Product data sheet

Specifications



discrete input module Modicon Quantum - 32 I - 48 V AC

140DAI45300

To be discontinued on: 31 December 2022

To be end-of-service on: 31 December 2030

To be discontinued

Main

Range of product	Modicon Quantum automation platform
Product or component type	VAC discrete input modules
Software name	ProWORX 32 Concept Unity Pro
Discrete input number	32

Complementary

Group of channels	4
Addressing requirement	2 input words
Discrete input voltage	48 V AC
Input current	11.7 mA at 57...63 Hz 9.8 mA at 47...53 Hz
Voltage state 1 guaranteed	29...56 V AC at 57...63 Hz 34...56 V AC at 47...53 Hz
Voltage state 0 guaranteed	0...10 V AC at 57...63 Hz 0...10 V AC at 47...53 Hz
Input impedance	5600 Ohm capacitive at 57...63 Hz 6800 Ohm capacitive at 47...53 Hz
Network frequency limits	47…63 Hz
Maximum leakage current	1.7 mA
Absolute maximum input	100 V 1 cycle 56 V continuous 63 V 10 s
Response time	4.9...0.75 ms x line cycle Off-On 7.3...12.3 ms On-Off
Isolation between group	1780 Vrms for 1 minute
Isolation between group and bus	1780 Vrms for 1 minute
Bus current requirement	250 mA
Maximum power dissipation in W	10.9 W
Local signalling	1 LED (green) for bus communication is present (Active) 1 LED (red) for external fault detected (F) 32 LEDs (green) for input status

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

Marking	CE
Module format	Standard
Net weight	0.3 kg

Environment

Standards	UL 508 CSA C22.2 No 142
Product certifications	FM Class 1 Division 2 cUL
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…2000 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	475.0 g
Package 1 Height	16.3 cm
Package 1 width	4.5 cm
Package 1 Length	31.2 cm
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Weight	1.305 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
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

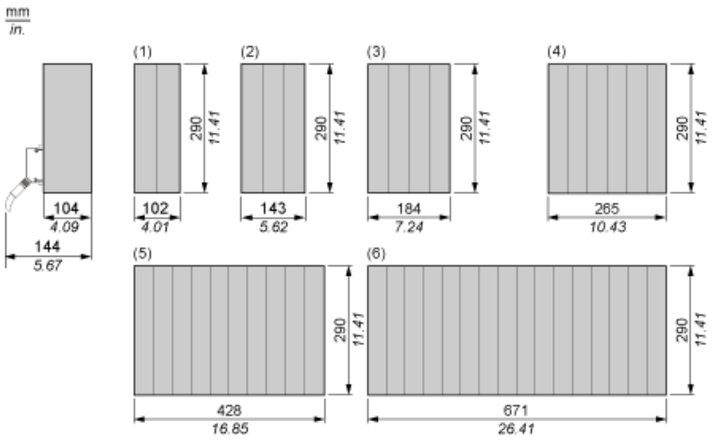
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months

Racks for Modules Mounting

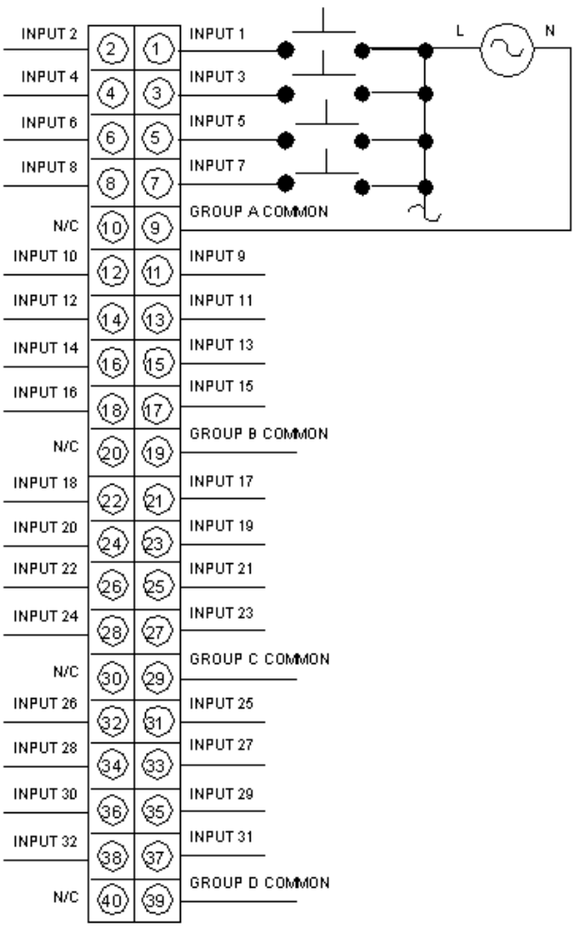
Dimensions of Modules and Racks



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

48 Vac Discrete Input Module

Wiring Diagram



N/C Not Connected

Recommended replacement(s)

140DAI45300 is replaced by:

1x 

discrete input module X80 - 16 inputs - 48V AC - severe

BMXDAI1603H