



VARIMETER IMD



Insulation monitor RN 5897/010 - Insulation monitoring for modern IT systems

The demand for the availability of machines and apparatus in the region of factory machinery and process technology is constantly increasing. The requirement for this is a functioning and reliable power supply. Unexpected insulation faults in the system can lead to unwanted power supply failures, and even cause personal injury or property damage. This is why insulation monitoring equipment is typically used in IT systems.

The **insulation monitor RN 5897/010** from the **VARIMETER IMD** series by DOLD was developed especially for use with modern power supplies. These are often comprised of converters, thyristor regulators, and direct current components. Through EMV interference suppression measures, high leakage capacitance onto the ground is present. The RN 5897/010 is suited for system leakage capacitances of up to 1000 μF , and for voltages up to AC/DC 230 V. Using the additional ballast unit RR 5898, it is possible to install the unit in systems with voltages of up to AC 1000 V and DC 1500 V.

Besides an adjustable alarm threshold, the insulation monitor also has an adjustable pre-alarm threshold. A multicoloured LCD screen constantly updates stating the current insulation value. The insulation monitors guarantee additional surveillance over current-free networks. A selective earth fault detection of L+ and L- enables quick fault localisation.

Advantages and customer benefit

- ▶ Recognition of symmetrical and asymmetrical insulation faults
- ▶ Quick error localization through selective earth fault detection based on L+ und L-
- ▶ Preventive fire and plant protection
- ▶ Multi-color display to show the insulation value and mains voltage
- ▶ Universal use in mixed IT systems up to AC 1000 V / DC 1500 V
- ▶ Suitable for system leakage capacitance of up to 1000 μF
- ▶ Easy to adjust parameters with a rotary dial and menu organization
- ▶ Trigger output for insulation fault location system RR 5886 / RR 5887

Our experience. Your safety.

Insulation monitor RN 5897/010

Technical features

- ▶ Insulation monitoring in accordance with IEC/EN 61557-8
- ▶ Standard type RN 5897/010 with option to connect an external coupling device RR 5898 for voltages up to AC 1000 V, DC 1500 V
- ▶ 2 separated, adjustable response thresholds (e.g. can be used for pre-alarm and alarm)
- ▶ Adjustment range
 1. Response value (pre-alarm): 20 kΩ ... 2 MΩ
 2. Response value (alarm): 1 kΩ ... 250 kΩ
- ▶ 1 changeover each for insulation fault pre-alarm and insulation fault alarm
- ▶ Load or closed current principle adjustable for signaling relay
- ▶ Multi-colored display to show the current insulation resistance, the device status, and for setting parameters
- ▶ Setting for maximum system leakage capacitance to shorten response times
- ▶ Automated and manual device self test
- ▶ Selectable alarm memory
- ▶ Manipulation protection through sealed clear cover
- ▶ External control input for combined Test / Reset button
- ▶ 3 wide voltage ranges for the auxiliary voltage
- ▶ Construction width 52.5 mm

Order information

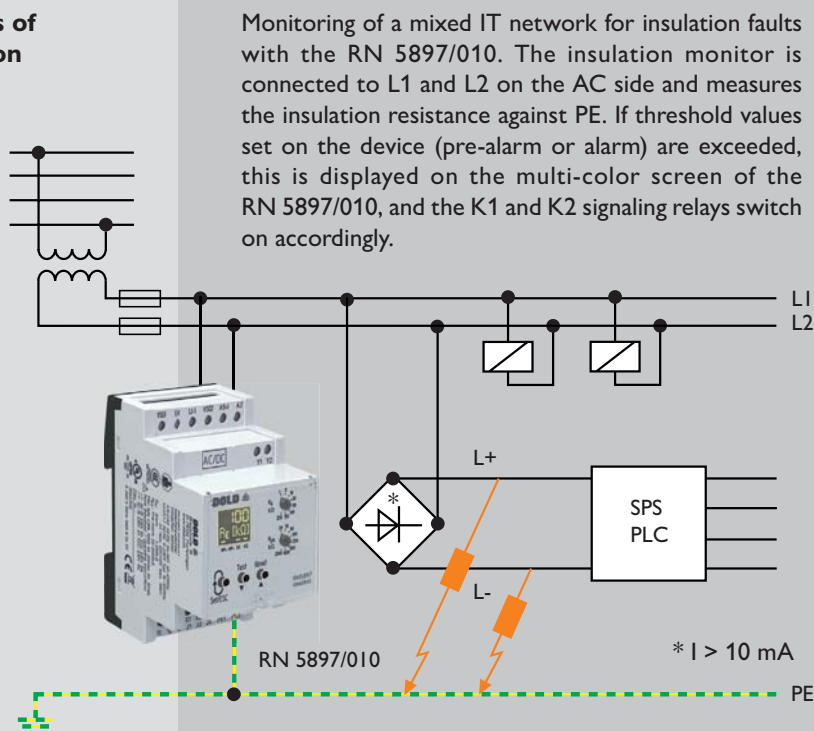
Standard type: RN 5897.12/010 AC/DC 24 ... 60 V
Item number: 0070011

Standard type: RN 5897.12/010 AC/DC 85 ... 230 V
Item number: 0070012

Standard type: RN 5897.12/010 DC 12 ... 24 V
Item number: 0070013

Standard type: RP 5898 / RL 5898 / RR 5898
Item number: 0066944 / 0068315 / 0069925

Examples of application



Further information

RN 5897/010

Start

www.dold.com



Do you need a **communication interface** for the central **evaluation, control and visualisation** of your **measurement data**?

RN 5897/011



Insulation monitor
RN 5897/010



Accessories



Coupling device
RL 5898



Coupling device
RP 5898



Coupling device
RR 5898



Buzzer
RK 8832

* only RN 5897/010, RL/RP 5898

Areas of application

- ▶ Unearthed AC, DC, AC/DC mains
- ▶ UPS systems
- ▶ Networks with frequency converters
- ▶ Battery systems
- ▶ Hybrid and battery-powered vehicles
- ▶ Grids with DC drives
- ▶ Power generators



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