

Product data sheet

Specifications



distributed analog input Modicon Momentum - 16 Input

170AAI14000

Main

Range of product	Modicon Momentum automation platform
Product or component type	Analogue input base
Analogue input number	16
Analogue input type	Single ended
Analogue input range	4...20 mA 12 bits < 0.25 Ohm +/- 10 V 12 bits + sign > 2200 kOhm +/- 5 V 12 bits + sign > 2200 kOhm
Type of filter	Low pass input filter 10 kHz

Complementary

Data format	Full 16 bits signed
Absolute accuracy error	+/- 0.15 % of full scale 25 °C +/- 10 V +/- 0.15 % of full scale 25 °C +/- 5 V +/- 0.25 % full scale 25 °C 4...20 mA +/- 0.25 % full scale 60 °C +/- 10 V +/- 0.25 % full scale 60 °C +/- 5 V +/- 0.45 % full scale 60 °C 4...20 mA
Temperature drift	30 %oFS/°C +/- 10 V 60 °C 30 %oFS/°C +/- 5 V 60 °C 60 %oFS/°C 4...20 mA 60 °C
Full scale	10 V +/- 10 V 16 mA 4...20 mA 5 V +/- 5 V
Update time	25 ms
Isolation between channels and ground	1780 V AC for 1 minute
Isolation between supply and ground	500 V 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
External power requirement	+/- 30 V DC
Maximum power dissipation in W	5.55 W
Reverse polarity protection	Internal
Protection type	Internal 2 A slow-blow
Associated fuse rating	500 mA, fast blow
Marking	CE
Local signalling	16 LEDs for channel status
Electrical connection	2 connectors for removable terminal blocks
Current consumption	305 mA at 24 V DC

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

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

Environment

Product certifications	UL FM Class 1 Division 2 CSA
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	5.5 cm
Package 1 Width	18.0 cm
Package 1 Length	26.0 cm
Package 1 Weight	385.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.85 kg
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	75.0 cm
Package 3 Width	60.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	46 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

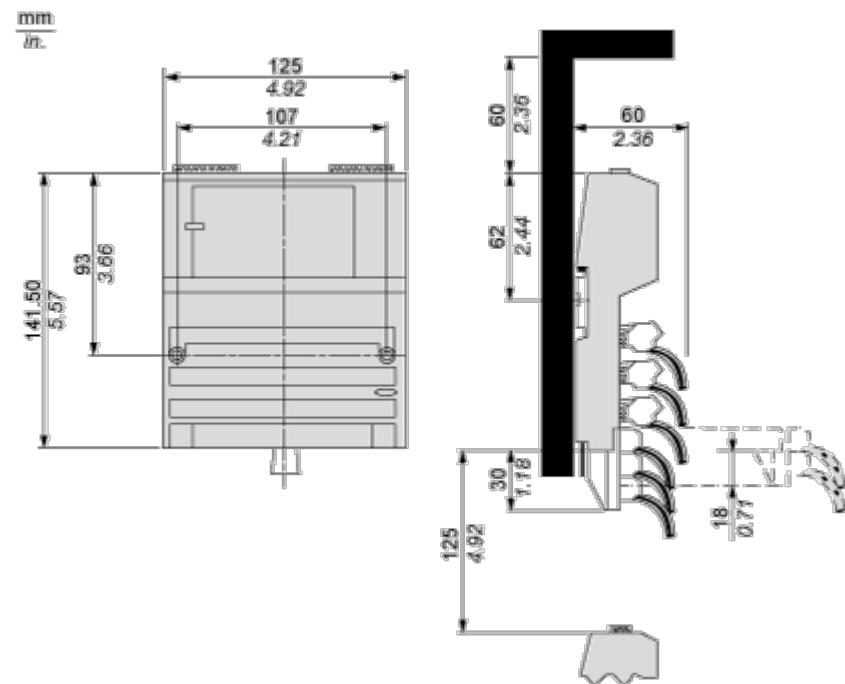
Use Again

Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

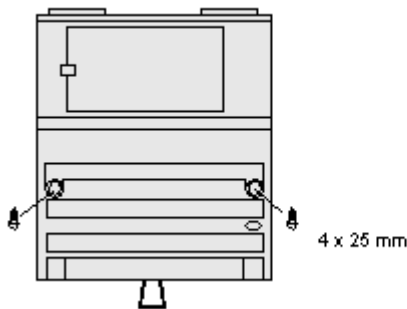
Standard Adapter on a Typical Base

Dimensions



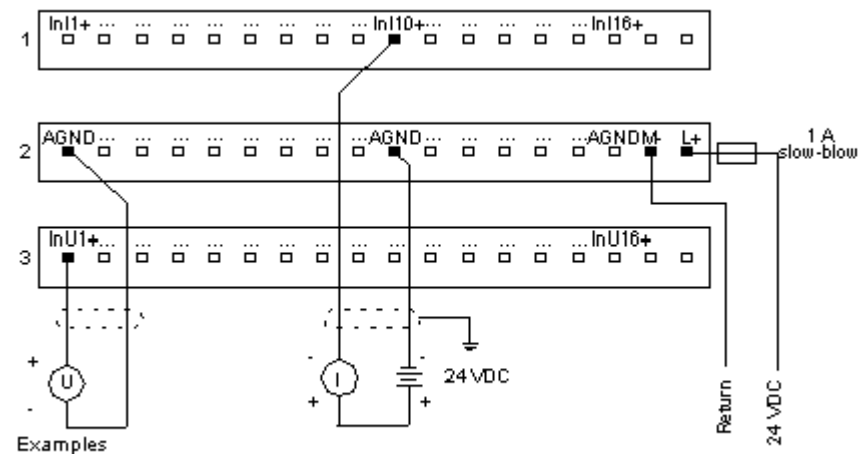
Mounting and Clearance

Mounting on a Wall



Connections and Schema

External Wiring Diagram



- Examples
- * Channel 1, wired for voltage input
 - * Channel 10, wired for current input

Internal Pin Connections

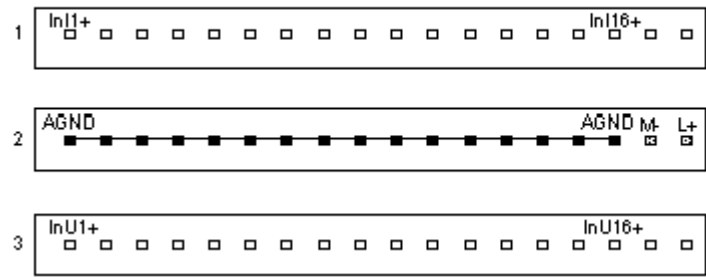


Image of product / Alternate images

Alternative

