



## VARIMETER RCM



### Residual current monitor RN 5883 - Reliably detect fault currents

The type B (sensitive to all types of current) **residual current monitor RN 5883** from DOLD's **VARIMETER RCM** family detects fault currents with DC or AC components in earthed networks. Here, the differential current measurement is implemented via the ND 5015 external differential current transformer. With an installation depth of 71 mm, the RN 5883 is also suitable for use in installation consumer units and industrial cabinets.

Residual current monitors (RCMs) measure and monitor differential currents or fault currents in earthed power supply systems. They are installed in systems in which a message rather than a shut-down is to be initiated in the event of a fault. In comparison to residual current breakers (or residual current devices - RCDs), which trip in the event of a defined fault current being measured and cause an immediate shut-down, residual current monitors indicate a fault current early and report a degradation of insulation via an output contact for example.

The early detection of insulation faults along with preventative maintenance and repair outside operating hours allows unexpected downtimes for machines and systems to be avoided and this in turn avoids undesirable operational interruptions, property damage and high costs.

#### Advantages and customer benefits

- ▶ Space-saving switch cabinet installation with a width of just 52.5 mm
- ▶ Time and cost optimised maintenance / repair
- ▶ High system availability through early fault reporting
- ▶ Simple adjustment via stepped rotary switches
- ▶ Broken wire detection in the measurement circuit
- ▶ 4 measurement ranges from 10 mA to 3 A
- ▶ Adjustable pre-alarm

**Our experience. Your safety.**

# Residual current monitor RN 5883

## Technical features

- ▶ Per IEC/EN 62 020, VDE 0663
- ▶ All-current sensitive (type B) per IEC/TR 60755
- ▶ For detection of insulation faults in earthed networks
- ▶ 4 measurement ranges from 10 mA ... 3 A
- ▶ Alarms and pre-alarms with manual reset possible
- ▶ With adjustable switching delay
- ▶ Energized or de-energized on trip selectable
- ▶ LED display for operation, pre-alarm and alarm
- ▶ With test function
- ▶ Display via LED chain for differential current
- ▶ With analogue output as an option
- ▶ Broken wire detection
- ▶ Adjustment protection for the rotary switch with transparent cover which can be lead-sealed
- ▶ 52.5 mm installation width

## Order information

Standard type: RN 5883.12/6I AC/DC 80 ... 230 V  
Item number: 0066451

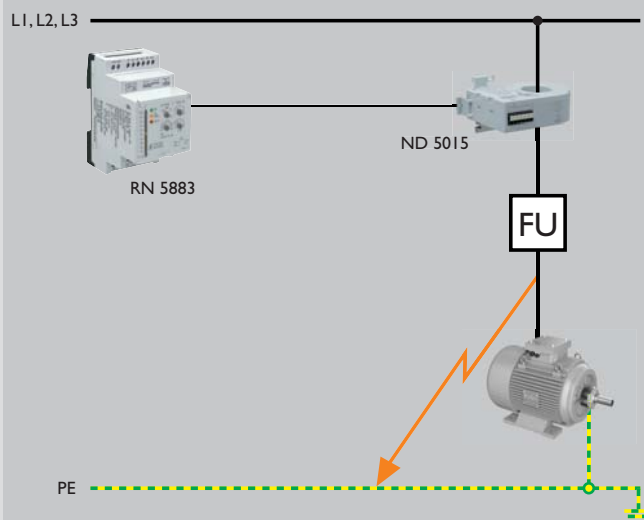
Standard type: ND 5015/035/6I  
Item number: 0066841

## Areas of application

- ▶ Co-generation plants
- ▶ Medical facilities
- ▶ Battery and UPS systems
- ▶ Laboratory facilities
- ▶ Printing machines

## Application examples

The differential current measurement is implemented via an external differential current transformer. All power lines of the output (without PE) to be protected are routed through the transformer. In a fault-free network the sum of all currents will be zero, so no voltage will be induced in the differential current transformer. However, if an insulation fault results in a fault current flowing to earth, the current difference in the transformer will induce a current which will be detected and evaluated by the RN 5883. In the event of the threshold value being exceeded, the device switches to alarm condition and the LEDs for the pre-alarm and alarm flash.



## Further information

RN 5883

Start

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



Residual current monitor  
RN 5883



Residual current transformer  
ND 5015

**DOLD**

**E. DOLD & SÖHNE KG**

P.O. Box 1251 • 78114 Furtwangen • Germany  
Phone +49 7723 6540 • Fax +49 7723 654356  
[dold-relays@dold.com](mailto:dold-relays@dold.com) • [www.dold.com](http://www.dold.com)

FE91 / 1125 co