PGK 50 E / PGK 80 E

BAUR DC HV tester

The figure is illustrative.

Small, lightweight and powerful

- Compact device for DC voltage testing with negative polarity
- Sensitive current measurement for recording extremely small insulation currents
- Easily portable thanks to practical case

The portable PGK 50 E and PGK 80 E DC HV testers are used for DC voltage testing up to 50 kV or 80 kV of paper-insulated mass-impregnated cables and electrical equipment in the medium-voltage network.

Sensitive current measurement permits the detection of extremely small insulation currents, which are used to determine insulation resistances up to the tera-ohm range. An external curve tracer can be connected to the PGK 50 E/PGK 80 E to record the measured current in relation to time.

The integrated discharge unit operates automatically and independently of the device situation, even in the event of power failure. A clear switching noise can be heard. The discharging resistance is designed for a max. discharge energy of 8000 J.

Thanks to their small dimensions and the practical case with carrying handle and carrying strap, the PGK 50 E and PGK 80 E are optimal for use on site.

Functions

- On-site testing of paper-insulated mass-impregnated cables according to:
  - IEEE 400-2012
  - IEC 60060-3
- Voltage test on electrical equipment according to:
  - IEEE 62.2
  - IEEE 95
- Cable sheath testing according to:
  - IEC 60502 / IEC 60229
  - VDE DIN 0276-620/621 (CENELEC HD 620/621)

Features

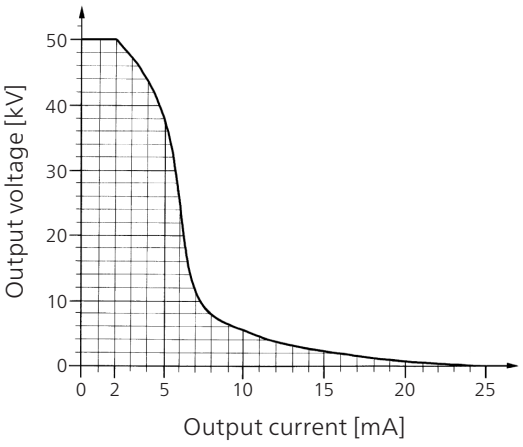
- Negative test voltages:
  - PGK 50 E: DC 0 – 50 kV
  - PGK 80 E: DC 0 – 80 kV
- Integrated timer (1-30 min) with automatic switch-off of the high voltage and triggering of the discharge unit
- Continuously adjustable output voltage
- Safety control unit according to EN 50191
- Ammeter with 6 measurement ranges from 1 µA to 100 mA
- All connection elements and cables are in a robust case
- Short-circuit-proof design
- Connection for external emergency off unit, external door contact and signal lamps
- Connection for external curve tracer for recording the test current

Technical data

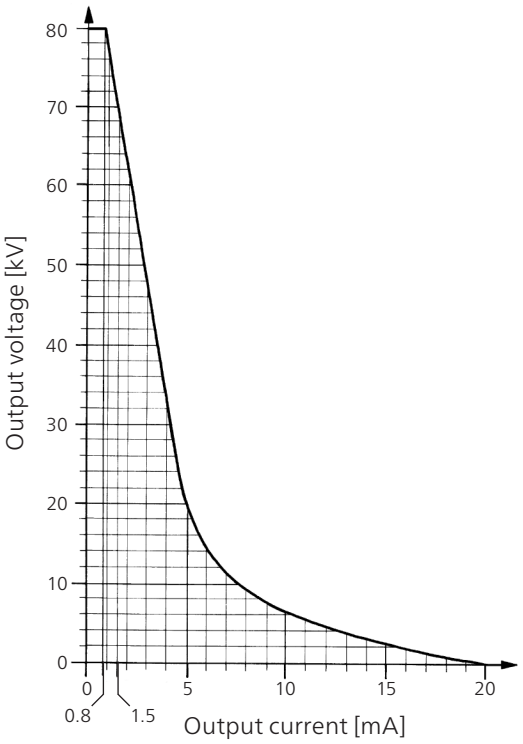
Testing	PGK 50 E	PGK 80 E
DC voltage (negative)	0 – 50 kV	0 – 80 kV
Output current (negative)	2 mA @ 50 kV	0.8 mA @ 80 kV 1.5 mA @ 70 KV
Short-circuit current (negative)	25 mA	20 mA
Voltage measuring range		
Range I	0 – 50 kV	0 – 80 kV
Range II	0 – 10 kV	0 – 16 kV
Current measuring range	20 nA to 1 µA / 10 µA / 100 µA / 1 mA / 10 mA / 100 mA	
Accuracy of the voltmeter (kV)	±2.5%	
Timer	0 – 30 min	
Max. discharge energy	8 000 J at 1 discharge/15 min (ambient temperature 20°C)	

General	
Power supply	110/120 V, 220/230 V, 240 V, 50/60 Hz
Power consumption	▪ PGK 50 E: 1 600 VA ▪ PGK 80 E: 1 400 VA
Ambient temperature (operational)	0°C to +45°C
Storage temperature	-20°C to +60°C
Relative humidity	Non-condensing
Dimensions (W x H x D)	Approx. 495 x 460 x 285 mm
Weight	Approx. 25 kg
Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EU), EMC Directive (2014/30/EU), EN 60068-2-ff Environmental testing

PGK 50 E load diagram



PGK 80 E load diagram



Standard delivery

- BAUR PGK 50 E or PGK 80 E DC HV tester
- HV connection cable, 5 m, fix mounted
- Earth cable, 3 m, with earth terminal
- Operational earthing cable, 4 m, for current measurement
- Mains supply cord, 2.5 m
- User manual

Option for PGK 50 E

- Discharge and earth rod GDR 60-375

Option for PGK 80 E

- GDR 80-500 discharge and earth rod