



VARIMETER IMD

DOLD 

Insulation Monitor LK 5895 / LK 5896

With the new **Insulation Monitors LK 5895** and **LK 5896** from the **VARIMETER IMD** family, DOLD offers a convincing solution for insulation monitoring of non-earthed AC, AC/DC, and DC power supplies (IT systems). The devices increase the availability of plants and are used for preventive maintenance and repair. Faults are detected even during operation and costly plant standstills are prevented. The insulation monitors were specially designed for use in modern power supplies that often include rectifiers, converters, thyristor controllers or directly connected DC components. EMC interference suppression with its leakage capacitances against earth plays an important role in this matter. The two insulation monitors meet these requirements.

Besides a faster fault localisation by selective earth fault detection and optimised measuring times, the insulation monitors can deal with system leakage capacitances of up to 3000 μF . They are also universally applicable in non-earthed DC/AC and mixed networks from 0 V to 1000 V nominal voltage. The maximum voltage is up to DC 1500 V and AC 1100 V without additional adaption device. An additional measurement circuit allows simultaneous monitoring of an AC network which is galvanically isolated from the main measurement circuit. Universal analogue outputs for the insulation resistance output complete the device's functionality.

Advantages and customer benefit

- ▶ Preventive fire and plant protection
- ▶ Early insulation fault detection during operation
- ▶ No additional adaption device needed
- ▶ Fast error localisation via selective earth fault detection to L+ and L-
- ▶ Suitable for universal application in non-earthed DC/AC and mixed networks
- ▶ Suitable for large-scale system leakage capacitances up to 3000 μF
- ▶ Simple adjustment via latching rotary switches
- ▶ Reliable monitoring, also in voltage-free network
- ▶ LK 5896 with additional measurement circuit

Our experience. Your safety.

Insulation Monitor LK 5895 / LK 5896

Technical features

- ▶ Insulation monitoring in accordance with IEC/EN 61557-8
- ▶ Detection of symmetrical and asymmetrical insulation faults
- ▶ Measurement circuits can be switched off via control terminals, e.g. in case of network connection
- ▶ 1 changeover contact each for prewarning and alarm
- ▶ 3. Output relay to indicate broken wire and device faults
- ▶ Max. voltage up to DC 1500 V and AC 1100 V
- ▶ 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
- ▶ Manual or auto alarm reset selectable
- ▶ External test and reset buttons can be connected
- ▶ Construction width 90 mm



Insulation monitor
LK 5896

Accessories



Buzzer
RK 8832



Indicating instrument
RP 5898

Order information

Standard type: LK 5895.12/010 DC 20 ... 30 V
Item number: 0065217

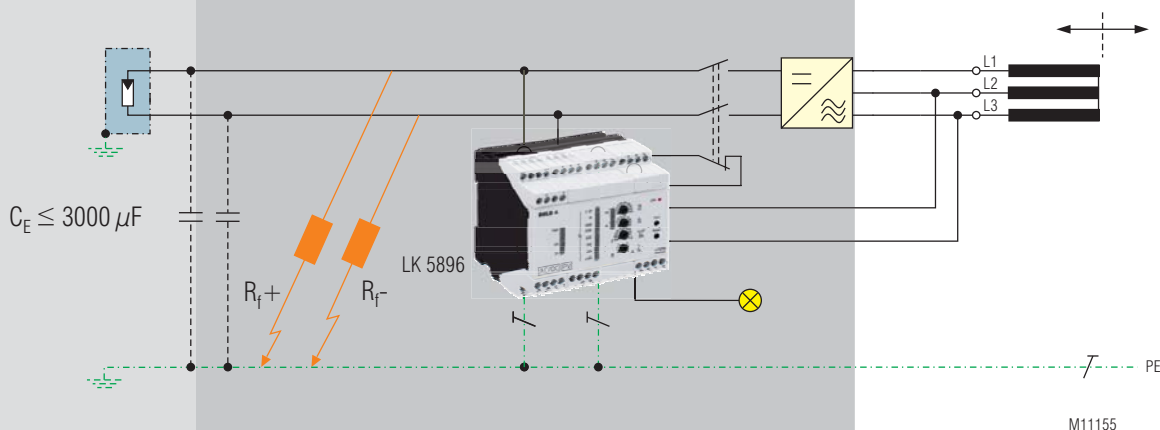
Standard type: LK 5896.13/100 DC 20 ... 30 V
Item number: 0065131

Application

With its two measurement circuits, i.e. the main measurement circuit and the additional measurement circuit, the insulation monitor LK 5896 is perfectly suitable for photovoltaic systems. While the main measurement circuit monitors the DC side for insulation faults in front of the inverter, the insulation resistance against earth can be analysed on the AC side by means of the additional measurement circuit. And this is done prior to connection to the photovoltaic system. In order to prevent a reciprocal influence of both measurement circles, the additional measurement circuit is deactivated via control terminal when connecting the system.

Fields of application

- ▶ Non-earthed DC/AC and mixed IT networks
- ▶ UPS systems
- ▶ Networks with frequency converters
- ▶ Battery networks
- ▶ DC driven networks
- ▶ Photovoltaic systems
- ▶ Hybrid cars or battery operated cars



Principle of a non-earthed IT system with insulation monitoring
also after the inverter, before connection

Further information

LK 5896

Start

You need a device for
system leakage capacitances
up to 1000 μF?

LK 5894

www.dold.com

DOLD

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