

SPG 5-1000

Complete System for reliable testing, prelocation and pinpointing of faults in LV networks



- **Highest operator comfort for all user levels**
- **Highest safety standards**
- **Safe and reliable fault prelocation method for branched low voltage grids**
- **Compact and light construction**

DESCRIPTION

The SPG 5-1000 is a portable, multi-functional system for testing, fault conditioning, pre- and pinpoint location of faults in low voltage distribution networks. The ingenious pre-location method "ICEplus" offers the operator an easy-to-use tool for pre-locating faults in wbranched systems, which so far were very difficult to locate. This test method uses the low frequency component of the impulse signals during a flashover at the fault point in order to determine the distance. The ICEplus method avoids the usual problems of TDR and ARM methods of reflection and attenuation in branches.

Prelocation is possible irrespective of the number of T-joints in the section. The compact size and low weight have been made possible by using an electronic HV source, optimised capacitors and a newly developed HV switching system. The unit is controlled via a PLC (Programmable Logic Control) with a built-in command knob and a graphic display for the test modes and parameters. The easy-to-use, self-explanatory software allows even less experienced operators to successfully work with the SFX 5-1000 while at the same time ensuring maximum safety.

FEATURES

- DC Testing up to 5 kV
- Automatic breakdown recognition
- Pre-location with ICEplus
- Fault conditioning/Burning
- Acoustic pinpoint location.
- Fault location (step voltage)

TECHNICAL DATA

Display	¼ VGA-Display
Testing	0 ... 5000 V DC; timer
Leakage display	0... 1mA ; 0.... 10 mA
Automatic flash over identification	0 ... 5000 V DC
Prelocation	0 ... 4000 V Surge voltage
Burning	0 ... 500 V; 1.0 A 0 ... 2000 V; 0.25 A 0 ... 5000 V; 0.1 A
Surge	0 ... 2000 V; 1000 J 0 ... 4000 V; 1000 J
Surge rate	Single pulse ; 3 ... 20 Sek.
Sheath fault location	0 ... 500 V / 2000 V / 5000 V
Pulse ratio	1:3 ; 1:6
Operation temp.	-10 ... + 50 °C
Main supply	230 V; 50/60 Hz (110 V optional)
Power input	600 VA max.
Dimensions (W x H x D)	520 x 560 x 430 mm
Weight	approx. 45 kg

TECHNICAL FEATURES

- PLC with ¼ VGA display
- Easy-to-use software, providing a high level of operational comfort and safety
- Pre-location with ICEplus (optional) for accurate prelocation, independent of T-joints
- Compact and rugged, using an electronic HV source and HV switch

ORDER INFORMATION

Product	Order-No.
Surge and Test System SPG 5-1000 (with permanently installed HV cable) Surge and test system with ICEplus prelocation, permanently installed HV test lead 4 m, accessory bag, ground cable 6 mm ² 5 m, mains lead 2.5 m, MC connector with clamp, NH adapter	820006381
Surge and Test System SPG 5-1000-C (with optional pluggable HV cable) Surge and test system with ICEplus prelocation, HV connector for optional choosable HV test lead, accessory bag, ground cable 6 mm ² 5 m, mains lead 2.5 m, MC connector with clamp, NH adapter	820006381
HV Cable SPG 5-1000-C (must be defined when ordering) 10m HV test lead, manual cable drum	1009144
20m HV test lead, manual cable drum	1009145
Surge and test unit SPG 5-1000 Surge and test unit without prelocation, permanently installed HV test lead 4m, accessory bag, ground cable 6 mm ² 5 m, mains lead 2.5 m, MC connector with clamp, NH adapter	810679
Optional Accessories (must be defined when ordering)	
Trolley with wheels	820007520
Emergency off switch with 4m connection cable	810399
External safety unit with 5m connection cable (BGI 891 / DIN EN 50191 / VDE 0104 compliant)	820003206
digiPHONE+ Surge wave receiver	1003319-S
ESG NT Earth fault locator	1004629-S
digiPHONE+ NT Surge wave receiver and earth fault locator combination system	1003317-S

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CERTIFICATION ISO

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