



The E3640 digital flash tester is a portable mains operated instrument, capable of operating from either 115V or 230V at 50/60Hz. It applies up to 4kV AC and displays output voltage and leakage current on the twin 3½ digit LCD's.

The unit has three modes:

Breakdown - fast transients can trigger the trip;

Burn - where the trip function is bypassed and the fault current flows continuously to expose the fault;

Hold - shows breakdown voltage and leakage current.

SPECIFICATIONS

ELECTRICAL

Power Requirement: 115/230 Volts $\pm 15\%$ 50/60Hz 40VA

Fuses: 230V - 5x20mm 0.25A, HBC, Type F

115V - 5x20mm 0.5A, HBC, Type F

Output Voltage Range: 0 - 2.2, 0 - 4.2kV 50/60Hz

Output Voltage Accuracy: $\pm 2\%$ of reading ± 1 digit

Leakage Current: 0 - 5 mA (nominal) 50/60Hz in 10 μ A steps

Leakage Current Accuracy: $\pm 2\%$ of reading ± 1 digit

Trip Level Range: 0 to 3mA 50/60Hz

Setting Accuracy: $\pm 5\%$ of full range

Trip Response Leakage: Will trip for fault duration $>5\text{ms}$ but not for $<100\mu\text{s}$

Breakdown: Will trip for fast transients of 30 μs and above

MECHANICAL

Weight: 4kg **Dimensions:** 330 x 263 x 144mm

Bump Test IEC 68-2-29

Vibration, Impact and Drop: BS EN61010 8.3, 8.2, 8.4

ENVIRONMENTAL

Operating Temperature: -15°C to $+55^{\circ}\text{C}$

Storage Temperature: -25°C to $+65^{\circ}\text{C}$

Operating Humidity: 80% RH at 40°C

Installation Category II: BS EN 61010 - Annex J

Pollution Degree 2: BS EN 61010 - clause 3.7.3.2

INDICATORS

kV ON: Red lamp shows the high voltage circuit is energised

FAIL: A red lamp which indicates the trip has triggered

Audible Fail: A buzzer indicates the trip has triggered

CONTROLS

Power Switch type: Double pole ON/OFF rocker type

Mode Select: Three position rotary switch selects the breakdown, trip or burn mode of operation

Trip Level: Single turn trip level setting potentiometer

Voltage Select: Two position rotary switch for 2 or 4kV range.

Voltage Control: Single-turn potentiometer for accurate setting of the output voltage

CONNECTORS

Power Inlet: A module which combines a filter with an IEC 320 inlet with an ON/OFF double pole rocker.

Low/Earth Terminal: Large yellow/green binding post

High Voltage Outlet: Red custom designed deep socket

LEADS/PROBES

Earth Lead: A green heavy duty flexible lead with a 4mm plug and a fixed shrouded crocodile clip at the other.

High Voltage probes: A custom moulded pistol shaped probe with a trigger operated retractable "hot" end. A red high voltage lead emerges from the bottom of the hand grip and is terminated with especially designed high voltage safety connector.

EMC: To BS EN 50081-1 and BS EN 50082-2

Safety and Flash Test: To BS EN 61010-1

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