I/O distributed module OTB - Ethernet TCP/IP - 0..100 m



Main Range of product Modicon OTB Product or component I/O distributed module Integrated connection Ethernet TCP/IP RJ45, transmission mode: 1 twisted pairat 10/100 Mbit/s, web server transparent type ready class A10 Discrete input number 12 conforming to EN/IEC 61131 type 1 Discrete input logic Sink or source Discrete input current 7 mA for I8...I11 7 mA for I2...I5 5 mA for I6...I7 5 mA for I0...I1 Discrete output number 6 relay for Q2...Q7

300 mA solid state

2000 mA relay

2 solid state PNP for Q0...Q1 output logic: source

Complementary

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Concept	Transparent Ready
Port Ethernet	10BASE-T/10BASE-TX
Bus length	0100 m, copper
Number of devices per segment	0256
Communication service	Modbus messaging
Web services	No standard Web server
Discrete input voltage	24 V
Discrete input voltage type	DC
Discrete input type	NPN or PNP
Input voltage limits	20.426.4 V
Electronic filtering time	0.15 ms for I8I11 at state 0 0.15 ms for I2I5 at state 0 0.045 ms for I6I7 at state 0 0.045 ms for I0I1 at state 0 0.04 ms for I8I11 at state 1 0.04 ms for I2I5 at state 1 0.035 ms for I6I7 at state 1 0.035 ms for I0I1 at state 1
Configurable filtering time	0 ms 12 ms 3 ms
Input impedance	5.7 kOhm for I6I7 5.7 kOhm for I0I1 3.4 kOhm for I8I11 3.4 kOhm for I2I5
Discrete output voltage	30 V DC relay 240 V AC relay 24 V DC solid state
Output voltage limits	20.428.8 V solid state
Output current limits	360 mA solid state
Current per output common	<= 0.72 A solid state 8 A relay
Current consumption	5 mA at 5 V DC (at state 0) relay output 40 mA at 24 V DC (at state 1) relay output 30 mA at 5 V DC (at state 1) relay output
Output overvoltage protection	3840 V
Tungsten load	8 W for solid state

Discrete output current

Response time	5 µs at state 1 for solid state 5 µs at state 0 for solid state 300 µs at state 1 for relay 300 µs at state 0 for relay
Switchable load	>= 0.1 mA
Contact bounce time	<= 1 ms for relay
Leakage current	<= 0.1 mA at state 0 for solid state
Drop-out voltage	<= 1 V at state 1
Insulation between channels and internal logic	500 Vrms for 1 minute for solid state output 500 Vrms for 1 minute for input circuit 1500 Vrms for 1 minute for relay output
Insulation between channels	None
Contact resistance	<= 30 mOhm
Electrical durability	500000 cycles DC-13 with 30 W load for relay output 500000 cycles DC-1 with 60 W load for relay output 500000 cycles AC-15 with 200 VA load for relay output 500000 cycles AC-14 with 250 VA load for relay output 500000 cycles AC-1 with 500 VA load for relay output
Supply circuit type	DC
[Us] rated supply voltage	24 V
Supply voltage limits	20.426.2 V
Input current	<= 700 mA at 26.2 V for supply circuit
Inrush current	<= 50 A for supply circuit <= 1 A for solid state output
Power consumption	19 W
Number of I/O expansion module	07
I/O expansion capacity	7 x 8I or 7 x 2I or 7 x (4I/2O) with screw terminal analogue I/O module(s) 244 with HE10 connector discrete I/O module(s) 188 with spring terminal discrete I/O module(s) 132 with screw terminal discrete I/O module(s)
Insulation resistance	>= 10 mOhm between power supply and earth >= 10 mOhm between I/O and earth terminals
I/O connection	Removable screw terminal block
Number of common point	1 for solid state output 1 for relay output (3 NO) 1 for relay output (2 NO) 1 for relay output (1 NO) 1 for input
Counting input number	2
Counting capacity	32 bits
Counting frequency	20000 Hz 5000 Hz
Pulse generator number	2
Pulse generator frequency	7 kHz
Pulse generator function	RPLS pulse generator output RPWM pulse width modulation
Marking	CE
Fixing mode	By screws on solid plate with fixing kit By screws on panel with fixing kit By clips on 35 mm symmetrical DIN rail
Status LED	1 LED, yellow for STAT 1 LED, yellow for 100T 1 LED, green for PWR 1 LED, green for 10T 1 LED per channel, green for I/O
Product weight	0.185 kg



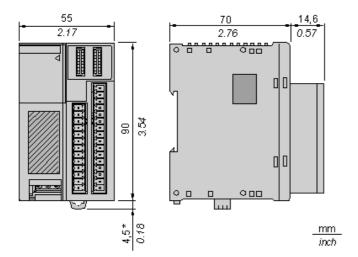
Environment

IP degree of protection	IP20
Immunity to microbreaks	10 ms for supply circuit
Dielectric strength	500 V between power supply and earth 500 V between I/O and earth terminals
Standards	CSA EN 61131-2 IEC 61131-2 UL 508 CSA C22.2 No 213 Class I Division 2 Group A CSA C22.2 No 213 Class I Division 2 Group B CSA C22.2 No 213 Class I Division 2 Group C CSA C22.2 No 213 Class I Division 2 Group C CSA C22.2 No 213 Class I Division 2 Group D
Product certifications	CULus
Ambient air temperature for operation	055 °C
Ambient air temperature for storage	-2570 °C
Relative humidity	3095 % without condensation
Pollution degree	2 conforming to IEC 60664 2 conforming to EN 60664
Operating altitude	02000 m
Storage altitude	03000 m
Vibration resistance	1 gn (f = 57150 Hz) on 35 mm symmetrical DIN rail 0.075 mm (f = 1057 Hz) on 35 mm symmetrical DIN rail
Shock resistance	15 gn for 11 ms conforming to IEC 61131 15 gn for 11 ms conforming to EN 61131
Resistance to electrostatic discharge	4 kV in contact conforming to EN 61000-4-2 8 kV in air conforming to IEC 61000-4-2 8 kV in air conforming to EN 61000-4-2 4 kV in contact conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/m, 800000002000000000 Hz conforming to IEC 61000-4-3 10 V/m, 800000002000000000 Hz conforming to EN 61000-4-3
Resistance to fast transients	2 kV for 24 V supply conforming to IEC 61000-4-4 1 kV for 24 V solid state I/O conforming to IEC 61000-4-4



Network Interface Module

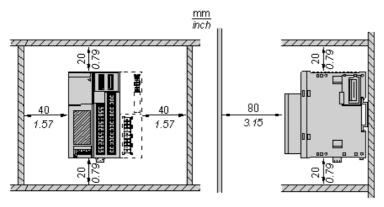
Dimensions



NOTE: * 8.5 mm (0.33 in) when the clamp is pulled out.

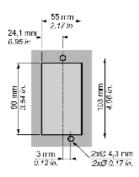
Mounting an Island on a Panel or in a Cabinet

Spacing Requirements



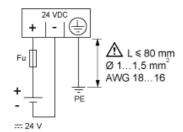
Panel Mounting

Position of the Mounting Holes for the Network Interface Module



24 Vdc Power Supply

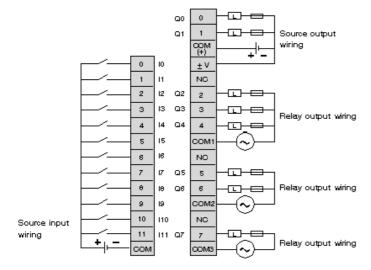
Wiring Diagram



Fu 2 A fast-blow fuse ABE7FU200

Network Interface Module

Wiring Diagram



- Output points 0 and 1 are source transistor outputs, all other output points are relay.
- The COM terminals are not connected together internally.
- Connect an appropriate fuse for the load.