

## DTL C

### BAUR oil tan delta and resistivity tester



#### Precise analyses, extensive diagnoses, maximum efficiency

- Fully automatic dissipation factor measurement
- Pre-programmed standards
- Maximum accuracy

The established analysis and diagnosis of insulating oils with 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.

DTL C offers the latest and most precise information for efficient oil management in plants in the electricity industry, the medical and safety industry. 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 DTL C is the leading standard in insulating oil testing across the world. In practice, the comprehensive analysis with 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  $1 \times 10^{-6}$
- Measurement of the specific resistance with both polarities up to 100 TΩm
- Measurement of the relative permittivity  $\epsilon_r$
- 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 protective ring electrode, 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 (automatic/manual)
- 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
- Multilingual user interface
- 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](http://www.baur.eu)

## Technical data

Measurements	Range	Resolution
Dissipation factor measurement	4 – 1x10 <sup>-6</sup>	1x10 <sup>-6</sup>
Relative permittivity	1 – 30	1x10 <sup>-2</sup>
Specific resistance measurement	2.5 MΩm – 100 TΩm	1x10 <sup>-2</sup> (complete range)
Temperature measurement	11 – 110 °C	0.1 °C
General information		
Power supply	90 – 264 V (50/60 Hz)	
Max. power consumption	500 VA	
Display	Colour LCD (approx. 3.5"), screen resolution 320 x 240 pixels	
Software available in	German, English, French, Spanish, Italian, Portuguese, Dutch, Polish, Russian, Chinese (Cn), Chinese (Tw), Czech, Turkish, Korean	
Pre-programmed standards	IEC 60247:2004 Standard, IEC 60247:2004 Routine, VDE 0380- 2:2005_01 Standard, VDE 0380-2:2005_01 Routine, BS 5737:1979 Standard, BS 5737:1979 Routine, ASTM D924-15 Standard, ASTM D924-15 Routine, ASTM D1169-11 Standard, ASTM D1169-11 Routine, IEC 61620:1998-11, JIS C2101:2010, NBR 12133 Standard, NBR 12133 Routine	
Programmable test sequences	10	

Interface	<ul style="list-style-type: none"> <li>USB 2.0 (type B plug)</li> <li>BAUR Report Manager external USB interface (type A plug)</li> </ul>
Printer	Matrix printer, 24 characters, 57mm plain paper
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
Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EC), EMC Directive (2014/30/EC), EN 60068-2-ff Environmental testing

### BAUR software ITS Lite

Software for efficient measurement data management (free download from [www.baur.eu](http://www.baur.eu))

For technical data see ITS Lite data sheet

### 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 <sub>rms</sub>
Oil viscosity	<150 mm <sup>2</sup> /s at 20 °C

## Standard delivery includes

- 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

### Contact:

BAUR GmbH (Headoffice Österreich)  
T +43 (0)5522 4941-0  
F +43 (0)5522 4941-3  
headoffice@baur.at  
[www.baur.eu](http://www.baur.eu)

BAUR Prüf- und Messtechnik GmbH  
T +49 (0)2181 2979 0  
F +49 (0)2181 2979 10  
vertrieb@baur-germany.de  
[www.baur-aermanv.eu](http://www.baur-aermanv.eu)

BAUR France  
T +33 (0)9 800 10 300  
F +33 (0) 172 718 485  
info@baur-france.at  
[www.baur.eu/fr](http://www.baur.eu/fr)

Baur do Brasil Ltda.  
T +55 11 297 25 272  
atendimento@baurdobrasil.com.br  
[www.baurdobrasil.com.br](http://www.baurdobrasil.com.br)

奥地利保尔公司上海代表处  
电话 +86 (0)21 6133 1877  
传真 +86 (0)21 6133 1886  
shanghaioffice@baur.at  
[www.baur.eu/china](http://www.baur.eu/china)

BAUR Test Equipment Ltd. (UK)  
T +44 (0)20 8661 957  
sales@baurtest.com  
[www.baurtest.com](http://www.baurtest.com)

BAUR Representative Office Hong Kong  
T +852 2780 9029  
F +852 2780 9039  
office.hongkong@baur.at  
[www.baur.eu](http://www.baur.eu)

BAUR representatives:  
[www.baur.eu/en/baur-worldwide](http://www.baur.eu/en/baur-worldwide)