



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

A

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

A-Si

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

With the impact of 8/20us surge 3000A, the RCCB will still be in stable status.

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.

2. Ordering information

$I_{\Delta c}=6000A$

★ NL1-63, 2P

A-Si



In (A)	$I_{\Delta n}$ (mA)	CTN	Order Code
25	30	90	200629
25	100	90	200626
25	300	90	200623
40	30	90	200628
40	100	90	200625
40	300	90	200622
63	30	90	200627
63	100	90	200624
63	300	90	200621

$I_{\Delta c}=6000A$


★ NL1-63, 4P

A-Si



In (A)	$I_{\Delta n}$ (mA)	CTN	Order Code
25	30	45	200638
25	100	45	200635
25	300	45	200632
40	30	45	200637
40	100	45	200634
40	300	45	200631
63	30	45	200636
63	100	45	200633
63	300	45	200630

3. Technical data

	Standard		IEC/EN 61008-1
Electrical features	Type (wave form of the earth leakage sensed)		A-Si (High immunity)
	Rated current I _n	A	25, 40, 63
	Poles		2P, 4P
	Rated voltage U _e	V	230/400~240/415
	Rated sensitivity I _{Δn}	A	0.03, 0.1, 0.3
	Insulation voltage U _i	V	500
	Rated residual making and breaking capacity I _{Δm}	A	500 (I _n =25A/40A), 1000(I _n =30A/100A)
	Short-circuit current I _{nc} =I _{Δc}	A	630 (I _n =63A)
	SCPD fuse	A	 10000
	break time under I _{Δn}	S	0.3s
	Rated frequency	Hz	50/60
	Rated impulse withstand voltage(1.2/50) U _{imp}	V	6000
	Dielectric test voltage at ind. Freq. for 1 min	kV	2.5
	Mechanical features	Pollution degree	
Electrical life			2, 000
Mechanical life			2, 000
Fault current indicator			Yes
Protection degree			IP20
Ambient temperature (with daily average ≤35°C)		°C	-5...+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	

4. Overall and mounting dimensions (mm)

