NL210 Residual Current Circuit Breaker (ELM)

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 IΔn < 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,VDE

1.4 Add-on devices

AX-5 auxiliary contacts

TC-1 terminal cover

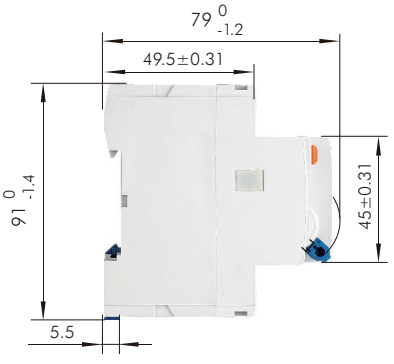
2. Technical data

	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		2P, 4P
	Rated voltage Ue	V	2P: 230/240 V~; 4P: 400/415 V~;
	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)
			630 (In=63A)
	Conditional rated short circuit current (Inc/I △ c)	A	10,000
	SCPD fuse	A	10000
	break time under I △ n	s	≤0.1
	Rated frequency	Hz	50
	Rated impulse withstand voltage(1.2/50) Uimp	V	4000
	Dielectric test voltage at ind. Freq. for 1 min	kV	2
	Pollution degree		2
Mechanical features	Electrical life		4000
	Mechanical life		4000
	Fault current indicator		Yes
	Protection degree		IP20
	Ambient temperature (with daily average≤35℃)	℃	-25...+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 or bottom
	Weight	kg	2P:0.27, 4P:0.43

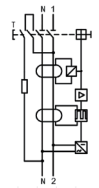
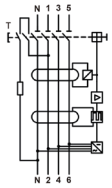
3. Overall and mounting dimensions (mm)

2P

4P



NL210	2P	25A	30mA	B	10kA
Frame	**Poles**	**Current(In)**	**Rated sensitivity (IΔn)**	**Leakage type**	**Breaking capacity**
NL210	2P 4P	25A 40A 63A	30mA 100mA 300mA	B	10kA

Diagram	Poles	In(A)	Inc(kA)	Ue(V)	IΔn(mA)	leakage type	Description	Code
	2P	25	10	AC230/240V	100	B	NL210 2P 25A 100mA B 10kA	782014
	2P	25	10	AC230/240V	300	B	NL210 2P 25A 300mA B 10kA	782017
	2P	25	10	AC230/240V	30	B	NL210 2P 25A 30mA B 10kA	782011
	2P	40	10	AC230/240V	100	B	NL210 2P 40A 100mA B 10kA	782015
	2P	40	10	AC230/240V	300	B	NL210 2P 40A 300mA B 10kA	782018
	2P	40	10	AC230/240V	30	B	NL210 2P 40A 30mA B 10kA	782012
	2P	63	10	AC230/240V	100	B	NL210 2P 63A 100mA B 10kA	782016
	2P	63	10	AC230/240V	300	B	NL210 2P 63A 300mA B 10kA	782019
	2P	63	10	AC230/240V	30	B	NL210 2P 63A 30mA B 10kA	782013
	4P	25	10	AC400/415V	100	B	NL210 4P 25A 100mA B 10kA	782005
	4P	25	10	AC400/415V	300	B	NL210 4P 25A 300mA B 10kA	782008
	4P	25	10	AC400/415V	30	B	NL210 4P 25A 30mA B 10kA	782002
	4P	40	10	AC400/415V	100	B	NL210 4P 40A 100mA B 10kA	782006
	4P	40	10	AC400/415V	300	B	NL210 4P 40A 300mA B 10kA	782009
	4P	40	10	AC400/415V	30	B	NL210 4P 40A 30mA B 10kA	782001
	4P	63	10	AC400/415V	100	B	NL210 4P 63A 100mA B 10kA	782007
	4P	63	10	AC400/415V	300	B	NL210 4P 63A 300mA B 10kA	782010
	4P	63	10	AC400/415V	30	B	NL210 4P 63A 30mA B 10kA	782000