■ Programmable Meter for Temperatures Model TM 2500

Highlights

- **THERMOCOUPLE**
- **RTD**
- **VOLTAGES**
- **DIN HOUSING 48 x 24 mm**
- **ISOLATED POWER SUPPLY**
- **PLUG_IN SCREW TERMINALS**

Standard functions

Modes

- Thermocouple Type K, J, S, L, and R
- RTD (2-wire/3-wire modes)
- Voltages 0 - 200 mV and 0 - 2 V

Software functions

- Scaling for voltage input channels
- Digital filtering
- Max value detection
- Programmable decimal point
- Last digit steps: 1, 2, 5 or 10
- Display test

Digital input channels

The instrument is provided with 3 digital input channels at the rear. These digital input channels are low active. With the aid of the digital inputs are carried out following functions:

- Programming
- Display test
- Reset of max. value

Power supply

The TM 2500 is provided for DC supply voltages. Using DC/DC converters the power supply is isolated from internal electronic and from all input channels. The TM 2500 can be delivered supplied with the following supply voltages:

- 18 .. 36 V DC isolated
- optional 12 V DC isolated
- optional 5 V DC isolated

Construction

The meter TM 2500 has a 4 digit resolution. Digits are 8 mm in height. The meter is presented in standard 1/32 DIN format with short depth (68.2 mm). The meter fit a 45mm x 22.2mm standard 1/32 DIN cut-out.

We have special conditions for this device!
Availability and prices only on demand.

The front of the instrument is drip proof and is dust tight.
The meter comes complete with brackets and plug in screw terminal connectors.

Programming

The meter is user programmable via external push buttons connected to the screw terminal at the rear.
The programming is easy and clearly arranged. By means of a programming menue the user is taken through this programming. The programming is carried out through the digital input channels.

Options

Housing type
- Panel mounting DIN 43700
- Mosaic system mounting (Subklev, Siemens 8RU)

Colour of the front frame
- Black
- Grey coloured RAL 7037
- Grey coloured RAL 7032
- Grey coloured RAL 7035

Design of the front
- Without front foil
- Front foil ALU
- Front foil RAL 7032
- Front foil RAL 7035
- Unit label

Display colour
- Red
- Green

Technical data

Display	: 4 decades, 8 mm, red (opt. green)
Display range	: -999 .. 9999
Display Rate	: 5 /s

Measuring ranges:
Thermocouple

Ni-CrNi (K)	: -100 to +1370 °C
Accuracy	: ± 1°C, ± 1 Digit (>200°C)
Fe-CuNi (J)	: -100 to 1000°C
Accuracy	: ± 1°C, ± 1 Digit
PtRh90/10%-Pt (S)	: 0 to 1750°C
Accuracy	: ± 1°C, ± 1 Digit (>250°C)
Fe-CuNi (L)	: -100 to +900°C
Accuracy	: ± 1°C, ± 1 Digit
PtRh87/13%-Pt (R)	: 0 to 1590°C
Accuracy	: ± 1°C, ± 1 Digit (>200°C)
Ice Point Compensation	: internal 0 to 50°C
Accuracy	: ± 1°C

RTD

Modes	: 2-wire / 3-wire
Resolution	: 0.1°C or 1 °C
Accuracy	: ± 1°C

Voltages

Range 1	: 0 to 200 mV, ± 0.1%, ± 1 Digit
Range 2	: 0 to 2 V, ± 0.01%, ± 1 Digit

Digital input channels:

Low level	: < 0,4 V
High level	: > 3,5 V, max. 30 V

Input resistance:

Input 1-4	: 10 kΩ to +5V
Input 5	: 10 kΩ to GND
Power supply DC	: 18 V to 36 V DC, isolated
optional	: 12 V DC, ± 10 %, isolated
optional	: 5 V DC, ± 10 %, isolated
Power consumption	: approx. 25 mA (red), 24 VDC
	: approx. 40 mA (green), 24VDC
Housing	: panel mounting DIN 43700
Dimensions	: 48 x 24 x 60 mm
Depth	: < 70 mm incl. screw terminal
Protection	: front IP 40
EMV	: EMV-conform with 89/336/EWG
Operating temperature	: 0 .. 50 °C

Ordering information

TM 2500 -						

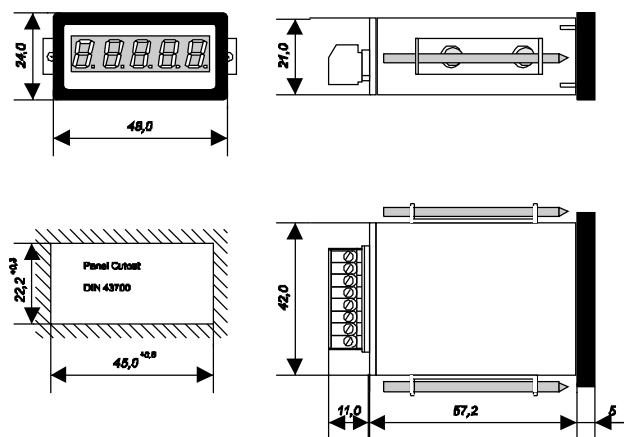|		
Housing		
0	Panel mounting	
1	Panel clip	
Front frame colour		
0	Black	
1	Grey coloured RAL 7037	
2	Grey coloured RAL 7032	
3	Grey coloured RAL 7035	
Front design		
0	Without front foil	
1	Front foil ALU eloxiert	
2	Front foil RAL 7032	
3	Front foil RAL 7035	
Display colour		
0	Red	
1	Green	
Power supply		
0	5 V DC, ± 10%, isolated	
1	12 V DC, ± 10 %, isolated	
2	18 .. 36 V DC, isolated	

Unit label

Please specify in clear text at order !

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Dimensions

Panel Mounting

Panel Clip

Mosaic Systems:
Siemens 8RU (M50x25)
Subklev