

# PortaTest

## Oil tester for insulating liquids



- RS232
- PC
- Print

The PortaTest allows a fully-automatic detection of the dielectric strength of insulating liquids. The compact design allows to use the PortaTest either on-site or in laboratories. Due to the protection cover that can be opened wide, the test vessel can comfortably be placed on the high-voltage electrodes in the test chamber.

Our oil testers are very easy to handle. The test programs are selected by the operator according to the respective standards. The test electrode and the electrode spacing required for the test are directly indicated by the tester. The distance is adjusted via an adjusting gauge. The test sequences are performed automatically.

Due to the graphic display, the tester can be operated easily. The four soft keys below the display serve for the selection of the standard, for data input, for the configuration of your own test sequences and for the overall configuration of the tester.

When delivered, the tester already includes test sequences, which correspond to all common national and international standards and test specifications. On top of that, you can define up to ten further test sequences and store them in the testing device.



### Highlights

- automatic oil tester
- test voltages 60KV, 80KV and 100KV
- variable test voltage and test-voltage increase
- integrated test sequences according to national and international standards
- storage capacity for ten self-defined test sequences
- carbonization is avoided through short switch-off times shorter than < 1ms
- indication of average values and indication of individual breakdown values
- magnetic stirrer
- integrated plain-paper protocol printer
- various test electrodes
- graphic display with backlight
- clear operator guiding via four soft keys
- input of sample number and sample temperature
- PC software PrintCom for storing and printing test results

Article Number	4018300	4018301	4018302
test voltage	60KV	80KV	100KV
voltage measurement TRMS	•		
voltage increase	0.1...10KV/s		
standards: IEC 156/95, VDE 370/96, BS 148/72, UTE C 27-221/74, UNE 21309/89, NEN 10156, SEV 3141/69, CEI 10-1/73, ASTM D1816/90, ASTM D877/90, JIS 2101-82, JIS Silicon 2101/82	•		
test sequences according to standards	12		
freely programmable test sequences	10		
withstand-voltage test	•		
step-voltage test	•		
switch-off time in case of disruptive breakdown	<1ms		
magnetic stirrer [can be switch on/off] incl. removal device for stirrer bar	•		
matrix printer 40 digits per line	•		
glas test vessel with one pair of electrodes as desired (0.4 liters)	•		
adjusting gauge	•		
integrated clock with date and battery back-up	•		
mains-voltage supply	230 - 240V   50 - 60Hz		
special-voltage supply 110V   60Hz	◇		
operating temperature   storing temperature	0...50°C   -20°...50°C		
dimensions (w x d x h mm)	580 x 370 x 400		

• Standard | ◇ Option | – not available

### Integrated test processes

- 12 standard test sequences consistent with worldwide test standards
- 10 freely programmable test sequences
- short test program for a fast evaluation of the condition (test time 5min)
- overload test, single disruptive breakdown test
- voltage-withstand test (1min...24h) with programmable rise time
- step test (1...10 steps)

Every oil sample can be marked automatically with a serial number by the PortaTest device. If desired, you can also use your own numbering.

After every test, a detailed test protocol is printed on the built-in printer. In addition to the standard used for the test, the print-out contains information like date, time, sample number, individual disruptive breakdown values, average values and standard deviations.

With our software PrintCom, the test results can also be transmitted from the oil tester to the PC, where they are stored and summarized to test protocols. To process the data optimally, PrintCom stores all data in Excel® format.



	Article Number
test vessel with one pair of sphere electrodes 12.7 mm...1/2"   0.4 liters	4018303
test vessel with one pair of mushroom electrodes 36 mm   0.4 liters	4018304
test vessel with one pair of disc electrodes 25.4 mm...1"   0.4 liters	4018305
test vessel with one pair of disc electrodes and 0.5 mm edge radius, 25.4 mm...1"   0.4 liters	4018306

### Refer to:

Windows® software PrintCom	58
Rolling tables	78
Test methods	94

