



## VARIMETER IMD

### Insulation monitor LK 5896/900

**DOLD** 

With the new **insulation monitor LK 5896/900** from the **VARIMETER IMD** family, DOLD is offering an exciting solution for compliant insulation monitoring in coupled networks. The device can be used flexibly in ungrounded AC, AC/DC, and DC power supply systems (IT systems), and can even handle high network leakage capacitances of up to 3000  $\mu\text{F}$ . In coupled IT systems, the LK 5896/900 takes over insulation measurements, making it possible to operate multiple insulation monitors in coupled networks without them influencing one another. If the coupled network is broken, each insulation monitor automatically takes over insulation monitoring tasks for its own individual network. This means the LK 5896/900 increases the availability of systems, serving as part of preventative maintenance and repair.

Besides quick error localization through selective earth fault detection and optimized measurement times, the insulation monitor recognizes errors even during operation, avoiding expensive machine downtimes. In addition, it can be used universally in ungrounded AC, DC, and AC/DC networks from 0 V to 1000 V rated voltage. The maximum voltage is up to DC 1500 V and AC 1100 V without additional ballast. A trigger input and output are used to monitor coupled IT systems, without the insulation monitors negatively influencing one another. Universal analogue outputs for the insulation resistance output complete the device's functionality.

#### Advantages and customer benefit

- ▶ Preventive fire and plant protection
- ▶ System for sequential monitoring of separated networks which can also be connected (network coupling)
- ▶ Quick error localization through selective earth fault detection based on L+ und L-
- ▶ Universal use in ungrounded AC-, DC- and AC/DC networks up to 1000 V rated voltage
- ▶ Suitable for large-scale system leakage capacitances up to 3000  $\mu\text{F}$
- ▶ Simple adjustment via latching rotary switches
- ▶ Reliable monitoring even when network voltage supply is cut
- ▶ No additional ballast unit required

**Our experience. Your safety.**

# Insulation monitor LK 5896/900

## Technical features

- ▶ Insulation monitoring in accordance with IEC/EN 61557-8
- ▶ Recognition of symmetrical and asymmetrical insulation faults
- ▶ 1 changeover contact each for prewarning and alarm
- ▶ 3. Output relay to indicate wire wire breakage and device faults
- ▶ Adjustment range prewarning threshold: 20 kΩ ... 2 MΩ
- ▶ Adjustment range alarm threshold: 1 kΩ ... 250 kΩ
- ▶ Open circuit or closed circuit principle selectable for output relay
- ▶ Adjustment of maximum system leakage capacitance to reduce response time
- ▶ LED chain for indication of the current insulation resistance
- ▶ Indication of active measurement circuits
- ▶ Automated and manual device self test
- ▶ Selectable alarm memory
- ▶ External test and reset buttons can be connected
- ▶ With "watchdog timer" to monitor the trigger signal
- ▶ Construction width 90 mm



Insulation monitor  
LK 5896/900

## Accessories



Buzzer  
RK 8832



Indicating instrument  
RP 5898

## Order information

Standard type: LK 5896.13/900 DC 20 ... 30 V  
Item number: 006699 I

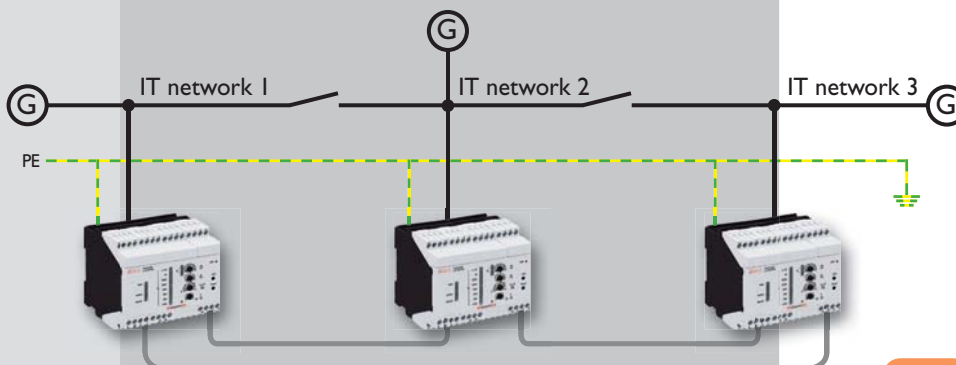
## Areas of application

Insulation monitoring of separated, ungrounded AC, DC, and AC/DC networks which can also be connected.

- ▶ UPS systems
- ▶ Networks with frequency converters
- ▶ Battery networks
- ▶ Networks with DC drives
- ▶ IT systems with high leakage capacitances

## Examples of application

The LK 5896/900 insulation monitor is predestined for use in coupled IT systems. A trigger input and output are used to monitor separated IT systems which can also be coupled during operation without the insulation monitors negatively influencing one another.



Principle of a coupled IT system with insulation monitoring



## Further information

VARIMETER B01

Start

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