Profibus DP diagnostics expansion module, Modicon MCM, spring term



Main	
Range of product	Modicon MCM
Product or component type	Non-safe communication module
Device short name	XPSMCM
[Us] rated supply voltage	24 V - 2020 % DC

Comp	lemen <sup>-</sup>	tarv

Power dissipation in W	3 W
Quality labels	CE
Range compatibility	Preventa XPSMCM
Connector type	Female SUB-D 9
Number of port	1
Method of access	Server
Transmission rate	500 kbit/s 9.6 kbit/s 19.2 kbit/s 45.45 kbit/s 93.75 kbit/s 187.5 kbit/s 1.5 kbit/s 3 Mbit/s 6 Mbit/s
	12 Mbit/s
Communication port protocol	Profibus DP
Current consumption	0.125 mA
Maximum cable distance between devices	1000 M 100 M 1200 M 400 M 200 m
Local signalling	LED green with PWR marking for power ON LED green with RUN marking for operating LED red with E IN marking for internal error LED red with E EX marking for external error LED green/red with STS marking for communication status LED green/red with Mode marking for connection state
Connections - terminals	2 spring clamp terminals, removable terminal block
Cable cross section	0.22.5 Mm² - AWG 24AWG 14 flexible cablewithout cable end 0.252.5 Mm² - AWG 23AWG 14 flexible cablewith cable end, with bezel 0.252.5 Mm² - AWG 23AWG 14 flexible cablewith cable end, without bezel 0.22.5 Mm² - AWG 24AWG 14 solid cablewithout cable end 0.51 mm² - AWG 20AWG 18 flexible cablewith cable end, with double bezel
Mounting support	Omega 35 mm DIN rail conforming to EN 50022
Width	22.5 mm
Height	99 mm
Depth	114.5 mm
Net weight	0.3 kg

## Environment

Product certifications	cULus[RETURN]RCM[RETURN]TÜV	
IP degree of protection	IP20	
Ambient air temperature for operation	-1055 °C	
Ambient air temperature for storage	-2085 °C	
Relative humidity	1095 %	
Pollution degree	2	
Insulation	250 V AC between power supply and housing conforming to EN/IEC 61800-5-1	
Overvoltage category	II	
Electromagnetic compatibility	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 (801000 MHz) conforming to EN/IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 30 V/m (1.4 GHz2 GHz) conforming to EN/IEC 61000-4-3	
Vibration resistance	+/-0.35 mm (f= 1055 Hz) conforming to EN/IEC 61496-1	
Shock resistance	10 gn (duration = 16 ms) for 1000 shocks on each axis conforming to EN/IEC 61496-1	
Operating altitude	2000 m	
Service life	20 year(s)	

# Packing Units

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	12.8 cm
Package 1 Length	16.2 cm
Package 1 Weight	213.0 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	1.514 kg

## Offer Sustainability

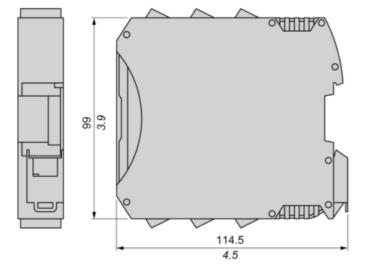
REACh Regulation	☑ REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
Mercury free	Yes	
China RoHS Regulation	☑ China RoHS Declaration	
RoHS exemption information	₽¥Yes	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
PVC free	Yes	

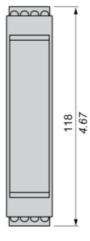
## **Dimensions**

# Spring Terminal



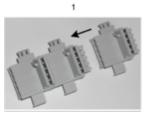






## Mounting Safety Controller CPU with Module(s)

#### Mount BackPlane Connector on Rail



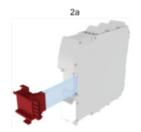




- 1 : Connect as much Backplane Connector as module to be install.
- 2 : Fix the connectors to the rail (Top first).

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







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

#### Connection & Schema

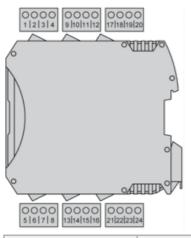
#### **PROFIBUS DP Connector**



Description	PBUS (PROFIBUS DP) standard communication device	
Wiring	PIN/Signal/ Description	
	1/ not connected	
	2/ not connected	
	3 / B Line / Positive RxD/TxD, RS485 level	
	4 / RTS / Request to send	
	5 / GND Bus/ ground (isolated)	
	6 / +5 V Bus Output / +5V termination power (isolated, short-circuit protected)	
	7 / not connected	
	8 / A Line /Negative RxD/TxD, RS485 level	
	9 / not connected housing / cable Shield / Internally connected to the protective earth via cable shield filters according to the PROFIBUS standard	
Data sets	Input status, input diagnostics,	
	fieldbus input status, probe status,	
	safety output status, safety output diagnostics	

## Wiring

## **Terminal Designation**



Terminal	Signal	Description
1	24 VDC	24 Vdc power supply
2	_	Not connected
3		
4	0 VDC	0 Vdc power supply

Terminal	Signal	Description
5	_	Not connected
6		

# Wiring Example

