

Product data sheet

Specifications



expansion module, Modicon MCM, 16 inputs, screw

XPSMCMDI1600

Main

Range of product	Preventa Safety automation
Product or component type	Safe input expansion module
Device short name	XPSMCM
Electrical connection	Screw terminal
[Us] rated supply voltage	24 V - 20...20 % DC
Input type	16 digital
Output type	4 test for line control
Discrete input type	Isolated
Discrete output type	PNP
Function of module	Monitoring safety detection for discrete input Monitoring safety dialogue for discrete input

Complementary

Power consumption in W	3 W
Power dissipation in W	3 W
Integrated connection type	Backplane expansion bus
Number of terminal blocks	6
Connections - terminals	2 captive screw clamp terminals, removable terminal block 1 captive screw clamp terminals, removable terminal block
Safety level	Can reach category 4 conforming to ISO 13849-1 Can reach PL = e conforming to ISO 13849-1 Can reach SIL 3 conforming to IEC 61508 SILCL 3 conforming to IEC 62061
Quality labels	CE
Discrete input voltage	24 V DC
Local signalling	1 LED green with PWR marking for power ON 1 LED green with RUN marking for RUN (status) 1 LED red with E IN marking for internal error 1 LED red with E EX marking for external error 2 LEDs orange with ADDR marking for node address 16 LEDs yellow with IN marking for input status
Cable cross section	0.2...1.5 mm² - AWG 24...AWG 16 flexible cablewithout cable end 0.2...2.5 mm² - AWG 24...AWG 14 flexible cablewithout cable end 0.25...1 mm² - AWG 23...AWG 18 flexible cablewith cable end, without bezel 0.25...2.5 mm² - AWG 23...AWG 14 flexible cablewith cable end, with bezel 0.25...2.5 mm² - AWG 23...AWG 14 flexible cablewith cable end, without bezel 0.5...1.5 mm² - AWG 20...AWG 16 flexible cablewith cable end, with double bezel 0.2...1 mm² - AWG 24...AWG 18 solid cablewithout cable end 0.2...2.5 mm² - AWG 24...AWG 14 solid cablewithout cable end
Mounting support	Omega 35 mm DIN rail conforming to EN 50022

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

Depth	22.5 mm
Height	99 mm
Width	114.5 mm
Product weight	0.25 kg

Environment

Standards	IEC 61800-5-1 IEC 61508 ISO 13849-1 IEC 62061
Product certifications	RCM TÜV cULus
IP degree of protection	IP20 (enclosure)
Ambient air temperature for operation	-10...55 °C
Ambient air temperature for storage	-20...85 °C
Relative humidity	10...95 %
Pollution degree	2
[Uimp] rated impulse withstand voltage	4 kV conforming to IEC 61800-5-1
Safety reliability data	DC > 99 % MTTFd < 100 years high PFHd = 7.09E-9 1/h
Insulation	250 V AC between power supply and housing conforming to IEC 61800-5-1
Overvoltage category	II
Electromagnetic compatibility	Electrostatic discharge immunity test - test level: 6 kV (on contact) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 20 kV (on air) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m (80...1000 MHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 30 V/m (1.4 GHz...2 GHz) conforming to IEC 61000-4-3
Vibration resistance	+/-0.35 mm (f= 10...55 Hz) conforming to IEC 61496-1
Shock resistance	10 gn (duration = 16 ms) for 1000 shocks on each axis conforming to IEC 61496-1
service life	20 year(s)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.400 cm
Package 1 Width	12.800 cm
Package 1 Length	16.400 cm
Package 1 Weight	241.000 g
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	15.000 cm
Package 2 Width	15.000 cm
Package 2 Length	40.000 cm

Package 2 Weight	1.700 kg
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Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Better

 Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
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 www.P65Warnings.ca.gov
PVC free	Yes

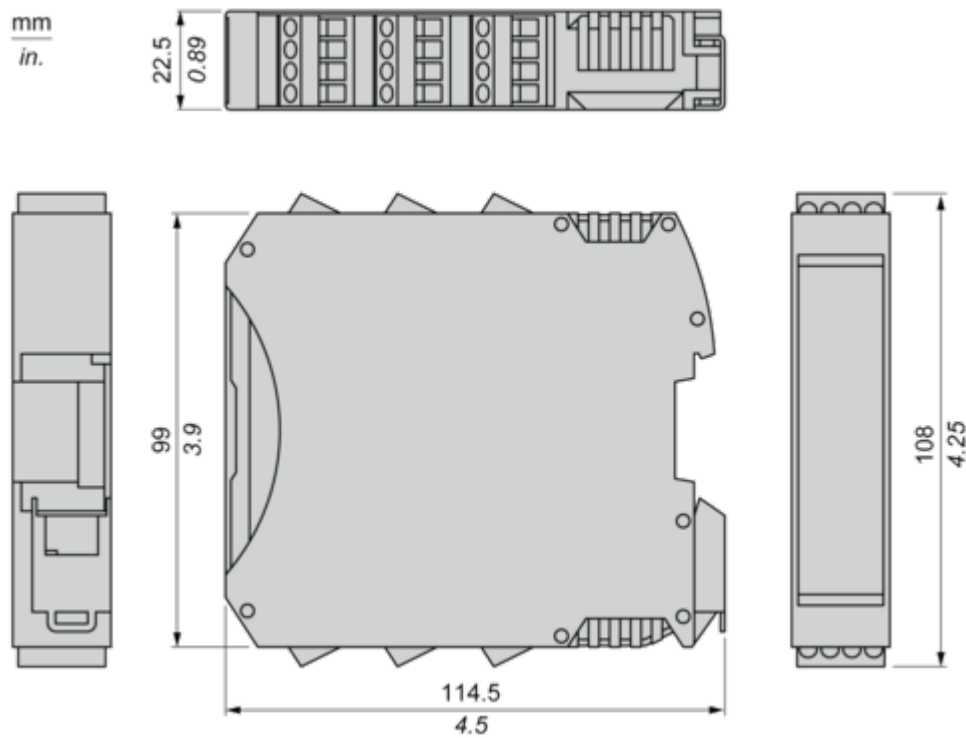
Use Again

 Repack and remanufacture	
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

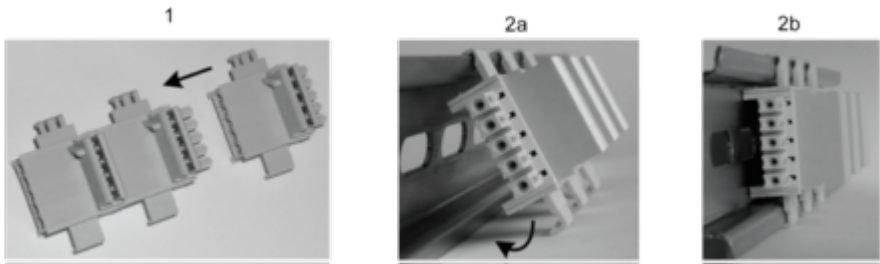
Screw Terminal



Mounting and Clearance

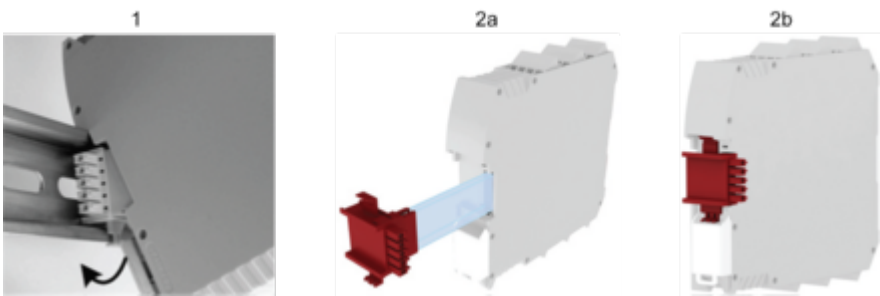
Mounting Safety Controller CPU with Module(s)

Mount BackPlane Connector on Rail



- 1 : Connect as much Backplane Connector as module to be install.
- 2 : Fix the connectors to the rail (Top first).

Mount Safety Controller CPU with Other Module(s)

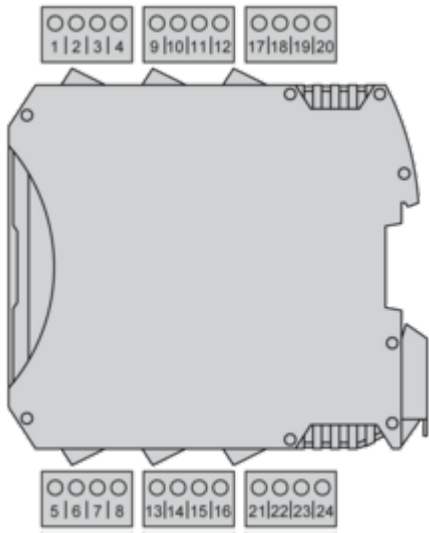


- 1 : Mount controller CPU and modules on rail.
- 2 : Make sure that the controller CPU or the module(s) are plugged on the BackPlane connector.

Connections and Schema

Wiring

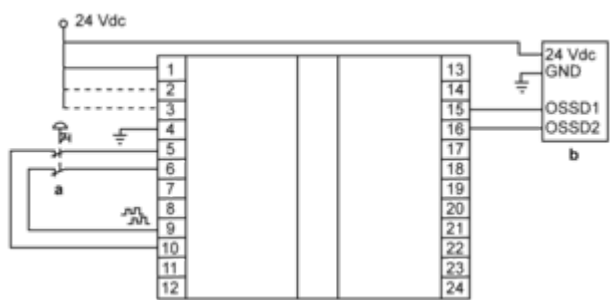
Terminal Designation



Terminal	Signal	Description
1	24 VDC	24 Vdc power supply
2	NODE_ADDR0	Node selection
3	NODE_ADDR1	
4	0 VDC	0 Vdc power supply
5	INPUT1	Digital input 1
6	INPUT2	Digital input 2
7	INPUT3	Digital input 3
8	INPUT4	Digital input 4
9	OUT_TEST1	Short circuit detected output
10	OUT_TEST2	
11	OUT_TEST3	
12	OUT_TEST4	
13	INPUT5	Digital input 5
14	INPUT6	Digital input 6
15	INPUT7	Digital input 7
16	INPUT8	Digital input 8

Terminal	Signal	Description
17	INPUT9	Digital input 9
18	INPUT10	Digital input 10
19	INPUT11	Digital input 11
20	INPUT12	Digital input 12
21	INPUT13	Digital input 13
22	INPUT14	Digital input 14
23	INPUT15	Digital input 15
24	INPUT16	Digital input 16

Wiring Example



- a : Emergency stop
b : Light curtain

Image of product / Alternate images

Alternative

