# > Millenium Evo expansion XRP10

# Digital expansion 10 I/O

- Digital Expansion 6 DI 4 DO
- Can be used twice to reach 44 I/Os configuration
- > Power supply by the controller
- XRP10



XRP10 Digital expansion 10 I/O

General characteristics	00.075.004
Part number	88 975 201
Products certification	CE, cULus Listed
Conformity with the low voltage directive (in accordance with 2014/35/EU)	IEC/EN 61131-2 (Open equipment)
Conformity with the EMC directive (in accordance with 2014/30/EU)	IEC/EN 61000-6-1 (Residential, commercial and light-industrial environments)
	IEC/EN 61000-6-2 (Industrial)
	IEC/EN 61000-6-3 (Residential, commercial and light-industrial environments)
	IEC/EN 61000-6-4 (Industrial)
Earthing	None
Overvoltage category	3 in accordance with IEC/EN 60664-1
Pollution	Degree: 2 in accordance with IEC/EN 61131-2
Maximum utilization altitude	Operation: 2000 m
	Transport: 3000 m
Mechanical resistance	Immunity to vibrations IEC/EN 60068-2-6, Fc test
	Immunity to shock IEC/EN 60068-2-27, Ea test
Resistance to electrostatic discharge	Immunity to ESD IEC/EN 61000-4-2, level 3
Resistance to HF interference (Immunity)	Immunity to radiated electrostatic fields IEC/EN 61000-4-3, level 3
	Immunity to fast transients (burst immunity) IEC/EN 61000-4-4, level
	Immunity to shock waves IEC/EN 61000-4-5
	Radio frequency in common mode IEC/EN 61000-4-6, level 3
Conducted and radiated emissions (in accordance with EN 55022/11 group 1)	Class B
Operation temperature	$-20 ^{\circ}\text{C}  (-4 ^{\circ}\text{F}) \rightarrow +60 ^{\circ}\text{C}  (140 ^{\circ}\text{F})  (+40 ^{\circ}\text{C}  (104 ^{\circ}\text{F}))$
	in a non-ventilated enclosure) UL: maximum surrounding air: +50 °C (122 °F)
Storage temperature	-40 °C (-40 °F) → +80 °C (176 °F)
Relative humidity	95% max. (no condensation or dripping water)
Screw terminals connection capacity	Flexible wire with ferrule: 1 conductor: 0.2 to 2.5 mm², AWG 24-14 Flexible wire with ferrule: 2 conductors: 0.2 to 0.75 mm², AWG 24-18
	Rigid wire: 1 conductor: 0.2 to 2.5 mm², AWG 24-14
	Rigid wire: 2 conductors: 0.2 to 0.75 mm², AWG 24-18
	Tightening torque: 0.5 N.m (4.5 lb-in) (tighten using screwdriver diam
	3.5 mm)
	Stripping length: 6 mm
Material	Lexan, UL94V0, Halogen free 1272/2008/CE
On front panel color	Grey RAL 7035
On sole color	Black RAL 9011
Protection rating	IP 40 on front panel
(in accordance with IEC/EN 60529)	IP 20 on terminal block



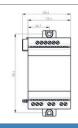
Weight	Without packing: 120 g With packing: 160 g
Dimensions	Without packing: 60.4 x 90 x 60.6 mm / 2.37 x 3.54 x 2.38 inch With packing: 93 x 103 x 65 mm / 3.66 x 4.06 x 2.56 inch
Supply	
Nominal voltage	Powered by the controller
Max. absorbed power	2.5 W
Inputs	
Digital 24 VDC - 6 inputs from I1 to I6	
Input voltage	24 VDC (-15% / +20%)
Input current	1.8 mA @ 20.4 V
	2.1 mA @ 24 V
	2.5 mA @ 28.8 V
Input impedance	11.6 kΩ
Logic 1 voltage threshold	≥ 11 VDC
Making current at logic state 1	≥ 1 mA
Logic 0 voltage threshold	≤9 VDC
Release current at logic state 0	≤ 0.7 mA
Response time	1 to 2 cycle times
Sensor type	Contact or 3-wire PNP
Conforming to IEC/EN 61131-2	Type 1
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
Protection against polarity inversions	Yes
Status indicator	On LCD screen
Cable length	≤ 30 m
Outputs	
6 A relay output - 2 outputs from O1 to O2	
Breaking voltage	250 VAC max
Breaking current	6A
Maximum breaking current in the common	IEC @ 25°C (77 °F): 12 A
	IEC @ 60°C (140 °F) or UL: 10 A
Mechanical life	5 000 000 operations (cycles)
Electrical durability for 50 000 operating cycles	24 VDC tau = 0 ms: 6 A, tau = 7 ms: 3 A, tau = 15 ms: 1.8 A
	Usage category DC-12: 24 V, 6 A
	Usage category DC-14: 24 V, 1.8 A
	250 VAC cos phi = 1: 6 A, cos phi = 0.7: 5 A, cos phi = 0.4: 2.5 A Usage category AC-12: 250 V, 6 A
	Usage category AC-12: 250 V, 6 A Usage category AC-13: 250 V, 5 A
	Usage category AC-15: 250 V, 2 A
Minimum switching capacity	100 mA (at minimum voltage of 12V)
Maximum operating rate	Off load: 10 Hz
	At operating current: 0.1 Hz
Voltage for withstanding shocks	In accordance with IEC/EN 60947-1 and IEC/EN 60664-1: 4 kV
Response time	Make = 1 cycle time + 8 ms typical
	Release = 1 cycle time + 4 ms typical
Built-in protections	Against short-circuits: None
	Against over voltages and overload: None
Status indicator	On LCD screen
Cable length	≤ 30 m
8 A relay output - 2 outputs from O3 to O4	
Breaking voltage	250 VAC max

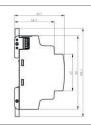
20 000 000 operations (cycles)
24 VDC tau = 0 ms: 8 A, tau = 7 ms: 3 A, tau = 15 ms: 1.5 A
Usage category DC-12: 24 V, 8 A
Usage category DC-14: 24 V, 1.5 A
250 VAC cos phi = 1: 8 A, cos phi = 0.7: 4.75 A, cos phi = 0.4: 3 A
Usage category AC-12: 250 V, 8 A
Usage category AC-13: 250 V, 4.3 A
Usage category AC-15: 250 V, 1.5 A
100 mA (at minimum voltage of 12V)
Off load: 10 Hz
At operating current: 0.1 Hz
In accordance with IEC/EN 60947-1 and IEC/EN 60664-1: 4 kV
Make = 1 cycle time + 10 ms typical
Release = 1 cycle time + 5 ms typical
Against short-circuits: None
Against over voltages and overload: None
On LCD screen
≤ 30 m

# Technical sketches

## Dimensions (mm)

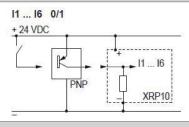
#### XRP10





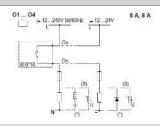
#### Connections

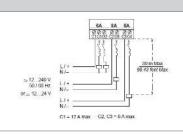
### INPUTS





# OUPUTS





#### Warning