



## VARIMETER IMD

**DOLD** 

### Insulation Monitor LK 5894

With the new **Insulation Monitor LK 5894** 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 LK 5894 increases the availability of plants and is used for preventive maintenance and repair. Faults are detected even during operation and costly plant standstills are prevented. The insulation monitor was specially designed for use in modern power supplies that often include rectifiers, converters, thyristor controllers or directly connected DC components. EMC interference suppression measures with its leakage capacitances against earth play an important role in this matter. DOLD's insulation monitor meets the criteria.

Besides a faster fault localisation by selective earth fault detection and optimised measuring times, the insulation monitor can deal with system leakage capacitances of up to 1000  $\mu\text{F}$ . It is also universally applicable in non-earthed DC/AC and mixed networks from 0 V to 690 V nominal voltage. The maximum voltage can be up to DC 1000 V and AC 760 V without additional adaption device.

The device can be adjusted quickly and easily with its latching rotary switches. The measuring circuit monitoring for broken wire detection and the LED chain for indication of the current insulation resistance are further convincing features of the LK 5894.

#### 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 system leakage capacitances up to 1000  $\mu\text{F}$
- ▶ Simple adjustment via latching rotary switches
- ▶ Reliable monitoring, also in voltage-free network
- ▶ Measuring circuit monitoring of wire breakage

**Our experience. Your safety.**

# Insulation Monitor LK 5894

## Technical features

- ▶ Insulation monitoring in accordance with IEC/EN 61557-8
- ▶ Detection of symmetrical and asymmetrical insulation faults
- ▶ 2 changeover contacts
- ▶ Max. voltage up to DC 1000 V and AC 760 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 for reduction of response time
- ▶ Simple, clearly structured setting of the device with screw driver
- ▶ LED chain for indication of the current insulation resistance
- ▶ Display „measurement circuit active“
- ▶ Automated and manual device self test
- ▶ Construction width 90 mm

## Order information

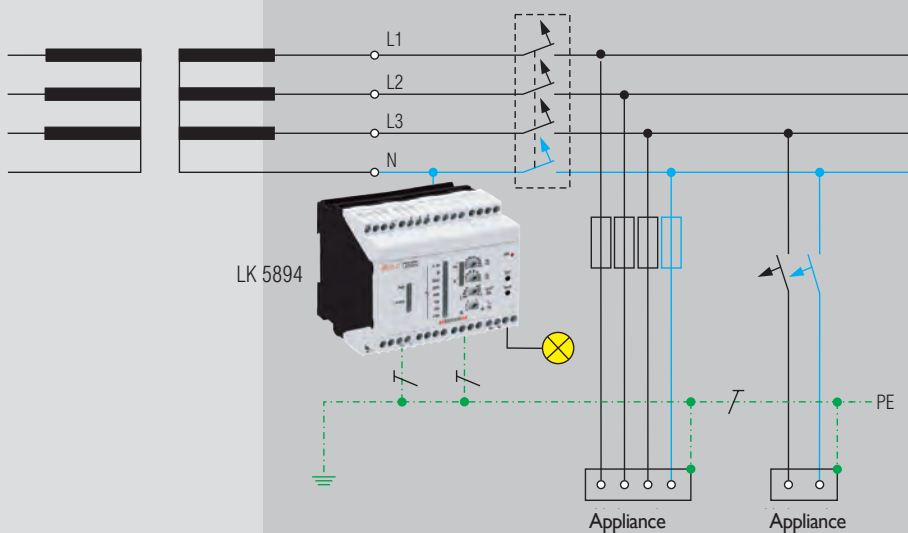
Standard type: LK 5894.12/010 DC 20 ... 30 V  
Item number: 0065331

## Fields of application

- ▶ 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

## Application

The application example illustrates an insulation monitor with current indication of the insulation resistance in an IT system. When a first insulation fault occurs, a warning or alarm is displayed. When a second insulation fault occurs, fuses or circuit breakers will shut down the plant.



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Principle of a non-earthed IT system with insulation monitoring

## Further information

VARIMETER B01

Start

[www.dold.com](http://www.dold.com)

Do you have **leakage capacities up to 3000 μF**, do you need a second **additional measuring circle** or **analogue output**?

LK 5896



Insulation monitor  
LK 5894

**DOLD**

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