IKI-20U2

Short circuit / earth short circuit indicator - type U

The IKI-20 is suitable for the detection, indication and remote signalling of short circuits in power distribution networks. In addition, in power distribution networks with rigidly, low-resistance or short-time low-resistance grounded neutral point, the detection, indication and remote signalling of ground short-circuits is possible. Non-directional earth faults can be indicated in cleared or isolated networks.

Properties

The IKI-20 is maintenance-free because the power supply is provided by the current transformers.

Measurement functions and display

- Reliable measured value processing through independent overcurrent-time characteristic (UMZ measurement function)
- True current measurement
- Self-explanatory LCD-. symbols
- additional very bright LED flashing display

Universal setting option of operating parameters

- response current and response time separately for short circuit and earth short circuit
- reset mode resp. reset time
- Relay functions duration or wiping contact

Self test

- Function test on site by means of test button or remotely controllable via auxiliary input

Operation in ring and beam network (without switching)

- Differentiated display of first and second fault event in networks with AWE

Power supply buffering

- Using wide range auxiliary voltage input 24 ... 230 VAC/DC, capacitor buffering

Relay outputs as floating transient or continuous contacts

- 2 relays with 1 NC or 1 NO contact for short-circuit and 1 NC or 1 NO contact for ground fault

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Technical Data

Device data

Article number	2501978
Product designation	IKI-20U2 Short-circuit / earth fault indicator | capacitor-buffered | auxiliary power 24 - 230 VAC | 2 relay outputs N/O contact

Controls and display

Red LED (1)	Collective display
Buffer of power supply	Capacitor over at least 12h

Dimensions and installation instructions

Case height x width x depth	48 x 96 x 80 mm
Cutout height x width	45 x 92 mm
Norm cutout dimensions	DIN 43700
Installation type	Panel mounting

Operating conditions

Operating temperature	-25°C ... 75°C
Storage temperature	-30°C ... 75°C
Protection class	IP40

Fault Detection

Short circuit detection I>>	✓
Threshold current short-circuit detection I>> [A]	100, 200, 300, 400, 600, 800, 1000, 2000
Threshold time short-circuit detection I>> [ms]	60, 80, 150, 200
Earth short-circuit detection Ie>>	✓
Threshold current earth short-circuit detection Ie>> [A]	40, 80, 100, 150
Threshold time earth short-circuit detection Ie>> [ms]	60, 80, 150, 200
Fault reset	Auto, Manually on the device, After 2h, 4h, External potential-free normally open contact

Interfaces and communication

Slave test	✓
Switching capacity relay	Umax = 220 Vdc, 250 Vac Imax = 0,1 A
Relay outputs	2x (NO)

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Power supply

Auxiliary power supply	24 - 230 V AC/DC
Insulation voltage	1 kV / 1 min
CT-supplied	✓
Notes on transformer supply	With a primary current of >=5A through a split-core CT at the inputs L1, L2 or L3, the energy supply is made from the sensors. At primary currents <4A, power is supplied from the energy buffer. With primary currents 1A <I <5A, a mixed supply takes place.

Associated current transformers

Article number	Product designation
2502381	IKI-LU split-core CT (piece) | non-directional | Ø 52mm | Obscolescent (Replace with IKI-LUG)
2502104_H001	IKI-LUG split-core CT (pieces) | directional | pluggable connectors | Ø 92mm
2504381_H001	Balanced core CT IKI-GSU | pluggable connection | Ø 160mm
2512105_H001	IKI-LUG_1500 Split-Core Transducer with cable tie (set) | Ø 92mm
2512105_H003	IKI-LUG_1500 Split-Core Transducer for C-Cone-Bushings (set) | Ø 92mm
2512105_H004	IKI-LUG_1500 Split-Core Transducer for SIEMENS-Bushings (set) | Ø 92mm
IKI-LUG1500	IKI-LUG_1500 Split-Core Transducer | Ø 92mm

Connecting cables CTs

Article number	Product designation
3503118_S	Connecting cable set | pluggable | Length = 3,0m
3503135_E	Connecting cable piece | pluggable | Length = 5,0m
3503135_S999	Connecting cable set | pluggable | Lengths on request

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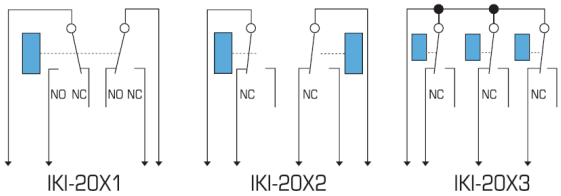
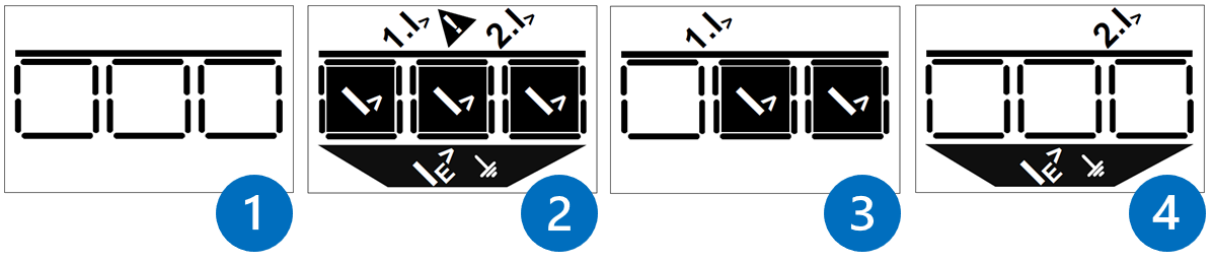
Options signal outputs



Display indication



- **(1)** Standby
- **(2)** Test or display test: all segments are active
- **(3)** Short circuit on L1 and L3
- **(4)** Ground short

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