

# EARTH-FAULT AND SHORT-CIRCUIT INDICATOR TYPE **EKL8001NG**

panel-mounted

## General description

The earth-fault and short-circuit indicator type EKL8001NG can be used in radial networks with one input and ring networks. For earth-fault detection, the network has to be solidly earthed or low resistance-earthed.

The potential-free connections between the short-circuit sensors, the earth-fault sensor and the display unit are done by fibre optic cables. The short-circuit sensor can be mounted on screened and unshielded cables. The earth-fault sensor must be mounted on screened cables.

All sensors are divisible and can be retrofitted on the cable. The fault indicators of the NG-Series have a compact design with low installation depth.

The earth-fault and short-circuit indicator type EKL8001 NG is equipped with two remote contact relays to indicate earth-faults and short-circuits separately.



## Features and Options

Permanent earth-faults:	Indication of permanent earth-faults by double blinking of the earth-fault LED.
2nd short-circuit pass-through:	Indication of a second short-circuit passing through by double blinking of the respective short-circuit LED.
Low installation depth:	Small housing allows flexible installations
Optional reset input:	For reset by recovering 230 V AC

## External Connectors

Optical terminal (triple):	Connectors for short-circuit sensors L1, L2 and L3
Optical terminal (single):	Connector to earth-fault sensor
Connector 1-2:	Remote reset input
Connector 3-4:	External blinking lamp (Type BL4.1 and BL6)
Connector 5-6:	SCADA remote contact for earth-fault indication (NO)
Connector 7-8:	SCADA remote contact for short-circuit indication (NO)
Connector 11-13:	Reset input for recovering 230 V AC (not for supply)

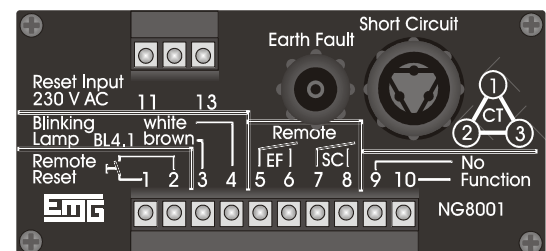


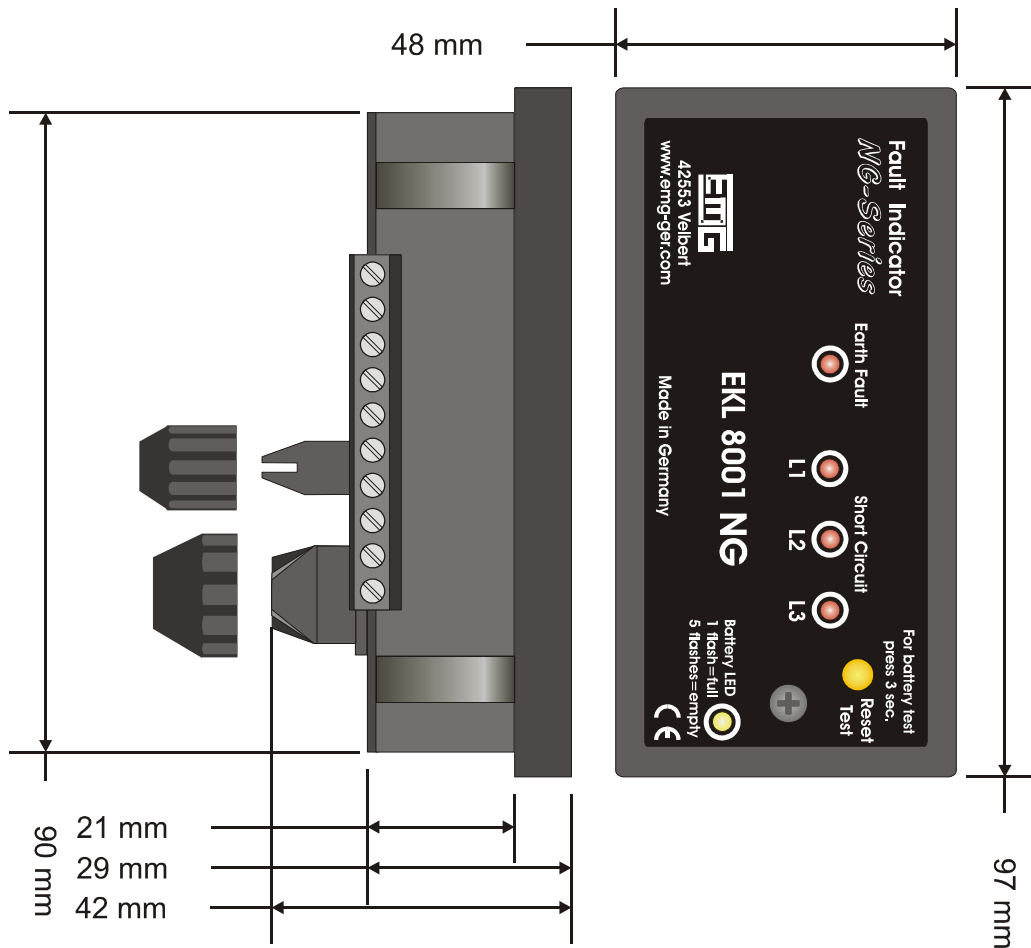
figure 1: connectors type EKL8001

## General Data

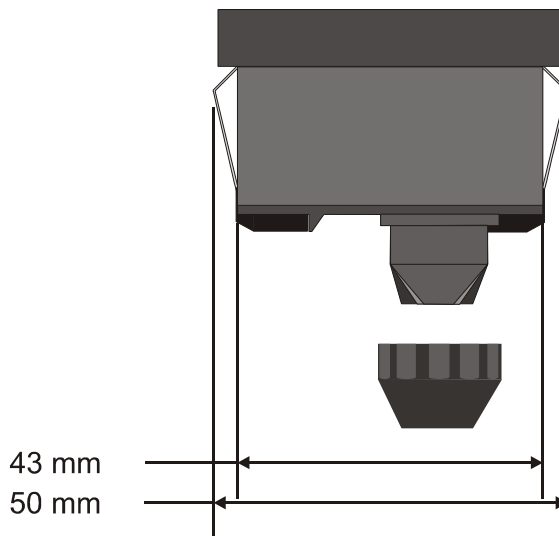
Subject	Value
short-circuit current	adjustable: 200 / 300 / 400 / 500 / 600 / 800 / 1000 * A ( $\pm 10$ %)
earth-fault current	adjustable: 10 / 20 / 30 / 40 / 60 / 80 / 100 * A ( $\pm 10$ %)
Response delay	adjustable: 40 / 60 / 80 / 160 * ms
Indication unit	suitable for panel installation
Indication of a) short-circuit b) earth-fault c) battery	a) one red LED for each phase b) one red LED c) 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) self-acting after recovering of 230 VAC (the 230 VAC connector is only for reset, not for power supply)
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 42 mm (dimensions of panel 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 (LiSOC12) type AA / 3.6V / 2600 mAh
SCADA contacts	2x NO contacts permanent / wipe contact (100 * ms), configurable by DIP switch max. 230 V AC / max. 2 A / max. 30 W
Short-circuit sensors	3x short-circuit sensors type LK (fibre optic cable) diameter: 22-42** mm connection cable length: 3* m (** Other diameter ranges for all standard cables are available.)
Earth-fault sensor	1x earth-fault sensor type LE (fibre optic cable) diameter: 80-100** mm connection cable length: 3* m (** Other diameter ranges for all standard cables are available.)

\* **Please note:** Other values can be ordered.

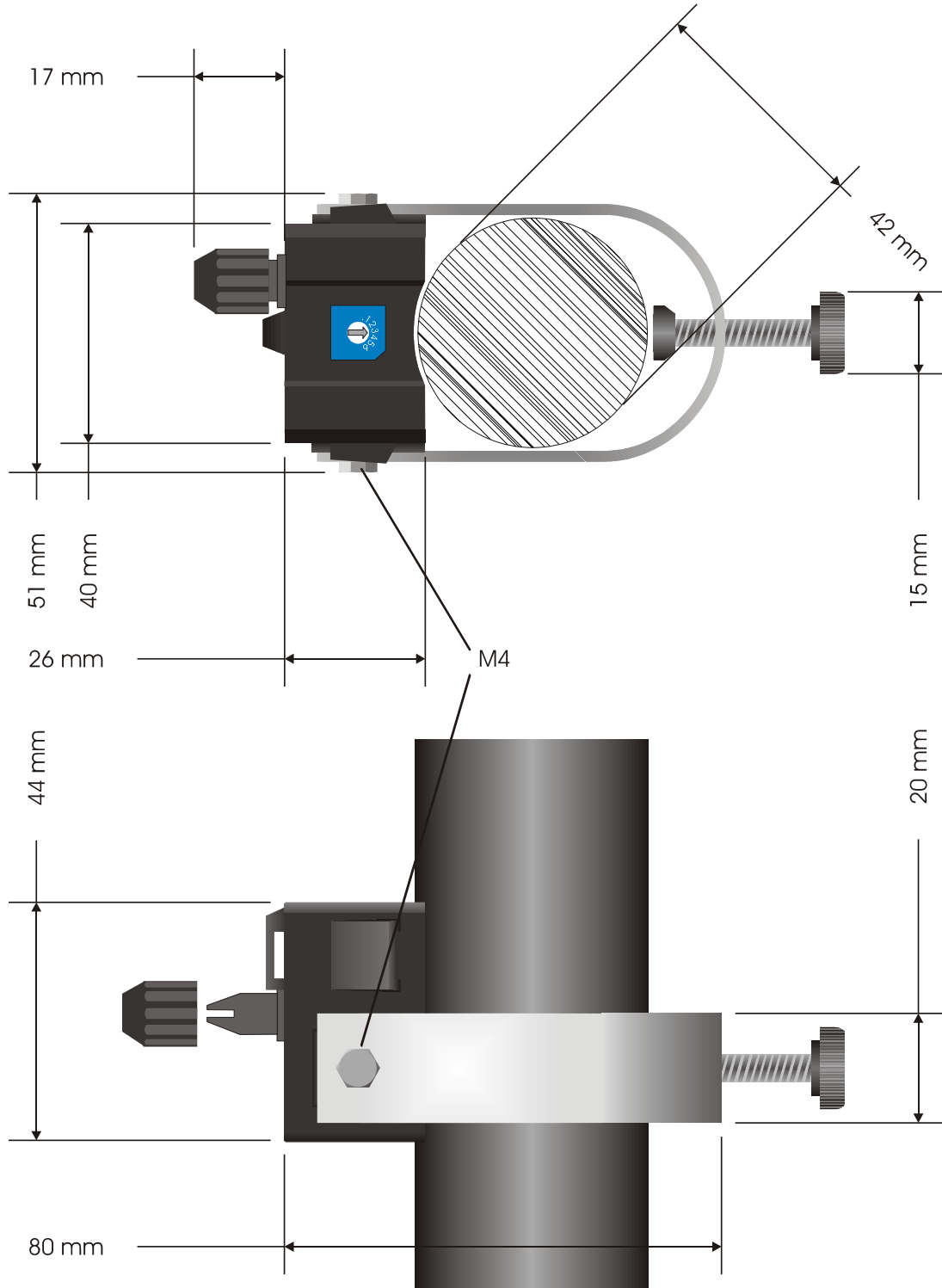
### Display unit



28.2469.00

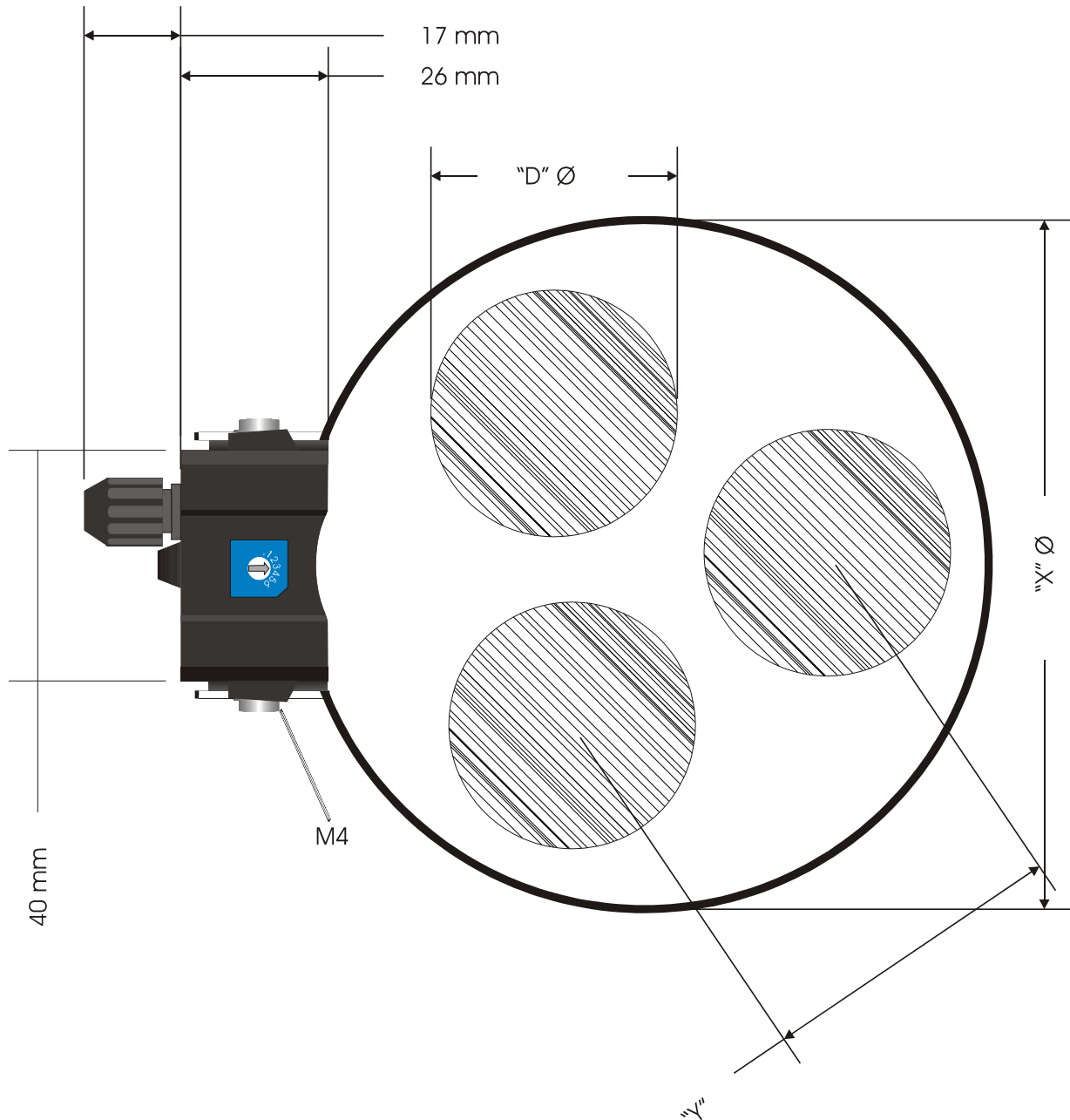


### Sensor type LK



12.1424.10

### Sensor type LE



12.1556.02