

# **SH-Q SHUNTS**

# Cage Impulse Current Measuring Shunt

Datasheet





#### **General Description**

These shunts are used for the measurement of high impulse currents in high-voltage test labs. The wave shape of the measured current can be displayed on a highest resolution impulse analysing system HiAS 744. The shunts consist of a metal cylinder with coupling flanges and a coaxial measuring connector.

Each resistance value (1, 0.47 and 0.1 Ohm) of the set is a separate shunt. The standard repetition rate allows measuring impulse currents up to 5000 A (voltage drop 500 V), and at reduced repetition rate up to 16000 A are possible (voltage drop 1600 V)

#### **Applications**

Impulse current measurement

### Scope of Supply

Set of shunts SH H-S

- 3 Shunts (0.1, 0.47, 1 Ω)
   1 Termination resistor (LEMO) 75 Ω
- 2 Test reports (routine test: resistance measurement)

#### Individual shunts

1 shunt in metal case

# **Technical Data**

| General                                |                            |           |         |
|--|----------------------------|-----------|---------|
| Туре                                   | SH Q 0.1                   | SH Q 0.47 | SH Q 1  |
| Rated voltage drop Un                  | 500 V                      | 500 V     | 500 V   |
| Max. voltage drop U <sub>max</sub>     | 1600 V                     | 1600 V    | 1600 V  |
| Rated peak current In                  | 5000 A                     | 1060 A    | 500 A   |
| Max. peak current I <sub>max</sub>     | 16 kA                      | 3400 A    | 1600 A  |
| Resistance R                           | 0.1 Ω                      | 0.47 Ω    | 1 Ω     |
| Resistance Accuracy                    | ±5%                        | ±5%       | ±5%     |
| Partial response time T <sub>α</sub>   | < 15 ns                    | < 15 ns   | < 30 ns |
| Repetition rate                        | 2.5 s                      | 1.5 s     | 1 s     |
| at Ù <sub>n</sub> / I <sub>n</sub>     |                            |           |         |
| Repetition rate                        | 25 s                       |           |         |
| at U <sub>max</sub> / I <sub>max</sub> |                            |           |         |
| Weight / shunt                         | 1.3 kg                     |           |         |
| Dimensions                             | H 155 mm, Ø 64 or Ø 100 mm |           |         |

Accuracy on the resistance measurement  $< \pm 1 \%$ Accuracy at 8/20  $\mu$ s impulse currents  $< \pm 1$ 

| Other available values |                |  |
|------------------------|----------------|--|
| SH-Q-0.047             | $0.047 \Omega$ |  |
| SH-Q-0.1               | 0.1 Ω          |  |
| SH-Q-0.22              | $0.22\Omega$   |  |
| SH-Q-47                | $0.47 \Omega$  |  |
| SH-Q-1                 | $1\Omega$      |  |
| SH-Q-2                 | $2\Omega$      |  |
| SH-Q-2.2               | 2.2 Ω          |  |
| SH-Q-4.7               | 4.7 Ω          |  |
| SH-Q-10                | 10 Ω           |  |

#### **Global Presence**

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