

Product data sheet

Specifications



distributed analog input Modicon Momentum - 16 Input

170AAI14000

Product availability : Stock - Normally stocked in distribution facility

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 77 °F (25 °C) +/- 10 V +/- 0.15 % of full scale 77 °F (25 °C) +/- 5 V +/- 0.25 % full scale 77 °F (25 °C) 4...20 mA +/- 0.25 % full scale 140 °F (60 °C) +/- 10 V +/- 0.25 % full scale 140 °F (60 °C) +/- 5 V +/- 0.45 % full scale 140 °F (60 °C) 4...20 mA
Temperature drift	30 %oFS/°C +/- 10 V 140 °F (60 °C) 30 %oFS/°C +/- 5 V 140 °F (60 °C) 60 %oFS/°C 4...20 mA 140 °F (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	for channel status 16 LEDs
Electrical connection	2 connectors for removable terminal blocks
Current consumption	305 mA 24 V DC
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

Product Certifications	UL FM Class 1 Division 2 CSA
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/m (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	<= 16404.2 ft (5000 m)

Ordering and shipping details

Category	18206-MOMENTUM PROCESSORS,I/O BASES,CONN.
Discount Schedule	PC31
GTIN	3595861147690
Returnability	Yes
Country of origin	ID

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	13.58 oz (385.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	8.49 lb(US) (3.85 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	80

Package 3 Height	29.53 in (75.0 cm)
Package 3 Width	23.62 in (60.0 cm)
Package 3 Length	31.50 in (80.0 cm)
Package 3 Weight	101.41 lb(US) (46 kg)

Offer Sustainability

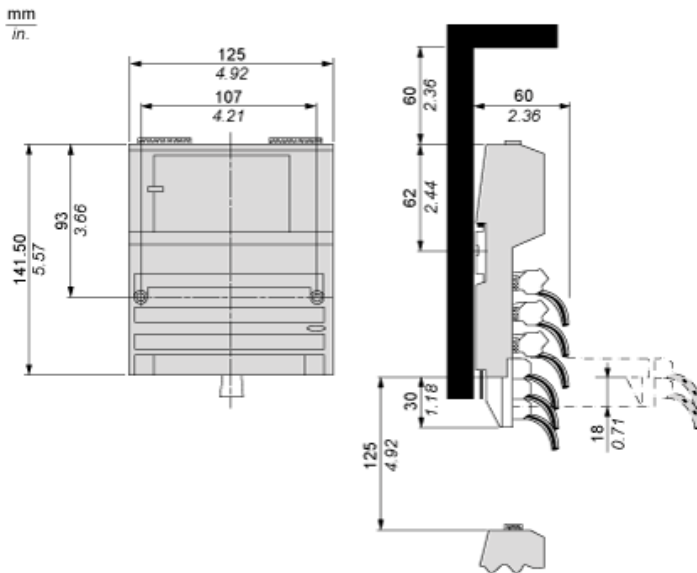
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov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

Contractual warranty

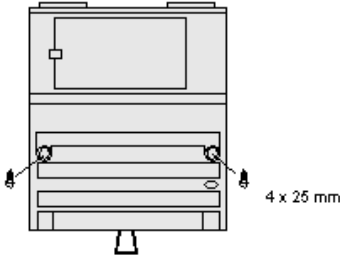
Warranty	18 months
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Standard Adapter on a Typical Base

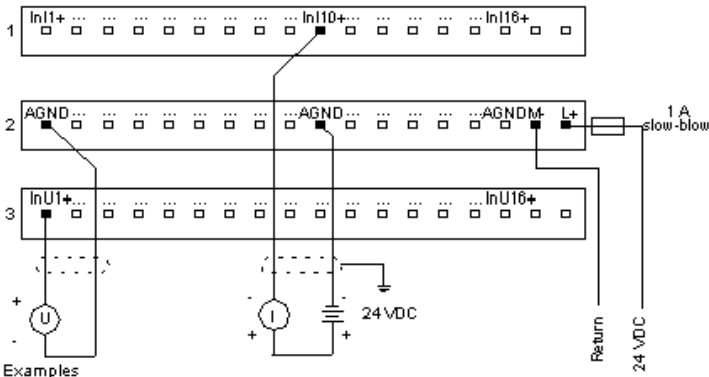
Dimensions



Mounting on a Wall



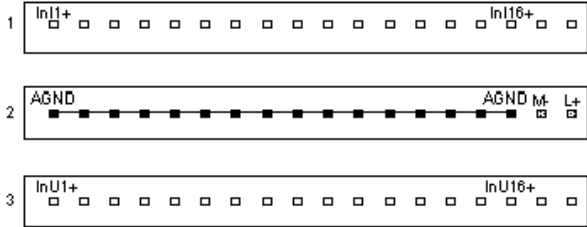
External Wiring Diagram



Examples

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

Internal Pin Connections



Recommended replacement(s)