Product data sheet

Specifications



discrete I/O module Modicon Momentum - 16I / 8O solid state

170ADM37010

Main

Range of product	Modicon Momentum automation platform
Product or component type	Discrete solid state I/O base DC
Group of channels	4 groups of 4 inputs 2 groups of 4 outputs
Discrete input number	16 conforming to IEC 1131-2 Type 1
Discrete input logic	Positive
Discrete input voltage	24 V DC
Discrete output number	8
Discrete output type	Solid state switch
Discrete output voltage	<= 30 V DC 24 V DC
Discrete output logic	Positive
Protective treatment	TC

Complementary

[Us] rated supply voltage	24 V DC
Input voltage limits	- 3...30 V
Voltage state 0 guaranteed	-3...5 V
Voltage state 1 guaranteed	11...30 V
Current state 0 guaranteed	<= 1.2 mA
Current state 1 guaranteed	>= 2.5 mA
Input resistance	4 kOhm
Discrete output current	16 A per module 2 A per point 8 A per group
Maximum leakage current	1 mA at 24 V (output circuit)
Peak output current	2.8 A
Fault type	Short circuit on output Overload on output
Response time	< 0.1 ms from state 0 to state 1 on output < 0.1 ms from state 1 to state 0 on output 2.2 ms from state 0 to state 1 on input 3.3 ms from state 1 to state 0 on input

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

Isolation between channels and bus	500 V AC
Power dissipation	6.5 W <= 10 W
Marking	CE
Terminals description PLC n°1	(11)IN_DIS#11 (M-)PW_NEG (L+)PW_POS (7)IN_DIS#7 (15)IN_DIS#15 (16)IN_DIS#16 (1)IN_DIS#1 (4)IN_DIS#4 (6)IN_DIS#6 (14)IN_DIS#14 (13)IN_DIS#13 (5)IN_DIS#5 TB (12)IN_DIS#12 (10)IN_DIS#10 (8)IN_DIS#8 (2)IN_DIS#2 (3)IN_DIS#3 (9)IN_DIS#9
Terminals description PLC n°2	(5)OUT_DIS#5 (1)OUT_DIS#1 (2)OUT_DIS#2 (4)OUT_DIS#4 (6)OUT_DIS#6 (8)OUT_DIS#8 (7)OUT_DIS#7 (3)OUT_DIS#3 (1L+)PW_POS (2L+)PW_POS TB_1
Current consumption	250 mA at 24 V DC
Depth	47.5 mm
Height	141.5 mm
Width	125 mm
Net weight	0.22 kg

Environment

Product certifications	UL CSA
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 Weight	394.0 g
Package 1 Height	5.5 cm
Package 1 width	18 cm
Package 1 Length	26 cm

Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Weight	4.381 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

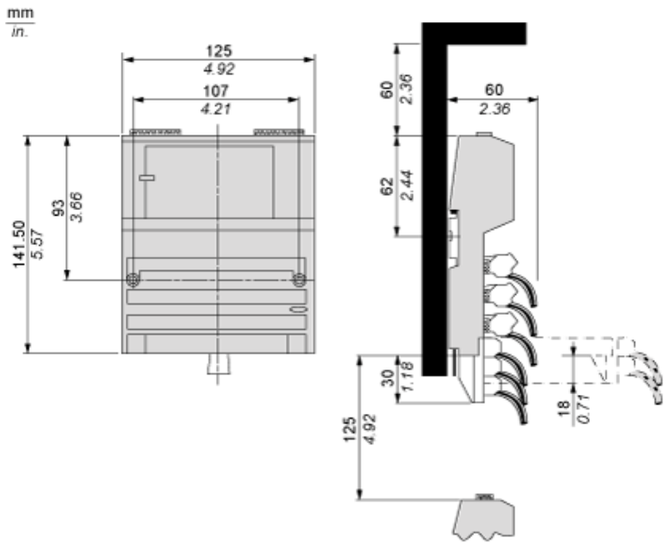
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product 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
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

Contractual warranty

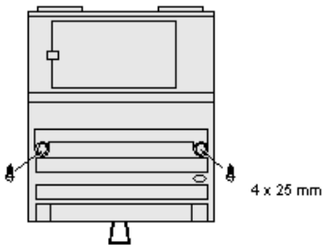
Warranty	18 months

Standard Adapter on a Typical Base

Dimensions

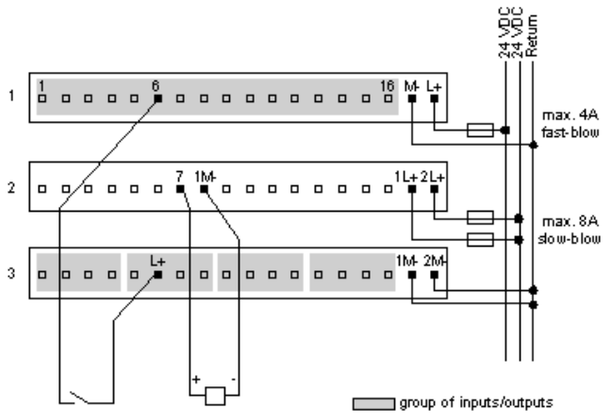


Mounting on a Wall

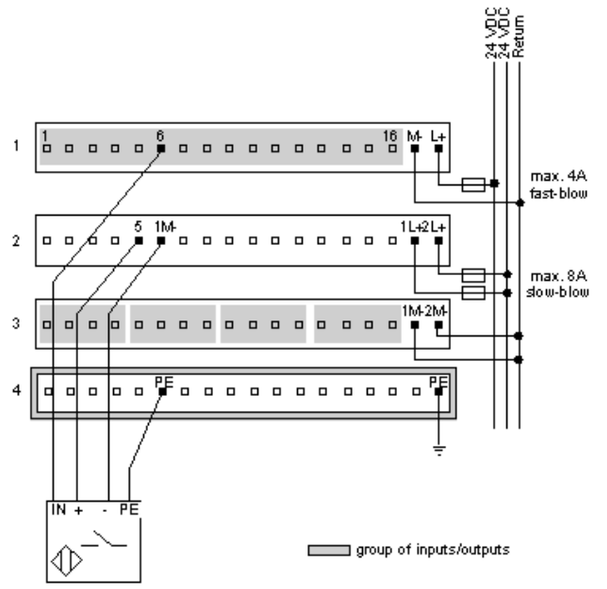


External Wiring Diagrams

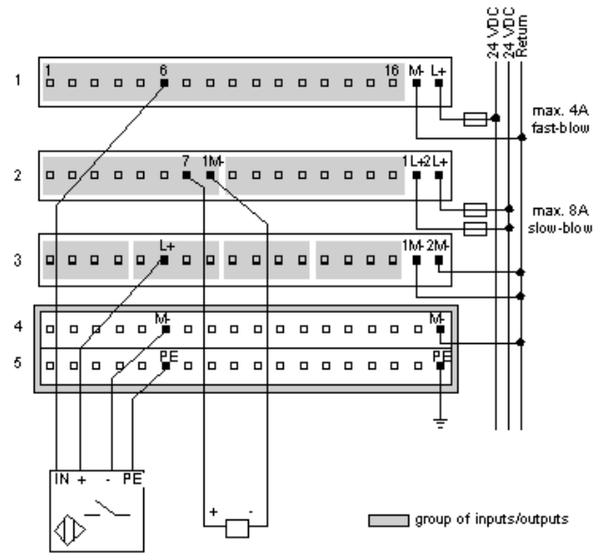
2-Wire Devices



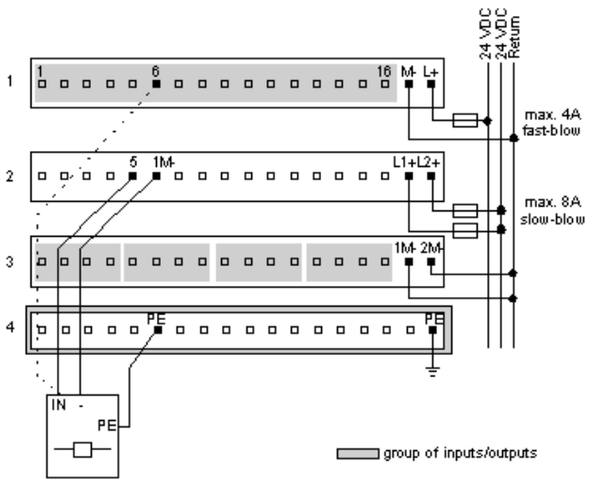
Sensor Activated by Output



Four-Wire Sensor with a Two-Wire Actuator



Broken Wire Detection



Internal Pin Connections

Rows 1 through 3 show the internal connections between terminals on the I/O base. Rows 4 through 5 show the internal connections on the optional busba

