

# Product datasheet

Specifications



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

RMTC1UUBD

EAN Code: 3606487614166

### 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                                                                                  |
| Product 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                                                                                                                    |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                   |          |
|-------------------|----------|
| 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 61000-4-3<br>Radiated RF field immunity test - test level: 3 V/m, 1.4...6 GHz criteria A conforming to IEC 61000-4-3<br>Conducted radio-frequency immunity test - test level: 10 V, 0.15...80 MHz criteria A conforming to IEC 61000-4-6<br>Magnetic field at power frequency - test level: 30 A/m criteria A conforming to IEC 61000-4-8 |
| Product certifications                | cULus<br>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  |

## Contractual warranty





## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

|                                                        |                |
|--------------------------------------------------------|----------------|
| Total lifecycle Carbon footprint                       | 24 kg CO2 eq.  |
| Carbon footprint of the manufacturing phase [A1 to A3] | 4 kg CO2 eq.   |
| Carbon footprint of the distribution phase [A4]        | 0.2 kg CO2 eq. |
| Carbon footprint of the installation phase [A5]        | 0 kg CO2 eq.   |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 19 kg CO2 eq.  |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 0.1 kg CO2 eq. |

## Use Better



### Materials and Substances

|                                        |                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                    |
| Packaging without single use plastic   | Yes                                                                                    |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                 |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a> |
| PVC free                               | Yes                                                                                    |
| Silicone-free                          | Yes                                                                                    |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again

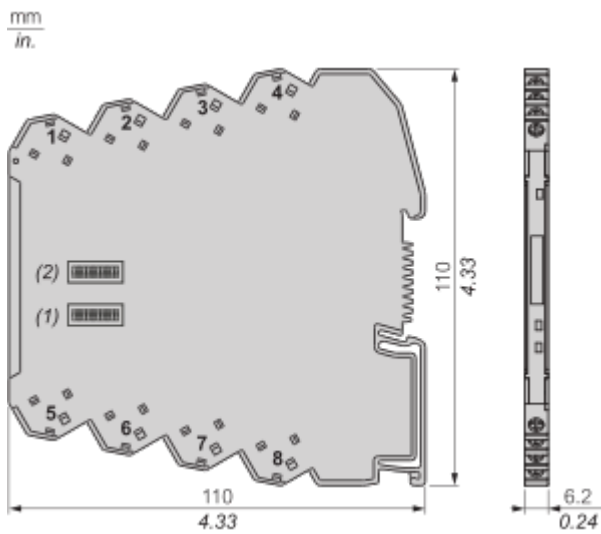


### Repack and remanufacture

|                                 |                                         |
|---------------------------------|-----------------------------------------|
| Recyclability potential, in %   | 62                                      |
| End of life manual availability | <a href="#">End of Life Information</a> |

Dimensions Drawings

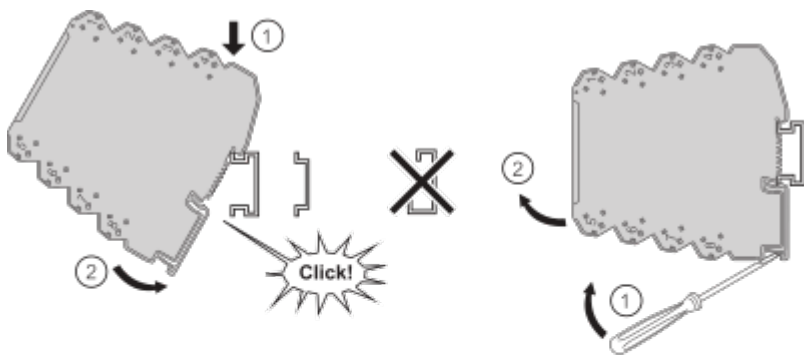
Dimensions



- 1 : S1 DIP Switch for configuration
- 2 : S2 DIP Switch for configuration

Mounting and Clearance

Mounting & Installation



|                 |             |           |           |
|-----------------|-------------|-----------|-----------|
| mm              | 8...9       |           |           |
| inch            | 0.31...0.35 |           |           |
| mm <sup>2</sup> |             | 0.5...2.5 | 0.5...2.5 |
| AWG             |             | 20...14   | 20...14   |

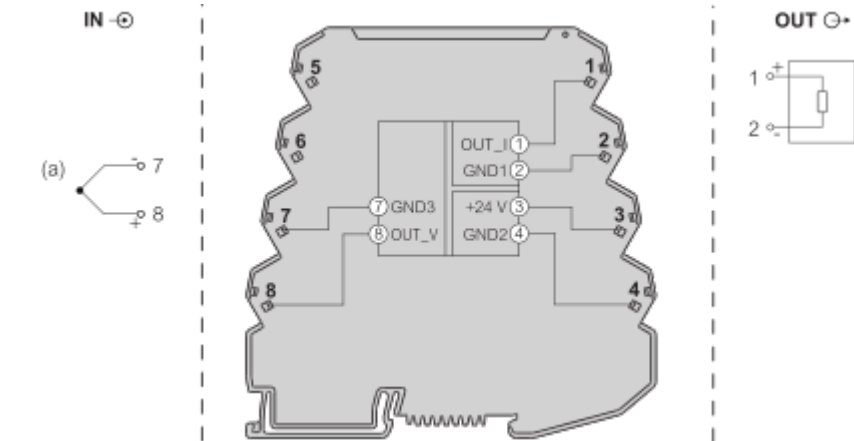
Rail 35 mm / 1.38 in →  
Rail 35 mm / 1.38 in →  
Schiene 35 mm / 1.38 in →  
Riel 35 mm / 1.38 in →  
Guida 35 mm / 1.38 in →  
レール 35 mm / 1.38 in →

IEC/EN 60715

|                      |  |        |           |
|----------------------|--|--------|-----------|
| Ø 3.5 mm/<br>0.14 in |  | N.m    | 0.4...0.5 |
|                      |  | lbf.in | 3.5...4.4 |

Connections and Schema

Connection Example

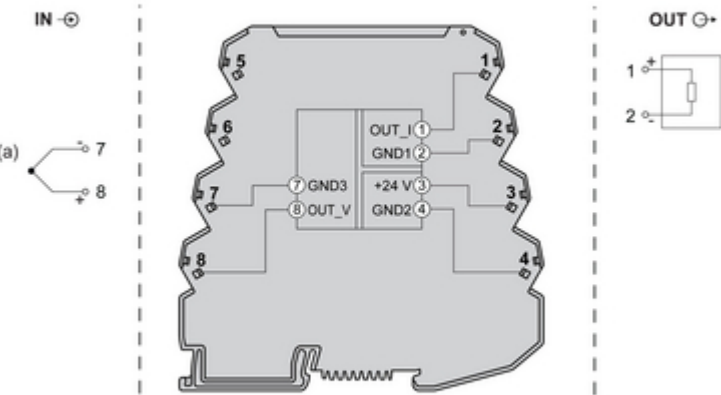


(a) : Thermocouple

Technical Illustration

Dimensions

Connection Example / Exemple de raccordement / Anschlussbeispiel /  
Ejemplo de conexión / Esempio di collegamento / 连接示例



(a) Thermocouple / Thermocouple / Thermoelement / Termopar / Termocoppia / 热电偶

Image of product / Alternate images

### Alternative

