

# DEB71



## Earth Leakage Monitoring Relay



### Benefits

- **Adjustable trip level.** Adjustable leakage threshold from 30mA to 5A or from 300mA to 30A.
- **2 outputs.** Two relay outputs provide, besides the alarm signal an additional warning output.
- **Level indication.** LED Bar shows at a glance the real time leakage level.
- **Nuisance tripping safe.** EN 60947-2 Annex M conformity.
- **Anti tampering.** Sealable front lid provides protection against possible tampering.
- **Remote R/T button.** Input for external reset switch allows remote system restart in case of tripping.
- **Single / Threephase mains.** The DEB71 can be used on both three phase or single phase.

### Description

The DEB71 is an adjustable modular residual current relay which, in conjunction with the MCB and the CT, provides the protection of people against electrocution, or protection of properties against fire, by interrupting the mains on faulty loads or lines.

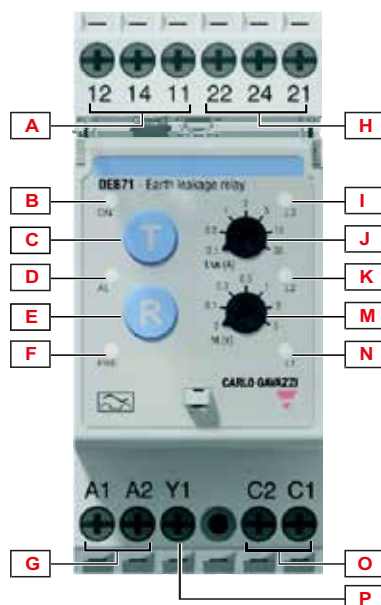
The setpoint of the leakage current is adjustable. The device is equipped with two changeover relay outputs.

One output triggers at 60% of fault current setpoint value providing a warning to user, the other output is used to shut down the system to prevent accidents.

### Applications

The DEB is a flexible device and can be used for all the applications where the loss of insulation, and/or grounding failure, of the loads or lines may cause injuries to people due to electrocution or ignite fires.

## Structure

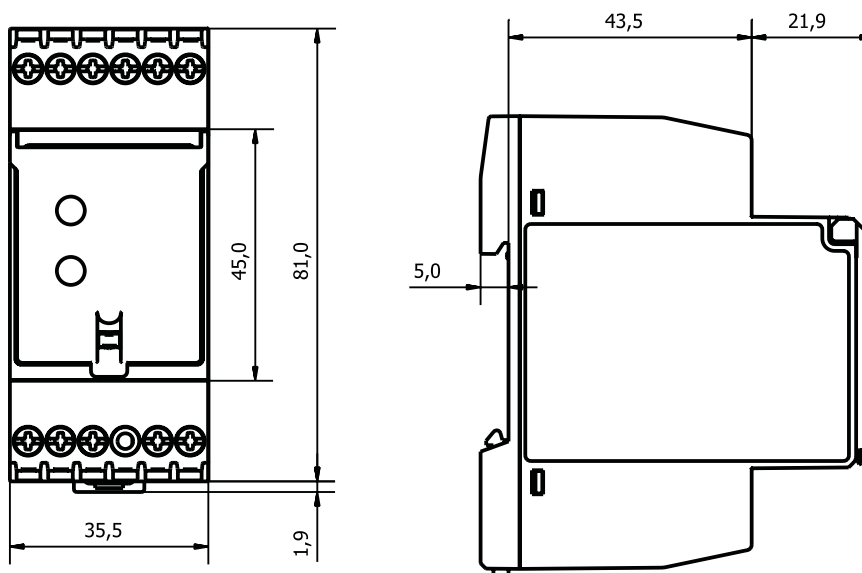


Element	Component	Function
A	Output 1	Main alarm SPDT relay output: 11 C, 12 NC, 14 NO
B	LED ON	Power ON GREEN LED
C	Test pushbutton	When pressed it will test the system integrity
D	LED AL	Alarm RED LED. It turns ON when current exceeds 80% of $I_{\Delta n}$
E	Reset pushbutton	Restores operation after an alarm has been triggered
F	LED PRE	Warning YELLOW LED. Lit when leakage level exceeds 60% of set $I_{\Delta n}$
G	Power supply terminals	Power supply from 24VAC to 240VAC
H	Output 2	Warning alarm output: 21 C, 22 NC, 24 NO
I	LED L3	$\geq 60\% I_{\Delta n}$ LED Bar
J	Alarm set	$I_{\Delta n}$ current alarm threshold setting
K	LED L2	$\geq 40\% I_{\Delta n}$ LED Bar
M	Delay set	$\Delta t$ alarm delay setting from 0 to 5s
N	LED L1	$\geq 20\% I_{\Delta n}$ LED Bar
O	Sensor input	Input for external Core Balance Transformer (CTG)
P	Remote R/T	Input for remote R / T pushbutton (in conjunction with A2)

## Features

### General

<b>Material</b>	PA66 or Noryl
<b>Colour</b>	RAL7035 (light grey)
<b>Front cover material</b>	Transparent polycarbonate
<b>Sealing / locking</b>	Sealing slot
<b>Mechanical form type</b>	According to DIN 43880
<b>Assembly</b>	DIN rail mounting (according to EN 50022)
<b>Protection degree</b>	IP20
<b>Weight</b>	150 g
<b>Terminals</b>	Screw terminals. Cable size AWG30 to AWG12 (0.06 mm <sup>2</sup> to 3.3 mm <sup>2</sup> ) stranded or solid
<b>Tightening torque</b>	0.4Nm to 0.8Nm (from 4lb-in to 7lb-in)



### Power supply

<b>Auxiliary power supply</b>	24 to 240 Vac $\pm$ 10%
<b>Frequency</b>	50 to 60 Hz $\pm$ 10%
<b>Consumption</b>	< 2.5 VA
<b>Overvoltage category</b>	III