



KRIES IKI-OVERHEAD

FAULT CURRENT INDICATOR FOR OVERHEAD DISTRIBUTION LINES UP TO 36 kV



IMPROVE GRID RELIABILITY BY REDUCING THE TIME TO LOCATE FAULT CONDITIONS, TRACKED BY MEASURES SUCH AS SAIDI OR SAIFI ETC.

APPLICATIONS

- Fault indicators for overhead lines
- Grid edge monitoring

RELEVANT STANDARDS AND TEST REPORTS

• IEEE-495

KEY FEATURES

- · Field configurable
- Multiple reset
 options by time, by
 re-energization or by reset
 magnet
- Multiple fault detection strategies

TE Connectivity (TE) Kries IKI-Overhead (IKI-OH) fault current indicators are designed for overhead distribution lines from 1 to 36 kV, and from 20 - 960 mm² and #4 - 1750 kcmil cable sizes. They are engineered to monitor fault conditions such as short circuits, temporary disruptions and ground faults on overhead lines, helping grid operators to quickly restore power after unplanned outages.

Our Kries IKI-OH indicates a fault condition locally using integrated LEDs whereas the combination of IKI-Overhead-Radio and IKI-Overhead-Butler allows remote reporting to a distribution control center, enabling grid transparency and reducing SAIDI.

Our Kries IKI-OH portfolio is tested to IEEE-495 standards and meets operating temperatures from -30 °C to 75 °C (-22 °F to 167 °F).

With no special tools required, the Kries IKI-OH can be quickly and easily installed, without de-energizing the circuit that is to be monitored.

Vegetation clashing against power lines or fallen poles can be detected by IKI-OH, helping our customers to prevent wildfires and unsafe conditions for the local population.

TECHNICAL SPECIFICATIONS







Description	IKI OVERHEAD BUTLER	IKI OVERHEAD RADIO	IKI OVERHEAD	
TCPN	ES9683-000		ER3568-000	
	Includes 1x Butl	er and 2x Radio	Includes 1x IKI-OH	
Product Designation	IKI-Overhead R2.5 Butler fault indicator for overhead line	IKI-Overhead R2.5 Radio Fault Indicator for overhead line	IKI-Overhead R2 fault indicator for overhead line	
	Remote signalling via SMS Receiver for IKI-OH Radio 4G LTE-M Ring eyelet or bayonet	Remote message via short range radio to IKI-Overhead Butler Ring eyelet or bayonet	Strobe only indication	
Dimensions and installation instructions				
Connection Type for Insulating Pole	Ring eyelet or bayonet			
Case Height x Width x Depth	290 x 104 x 145 mm 11.4 x 4.09 x 5.71 inch			
Conductor Cross Section	20 - 960 mm² 5 - 35 mm diameter #4 - 1750 kcmil AWG 0.20 - 1.38 inch diameter			
Operating conditions				
Operating Temperature	-30 °C to 75 °C (-22 °F to 167 °F)			
Storage Temperature	-30 °C to 35 °C (-22 °F to 176 °F)			
Protection Class	IP 67			
Voltage Level	Applicable up to 36 kV			
Maximum Height Operation	4500 m above sea level 14764 ft above sea level			
Maximum Wind Force	45 m/s 100 miles/h			
Fault detection				
Short Circuit Detection I>>	✓			
Threshold Current Short-Circuit Detection I>> [A]	Adjustable: Auto, 200 A, 400 A, 600 A			
Automatic Response Threshold Short Circuit Detection	✓			
Duration of fault for indication [ms]	75, 175			
Inrush Indication [ms]	200			
Earth Short-Circuit Detection le>>	✓			
Timed Reset Setting	2, 4, 8 hours			
Reset Types Available	Time Manually by reset magnet Automatically upon re-energization			
Display (all variants)				
Display Visibility	Approx. 100 m (160-330 ft) in bright sunlight Approx. 500 m (1640 ft) at night Omnidirectional			
LED Flashing Frequency	20 per minute (once every 3 seconds)			
Communication (IKI Overhead Butler only)				
GSM Network	4G LTE-M and NB IoT	-	-	
Maximum number of connectable IKI-Overhead-Radio	2	-	-	
Regional Certification	Please inquire to confirm device compatibility with your local Mobile Network Operator (MNO)			
Power supply	ES9683-000 ER3568-000			
Battery Life	Min. 10 years Approx. 15 years			
Battery	Lithium metal battery			

Safety notes

The IKI Overhead R2.5 can be installed and also uninstalled directly on live overhead lines using suitable installation tools. For the installation, working principles must be defined by the responsible safety engineer. The safety instructions regarding the insulating rod must also be observed.

102 mm (4.02 inch) 145 mm (5.71 inch)

IKI-OVERHEAD COMMUNICATION



IKI-OH R2 Visual Indication



IKI-OH Radio R2.5 Radio Link Up To 10 m (32.81 feet)

IKI-OH Butler R2.5 GSM Communication (4G)

IKI-OH Radio R2.5 Radio Link Up To 10 m (32.81 feet)

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Bayonet hot stick	270 mm (10.63 inch)	
Plug-in eyelet	290 mm (11.42 inch)	
Eyelet	240 mm (9.45 inch)	

Learn more: TE.com/energy

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