

## **Voltech Instruments Ltd.**

65 Milton Park, Abingdon, Oxfordshire. OX14 4RX U.K.



Operations, Accounts & Administration:

Tel: +44 (0) 1235 861173

Fax: +44 (0) 1235 861174

Sales, Service & Applications Support:

Tel: +44 (0) 1235 834555

Fax: +44 (0) 1235 835016 Email: sales@voltech.co.uk

http://www.voltech.co.uk

We hereby declare that the Automatic Transformer Tester model number AT3600 is suitable for routine (production) dielectric strength ("hipot") testing of transformers in accordance with the following standards:

EN 61558-1:1998. SAFETY OF POWER TRANSFORMERS, POWER SUPPLY UNITS AND SIMILAR.

EN 60065:1998. AUDIO, VIDEO AND SIMILAR ELECTRONIC APPARATUS - SAFETY REQUIREMENTS.

UL 1411  $5^{TH}$  Edition. Transformers for Use in Audio, Radio and Television Type Appliances.

CSA 22.2 No.1-94 AUDIO, VIDEO, AND SIMILAR ELECTRONIC EQUIPMENT. And others to be defined.

Principle of operation, AT3600 AC dielectric strength test:

The output of a programmable 500VA signal generator is coupled to the input of a step-up transformer that is capable of providing in excess of 200mA into a short-circuit for a short period of time. The output voltage of the transformer is continuously monitored using a voltmeter of input resistance  $>50 \mathrm{M}\Omega$  and the measured voltage is displayed on the front panel of the tester in real time. The output voltage of the transformer is continuously and automatically adjusted to be at the programmed level. Whenever the programmed trip current is exceeded or the programmed output voltage cannot be maintained, the tester will automatically display 'FAIL' and illuminate a red indicator on the front panel. Optionally the tester will also return a 'FAIL' result to the PC Server (if used) and sound a warning buzzer (if enabled).

This method ensures that the device under test is always subjected to the programmed test voltage or a 'FAIL' will be recorded.

The tester should always be installed and maintained in accordance with the instructions contained within the latest Voltech documentation.

Jonathan Francis

Technical Marketing Manager

On behalf of Voltech Instruments Ltd.

References:

EN61558-1: 1998 Annex L. Routine Tests. EN60065: 1998 Annex N. Routine Test.

UL 1411 5<sup>th</sup> Edition 1998 Section 28. Dielectric Voltage-Withstand Test. + CRG 1411 Canadian

Requirements Comparison Guide.

© Voltech Instruments Ltd, June 2001.

104-003/2