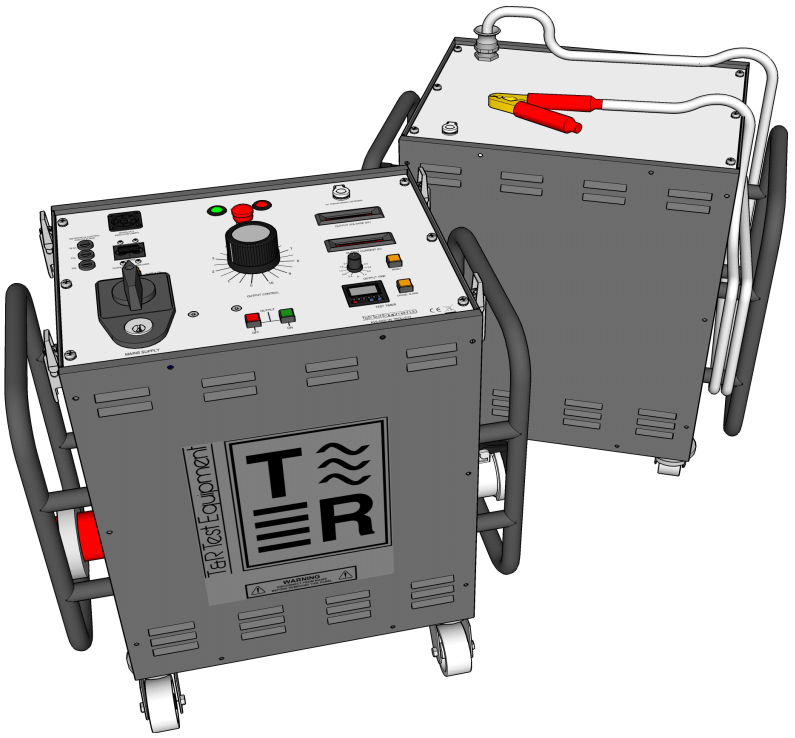
HV TROLLEY2

High Voltage AC Test System



Double Trolley Version

Features

- 20kVA output capability
- 0-3kV to 0-15kV options available
- Accurate digital metering
- Key operated supply switch
- Dual overload protection
- Variable electronic trip 10-110% of rated output
- Voltage and current metering
- Optional 5s - 5min test timer
- External 24V interlock and zero-volt interlock
- Emergency stop switch

Single Trolley Version

The HV trolley2 series of units are high power AC flash test sets with a 20kVA output capability. The maximum output voltage can be customised to be any voltage up to 15kV. The unit is housed in a rugged aluminium enclosure with a cover to protect the control panel. It is mounted on wheels to allow easy movement within a production environment.

The HV trolley2 is provided with accurate digital voltage and current metering and a variable electronic trip. An external interlock input is also fitted to the unit. Outputs are provided to drive 24V warning beacons. The HV output is connected to the test object by a high voltage cable 5m long.

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HV Trolley2 Specification

Output

The output of the HV Trolley2 series units is by a 5m long screened high voltage cable terminated in a large clip. A 5m long silicone covered earth lead is provided for the earth connection to the test object.

Unit	Output voltage	Continuous rating	5 min on/ 15 minutes off
KV3-7000/2	0-3kV	3.5A	7.0A
KV5-4000/2	0-5kV	2.0A	4.0A
KV8-2500/2	0-8kV	1.25A	2.5A
KV10-2000/2	0-10kV	1.0A	2.0A
KV12-1600/2	0-12kV	0.8A	1.6A
KV15-1200/2	0-15kV	0.6A	1.2A

Ratings

Other voltages up to 15kV are available—please contact us to discuss your requirements.

Metering

The output voltage and current are metered using a true RMS metering circuit. The output voltage measurement is taken from a divider on the output and will give accurate results regardless of load type.

Customisation

Certain aspects of the design can be customised at extra cost including HV & supply lead lengths, output voltage and supply voltage.

Unit	kV meter full scale	kV meter resolution	kV meter accuracy
KV3-7000/2	3.000kV	1V	0.8%±6d
KV5-4000/2	5.000kV	1V	0.8%±6d
KV8-2500/2	8.000kV	1V	0.8%±6d
KV10-2000/2	10.00kV	0.01kV	0.8%±6d
KV12-1600/2	12.00kV	0.01kV	0.8%±6d
KV15-1200/2	15.00kV	0.01kV	0.8%±6d

Unit	mA meter full scale	mA meter resolution	mA meter accuracy
KV3-7000/2	7.000A	1mA	0.8%±6d
KV5-4000/2	4.000A	1mA	0.8%±6d
KV8-2500/2	2.500A	1mA	0.8%±6d
KV10-2000/2	2.000A	1mA	0.8%±6d
KV12-1600/2	1.600A	1mA	0.8%±6d
KV15-1200/2	1.200A	1mA	0.8%±6d

Control

The output voltage is set by a continuously variable output control with a zero volt interlock - the output may only be switched on with the control in the zero position. The output voltage is switched on and off by illuminated push button switches.

The mains supply switch for the unit is a key operated switch. The key is trapped in the switch in the 'on' position.

Optional Test Timer

The HV trolley2 may optionally be supplied with a test timer (this must be specified at time of ordering, and cannot be retro-fitted). The following times are selectable via a switch: 5, 10, 15, 20 and 30 seconds and 1, 2, 3, and 5 minutes. An alarm sounds at the end of the test time.

Supply Requirements

Option 1	400V ±10%	50/60Hz	2ph	22kVA max
Option 2	230V ±10%	50/60Hz	1ph	22kVA max

The unit is fitted with a 5m supply lead and 5 or 10m interconnecting leads.

Protection and Safety

The output of the units are protected by variable electronic trips monitoring the output current and a fixed over-current trip on the primary of the output transformer. The variable trip is adjustable in 10% steps between 10% and 110% of the rated output current. The input and control supplies are protected by fuses.

An emergency stop switch is fitted to the unit.

The HV trolley2 series are designed to meet the requirements of BS EN61010. The unit must be installed in a high voltage test area complying with the requirements of BS EN50191.

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

Interlock Circuits

Two interlock circuits are provided on the HV trolley2 test systems. A zero voltage interlock is fitted which prevents the HV output being energised unless the output voltage control is in the zero position. An external interlock circuit is also provided, allowing the fitting of external emergency off buttons and test cage door interlocks.

Temperature Range

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

Unit	Dimensions	Weight
Control unit	660 x 400 x 740mm	115kg
HV transformer	660 x 400 x 740mm	130kg

Standard Accessories

1 x 5m earth lead terminated in croc clip

1 x 5m earth lead for connection to local earth (M10 ring crimp)

1 x ES30 earth stick. Spare fuse set, operating manual

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