Electrical safety for power supplies!

Reliable insulation monitoring in mixed IT networks.

Undetected insulation faults in non-earthed networks may lead to accidents with considerable personal injuries and property damages. Monitoring of IT networks by insulation monitors is therefore legally mandated. The insulation monitor LK 5894 from the VARIMETER IMD series by DOLD was developed especially for use in modern power supply systems.

Modern power supply systems often include inverters, rectifiers, thyristor controllers and directly connected direct current components. Because of EMC interference suppression measures, high discharge capacities against earth are often present in these systems. The LK 5894 meets these requirements. It is suitable for network discharge capacities up to 1000 µF as well as for voltages up to DC 1000 V and AC 760 V.

In addition to an adjustable alarm threshold from 1 to 250 kOhm, the insulation monitor features an adjustable prewarning threshold from 20 kOhm to 2 MOhm. The device is simply adjusted with a screwdriver on rotary knobs. An LED chain constantly informs about the current insulation resistance. The insulation monitor does not require any ballasting and guarantees reliable monitoring even if the network is without voltage. With the monitoring of direct current networks, a selective earth fault detection to L+ and L- enables quick fault localisation.

The LK 5894 increases the availability of systems and provides preventive fire and system protection. The insulation monitor is employed, for example, in UPS systems, photovoltaic systems, hybrid and battery-powered vehicles, etc.