

Product availability : Non-Stock - Not normally stocked in distribution facility



Main

Range of product	Preventa Safety automation
Product or component type	Preventa safety PLC compact
Safety module name	XPSMF40
Safety module application	F use with numerous machine safety functions and for the protection of personnel
Safety use category	Category 4 maximum EN 954-1 Performance level e EN/ISO 13849-1 SIL 3 EN/IEC 61508
Structure type	10BASE-T/100BASE-TX, safe Ethernet

Complementary

Function of module	Monitoring safety actuators discrete output Monitoring safety detection discrete input Monitoring safety dialogue discrete input Monitoring safety dialogue discrete output Monitoring short-circuit and line break line control outputs
[Us] rated supply voltage	24 V DC - 15...20 %
Supply	SELV or PELV EN/IEC 60950
No load current	0.5 A
Protection type	10 A internal fuse
Clock	With, supplied by backup capacitor for 1 week following loss of supply
Response time	Depending on size of application
Memory description	User logic 250 kB application User logic 250 kB data
Group of channels	2 groups of 4 line control outputs
Discrete I/O number	24 configurable
Maximum discrete input number	24 not isolated
Voltage state 0 guaranteed	<= 24 V discrete input
Voltage state 1 guaranteed	24...30 V discrete input
Current state 0 guaranteed	<= 1.5 mA discrete input)
Current state 1 guaranteed	3.5...4.5 mA discrete input)
Discrete input voltage	20 V
Discrete input current	100 mA
Maximum input resistance	7 kOhm

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Input overvoltage protection	-10...35 V discrete input
Maximum discrete output number	24 not isolated
Discrete output voltage	24 V DC
Output voltage tolerance	+/- 2 %
Discrete output current	1 A 140 °F (60 °C) channels 4, 8, 12, 16, 20 and 24) 2 A 122 °F (50 °C) channels 4, 8, 12, 16, 20 and 24) 0.5 A 140 °F (60 °C) channels 1 to 3, 5 to 7, 9 to 11,13 to 15, 17 to 19, 21 to 23) <= 7 A all channels)
Minimum load	2 mA per discrete output
Maximum leakage current	1 mA 2 V at state 0 discrete output
Overload protection	Shutdown of outputs concerned with cyclic reconnection
Output voltage	20 V line control outputs
Nominal output current	60 mA line control outputs
Communication port protocol	Safe Ethernet 2 RJ45 100 Mbps, 10 Mbps dual twisted pair cable, category 5D or better Profibus 1 SUB-D 9-pin female, RS485 shielded dual twisted pair cable
Exchange mode	Half duplex, full duplex, autonegotiation safe Ethernet
Method of access	Slave V0 Profibus
Operating distance	<= 300 m between station discrete input <= 300 m between station discrete output
Number of terminal blocks	1 power supply 2 line control outputs 6 discrete input/output circuit 8 line control outputs
Connections - terminals	Discrete input/output circuit captive spring terminals, 1 x 0.5 mm ² AWG 20) flexible with cable end Line control outputs captive spring terminals, 1 x 0.5 mm ² AWG 20) flexible with cable end Discrete input/output circuit captive screw clamp terminals, 1 x 0.14...1 x 1.5 mm ² AWG 25...AWG 15) solid without cable end Line control outputs captive screw clamp terminals, 1 x 0.14...1 x 1.5 mm ² AWG 25...AWG 15) solid without cable end Discrete input/output circuit captive screw clamp terminals, 1 x 0.14...1 x 1.5 mm ² AWG 28...AWG 16) flexible without cable end Line control outputs captive screw clamp terminals, 1 x 0.14...1 x 1.5 mm ² AWG 28...AWG 16) flexible without cable end Power supply captive screw clamp terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 12) flexible without cable end Power supply captive screw clamp terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 12) solid without cable end Discrete input/output circuit captive screw clamp terminals, 1 x 0.25...1 x 0.5 mm ² AWG 23...AWG 20) flexible with cable end Line control outputs captive screw clamp terminals, 1 x 0.25...1 x 0.5 mm ² AWG 23...AWG 20) flexible with cable end Discrete input/output circuit captive screw clamp terminals, 1 x 0.25...1 x 1.5 mm ² AWG 23...AWG 15) flexible without cable end Line control outputs captive screw clamp terminals, 1 x 0.25...1 x 1.5 mm ² AWG 23...AWG 15) flexible without cable end Power supply captive screw clamp terminals, 1 x 0.25...1 x 2.5 mm ² AWG 23...AWG 14) flexible with cable end Power supply captive screw clamp terminals, 1 x 0.25...1 x 2.5 mm ² AWG 23...AWG 14) flexible without cable end Discrete input/output circuit captive spring terminals, 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 16) solid without cable end Line control outputs captive spring terminals, 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 16) solid without cable end Discrete input/output circuit captive spring terminals, 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 17) flexible without cable end Line control outputs captive spring terminals, 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 17) flexible without cable end Power supply captive spring terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 12) flexible without cable end Power supply captive spring terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 12) solid without cable end Discrete input/output circuit captive spring terminals, 1 x 0.25...1 x 0.34 mm ² AWG 22) flexible without cable end Line control outputs captive spring terminals, 1 x 0.25...1 x 0.34 mm ² AWG 22) flexible without cable end Power supply captive spring terminals, 1 x 0.25...1 x 2.5 mm ² AWG 23...AWG 12) flexible with cable end Power supply captive spring terminals, 1 x 0.25...1 x 2.5 mm ² AWG 23...AWG 12) flexible without cable end

Tightening torque	Discrete input/output circuit 1.95...2.21 lbf.in (0.22...0.25 N.m) captive screw clamp terminals Line control outputs 1.95...2.21 lbf.in (0.22...0.25 N.m) captive screw clamp terminals Power supply 4.43 lbf.in (0.5 N.m) captive screw clamp terminals
Wire stripping length	0.39 in (10 mm) power supply captive screw clamp terminals 0.35 in (9 mm) discrete input/output circuit captive screw clamp terminals 0.35 in (9 mm) discrete input/output circuit captive spring terminals 0.35 in (9 mm) line control outputs captive screw clamp terminals 0.35 in (9 mm) line control outputs captive spring terminals 0.35 in (9 mm) power supply captive spring terminals
Current consumption	8 A 24 V DC on power supply
Mounting support	35 mm symmetrical DIN rail
Depth	6.02 in (153 mm)
Height	5.96 in (151.5 mm)
Width	2.91 in (74 mm)
Net weight	2.20 lb(US) (1 kg)

Environment

Standards	EN/IEC 61131-2 : 2003 EN 298 : 2003 NFPA 72 : 2002 DIN VDE 0116 : 1989 NFPA 85 : 2001 EN 54-2 : 1997 EN 230 : 1990 EN 12067-2 : 2004 IEC 61511 part 1-3 : 2004 EN 61000-6-2 : 2001 EN 61000-6-4 : 2001 EN 50156-1 : 2004
Immunity to microbreaks	10 ms
IP degree of protection	IP20 enclosure)
Ambient air temperature for operation	32...140 °F (0...60 °C) EN 61131-2
Ambient air temperature for storage	-40...185 °F (-40...85 °C) EN 61131-2
Relative humidity	95 % supply not connected
Operating altitude	< 6561.68 ft (2000 m)
Pollution degree	2
Electrical shock protection class	Class II IEC 61131-2
Electromagnetic compatibility	EN/IEC 61131-2
Vibration resistance	1 gn 9...150 Hz)EN 61131-2
Shock resistance	15 gn 11 ms EN 61131-2
Resistance to electrostatic discharge	4 kV contact EN/IEC 61000-4-2 8 kV on air EN/IEC 61000-4-2
Resistance to electromagnetic fields	9.14 V/m (10 V/m) 80...2000 MHz, amplitude modulation 80 % EN/IEC 61000-4-3

Ordering and shipping details

Category	22478 - XPS SAFETY PLC
Discount Schedule	SAF1
GTIN	03389119010559
Package weight(Lbs)	1.38 kg (3.04 lb(US))
Returnability	No
Country of origin	DE

Offer Sustainability

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 Carcinogen & Reproductive harm. For more information go to www.p65warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration

Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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