

# Product data sheet

Specifications



## discrete I/O module Modicon Momentum - Conformal coating - 16 I/O solid state

170ADM35010C

### Main

|                           |                                               |
|---------------------------|-----------------------------------------------|
| Range of product          | Modicon Momentum automation platform          |
| Product or component type | Discrete solid state I/O base DC              |
| Group of channels         | 2 groups of 8 outputs<br>1 group of 16 inputs |
| Discrete input number     | 16 conforming to IEC 1131-2 Type 1            |
| Discrete input logic      | Positive                                      |
| Discrete input voltage    | 24 V DC                                       |
| Discrete output number    | 16                                            |
| Discrete output type      | Solid state switch                            |
| Discrete output voltage   | 24 V DC<br><= 30 V                            |
| Discrete output logic     | Positive                                      |
| Protective treatment      | Conformal coating Humiseal 1A33               |

### Complementary

|                            |                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| [Us] rated supply voltage  | 24 V DC                                                                                                                             |
| Input voltage limits       | - 3...30 V                                                                                                                          |
| Network frequency          | 47...63 Hz                                                                                                                          |
| 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    | 4 A per group<br>8 A per module<br>0.5 A per point                                                                                  |
| Maximum leakage current    | 1 mA at 24 V (output circuit)                                                                                                       |
| Peak output current        | 5 A                                                                                                                                 |
| Maximum voltage drop       | <0.5 V 0.5 A at state 1 output circuit                                                                                              |
| Fault type                 | Overload on output                                                                                                                  |
| Response time              | < 0.1 ms from state 0 to state 1 on output<br>< 0.1 ms from state 1 to state 0 on output<br>2.2 ms from state 0 to state 1 on input |

|                                         |                                                                                                                                                                                                                                                                                                |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.3 ms from state 1 to state 0 on input |                                                                                                                                                                                                                                                                                                |
| Isolation between channels and bus      | 500 V AC                                                                                                                                                                                                                                                                                       |
| Power dissipation                       | 6 W<br><= 8 W                                                                                                                                                                                                                                                                                  |
| Marking                                 | CE                                                                                                                                                                                                                                                                                             |
| Terminals description PLC n°1           | (9)IN_DIS#9<br>(L+)PW_POS<br>(1)IN_DIS#1<br>(3)IN_DIS#3<br>(16)IN_DIS#16<br>(11)IN_DIS#11<br>(5)IN_DIS#5<br>(M-)PW_NEG<br>(8)IN_DIS#8<br>(13)IN_DIS#13<br>(15)IN_DIS#15<br>(10)IN_DIS#10<br>(7)IN_DIS#7<br>(14)IN_DIS#14<br>(6)IN_DIS#6<br>(2)IN_DIS#2<br>TB<br>(12)IN_DIS#12<br>(4)IN_DIS#4   |
| Terminals description PLC n°2           | (15)OUT_DIS#15<br>(11)OUT_DIS#11<br>(8)OUT_DIS#8<br>(3)OUT_DIS#3<br>(10)OUT_DIS#10<br>(13)OUT_DIS#13<br>(12)OUT_DIS#12<br>(2L+)PW_POS<br>(6)OUT_DIS#6<br>(7)OUT_DIS#7<br>(1)OUT_DIS#1<br>(1L+)PW_POS<br>(14)OUT_DIS#14<br>(5)OUT_DIS#5<br>(2)OUT_DIS#2<br>TB_1<br>(4)OUT_DIS#4<br>(9)OUT_DIS#9 |
| Current consumption                     | 250 mA at 24 V DC                                                                                                                                                                                                                                                                              |
| Depth                                   | 47.5 mm                                                                                                                                                                                                                                                                                        |
| Height                                  | 141.5 mm                                                                                                                                                                                                                                                                                       |
| Width                                   | 125 mm                                                                                                                                                                                                                                                                                         |
| Net weight                              | 0.2 kg                                                                                                                                                                                                                                                                                         |
| Environment                             |                                                                                                                                                                                                                                                                                                |
| Product certifications                  | CSA<br>UL                                                                                                                                                                                                                                                                                      |
| Resistance to electrostatic discharge   | 4 kV contact conforming to IEC 801-2<br>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             | 407 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             | 4.07 kg  |
| Package 2 Height             | 30 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Unit Type of Package 3       | PAL      |
| Number of Units in Package 3 | 80       |
| Package 3 Weight             | 32.56 kg |
| Package 3 Height             | 60 cm    |
| Package 3 width              | 80 cm    |
| Package 3 Length             | 80 cm    |

### Offer Sustainability

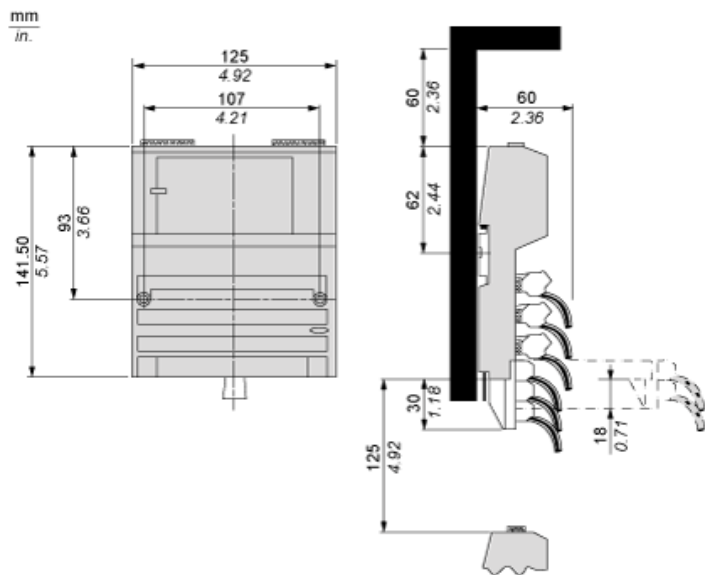
|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                                                           |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                                                                                                                                                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                                                                                                                                                                                     |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

### Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

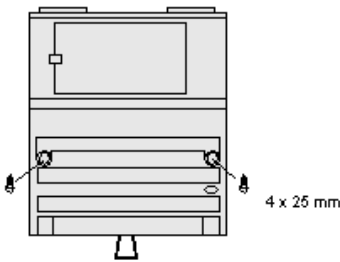
Standard Adapter on a Typical Base

Dimensions



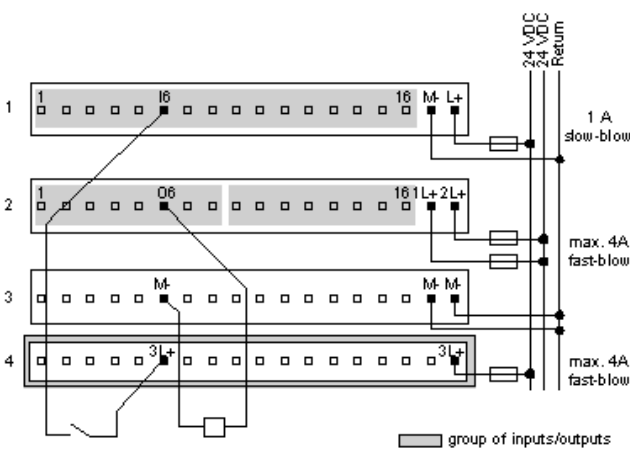
Mounting on a Wall

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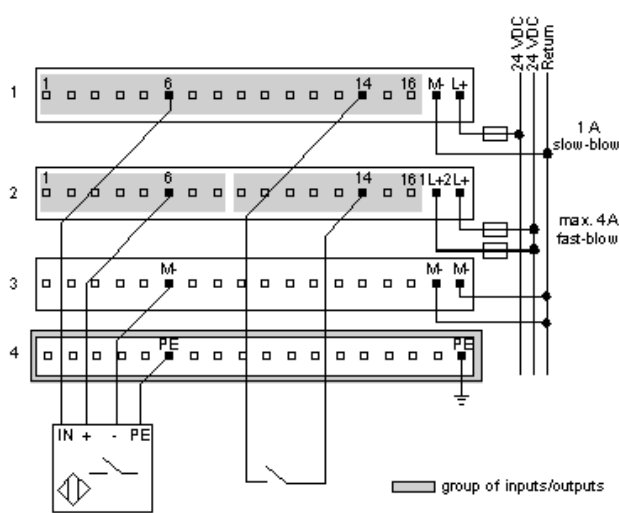


External Wiring Diagrams

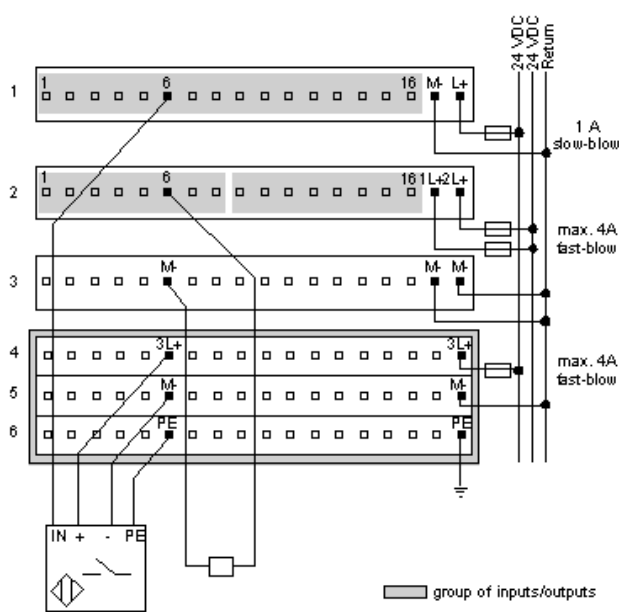
2-Wire Devices



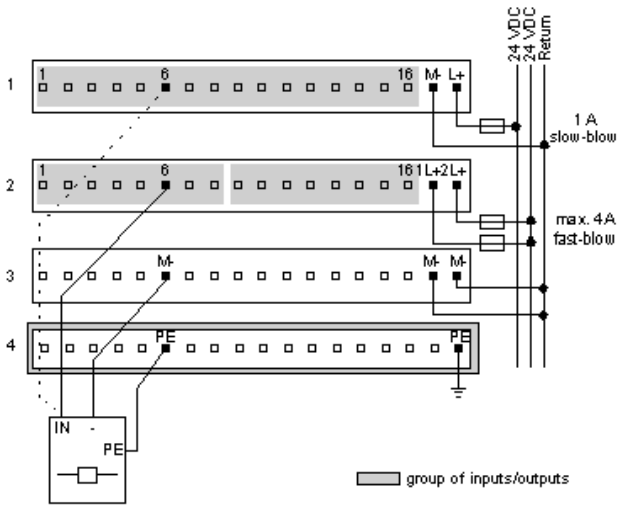
Sensor Activated by Output



Four-Wire Sensor with a Two-Wire Actuator



Broken Wire Detection



# Product data sheet

## Connections and Schema

# 170ADM35010C

## 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.

