Product data sheet Characteristics

140DDM39000

discrete I/O module Modicon Quantum - 16 I - 24 V DC - 8 O solid state





Main

Range of product	Modicon Quantum automation platform
Product or component type	Mixed discrete I/O module
Discrete I/O number	24

Complementary

Complementary	
Discrete input number	16 2 groups of 8
Discrete input logic	Sink
Addressing requirement	1 input word 0.5 output word
Network frequency limits	4763 Hz
Discrete input voltage	24 V DC
Input voltage limits	30 V <= 1 V during one cycle 56 V during 1.3 ms <= 1 V during 10 s
Voltage state 0 guaranteed	-35 V
Voltage state 1 guaranteed	1530 V
Current state 0 guaranteed	<= 0.5 mA
Current state 1 guaranteed	>= 2 mA
Input impedance	2500 Ohm
Discrete output number	8 2 groups of 4
Discrete output type	Solid state
Discrete output logic	Sink
Discrete output voltage	24 V
Output voltage limits	19.230 V DC typical 56 V DC during 1.3 ms
Maximum load current	<= 0.5 A per point <= 2 A per group <= 4 A per module
Maximum voltage drop	<0.4 V 0.5 A
Absolute maximum output	5 A during 500 μs per point
Maximum load inductance	500 mH 4 Hz
Maximum load capacitance	50 μF
Maximum leakage current	0.4 mA 30 V DC
Response time on output	<= 1 ms at state 0 to state 1 <= 1 ms at state 1 to state 0
Protection type	On output by transient voltage suppression On input by resistor limited Internal output protection by 5 A fuse per group
Associated fuse rating	5 A per group
Isolation between group	500 Vrms for 1 minute
Isolation between group and bus	1780 Vrms for 1 minute

Fault indication	Blown fuse on output Loss of field power on output
Power dissipation	1.75 W + (0.36 x input point on) + (1.1 total output load current)
Local signalling	Bus communication is present (Active) 1 LED green)
•	No voltage in output and input (F) 1 LED red)
	Output is turned on 2 LEDs green)
	Fault detected on the input point 2 LEDs red)
	Fault detected on the output point 2 LEDs red)
Marking	CE
Bus current requirement	330 mA
Net Weight	0.66 lb(US) (0.3 kg)

Environment

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) 801000 MHz IEC 801-3	
Ambient air temperature for operation	32140 °F (060 °C)	
Ambient air temperature for storage	-40185 °F (-4085 °C)	
Relative humidity	95 % without condensation	
Operating altitude	<= 16404.2 ft (5000 m)	
Standards	CSA C22.2 No 142 UL 508 FM Class 1 Division 2	
Product certifications	CUL	

Ordering and shipping details

18155 - QUANTUM I/O & POWER SUPPLIES
PC21
00785901013976
1
0.96 lb(US) (0.44 kg)
No
CN

Packing Units

1.77 in (4.5 cm)	
12.40 in (31.5 cm)	
6.30 in (16 cm)	
S03	
7	
6.70 lb(US) (3.039 kg)	
11.81 in (30 cm)	
11.81 in (30 cm)	
15.75 in (40 cm)	
	12.40 in (31.5 cm) 6.30 in (16 cm) S03 7 6.70 lb(US) (3.039 kg) 11.81 in (30 cm) 11.81 in (30 cm)

Offer Sustainability

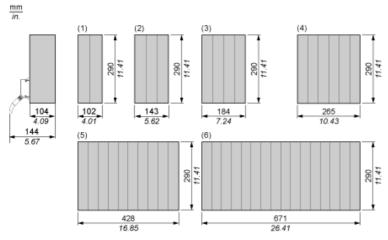
Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	₽¥Yes
China RoHS Regulation	☐ China RoHS Declaration
Environmental Disclosure	₽roduct Environmental Profile

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

140DDM39000

Racks for Modules Mounting

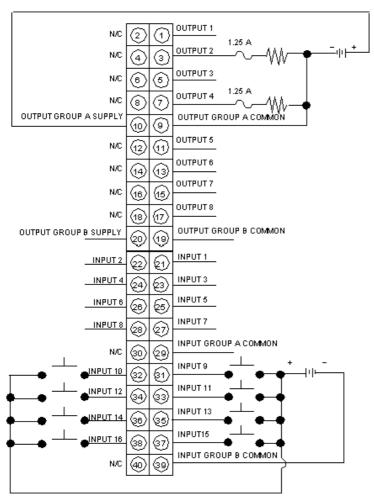
Dimensions of Modules and Racks



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

24 Vdc Discrete Input Sink/Output Source Module

Wiring Diagram



N/C Not Connected