

140ERT85410C

multifunction input module - Modicon Quantum
- 32 I - DCF77



Main

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

Complementary

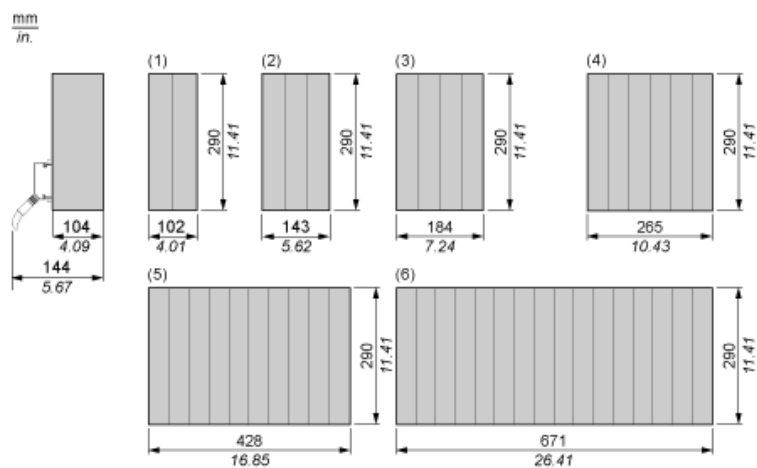
Function of module	Status logging counting 500 Hz Status monitoring on discrete inputs Time and date stamped event logging
Time synchronisation protocol	DCF77
Product compatibility	Unity Pro Concept
Group of channels	2 groups of 16 inputs for process input
Discrete input number	32 discrete input(s) at 24...125 V for process input 1 discrete input(s) at 24 V for clock signal input
Switching voltage	60 V at 2.5 mA for process input 48 V at 2.5 mA for process input 24 V at 6 mA for process input 125 V at 1 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	Unshielded cable cable, cable length: <= 400 m for process input Shielded cable cable, cable length: <= 600 m for process input
Connections - terminals	Screw terminal block
Local signalling	32 LEDs for status of inputs (1 to 32) 1 LED red for fault (F) 1 LED green for self test OK, module ready (R) 1 LED green for communication on the bus (Active)
Current consumption	300 mA at 5 V DC bus 3 mA at 24...125 V DC external power supply per group of channel 0.07 mA at 24 V DC 140XCP90000 module
Module format	Standard
Product weight	0.45 kg

Environment

Resistance to electrostatic discharge	8 kV on air conforming to IEC 801-2 4 kV contact 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	Conformal coating Humiseal 1A33 TC
Standards	HazLoc UL 508
Product certifications	CSA Class 1 Division 2 C-Tick GOST LR UL Merchant Navy

Racks for Modules Mounting

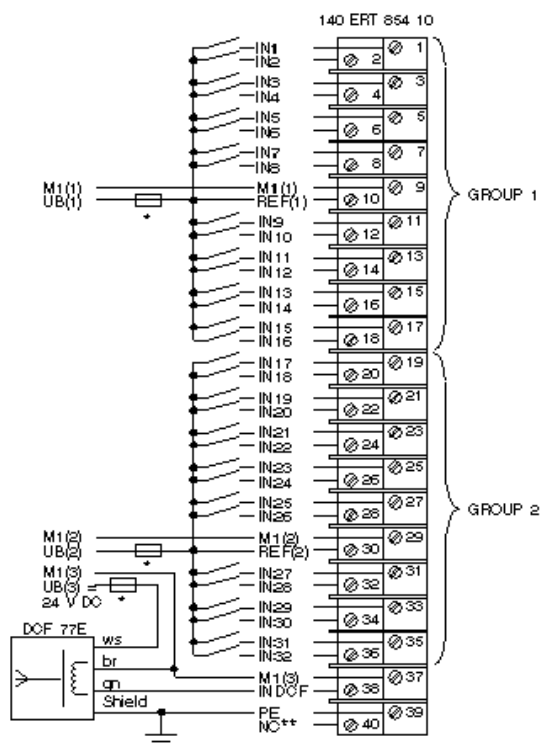
Dimensions of Modules and Racks



- (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

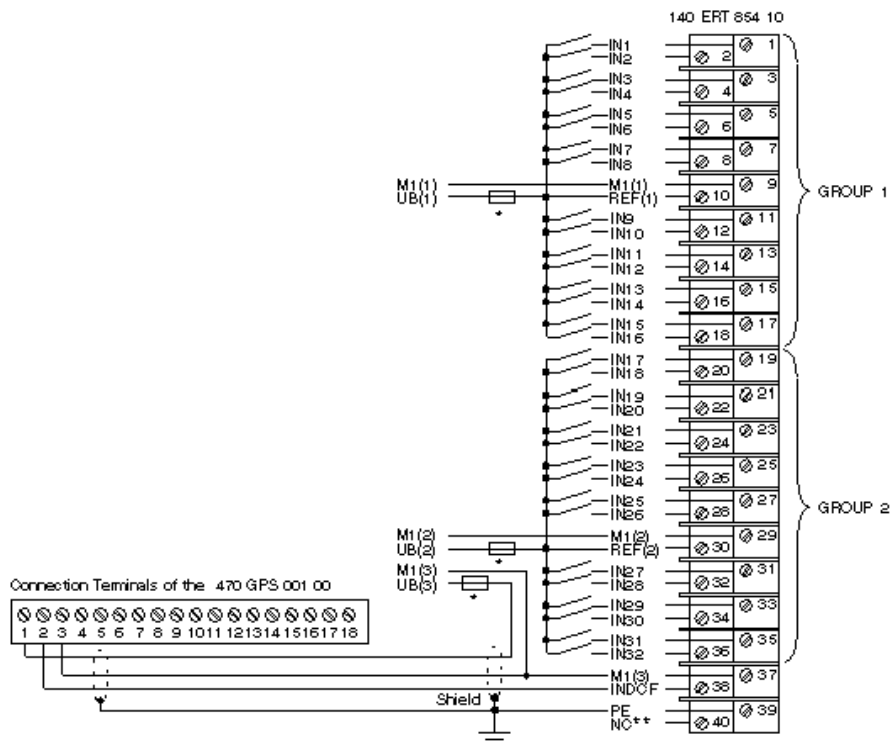


M1(1), M1(2), M1(3) : 0 VDC

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

** not connected, suitable for support clamp for UB(3)

Connecting the GPS001 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, suitable for support clamp for UB(3)