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CALIBRATION CERTIFICATES

High-precision temperature measuring instrument ALMEMO® 1030-2 Using Pt100 sensors, resolution 0.001 K



Technical features

- Temperature measurement with very high resolution, precision, and linearity with Pt100 temperature sensor
- Suitable as reference device in calibration laboratories and quality assurance procedures
- Highest accuracy through multipoint adjustment of the Pt100 temperature sensor (factory).
- Compact modern, ergonomic design
- 2 electrically isolated input sockets for Pt100 sensors
- Resolution can be set at 0.001 or 0.01 K.
- Units °C, °F, K
- High-resolution A/D converter, delta-sigma, 24-bit, 1.25 mops
- 2 output sockets for digital interface, ALMEMO® memory connector
- Illuminated white graphics display
- Easy and convenient to operate by means of 4 soft-keys and cursor block
- Measuring display: 2 measured values and differential
- Measuring functions: Zero-setting, smoothing, Maximum / minimum values, individual value memory for 100 values
- Data logger with ALMEMO® memory connector (Accessories)
- Sensor programming: smooting, designation, Units, resolution
- Device configuration: illumination period, contrast, Device address, , baud rate
- Choice of language: German, English, French



Menu selection REL > 005

154.512

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Max: 161.349

P12: 125.454°C

P304 Reference 2 Min: 135.374 Max: Memory: P12:

Functions menu



SENSORPROGRAMMING Sensor: 0 Designation: Reference 2 Multi-Point calibration: ν Resolution: 0.001 Units: Smoothing: MKK MENU M

Sensor programming

Technical data

AI MFMO® 1030-2

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Measuring inputs	2 ALMEMO® input sockets For Pt100 sensors
Electrical isolation A/D converter Measuring range Pt100 Resolution	Semiconductor relay (50 V) delta-sigma, 24-bit, 1.25 mops -50 +400°C display from -200°C 0.001 K or 0.01 K
Measuring current Accuracy nominal conditions	1 mA ±0.01 K ±1 digit 23°C ±2K , 1013mb, battery operation
Temperature drift	typical 0.5 ppm / K
Outputs	2 ALMEMO® sockets for interface cable and ALMEMO® memory connector
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Standard equipment

Graphics display, 128 x 64 dots,
8 rows
Illumination 2 white LEDs
7 silicone keys (of which 4 softkeys)
Real-time clock buffered
with device battery
100 measured values

Voltage supply

Battery set	3 AA alkaline batteries
Mains adapter	ZA1312NA7 230 VAC to 12 VDC, 1
'	electrically isolated
Current consumption	approx. 20 mA
(without i / o modules)	with illumination approx. 40 mA
Housing	(LxWxH) 127 x 83 x 42 mm
	ARS (maximum 70 °C) 290 σ

t 100 temperature sensor	FPA923L0250
Measuring element	Pt100 as per DIN EN 60751
Class	1/10 B (DIN EN 60751) at 0 °C
Measuring tip	Operative range -50 to +400 °C
Response time T ₉₀	5 seconds
Nominal length	250 mm
Shaft	Stainless steel, diameter 3 mm
Connection cable	2 meters, FEP / silicone
ALMEMO® connector	Resolution 0.001 K



Pt100 temperature sensor FPA923L0250

Accessories

Order no. ZA1945DK
Order no. ZA1904SD
Order no. ZB2490GS2
Order no. ZB2490HS

Variants

High-precision temperature measuring instrument with accessories, evaluation software, and Pt100 temperature sensor Complete set including DKD calibration certificate

ALMEMO® 1030-2 measuring instrument including 3 AA alkaline batteries, connector mains unit ZA1312NA7, USB data cable ZA1919DKU, instrument case, and evaluation software ALMEMO View SW5500AV (see page 06.16), and Pt100 temperature sensor FPA923L0250 including DKD calibration certificate (2 temperature points at 0 and 100 °C and adjustment) Order no. SP10302D www.ahlborn.com