

2-WIRE INSULATED PROGRAMMABLE TRANSMITTER

TM2F



- **Universal input (TM2F10):**
±100mV, ±1V, ±10V, ±300V, ±20mA, Pt100 3 wire, Ni 100, thermocouples, resistance and potentiometer.
- **Process input (TM2F11):**
±100mV, ±1V, ±10V, ±300V, ±20mA.
- **Temperature input (TM2F12):**
Pt100 3 wire, Ni100, thermocouples
- **Pt100 input (TM2F13):**
Pt100 3 wire
- **Thermocouple input (TM2F14):**
thermocouples J,K,B,R,S,T,E,N,L,W,W3,WRE5
- **Power supply:**
powered by the output loop
- **Analog output:**
passive 4-20mA insulated

Detection of the sensor rupture.

*Insulation between input / output
Self-zero and self-diagnosis*

*Easy programming via the output terminals
or via the front face DIN plug using the
interface TP2F.*

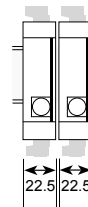
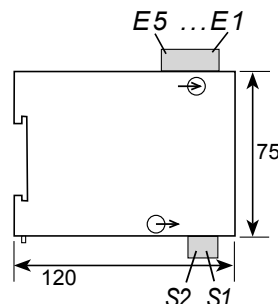
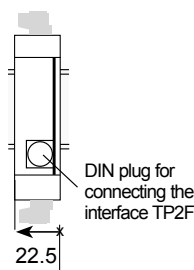
The interface TP2F includes a µconsole with graphical rear-lit LCD, and a USB 2.0 connection.

The user can configure the TM2F either with the µconsole, or with a computer of the type PC via the software Supervision.

In the case of a programming via the DIN plug on front face (connected to the TP2F), the output loop will not be disturbed.

- Self-extinguishing case of black UL 94VO ABS.
- Mounting in switchbox: latching on symmetrical DIN rail.
- *Rack version: consult with ARDETEM*
- Plug-off connectors for screwed connections (2.5mm², flexible or rigid)
- Weight: 200g (with packaging)

Dimensions



Dimensions: 22.5x75x120 mm

Operating T°: -20° to 60°C
Storage T°: -30 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)
- ♦ Limits of the emitted disturbances according to the standard EN55011 class A
- ♦ Vibration withstanding according to the standard EN60068-2-6 +/-150µm from 10 to 57Hz and +/-2g peak from 57 to 500Hz.

Features

Inputs

TM2F 10	TM2F 11	TM2F 12	TM2F 13	TM2F 14	Types of INPUTS	Measure range adjustable from		Basic accuracy (2)	Min. range delta (3)	Permanent overload	Input impedance
●	●				mA♣	-22 to +22mA		≤ ±2μA	1mA	±100mA	0,9V max. drop
●	●				mV♠♠	-110 to +110mV		≤ ±10μV	5mV	±1V	≥ 1MΩ
●	●				V♣	-1.1 to +1.1V		≤ ±100μV	50mV	±50V	
						-11 to +11V		≤ ±1mV	0.5V		
						-330 to +330V		≤ ±30mV	3V	±600V	
●		●		●	Thermocouples ♠ Standard IEC 581 J K T E N L W W3 WRE5 B R S	°C	°F	♦ 			

(1) Line resistance <25Ω

(2) Total accuracy = basic accuracy +/- 0.1% EEC.
(à 23°C)

(3) Other features: consult with ARDETEM

- ♣ A 12 μA pulsed current allows the detection of line or sensor rupture.
- ♣ Cut off: the display of the console and the output of the TM2F remain at down scale for an input signal < than the cut off value, programmable from 0% to 100% of the input scale.
- ♦ CJC efficiency: $\pm 0.03^\circ C/^\circ C \pm 0.5^\circ C$ from -20°C to +60°C

Thermic drift < 0.015% of the MR /°C
Influence of a variation of the supply voltage < 0.005% of the EEC /Volt

MR Measure range
EEC Configured scale span

Output

Measure range 3.5 22mA
Max. load $LR \leq (U_{supply} - 10) / 0.022$ in Ω

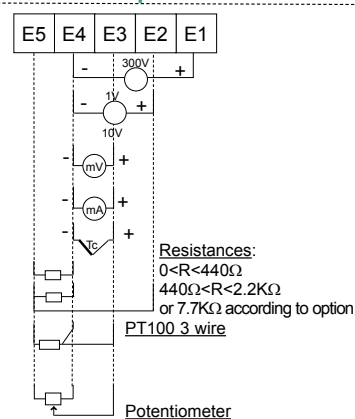
Response time (0 to 90%) programmable:
Input mA/mV/V/resistance 500ms to 6.5s
Temperature and potentiometer inputs... 700ms to 6.5s

Galvanic partition..... 2.5kV - 50Hz - 1mn between inputs and output

Connectings

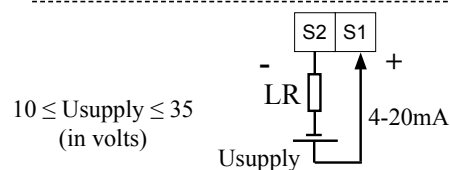
Upper connector

Inputs



Lower connector

Output



Your representative



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