

CTL27 Liquid Conductivity Test Apparatus Data Sheet



Liquid Conductivity Test Apparatus

For accurate measurement of the conductivity/resistivity of liquids and other applications.

The liquid conductivity test apparatus is used to assess a liquid 's conductive properties by measuring the current flowing through the material when a known 100 V is applied across it with reference to ground. A heptane known data reference sample is used to check the equipment prior to conducting a test on liquid sample with no known conductivity data. The equipment permits testing in general accordance with IEC 60079-32-2.

Benefits

- Simple to use
- Simple assembly/disassembly of test cell. This is especially important since cleaning of the test cell, regularly between test samples, is essential when performing liquid conductivity tests
- Close interference fit machined surfaces for excellent sealing when testing liquids

Functional specification and deliverables

- Power supply 0v to -0.5kV with respect to ground (test standard requires 100V +/-1V)
- Picoammeter (2 nA to 20 mA ranges) – 2 nA range has 10 fA resolution +/- 400 fA. Noise 20 fA.
- Calibration certificate supplied.
- Custom manufactured liquid conductivity test cell (with very effective cell sealing system through expansion of dissimilar materials at room temperature). To disassemble/reassemble the test cell it is usual to place it within a refrigerator for ½ hour. This allows the internal components to be flushed and cleaned effectively between test checks with a Heptane reference sample.
- Miscellaneous cables (transorb in line overvoltage protection unit – protects sensitive measuring equipment from over voltage).
- Interlock Test Chamber.

Optional extras

- Calibration and training services
- Spare parts

The following items are available at an additional cost

- The JCI 155v6 Charge Decay Analyser together with a JCI 173 liquid sample support insert for testing charge decay time of liquids. May also prove to be beneficial when performing R&D into various liquid properties or for assessing electrostatic risks with processing and handling the product. The JCI 155v6 must not be used for testing solvents.

DEKRA Organisational & Process Safety Contact

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We have offices throughout North America, Europe, and Asia.

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