

EARTH-FAULT INDICATOR

TYPE **TERRA**

surface-mounted

General description

The earth-fault indicator type TERRA can be used in radial medium voltage networks with one input and open-ring networks. The network has to be solidly earthed or low resistance-earthed. The indication of the earth-fault is done by a flag indicator.

The indicator set consists of one display unit and one sensor (CT). The sensor is connected to the indication unit by copper cable. It must be mounted on screened cables.

The sensor is divisible and can be retrofitted on the cable. For the operation of the display device a 230V AC power supply is needed. Due to the bistable flag indication the power supply can fail after the occurrence of a fault.

The earth fault indicator detects earth-faults by measuring the sum current of the monitored network with one sensor.



Features

- No internal power supply: Due to the bistable flag indication no fail-safe power supply and no batteries are necessary for operation. The indicator is able to indicate and to reset by a 230V AC power supply, that can fail during fault condition.
- Remote indication: The indicator is able to remotely indicate faults via potential-free contacts.
- Optional reset time: When the 230V AC power supply does not fail, the indicator will reset after a pre-adjusted time.

External connectors

- Connector 1 - 2: SCADA contact NO
 Connector 3 - 4: SCADA contact NC
 Connector 5: not used
 Connector 6 - 7: earth-fault sensor (CT)
 Connector 8 - 10: external AC power supply

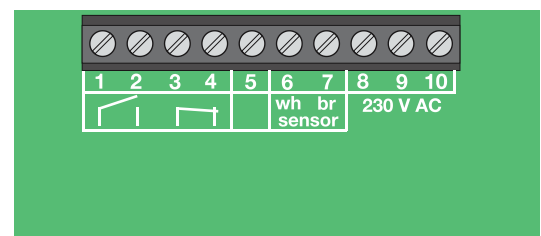
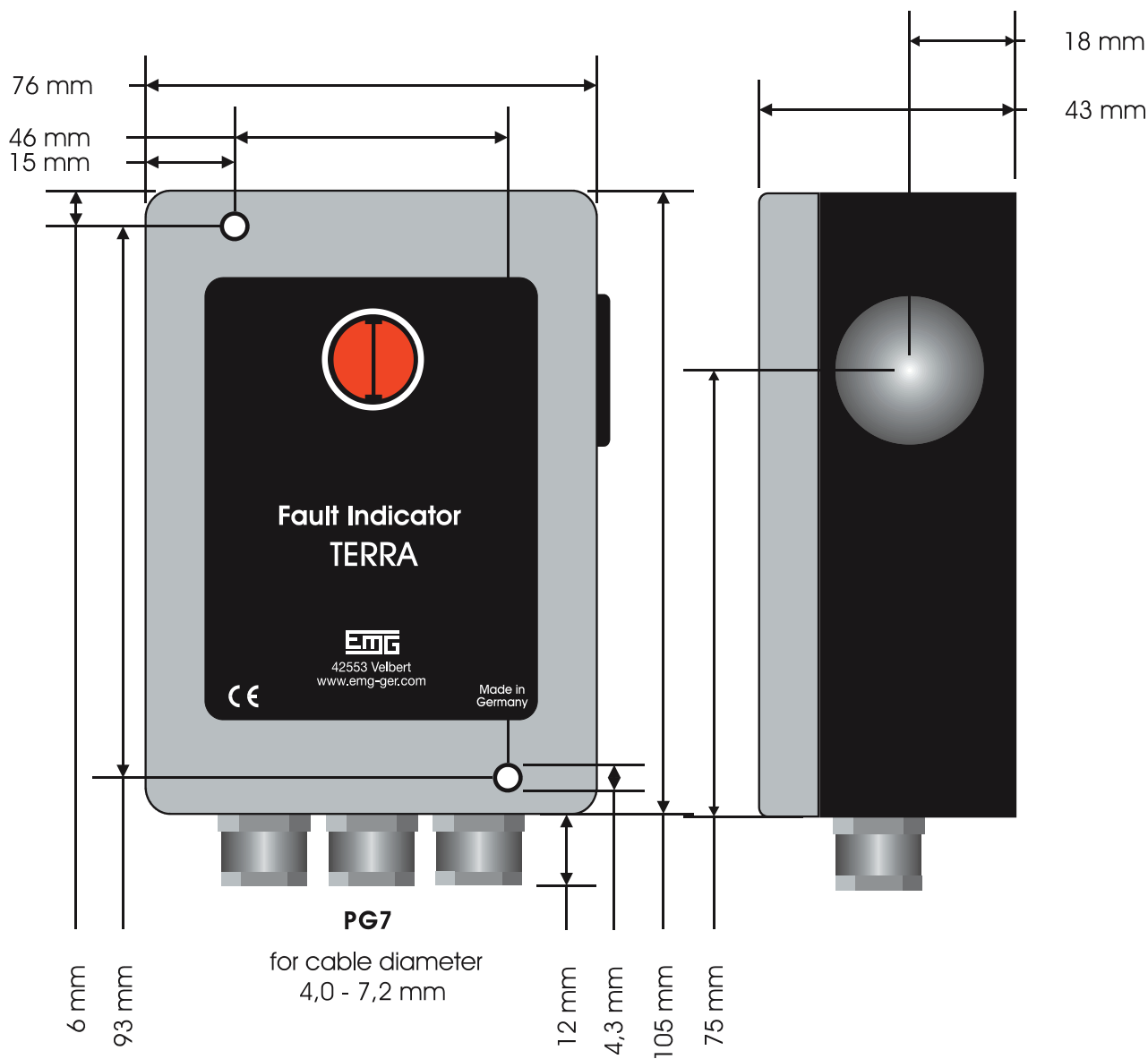


figure 1 - Connectors

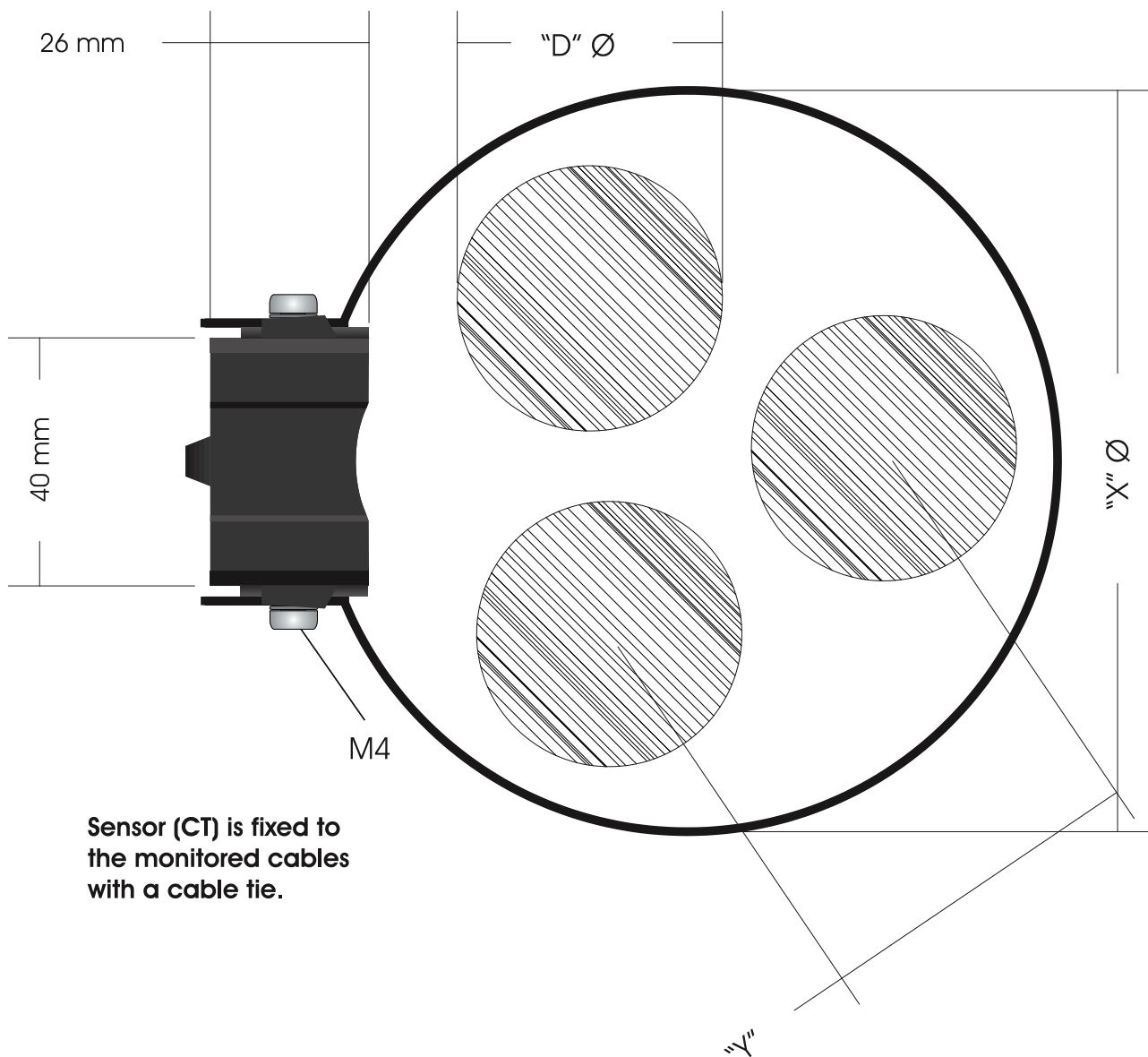
General Data

Subject	Value
earth fault current (phase to ground)	adjustable: 25 / 50 / 75 / 100 / 125 A ($\pm 10\%$) *
response delay	60 ms *
indication unit	suitable for surface installation
indication	flag indication
reset of the indicator	a) manual by push-button (only if power supply is available) b) self-acting by 230 V AC (the 230 V AC connector is for reset and for supply) c) reset by time: 4h * (only if power supply does not fail during fault situation)
on site function test	by push-button (only if power supply is available)
power supply	110 / 230 V AC (can fail during fault situation)
dimensions: indication unit	(WxHxD) 76 mm x 117 mm x 43 mm
Protection class: indication unit	IP65
Protection class: earth-fault sensor	IP67
internal type test	according to IEEE 495-2007
operation temperature range	-25°C to +70°C
SCADA contact	1 x NO and 1 x NC max. 230 V AC / max. 2 A / max. 30 W
earth-fault sensor (CT)	one earth-fault sensor type SE (current transformer for a three-core cable or three single core cables) diameter: 80-100* mm. connection cable length: 3* m

*PLEASE NOTE: other values can be ordered



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Sensor (CT) is fixed to the monitored cables with a cable tie.

Verbindungskabel/connection cable:

- LIYY 2 x 0,5 mm²
- PB-free
- Ø = 5 mm
- length customer specific

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