Syscompact 400 portable

BAUR cable fault location system

NEW:
BAUR Fault Location App

The figures are illustrative

Portable system for cable fault pre-location and pin-pointing

- High-performance surge voltage generator
- Proven fault pre-location methods
- Maximum safety during application

The cable fault location system, Syscompact 400 portable, is used for the pre-location and pin-pointing of faults on power cables. It is ideal for mobile use, without permanent installation in a vehicle.

Thanks to Wi-Fi connectivity, the time domain reflectometer can be operated remotely. With the integrated CAT IV/600 V separation filter, TDR measurements can also be performed safely on live cables. User-friendly menu navigation in multiple languages and proven fault location methods ensure fast and precise measurement results.

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.

System versions

Syscompact 400 portable

- Integrated IRG 400 time domain reflectometer
- Measurements carried out via:
  - Laptop with BAUR Software 4 or
  - Tablet with BAUR BUI-F app
- In the case of control via laptop: Transfer of relevant cable route data to the BAUR Fault Location App to assist with cable fault pin-pointing

Syscompact 400 portable with IRG 400 portable

- IRG 400 portable time domain reflectometer: Can be used in conjunction with Syscompact 400 portable or as stand-alone device
- Measurements carried out via a tablet using the BAUR BUI-F app

Functions

- TDR: Time Domain Reflectometry (1- and 3-phase)
- Step TDR for the pre-location of cable faults and joints in the vicinity (1- and 3-phase) – only with the BAUR BUI-F app
- 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

Features

- Surge energy up to 2,050 J
- Long service life of the electrodes thanks to optimised physical properties
- High reliability of the spark gap
- Easy maintenance and repair by trained personnel on site
- Length-dependent gain for better display of remote events

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Technical data

IRG 400 time domain reflectometer	
This table describes the technical data for the integrated IRG 400 time domain reflectometer. The technical data for the stand-alone device is provided in the data sheet for the IRG 400 portable.	
Pulse voltage	60 V
Pulse width	30 ns – 10 µs
Number of pulses (SIM/MIM)	1 – 20 pulses, adjustable
Voltage-proof up to	400 V, 50/60 Hz
Measurement category	CAT IV/600 V (with enabled separation filter)
Input signal gain	Dynamic range 101 dB (-63 to +38 dB)
	+40 dB (length-dependent gain)
Measurement range	10 m – 250 km
Accuracy	0.1% (relating to the measurement result)
Data rate	400 MHz
Resolution	0.1 m (at v/2 = 80 m/µs)
Velocity of propagation (v/2)	20 – 150 m/µs, adjustable
Control	▪ Via laptop with BAUR Software 4 ▪ Via tablet with BAUR BUI-F app
Surge voltage generator	
Surge voltage ranges	0 – 8 kV, 0 – 16 kV, 0 – 32 kV
Surge energy	1,100 J
SSG 1500 option	1,540 J
SSG 2100 option	2,050 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 (burn)	DC 560 mA (0 – 8 kV)
SSG 1500 / SSG 2100 option	DC 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)	-10°C to +50°C
Storage temperature	-20°C to +60°C
Dimensions of rack incl. heavy-duty wheels (W x H x D)	Approx. 775 x 1,185 x 935 mm
Weight	From 140 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

Standard delivery, accessories and options

	Syscompact 400 portable	Syscompact 400 portable with IRG 400 portable
IRG 400 time domain reflectometer (integrated) incl. laptop with BAUR Software 4 installed	✓	–
▪ Options for BAUR Software 4	See "Optional software functions for BAUR Software 4"	
IRG 400 time domain reflectometer (integrated) incl. tablet with BAUR BUI-F app installed	Option	–
IRG 400 portable time domain reflectometer incl. tablet with BAUR BUI-F app installed	–	✓
▪ TDR connection cable, 2 m, 3-phase, with connection clips and fuses ▪ BNC cable, 2 m, incl.: – BNC adapter, 2 x connection Ø 4 mm – Connection cables, red and black, 0.75 m each, with fuses ▪ Earth cable, 3 m, with earth terminal ▪ Charger incl. country-specific mains supply cord ▪ User manual for IRG 400 portable ▪ Power supply, 19", 3 RU for IRG 400 portable ▪ Holder for IRG 400 portable		
Surge voltage generator:		
SSG 1100	✓	✓
SSG 1500	Option	Option
SSG 2100	Option	Option
Power supply:		
220 – 230 V, 50/60 Hz	✓	✓
110/230 V, 50/60 Hz, 1.5 kVA, via external auto transformer	Option	Option
110/230 V, 50/60 Hz, 3.0 kVA, via external auto transformer	Option	Option
127/230 V, 50/60 Hz, 3.0 kVA, via external auto transformer	Option	Option
Isolation transformer with protective earthing connection, 2.5 kVA	Option	Option
Connection cable:		
HV connection cable, 10 m	✓	✓
Mains supply cord, 10 m	✓	✓
Earth cable, 10 m, with earth terminal	✓	✓
IRG connection cable, 3-phase, 10 m	✓	–
HV connection cable, 25 m or 50 m cable length, on hand cable drum, with HV connection socket	Option	Option
Mains supply cord, 25 m or 50 m cable length, on hand cable drum	Option	Option
Earth cable, 25 m or 50 m cable length, on hand cable drum	Option	Option
TDR connection cable, CAT IV/600 V, 3-phase, 25 m or 50 m cable length, on hand cable drum	Option	–

Standard delivery, accessories and options (continued)

	Syscompact 400 portable	Syscompact 400 portable with IRG 400 portable
SA 32 SIM/MIM coupling unit	✓	✓
SK 1D inductive coupler for ICM	✓	✓
19" rack, height 21 RU (933.45 mm), depth 700 mm, incl. heavy-duty wheels and carry handle	✓	✓
GR 40 earth rod	✓	✓
GDR 40-250 discharge and earth rod	Option	Option
External emergency off unit with signal lamps, 25 m or 50 m cable length	Option	Option
User manual	✓	✓

✓ Included in standard delivery
Option Optionally available
– Not available

Optional software functions for BAUR Software 4

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

* These optional software functions are only available when the IRG 400 time domain reflectometer is controlled via a laptop and the BAUR Software 4.

Example: Map view in the BAUR Fault Location App
(only available when control is via laptop and BAUR Software 4)

Would you like to discover more about this product?
If so, contact us: www.baur.eu > BAUR worldwide

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