

Product data sheet

Specifications



expansion module, Modicon MCM, 8
inputs 4 outputs, screw

XPSMCMX0804

Main

Range of product	Preventa Safety automation
Product or component type	Safe mixed I/O expansion module
Device short name	XPSMCM
Electrical connection	Screw terminal
[Us] rated supply voltage	24 V - 20...20 % DC
Input type	8 digital 4 digital for external device monitoring
Output type	4 test for line control 4 safety outputs OSSD for contactor/drive connection 4 configurable for diagnostic connection
Discrete input type	Isolated
Discrete output type	PNP
Function of module	Monitoring safety detection for discrete input Monitoring safety dialogue for discrete input Monitoring safety actuators for discrete output

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
load type	Resistive load
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
Discrete output voltage	24 V DC
Discrete output current	400 mA 100 mA
Output load	60 Ohm

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

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 8 LEDs yellow with IN marking for input status 4 LEDs green/red with OUT marking for output status 4 LEDs yellow with STATUS marking for output 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
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	cULus TÜV RCM
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 = 166 years high PFHd = 1.32E-8 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
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Number of Units in Package 1	1
Package 1 Height	16.0 cm
Package 1 Width	12.5 cm
Package 1 Length	4.3 cm
Package 1 Weight	250.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.766 kg

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

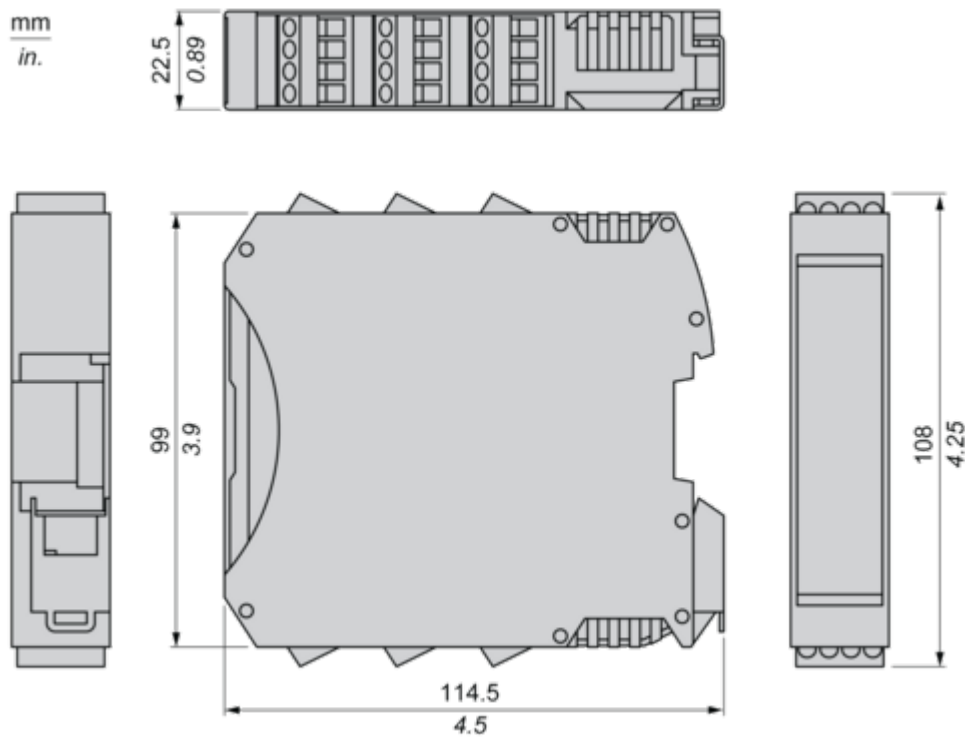
Use Again

 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

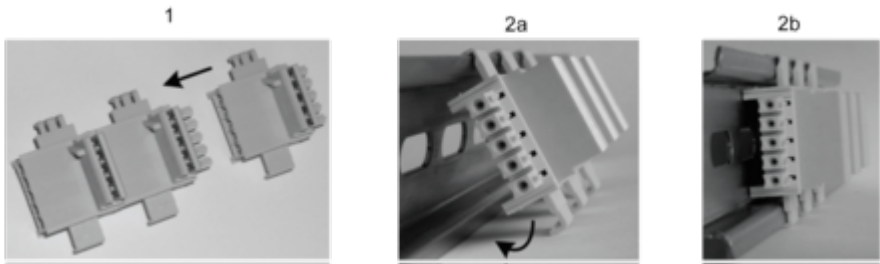
Screw Terminal



Mounting and Clearance

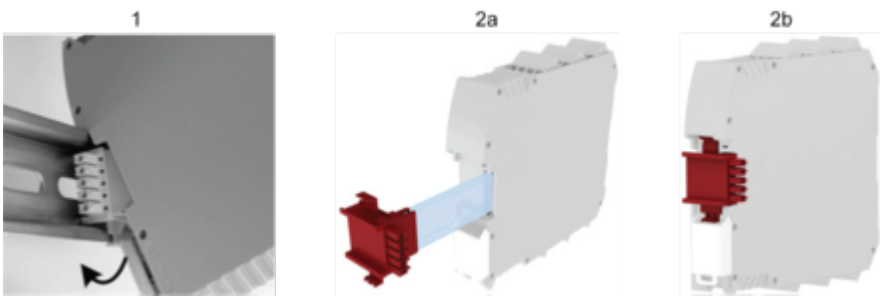
Mounting Safety Controller CPU with Module(s)

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)

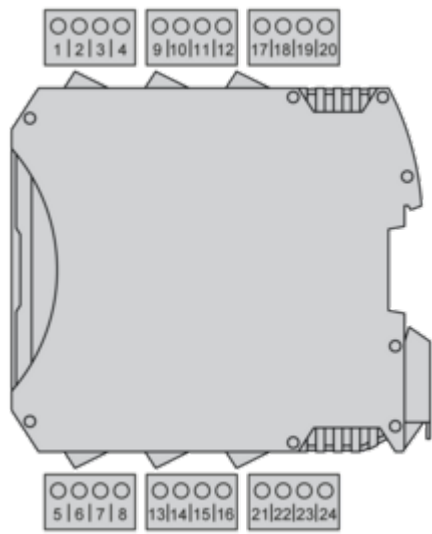


- 1 : Mount controller CPU and modules on rail.
- 2 : Make sure that the controller CPU or the module(s) are plugged on the BackPlane connector.

Connections and Schema

Wiring

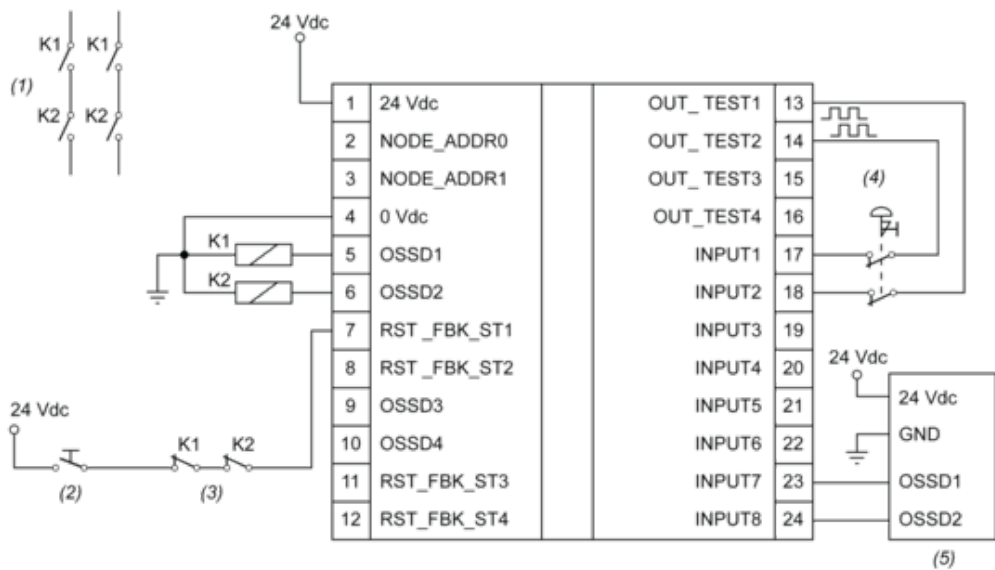
Terminal Designation



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	OSSD1	Safety-related output 1
6	OSSD2	Safety-related output 2
7	RESTART_FBK1/ STATUS1	Feedback/Restart 1 for OSSD1
		Configurable output 1 for OSSD1
8	RESTART_FBK2 / STATUS2	Feedback/Restart 2 for OSSD2
		Configurable output 2 for OSSD2
9	OSSD3	Safety-related output 3
10	OSSD4	Safety-related output 4
11	RESTART_FBK3/ STATUS3	Feedback/Restart 3 for OSSD3
		Configurable output 3 for OSSD3
12	RESTART_FBK4/ STATUS4	Feedback/Restart 4 for OSSD4
		Configurable output 4 for OSSD4

Terminal	Signal	Description
13	OUT_TEST1	Test output for detection of short circuits/cross circuits in input circuits
14	OUT_TEST2	
15	OUT_TEST3	
16	OUT_TEST4	
17	INPUT1	Safety-related input 1
18	INPUT2	Safety-related input 2
19	INPUT3	Safety-related input 3
20	INPUT4	Safety-related input 4
21	INPUT5	Safety-related input 5
22	INPUT6	Safety-related input 6
23	INPUT7	Safety-related input 7
24	INPUT8	Safety-related input 8

Wiring Example



- (1) : Contactors
- (2) : Restart
- (3) : Feedback
- (4) : Emergency stop
- (5) : Light curtain

Image of product / Alternate images

Alternative

