Voltech IEC Reference Impedance Network

Impedance Network for Full-compliance Flicker Testing to EN61000-3-3



The Voltech IEC Reference Impedance Network is a fully compliant impedance for use when testing single-phase equipment to the EN61000-3-3 flicker standard.

The network provides the correct total single-phase line and neutral impedance for a test system when used with a PM3000ACE-002, the leads supplied and a 50Hz source with an output impedance of less than 0.01Ω .

Specification

Series Resistance: $0.4 + 0.00 - 0.02\Omega$

 $(50Hz, 23^{\circ}C \pm 8^{\circ}C)$

Series Reactance: $0.25 \pm 0.01\Omega$

 $(50Hz, 23^{\circ}C \pm 8^{\circ}C)$

Continuous Current: 16A_{rms}

Peak Current: ± 50A_{peak}

Maximum Voltage: $\pm 1000 V_{peak}$ Operating Temperature: $5 ^{\circ}$ C to $40 ^{\circ}$ C

Relative Humidity: 10% to 80%, non-condensing

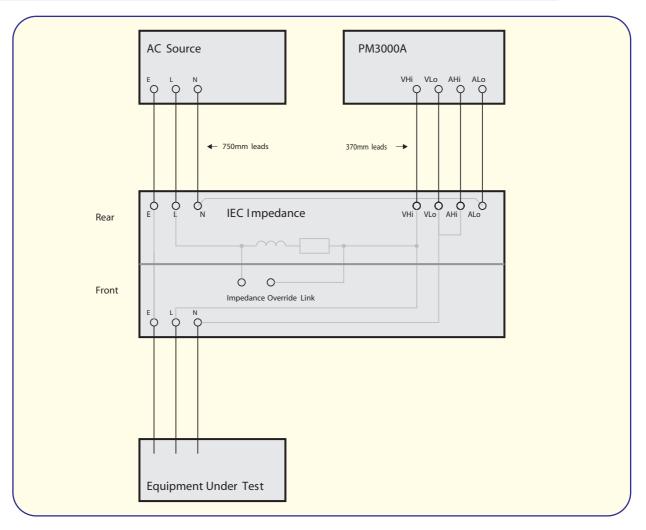
Dielectric Strength: Input to Case: 2kV DC, 1 minute

Power Source: $110V \text{ to } 220V \pm 20\%$

45Hz to 65Hz Fuse 20mm 0.5AT

10W, 20VA maximum

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The Voltech IEC Reference Impedance Network is constructed with the highest quality materials throughout to ensure stable and trouble-free measurements under all working conditions.

Connections to the ac source and power analyzer are made via 4mm safety sockets. When used with the color-coded leads supplied, the connections are easy to make, and the total system impedance will be in accordance with the requirements of the 61000-3-3 flicker standard. The equipment under test is connected to the front of the impedance via a standard outlet or 4mm safety sockets.

Also at the front of the network, an override link may be fitted to allow harmonics and other tests to be carried out without the impedance in circuit.

See the Voltech technical note 104-152 for how to measure system impedance and how to use multiple impedances to test flicker up to 75A.

Voltech Instruments Ltd.

148 Sixth Street, Harwell International Business Centre Harwell, Didcot, Oxon, OX11 0RA, UK

Tel: +44 (0)1235 834555 Fax: +44 (0)1235 835016 E-mail: sales@voltech.co.uk

Voltech Instruments Inc.

11637 Kelly Road, Suite 306 Fort Myers, FL 33908, USA Tel: +1 239 437 0494

Fax: +1 239 437 3841 E-mail: sales@voltech.com



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