

NL1 Residual Current Operated Circuit Breaker without over-current protection (Magnetic)

1. General

1.1 Function

Control electric circuits.
Protect people against indirect contacts and additional protection against direct contacts.
Protect installations against fire hazard due to insulation faults.
Residual current circuit breakers are used in housing, tertiary sector and industry.

1.2 Selection

Detectable wave form

AC class

Tripping is ensured for slowly increasing sinusoidal AC residual currents.

A class

Tripping is ensured for sinusoidal AC residual currents and for pulsed DC residual currents, whether applied suddenly or increasing slowly.

Tripping sensitivity

30mA - additional protection against direct contact.
100mA - co-ordinated with the earth system according to the formula $I\Delta n < 50/R$, to provide protection against indirect contacts;
300mA - protection against indirect contacts, as well as fire harzard.

Tripping time

Instantaneous

It ensures instantaneous tripping (without time-delay).

Short time delay G

It ensures any tripping at least 10ms.

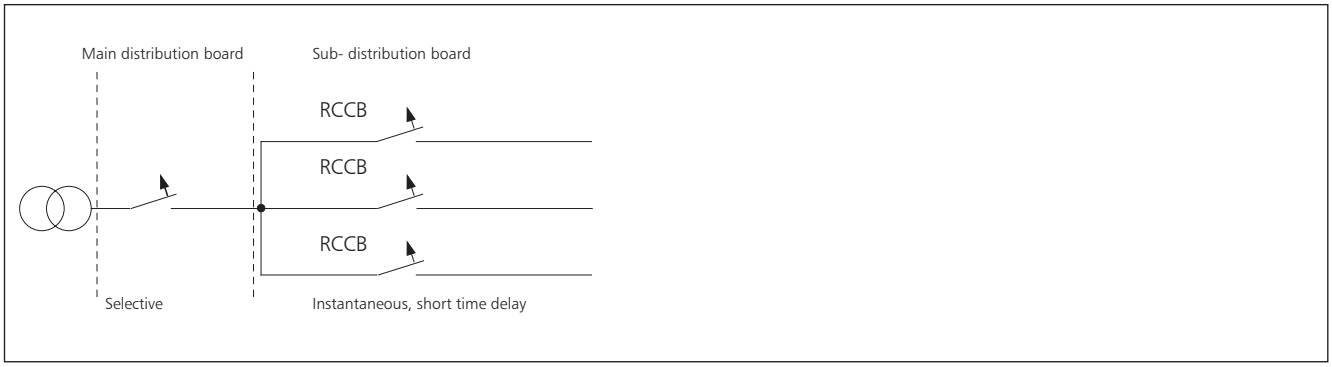
Selective S

It ensures total discrimination with a nonselective RCD placed downstream.

1.3 Approvals and certificates

Detailed information, please refer to Certificates Table on the last page.

RCC
SAA


Main distribution board
Sub- distribution board
RCCB
RCCB
RCCB
Selective
Instantaneous, short time delay

I△c=6000A

3. Technical data

	Standard		IEC/EN 61008-1
Electrical features	Type (wave form of the earth leakage sensed)		AC, A, AC-G, A-G, AC-S, A-S
	Rated current In	A	25, 40, 63, 80, 100
	Poles		2P, 4P
	Rated voltage Ue	V	230/400~240/415
	Rated sensitivity I△n	A	0.03, 0.1, 0.3
	Insulation voltage Ui	V	500
	Rated residual making and breaking capacity I△m	A	500 (In=25A/40A), 1000(In=30A/100A)
			630 (In=63A)
	Short-circuit current Inc=I△c	A	6000/10000
	SCPD fuse	A	10000
	break time under I△n	S	≤0.1(Normal type), 10ms~30ms(G type). 150ms~500ms(S type)
	Rated frequency	Hz	50/60
	Rated impulse withstand voltage(1.2/50) Uimp	V	6000
	Dielectric test voltage at ind. Freq. for 1 min	kV	2.5
	Pollution degree		2
Mechanical features	Electrical life		2, 000
	Mechanical life		2, 000
	Fault current indicator		Yes
	Protection degree		IP20
	Ambient temperature (with daily average≤35℃)	℃	-5...+40
	Storage temperation	℃	-25...+70
Installation	Terminal connection type		Cable/U-type busbar/Pin-type busbar
	Terminal size top/bottom for cable	mm^2	25/35
		AWG	18-3/18-2
	Terminal size top/bottom for busbar	mm^2	10/16
		AWG	18-8/18-5
	Tightening torque	N*m	2.5
		In-lbs.	22
	Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
	Connection		From top and bottom

4. Overall and mounting dimensions (mm)





