Product data sheet Characteristics

RMCL55BD

Voltage or current converter, Harmony Analog, Isolated 0...20mA





Main

TVI GITT		
Range of product	Harmony Analog	
Product or component type	Voltage/current converter	
Analogue input type	Current 020 mA Current 420 mA Voltage +/- 10 V DC Voltage 010 V DC	
Analogue output type	Current 020 mA <= 500 Ohm switchable Current 420 mA <= 500 Ohm switchable Voltage +/- 10 V >= 100 kOhm switchable Voltage 010 V >= 100 kOhm switchable	

Complementary

Complementary	
Protection type	Reverse polarity protection on output Short-circuit protection on output Overvoltage protection on output (+/- 30 V)
Abnormal analogue output voltage	1115 V, output selected - 1010 V no input or input wire broken voltage 1115 V, output selected 010 V no input or input wire broken voltage -150 V, output selected 020 mA no input or input wire broken current -150 V, output selected 420 mA no input or input wire broken current
Abnormal analogue output current	2230 MA, output selected 020 mA no input or input wire broken voltage 2230 MA, output selected 420 mA no input or input wire broken voltage -300 MA, output selected 020 mA no input or input wire broken current 430 mA, output selected 420 mA no input or input wire broken current
[Us] rated supply voltage	24 V DC +/- 20 %, isolated
Current consumption	<= 70 mA for voltage output <= 90 mA for current output
Local signalling	LED (green) for power ON
Measurement error	+/- 5 % of full scale at 20 °C (temporary performance degradation when subject to electromagnetic interference)
Repeat accuracy	+/- 0.2 % full scale at 20 °C +/- 0.6 % full scale at 60 °C
Temperature coefficient	200 ppm/°C
Clamping connection capacity	2 x 1.5 mm ² 1 x 2.5 mm ²
Tightening torque	0.61.1 N.m
Marking	CE
Surge withstand	0.5 kV during 1.2/50 μs conforming to IEC 61000-4-5
[Ui] rated insulation voltage	2 kV
Fixing mode	By screws (mounting plate) Clip-on (35 mm symmetrical DIN rail)
Safety reliability data	B10d = 20000 MTTFd = 21.6 years
Net weight	0.12 kg

Environment

Standards	IEC 60947-1 IEC 60584-1
Product certifications	UL[RETURN]GL[RETURN]CSA
IP degree of protection	IP20 (terminal block) IP50 (housing)
Fire resistance	850 °C conforming to IEC 60695-2-1 850 °C conforming to UL
Shock resistance	50 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	5 gn (f= 10100 Hz) conforming to IEC 60068-2-6
Resistance to electrostatic discharge	6 KV (in contact) conforming to IEC 61000-4-2 level 3 8 kV (in air) conforming to IEC 61000-4-2 level 3
Resistance to fast transients	1 KV (on input-output) conforming to IEC 61000-4-4 2 kV (on power supply) conforming to IEC 61000-4-4
Disturbance radiated/conducted	CISPR 22 group 1 - class B CISPR 11
Ambient air temperature for storage	-4085 °C
Ambient air temperature for operation	050 °C mounting side by side 060 °C 2 cm spacing
Pollution degree	2 conforming to IEC 60664-1

Packing Units

•	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.7 cm
Package 1 Width	8.2 cm
Package 1 Length	8.5 cm
Package 1 Weight	119.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	47
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	6.14 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₽¥Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

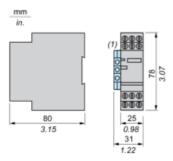
Warranty	18 months

Product data sheet Dimensions Drawings

RMCL55BD

Analog Interface (Converter)

Dimensions



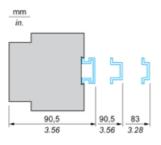
(1) Terminal block AB1TP435U or AB1RRNTP435U2

Product data sheet Mounting and Clearance

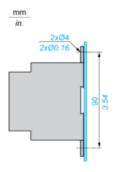
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Mounting

Mounting on Rails AM1 *****



Panel Mounting

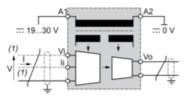


Product data sheet Connections and Schema

RMCL55BD

Analog Interface: Voltage/Current Converter

Wiring Diagram



(1) Use 1 input only.

The input, output and power supply lines must be kept away from the power cables to avoid effects due to induced interference.

The supply, input and output cables must be shielded as indicated in the schemes and must be kept away from each other.