

SHORT-CIRCUIT INDICATOR

panel-mounted

General description

The short-circuit indicator type OK can be used in radial networks with one input and open-ring networks. The device detects shortcircuits by measuring the phase-currents. A fault is identified when the current is exceeding an adjusted threshold. Detected faults will be displayed by one flag indicator per phase.

The fault indicator type OK consists of one display unit and three sensors for the current measurement of each phase. The sensors have a rigid housing and their interior is fully sealed from the environment. The sensors are divisible and can be retrofitted on the cables.

The device is power supplied by an exchangeable long-life lithium battery. To extend the battery lifetime an external power supply can be equipped as an option.



The type OK is available in two versions:

Version OK-L: Version OK-S: The potential-free connections between the sensors and the display unit are done by fibre optic cables. The sensors can be mounted on screened and unscreened cables. The connections between the sensors and the display unit are done by copper cables. The sensors must be mounted on screened cables only.

Features and Options

Very long battery lifetime: Optional reset input: Optional sensor reset: Optional power supplies: Due to the flag indication the battery lifetime is approx. 20 years For reset by recovering external power supply Sensor reset on recovering network current (only for OK-S and net current of 20A upwards) 10-110 V DC or 110 / 230 V AC power supply with optional lithium backup battery

External Connectors

Connectors 9 - 10: Connectors 10 - 11: Connectors 12 - 13: Connectors 14 - 15: Connectors 16 - 17:

Type OK-L Optical connector:

Type OK-S Connectors 1 - 6: Blinking lamp type BL4.1 / BL6 Remote reset input SCADA NO contact SCADA NC contact Optional external power supply

3x short-circuit sensors type LK

3x short-circuit sensors type SK





figure 2: connectors type OK-S



General Data

Subject	Value
OK-L short-circuit current	adjustable: 200 / 300 / 400 / 500 / 600 / 800 / 1000 * A (±10 %)
OK-S short-circuit current	adjustable: 200 / 400 / 600 / 800 / 1000 * A (±10 %)
Response delay	adjustable: 40 / 60 / 80 / 160 * ms
Indication unit	suitable for panel installation
Indication of a) short-circuit b) battery	a) one red flag for each phase b) one yellow LED
Reset of the indicator	 a) manual by push-button b) connection for a potential-free remote reset c) time: 1 / 2 / 4 / 8 * hours after fault d) optional: self-acting after recovering of external power supply e) optional: self-acting after recovering net current (Only for OK-S and network current of 20A upwards)
On site function test a) function test b) battery test	by push-button a) the button has to be pressed for 1 second b) the button has to be pressed for 3 seconds
Dimensions: display unit	(WxHxD) 97 mm x 48 mm x 74 mm (dimensions of cut-out: 92+0.8 x 45+0.6 mm / IEC61554 / DIN43700)
Protection class: display unit	IP40
Protection class: sensors	IP67
Internal type test	According to IEEE 495-2007
Operation temperature range	-20°C to +70°C
Power supply	lithium battery (LiSOCl2) type AA / 3.6V / 2600 mAh optional: 10-110 V DC with backup battery type AA / 3.6V / 2600 mAh optional: 110/230 V AC with backup battery type AA / 3.6V / 2600 mAh
SCADA contacts	1x NO contact 1x NC contact permanent / wipe contact (100 * ms), configurable by DIP switch max. 230 V AC / max. 2 A / max. 30 W
Current sensors	OK-L 3x short circuit sensors type LK (fibre optic cable) OK-S 3x short circuit sensors type SK (copper cable) diameter: 22-42** mm connection cable length: 3* m (** Other diameter ranges for all standard cables are available.)

* Please note: Other values can be ordered.

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DATA SHEET

Display unit





Sensor type LK



12.1424.10



Sensor type SK



12.1469.03

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