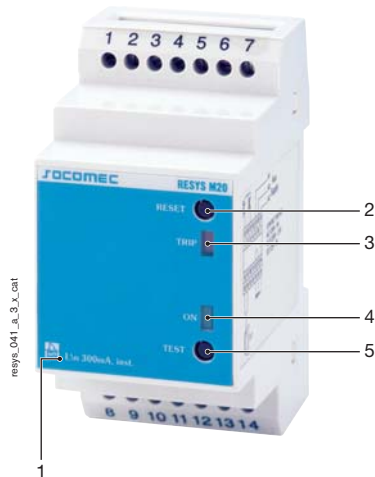


# RESYS M20

- RESYS B 420
- RESYS Type B
- RESYS M40
- RESYS P40
- ▶ **RESYS M20**
- Core balance transformers



## Functions

Earth leakage protection relay

**RESYS Type M20** is associated with a remote trip breaking device (automatic power cut-off), and provides the following functions:

- protection against indirect contacts,
- limitation of leakage currents.

The relay also monitors electrical installations when used directly as signalling relay.

## Conformity to standards

- IEC 60755
- IEC 60947-2
- IEC 62020
- IEC 60364

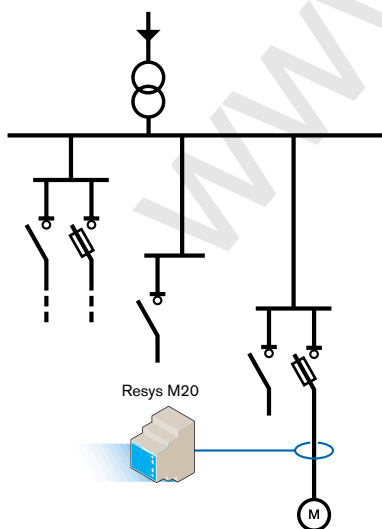
## General characteristics

- M20 with 1 alarm relay.
- Sensitivity: 30 or 300 mA depending on the version.
- Time setting: 0 (instantaneous) or 60ms depending on the version.
- Measurement accuracy by TRMS.
- Automatic permanent relay-toroid connection test.

## RESYS M20 (Type AC and A)

- |   |                       |
|---|-----------------------|
| 1. Threshold value and time delay indication. | 3. "TRIP" alarm LED.  |
| 2. "RESET" pushbutton.                        | 4. "ON" LED.          |
|   | 5. "TEST" pushbutton. |

## Applications



Rapid recognition of an insulation fault increases the availability of the distribution network by preventing accidental power cuts and the resulting loss of production.

### Examples of conventional applications

AC LV networks: TT, TNS, IT.

Monitoring pure AC differential currents (type AC) and pulsed (type A) to provide the following functions:

- protection:
  - against indirect contact,
  - against fire risk,
  - of earth and protection conductors;
- preventive signalling;
- used with SOCOMEC "Core balance transformers" (see page B.82).



RESYS M20

## References

Auxiliary power supply $U_s$	Setting $I\Delta n$	Temporisation	References
115 / 230 VAC	30 mA	0 s	4941 <b>4723</b> <sup>(1)</sup>
115 / 230 VAC	300 mA	0 s	4941 <b>5723</b> <sup>(1)</sup>
115 / 230 VAC	300 mA	60 ms	4941 <b>6723</b> <sup>(1)</sup>

(1) References and characteristics of the "Core balance transformers", see page B.82.

## Electrical characteristics

### Auxiliary power supply $U_s$

Frequency	47 ... 63 Hz
Operating zone	0.85 ... 1.15 $U_s$
Max. consumption	6 VA

### Insulation (according to IEC 60664-1 standard)

Rated insulation voltage	250 VAC
Rated impulse voltage	2.5 kV (115 VAC) / 4 kV (230 VAC)
Degree of pollution	Class 3

### Threshold values

Setting $I\Delta n$	30 / 300 mA
Accuracy of tripping	- 20 ... -10% $I\Delta n$
Domain of network frequency	15 ... 400 Hz

### Alarm

Alarm configuration mode	memory
RESET	manual by pushbutton or using the terminals

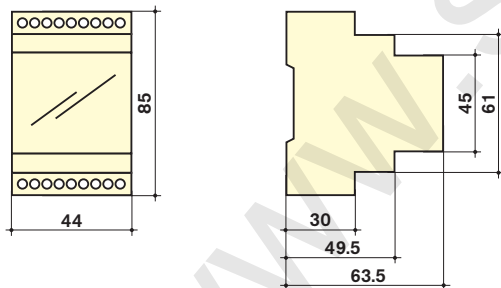
### Output contacts

Number of contacts	1
Type of ALARM contact	250 VAC - 8 A - 2000 VA
ALARM operating mode	negative security

### Operating conditions

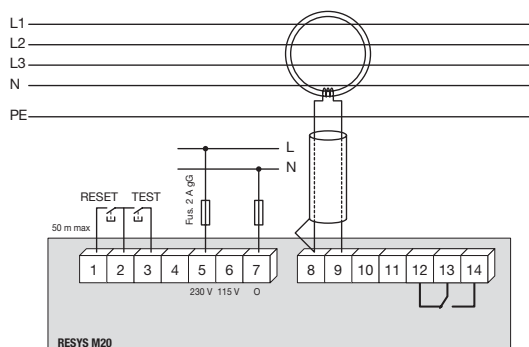
Operating temperature	- 20 ... + 55 °C
Storage temperature	- 30 ... + 70 °C

## Overall dimensions



Type	modular
Number of modules	2.5
Dimensions W x H x D	44 x 85 x 63.5 mm
Case protection rating	IP40
Terminal block protection rating	IP20
Rigid cable connection section	0.2 ... 4 mm <sup>2</sup>
Flexible cable connection section	0.2 ... 2.5 mm <sup>2</sup>
Weight	190 g

## Terminals



- 1 - 2 - 3: external pushbuttons
- 5 - 6 - 7: auxiliary power supply  $U_s$
- 8 - 9: SOCOMEC differential toroid connections
- 12 - 13 - 14: alarm relay

**NOTE:** The earth must not pass through the C.T.  
For single phase applications, only the live and neutral need to be passed through the C.T.  
Cabling: for distances > 1 m, use twisted pair cable between the unit and C.T.