

Ground fault and short circuit indicator MEg61.4/3E





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CHARACTERISTICS

The set of the indicator MEg61.4/3E creates a separate environment-independent construction unit placed in one waterproof plastic case, which is to be installed on a MV line pole under phase wires of any arrangement of compensated MV networks or MV networks with grounded neutral point. It is characterized by a low weight, small dimensions and easy (also additional) installation; it is independent of external power supply. The three-phase power supply is through multi-functional used MV capacitive dividers.

Beside the basic function of indication of short-circuits and ground faults whose signals are transmitted immediately by the GPRS communication of the GSM network, with possible subsequent transmission of courses of short-circuit currents and electric quantities recorded at the beginning and during a ground fault, the indicator MEg61.4/3E can be used for dispatching measurements of phase and delta voltages and phase currents. As well directional flash light indication can be used for indicating a short-circuit and a ground fault.

The set of the indicator MEg61.4/3E can be installed advantageously in points of a MV line when remote dispatching measurement is required due to development of renewable energy sources.

The GPRS communication of GSM networks can be implemented through the EN 60870-5-104 protocol linked to the SCADA system of the control station. In this way, a faulty section of a MV line can be quickly identified without its necessary delimitation through repeated risk switching on the MV line to make a short-circuit or a ground fault. It results positively in the power supply continuity without repeated restarts of sensitive electrical equipment of consumers.

TECHNICAL PARAMETERS

Overcurrent indication:	according to the setting level with 1 A resolution
Directional indication of ground faults:	transient process of 1st half-wave, admittance principle due to resistance connection,
	active power component due to resistance connection, power factor change due to resistance connection.
Accuracy of phase to phase	
voltage measurement:	0.5 % of range + 0.5 % of measured value
Range of voltage measurement:	0.8 U _{nom} – 1.2 U _{nom}
Accuracy of phase current measurement:	2% of range + 1% of measured value
Range of current measurement:	3 % I _{nom} – 130 % I _{nom}
Capacitive dividers:	3 pcs of VSO 25
Voltage level:	22 kV
GSM communication:	standardized protocol EN 60870-5-104
Dimensions of the indicator case:	400 × 300 × 200 mm
Weight of the indicator case:	12 kg
Method of pole attachment:	pair of Bandimex tapes (width 16 mm)
Case protection rating:	IP66
Resistance of mounting accessories:	against UV radiation
Operating temperature:	from -25 °C to +60 °C

Manufacturer

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