



### Main

Range of product	Modicon Quantum automation platform
Product or component type	Multifunction input module
Number of terminals	<= 40

### Complementary

Function of module	Status monitoring on discrete inputs Time and date stamped event logging Status logging counting 500 Hz
Time synchronisation protocol	DCF77 IRIG-B
Product compatibility	Unity Pro V5.0 - without IRIG-B or TXSNTP100 function Unity Pro V7.0 Unity Pro V4.1 - without IRIG-B or TXSNTP100 function Unity Pro V6.0 - without IRIG-B or TXSNTP100 function
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
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	Shielded cable cable 600 m for process input Unshielded cable 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

Module format	Standard
Product weight	0.45 kg

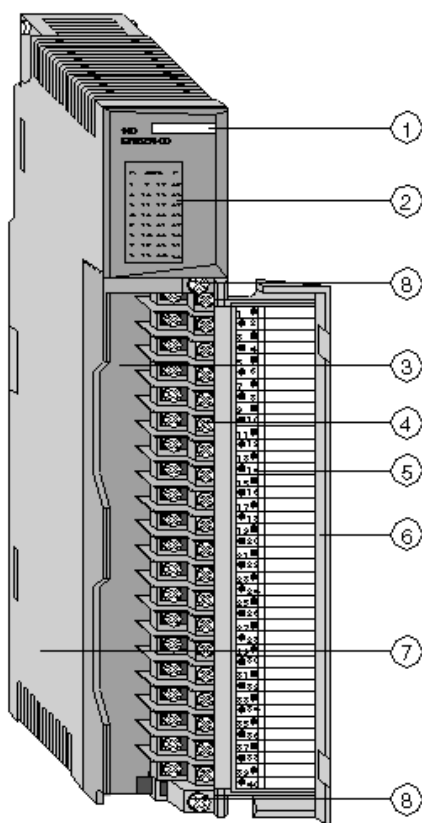
## Environment

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 at 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	UL 508 HazLoc
Product certifications	UL Merchant Navy CSA Class 1 Division 2 GOST C-Tick LR

## Contractual warranty

Warranty period	18 months
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Presentation



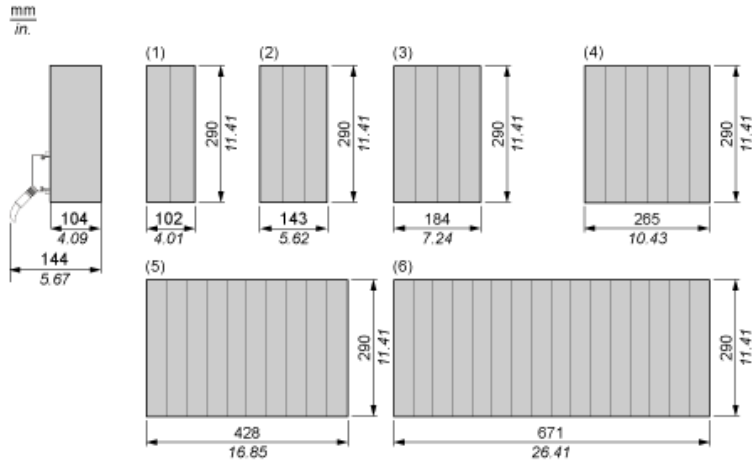
Location of Operating Elements

- 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

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Racks for Modules Mounting

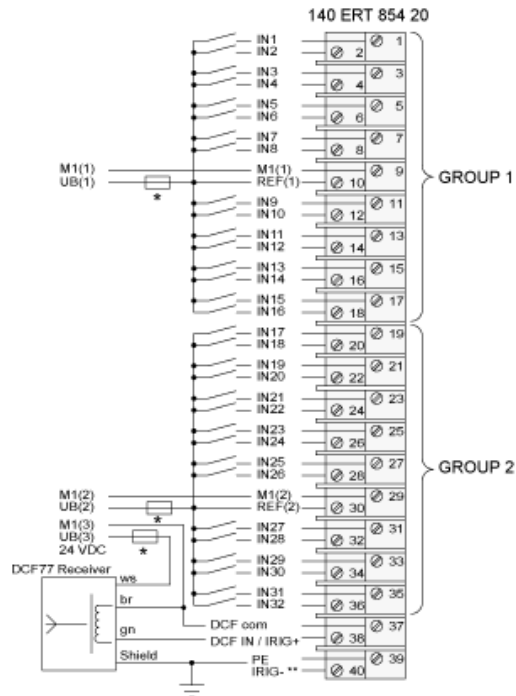
Dimensions of Modules and Racks



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

Multifunction Input Module

Connecting the DCF77E Time Receiver



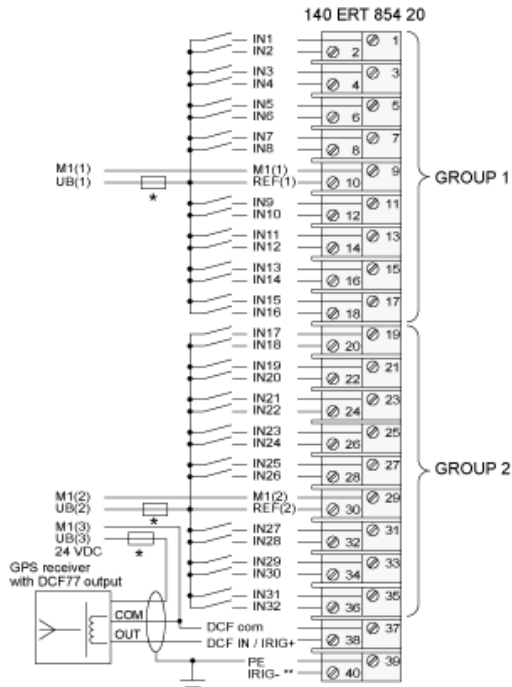
M1(1), M1(2), M1(3) : 0 VDC

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

\*\* not connected

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## 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