

Product data sheet

Specifications



distributed analog input Modicon Momentum - 8 Input

170AAI03000

Main

Range of product	Modicon Momentum automation platform
Product or component type	Analogue input base
Analogue input number	8
Analogue input type	Differential
Analogue input range	+/- 20 mA 14 bits + sign 250 kOhm 4...20 mA 15 bits + sign 250 kOhm +/- 10 V 14 bits + sign > 0.1 kOhm +/- 5 V 14 bits + sign > 0.1 kOhm 1...5 V 15 bits + sign > 0.1 kOhm

Complementary

Data format	Full 16 bits signed
Absolute accuracy error	+/- 0.13 % full scale 25 °C 1...5 V +/- 0.19 % full scale 60 °C 1...5 V +/- 0.21 % full scale 25 °C +/- 5 V +/- 0.26 % full scale 60 °C +/- 5 V +/- 0.27 % full scale 25 °C +/- 10 V +/- 0.27 % full scale 25 °C 4...20 mA +/- 0.32 % full scale 25 °C +/- 20 mA +/- 0.32 % full scale 60 °C +/- 10 V +/- 0.38 % full scale 60 °C 4...20 mA +/- 0.41 % full scale 60 °C +/- 20 mA
Conversion time	12 ms 8
Isolation between channels	+/- 200 V DC for 1 minute
Isolation between channels and ground	500 V AC for 1 minute
Isolation between channels and bus	500 V AC for 1 minute
Permissible common mode voltage	100 V 47...63 Hz DC between channels to ground 250 V 47...63 Hz AC between channels to ground
Common mode rejection	> 80 dB between channels to ground
External power requirement	< 382 mA DC 20.4...28.8 V DC 24 V DC
Reverse polarity protection	Internal
Marking	CE
Local signalling	1 LED (green) for ready 8 LEDs for channel status
Electrical connection	2 connectors for removable terminal blocks

Depth	47.5 mm
Height	125 mm
Width	141.5 mm
Net weight	0.215 kg

Environment

Standards	EN 50081-2 IEC 1131
Product certifications	FM Class 1 Division 2 CSA UL
Protective treatment	TC
Resistance to electrostatic discharge	4 kV contact conforming to IEC 801-2 8 kV on air conforming to IEC 801-2
Resistance to electromagnetic fields	10 V/m 80...1000 MHz conforming to IEC 801-3
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...85 °C
Relative humidity	95 % without condensation
Operating altitude	<= 5000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	398.0 g
Package 1 Height	5.5 cm
Package 1 width	18.0 cm
Package 1 Length	26.0 cm

Offer Sustainability

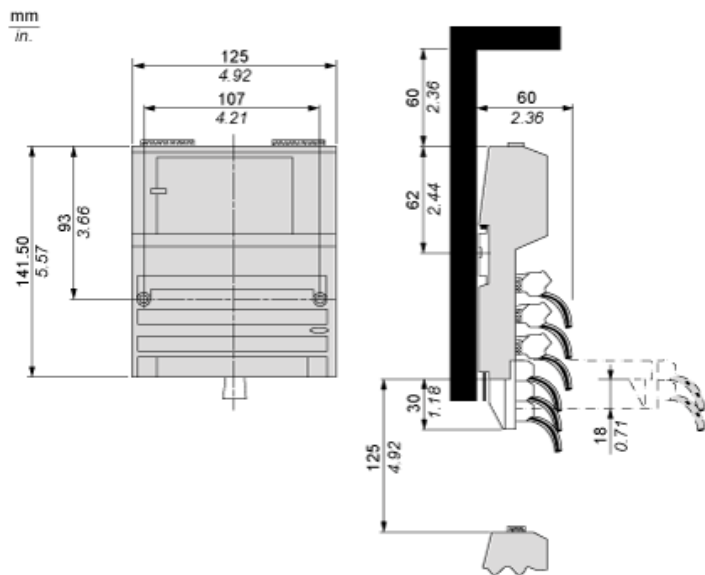
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product 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
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

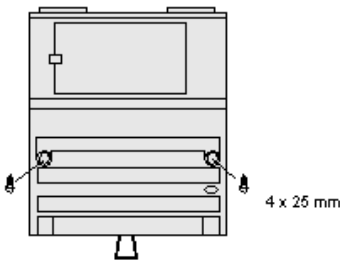
Warranty	18 months
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Standard Adapter on a Typical Base

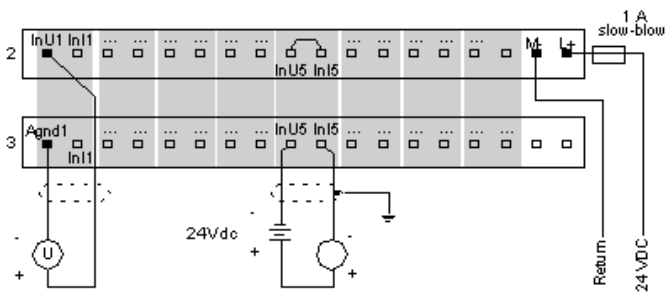
Dimensions



Mounting on a Wall



External Wiring Diagram



Examples

- * Channel1, wired for voltage input
- * Channel 5, wired for current input

Internal Pin Connections

