

VC24-24

24kV High Voltage AC Test System



Features

- 0-24kV output voltage
- 24mA maximum output current
- Automatic mains voltage selection
- Key operated supply switch to prevent unauthorised operation
- Dual overload protection
- Variable electronic trip - 16, 20 & 24mA
- Voltage and current metering
- Zero-volt interlock
- Emergency stop
- Visual indication of test piece failure

The VC24-24 is a general purpose high-voltage AC test set, ideal for Flash Testing of plant and switchgear, such as circuit breaker vacuum bottles, with voltages up to 24kV AC.

The output voltage is variable from zero to 24kV. A zero-voltage interlock is provided, ensuring that the output may only be energised with the voltage control at zero.

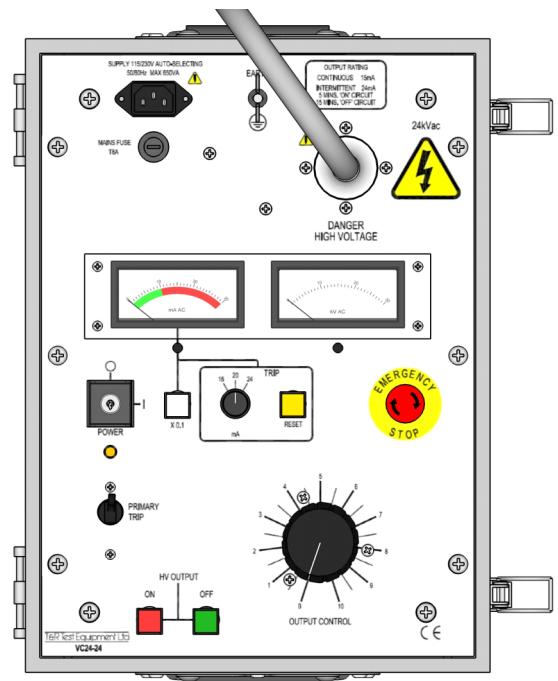
The unit features automatic mains voltage selection and an emergency-off switch.

	Max. Voltage	Max. current	kV meter full scale	mA meter full scale
VC24-24	24kV	24mA	30kV	3mA/ 30mA

The output voltage and current are metered by large, linear analogue instruments. The unit has a x0.1 range on the mA meter. The mA meter is marked with a green scale for currents under 10mA and a red scale for currents larger than 10mA.

The test object and output are protected by an adjustable electronic current trip. The trip level may be set to 16, 20 or 24mA. Breakdown of the test object is visibly indicated and the unit must be manually reset after a trip condition, before testing can be resumed.

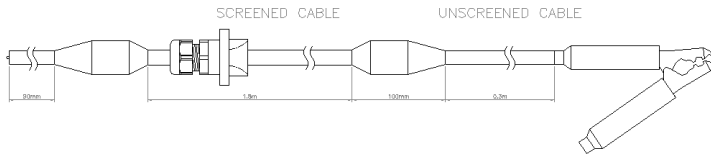
The unit is supplied in a compact, portable case with a permanently connected 2 metre long HV output lead. The VC24-24 is one of a family of high voltage units spanning the range 6kV, 200mA to 30kV, 40mA.



VC24-24 Specification

Output

The output of the VC24-24 is supplied via a permanently connected and partially screened high voltage cable, 2metres long, terminated in a large clip. This stows in the lid for easy transit, along with the ES30 earthing stick and earth lead.



The output of the VC24-24 is rated at 24mA on a duty cycle of 5 minutes on/15 minutes off, or 15mA continuously. These ratings are based on an ambient temperature of 25°C.

Metering

The output voltage and current are metered by large, accurate true RMS analogue meters.

Meter	Full scale	Resolution	Accuracy
kV	30kV	0.01kV	±2% of FS
mA	3mA/ 30mA	0.02mA	±2% of FS

The kV meter has a red line at 24kV, and the mA meter a red scale above 10mA.

Supply Requirements

115V/230V±10% ac auto-selecting 50/60Hz 1ph 650VA

Temperature Range

Storage -20°C to 60°C Operating 0°C to 45°C

Included Accessories

Operating manual, ES30 earthing stick, spare fuses, mains lead, 5m earth lead

Dimensions

300x400x470mm

Weight

27kg

Overload Protection

Two overload protection circuits are provided on the units. The first is the user selectable output level trip, and allows currents of 16mA, 20mA or 24mA to be set. A trip condition is indicated by an illuminated push button and an audible alarm.

The second trip circuit is a magnetic circuit breaker operating on the primary of the HV transformer. This operates on large overloads (such as under flashovers).

Protection and Safety

In addition to the output protection the input and control supplies are protected by fuses.

All units are designed to meet the requirements of BS EN61010.

An earth terminal is provided on the transformer, which must be connected to a low impedance local earth.



ES30 Earthing stick

Note: Due to the company's continuous research programme, the information above may change at any time without prior notification. Please check that you have the most recent data on the product.

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