

# Product datasheet

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

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

<b>Local signalling</b>	16 LEDs for channel status
<b>Electrical connection</b>	2 connectors for removable terminal blocks
<b>Current consumption</b>	305 mA at 24 V DC
<b>Depth</b>	47.5 mm
<b>Height</b>	125 mm
<b>Width</b>	141.5 mm
<b>Product weight</b>	0.215 kg

## Environment

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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.5 cm
<b>Package 1 Width</b>	18.0 cm
<b>Package 1 Length</b>	26.0 cm
<b>Package 1 Weight</b>	385.0 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	30 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	3.85 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	80
<b>Package 3 Height</b>	75.0 cm
<b>Package 3 Width</b>	60.0 cm
<b>Package 3 Length</b>	80.0 cm
<b>Package 3 Weight</b>	46 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
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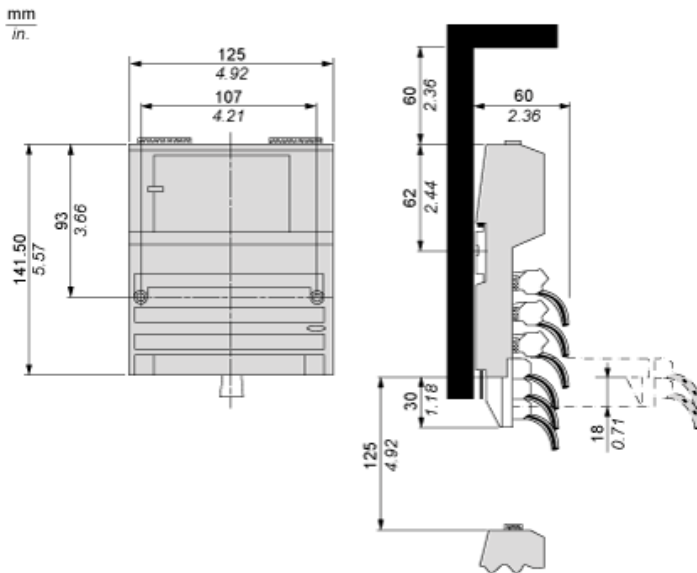
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

<b>Warranty</b>	18 months
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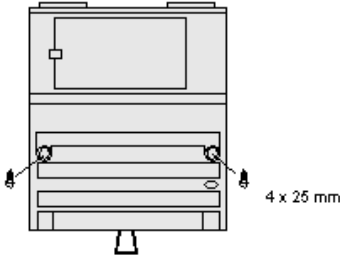
Standard Adapter on a Typical Base

Dimensions

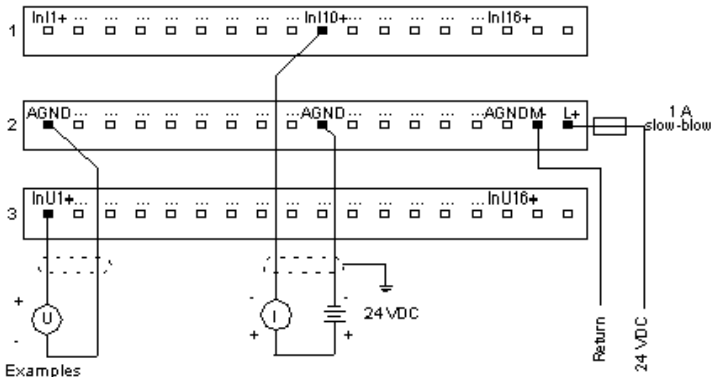


**Mounting on a Wall**

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External Wiring Diagram

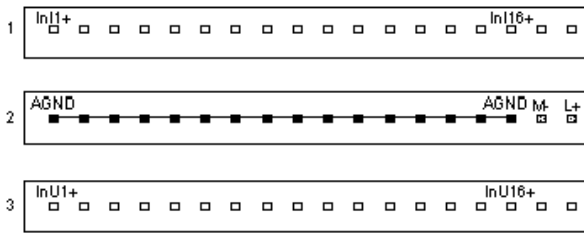


Examples

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

## Internal Pin Connections

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## Recommended replacement(s)