

Product datasheet

Specifications



Signal Conditioner, Harmony Analog, 6.2mm, thermocouple

RMTC1UUBD

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 Current 4...20 mA <= 550 Ohm Voltage 0...10 V >= 10 kOhm Voltage 2...10 V >= 10 kOhm Voltage 0...5 V >= 10 kOhm Voltage 1...5 V >= 10 kOhm

Complementary

Protection type	Reverse polarity protection on power supply Overvoltage protection on output 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 0.4...0.5 N.m
Marking	CULus DNV CE UKCA WEEE 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 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) (red) high signal level (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 Fast transient bursts - test level: 2 kV criteria A (power lines) conforming to IEC 61000-4-4 Radiated RF field immunity test - test level: 10 V/m, 80 MHz...1 GHz criteria A conforming to IEC 61000-4-3 Radiated RF field immunity test - test level: 3 V/m, 1.4...6 GHz criteria A conforming to IEC 61000-4-3 Conducted radio-frequency immunity test - test level: 10 V, 0.15...80 MHz criteria A conforming to IEC 61000-4-6 Magnetic field at power frequency - test level: 30 A/m criteria A conforming to IEC 61000-4-8
Product certifications	cULus 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 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 Radiated emissions conforming to CISPR 11
Dielectric strength	3 kV AC between the inputs and the supply circuit 3 kV AC between the outputs and the supply circuit 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	2.2 cm
Package 1 Width	11.8 cm
Package 1 Length	12 cm
Package 1 Weight	110 g
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.65 kg
Unit Type of Package 3	P06

Number of Units in Package 3	480
Package 3 Height	75 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	66.9 kg



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 Packaging

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes
Silicone-free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again

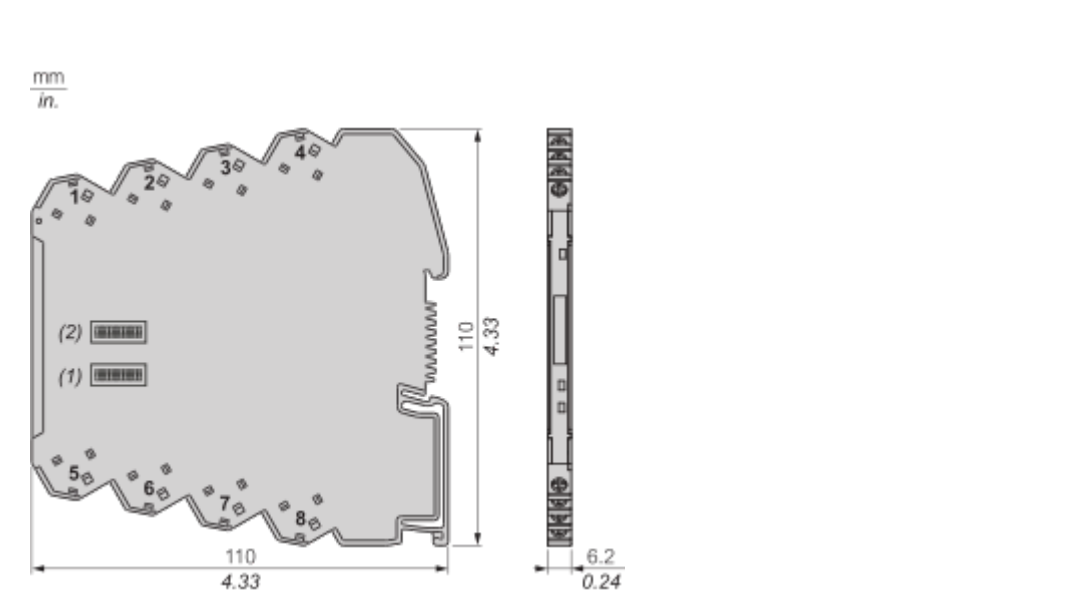


Repack and remanufacture

Recyclability potential, in %	62
End of life manual availability	End of Life Information

Dimensions Drawings

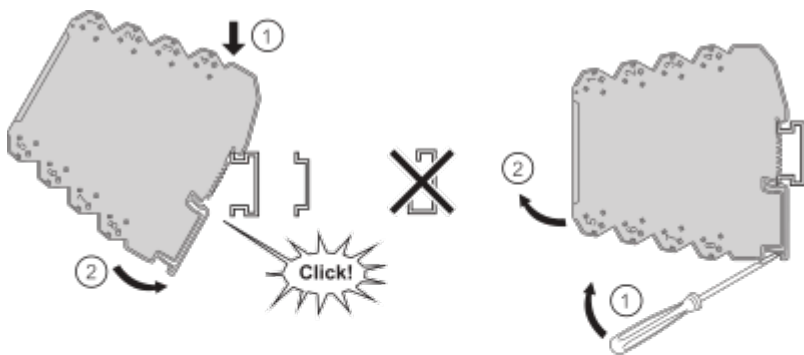
Dimensions



- 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 ²		0.5...2.5	0.5...2.5
AWG		20...14	20...14

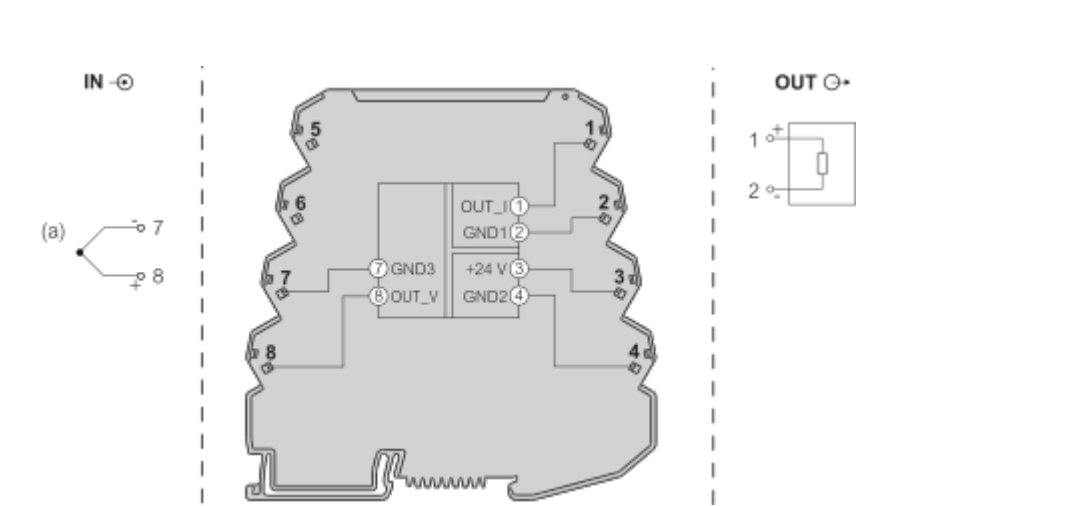
Rail 35 mm / 1.38 in →
Rail 35 mm / 1.38 in →
Schiene 35 mm / 1.38 in →
Riel 35 mm / 1.38 in →
Guida 35 mm / 1.38 in →
レール 35 mm / 1.38 in →

IEC/EN 60715

Ø 3.5 mm/ 0.14 in	C	N.m	0.4...0.5
		lbf.in	3.5...4.4

Connections and Schema

Connection Example

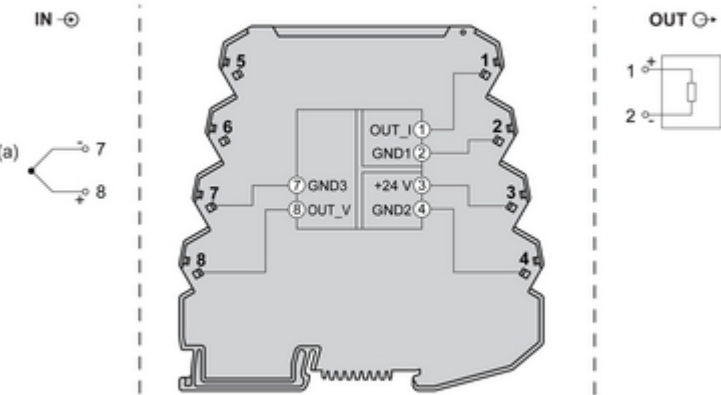


(a) : Thermocouple

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

