Remote Overhead Line Wave Recording Fault Indicator

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JYL-FF Datasheet

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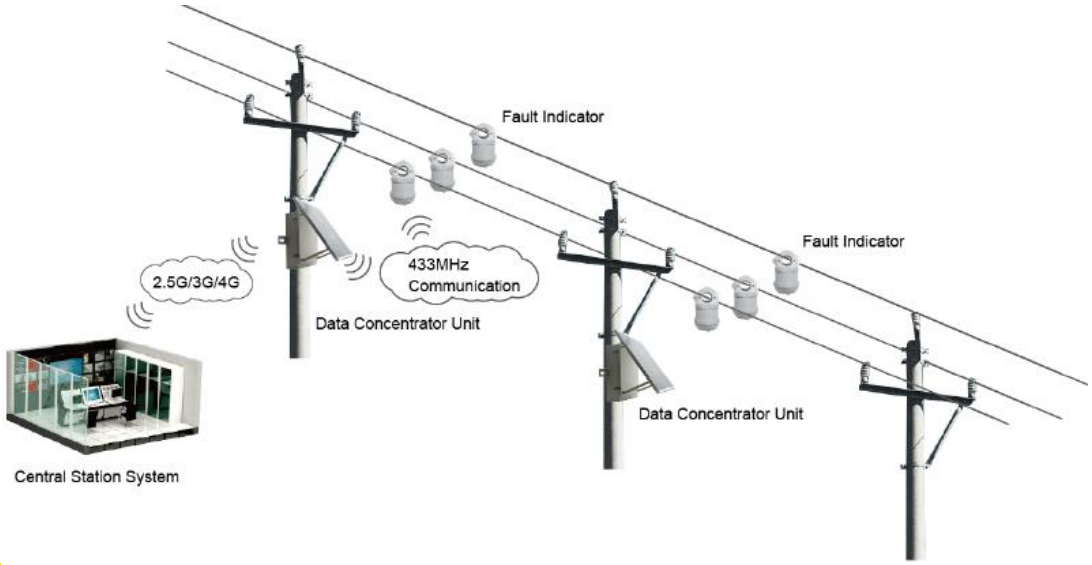
The wave record fault indicator type JYL-FF V2.0 is usually used in radial medium and high voltage overhead line distribution networks, which neutral points are ineffectively grounded. Short-circuit fault and single-phase earth fault can be detected and indicated by four ultra-bright blinking LEDs, which can be seen from 360º sight. The voltage and current wave can be recorded at all time, especially when the voltage drop or the current change suddenly. The wave records in the forms of IEEE Comtrade 1999 can also be transmitted to the SCADA by 2G/3G/4G networks.

The indicator can be mounted under live conditions with the help of an adapter and a hot stick. The parameters such as trip current, reset time, blinking interval, etc., can be read and adjusted by a bidirectional wireless tool. One DCU can link at most nine indicators.

The wave record fault indicator type JYL-FF V2.0 consists of:
1 pcs DCU: transmission fault, load current value and wave record to SCADA
3 pcs indicators: fault detection and indication, and wave recording

Topology



Features

Wave Record:	Voltage & Current wave can be recorded and uploaded to SCADA, 80 points per cycle.
Short Circuit:	Indicated by four red ultra-bright blinking LEDs.
Earth-fault:	Indicated by four red ultra-bright blinking LEDs. Fault is confirmed by DCU(local) or SCADA(remote)
Low Battery Warning:	Information will be sent to SCADA
Parameter Adjust:	The parameters can be read and adjusted by bidirectional wireless tool.
Remote Transmission:	DCU can transmit data to SCADA system.
Power Supply:	The indicator can take power from overhead lines, with lithium battery as backup. The DCU can take power from solar energy with lithium battery backup.

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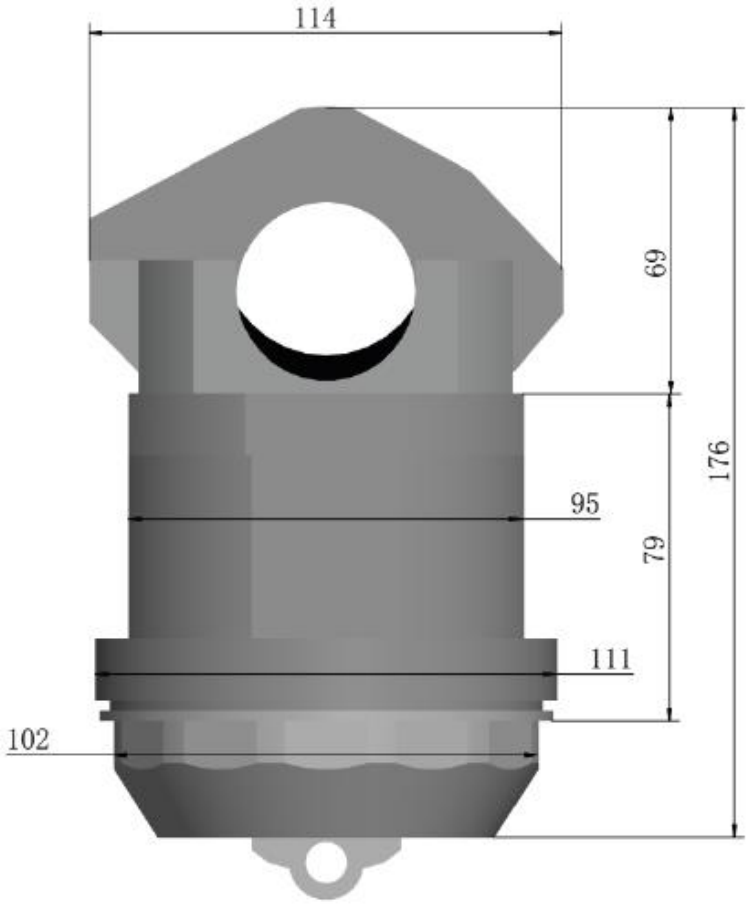
General Data

Subject	Value
Short-circuit Trip Current (Phase to Phase)	50~1200A adjustable, 1A step, 150A default
Electrical filed drop record threshold	Adjustable: 1% step, 30% default
Current record threshold	adjustable, 1A step, 5A default (≥5A)
Current wave upload threshold	adjustable, 1A step, 50A default
Indication Unit Reset	1. remote reset through SCADA system 2. time reset: adjustable, 1 second step, 24h default, max. 48h 3. Auto delay reset after repower, 1 second step, 30s default max 5min, only for permanent fault
Protection Class	IP68
Internal Type Test	According to IEEE495-2007
Operation Temperature Range	-40~+70℃
Indicator Battery	Lithium battery type AA 3.6V / 9Ah, replaceable
Battery Life	10 years
Indicator weight	approx. 1kg
DCU weight	<5kg
Dimensions	Diameter: 114mm Height: 176mm
Accuracy	0A~300A ±3A 300A~800A ±1%
Cable Diameter Ranges	6mm~42mm
Blinking Frequency	10 per minute, adjustable
Max. load/fault current	1200A
Voltage range	5~38KV, can be customized to 44KV, 69KV and 110KV
Current withstand	31.5KA/4s
Communication	433MHz from indicators to DCU 2.5G/3G/4G from DCU to SCADA
Communication Protocol	Indicator to DCU: private DCU to SCADA: IEC101, IEC104, DNP3.0， Modbus
Waveform file format	COMTRADE 1999, including Ua, Ub, Uc, Ia, Ib, Ic, Io

Dimension



Order Info

Item	Content
Parameter	Voltage level:____KV, Frequency:____Hz SIM card quantities: 1☐/2☐
Accessories	DCU: Solar panel☐ Battery☐ Housing☐ DC adapter☐