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 77 °F (25 °C) 1...5 V +/- 0.19 % full scale 140 °F (60 °C) 1...5 V +/- 0.21 % full scale 77 °F (25 °C) +/- 5 V +/- 0.26 % full scale 140 °F (60 °C) +/- 5 V +/- 0.27 % full scale 77 °F (25 °C) +/- 10 V +/- 0.27 % full scale 77 °F (25 °C) 4...20 mA +/- 0.32 % full scale 77 °F (25 °C) +/- 20 mA +/- 0.32 % full scale 140 °F (60 °C) +/- 10 V +/- 0.38 % full scale 140 °F (60 °C) 4...20 mA +/- 0.41 % full scale 140 °F (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	Ready 1 LED green) Channel status 8 LEDs
Electrical Connection	2 connectors for removable terminal blocks
Depth	1.87 in (47.5 mm)
Height	4.92 in (125 mm)

Width	5.57 in (141.5 mm)
Net Weight	0.47 lb(US) (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 IEC 801-2 8 kV on air IEC 801-2
Resistance To Electromagnetic Fields	9.14 V/yd (10 V/m) 80...1000 MHz IEC 801-3
Ambient Air Temperature For Operation	32…140 °F (0…60 °C)
Ambient Air Temperature For Storage	-40…185 °F (-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	2.17 in (5.5 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	10.24 in (26.0 cm)
Package 1 Weight	14.04 oz (398.0 g)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium^{TM} label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes

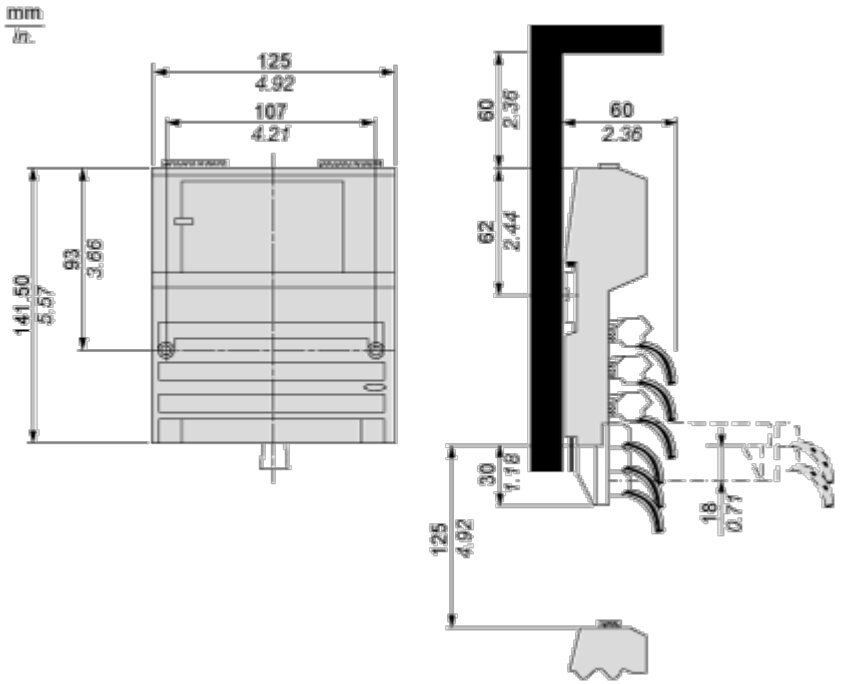
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Dimensions Drawings

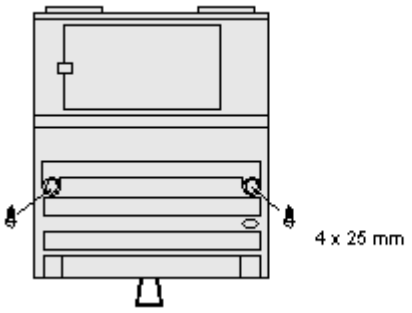
Standard Adapter on a Typical Base

Dimensions



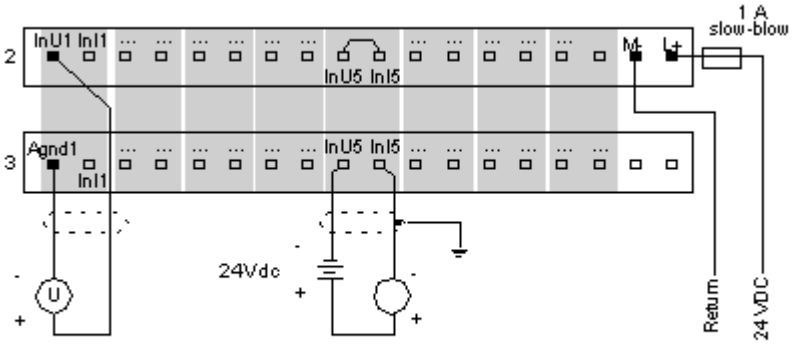
Mounting and Clearance

Mounting on a Wall



Connections and Schema

External Wiring Diagram



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

Internal Pin Connections