XPSMC16Z

safety controller, Harmony XPS MC, 24V DC, 16 inputs, 30 LEDs signalling





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[RETURN]UL[RETURN]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

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	
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

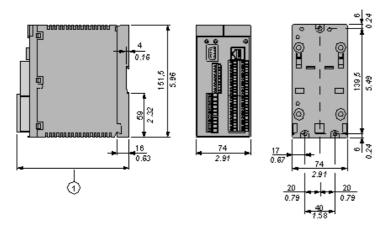
r doking office	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.600 cm
Package 1 Width	18.000 cm
Package 1 Length	26.000 cm
Package 1 Weight	1.185 kg
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2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

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)	
Mercury free	Yes	
China RoHS Regulation	Ğ China RoHS Declaration	
RoHS exemption information	₫Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	
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 www.P65Warnings.ca.gov	

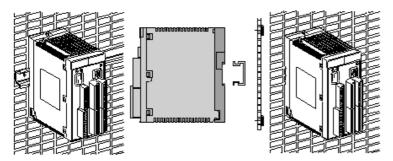
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Warranty	18 months	

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)

Installation



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

XPSMC16Z

Wiring Diagrams

Refer to the Instruction Sheet

To download the instruction sheet, follow below procedure:



module XPSAC - Emergency stop - 24 V AC DC

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

XPSMC16Z

Safety Functions

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	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.
	Two-hand control.
	Guard monitoring:
	o with 1 limit switch.
	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.
	○ Solid-state output type.
	"Muting" function for light curtains.
FL FL	Zero speed detection.
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	Dynamic monitoring of hydraulic valves on linear presses.
	Safety time delays.
	Monitoring safety stop at top dead centre on eccentric press.
· 奇	Hydraulic press.
	Eccentric press.



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

Other functions:

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