



CONVERTER



CAP 10

- **Universal power supply:**
20 to 270 Vac and 20 to 300 Vdc
- **Universal input:**
mA, mV, V, Pt100 3 wire, thermocouple J or K, resistance and potentiometer.
- Supply for 2-wire transmitter
- **Insulated analog outputs:**
- active or passive current (0-20 mA or 4-20 mA)
or voltage 0-10V.
- **Configuration:**
A set of 8 switches located behind the front face allows selecting the input and output types and calibers, without any other setting required.
- Detection of the sensor rupture
Self-zero and self-diagnosis

Environment

- Operating T°: -10° to 50°C
- Storage T°: -20° to 70°C
- **CE** according to IEC 61000-6-4, IEC 61000-6-2 (industrial environment).
- Disturbance immunity according to the standard IEC 61000-6-2(IEC 61000-4-3 level 3, IEC 61000-4-4 level 4, IEC 61000-4-6 level 3)

Power supply

- Voltage range: 20 to 270 Vac 50/60/400 Hz and 20 to 300 Vdc
- Power draw: 2.5W max. 4.5 VA max.

Outputs

- Average response time = 200 ms (for a variation from 0 to 90% of the input signal)
- Temperature coefficient < 200 ppm/°C

Type	Load impedance Lr in Ω	Caliber	Configuration of the micro-switches	
			S7	S8
Active/passive current	active : ≤ 600 passive : ≤ (U-2)/0.022	0-20 mA		
		4-20 mA		•
Voltage	≥ 5000	0-10V	•	

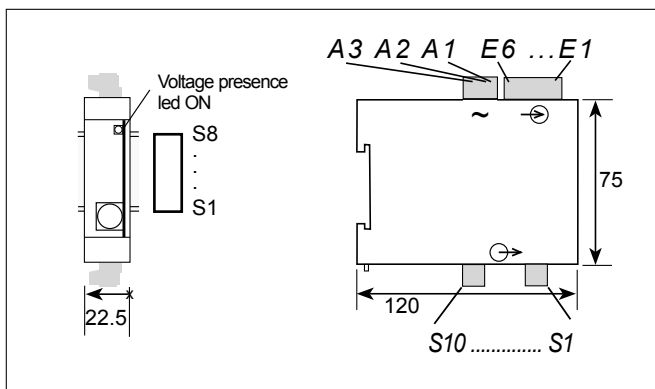
• → Switch ON



The friendly interface

Dimensions

- Self-extinguishing case of black UL 94VO ABS.
- Mounting in switchbox: latching on symmetrical DIN rail.
- *Rack version: consult.*
- Plug-off connectors for screwed connectings (2.5mm², flexible or rigid)
- Protection: Case / terminals: IP20
- Weight: 175 g (with packaging)



Dimensions : 22.5x75x120 mm

Galvanic partition

- 2 KV - 50 Hz - 1mn between supply, inputs, outputs
- Other features: consult

Inputs

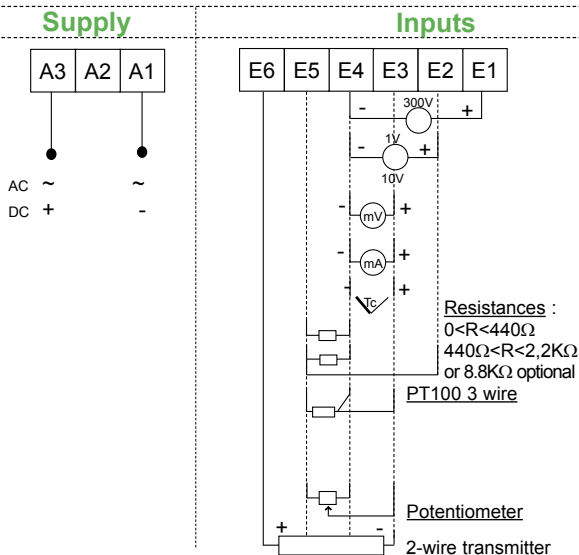
• → Switch ON

- Supply for 2-wire sensor: 24 Vdc $\pm 15\%$ (protection from short-circuits 30mA max)
- Measurable overrange: $\pm 10\%$ of the caliber
- Standard sampling time: 100ms
- Common mode rejection rate: 130 dB
- Serial mode rejection rate: 40 dB 50/60Hz

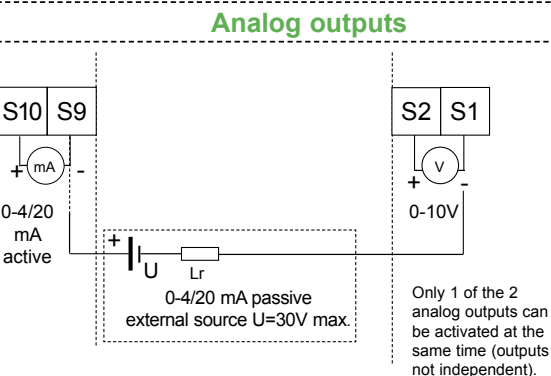
Wiring

Type	Max. error	Input impedance	Permanent overload	Caliber	Configuration of the micro-switches						
					S1	S2	S3	S4	S5	S6	
mA	±30μA	Max. drop 0.9V	±100mA	4-20 mA							
	±30μA			4-20 mA (2-wire sensor)					●		
	±30μA			0-20 mA					●		
	±20μA			0-10 mA					●	●	
	±50μA			±20mA				●			
	±50μA			±10mA				●		●	
mV	±150μV	≥1MΩ	±1V	0-100 mV				●	●		
	±250μV			±100mV				●	●	●	
V	±1.5mV		±50V	0-1V				●			
	±1mV			0-500mV			●			●	
	±2.5mV			±1V			●		●		
	±15mV			0-10V			●		●	●	
	±10mV			0-5V			●	●			
	±25mV			±10V			●	●		●	
	±450mV			0-300V			●	●	●		
	±750mV		±300V				●	●	●		
Thermocouple J (Standard IEC581)	±3.5°C	≥1MΩ	-	-50 to 200°C		●					
				0 to 100°C		●					●
				0 to 200°C		●				●	
				0 to 400°C		●				●	●
				0 to 600°C		●		●			
				0 to 800°C		●		●			●
				0 to 1000°C		●		●	●		
				0 to 1200°C		●		●	●	●	
Thermocouple K (Standard IEC581)	±3.5°C	≥1MΩ	-	-50 to 200°C		●	●				
				0 to 100°C		●	●				●
				0 to 200°C		●	●		●		
				0 to 400°C		●	●		●	●	
				0 to 600°C		●	●	●			
				0 to 800°C		●	●	●			●
				0 to 1000°C		●	●	●	●		
				0 to 1200°C		●	●	●	●	●	
Sensor Pt100Ω 3 wire Standard IEC 751 (DIN 43760) (line resistance < 25Ω)	±0,6°C	Current 250μA	-	-200 to 200°C	●						
				-100 to 100°C	●						●
				-50 to 50°C	●				●		
				-50 to 100°C	●					●	●
				-50 to 150°C	●			●			
	±0,8°C			0 to 50°C	●			●			●
				0 to 100°C	●			●	●		
				0 to 150°C	●			●	●	●	
				0 to 200°C	●		●				
				0 to 300°C	●		●				●
				0 to 500°C	●		●			●	
±1°C	0 to 800°C	●		●		●	●				
Potentiometer from 100Ω to 10kΩ	±0.1% of the measure range	-	-		●	●					
Resistive sensor	±0.7Ω	-	-	0 to 100Ω	●	●				●	
				0 to 200Ω	●	●			●		
				0 to 300Ω	●	●			●	●	
				0 to 400Ω	●	●		●			
	±12Ω	-	-	0 to 500Ω	●	●		●		●	
				0 to 1000Ω	●	●		●	●		
				0 to 1500Ω	●	●		●	●	●	
				0 to 2000Ω	●	●	●				

Upper connectors



Lower connectors



Safety

	Voltage presence LED blinking	Return value of the analog output
Self-diagnosis	2s / 2s	22mA for the 0-20mA current output
Sensor rupture	0.5s / 0.5 s	0mA for the 4-20mA output 11V for the voltage output

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