

Syscompact 4000

BAUR cable fault location system



The figure is illustrative

Compact and multifunctional

- Precise and dependable cable fault location
- High-performance surge voltage generator
- Precise fault location methods for every type of fault

The compact cable fault location system, Syscompact 4000, is used for the prelocation and pin-pointing of faults on low- and medium-voltage cables.

Thanks to the novel operational concept and the integrated location methods, cable fault location with Syscompact 4000 is faster and easier. The high-performance industrial PC and improved measurement parameters allow for a precise cable fault location in all cable types.

The system can be equipped with different surge voltage generators with a surge energy up to 2,050 J.

When combined with the separately available BAUR protrac® pin-pointing system, it is possible to pin-point cable faults acoustically and to pin-point cable sheath faults with the step voltage method.

Thanks to its compact design, Syscompact 4000 is easy to transport and is also suitable for installation in any small van with a payload of 300 – 500 kg.

NEW: BAUR Fault Location App

Functions

- Insulation resistance measurement up to 1,000 V (option)
- TDR: Time Domain Reflectometry
- SIM/MIM: Secondary/multiple impulse method
- DC-SIM/MIM: Secondary/multiple impulse method used in DC mode
- ICM: Impulse current method
- DC-ICM: Impulse current method used in DC mode
- Decay method (option)
- Cable and cable sheath testing up to 32 kV
- Surge mode for acoustic pin-pointing

Features

- Intuitive user interface in multiple languages adapted to the work flow
- Automatic detection of cable end and fault position
- Dynamic input signal gain
- Length-dependent gain for better display of remote events
- Automatic saving of all measurement data
- Storage for more than 100,000 measurements
- Transfer of relevant cable route data to the BAUR Fault Location App to assist with cable fault pin-pointing
- Modular system, easily expandable for cable testing and diagnostics



Technical data

IRG 4000 time domain reflectometer

The technical data of the time domain reflectometry and insulation resistance measurement are provided in the data sheet for the IRG 4000 time domain reflectometer and BAUR Software 4 for cable fault location.

Surge voltage generator	
Surge voltage ranges	0 – 8 kV, 0 – 16 kV, 0 – 32 kV
SZ 1000 / SZ 1600 option	0 – 4 kV
Surge energy SSG 1100	1,100 J with option SZ 1000: 880 J with option SZ 1600: 1,480 J
SSG 1500 option	1,540 J with option SZ 1000: 980 J with option SZ 1600: 1,580 J
SSG 2100 option	2,050 J with option SZ 1000: 1,110 J with option SZ 1600: 1,710 J
Surge sequence	10 or 20 pulses/min, single surge
SSG 1500 option	20 or 30 pulses/min, single surge
DC voltage	0 – 32 kV
Max. output current (in DC mode)	560 mA (0 – 8 kV)
Option SSG 1500/SSG 2100	850 mA (0 – 8 kV)

System		
Power supply	220 – 230 V, 50/60 Hz	
Other power supplies optional	See "Standard delivery, accessories and options"	
Ambient temperature (operational)	0°C to +50°C	
extended temperature range*	-20°C to +60°C	
Storage temperature	-40 to +60°C	
Dimensions (W x H x D)	Approx. 935 x 1,145 mm x 775 mm (incl. KTG M3 cable drum rack)	
Weight	From 195 kg (depending on configuration)	
Degree of protection	IP22	
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	

^{*} Limitation of performance data possible



Standard delivery, accessories and options

Syscompact 4000	
RG 4000 time domain reflectometer incl. pre-installed BAUR Software 4 (cable fault location)	✓
Options for BAUR Software 4	See "Optional software functions for BAUR Software 4"
PC keyboard	✓
Surge voltage generator:	
SSG 1100	\checkmark
SSG 1500	Option
SSG 2100	Option
Surge capacitor extension:	
SZ 1000	Option
SZ 1600	Option
Power supply:	
220 – 230 V, 50/60 Hz	✓
110/230 V, 50/60 Hz, 1.5 kVA, via external auto transformer	Option
110/230 V, 50/60 Hz, 3.0 kVA, via external auto transformer	Option
Isolation transformer with protective earthing connection, 2.5 kVA	Option
5A 32 SIM/MIM coupling unit	✓
SK 1D inductive coupler for ICM	✓
19" rack, height 27 RU (1,200.15 mm), depth 700 mm	✓
lumper plug for external emergency off unit	✓
Measuring cable (3 m)	✓
KTG M3 cable drum rack incl.	✓
 CS 2 HV connection socket, 40 kV HV connection cable, mains supply cord and earth cable, each 25 m Contact monitoring of the earth terminal 	
CTG M3 cable drum rack incl.	Option
 CS 2 HV connection socket, 40 kV HV connection cable, mains supply cord and earth cable, each 50 m Contact monitoring of the earth terminal 	
TDR connection cable, CAT IV/600 V, 3-phase, 25 m or 50 m cable length, on hand cable drum	Option
Jninterruptible power supply (UPS)	✓
GR 40 earth rod	✓
5DR 40-250 discharge and earth rod	Option
external emergency off unit with signal lamps, 25 m or 50 m cable length	Option
rolley for Syscompact 4000	Option
Steel frame with wheels and guide rods for Syscompact 4000	Option
Steel pallet for Syscompact 4000	Option
User manual	√

✓ Included in standard delivery

Option Optionally available



Optional software functions for BAUR Software 4

- Insulation resistance measurement
- Mapping (available countries on request)
- GIS interface
- BAUR Fault Location App
- BAUR Software 4 for office PC (office installation)





Example: Map view in the BAUR Fault Location App

