



# Mounting and Disassembly Recommendations for RCMW Resistors

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## ASSEMBLY DIAGRAM

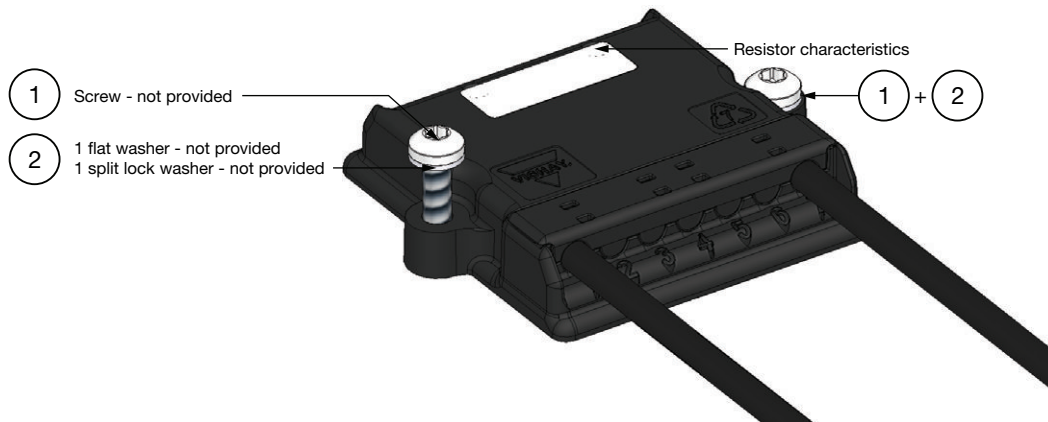


Fig. 1

## MECHANICAL INTERFACE SET UP

Make sure that the dissipation area of the heatsink has been properly set up to ensure expected performances. The maximum flatness defect must not exceed 0.05 mm. The interface between the heatsink and RCMW resistor has to be free of any holes, scratches, flaws, or foreign objects. Heatsink contact surface roughness has to be less than Ra 6.3 μ.

Mount the resistor on the heatsink following operations 1, 2, 3, and 4.

### OPERATION 1

Clean both the heatsink (Fig. 2) and RCMW resistor (Fig. 3) with an ethanol-soaked wipe.

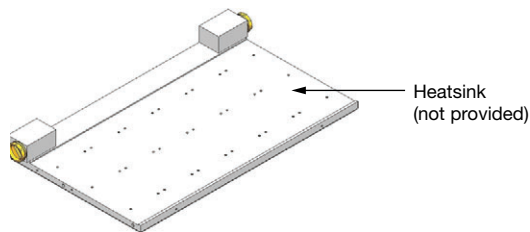


Fig. 2

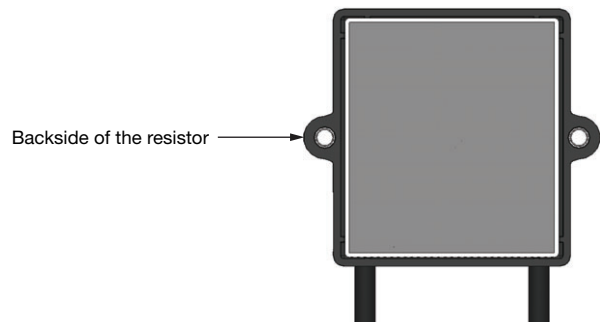


Fig. 3

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### OPERATION 2

Use a thermal interface material such as a thermal paste between the heatsink and resistor to ensure proper power dissipation. A thermal interface material thickness of 0.05 mm maximum and thermal resistance of  $\leq 0.025$  °C/W are required. In order to manage this step correctly, apply some thermal paste on the backside of the resistor (Fig. 4). Take care to keep a 90° angle (Fig. 5) between the backside surface of the resistor and the plastic squeegee (Fig. 6).

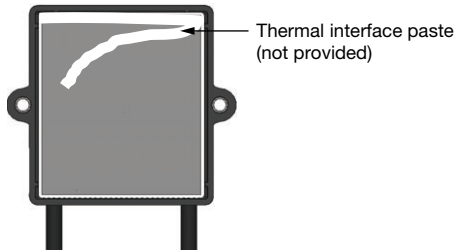


Fig. 4

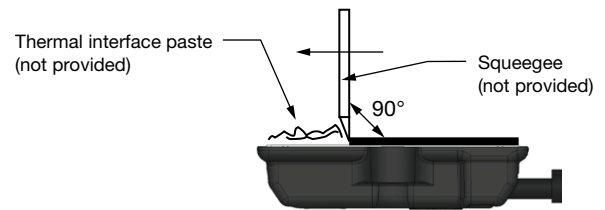


Fig. 5

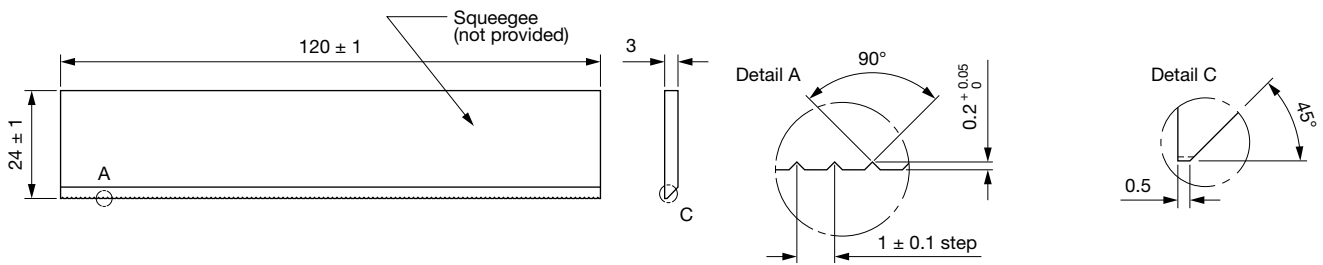
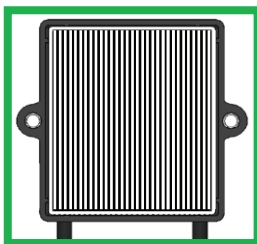


Fig. 6

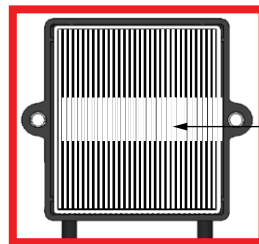
### OPERATION 3

Check that the active area of the resistor has been fully covered up with thermal interface material (Fig. 7). Avoid any excess (Fig. 8) or lack of thermal paste on the active area (Fig. 9).



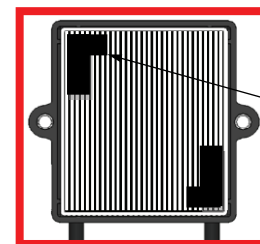
OK

Fig. 7



Not OK

Fig. 8



Not OK

Fig. 9

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### OPERATION 4

We recommend using the following mounting accessories:

- M4 x 20 mm mounting screws with a minimum advised screw length, (1)
- Split-lock washer together with a flat washer, (2)

Make sure that threading depth matches with the screws used.

Then use the following sequence to tighten the mounting screws:

- **STEP 1:** apply a preliminary tightening torque of 0.5 Nm on one screw (e. g. the screw on the left has been tightened as described in Fig. 10).
- **STEP 2:** apply a tightening torque of 1.8 Nm up to 2 Nm maximum on the other screw (e. g. the screw on the right has been tightened as described in Fig. 11).
- **STEP 3:** apply a tightening torque of 1.8 Nm up to 2 Nm maximum on the first screw (e. g. the screw on the right has been tightened as described in Fig. 12).

STEP 1

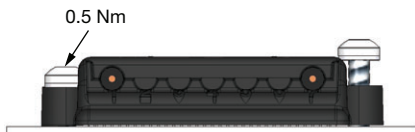


Fig. 10 - After First Screw Pre-Tightening

STEP 2

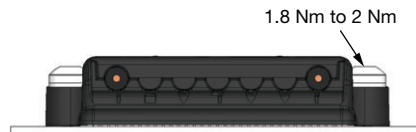


Fig. 11 - After Tightening of the Other Screw

STEP 3

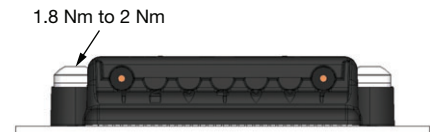


Fig. 12 - After Tightening of the First Screw

### ELECTRICAL INTERFACE SET UP

We recommend using a compatible connector with a cable 1.5 mm<sup>2</sup>.

### DISASSEMBLY OF THE RESISTOR FROM THE HEATSINK

When you have to remove the resistance from the heatsink, be careful not to pull directly on the plastic housing vertically (Fig. 13). To lower the suction effect of the thermal grease, you have to make a rotational movement of  $\pm 90^\circ$  (Fig. 14) to disassemble the resistor from the heatsink.

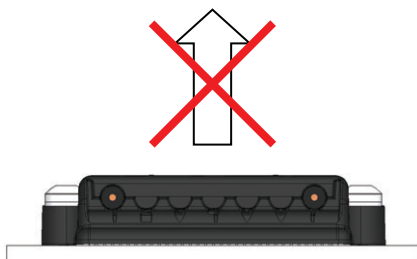


Fig. 13

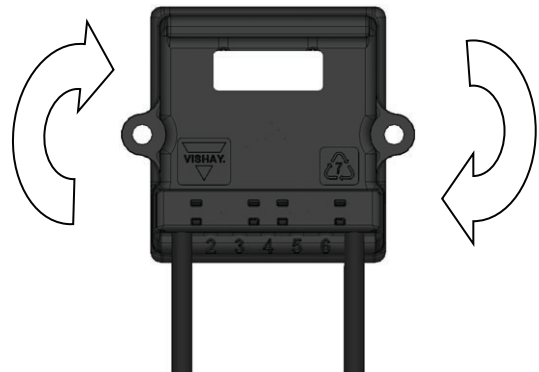


Fig. 14

### PRODUCT END OF LIFE

In order to preserve, protect, and improve the quality of the environment, as well as to protect the health of human beings and to use natural resources prudently, the user is asked to treat the product at the end of its life in accordance with regulations in force in the country of use.

Packaging materials (cardboard, plastics, pallets) can be reused or recycled in a specialized sector in the treatment of packaging materials.

Electrical cables can be separated from the resistor and recycled in a specialized sector in their treatment.

The rest of the product must be considered as ordinary industrial waste (OIW).