

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

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	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 Height	5.500 cm
Package 1 Width	18.000 cm
Package 1 Length	26.000 cm
Package 1 Weight	400.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.421 kg

Contractual warranty

Warranty	18 months
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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

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard

Yes

Packaging without single use plastic

No

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number

441d5619-6318-4bbf-ac83-96d05888ee7e

REACH Regulation

[REACH Declaration](#)

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

Use Again

Repack and remanufacture

End of life manual availability

[End of Life Information](#)

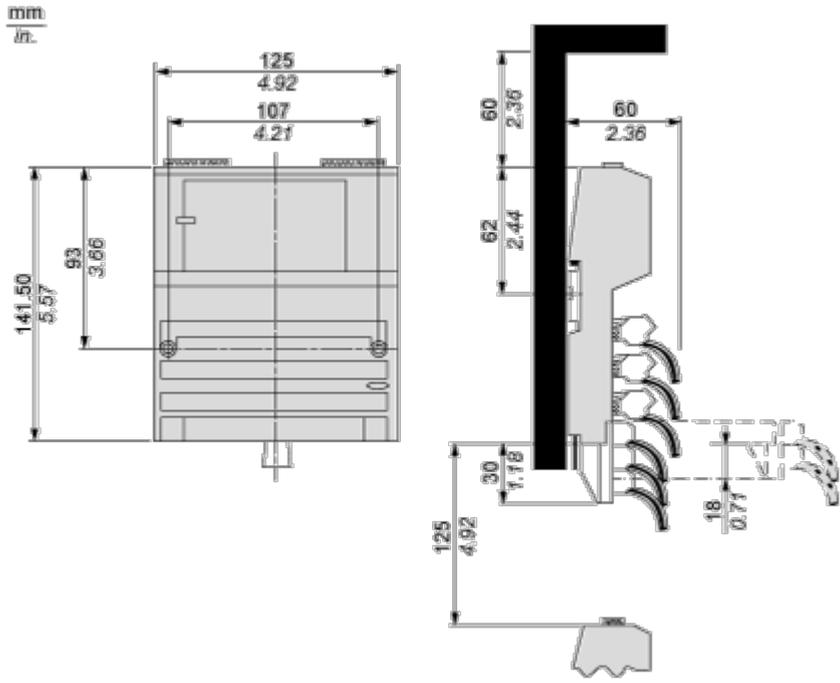
Take-back

No

Dimensions Drawings

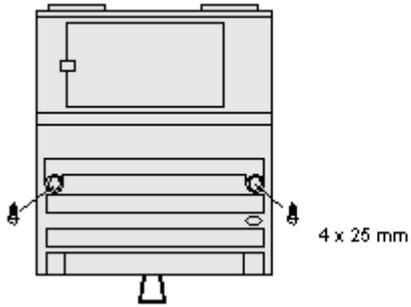
Standard Adapter on a Typical Base

Dimensions



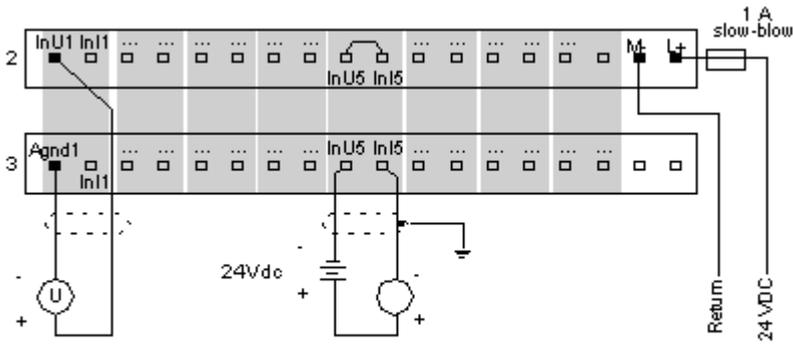
Mounting and Clearance

Mounting on a Wall



Connections and Schema

External Wiring Diagram



Examples

- * Channel 1, wired for voltage input
- * Channel 5, wired for current input

Internal Pin Connections

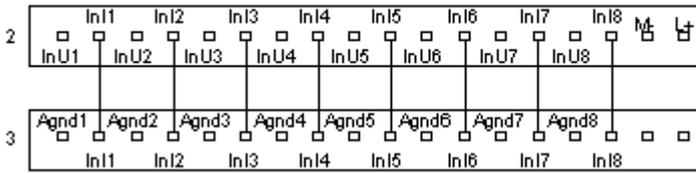


Image of product / Alternate images

Alternative

