

# RHS703, RHS703D



## Accessories: Heatsinks



### Main features

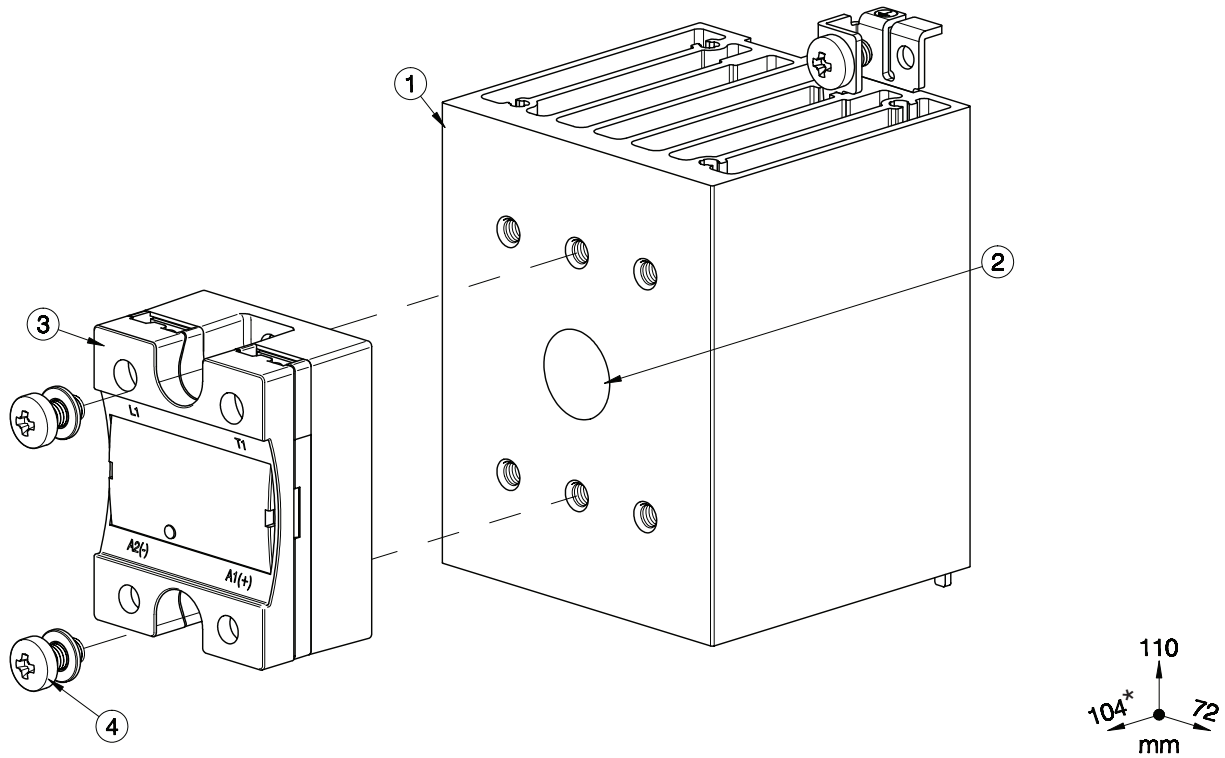
- 1.1°C/W thermal resistance
- Suitable for mounting of 3x 1-phase SSRs
- DIN rail mounting
- Suitable for panel mounting
- Dimensions W x H x D: 72 x 110 x 75 mm
- RoHS compliant

### Description

Heatsink assembly suitable for mounting of maximum 3x 1- phase solid state relay (SSRs).  
Suffix H75 added to SSR part no. refers to factory mounted heatsink. Conditions apply. Please ask your sales representative for further details.

# Structure

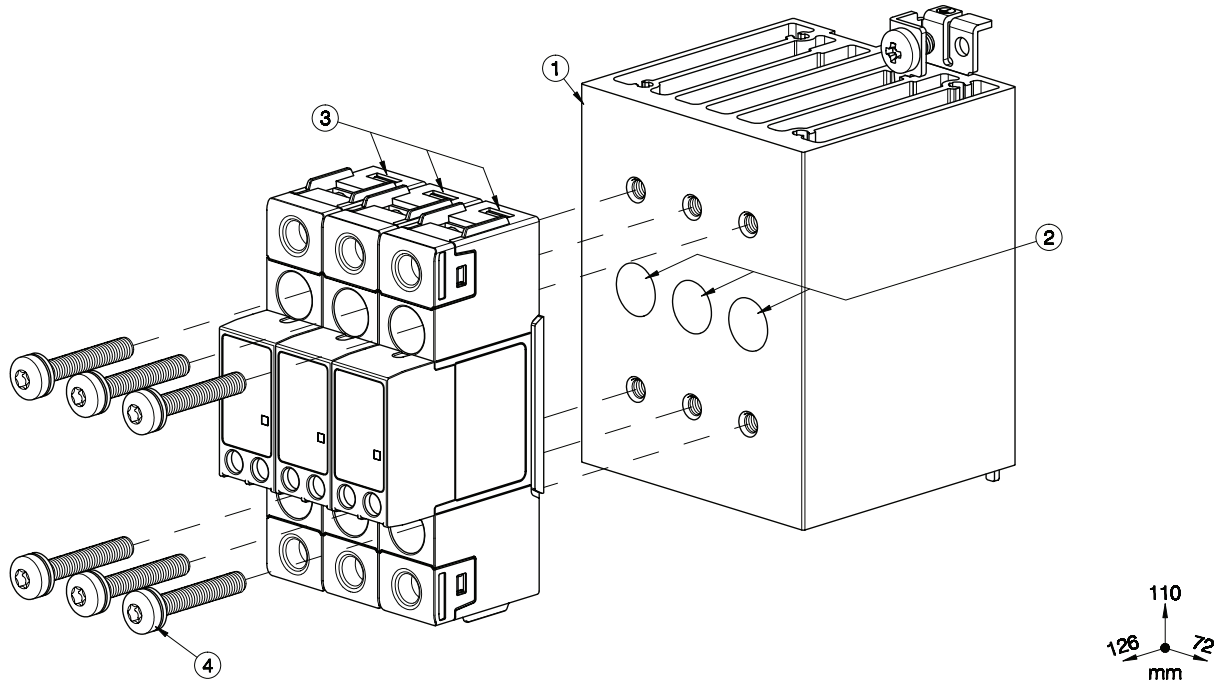
1-phase SSR



Element	Component	Qty	RHS703	RHS703D
1	RHS703 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:  
 \* 108mm for RK..C, 119mm for RK..P (including plug).  
 Dimensions including the SSR.

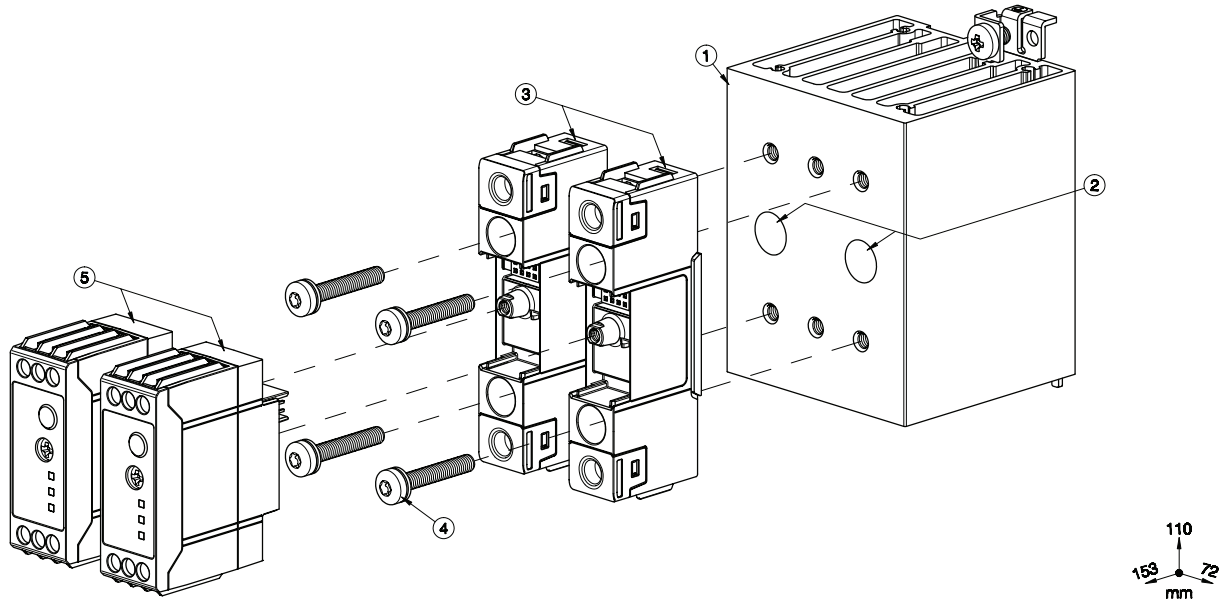
RGS1 18mm Module



Element	Component	Qty	RHS703	RHS703D
1	RHS703 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)

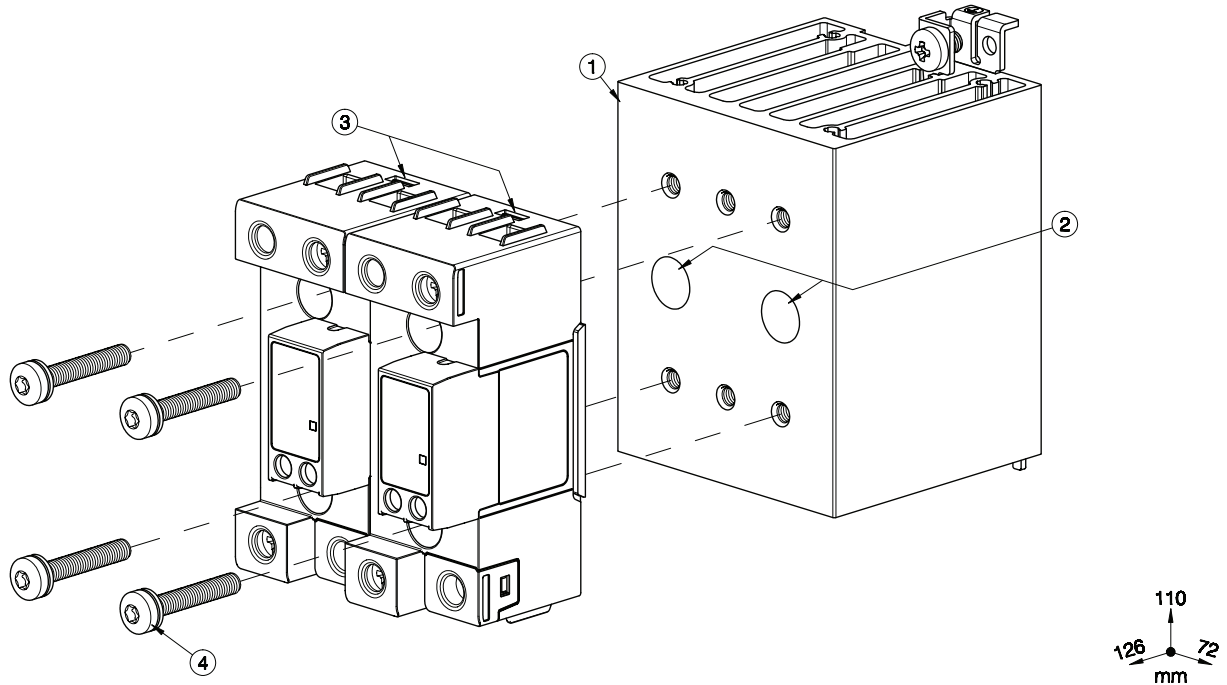
Note:  
Dimensions including the SSR.

**RGS1 22.5mm Module**



Element	Component	Qty	RHS703	RHS703D
1	RHS703 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 Power Module 18x90mm (max.)	2	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)	Provided (x6)
5	RGS1S Control Module 22.5x65mm (max.)	2	Not provided	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**


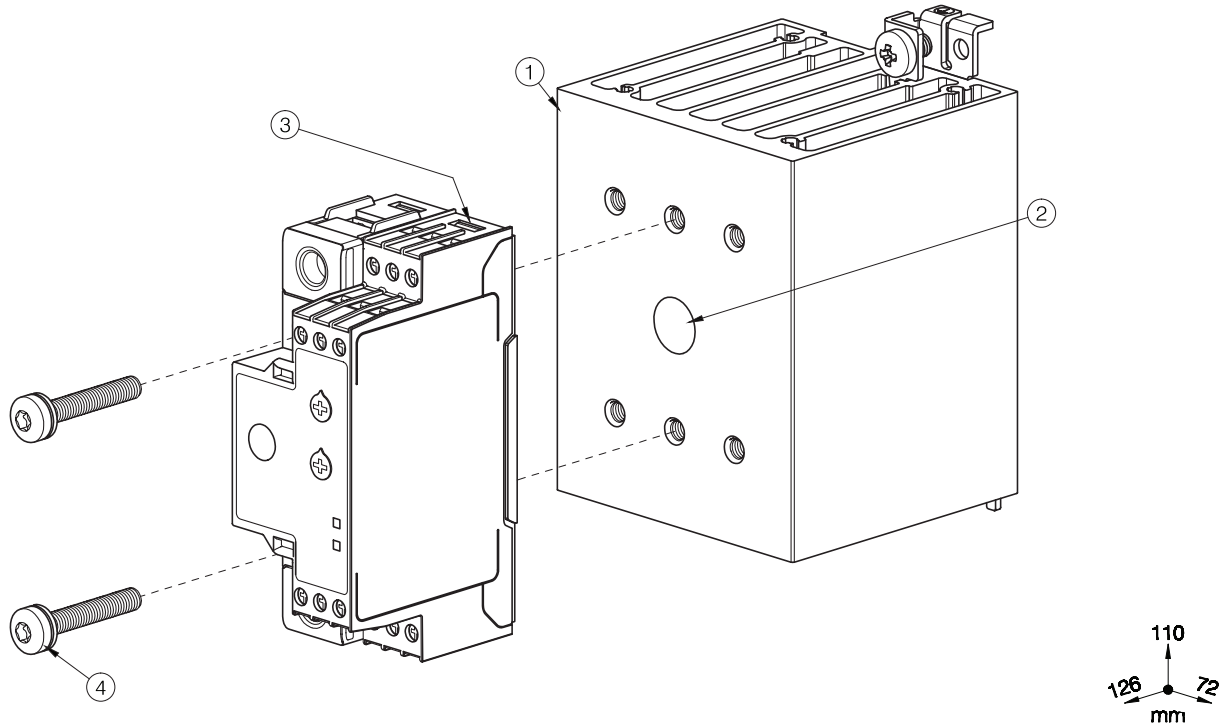
Element	Component	Qty	RHS703	RHS703D
1	RHS703 heatsink assembly	1	Provided	Provided
2	Thermal Compound HTS02S	1	Provided	Not provided
3	RGS1 or RGS1S SSR 36x90mm (max.)	2	Not provided	Not provided
4	M5x30mm Torx T20 + Washer (per SSR)	2	Provided (x6)	Provided (x6)

**Note:**

Dimensions including the SSR.

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

**RGS1P 35mm Module**



Element	Component	Qty	RH703	RHS703D
1	RHS703 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 (x6)	Provided (x6)

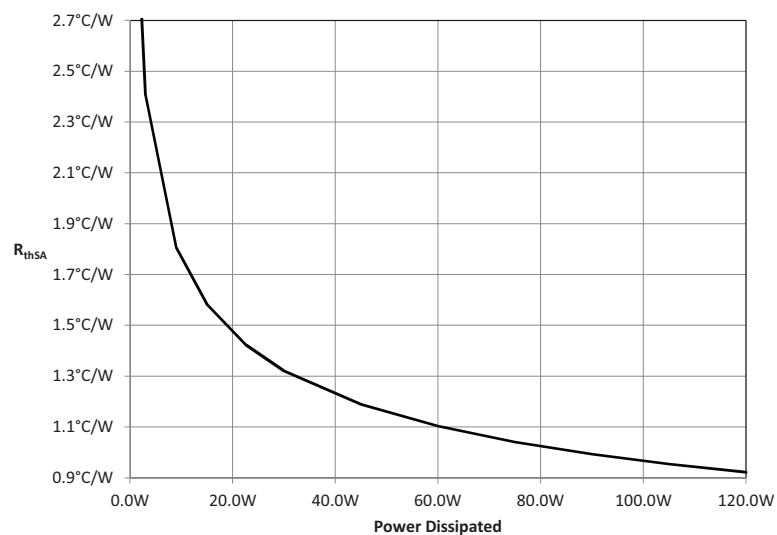
Note:  
 Dimensions including the SSR.  
 When only 1 SSR is utilized it shall be mounted at the centre of the heatsink.

## Features

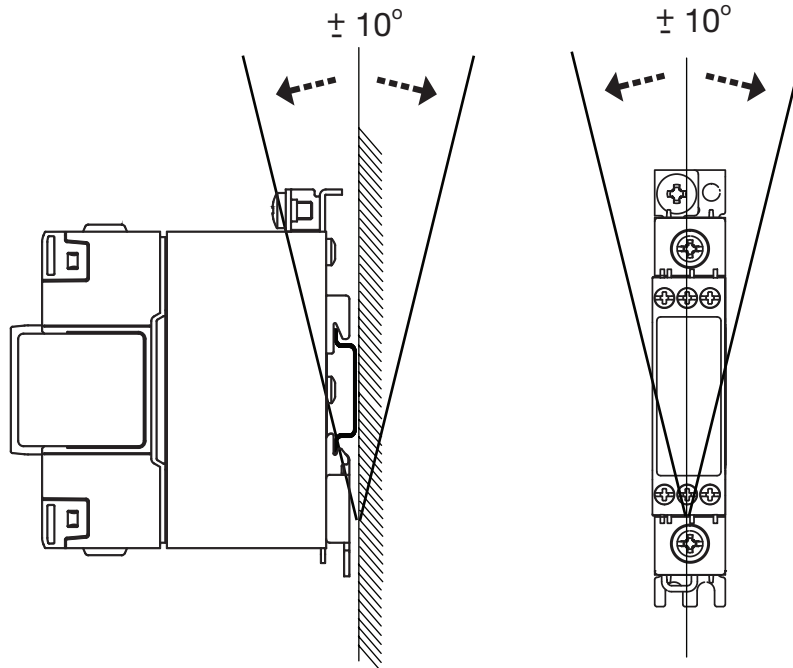
### General

<b>SSR max. mounting torque</b>	1.5Nm (13.3 lb-in)
<b>PE screw (Not provided with assembly)</b>	M5, max. 1.5Nm (13.3 lb-in)
<b>Weight (excl. SSR)</b>	approx. 560g
<b>Material</b>	Aluminium
<b>Finish</b>	Black anodization
<b>Fan mounting</b>	Refer to models: RHS703F60-24 or RHSF703F60-230

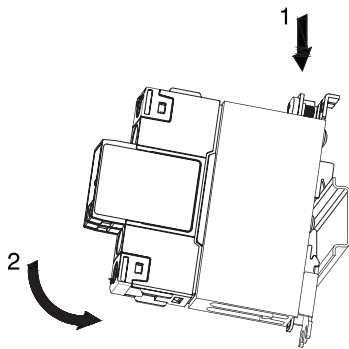
### Thermal resistance curve



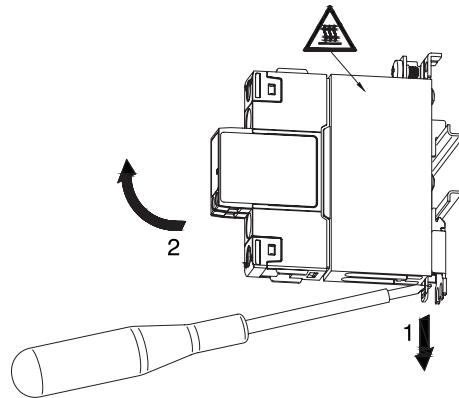
**Mounting position**



**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](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 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	40	36	31.5	27	22.5	18	13.5
	51	44	39	34	29	24	19.5	14.5
	75	50.5	44.5	39	33	27	21.5	16

 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	24.5	22	19	16	13	-
RA..	25	25	25	25	21.5	17.5	13.5	-
	50	42.5	40	34.5	28.5	23	17.5	-
	90	56	52.5	45	37.5	30	22	-
	110	63	59	50	41.5	33	24.5	-
RA60..	50	42	39.5	34	29	23.5	18	-
RA2A.. (per pole)	25	25	25	24.5	21	15.5	10.5	-
	40	32.5	30.5	27	23	17	11.5	-
	25M	25	25	24.5	21	15.5	10.5	-
	40M	33	31.5	28	23	17	11.5	-
RS1A..	10	10	10	10	9.5	7.5	5.5	-
	25	25	25	25	25	24	16.5	-
	40	40	40	35	28.5	21.5	15	-
RS1A..E	25	22	20.5	18	15.5	13	10.5	-
	40	26	24.5	21.5	18.5	15.5	12.5	-
RM1A.. RM1B.. RM1C..	25	25	25	25	25	24	16.5	-
	50	45	41.5	35	28.5	21.5	15	-
	75	66.5	61.5	51.5	41	31	21	-
	100	73.5	68	56	44.5	33.5	22.5	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	47	44.5	40	34.5	26.5	18.5	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	25	24	16.5	9.5
	50	45	41.5	35	28.5	21.5	15	9.5
	75	66.5	61.5	51.5	41	31	21	11.5
	100	66.5	61.5	51.5	41	31	21	11.5
	125	73.5	68	56	44.5	33.5	22.5	12
RM1D060	10	10	10	10	10	10	10	9.5
	20	20	20	20	20	20	19	9.5
	50	50	50	50	50	41.5	30.5	15.5
	100	100	100	91.5	78.5	64	46.5	23
RM1D200	20	20	20	20	20	18.5	16	13
	50	49	47.5	43.5	39.5	35	30	23.5
RM1D500	10	10	10	10	10	10	10	8.5

 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
RGS1..E RGS1P..E*	25	25	25	25	25	25	25	20.5
	50	50	50	48.5	42.5	36.5	30	24
	51	50	50	47	41.5	36	30	24
	75	64	60.5	54	47	40	33	26
	90 91 92	68	64.5	57.5	50	43	35.5	28
RGS1..U	20	20	20	20	20	20	20	20
	30	30	30	30	30	30	30	24
RGS1S..E	20	23	23	23	23	23	16.5	-
	30	30	30	30	30	30	30	-
	31	30	30	30	30	30	30	-
	92	68	64.5	57.5	50	43	35.5	-
RGS1S..U	61	65	64.5	57.5	50	43	35.5	-
RGS1D..	15	15	15	15	15	15	15	14
	25	25	25	25	23.5	20.5	17	14

\* 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
RA..L RA..T	10	10	10	10	10	10	10	-
	25	23	22	19.5	17	14	11.5	-
RA..	25	25	25	23.5	20	16	12.5	-
	50	38	35.5	30.5	25.5	20.5	15.5	-
	90	47.5	44	38.0	31.5	25.5	19	-
	110	52.5	49	42	35	28	20.5	-
RA60..	50	37.5	35.5	31	26	21	16	-
RA2A.. (per pole)	25	25	25	22	19.5	16	10.5	-
	40	29.5	28	24.5	21.5	17.5	11.5	-
	25M	25	25	22	19.5	16	10.5	-
	40M	30	28.5	25	22	17.5	11.5	-
RS1A..	10	10	10	10	8.5	7	5	-
	25	25	25	25	25	20	14	-
	40	40	40	35	28.5	21.5	15	-
RS1A..E	25	19.5	18.5	16	14	11.5	9.5	-
	40	23	21.5	18.5	16	13.5	11	-
RM1A.. RM1B.. RM1C..	25	25	25	25	25	20	14	-
	50	45	41.5	35	28.5	21.5	15	-
	75	52	48	40.5	32.5	25	17	-
	100	57	52.5	44	35	26.5	18	-
RM1A60.. RM1B60.. RM1C60.. RM1E60..	50	42	40	35.5	29	22.5	15.5	-
RAM1A.. RAM1B.. RM1E..	25	25	25	25	25	20	14	8
	50	45	41.5	35	28.5	21.5	15	8.5
	75	52	48	40.5	32.5	25	17	9.5
	100	52	48	40.5	32.5	25	17	9.5
	125	57	52.5	44	35	26.5	18	10
RM1D060	10	10	10	10	10	10	10	9
	20	20	20	20	20	20	17.5	9
	50	50	50	50	47	38.5	28.5	14.5
	100	98	93.5	83	71.5	58.5	43	21.5
RM1D200	20	20	20	20	19.5	17.5	15	12
	50	44	42.5	39	35.5	31.5	27	22
RM1D500	10	10	10	10	10	10	10	8


 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
RGS1..E RGS1P..E*	25	25	25	25	25	24	20	16.5
	50	44.5	42	37.5	33	28.5	23.5	19
	51	43.5	41.5	37	33	28.5	24	19
	75	50	47.5	42.5	37	32	26.5	21
	90	53	50.5	45	39.5	34	28	22
	91							
92								
RGS1..U	20	20	20	20	20	20	20	16.5
	30	30	30	30	30	28.5	23.5	19
RGS1S..E	20	23	23	23	23	23	20	-
	30	30	30	30	30	28.5	23.5	-
	31	30	30	30	30	30	28	-
	92	53	50.5	45	39.5	34	28	-
RGS1S..U	61	53	50.5	45	39.5	34	28	-
RGS1D..	15	15	15	15	15	15	13	10.5
	25	22.5	21.5	19.5	17.5	15	13	10.5

\* 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
Thermal compound	HTS02S	2.38 ml sachet of silicon based thermal compound
Fans	RHSF60-24	24 VDC, 60x60mm
	RHSF60-230	240 VAC, 60x60mm
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="https://gavazziautomation.com/nsc/HQ/EN/solid_state_relays">https://gavazziautomation.com/nsc/HQ/EN/solid_state_relays</a>
Accessories	<a href="http://gavazziautomation.com/images/PIM/DATASHEET/ENG/SSR_Accessories.pdf">http://gavazziautomation.com/images/PIM/DATASHEET/ENG/SSR_Accessories.pdf</a>

### Order code



RHS703

Enter the code entering the corresponding option instead of

Code	Option	Description
R	-	
H	-	
S	-	
7	-	
0	-	
3	-	
<input type="checkbox"/>		With thermal compound
	D	Thermal compound not included



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