

Module Class	Module Part Number	Module Coding	Terminal Strip Coding
230 VAC	140 DAI 740 00	ADF	BCE
	140 DAO 840 00		
	140 DAO 842 10		
	140 DRA 840 00		
Relay	140 DRC 830 00	AEF	BCD
Analog I/O	140 ACI 030 00	BCD	AEF
	140 SAI 940 00S		
	140 AVI 030 00		
	140 ACO 020 00	BCE	ADF
	140 AVO 020 00	BCF	ADE
TC In / RTD / PT100 In	140 ARI 030 10	BDE	ACF
	140 ATI 030 00		
Analog In/Out	140 AMM 090 00	BDF	ACE
Intelligent/ Special Purpose	140 EHC 105 00	BEF	ACD
	140 EHC 202 00		
	Unassigned	CDE	ABF
	Unassigned	CDF	ABE
	Unassigned	CEF	ABD
	Unassigned	DEF	ABC

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	140 CFA 040 00	140 CFB 032 00	140 CFC 032 00	140 CFD 004 00	140 CFE 032 00	140 CFG 016 00	140 CFH 008 00	140 CFI 008 00	140 CFJ 004 00	140 CFK 004 00
140 ACI 030 00	X						X	X		
140 ACO 020 00	X								X	X
140 ACI 040 00	X									
140 ACO 130 00	X									
140 ARI 030 10	X									
140 ATI 030 00	X (see note 3)									
140 AMM 090 00	X									
14 AVI 030 00	X						X	X		
140 AVO 020 00	X									X
140 DAI 340 00	X					X				
140 DAI 353 00	X	X	X	X						
140 DAI 440 00	X					X				
140 DAI 453 00	X	X	X	X						
140 DAI 540 00	X					X				
140 DAI 543 00	X									
140 DAI 553 00	X	X	X	X						
140 DAI 740 00	CableFast not allowed									
140 DAI 753 00										
140 DAM 590 00	X see note 1									
140 DAO 840 00	–					X (see note 2)				
140 DAO 840 10						X (see note 2)				
140 DAO 842 10	–					X (see note 2)				
140 DAO 842 20	–					X (see note 2)				
140 DAO 853 00	X see note 1									
140 DDI 153 10	X		X							
140 DDI 364 00	not compatible with cable fast. See in the related chapter of the I/O reference guide for recommended cables									

Agency Approvals: I/O

I/O Table

The following table provides the agency approvals and conformal coating availability for the I/O of the indicated Quantum products

Quantum Part Numbers	Availability of a conformal coated version	Agency Approval Status				
		UL 508	c-UL (UL for Canada)	CSA 22.2-142	FM Class I, Div 2	CE
140 ACI 030 00	y	y	y	y	y	y
140 ACI 040 00	y	y	y	y	y	y
140 ACO 020 00	y	y	y	y	y	y
140 ACO 130 00	y	y	y	y	y	y
140 AII 330 00	y	y	y	y	y	y
140 AII 330 10	y	y	y	y	y	y
140 AIO 330 00	y	y	y	y	y	y
140 AMM 090 00	y	y	y	y	y	y
140 ARI 030 10	y	y	y	y	y	y
140 ATI 030 00	y	y	y	y	y	y
140 AVI 030 00	y	y	y	y	y	y
140 AVO 020 00	y	y	y	y	y	y
140 DAI 340 00	y	y	y	y	y	y
140 DAI 353 00	y	y	y	y	y	y
140 DAI 440 00	y	y	y	y	y	y
140 DAI 453 00	y	y	y	y	y	y
140 DAI 540 00	y	y	y	y	y	y
140 DAI 543 00	y	y	y	y	y	y
140 DAI 553 00	y	y	y	y	y	y
140 DAI 740 00	y	y	y	y	y	y
140 DAI 753 00	y	y	y	y	n	y
140 DAM 590 00	y	y	y	y	y	y
140 DAO 840 00	y	y	y	y	y	y
140 DAO 840 10	y	y	y	y	y	y
140 DAO 842 10	y	y	y	y	y	y
140 DAO 842 20	y	y	y	y	y	y
140 DAO 853 00	y	y	y	y	n	y
140 DDI 153 10	y	y	y	y	y	y

I/O Module Specifications

I/O Modules with Operating Voltages Less than 24 V

Fast transients (IEC 1000-4-4)	0.5 kV common mode
Damped oscillatory transients	1 kV common mode
	0.5 kV differential mode
Surge withstand capability (transients) (IEC 1000-4-5)	1 kV common mode
	0.5 kV differential mode

I/O Modules with 24 to 48 V Operating Voltages

Fast transients (IEC 1000-4-4)	1 kV
Damped oscillatory transients	2 kV common mode
	1 kV differential mode
Surge withstand capability (transients) (IEC 1000-4-5)	1 kV common mode
	0.5 kV differential mode

I/O Modules with Operating Voltages Greater than 48 V

Fast transients (IEC 1000-4-4)	2 kV
Damped oscillatory transients	2 kV common mode
	1 kV differential mode
Surge withstand capability (transients) (IEC 1000-4-5)	2 kV common mode
	1 kV differential mode

Operating and Storage Conditions

Operating Conditions

Temperature	0 ... 60 °C (32 ... 140 °F)
Humidity	90 ... 95% RH non-condensing at 6 °C
Chemical interactions	Enclosures and terminal strips are made of polycarbonates. This material can be damaged by strong alkalis and various hydrocarbons, esters, halogens and ketones in combination with heat. Common products containing these include detergents, PVC products, petroleum products, pesticides, disinfectants, paint removers, and spray paints.
Altitude	2,000 m. When the altitude exceeds this, reduce the 60 °C maximum operating temperature by 6 °C/1000 m of additional elevation.
Vibration	10 ... 57 Hz at 0.075 mm constant displacement amplitude 57 ... 150 Hz at 1 g
Shock	+/-15 g peak, 11 ms, half-sine wave

Storage Conditions

Temperature	-40 ... 85 °C. C -40 ... 185 °F
Humidity	0 ... 95% RH noncondensing at 60 °C
Free Fall	1 m (3 ft)

Gas Resistance in Conformally Coated Modules

This table shows the results of the mixed flowing gas test, 22 days exposure

Standard	Gas	Test Requirement	Actual Exposure
EIA364-65 Level III	CL2 (chlorine)	20 PPB, +/- 5 PPB	20 PPB
	NO2 (nitric oxide)	200 PPB, +/- 50 PPB	1250 PPB
	H2S (hydrogen sulfide)	100 PPB, +/- 20 PPB	100 PPB
	SO2 (sulfur oxide)	N/A	300 PPB
ISA-S71.04 (GX Severe)	CL2 (chlorine)	10 PPB	20 PPB
	NO2 ((nitric oxide)	1250 PPB	1250 PPB
	H2S (hydrogen sulfide)	50 PPB	100 PPB
	O2 (sulfur oxide)	300 PPB	300 PPB