

## shirla

### BAUR Sheath Test and Fault Location Device



## Mobile cable sheath testing and fault location

- Fault pre-location and pin-pointing in a single device
- Data export via USB interface
- Mains and battery operated
- Simple operation and intuitive user interface

The shirla sheath test and fault location device is used for cable and cable sheath testing, and for the pre-location and pin-pointing of cable sheath faults and cable faults due to earth contact.

The fault pre-location is based on the measuring bridge principle according to Murray and Glaser. The measuring bridge is dimensioned specially for power cables, but also enables pre-location for control and lighting cables. Zero balance and evaluation take place automatically. The fault distance is shown in meters. Various cable sections can be entered, thus increasing the accuracy of the measurement.

For fault pin-pointing, shirla generates a pulsed voltage, thereby permitting the use of the step voltage method. Using the KMF 1\* earth fault locator or the UL 30\* universal receiver, cable sheath faults and other faults due to earth contact can be located quickly and accurately.

#### Functions

- Cable and cable sheath testing with DC voltage up to 10 kV
- Insulation resistance measurement
- Pre-location of cable sheath faults and faults due to earth contact with measuring bridge
- Step voltage method for cable sheath fault pin-pointing

#### Features

##### Pre-location of cable sheath faults and faults due to earth contact

- Measuring bridge with automatic zero balancing
- Automatic evaluation
- High accuracy by accounting for different cable sections in terms of length, conductor cross-section and material

##### Cable sheath fault pin-pointing

- Pulsed voltage up to 10 kV
- 4 pulse patterns selectable
- Adjustable switch-on delay and operating time

##### General functions

- Continuously adjustable voltage
- Adjustable current and voltage limitation
- Automatic measurement sequences and reporting
- Automatic report export to USB stick
- Integrated discharge unit
- Connection for external emergency off unit in accordance with EN 50191

\* Options

## Technical data

| Cable and cable sheath testing                                                         |                                                             |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------|
| DC voltage                                                                             | 0 – 10 kV                                                   |
| Output current                                                                         | 10 mA @ DC 5 kV<br>5 mA @ DC 10 kV                          |
| Current indicator                                                                      | Accuracy $\pm 10 \mu\text{A}$<br>Resolution 1 $\mu\text{A}$ |
| Insulation resistance measurement                                                      | 0.01 megohm to 1 gigaohm                                    |
| Voltage and current limitation                                                         | adjustable                                                  |
| Measuring bridge (pre-location of cable sheath faults and faults due to earth contact) |                                                             |
| Measurement method                                                                     | 4-wire measuring bridge according to Murray and Glaser      |
| Output voltage                                                                         | DC 100 V – 10 kV                                            |
| Max. output current                                                                    | 50 mA                                                       |
| Accuracy                                                                               | Accuracy 0.1% relating to the measurement result            |
| Number of definable cable sections                                                     | 50                                                          |
| Voltage and current limitation                                                         | adjustable                                                  |
| Step voltage method (cable sheath fault pin-pointing)                                  |                                                             |
| Pulsed DC voltage                                                                      | 100 V – 10 kV<br>4 selectable pulse patterns                |
| Max. output current                                                                    | 700 mA                                                      |

## Standard delivery

- BAUR shirla sheath test and fault location device
- HV connection cable, 4.5 m, fix mounted
- 4-wire bridge connection cable, 2.5 m, fix mounted
- G clamps, 24 mm, 4 pcs
- Short circuit cable set
- Earth cable, 3 m, with earth terminal
- Transport case for accessories
- USB memory stick
- Mains supply cord, 2.5 m
- Carrying strap
- User manual

| General                           |                                                                                                                                     |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Display                           | LCD with background lighting, screen resolution 320 x 240 pixels<br>Automatic brightness setting                                    |
| Reporting                         | <ul style="list-style-type: none"> <li>▪ Shown on display</li> <li>▪ Automatic export via USB interface (USB 2.0)</li> </ul>        |
| Data export format                | Text file, bilingual: English, German                                                                                               |
| Power supply                      | Mains voltage AC 100 – 240 V, 50/60 Hz<br>Rechargeable battery DC 12 V; 3.4 Ah                                                      |
| Max. power consumption            | 200 VA                                                                                                                              |
| Ambient temperature (operational) | -20°C to +50°C                                                                                                                      |
| Storage temperature               | -40°C to +60°C                                                                                                                      |
| Relative humidity                 | Non-condensing                                                                                                                      |
| Dimensions (W x H x D)            | Approx. 440 x 490 x 220 mm                                                                                                          |
| Weight incl. accessories          | Approx. 20 kg                                                                                                                       |
| Degree of protection              | IP54 (in closed state)                                                                                                              |
| 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 |
| Integrated battery                |                                                                                                                                     |
| Battery type                      | Lead-acid battery 12 V, 3.4 Ah                                                                                                      |
| Battery life                      | Approx. 45 min (in HV mode)                                                                                                         |
| Charging time                     | Approx. 4 h                                                                                                                         |

## Options

- GDR 20-125 discharge and earth rod
- BAUR KMF 1 earth fault locator
- Accessories set for cable sheath fault location with UL 30
- External emergency off unit with signal lamps, incl. connection cable, 50 m, on hand drum
- External emergency off unit with signal lamps, incl. connection cable, 25 m, on hand drum