

VC24-24 Mk3

24kV Vacuum Bottle Check 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 MK3 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 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.

Unit	Maximum Voltage	Maximum current	kV meter full scale	mA meter full scale
VC24-24 MK3	24kV	24mA	30kV	3mA/30mA

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

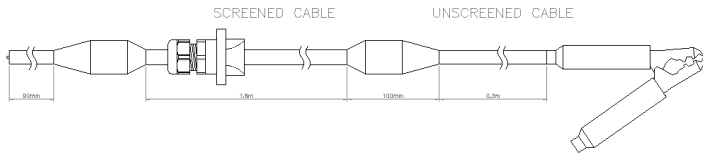
The output voltage and current are metered by large, linear analogue instruments. The unit has a x0.1 range on the mA meter.



VC24-24 MK3 Specification

Output

The output of the VC24-24 MK3 is by a 2 metre long permanently connected partially screened high voltage cable terminated in a large clip.



Output Ratings

Unit	Output Voltage	Current (continuous)	Current (5 min)
VC24-24 MK3	0-24kV	15mA	24mA

The above intermittent on times must be followed by an off time of 15 minutes, and are based on an ambient temperature of 25°C.

Metering

The output voltage and current are metered by large analogue instruments, with dual ranges on the current meter.

Meter	Low range full scale	High range full scale	Accuracy
kV meter	-	30kV	±2% of FS
mA meter	3mA	30mA	±2% of FS

Supply Requirements

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



ES30 Earthing stick

Overload Protection

Two overload protection circuits are provided on the unit. The first is user selectable, and allows trip currents of 16, 20 or 24mA to be set. A trip condition is indicated by an illuminated push button that must be pressed before testing can continue.

The second trip circuit is a magnetic circuit breaker operating on the primary of the HV transformer. This operates on large overloads (such as 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 unit which must be connected to a low impedance local earth.

Temperature Range

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

Dimensions

300 x 400 x 470mm

Weight

27kg

Accessories

Supply lead, spare fuse set, operating manual, 5m earth lead, ES30 earthing stick.

The VC24-24 MK3 is one of a family of high voltage units spanning the range 6kV 200mA to 30kV 40mA.

Unit	Maximum Voltage	Maximum current
KV6-200D	6kV	200mA
KV10-120D	10kV	120mA
KV15-80D	15kV	80mA
KV30-40D Mk4	30kV	40mA

High voltage test systems are also available from T&R Test Equipment up to 100kV @ 100mA.



KV100-100 MK3