DTL C
BAUR oil tan delta and resistivity tester

The established analysis and diagnosis of insulating oils with BAUR DTL C provides valuable findings in the scientific work, research and development. The extensive knowledge about the current state of insulating liquids becomes more important even for the operational power network expert.

BAUR DTL C offers the latest and most precise information for efficient oil management in plants in the electricity industry, the medical and safety industry. BAUR DTL C is the only device in the market which combines measurement of the dissipation factor, specific resistance and relative permittivity.

Maximum economic and safe maintenance planning

At present, the BAUR DTL C is the leading standard in insulating oil testing across the world. In practice, the comprehensive analysis with BAUR DTL C impacts a precise and, hence more economic maintenance planning. The saving potential for network operators, depending on the network size, and the associated insulating oil requirement is several hundred thousand Euros per year.

Features

- Dissipation factor measurement from 4.0 to 1 x 10⁻⁶
- Measurement of the specific resistance with both polarities up to 100 TΩm
- Measurement of the relative permittivity ε_r
- Highly precise induction heating of the cell with accurate temperature control
- Functional design for high efficiency, user-friendliness and safety in case of minimum space requirement
- Test cell with safety ring, three electrodes and quartz glass rings
- Test cell according to IEC 60247 Fig. 3
- Calibration of the empty cell
- Emptying of the test cell possible without disassembly
- Direct temperature measurement by placing the sensor in the measurement electrodes
- Fully automatic measuring sequences from 12 pre-programmed test standards and 10 user-programmable test sequences
- User interface in 13 languages
- Ergonomic operating unit with oil-proof membrane keyboard, easy-to-read colour LCD display and integrated printer
- Efficient measuring data management with BAUR Software ITS Lite*

* Free download at www.baur.eu
## Technical data

### Measurements

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissipation factor measurement</td>
<td>4 – 1x10^-6</td>
<td>1x10^-6</td>
</tr>
<tr>
<td>Relative permittivity</td>
<td>1 – 30</td>
<td>1x10^-2</td>
</tr>
<tr>
<td>Specific resistance measurement</td>
<td>2.5 MΩm – 100 TΩm</td>
<td>1x10^-2</td>
</tr>
<tr>
<td>Temperature measurement</td>
<td>11 – 110 °C</td>
<td>0.1 °C</td>
</tr>
</tbody>
</table>

### General information

- **Power supply**: 90 – 264 V (50/60 Hz)
- **Max. power consumption**: 500 VA
- **Display**: LCD colour display (320 x 240)
- **Software available in**: German, English, French, Spanish, Italian, Portuguese, Dutch, Polish, Russian, Chinese (Cn), Chinese (Tw), Czech, Korean
- **Programmable test sequences**: 10

### Interface

- USB 2.0 (type B plug)
- BAUR Report Manager external USB interface (type A plug)

### Printer

Matrix printer, 24 characters, 57mm plain paper

### Printer

- Ambient temperature: -10 to +45 °C
- Storage temperature: -20 to +55 °C
- Relative humidity: Non-condensing
- Dimensions (W x H x D): 545 x 458 x 384 mm (closed) 545 x 770 x 465 mm (open)
- Weight: 28 kg
- Degree of protection: IP 32
- Test cell according to IEC 60247 Fig. 3
  - Content: 45 ml
  - Idle capacity tolerance: 67.8 to 73 pF
  - Electric strength in air: 2 000 V rms
  - Oil viscosity: <150 mm²/s at 20 °C

### Options

- Dust cover
- Transport case
- Test cell according to IEC 60247 Fig. 3 with transport case
- Paper roll for printer, 57 mm width, 30 mm
- Ink ribbon (blue) for printer
- TE C tester
- BAUR Report Manager – External USB interface for measurement data management

---

**Standard delivery includes**

- BAUR DTL C oil tan delta and resistivity tester incl. integrated plain paper printer
- Dust cover
- Hose for emptying the test cell
- Test cell according to IEC 60247 Fig. 3 with transport case
- Temperature sensor
- One-way syringe 50 ml
- Mains supply cord
- User manual
- Video tutorial

---

*Data sheet: BAUR · 826-031-9 · 06.2017 · Subject to modifications*