

Insulation fault location system with Modbus RTU - Precise localisation of faults during operation

In extensive industrial systems, the localisation of insulation faults can be a cost-intensive and time-consuming process. The **insulation fault location systems** from the **VARIMETER EDS** family of DOLD, comprising the **RR 5886** test current generator and the **RR 5887** insulation fault location device, localise insulation faults quickly and reliably in complex insulated AC/DC mains (IT systems).

A device for insulation fault detection, also known as IFLS (Insulation Fault Location System), enables the rapid localisation of insulation faults in non-earthed power supply systems. It is employed along with an insulation monitor and in the event of a fault it injects a test current between the current-carrying conductors and the earth. It allows the quickest possible localisation of components with pre-existing insulation damage so that they can be replaced before a complete failure occurs, i.e. there is no need to shut down the plant. Protective devices such as circuit breakers or fuses only trip after a second fault. Immediate fault rectification is therefore required.

During operation you receive all necessary information regarding faulty circuits and consumer outputs, which can be visualised directly on the RR 5887 insulation fault detection device. Via the Modbus RTU interface, insulation fault current values can be read out from the connected devices. This allows the optimum planning of the maintenance and repair of your plant. VARIMETER EDS is suitable for use in a great variety of sectors.

# Advantages and customer benefits

- Automatic and rapid localisation of faulty circuits
- Increase in reliability and system availability
- Optimum planning of the maintenance and repair
- No manual and time-consuming fault detection
- Simple operation
- Monitoring of complex systems
- With Modbus RTU interface



Our experience. Your safety.

# **Insulation fault location system**

#### **Technical features**

- Insulation fault detection in AC, DC and AC/DC mains (IT systems) per: DIN EN 61557-9 (VDE 0413-9):2009 and DIN EN 61557-1 (VDE 0413-1)
- Modbus RTU
- Status output for insulation fault detection via external switch output
- ▶ 105 mm installation width

#### RR 5886

- External control possible via insulation monitor
- ► Button for manual test current output
- ► Terminal connection for automatic test current output

#### RR 5887

- Connection of max. 4 or 8 differential current transformers
- Manual or automatic reset selectable via jumper Y1-Y2
- Button for manual resetting of alarm conditions
- ► Terminal connection for saving alarm conditions



Standard type: RR 5886 AC/DC 85 ... 230 V

Item number: 0068220

Standard type: RR 5887.12 AC/DC 85 ... 230 V

Item number: 0068221

Standard type: ND 5017/024 Item number: 0066017



Test current generator RR 5886



Insulation fault location device RR 5887



Differential current transformer ND 5017/024

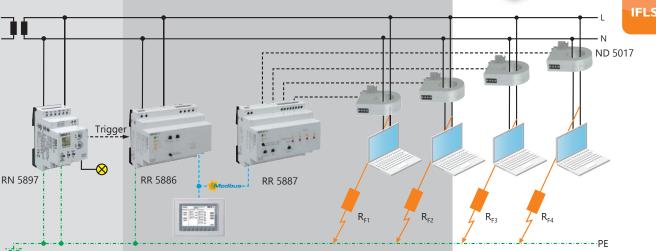
## **Application**

Devices for insulation fault location can be particularly advantageous when dealing with complex and ramified power supply systems. Computer centres, which are operated using non-earthed mains (IT systems) for reasons of availability and interference immunity, can also benefit from the use of an insulation fault location system. It allows the quickest possible localisation of components with pre-existing insulation damage so that they can be replaced before a complete failure occurs. Faulty circuits and consumer outputs can be visualised directly on the insulation fault location device RR 5887 and can be read out via the Modbus RTU interface.

## **Application areas**

- Power stations
- Shipbuilding
- Transportation technology
- Industrial systems
- Hospitals





#### **Further information**

RR 5886



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