



SPG 40

Mobile cable testing and fault location system

Benefits

- ▶ **High surge energy**
- ▶ **Portable and test van installation version**
- ▶ **All HV-prelocation methods integrated**
- ▶ **High level of operational comfort and safety**


Description

The SPG 40 is a mobile, multi-functional system for testing, converting, prelocation and pinpointing cable faults in low and medium voltage networks.

The system is controlled directly via the connected T 30-E reflectometer or the integrated control panel. Depending on the installation, the HV is controlled either by the network and HV control integrated in the device or by a separate HV ON/OFF box. All functions of the system can be easily performed using the selector knob.

The software supports easy and clear handling, even for inexperienced users. At the same time, the highest degree of safety is guaranteed.

Features

- ▶ ARM choke filter for arc reflection measurement (Arc Reflection Method) using a reflectometer.
- ▶ Convenient operation via ¼ VGA display and one-button selector knob 
- ▶ User-friendly system software for simple, intuitive and safe operation
- ▶ High surge energy for acoustic pinpointing
- ▶ Selectable surge voltage levels for medium-voltage and low voltage applications
- ▶ Compact and suitable for outdoor use due to robust power supply and switch technology
- ▶ Adjustable burning current
- ▶ Comprehensive safety circuit for monitoring of earthing ($F\Omega$), step voltage (FU), rear doors (measuring carriage installation), int. and ext. emergency stop, overheating, etc.
- ▶ Modes of operation:
 - Insulation test up to 5,000 V
 - DC test up to 40 kV with ramp function, automatic switch-off in case of breakdown and display of breakdown voltage
 - ARM prelocation procedure method, ICE impulse current method and Decay voltage decoupling
 - Fault conversion / Burning with adjustable burning current
 - Acoustic pinpointing
 - Sheath fault location with step voltage method

Special accessories

- ▶ External emergency stop switch with warning lamp system
- ▶ Shock wave receiver **Digiphone**
- ▶ Short-to-earth detector **ESG 80-2**
- ▶ Line detector **Ferrolux**



Technical data

Display	¼ VGA
Insulation test	Voltages 1,000 V and 5,000 V ranges 1 k Ω , 1 M Ω , 100 M Ω
DC testing	0 ... 40 kV DC
Leakage current	0 ... 1/10/100 mA automatic measuring area setting
Breakdown detection	0 ... 40 kV
Burning	0 ... 8 kV; 0.7A; 0 ... 20 kV; 0.1A
Upper surge voltages	0 ... 12.5 / 25 kV or 0 ... 16/32 kV
Lower surge voltages (optional)	0 ... 4 kV or 0 ... 8 kV 0 ... 3 kV or 0 ... 6 kV
Surge energy	1,000 J in every range (optionally 2,000 J for vehicle installation)
Surge sequence	3 ... 10 sec. and single pulse
Sheath fault location	0 ... 5 kV and 0 ... 10 kV
Cycle intervals	DC; 1:3; 1:4; 1:6 (sec.)
HV prelocation (with optional TDR)	ARM, ICE current decoupling Decay voltage coupling ICE Plus option (for 4 and 8 kV)
Operating temperature	-10 °C ... + 50 °C
Power supply	230 V; 50 / 60 Hz (110 V optional)
Power consumption	1.7 kVA max.
Dimensions (L x W x H)	520 x 430 x 1,050 mm
Weight	ca. 116 kg (incl. opt. surge level)



Test van installation with 19" rack containing SPG 40 Control Panel and T 30 M