# Product data sheet
## Characteristics

# RMTC1UUBD
## Signal Conditioner, Harmony Analog, 6.2mm, thermocouple



## Main

| | |
|---|---|
| Range of product | Harmony Analog |
| Product or component type | Signal conditioner |
| Analogue input type | Thermocouple -200 …1800 °C |
| Analogue output type | Current 0...20 mA <= 550 Ohm<br>Current 4...20 mA <= 550 Ohm<br>Voltage 0...10 V >= 10 kOhm<br>Voltage 2...10 V >= 10 kOhm<br>Voltage 0...5 V >= 10 kOhm<br>Voltage 1...5 V >= 10 kOhm |

## Complementary

| | |
|---|---|
| Protection type | Reverse polarity protection on power supply<br>Overvoltage protection on output<br>Short-circuit protection on output |
| [Us] rated supply voltage | 24 V DC +30 %...-25 %, isolated |
| Current consumption | <= 40 mA for 24 V |
| Measurement error | +/- 0.1 % of full scale |
| Repeat accuracy | +/- 0.03 % |
| Clamping connection capacity | 20...14 AWG |
| Tightening torque | 0.4…0.5 N.M<br>0.4…0.5 N.M |
| Marking | CULus<br>DNV<br>CE<br>UKCA<br>WEEE<br>China RoHS |
| Surge withstand | 1 KV during 1.2/50 µs conforming to IEC 61000-4-5 |
| [Ui] rated insulation voltage | 300 V |
| Fixing mode | Clip-on (35 mm DIN rail) |
| Safety reliability data | MTTFd = 296.1 years<br>B10d = 273271 |
| Net weight | 0.07 Kg |
| Temperature coefficient | < 100 ppm/°C |
| Wire stripping length | 8…9 Mm |
| Status LED | 3 LEDs (green) PWR (Power Status)<br>(Red) high signal level<br>(Red) low signal level |
| Overvoltage category | II |
| Width | 6.2 Mm |
| Height | 110 Mm |

| | |
|---|---|
| Depth | 110 Mm |
| Relative humidity | 5…95 % |

## Environment

| | |
|---|---|
| Electromagnetic compatibility | Fast transient bursts - test level: 1 kV criteria A (I/O) conforming to IEC 61000-4-4<br>Fast transient bursts - test level: 2 kV criteria A (power lines) conforming to IEC 61000-4-4<br>Radiated RF field immunity test - test level: 10 V/m, 80 MHz...1 GHz criteria A conforming to IEC 6<br>Radiated RF field immunity test - test level: 3 V/m, 1.4...6 GHz criteria A conforming to IEC 61000<br>Conducted radio-frequency immunity test - test level: 10 V, 0.15...80 MHz criteria A conforming to<br>Magnetic field at power frequency - test level: 30 A/m criteria A conforming to IEC 61000-4-8 |
| Product certifications | cULus[RETURN]DNV |
| IP degree of protection | IP20 |
| Shock resistance | 50 gn for 11 ms conforming to IEC 60068-2-27 |
| Vibration resistance | 5 gn (f= 10…150 Hz) conforming to IEC 60068-2-6 |
| Resistance to electrostatic discharge | 6 KV (in contact) conforming to IEC 61000-4-2<br>8 KV (in air) conforming to IEC 61000-4-2 |
| Ambient air temperature for storage | -40…85 °C |
| Ambient air temperature for operation | -40…70 °C |
| Pollution degree | 2 conforming to IEC 60664-1 |
| Operating altitude | 0...2000 m |
| Electromagnetic emission | Conducted emissions conforming to CISPR 11<br>Radiated emissions conforming to CISPR 11 |
| Dielectric strength | 3 KV AC between the inputs and the supply circuit<br>3 KV AC between the outputs and the supply circuit<br>3 KV AC between input and output |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.200 Cm |
| Package 1 Width | 11.800 Cm |
| Package 1 Length | 12.000 Cm |
| Package 1 Weight | 102.000 G |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 30 |
| Package 2 Height | 15.000 Cm |
| Package 2 Width | 30.000 Cm |
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 3.509 Kg |

## Offer Sustainability

| | |
|---|---|
| Recyclability potential, in % | 62 |
| Total lifecycle Carbon footprint | 24 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 4.1327482689115875 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 4 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.21799948858892537 |
| Carbon footprint of the distribution phase [A4] | 0.2 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.0008031084620051895 |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 19.105800523323484 |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 19 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | Yes |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.14715839761044058 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.1 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 24 |
| Packaging made with recycled cardboard | Yes |

| | |
|---|---|
| Packaging without single use plastic | Yes |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, w |
| PVC free | Yes |
| Silicone-free | Yes |
| End of life manual availability | End Of Life Information |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection a |

## Contractual warranty

| | |
|---|---|
| Warranty (in months) | 18 |

Product Life Status : Commercialised