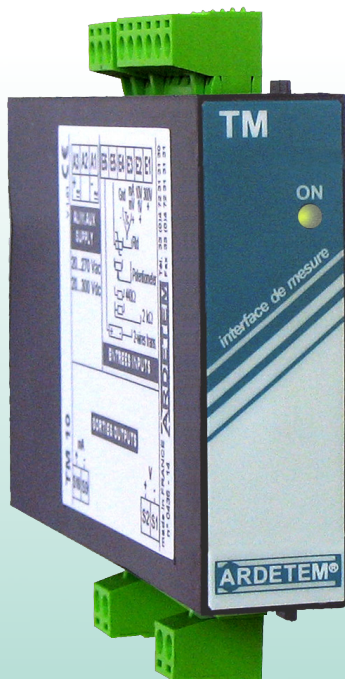


TM10/CAP10

ARDETEM

SFERE



- **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 sensor
- **Isolated analog outputs:**
active or passive current (0-20 mA or 4-20 mA), or 0-10V voltage.
- Sensor break detection
Self-zero and self-diagnosis
- **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.



Environment

- Operating T°: -10° to 50°C
- Storage T°: -20° to 70°C



- ♦ 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

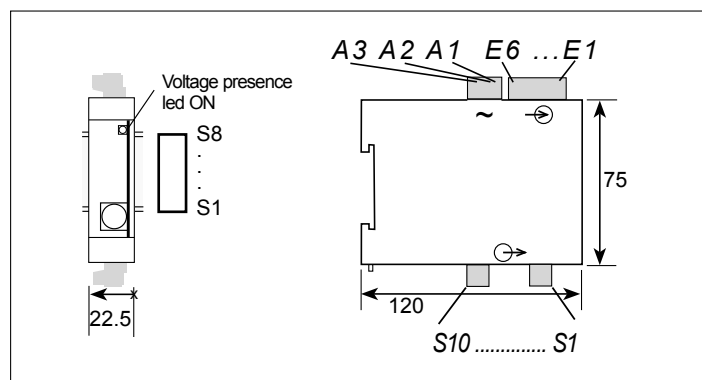
- Average response time = 200 ms (for a variation from 0 to 90% of the input signal)
- Temperature coefficient < 200 ppm/°C

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

• → Switch ON

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

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		±1V	0-100 mV				●	●			
	±250μV			±100mV				●	●	●		
V	±1.5mV	≥1MΩ	±50V	0-1V				●				
	±1mV			0-500mV				●		●		
	±2.5mV			±1V				●		●		
	±15mV			0-10V				●		●	●	
	±10mV			0-5V				●	●			
	±25mV			±10V				●	●		●	
	±450mV		±600V	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							●			●	●	
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			●	●	●	●		
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 to 50°C		●			●	●	●	
	±0,8°C			0 to 100°C		●			●	●		
				0 to 150°C		●			●	●	●	
				0 to 200°C		●		●				
				0 to 300°C		●		●			●	
±1°C	0 to 500°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		●	●	●				

Types:

ARDETEM reference: TM10

SFERE reference: CAP10



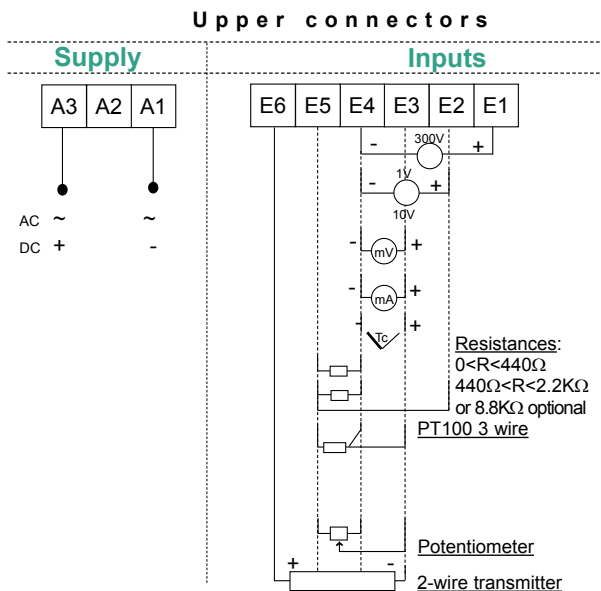
e-mail : info@ardetem.com
http : //www.ardetem.com

Route de Brindas
Parc d'activité d'Arbora N°2
69510 SOUCIEU EN JARREST
- FRANCE -

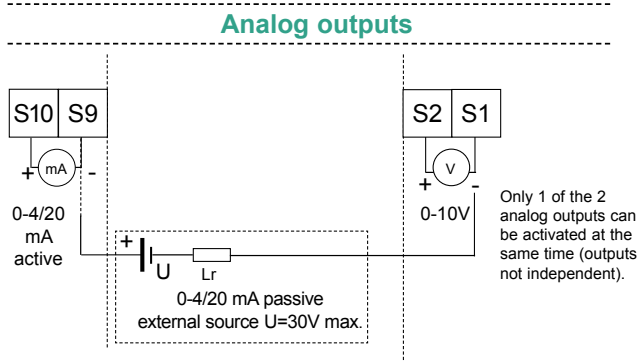
Tél. : 33 (0)4 72 31 31 30
Fax. : 33 (0)4 72 31 31 31

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

Wiring



Lower connectors



Safeties

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

your representative

