ALMEMO® Measuring Instruments

ALMEMO® 2450-1L

Compact ALMEMO® measuring instrument
1 measuring input,
over 35 measuring ranges.
Runs in battery mode

Technical data and functions

- Generously dimensioned 2-row segment display including units
- Easy and convenient to operate by means of 7 keys.
- Over 35 measuring ranges for
  - Thermocouple and NTC sensors
    For the customer’s own sensors ready-to-use ALMEMO® connectors are available. (see chapter 07)
  - Atmospheric humidity sensor, capacitive, dewpoint sensor, water detection probe, moisture in wood FHA636MF (see chapter 08)
  - Pressure transducer FDA602L/D, FD8214, FD8612, Tachometer, turbine flowmeter (see chapter 10)
    Current clamps FEA604, Voltage / current measuring modules ZA990xAB (see chapter 11)
  - Meteorological radiation probe heads FLA613 (see chapter 12)
  - Carbon dioxide sensor FYAD00CO2, Carbon monoxide probe and ozone probe (see chapter 15),
  - ALMEMO® plugs with multi-point adjustment are supported.
  - Measuring functions
    Measured value, zero-setting, saving of maximum / minimum values, hold function
  - Test functions
    Segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display.

Technical data

<table>
<thead>
<tr>
<th>Measuring input</th>
<th>1 ALMEMO® socket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision class</td>
<td>C (see page 01.06)</td>
</tr>
<tr>
<td>Measuring rate</td>
<td>2.5 mops</td>
</tr>
<tr>
<td>Measuring ranges</td>
<td>(see 01.05 / 01.06) NiCr-Ni(K), NiCroSil-NiSil(N), Fe-CuNi(L), Cu-CuNi(U), Cu-CuNi(T), PtRh10-Pt(S), Fe-CuNi(J), NTC, -200 to +950 °C, -20 to +100 °C</td>
</tr>
<tr>
<td>Voltage</td>
<td>-26 to +26 mV, -260 to +260mV, 0 to 2.6V</td>
</tr>
<tr>
<td>Current</td>
<td>0 to 26 mA, 4 to 20 mA Double connectors with 2 x differenti al voltage / differential current (input D - B) are not possible.</td>
</tr>
<tr>
<td>Humidity, capacitive</td>
<td>0 to 100 % RH, (% RH, HcRH, HRH)</td>
</tr>
<tr>
<td>Dew point, mixture ratio, partial vapor pressure, enthalpy, rotating vanes, digital process (0 / 100 %), frequency, pulse, rotational speed, digital</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resolution</th>
<th>(see page 01.08 / 01.09)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linearization accuracy</td>
<td>(see page 01.08 / 01.09)</td>
</tr>
<tr>
<td>Sensor power supply</td>
<td>9 V, maximum 0.5 A</td>
</tr>
<tr>
<td>Standard equipment</td>
<td>LCD 7 segments Measured value 5 characters, 15 mm Function 4½ characters, 9 mm</td>
</tr>
<tr>
<td></td>
<td>16 segments Units 2 characters, 9 mm 9 symbols</td>
</tr>
<tr>
<td>Keypad</td>
<td>7 silicone keys</td>
</tr>
<tr>
<td>Power supply</td>
<td>Battery set 3 AA alkaline batteries</td>
</tr>
<tr>
<td>Current consumption</td>
<td>approx. 10 mA without input modules</td>
</tr>
<tr>
<td>Housing</td>
<td>ABS (max. 70 °C) 127 x 83 x 42 mm (LxWxH)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10 to +60 °C</td>
</tr>
<tr>
<td>Atmospheric humidity (ambient)</td>
<td>10 to 90 % RH (non-condensing)</td>
</tr>
</tbody>
</table>
### Compact measuring instrument.
**Runs in battery mode**

### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubberized impact protection, gray</td>
<td>ZB2490GS2</td>
</tr>
<tr>
<td>DIN rail mounting</td>
<td>ZB2490HS</td>
</tr>
<tr>
<td>Magnetic fastening</td>
<td>ZB2490MH</td>
</tr>
<tr>
<td>Instrument case</td>
<td>ZB2490TK2</td>
</tr>
</tbody>
</table>

### Standard delivery

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries, operating instructions, manufacturer’s test certificate</td>
<td>MA24501L</td>
</tr>
</tbody>
</table>

**Compact measuring instrument ALMEMO® 2450-1L**

DAkkS or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“). DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.