TSXEMF16DT2

discrete I/O module - 1 group of 8 inputs/2 groups of 4outputs - 24 V DC - IP67

⚠ Restricted Sales for Services
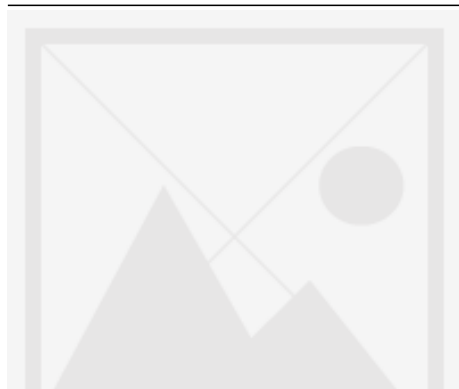
has not been replaced. Please contact your customer care center for more information.

Main

Range of product	Modicon Premium Automation platform
Product or component type	Discrete input/output module on Fipio
Discrete I/O number	16
Group of channels	1 group of 8 inputs 2 groups of 4 outputs
Discrete input number	8 conforming to EN/IEC 61131 type 2
Input compatibility	With 2-wire/3-wire proximity sensors

Complementary

Discrete input voltage	24 V DC
Discrete input logic	Positive
Discrete input current	7 mA
Sensor power supply	19.2…30 V
Voltage state 0 guaranteed	<= 5 V
Voltage state 1 guaranteed	>= 11 V
Current state 0 guaranteed	<= 2 mA
Current state 1 guaranteed	>= 6 mA 11 V
Response time	3.5 ms from state 0 to 1 on input 3.5 ms from state 1 to 0 on input
Power supply monitoring	14…18 V DC preactuator 14…18 V DC sensor
Discrete output number	8
Discrete output type	Solid state
Discrete output voltage	24 V DC
Output voltage limits	19.2...30 V
Discrete output current	0.5 A
Maximum output current	0.625 A at 60 °C per channel 1.2 A at 40 °C per group of 4 channels 2 A per group of 4 channels
Maximum leakage current	1 mA at state 0
[Ures] residual voltage	0.5 V at state 1 on output
Response time on output	< 0.5 ms resistive
Short-circuit protection	1.5 A by thermal circuit breaker on output 350 mA per 4 channels group on input

Jan 7, 2020

Output overload protection	1.5 A by thermal circuit breaker on output
Output overvoltage protection	By transil diode
Isolation between channels	None
Isolation voltage	500 V AC between bus and internal logic
Isolation between output channels group	60 Vrms AC
Isolation between channels and internal logic	60 Vrms AC
Isolation between input channel and output channel	60 V AC
Local signalling	3 LEDsmodule operation and integrated communication: 16 LEDschannels status: 1 LEDsensor power supply fault: 2 LEDspreactuator power supply:
Electrical connection	1 connector dust and damp proof male M23 for Fipio bus connctn, 24V DC power supply for sensor & internal electric of mod 1 connector male 7/8 inch for 2 24 V DC preactuators power supplies 8 connectors female M12 4 for connecting sensors and 4 for preactuators
Operating position	Any position
Marking	CE
Current consumption	80 mA 24 V DC 5 outputs at state 1
Net weight	0.54 kg

Environment

|	
IP degree of protection	IP67
Weatherproofness level	Dust and damp proof
Ambient air temperature for operation	0…60 °C
Ambient air temperature for storage	-25…70 °C
Operating altitude	0...2000 m
Shock resistance	15 gn for 11 ms
Standards	DIN EN/IEC 61131 CNOMO
Product certifications	CSA UL Fipio

Contractual warranty

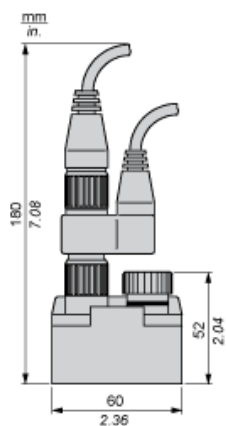|	
Warranty	18 months

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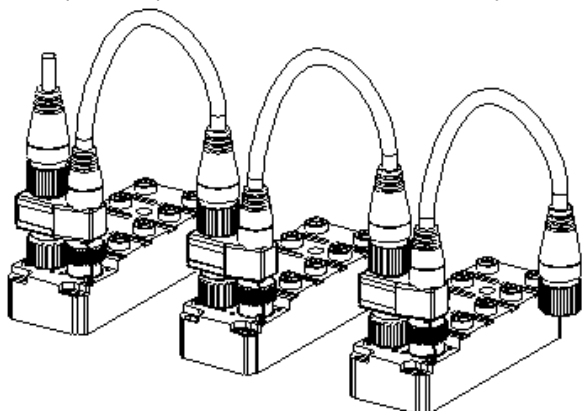## IP 67 Module

Dimensions

Horizontal dimensions
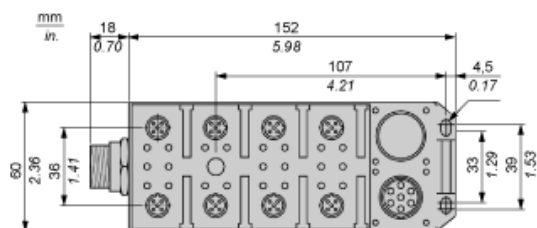
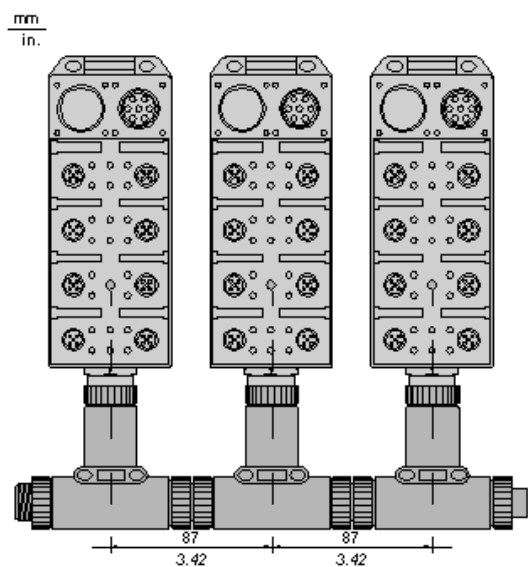Vertical dimensions including TSXEFACC•••• connector

Installation Principles

The input or output modules can be mounted side-by-side, whilst maintaining a distance of 87 mm/3.42 in. in between the axes of consecutive modules.
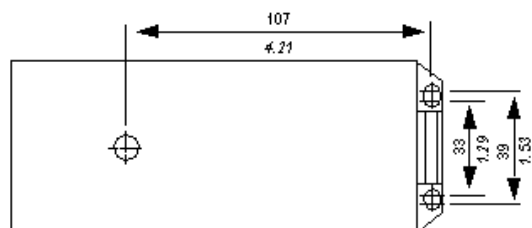
The use of a T connection for the output power supplies requires a minimum distance of 87 mm/3.42 in. in between two modules.
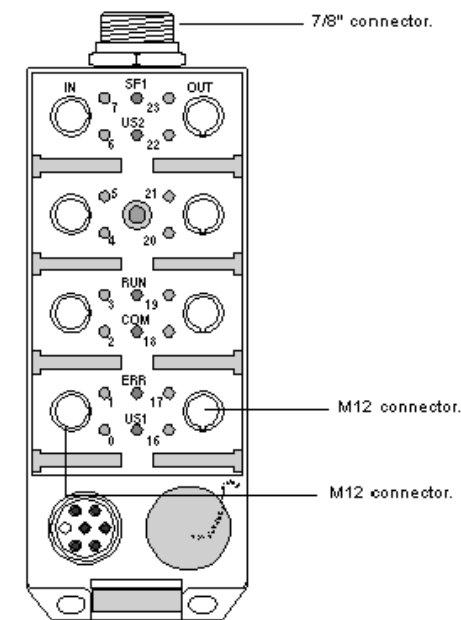
mm
in.

87
3.42

87
3.42

Mounting

Location of Drill Holes

$\dfrac{mm}{in.}$

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Connection of Module Inputs and Outputs

Each group of two inputs or two outputs of the module uses an M12 connector (two inputs or outputs per connector).
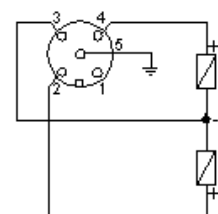

M12 connector (2 outputs)

1	Not Connected
2	Odd output
3	0 VDC
4	Even output
5	Ground

Actuator wiring:

M12 connector (2 inputs).

1	24 VDC

2	Odd sensor input
3	0 VDC
4	Even sensor input
5	Ground

Mechanical contacts:
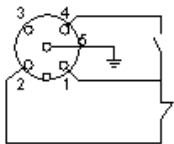
2-wire DDP:
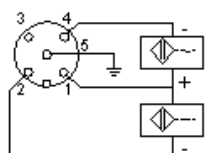
3-wire DDP:
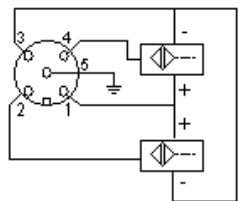
7/8" connector.

1	24 VDC (US1)
2	24 VDC (US2)
3	Ground
4	0 V (US1)
5	0 V (US2)

For the outputs to operate correctly, the two 24 VDC power supplies (US1 and US2) shall be connected to the module via the output power supply connector.

- the outputs 16, 17, 18 and 19 are powered by US1,
- the outputs 20, 21, 22 and 23 are powered by US2.