

VARIMETER PE-Conductor Monitoring Relay MK 9163N/820



- According to DIN EN 60 947-8
- LED indicator for
 - auxiliary voltage
 - contact position
- Output: 2 changeover contacts
- Wire connection: also 2 x 1.5 mm² stranded ferruled, or 2 x 2.5 mm² solid DIN 46 228-1/-2/-3/-4
- Width: 22.5 mm

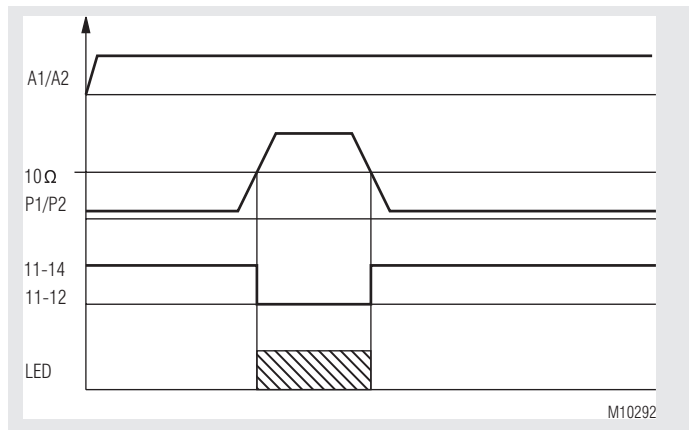
Product Description

The PE-conductor monitoring relay MK 9163N/820 is used to monitor the connection of the PE-conductor. It detects interruption of the PE-conductor between 2 connection points and signals this optically via an LED on the device and via its output contacts. An additional LED on the device indicates whether the auxiliary voltage is present.

Approvals and Markings



Function Diagram



Applications

Before starting the plant, the device checks whether PE is connected correctly.

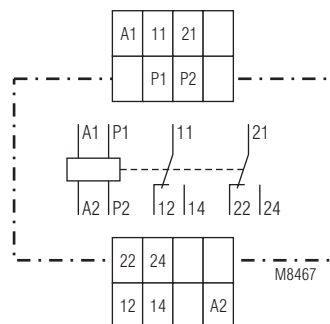
Function

The LEDs displays errors when the PE is interrupted between 2 connection points.

Indicators

LED green: on, when auxiliary supply connected
LED red: on, when PE interrupted

Circuit Diagram



Connection Terminals

Terminal designation	Signal description
A1, A2	Operating voltage
P1, P2	PE connection
11, 12, 14; 21, 22, 24	Changeover contacts

Technical Data

Input Circuit

Response value: > 10 Ω

Auxiliary Circuit

Auxiliary voltage U_H : AC 230 V 50 / 60 Hz
Voltage range: AC 0.8 ... 1.1 U_H AC
Nominal consumption: AC 1.5 VA
Nominal frequency: 50 / 60 Hz
Frequency range: 45 ... 65 Hz
Max. bridging time on failure of aux. supply: 20 ms

Output

Contacts: 2 changeover contacts
Thermal current I_{th} : 5 A
Switching capacity
to AC 15: 3 A / AC 230 V DIN EN 60 947-5-1
to DC 13: 2 A / DC 24 V DIN EN 60 947-5-1
Electrical life: 1,5 x 10⁶ switching cycles
at 4 A, AC 230 V, cos φ = 0,6: IEC/EN 60 947-5-1
Short-circuit strength
NC contact:
max. fuse rating: 6 A gG / gL
NO contact:
max. fuse rating: 10 A gG / gL
Mechanical life: ≥ 30 x 10⁶ switching cycles

General Data

Operating mode: Continuous operation
Temperature range
Operation: - 20 ... + 60 °C
Storage: - 20 ... + 60 °C
Altitude: < 2,000 m
Clearance and creepage distances
Rated impulse voltage / pollution degree: 4 kV / 2 DIN EN 60 664-1
EMC IEC/EN 60947-8
Interference suppressions: Limit value class B DIN EN 55 011
Degree of protection
Housing: IP 40 IEC/EN 60 529
Terminals: IP 20 IEC/EN 60 529
Housing: Thermoplastic with V0-behaviour according to UL subject 94
Vibration resistance: Amplitude 0,2 mm, frequency 10 ... 55 Hz, IEC/EN 60 068-2-6
Climate resistance: 20 / 060 / 04 DIN EN 60 068-1
Terminal designation: DIN EN 50 005
Wire connection DIN 46 228-1/-2/-3/-4
Screw terminals (integrated): 1 x 4 mm² solid or 1 x 2.5 mm² stranded ferruled (isolated) or 2 x 1.5 mm² stranded ferruled (isolated) or 2 x 2.5 mm² solid
Insulation of wires or sleeve length: 8 mm
Fixing torque: max. 0.8 Nm
Mounting: DIN-rail DIN EN 60 715
Weight: 160 g

Dimensions

Width x height x depth: 22.5 x 90 x 102 mm

Standard Type

MK 9163N.12/820 AC 230 V 50/60 Hz
Article number: 0061837
• Output: 2 changeover contacts
• Nominal voltage U_N : AC 230 V
• Width: 22.5 mm