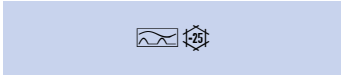




**DATA SHEET**  
**residual current monitors**  
**DMD 2**  
*sensitive to pulsating and alternating currents Type A*  
 Article number 09352010



**Function**

RCMs (residual current monitors), when used in combination with separate residual current transformers, allow the monitoring of insulation between active conductors and the earth conductor. In contrast to modular residual current devices (MRCDS) or residual current circuit-breakers (RCCBs), they are used where the system either cannot or should not be switched off. In this way, these devices alone are used to monitor or report residual currents and are therefore suitable for preventative maintenance. They are not suitable for implementing protective measure "Automatic switch-off of power supply" as per DIN VDE 0100-410. Residual current monitors from series DMD 2 have an integrated bushing transformer and therefore a compact design and easy installation. The device continuously indicates the current residual current on an LED bar display and switches a potential-free changeover contact when an adjustable response threshold is exceeded. An LED indicates the main alarm as well. Monitors with residual current characteristic A detect sinusoidal AC currents as well as pulsating DC residual currents. Devices in the standard design are intended for monitoring circuits with a rated voltage of 230 V and a rated frequency of 50 Hz. The DMD 2 response threshold is smoothly adjustable within four selectable detection ranges. To prevent signalling brief, non-hazardous residual current impulses, the alarm triggers after an adjustable response time.

**Features**

sensitive to AC and pulsating DC residual currents, four selectable residual response current ranges with smoothly adjustable threshold within the selected range, response time smoothly adjustable, compact design, potential-free changeover contact for signalling alarm, LED bar display for displaying the residual current in 10% increments, integrated bushing transformer

**Mounting**

quick fastening to mounting rail, any installation position

**Applications**

The monitoring device is suitable for use in power supplied to purpose-built buildings and industrial facilities with TN-S, TN-C-S networks and IT networks, such as in server rooms for data centres, laboratories, in the automotive industry and in conjunction with air conditioning systems, printing machines and packaging machines, Not permitted for use in TN-C networks and direct current networks; not permitted for monitoring systems in which electronic equipment may cause DC residual currents or residual currents with frequencies not equal to the rated frequency of the RCCB.

**Notes**

RCMs may not be used to realise protective measure 'Automatic switch-off of power supply' as per DIN VDE 0100-410 (an RCM does not replace an RCD).

**Accessories**

detectors/control panels DMD, detectors/control panels DMRP

**Technical Data**

| Technical Data                             | DMD 2      |
|--|------------|
| Series                                     | DMD 2      |
| Operating mode RCM                         | standalone |
| Error memory existent                      | false      |
| Selectivity adjustable                     | true       |
| Short-time delayed                         | false      |
| Residual operating current characteristics | A          |

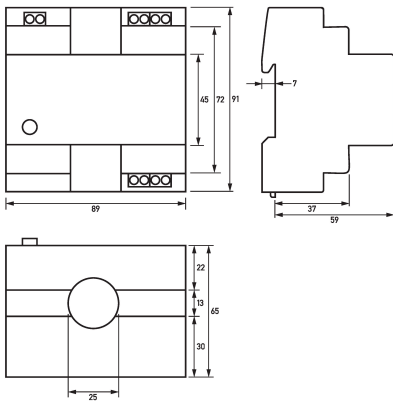
Subject to technical changes

| Technical Data   | DMD 2  |
|--|--|
| Residual operating current I <sub>Δn</sub> (measuring ranges) AC | 0.03 A, 0.1 A, 0.3 A, 1 A  |
| Frequency range response residual current Type A                 | 50 Hz ... 60 Hz  |
| Frequency range response residual current Type AC                | 50 Hz ... 60 Hz  |
| Response time (textual)  | smoothly adjustable from 0.1 s to 1 s  |
| Response threshold range of the main alarm                       | 75 % ... 100 %   |
| Rated voltage U <sub>n</sub> of circuit monitored                | 0 V ... 690 V  |
| Rated frequency f <sub>n</sub> of circuit monitored              | 50 Hz ... 60 Hz  |
| Control elements   | range switch for residual operating current, range switch for time delay, test key |
| Operating voltage (AC)   | 230 V (195.5 V ... 264.5 V)  |
| Operating frequency  | 50 Hz, 60 Hz   |
| Rated impulse withstand voltage                                  | 4 kV   |
|  | <b>Display nominal response residual current</b>                                   |
| Number   | 1  |
| Type   | LED bar display  |
| nominal response residual current range                          | 10 % ... 100 %   |
| resolution of nominal response residual current display          | 10 %   |
|  | Display operation  |
| Type   | LED  |
|  | Display alarm  |
| Type   | LED  |
|  | <b>main alarm output</b>   |
| Specification  | relays   |
| contact assignment   | 1 CO   |
| Rated voltage (AC)   | 230 V  |
| Rated current (AC)   | max. 6 A   |
| Rated frequency  | 50 Hz  |
| Overvoltage class  | III  |
|  | <b>semiconductor output</b>  |
| Specification  | semiconductor  |
|  | <b>screw-type terminal (load circuit)</b>  |
| Allowed types of wires   | aluminium conductor, copper conductor  |
| Clamping area  | max. 2.5 mm <sup>2</sup>   |
| Tightening torque  | max. 0.64 Nm   |
|  | <b>screw-type terminal (control unit, external)</b>                                |
| Clamping area  | max. 2.5 mm <sup>2</sup>   |
|  | <b>General data</b>  |
| Operating position   | optional   |
| max. Operating altitude above MSL                                | 2000 m   |
| Storage temperature  | -40 °C ... 85 °C   |
| Ambient temperature  | -25 °C ... 65 °C   |
| Housing type   | distribution board housing   |
| Installation type  | Mounting rail (35 mm)  |

Subject to technical changes

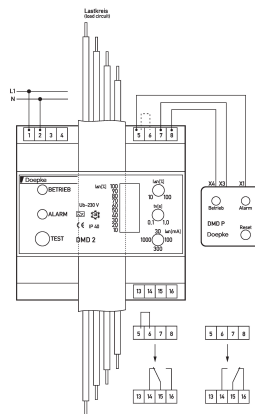
| Technical Data                            | DMD 2              |
|---|--------------------|
| Housing material                          | polycarbonate (PC) |
| Protection class                          | IP40               |
| sealable                                  | false              |
| Width                                     | 89 mm              |
| Height                                    | 91 mm              |
| Depth                                     | 66 mm              |
| Installation depth                        | 59 mm              |
| Module widths                             | 5                  |
| Inside diameter                           | 25 mm              |
| Design requirements/Standards             | EN 62020           |
| Degree of pollution according to EN 60664 | 2                  |

**Dimensions**



Dimensional drawing Group view

**Wiring example**



Wiring diagram