

## RESIDUAL CURRENT OPERATED CIRCUIT BREAKER

### 1. MOUNTING

Residual current operated circuit breaker (RCCB) can be used in TN-S, TN-C-S, TT and IT network systems which means in all places where neutral and protective conductor are not connected.

RCCB shall be mounted onto a rail of 35 mm according to EN 50022.

### 2. CONNECTION



The supply can be above or below.

### 3. MAXIMUM VALUE OF BACK-UP FUSE

For rated currents up to 63 A fuse links with the gL -gG characteristic and rated current of 63 A should be used, while for rated currents of 80 A, fuse links with the gL -gG characteristic and rated current of 80 A are required.

### 4. MAXIMUM VALUES OF EARTHING RESISTANCE

U <sub>L</sub> *	R <sub>E</sub> max								A
	50 V ~				25 V ~				
I <sub>ΔN</sub>	0,03	0,1	0,3	0,5	0,03	0,1	0,3	0,5	
R <sub>E</sub>	1660	500	166	100	830	250	83	50	Ω

U<sub>L</sub>\* - touch voltage  
Break time <0,04 sec.

### 5. OPERATION

The conditions for correct operation of the RCCB:

- the phase conductor and the neutral conductor shall be conducted through the RCCB;
- the neutral conductor shall be behind the breaker insulated in the same way as the phase conductor, otherwise there can appear false or unwanted tripping;
- earthing resistances shall not exceed the prescribed values.

### 6. TESTING OF BREAKER OPERATION WITH THE TEST BUTTON

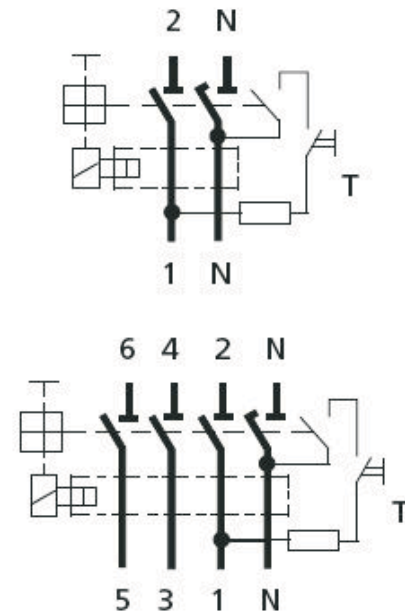
At least once in a half year the test button shall be actuated. On doing this the RCCB shall switch off.

### 7. EXPLANATION OF THE SYMBOLS ON THE BREAKER AND IN THE INSTRUCTIONS

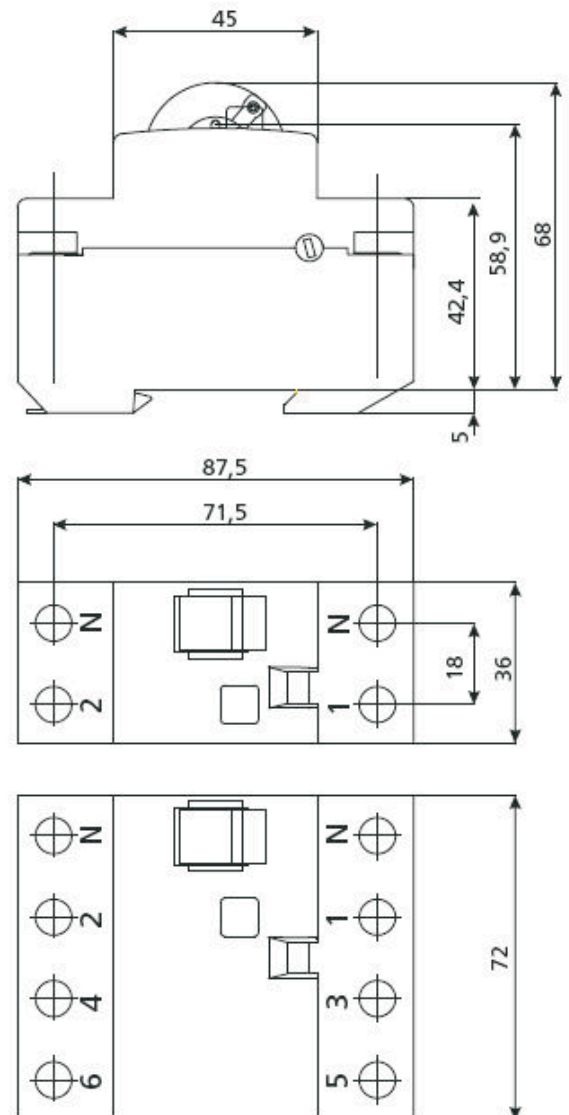
- RCCB for residual sinusoidal alternating and residual pulsating direct currents
- RCCB for residual sinusoidal alternating currents
- short-circuit capacity of RCCB with back-up fuse gL -gG
- lower temperature limit of use of the RCCB
- I<sub>N</sub> rated current
- I<sub>ΔN</sub> rated residual operating current
- U<sub>N</sub> rated voltage

A) FIGURE: THE INTERNAL CONNECTIONS, B) FIGURE: DIMENSIONS

A



B



### Warning:

The switch protection level is IP20, which means that there is no protection against dust penetration. Dust can have harmful influence on the mechanism operation therefore the switch should be correspondingly protected in dusty environment. Distribution box protection level should be at least IP5X.