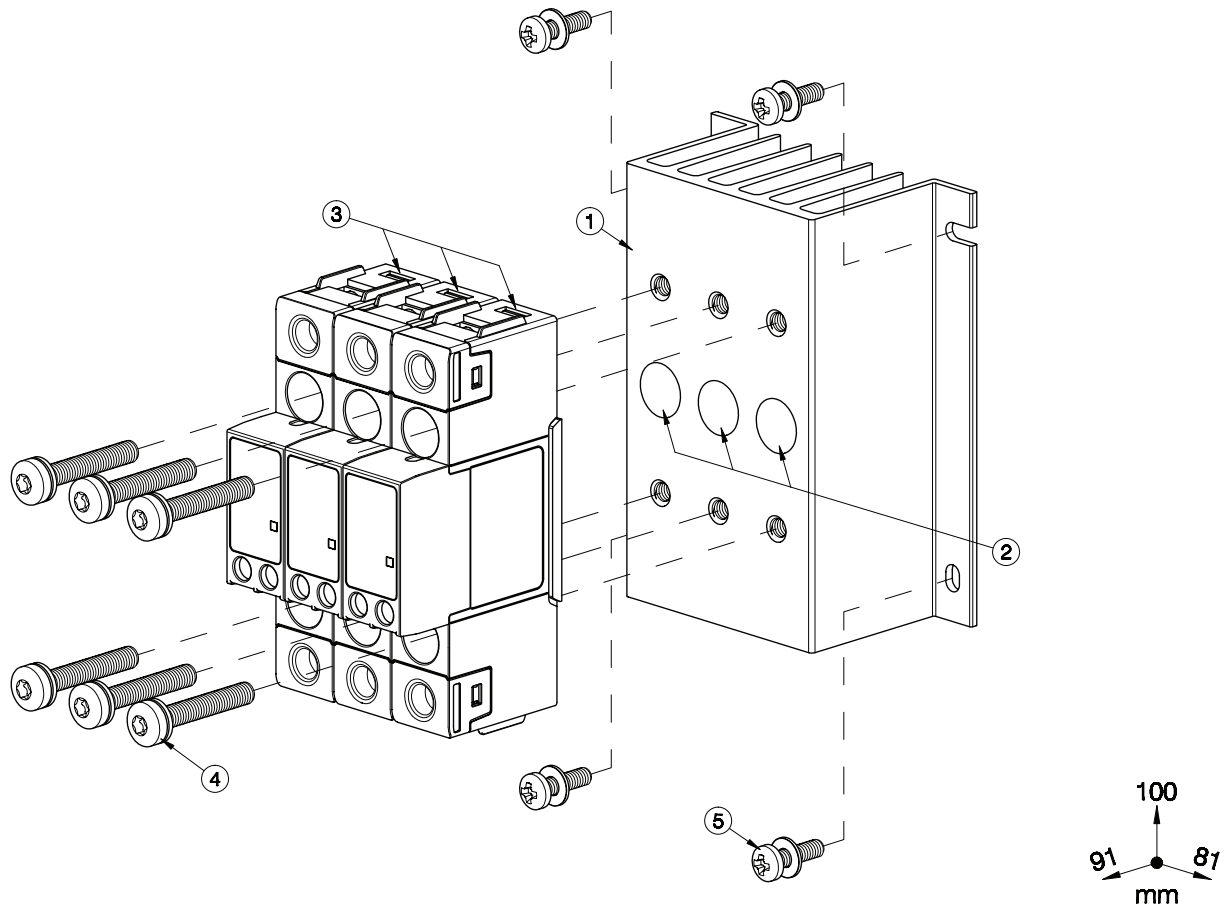
Element	Component	Qty	RHS5840D
1	RHS5840D heatsink assembly	1	Provided
2	Thermal Compound or Pad	1	Not provided
3	1-phase SSR 45x59mm	1	Not provided
4	M5x10mm PZ2 + Washer	2	Not provided
5	Panel Mounting Screws Ø4mm max.	4	Not provided

Note:

\* 73mm for RK..C, 84mm for RK..P (including plug).

Dimensions including the SSR.

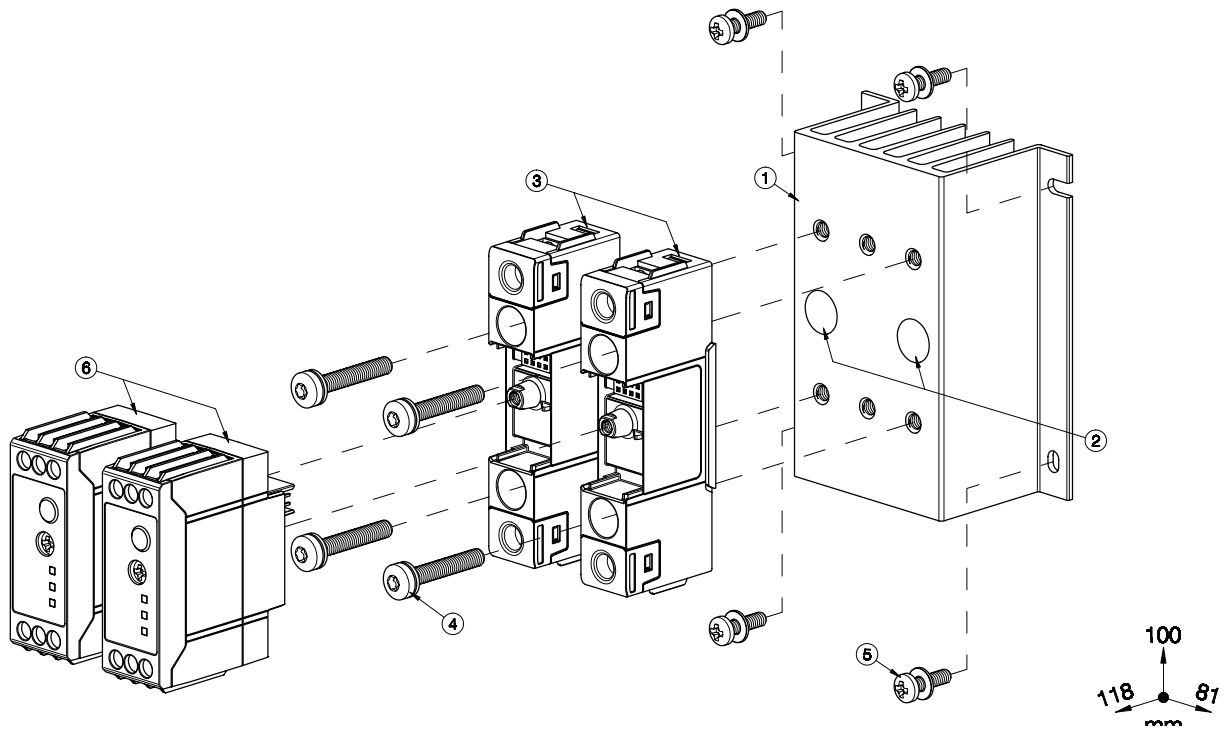
## RGS1 18mm Module



Element	Component	Qty	RHS5840D
1	RHS5840D heatsink assembly	1	Provided
2	Thermal Compound or Pad	1	Not provided
3	RGS1 SSR 18x90mm (max.)	3	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Not provided
5	Panel Mounting Screws Ø4mm max.	4	Not provided

Note:  
Dimensions including the SSR.

## RGS1 22.5mm Module


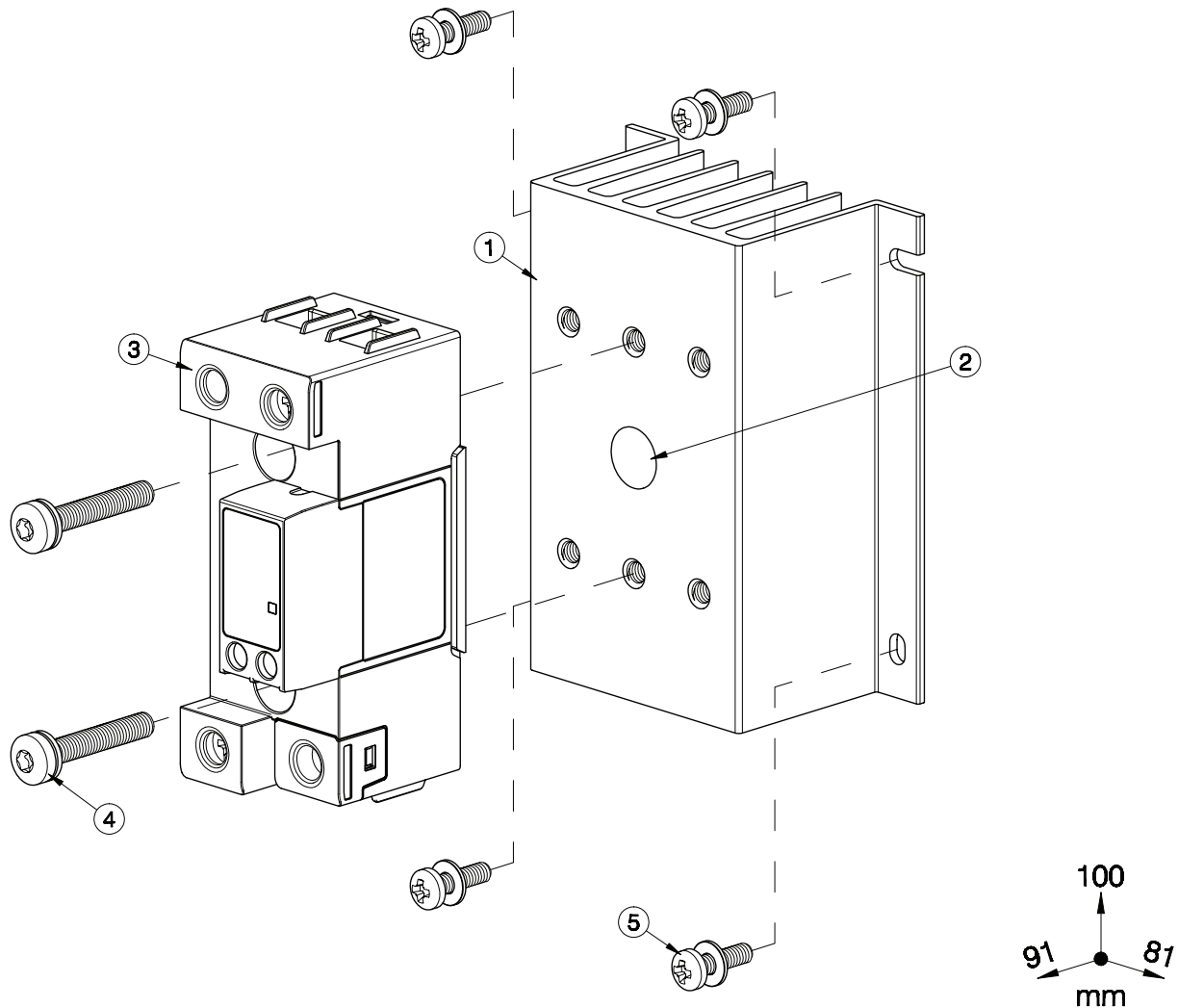


Element	Component	Qty	RHS5840D
1	RHS5840D heatsink assembly	1	Provided
2	Thermal Compound or Pad	1	Not provided
3	RGS1 Power Module 18x90mm (max.)	2	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Not provided
5	Panel Mounting Screws Ø4mm max.	4	Not provided
6	RGS1S Control Module 22.5x65mm (max.)	2	Not provided

## Note:

Dimensions including the SSR.

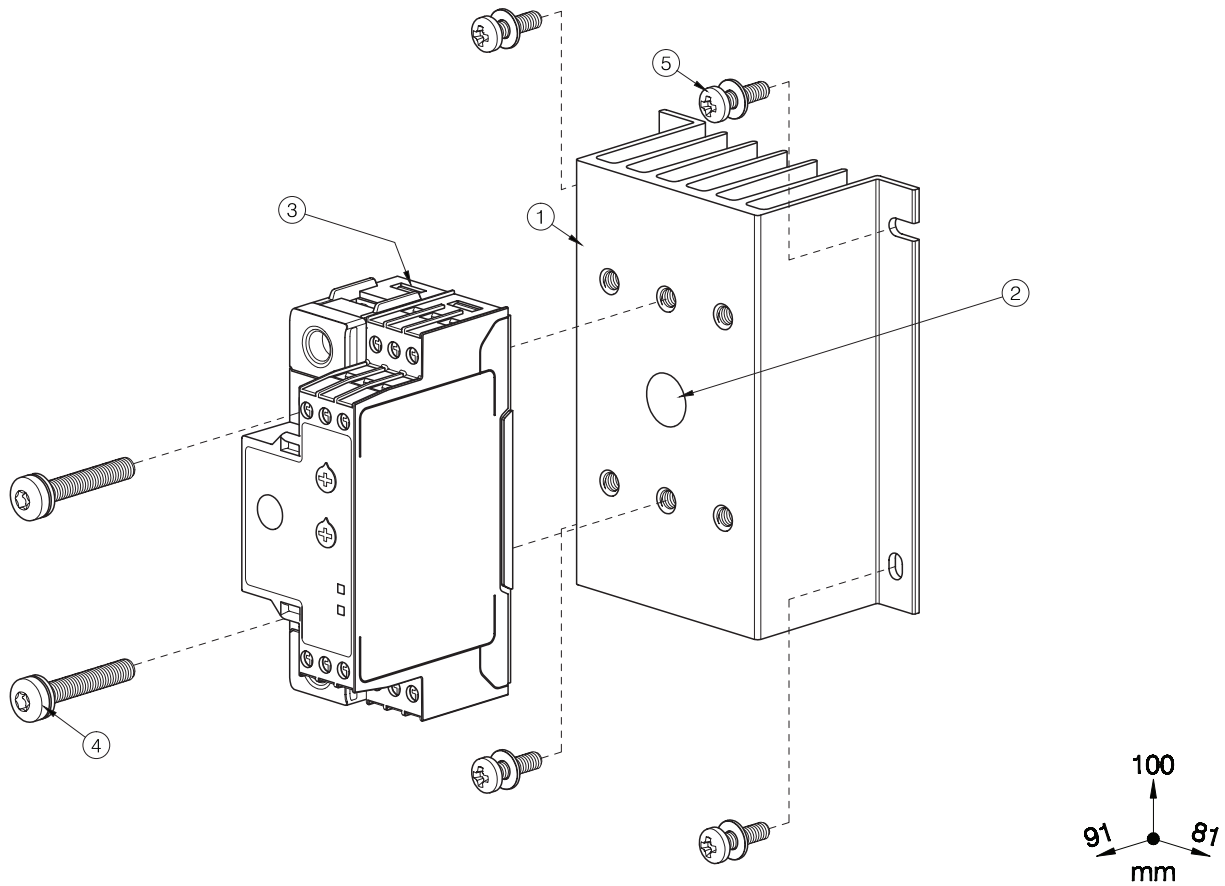
When only 1 SSR is utilized it shall be mounted at the centre of the heatsink.


**RGS1 35mm Module**


Element	Component	Qty	RHS5840D
1	RHS5840D heatsink assembly	1	Provided
2	Thermal Compound or Pad	1	Not provided
3	RGS1 or RGS1S SSR 36x90mm	1	Not provided
4	M5x30mm Torx T20 + Washer	2	Not provided
5	Panel Mounting Screws Ø4mm max.	4	Not provided

Note:  
Dimensions including the SSR.

**RGS1P 35mm Module**



Element	Component	Qty	RHS5840D
1	RHS5840D heatsink assembly	1	Provided
2	Thermal Compound or Pad	1	Not provided
3	RGS1P SSR 35x90mm	1	Not provided
4	M5x30mm Torx T20 + Washer	2	Not provided
5	Panel Mounting Screws Ø4mm max.	4	Not provided

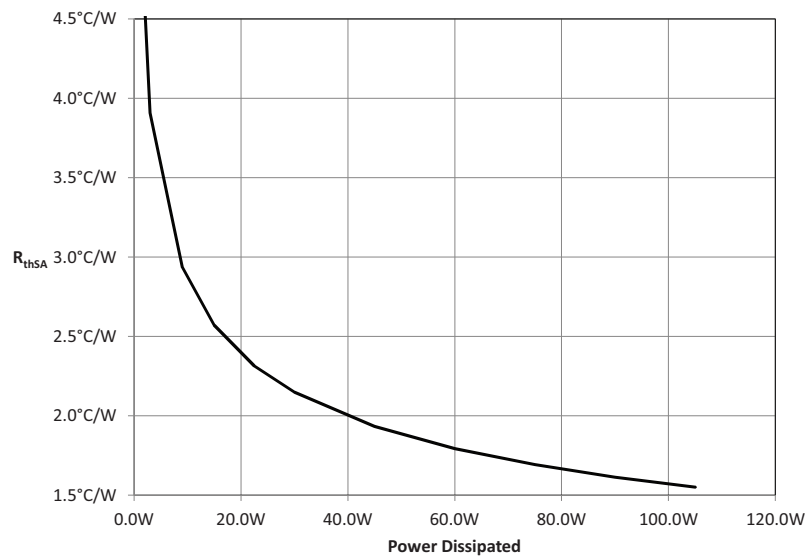
Note:  
Dimensions including the SSR.

## Features

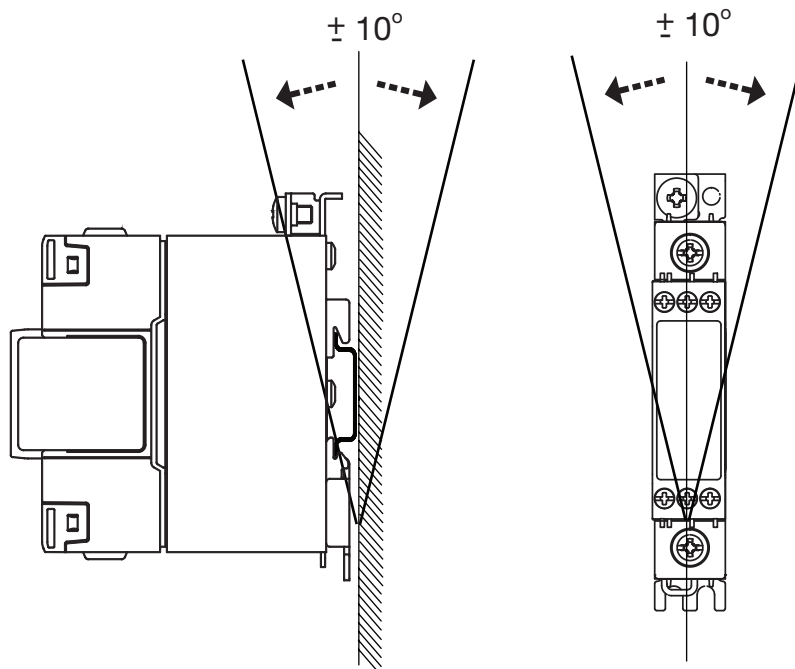
### General

SSR max. mounting torque	1.5Nm (13.3 lb-in)
Weight (excl. SSR)	approx 225g
Material	Aluminium
Finish	Black anodization
Fan mounting	Not possible

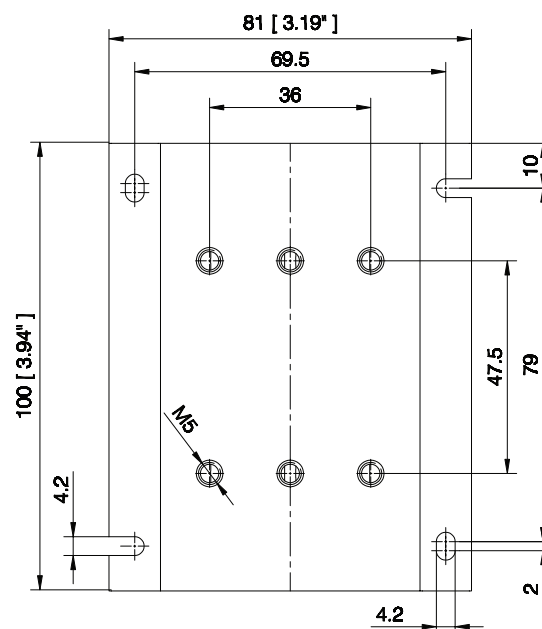
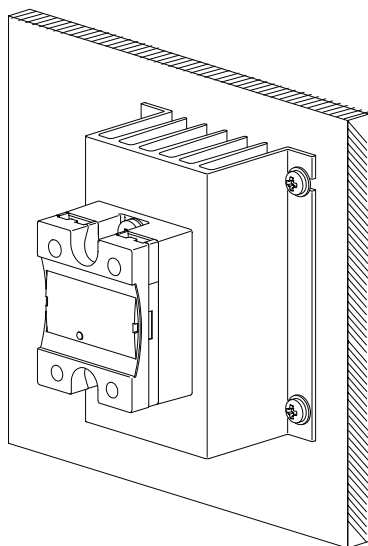
### Thermal resistance curve



## 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](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.


### 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	27.5	24	21	18	15	11.5	8.5
	51	29.5	26	22.5	19	15.5	12.5	9
	75	33	29	25	21	17	13.5	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	21.5	20	17.5	15	12.5	8	-
RA..	25	25	24.5	21	17.5	14	10.5	-
	50	33.5	31	26.5	22	17.5	13	-
	90	41	38.5	32.5	27	21	15.5	-
	110	45.5	42.5	36	29.5	23	17	-
RA60..	50	33	31	27	22.5	18	13.5	-
RA2A.. (per pole)	25	21	19.5	16	12.5	9.5	6.5	-
	40	23.5	21.5	17.5	14	10	6.5	-
	25M	21	19.5	16	12.5	9.5	6.5	-
	40M	23.5	21.5	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	36.5	33.5	28	22.5	16.5	11	-
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	-
	75	43.5	40	33	26	19.5	13	-
	100	47	43.5	35.5	28	21	14	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	37	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	6
	75	43.5	40	33	26	19.5	13	7
	100	43.5	40	33	26	19.5	13	7
	125	47	43.5	35.5	28	21	14	7.5
RGS1..E RGS1P..E*	25	25	25	25	25	22.5	18.5	14.5
	50	42	39.5	35	30.5	26	21	16.5
	51	41	39	34.5	30.5	26	21.5	17
	75	46.5	44	38.5	33.5	28.5	23	18
	90 91 92	49.5	46.5	41	35.5	30	24.5	19
RGS1..U	20	20	20	20	20	20	18.5	14.5
	30	30	30	30	30	26	21	16.5
RGS1S..E	20	23	23	23	23	22.5	18.5	-
	30	30	30	30	30	26	21	-
	31	30	30	30	30	30	24.5	-
	92	49.5	46.5	41	35.5	30	24.5	-
RGS1S..U	61	49.5	46.5	41	35.5	30	24.5	-
RGS1D..	15	15	15	15	15	15	12.5	10
	25	23	22	20	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	31	29	24.5	20.5	16	12	-
	90	37	34.5	29.5	24.5	19	14	-
	110	40.5	38	32	26.5	21	15.5	-
RA60..	50	31	29	25	21.0	16.5	12.5	-
RA2A.. (per pole)	25	20.5	19.5	16.5	13	9.5	6.5	-
	40	23	21.5	18	14	10.5	7	-
	25M	20.5	19.5	16.5	13	9.5	6.5	-
	40M	23	22	18	14	10.5	7	-
RS1A..	10	10	10	9	7.5	6	4	-
	25	25	25	23	18.5	14	9.5	-
	40	32.5	30	25	20	15	10	-
RS1A..E	25	16	15	13	11.5	9.5	7.5	-
	40	18	17	15	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	37.5	34.5	29	23	17.5	11.5	-
	100	40.5	37.5	31	24.5	18.5	12.5	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	33	30.5	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	37.5	34.5	29	23	17.5	11.5	6.5
	100	37.5	34.5	29	23	17.5	11.5	6.5
	125	40.5	37.5	31	24.5	18.5	12.5	7
RGS1..E RGS1P..E*	25	25	25	25	22.5	19	16	12.5
	50	35	33.5	29.5	25.5	22	18	14
	51	35	33	29.5	26	22	18.5	14.5
	75	39.5	37.5	33	28.5	24.5	20	15.5
	90 91 92	42	39.5	35	30.5	26	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	22.5	19	16	-
	30	30	30	29.5	25.5	22	18	-
	31	30	30	30	30	26	21	-
	92	42	39.5	35	30.5	26	21	-
RGS1S..U	61	42	39.5	35	30.5	26	21	-
RGS1D..	15	15	15	15	15	15	12.5	10
	25	18.5	22	20	17.5	15	12.5	10

\* 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
Screw Kits	SRWKITM5X10MM	Packing qty. 20 pcs.
	SRWKITM5X30MM	Packing qty. 20 pcs.

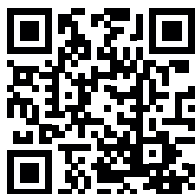
### Further reading

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

### Order code



RHS5840D



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