

XPSMFCIO2401

Preventa Safety automation - digital output and counting input cards



Main

Range of product	Preventa Safety automation
Product or component type	Digital output and counting input cards
Safety module name	XPS MF60
Safety use category	Category 4 maximum conforming to EN 954-1 Performance level e conforming to EN/ISO 13849-1 SIL 3 conforming to EN/IEC 61508
Function of module	Monitoring incremental encoders counting inputs Monitoring safety actuators discrete output Monitoring safety dialogue discrete output Monitoring sensors 2/3-wire PNP/NPN counting inputs
Standards	DIN V 0801 DIN V 19250 EN 50156 pending IEC 61131
[Us] rated supply voltage	24 V DC (- 15...20 %)
Group of channels	1 group of 4 discrete inputs 2 groups of 4 counting inputs
Counting input number	2

Discrete output number	4
Connections - terminals	Removable screw terminal block, clamping capacity: 1 x 0.14...1 x 1.5 mm ² , AWG 28...16 flexible without cable end for counting inputs Removable screw terminal block, clamping capacity: 1 x 0.14...1 x 1.5 mm ² , AWG 28...16 flexible without cable end for discrete output Removable screw terminal block, clamping capacity: 1 x 0.14...1 x 1.5 mm ² , AWG 28...16 solid without cable end for counting inputs Removable screw terminal block, clamping capacity: 1 x 0.14...1 x 1.5 mm ² , AWG 28...16 solid without cable end for discrete output Removable screw terminal block, clamping capacity: 1 x 0.25...1 x 0.5 mm ² , AWG 22...20 flexible with cable end for counting inputs Removable screw terminal block, clamping capacity: 1 x 0.25...1 x 0.5 mm ² , AWG 22...20 flexible with cable end for discrete output Removable screw terminal block, clamping capacity: 1 x 0.25...1 x 1.5 mm ² , AWG 22...16 flexible without cable end for counting inputs Removable screw terminal block, clamping capacity: 1 x 0.25...1 x 1.5 mm ² , AWG 22...16 flexible without cable end for discrete output Removable screw terminal block, clamping capacity: 2 x 0.14...2 x 0.5 mm ² , AWG 28...20 solid without cable end for counting inputs Removable screw terminal block, clamping capacity: 2 x 0.14...2 x 0.5 mm ² , AWG 28...20 solid without cable end for discrete output Removable screw terminal block, clamping capacity: 2 x 0.14...2 x 0.75 mm ² , AWG 28...18 flexible without cable end for counting inputs Removable screw terminal block, clamping capacity: 2 x 0.14...2 x 0.75 mm ² , AWG 28...18 flexible without cable end for discrete output Removable screw terminal block, clamping capacity: 2 x 0.25...2 x 0.34 mm ² , AWG 22 flexible without cable end for counting inputs Removable screw terminal block, clamping capacity: 2 x 0.25...2 x 0.34 mm ² , AWG 22 flexible without cable end for discrete output Removable screw terminal block, clamping capacity: 2 x 0.5 mm ² , AWG AWG 20 flexible with cable end for counting inputs Removable screw terminal block, clamping capacity: 2 x 0.5 mm ² , AWG AWG 20 flexible with cable end for discrete output

Complementary

Marking	CE
Internal resistance	3.7 kOhm for counting circuit
Counting input voltage	24 V DC 5 V DC
Counting input current	<= 3 mA
Counting frequency	0...1 MHz
Counter inputs resolution	24 bits
Time base accuracy	0,002
Length	<= 500 mm between station, shielded dual twisted pair cable for counting inputs
Discrete output voltage	18.4...26.8 V DC
Discrete output current	<= 2 mA (per channel) 2 A (per card) 0.5 A (per channel)
Voltage drop	<= 3 V at 0.5 A for discrete output
Minimum load	2 mA per discrete output
Leakage current	<= 1 mA, at 2 V at state 0
Number of terminal blocks	1 for discrete output 2 for counting inputs

Current consumption	0.1 A at 3.3 V DC on rack 0.1 A at 5 V DC on rack 0.8 A at 24 V DC on power supply
Product weight	0.26 kg

Environment

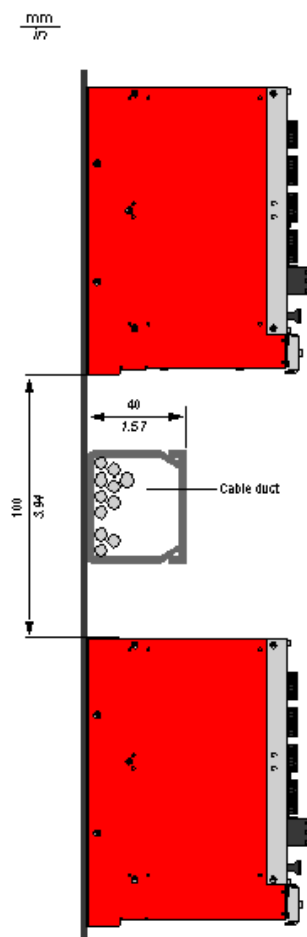
Product certifications	CSA C-Tick TÜV UL
IP degree of protection	IP20 with covering plate on unused in rack I/O card slots
Ambient air temperature for operation	0...60 °C conforming to EN/IEC 61131-2
Ambient air temperature for storage	-40...85 °C conforming to EN/IEC 61131-2
Relative humidity	95 % (supply not connected)
Operating altitude	< 2000 m
Pollution degree	2
Class of protection against electric shock	Class II conforming to IEC 61131-2
Electromagnetic compatibility	EN/IEC 61131-2
Vibration resistance	1 gn, 10...150 Hz conforming to EN 61131-2 (10 cycles per axis)
Shock resistance	15 gn for 11 ms (2 cycles per axis), conforming to EN 61131-2
Resistance to electrostatic discharge	4 kV contact conforming to EN/IEC 61000-4-2 8 kV on air conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m (26 MHz...1 GHz), amplitude modulation 80 % conforming to EN/IEC 61000-4-3

Front View

$$\frac{m \cdot m}{inch}$$

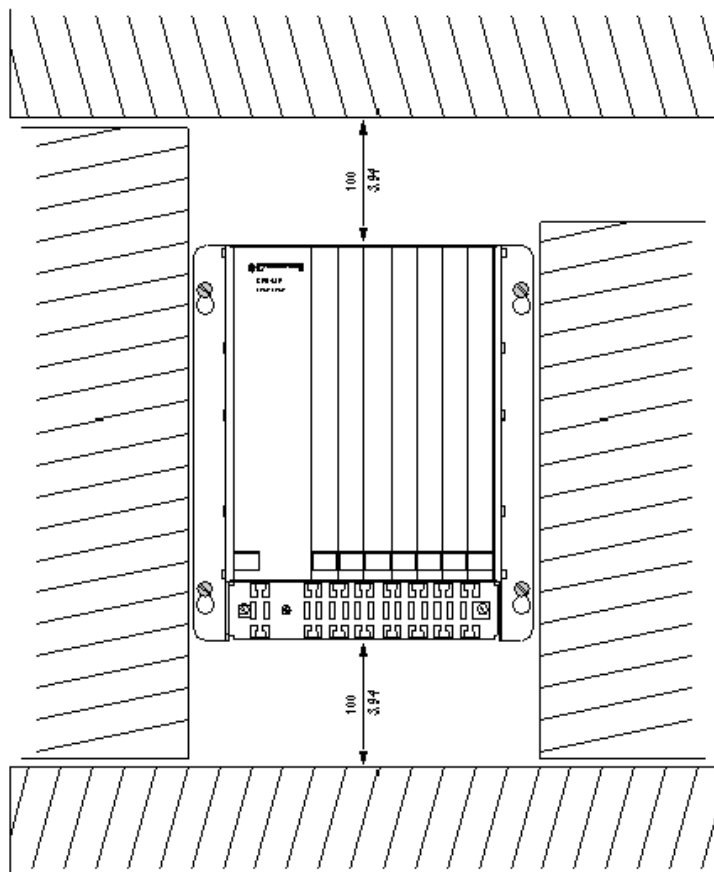

Mounting

Air Circulation

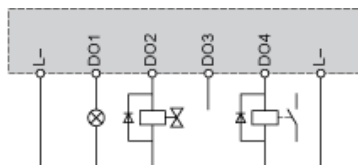


Minimum clearances

$\frac{\text{mm}}{\text{in}}$



Actuator Connections to the Outputs



Emergency Stop Connections (Line Control)

