

Product data sheet

Characteristics

170AMM09000

distributed analog/discrete I/O Modicon Momentum

Product availability: Stock - Normally stocked in distribution facility

Price*: 1619.00 USD



Main

Commercial Status	Commercialised
Range of product	Modicon Momentum automation platform
Product or component type	Analogue,Discrete I/O base
Group of channels	1 group of 2 analog outputs 1 group of 2 discrete outputs 1 group of 4 analog differential inputs 1 group of 4 discrete inputs
Analogue input range	4...20 mA 1...5 V +/- 5 V +/- 20 mA +/- 10 V
Analogue input type	Differential
Analogue input resolution	14 bits +/- 10 V 13 bits +/- 5 V 13 bits +/- 20 mA 12 bits 4...20 mA 12 bits 1...5 V
Discrete input voltage	24 V DC
Analogue output range	0...20 mA 12 bits +/- 10 V 12 bits
Discrete output voltage	<= 30 V
Output short-circuit protection	With discrete output
Output overload protection	With discrete output

Complementary

Discrete input number	4 IEC 1131-2 Type 1
[Us] rated supply voltage	24 V DC
Conversion consistency	+/- 0.04 % 4...20 mA analogue input circuit +/- 0.04 % 1...5 V analogue input circuit +/- 0.04 % +/- 5 V analogue input circuit +/- 0.04 % +/- 20 mA analogue input circuit +/- 0.02 % +/- 10 V analogue input circuit
Common mode rejection	> 54 dB analogue input circuit
Input voltage limits	< 30 V
Discrete input logic	Positive
Voltage state 0 guaranteed	-3...5 V discrete input
Voltage state1 guaranteed	11...30 V discrete input
Current state 0 guaranteed	<= 1.2 mA discrete input
Current state 1 guaranteed	>= 2.5 mA discrete input
Maximum overvoltage on input	-50...50 V <= 100 s analogue input circuit -30...30 V 24 V analogue input circuit
Input resistance	4 kOhm discrete input 1 MOhm analogue input circuit
Output load	>= 3 kOhm +/- 10 V analogue output <= 600 Ohm 0...20 mA analogue output

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Conversion time	10 ms analogue input circuit 1 ms analogue output
Conversion error	0,003 4...20 mA 140 °F (60 °C) analogue input circuit 0,003 1...5 V 140 °F (60 °C) analogue input circuit 0,003 +/- 5 V 140 °F (60 °C) analogue input circuit 0,003 +/- 20 mA 140 °F (60 °C) analogue input circuit 0,0016 4...20 mA 77 °F (25 °C) analogue input circuit 0,0016 1...5 V 77 °F (25 °C) analogue input circuit 0,0016 +/- 5 V 77 °F (25 °C) analogue input circuit 0,0016 +/- 20 mA 77 °F (25 °C) analogue input circuit 0,0015 +/- 10 V 140 °F (60 °C) analogue input circuit 0,0008 +/- 10 V 77 °F (25 °C) analogue input circuit +/- 0.70 % 0...20 mA 140 °F (60 °C) analogue output +/- 0.70 % +/- 10 V 140 °F (60 °C) analogue output +/- 0.35 % 0...20 mA 77 °F (25 °C) analogue output +/- 0.35 % +/- 10 V 77 °F (25 °C) analogue output
Fail state	Reset to zero analogue input circuit Hold analogue input circuit
Discrete output type	Transistor
Discrete output logic	Positive
Discrete output current	2 A per module 2 A per group 1 A per point
Leakage current	< 1 mA DC 24 V discrete output
Voltage drop	< 0.5 V 1 A at state on discrete output
Operating rate	8 cyc/s tungsten 2.4 W discrete output 1000 cyc/h inductive 1 A discrete output 100 cyc/s resistive 1 A discrete output
Response time	3.3 ms from state 1 to state 0 discrete input 2.2 ms from state 0 to state 1 discrete input < 0.1 ms from state 1 to state 0 discrete output < 0.1 ms from state 0 to state 1 discrete output
Isolation voltage	500 V 1 min between operating voltage and I/O from ground 500 V 1 min between analogue I/O and operating voltage
Power dissipation in W	<= 6 W
Marking	CE
Local signalling	8 LEDs channel status
Electrical connection	2 connectors for removable terminal blocks
Current consumption	200 mA 24 V DC <= 350 mA 24 V DC
Depth	1.87 in (47.5 mm)
Height	4.92 in (125 mm)
Width	5.57 in (141.5 mm)
Product weight	0.53 lb(US) (0.24 kg)

Environment

Product certifications	CSA FM Class 1 Division 2 UL
Protective treatment	TC
Resistance to electrostatic discharge	8 kV on air IEC 801-2 4 kV contact 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	<= 16404.2 ft (5000 m)

Ordering and shipping details

Category	18206 - MOMENTUM PROCESSORS,I/O BASES,CONN.
Discount Schedule	PC31
GTIN	00785901308034
Nbr. of units in pkg.	1
Product availability	Stock - Normally stocked in distribution facility
Returnability	Y
Country of origin	ID

Offer Sustainability

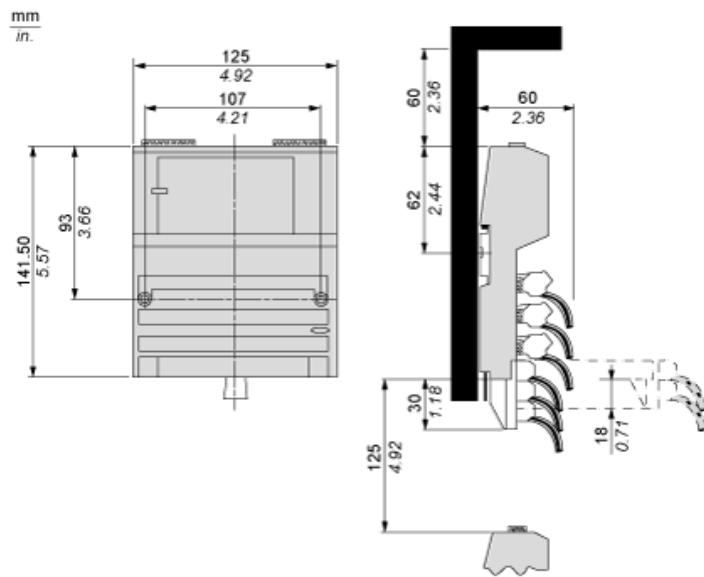
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Will be Compliant on 4Q2013
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available  Download Product Environmental Profile
Product end of life instructions	Available  Download End Of Life Manual

Contractual warranty

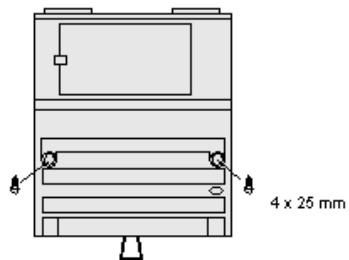
Warranty period	18 months
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Standard Adapter on a Typical Base

Dimensions

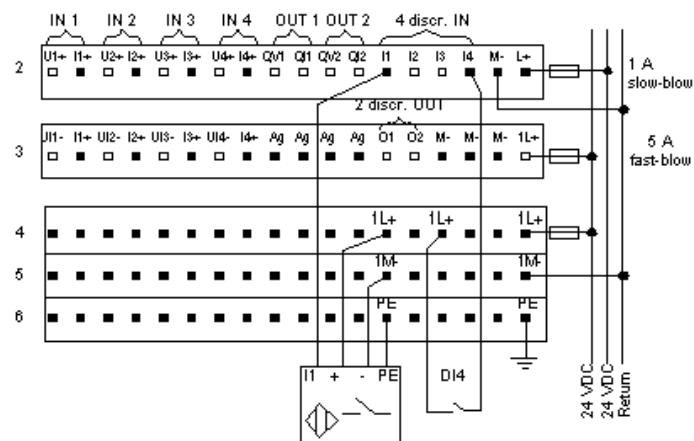


Mounting on a Wall

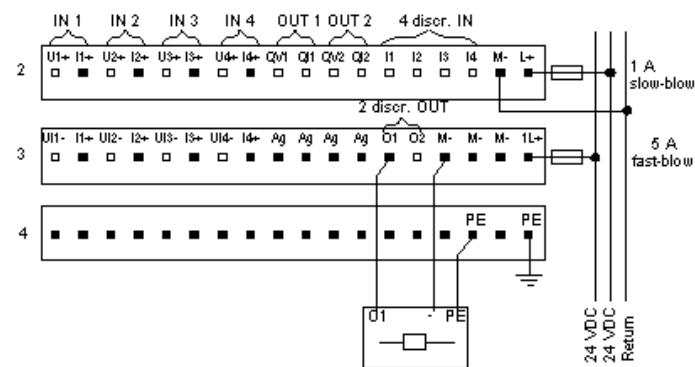


External Wiring Diagrams

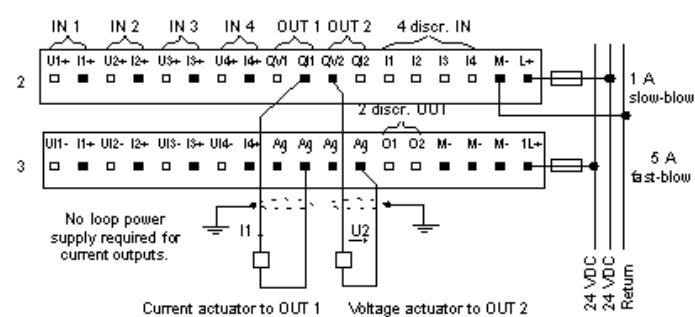
Discrete Inputs



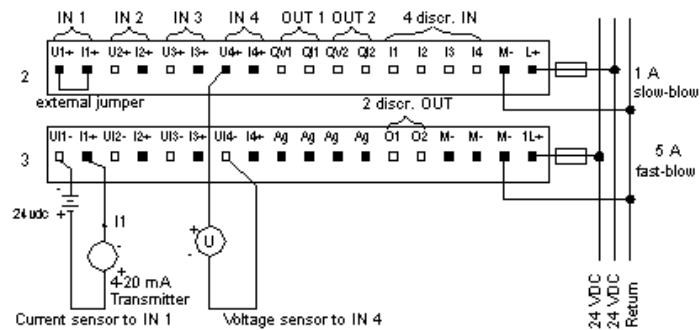
Discrete Outputs



Analog Outputs



Analog Inputs



Internal Pin Connections

Rows 1 through 3 show the internal connections between terminals on the I/O base. Rows 4 through 6 show the internal connections on the optional busbar.

