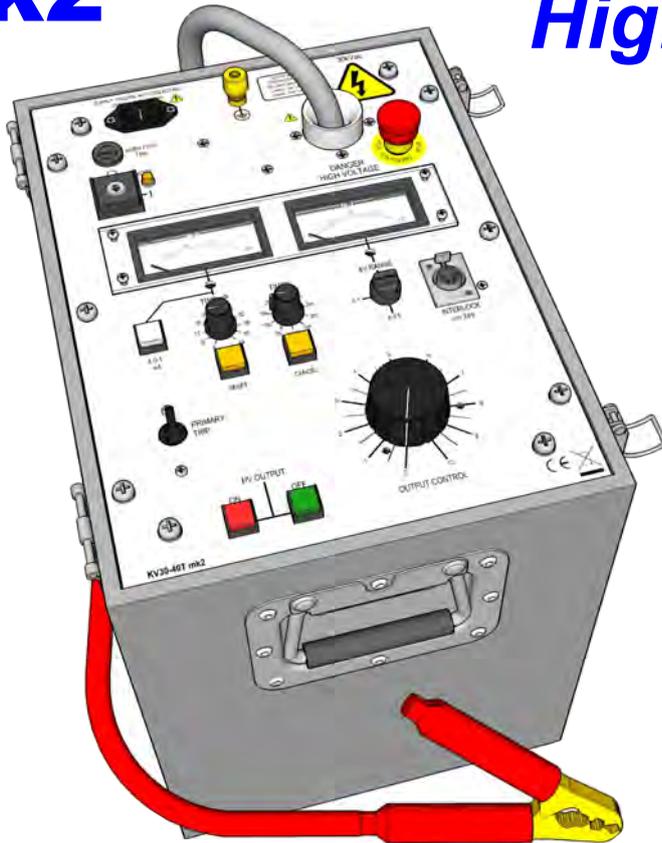


KV30-40T mk2

High Voltage AC Test System



Features

- 0-30kV output
- 5 second—5 minute test timer
- Emergency off switch
- Automatic mains voltage selection
- Key operated supply switch to prevent unauthorised operation
- Dual overload protection
- Variable electronic trip - 10-110% of rated output
- Voltage and current metering
- Zero-volt interlock
- External 24VDC interlock circuit
- Visual indication of test piece failure

The KV30-40T mk2 high voltage test set is a general purpose test instrument designed for testing insulation systems and the measurement of breakdown voltage on electrical plant and components.

The unit is fitted with a test timer with selectable test times of 5, 10, 15, 20, 30 seconds and 1, 2, 3 and 5 minutes. The test timer is started when the output is switched on, and the end of the test is signalled by a pulsed sounder and indicator lamp. The output is not switched off at the end of the test time to ensure that no switching transients are applied to the test object. A cancel button is provided to cancel the alarm.

A zero-voltage interlock is provided, ensuring that the output may only be energised with the voltage control at zero.

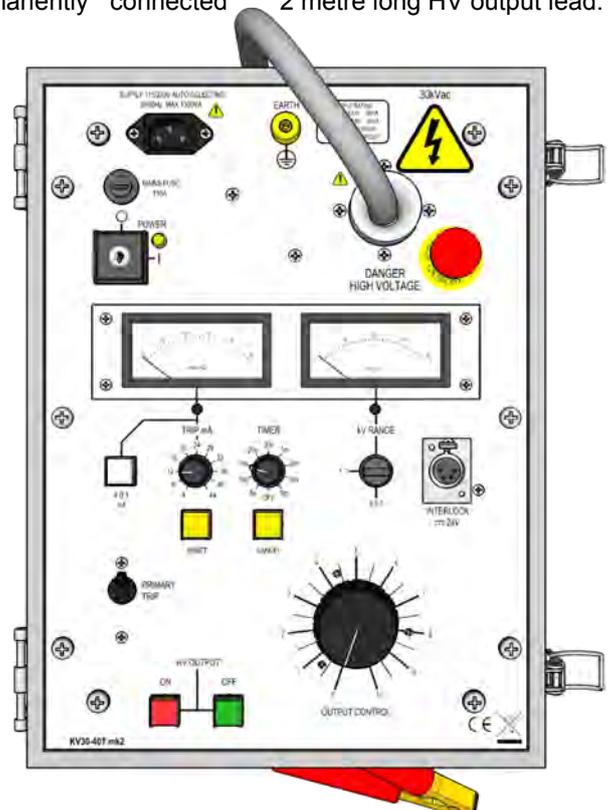
The units feature automatic mains voltage selection and an external 24VDC interlock circuit for connection of emergency-off switches and interlock switches on the test enclosure.

The output voltage and current are metered by large, linear analogue instruments. All units have a x0.5 range on the voltmeter and a x0.1 range on the mA meter.

The test object and output are protected by an adjustable electronic current trip. The trip level may be set to 10-110% of the rated output in 10% steps. 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.



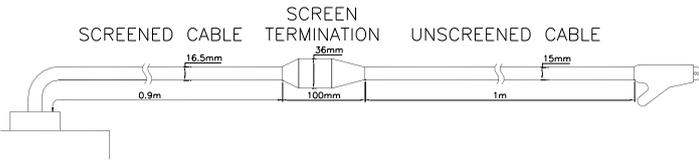
KV30-40T Specification

Supply Requirements

115V/230V±10% auto-selecting
50/60Hz 1ph 1200VA max

Output

The output of the unit is by a permanently connected partially screened high voltage cable.



Unit	Output Voltage	Current (continuous)	Current (5 min)
KV30-40T mk2	0-30kV	20mA	40mA

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 is metered by a dual range analogue instrument.

Unit	x0.5 Range	x1 Range	Accuracy
KV30-40T mk2	0-20kV	0-40kV	±2% of FS

The output current is metered by a dual range analogue instrument.

Unit	x0.1 Range	x1 Range	Accuracy
KV30-40T mk2	5mA	50mA	±2% of FS

Overload Protection

Two overload protection circuits are provided on the units. The first is user selectable, and allows trip currents between 10% and 110% of the rated output 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 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.

Temperature Range

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

Dimensions

KV30-40T 300x400x470mm

Weight

42kg

Accessories

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



ES30 Earthing stick