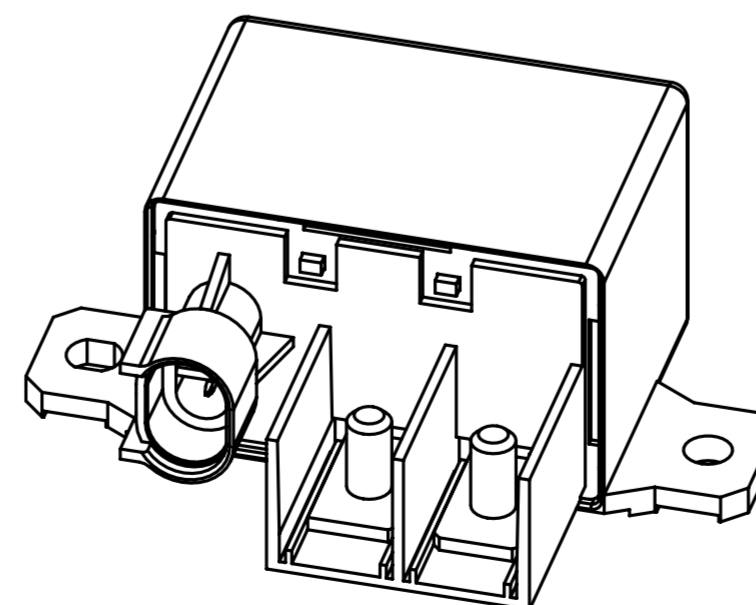
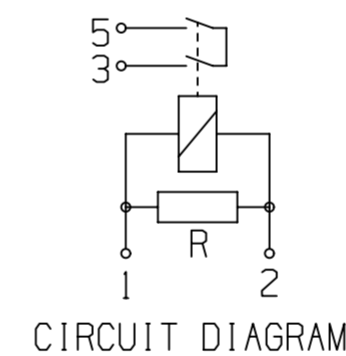
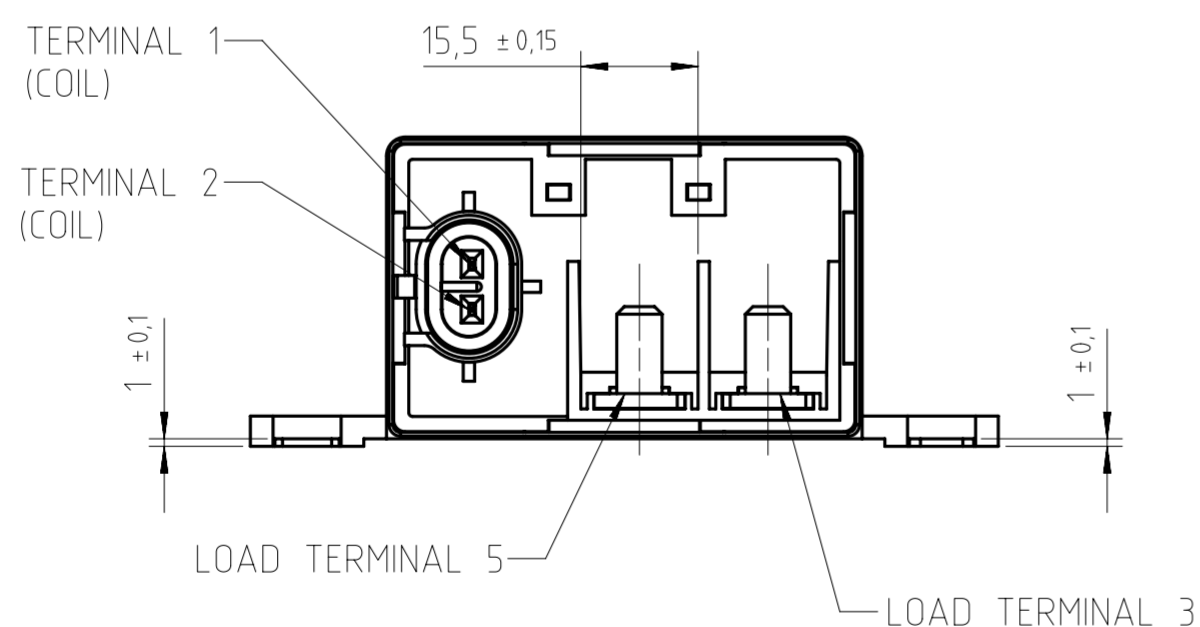
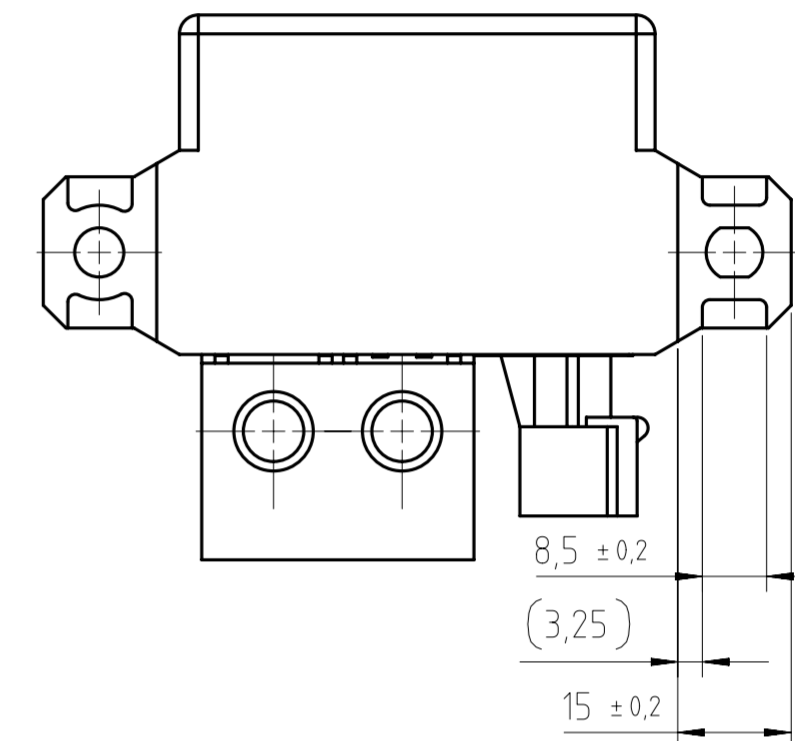
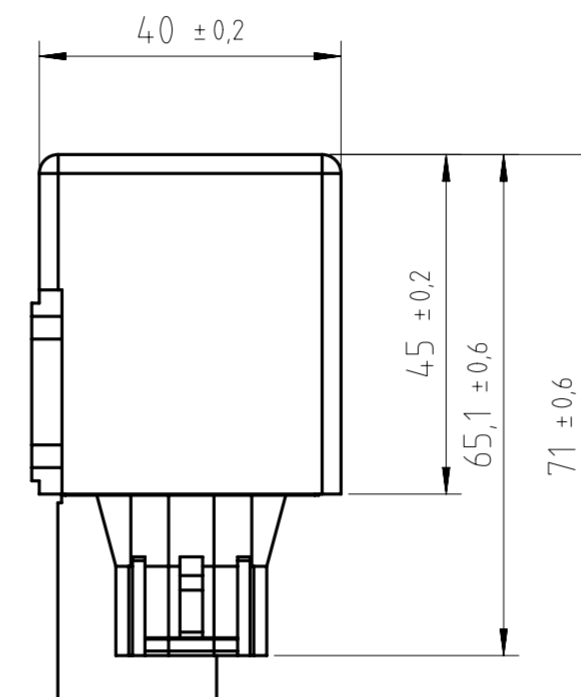
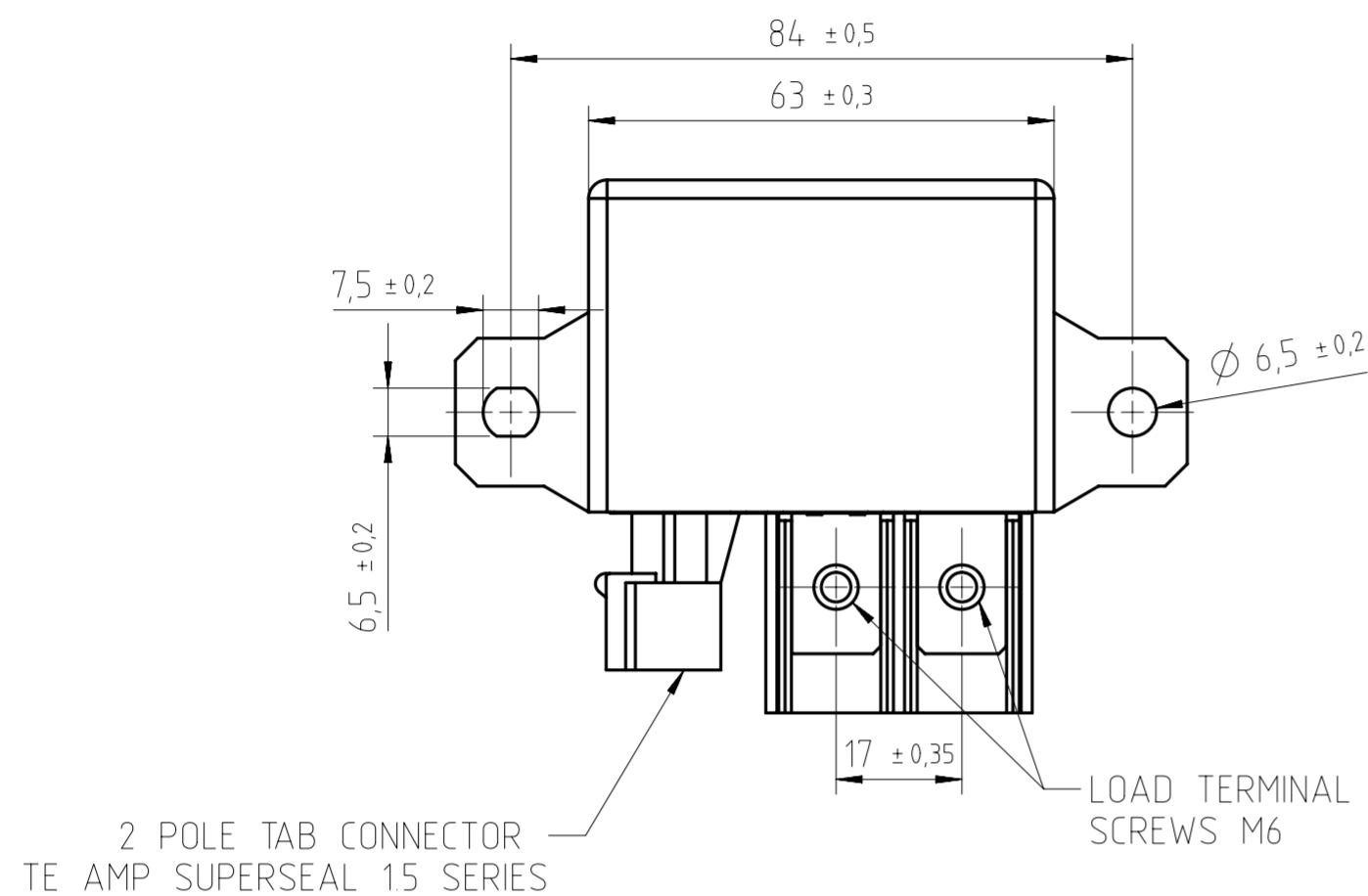


| PART            | MATERIAL           |
|-----------------|--------------------|
| COVER           | PA 66 GF 25        |
| BASE            | PA 66 GF 25        |
| COIL TERMINAL 1 | CuSn               |
| COIL TERMINAL 2 | CuSn               |
| LOAD TERMINAL 3 | ECu                |
| LOAD TERMINAL 5 | ECu                |
| CONTACTS        | AgSnO <sub>2</sub> |



|             |     |                   |
|-------------|-----|-------------------|
| TE P/N      | REV | TE PART NAME      |
| 1-1393315-1 | B   | V23132-B2002-B200 |

|  |                                 |  |                         |
|--|---------------------------------|--|-------------------------|
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| APPLICABLE SPEC.:  |                                 | FINISH   |                         |
| TOLERANCE UNLESS SPECIFIED OTHERWISE<br>$\pm 0,1$<br>$+ 1^\circ$   |                                 | DIMENSIONS APPLY<br>SCALE <b>1:1</b>             | PLATING<br>WEIGHT       |
| DIMENSIONS IN MM   |                                 | MATERIAL   |                         |
| DATE<br>DWN. 23APR2009 HFranc<br>APP. 10Nov2017 A.Fer  |                                 | PART NAME<br><b>DIMENSIONAL DRAWING HCR 24V</b>  |                         |
| LOCATION AMR PE Evora  |                                 | DWG NO.<br><b>V23132-B2002-B200</b>              |                         |
| B ECO-17-016680 10Nov2017 FS   | A INITIAL VERSION 04MAR2011 HMF | SHT.<br><b>1 OF 2</b>                            |                         |
| REV. CHANGE ORDER  | DATE APP.                       |  |                         |



| Coil data                            |         |
|--------------------------------------|---------|
| Rated coil voltage                   | 24 VDC  |
| Coil resistance (unsuppressed coil)  | 178 Ohm |
| Rated coil power (unsuppressed coil) | 3,3 W   |
| Maximum coil temperature             | 155°C   |

| Electrical values                   |         |
|-------------------------------------|---------|
| Rated voltage                       | 24 VDC  |
| Coil resistance (with suppression)  | 141 Ohm |
| Rated coil power (with suppression) | 4,1 W   |
| Operate voltage VDC                 | 14,4    |
| Release voltage VDC                 | 2,4     |

| Contact data   |  |
|--|--|
| Contact arrangement  | Double Make contact<br>1 Form X          |
| Rated voltage  | 24 VDC                                   |
| Rated current, cable 25mm <sup>2</sup>                                     | 130A at 85°C                             |
| Limiting continuous current  |  |
| 23°C, load cable 16mm <sup>2</sup>   | 130A                                     |
| 85°C, load cable 16mm <sup>2</sup>   | 120A                                     |
| 125°C, load cable 16mm <sup>2</sup>  | 60A                                      |
| 23°C, load cable 25mm <sup>2</sup>   | 180A                                     |
| 85°C, load cable 25mm <sup>2</sup>   | 130A                                     |
| 125°C, load cable 25mm <sup>2</sup>  | 70A                                      |
| Limiting making current, load current max. 3s on,<br>make/break ratio 1:10 | 300A                                     |
| Limiting breaking current  | 300A                                     |
| Contact material   | AgSnO2                                   |
| Min Recommended contact load   | 1A at 5VDC                               |
| Initial voltage drop, typ. at 100A   | 70mV                                     |
| Frequency of operation, with/without load                                  | 6 ops./min.                              |
| Operate/release time typ at nominal voltage                                | 25/8ms                                   |
| Electrical endurance   |  |
| form A contact (NO), resistive load,<br>cyclic temperature: +23°C          | >5x10 <sup>4</sup> cycles at 200A, 27VDC |
| Mechanical endurance   | >10 <sup>7</sup> operations              |

| Other Data                                    |                                      |
|---|--------------------------------------|
| EU RoHS/ELV compliance                        | complaint                            |
| Ambient temperature                           | -40 to +125° C                       |
| Dry heat, IEC 60068-2-2                       | 500h at 100°C                        |
| Damp heat constant,<br>IEC 60068-2-3 (78), Ca | 500h, 40°C, 93% RH                   |
| Degree of protection                          |                                      |
| dustproof                                     | IP54 (IEC 60529), RT I (IEC 61810)   |
| sealed:                                       | sealing in accordance with IEC 68    |
| immersion cleanable                           | IP67 (IEC 60529), RT III (IEC 61810) |
| Corrosive gas                                 |                                      |
| IEC 60068-2-42                                | 10 days                              |
| IEC 60068-2-43                                | 10 days                              |
| Vibration resistance (functional)             |                                      |
| IEC 60068-2-6 (sine sweep)                    | 10 to 200 Hz >5g <sup>1</sup>        |
| Shock resistance (functional)                 |                                      |
| IEC 60068-2-27 (half sine)                    | 6ms >20g <sup>1</sup>                |
| Drop test, free fall                          |                                      |
| IEC 60068-2-32                                | 1m onto concrete                     |

<sup>1</sup> No change in the switching state > 10 micro s

| Mechanical data       |       |
|-----------------------|-------|
| Cover retention       |       |
| Pull force            | 500 N |
| Push force            | 500 N |
| Terminal retention    |       |
| Pull force            | 150 N |
| Push force            | 150 N |
| Resistance to bending | 20 N  |
| Force applied to side | 20 N  |
| Torsion               | 5 Nm  |

| TE P/N   | REV. | TE PART NAME  |
|--|------|---|
| 1-1393315-1  | B    | V23132-B2002-B200   |
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| <small>APPLICABLE SPEC.:</small>   |      | <small>FINISH</small><br><small>DIMENSIONS APPLY</small> <small>PLATING</small> |
| <small>TOLERANCE UNLESS SPECIFIED OTHERWISE</small><br><small>± 0,1</small><br><small>+ 1°</small>   |      | <small>SCALE</small> <b>1:1</b> <small>WEIGHT</small>                           |
| <small>DIMENSIONS IN MM</small>  |      | <small>MATERIAL</small>   |
| <small>DATE</small> <small>NAME</small><br><small>DWN. 23APR2009</small> <small>HFranc</small><br><small>APP. 10Nov2017</small> <small>A.Fern</small><br><small>REV.</small><br><small>LOCATION</small> <small>AMR PE Evora</small>  |      | <small>PART NAME</small><br><b>DIMENSIONAL DRAWING</b><br><b>HCR 24V</b>        |
| <small>ECO-17-016680</small> <small>10Nov2017</small> <small>FS</small><br><small>INITIAL VERSION</small> <small>04MAR2011</small> <small>HMF</small>  |      | <small>DWG NO.</small><br><b>V23132-B2002-B200</b>                              |
| <small>REV. CHANGE ORDER</small> <small>DATE</small> <small>APP.</small>   |      | <small>SHT.</small><br><b>2</b><br><small>OF 2</small>                          |

