

# Product data sheet

Specifications



## multifunction input module - Modicon Quantum - 32 I - IRIG-B - DCF77

140ERT85420C

⚠ Discontinued - Service only

⚠ Discontinued on: Dec 31, 2021

⚠ To be end-of-service on: Dec 31, 2029

### Main

Range Of Product	Modicon Quantum automation platform
Product Or Component Type	Multifunction input module
Number Of Terminals	40

### Complementary

Function Of Module	Status logging counting 500 Hz Time and date stamped event logging Status monitoring on discrete inputs
Time Synchronisation Protocol	IRIG-B DCF77
Product Compatibility	Unity Pro V4.1 - without IRIG-B or TXSNTP100 function Unity Pro V5.0 - without IRIG-B or TXSNTP100 function Unity Pro V6.0 - without IRIG-B or TXSNTP100 function Unity Pro V7.0
Group Of Channels	2 groups of 16 inputs for process input
Discrete Input Number	1 discrete input(s) at 24 V for clock signal input 32 discrete input(s) at 24...125 V for process input
Switching Voltage	125 V at 1 mA for process input 24 V at 6 mA for process input 48 V at 2.5 mA for process input 60 V at 2.5 mA for process input
Maximum Power Consumption In W	7.5 W for process input
Insulation	By optocoupler for clock signal input
Insulation Between Group Of Channels	By optocoupler
Anti Bounce Filtering	Configurable from 0 to 255 ms
Input State	Inversion configurable
Acquisition Time	1 ms for clock signal input
Input Current	5 mA for clock signal input
Electrical Connection	Cable - shielded cable <600 m for process input Cable - unshielded cable <600 m for process input
Connections - Terminals	Screw terminal block
Local Signalling	1 LED (green) for communication on the bus (Active) 1 LED (green) for self test OK, module ready (R) 1 LED (red) for fault (F) 32 LEDs for status of inputs (1 to 32)
Current Consumption	300 mA at 5 V DC bus 20 mA at 24...125 V DC external power supply per group of channel

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

Module Format	Standard
Net Weight	0.45 kg

## Environment

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
Protective Treatment	TC Conformal coating Humiseal 1A33
Standards	HazLoc UL 508
Product Certifications	LR GOST CSA Class 1 Division 2 UL C-Tick Merchant Navy

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.0 cm
Package 1 Width	16.5 cm
Package 1 Length	31.5 cm
Package 1 Weight	441.0 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	1.308 kg

## Contractual warranty

Warranty	18 months
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# 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.

[Learn more about Green Premium >](#)

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

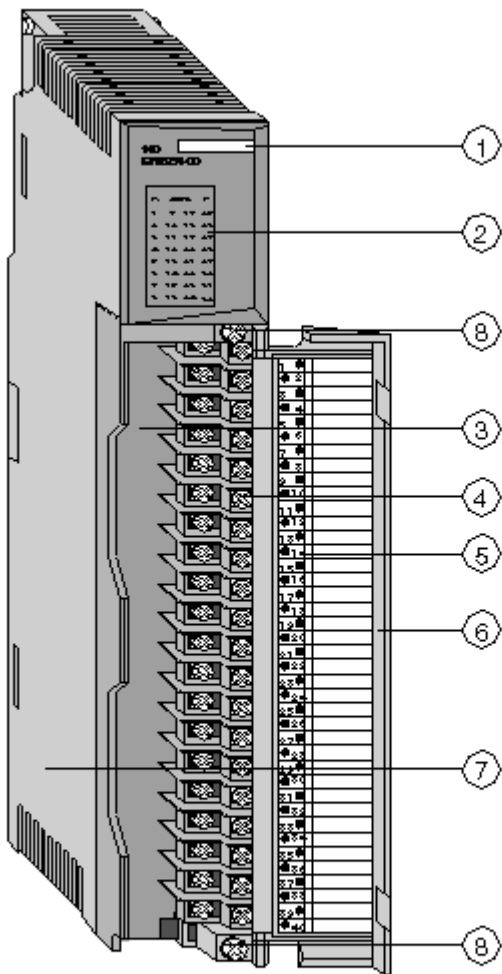
## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
China Rohs Regulation	<a href="#">China RoHS declaration</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>

Presentation

Presentation

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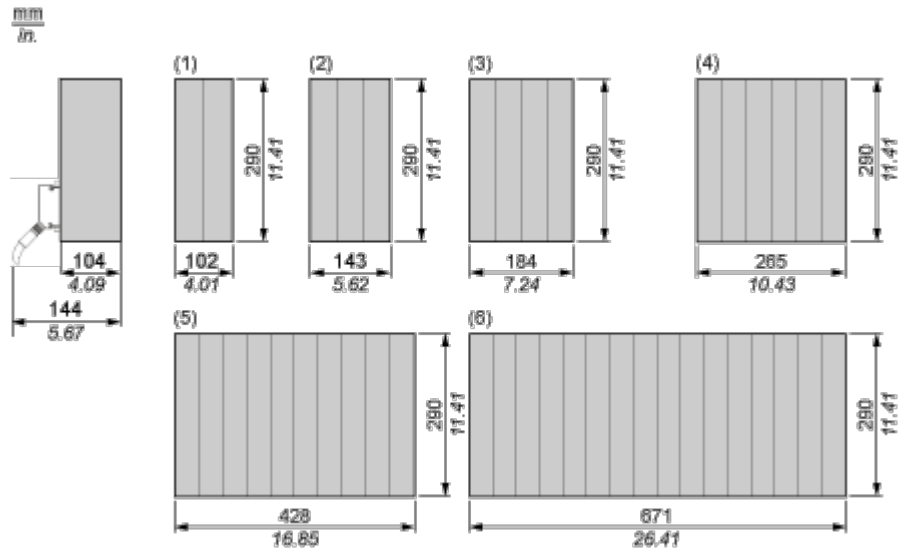
Location of Operating Elements

- 1 Color Code
- 2 Display field (LEDs)
- 3 Terminal Block
- 4 Connection terminals
- 5 Sliding Label (inside)
- 6 Cover for the terminal blocks
- 7 Standard housing
- 8 Screws for terminal block

Dimensions Drawings

Racks for Modules Mounting

Dimensions of Modules and Racks

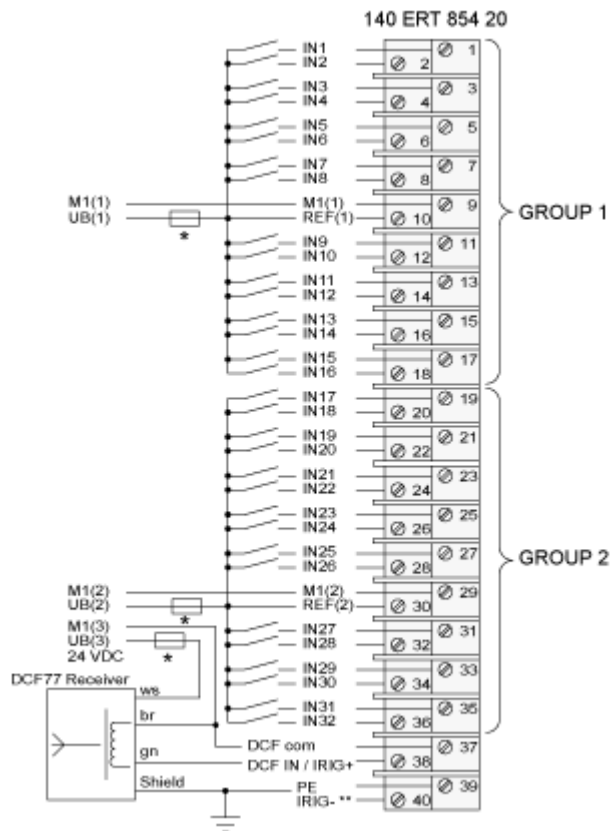


- (1) 2 slots
- (2) 3 slots
- (3) 4 slots
- (4) 6 slots
- (5) 10 slots
- (6) 16 slots

Connections and Schema

Multifunction Input Module

Connecting the DCF77E Time Receiver

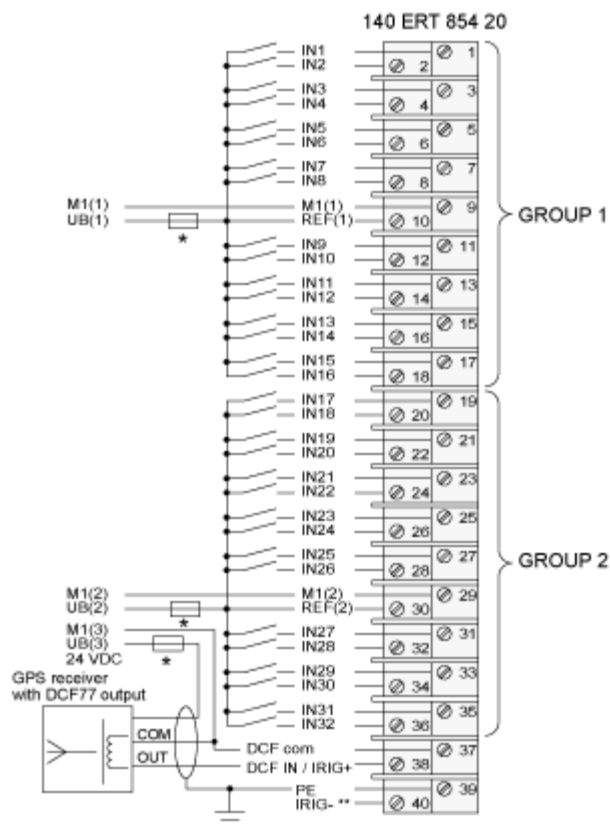


M1(1), M1(2), M1(3) : 0 VDC

\* UB(1), UB(2):24...125 VDC, UB(3): 24 VDC separate protection recommended

\*\* not connected

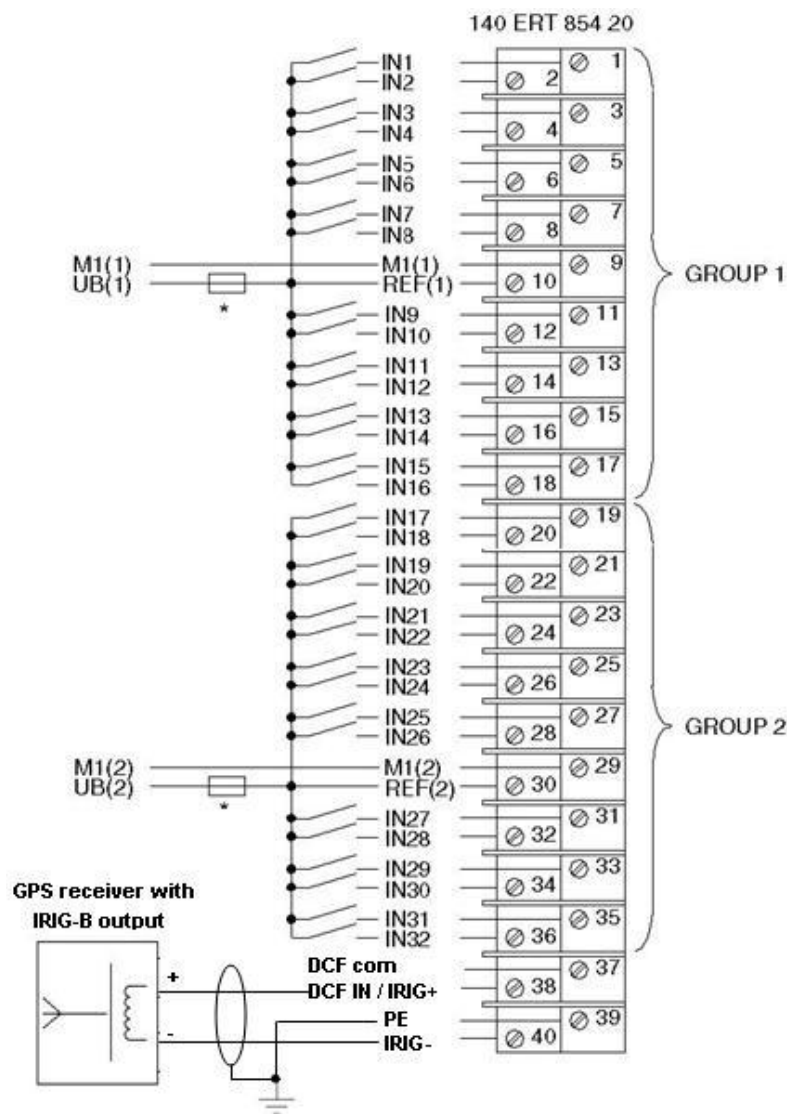
Connecting the DCF77 of GPS Time Receiver



M1(1), M1(2), M1(3) : 0 VDC

- \* UB(1), UB(2):24...125 VDC, UB(3): 24 VDC separate protection recommended
- \*\* not connected

Connecting the IRIG-B of GPS Time Receiver



M1(1), M1(2) : 0 VDC

\* UB(1), UB(2):24...125 VDC separate protection recommended