

# › 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	
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 3 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 °C (-4 °F) → +60 °C (140 °F) (+40 °C (104 °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 mm <sup>2</sup> , AWG 24-14 Flexible wire with ferrule: 2 conductors: 0.2 to 0.75 mm <sup>2</sup> , AWG 24-18 Rigid wire: 1 conductor: 0.2 to 2.5 mm <sup>2</sup> , AWG 24-14 Rigid wire: 2 conductors: 0.2 to 0.75 mm <sup>2</sup> , 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 (in accordance with IEC/EN 60529)	IP 40 on front panel 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 k $\Omega$
Logic 1 voltage threshold	$\geq$ 11 VDC
Making current at logic state 1	$\geq$ 1 mA
Logic 0 voltage threshold	$\leq$ 9 VDC
Release current at logic state 0	$\leq$ 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	$\leq$ 30 m

### Outputs

#### 6 A relay output - 2 outputs from O1 to O2

Breaking voltage	250 VAC max
Breaking current	6 A
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-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	$\leq$ 30 m

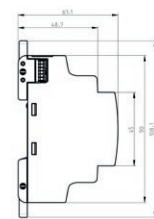
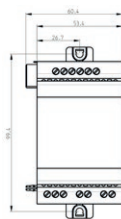
#### 8 A relay output - 2 outputs from O3 to O4

Breaking voltage	250 VAC max
------------------	-------------

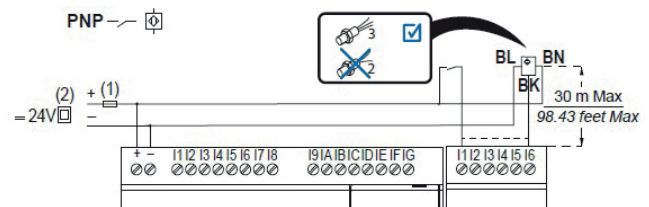
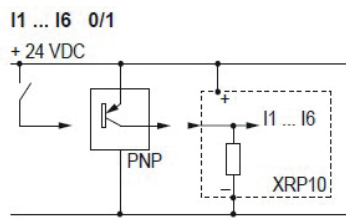
Breaking current	8 A, ≥ 55°C: 6 A
Mechanical life	20 000 000 operations (cycles)
Electrical durability for 50 000 operating cycles	24 VDC tau = 0 ms: 8 A, tau = 7 ms: 3 A, tau = 15 ms: 1.5 A Usage category DC-12: 24 V, 8 A Usage category DC-14: 24 V, 1.5 A 250 VAC cos phi = 1: 8 A, cos phi = 0.7: 4.75 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
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 + 10 ms typical Release = 1 cycle time + 5 ms typical
Built-in protections	Against short-circuits: None Against over voltages and overload: None
Status indicator	On LCD screen
Cable length	≤ 30 m

**Technical sketches**  
**Dimensions (mm)**

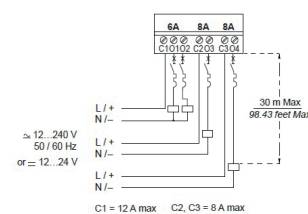
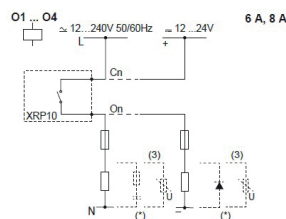
XRP10



**Connections**  
**INPUTS**



**OUTPUTS**



**Warning:**

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet Automatismes SAS and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.