

# Product data sheet

Specifications



## discrete output module Modicon Quantum - 16 O - 20..56 V AC

140DAO84220

⚠ Discontinued on: Dec 31, 2022

⚠ To be end-of-service on: Dec 31, 2030

⚠ Discontinued - Service only

### Main

|                           |                                     |
|---------------------------|-------------------------------------|
| Range Of Product          | Modicon Quantum automation platform |
| Product Or Component Type | AC discrete output modules          |
| Discrete Output Number    | 16                                  |

### Complementary

|                         |  |
|-------------------------|--|
| Group Of Channels       | 4 groups of 4 channels   |
| Supply Frequency        | 47...63 Hz   |
| Maximum Voltage Drop    | 1.5 V  |
| Discrete Output Voltage | 20...56 V AC   |
| Addressing Requirement  | 1 output word  |
| Absolute Maximum Output | 100 Vrms 1 cycle AC<br>63 Vrms for 10 s AC<br>111 Vrms for 1.3 s AC  |
| Maximum Load Current    | 16 A rms per module<br>4 A rms per group<br>4 A rms 20...56 V per output   |
| Surge Current           | 45 A during 1 cycle per group<br>25 A during 2 cycles per group<br>30 A during 3 cycles per group  |
| Dv/Dt                   | 400 V/ms   |
| Response Time           | <= 0.5 ms at state 0 to state 1<br><= 0.5 ms at state 1 to state 0   |
| Fault Indication        | Blown fuse<br>Loss of field power  |
| Protection Type         | Internal by RC filter<br>Internal output protection by 5 A fuse  |
| Power Dissipation       | 1.85 + (1.1 V x total module load current)   |
| Marking                 | CE   |
| Local Signalling        | 1 LED (green) for bus communication is present (Active)<br>1 LED (red) for external fault detected (F)<br>16 LEDs (green) for input status |
| Bus Current Requirement | 350 mA   |
| Module Format           | Standard   |
| Net Weight              | 0.45 kg  |

### Environment

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

|                                       |   |
|---------------------------------------|---|
| Product Certifications                | FM Class 1 Division 2<br>cUL  |
| Standards                             | UL 508<br>CSA C22.2 No 142  |
| Electromagnetic Compatibility         | Electrostatic discharge immunity test - test level: 4 kV (contact discharge) conforming to IEC 801-2<br>Electrostatic discharge immunity test - test level: 8 kV (air discharge) conforming to IEC 801-2<br>Susceptibility to electromagnetic fields - test level: 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 Height             | 16.3 cm  |
| Package 1 Width              | 4.5 cm   |
| Package 1 Length             | 31.2 cm  |
| Package 1 Weight             | 644.0 g  |
| Unit Type Of Package 2       | S02      |
| Number Of Units In Package 2 | 2        |
| Package 2 Height             | 15.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 1.284 kg |

## Contractual warranty

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

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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[Guide to assess a product's sustainability >](#)



RoHS/REACH

## Well-being performance

✓ Reach Free Of Svhc

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

## Certifications & Standards

|                           |   |
|---------------------------|---|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>   |
| China Rohs Regulation     | <a href="#">China RoHS declaration</a>  |
| Weee                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| Circularity Profile       | <a href="#">End of Life Information</a>   |
| 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="#">www.P65Warnings.ca.gov</a> |

Dimensions Drawings

Racks for Modules Mounting

Dimensions of Modules and Racks

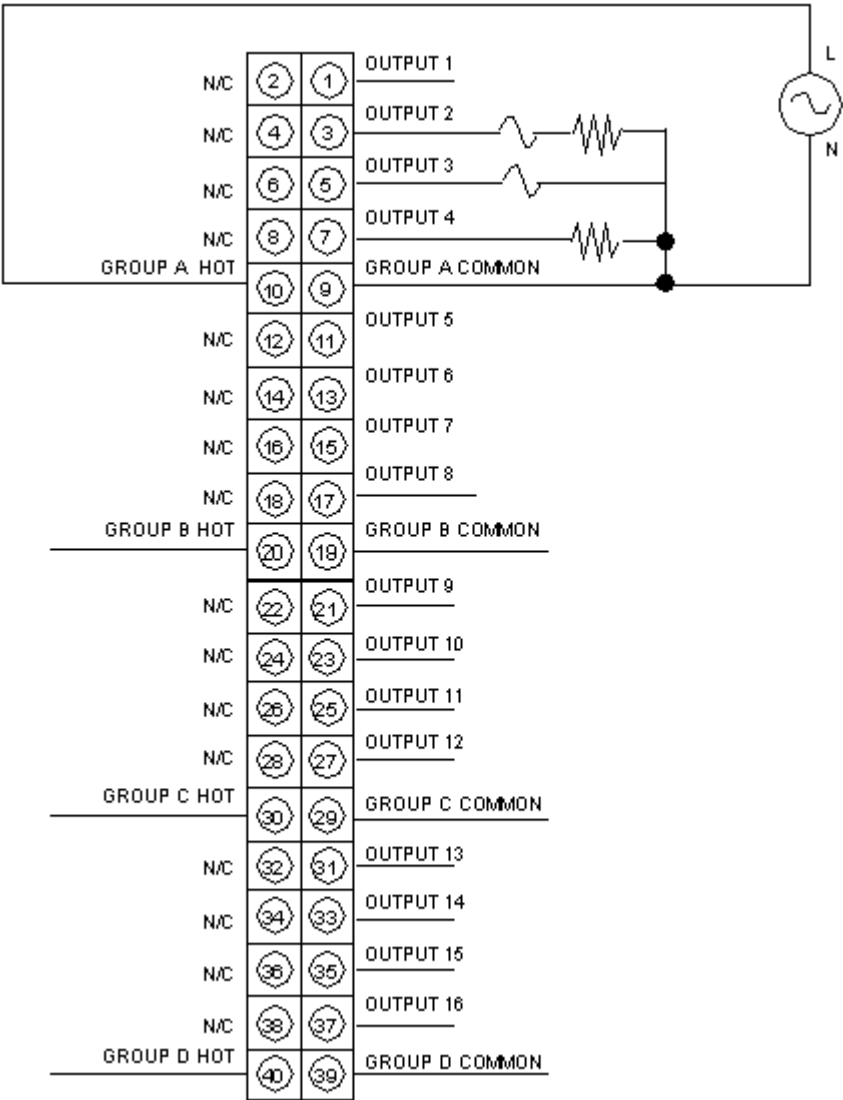


- (1) 2 slots
- (2) 3 slots
- (3) 4 slots
- (4) 6 slots
- (5) 10 slots
- (6) 16 slots

Connections and Schema

24...48 Vac Discrete Output Module

Wiring Diagram



N/C Not Connected