

# SHORT-CIRCUIT INDICATOR

## TYPE K / KM / KH

for underground lines

### General description

The short-circuit indicators type K, KM and KH are designed to detect faults in medium voltage networks with a radial or open-ring topology with one input. The short-circuit indicators apply a current threshold to identify faults. The fault is indicated via a bistable flag indication with a signal red colour.

The indicators are single, self-contained units which do not need any power supply. Therefore no battery maintenance is required. The devices are available with different steel frames or steel belts so that the devices can be mounted on different cables and busbars. All steel frames and steel belts are divisible so that the indicators can be easily retrofitted in existing installations.

### Versions

The three versions differ in the method used to reset to standby mode after a fault is detected.

Type K: Automatic reset by recovering operating voltage. The indicator must be installed on unscreened cables.

Type KH: Manual reset with a button. The indicator can be mounted on screened and unscreened cables.

Type KM: Automatic reset by recovering operating voltage and manual reset. If the automatic reset shall be used, the indicator must be installed on unscreened cables.

### Features and Options

No power supply:	No internal or external power supply required
Indication:	By bistable flag
Housing:	Completely sealed and casted
Versatile installation:	Various steel frames and steel belts available



figure 1: Type K



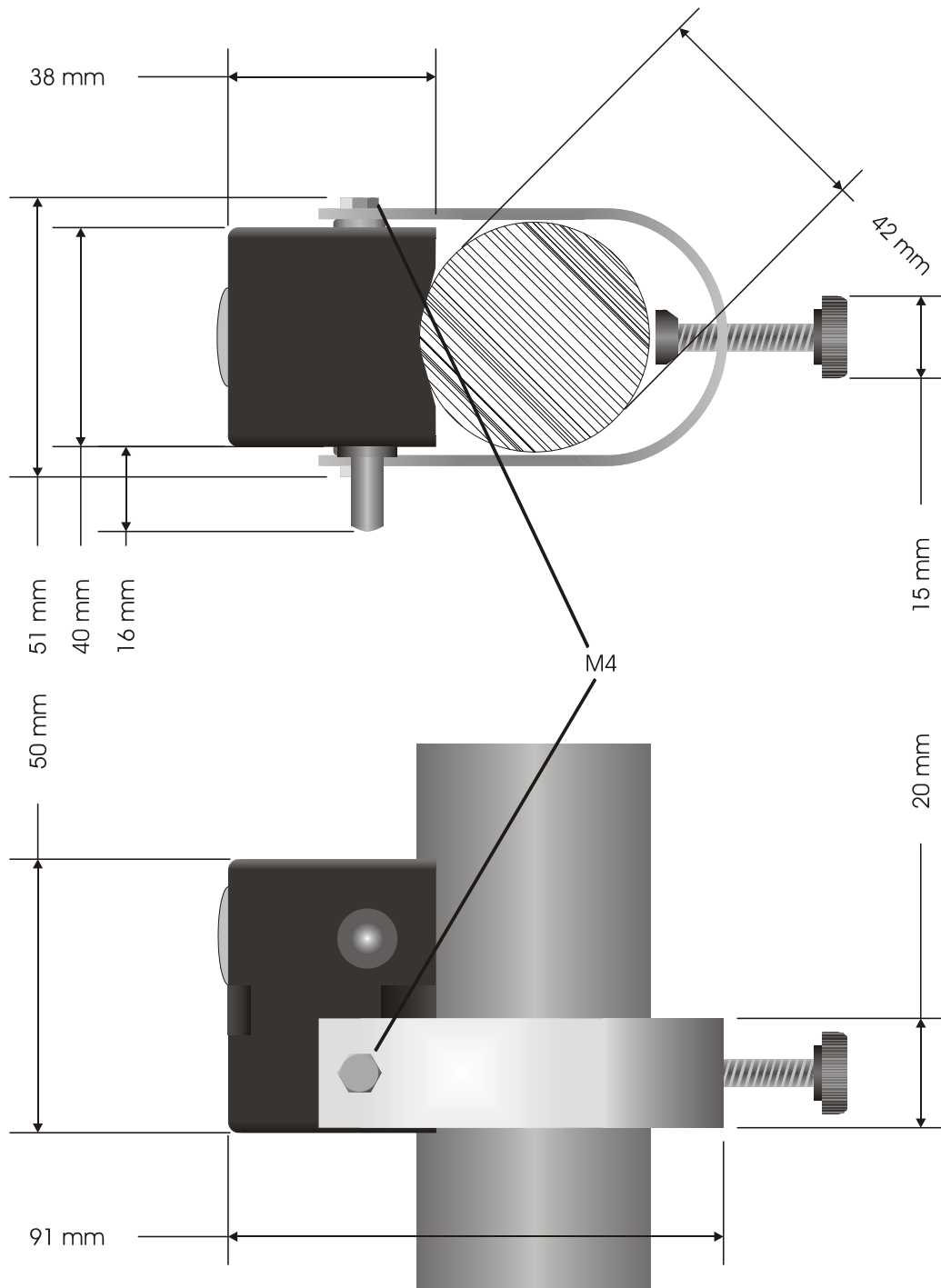
figure 2: Type KM



figure 3: Type KH

## General Data

Subject	Value	
Short-circuit trip current	One trip current available between 150 and 1500 A	
Display unit	Mounted onto a cable or busbar	
Fault indication	Flag indication	
Reset of the indicator	Type K	self-acting after recovery of medium voltage (Remark: reset time depends on voltage level and the potential surroundings)
	Type KM	a) manual by push-button b) self-acting after recovery of medium voltage (Remark: reset time depends on voltage level and the potential surroundings)
	Type KH	manual by push-button
Dimensions	Type K	(WxHxD) 40mm x 50mm x 38mm
	Type KM / KH	(WxHxD) 55mm x 50mm x 38mm
Weight	180g (Remark: Weight may vary depending on steel frame or steel belt)	
Protection class	IP67	
Current withstand	25kA / 170ms	
Internal type tests	According to IEEE 495-2007	
Operation temperature range	-40°C to +80°C	
Cable diameter ranges	a) round conductor: 5 mm – 15 mm b) round conductor: 15 mm – 25 mm c) round conductor: 22 mm – 42 mm d) round conductor: 40 mm – 50 mm e) round conductor: 50 mm – 55 mm f) flat conductor: up to 40mm x 10mm g) flat conductor: 40mm x 10mm to 60mm x 15mm	
Power supply	No supply required	



24.2054,00