

# safety controller XPS-MC - 24 V DC - 16 input - 30 LEDs signalling

Local distributor code:

407169719 XPSMC16Z

EAN Code: 3389119010245

# Main

Range of product	Preventa Safety automation	
Product or component type	Configurable safety controller	
Safety module name	XPSMC	
Safety use category	Category 4 maximum conforming to EN 954-1/EN/ISO 13849-1 PLE maximum conforming to ISO 13849-1 SIL 3 maximum conforming to IEC 61508	
Type of start	Configurable	
Standards	EN 574/ISO 13851 EN 1760-1/ISO 13856-1 IEC 61496-1 IEC 60204-1 IEC 61508 IEC 60947-5-1 EN 954-1/EN/ISO 13849-1	
Product certifications	TÜV UL CSA	
[Us] rated supply voltage	24 V DC - 2020 %	
Number of inputs	16	
Communication port protocol	Modbus with 1 RJ45 port(s), serial link, transmission rate: 1200 bps, 2400 bps, 4800 bps, 9600 bps or 19200 bps	
Safety level	Can reach PL e/category 4 conforming to EN 954-1/EN/ISO 13849-1 Can reach SIL 3 conforming to IEC 61508	

# Complementary

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Function of module	Dynamic monitoring of hydraulic valves on linear presses		
	Eccentric press		
	Emergency stop monitoring, with or without time delay, 1 or 2-channel wiring		
	Enabling switch monitoring, 2 or 3 contacts		
	Foot switch monitoring		
	Guard monitoring for injection presses and blowing machines		
	Guard monitoring with 1 or 2 limit switches		
	Hydraulic press		
	Magnetic switch monitoring category 4 conforming to EN/IEC 61496		
	Monitoring safety stop at top dead centre on eccentric press category 3 conforming		
	to EN 574/ISO 13851		
	Muting function of light curtains		
	Position selector		
	Safety mat monitoring		
	Safety time delays		
	Shaft/chain breaking monitor		
	Zero speed detection		
	Light curtain monitoring category 4 conforming to IEC 61496		
	Two-hand control category 3 conforming to EN 574/ISO 13851		
Synchronisation time between inputs	Depending on configuration selected		
Power consumption in W	12 W		

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Input protection type	External fuse 16 A	
[Uc] control circuit voltage	28.8 V	
Maximum line resistance	100 Ohm <2000 m	
Output type	2 relays, 2 NO contacts (4 NO total) circuit(s) Solid state, 6 circuit(s), volt-free	
Breaking capacity	180 VA holding AC-15 C300 relay output 1800 VA inrush AC-15 C300 relay output	
Breaking capacity	2 A at 24 V for static output circuit 1.5 A at 24 V (DC-13) time constant: 50 ms for relay output	
Output thermal current	4 A for both outputs simultaneously 6 A for 1 output and 2 A for the other for relay output	
[lth] conventional free air thermal current	16 A for relay output 6.5 A for static output circuit	
Associated fuse rating	16 A gL for power supply 4 A gL for relay output 6 A fast blow for relay output	
Minimum output current	10 mA for relay output	
Minimum output voltage	17 V for relay output	
Response time	Configurable : 20 ms or 30 ms with software XPSMCWIN	
[Ui] rated insulation voltage	300 V (pollution degree 2) conforming to IEC 60647-5-1, DIN VDE 0110 part 1	
[Uimp] rated impulse withstand voltage	4 kV overvoltage category III conforming to IEC 60647-5-1, DIN VDE 0110 part 1	
Method of access	Slave	
Exchange size	14 words	
Number of addresses	1247 for Modbus	
Parity	Even for Modbus No for Modbus Odd for Modbus	
Data format	1 start bit/8 data bits 1 stop bit even or odd 2 stop bits without parity RTU (Remote Terminal Unit) mode	
Supported modbus function	01: 8-bit output data/32-bit input data 02: 32-bit input data/8-bit output data 03: information and errors	
Local signalling	30 LEDs	
Mounting support	Mounting plate	
Depth	153 mm	
Height	151.5 mm	
Width	74 mm	
Net weight	0.82 kg	

# **Environment**

IP degree of protection	IP20 conforming to IEC 60529	
Ambient air temperature for operation	-1055 °C	
Ambient air temperature for storage	-2585 °C	

# **Packing Units**

Unit Type of Package 1	PCE		

Number of Units in Package 1	1
Package 1 Height	9.600 cm
Package 1 Width	18.000 cm
Package 1 Length	26.000 cm
Package 1 Weight	1.185 kg
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	7.950 kg

# **Contractual warranty**

Warranty 18 months



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 >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	539
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

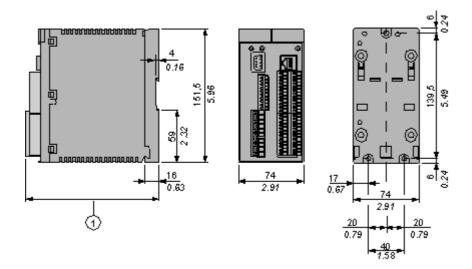
Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
PVC free	Yes

#### **Use Again**

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## **Dimensions Drawings**

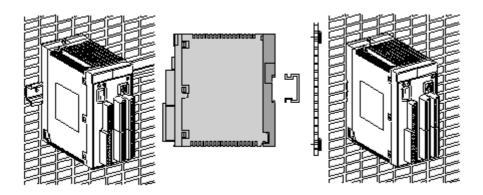
## **Dimensions**



When using XPSMCTS• connectors this dimension is 153 mm (6.02 in)
When using XPSMCTC• connectors this dimension is 151,5 mm (5.96 in)

Mounting and Clearance

# Installation



Metal adaptor for fixing on metal: DIN rail 35 mm/1.38 in.

## XPSMC16Z

#### Connections and Schema

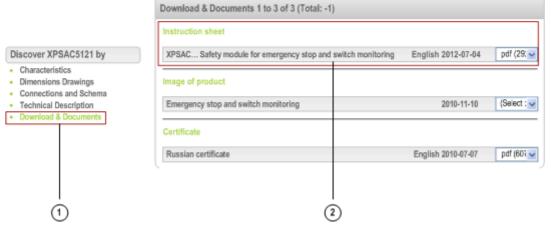
#### **Wiring Diagrams**

#### Refer to the Instruction Sheet

To download the instruction sheet, follow below procedure:



XPSAC5121
module XPSAC - Emergency stop - 24 V AC DC
Download XPSAC5121 product datasheet



- 1 Click on Download & Documents.
- 2 Click on Instruction sheet.

# XPSMC16Z

# **Technical Description**

# **Safety Functions**

<ul> <li>Emergency stop monitoring with time delay:         <ul> <li>1 channel wiring, with automatic start.</li> <li>2 channel wiring, with start button.</li> </ul> </li> </ul>
<ul> <li>Emergency stop monitoring without time delay:         <ul> <li>1 channel wiring, with automatic start.</li> <li>2 channel wiring, with start button.</li> </ul> </li> </ul>
Two-hand control.
Guard monitoring:  with 1 limit switch. with 2 limit switches. with 2 limit switches, with guard locking.  Guard monitoring for injection presses and blowing machines.
Magnetic switch monitoring.

# **Product datasheet**

# XPSMC16Z

	• Sensing mat monitoring.
9	<ul> <li>Light curtains monitoring:         <ul> <li>Relay output type.</li> <li>Solid-state output type.</li> </ul> </li> <li>"Muting" function for light curtains.</li> </ul>
	• Zero speed detection.
	<ul> <li>Dynamic monitoring of hydraulic valves on linear presses.</li> </ul>
	• Safety time delays.
	<ul> <li>Monitoring safety stop at top dead centre on eccentric press.</li> <li>Hydraulic press.</li> <li>Eccentric press.</li> </ul>

# **Product datasheet**

# XPSMC16Z



- Enabling switching monitoring:
  - 2 contact type.3 contact type.

#### Other functions:

- Foot switch monitoring
- Chain shaft breakage monitoring
- Position selector

Image of product / Alternate images

# **Alternative**







