



# safety controller XPS-MC - 24 V DC - 32 input - 46 LEDs signalling

XPSMC32Z

## 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 EN/ISO 13849-1 SIL 3 maximum conforming to IEC 61508
Type of start	Configurable
Standards	EN 954-1/EN/ISO 13849-1 EN/IEC 61496-1 EN/IEC 60947-5-1 IEC 61508 EN 1760-1/ISO 13856-1 EN 574/ISO 13851 EN/IEC 60204-1
Product certifications	CSA UL TÜV
[Us] rated supply voltage	24 V DC - 2020 %
Number of inputs	32
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

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
	Monitoring safety stop at top dead centre on eccentric press
	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 EN/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
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
	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
[Ith] 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	46 LEDs
Mounting support	Mounting plate
Depth	153 mm
Height	151.5 mm
Width	74 mm
Net weight	0.84 kg
Environment	
IP degree of protection	IP20 conforming to EN/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	9.5 cm
Package 1 Width	18.0 cm
Package 1 Length	26.0 cm
Package 1 Weight	1.196 kg
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	7.832 kg
Offer Sustainability	
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes

**Contractual warranty** 

California proposition 65

**China RoHS Regulation** 

**RoHS** exemption information

**Environmental Disclosure** 

**Circularity Profile** 

**WEEE** 

**PVC** free

Warranty 18 months

The product must be disposed on European Union markets following specific waste collection and

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

China RoHS declaration

End of Life Information

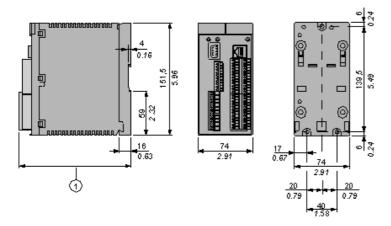
Yes

**Product Environmental Profile** 

never end up in rubbish bins

**Dimensions Drawings** 

#### **Dimensions**



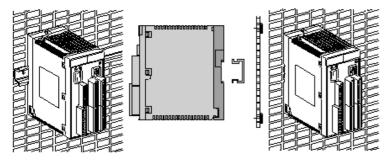
When using XPSMCTS• connectors this dimension is 153 mm (6.02 in) When using XPSMCTC• connectors this dimension is 151,5 mm (5.96 in)

# **Product data sheet**

# XPSMC32Z

Mounting and Clearance

## Installation



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

# XPSMC32Z

Connections and Schema

#### **Wiring Diagrams**

#### Refer to the Instruction Sheet

To download the instruction sheet, follow below procedure:



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

## XPSMC32Z

**Technical Description** 

## **Safety Functions**

	Emergency stop monitoring with time delay:
	1 channel wiring, with automatic start.
	2 channel wiring, with start button.
	Emergency stop monitoring without time delay:
	1 channel wiring, with automatic start.
	2 channel wiring, with start button.
n n	Two-hand control.
<u>+</u> <u>+</u>	
	Guard monitoring:
A	o with 1 limit switch.
406	o with 2 limit switches.
	with 2 limit switches, with guard locking.
	Guard monitoring for injection presses and blowing machines.
	Magnetic switch monitoring.
_	Sensing mat monitoring.
	Light curtains monitoring:
	Relay output type.
7	○ Solid-state output type.
	"Muting" function for light curtains.
	Zero speed detection.
	Zero speed detection.
0	
	Dynamic monitoring of hydraulic valves on linear presses.
	a Outer Countries
	Safety time delays.
1.	Monitoring safety stop at top dead centre on eccentric press.
	Hydraulic press.
	Eccentric press.
	A Frankling Makes and Makes
//S	Enabling switching monitoring:
(8)	2 contact type.
	○ 3 contact type.
-	

#### Other functions:

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

## Recommended replacement(s)