



NL210 Residual Current Operated Circuit Breaker without over-current protection

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

Type B

Tripping is ensured for sinusoidal AC residual currents pulsed DC residual currents, alternating residual sinusoidal currents up to 1000Hz, pulsating direct residual currents and for smooth direct 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 hazard.

Tripping time

Instantaneous

It ensures instantaneous tripping (without time-delay).

1.3 Approvals and certificates


CE, KEMA

1.4 Add-on devices

AX-5 auxiliary contacts

TC-1 terminal cover

2. Technical data

| | Standard | | IEC/EN 62423 & IEC/EN 61008-1 |
|---------------------|---|--|---|
| Electrical features | Type (wave form of the earth leakage sensed) | | B |
| | Rated current In | A | 25, 40, 63 |
| | Poles | | 1P+N, 3P+N |
| | Rated voltage Ue | V | 1P+N:230/240v~; 3P+N:400/415v~; |
| | Rated sensitivity I _{Δn} | A | 0.03, 0.1, 0.3 |
| | Insulation voltage Ui | V | 500 |
| | Rated residual making and breaking capacity I _{Δm} | A | 500 (In=25A/40A) 630 (In=63A) |
| | Short-circuit current Inc=I _{Δc} | A | 10,000 |
| | SCPD fuse | A |  10000 |
| | break time under I _{Δn} | S | ≤0.1 |
| | Rated frequency | Hz | 50 |
| | Rated impulse withstand voltage(1.2/50) Uimp | V | 4,000 |
| | Dielectric test voltage at ind. Freq. for 1 min | kV | 2.5 |
| | Pollution degree | | 2 |
| Mechanical features | Electrical life | | 2, 000 |
| | Mechanical life | | 10,000 |
| | Fault current indicator | | Yes |
| | Protection degree | | IP20 |
| | Ambient temperature (with daily average≤35°C) | °C | -25...+40 |
| | Storage temperature | °C | -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 | |

3. Overall and mounting dimensions (mm)

