

# Product data sheet

Specifications



## 8 inputs 2 output pairs expansion module with screw term

XPSMCMX0802

### 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
Number of inputs	8 digital 2 digital for external device monitoring
Number of outputs	4 test for line control 2 safety outputs OSSD for contactor/drive connection 2 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 EN/ISO 13849-1 Can reach PL = e conforming to EN/ISO 13849-1 Can reach SIL 3 conforming to EN/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
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  
 2 LEDs green/red with OUT marking for output status  
 2 LEDs yellow with RST marking for restart signal  
 2 LEDs yellow with STATUS marking for output status

<b>Cable cross section</b>	0.2...1.5 mm <sup>2</sup> - AWG 24...AWG 16 flexible cablewithout cable end 0.2...2.5 mm <sup>2</sup> - AWG 24...AWG 14 flexible cablewithout cable end 0.25...1 mm <sup>2</sup> - AWG 23...AWG 18 flexible cablewith cable end, without bezel 0.25...2.5 mm <sup>2</sup> - AWG 23...AWG 14 flexible cablewith cable end, with bezel 0.25...2.5 mm <sup>2</sup> - AWG 23...AWG 14 flexible cablewith cable end, without bezel 0.5...1.5 mm <sup>2</sup> - AWG 20...AWG 16 flexible cablewith cable end, with double bezel 0.2...1 mm <sup>2</sup> - AWG 24...AWG 18 solid cablewithout cable end 0.2...2.5 mm <sup>2</sup> - AWG 24...AWG 14 solid cablewithout cable end
<b>Mounting support</b>	Omega 35 mm DIN rail conforming to EN 50022
<b>Depth</b>	22.5 mm
<b>Height</b>	99 mm
<b>Width</b>	114.5 mm
<b>Net weight</b>	0.25 kg

## Environment

<b>Standards</b>	EN/IEC 61800-5-1 EN/IEC 61508 EN/ISO 13849-1 IEC 62061
<b>Product certifications</b>	cULus TÜV RCM
<b>IP degree of protection</b>	IP20 (enclosure)
<b>Ambient air temperature for operation</b>	-10...55 °C
<b>Ambient air temperature for storage</b>	-20...85 °C
<b>Relative humidity</b>	10...95 %
<b>Pollution degree</b>	2
<b>[Uimp] rated impulse withstand voltage</b>	4 kV conforming to EN/IEC 61800-5-1
<b>Safety reliability data</b>	DC > 99 % MTTFd < 100 years high PFHd = 5.72E-9 1/h
<b>Insulation</b>	250 V AC between power supply and housing conforming to EN/IEC 61800-5-1
<b>Overvoltage category</b>	II
<b>Electromagnetic compatibility</b>	Electrostatic discharge immunity test - test level: 6 kV (on contact) conforming to EN/IEC 61000-4-2 Electrostatic discharge immunity test - test level: 20 kV (on air) conforming to EN/IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m (80...1000 MHz) conforming to EN/IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 30 V/m (1.4 GHz...2 GHz) conforming to EN/IEC 61000-4-3
<b>Vibration resistance</b>	+/-0.35 mm (f= 10...55 Hz) conforming to EN/IEC 61496-1
<b>Shock resistance</b>	10 gn (duration = 16 ms) for 1000 shocks on each axis conforming to EN/IEC 61496-1
<b>Service life</b>	20 year(s)

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.4 cm
<b>Package 1 Width</b>	12.2 cm

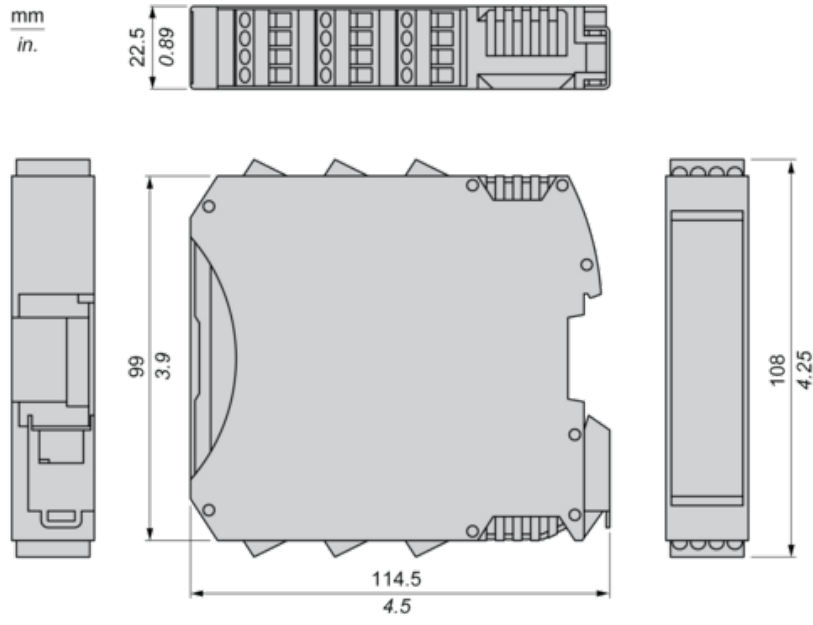
Package 1 Length	16.0 cm
Package 1 Weight	253.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.76 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Dimensions

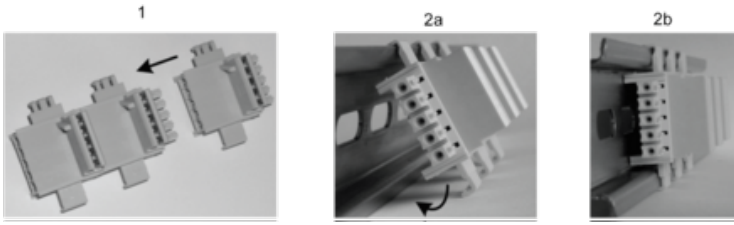
Screw Terminal



**Mounting Safety Controller CPU with Module(s)**

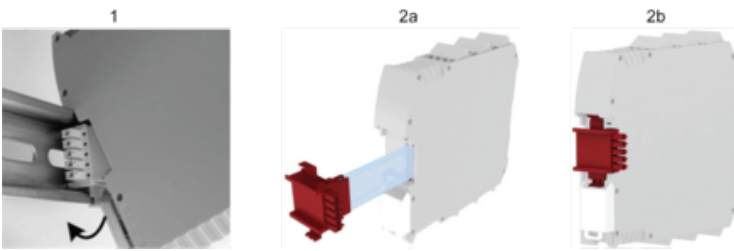
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**Mount BackPlane Connector on Rail**



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

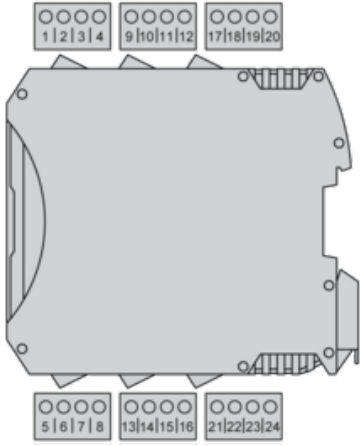
**Mount Safety Controller CPU with Other Module(s)**



- 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.

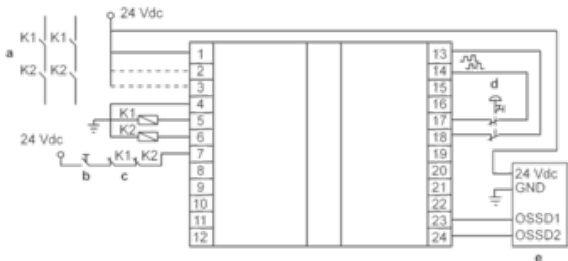
**Wiring**

**Terminal Designation**



Terminal	Signal	Description
1	24 VDC	24 Vdc power supply
2	NODE_ADDR0	Node selection
3	NODE_ADDR1	
4	0 VDC	
5	OSSD1_A	Static output 1
6	OSSD1_B	
7	RESTART1	Feedback/Restart 1
8	OUT_STATUS 1	Programmable digital output
9	OSSD2_A	Static output 2
10	OSSD2_B	
11	RESTART2	Feedback/Restart 2
12	OUT_STATUS 2	Programmable digital output
13	OUT_TEST1	Short circuit detected output
14	OUT_TEST2	
15	OUT_TEST3	
16	OUT_TEST4	
17	INPUT1	Digital input 1
18	INPUT2	Digital input 2
19	INPUT3	Digital input 3
20	INPUT4	Digital input 4
21	INPUT5	Digital input 5
22	INPUT6	Digital input 6
23	INPUT7	Digital input 7
24	INPUT8	Digital input 8

**Wiring Example**



- a : Contactors
- b : Restart
- c : Feedback
- d : Emergency stop
- e : Light curtain

**Recommended replacement(s)**