

# One-module RCBOs Ex9NLE, 6 kA

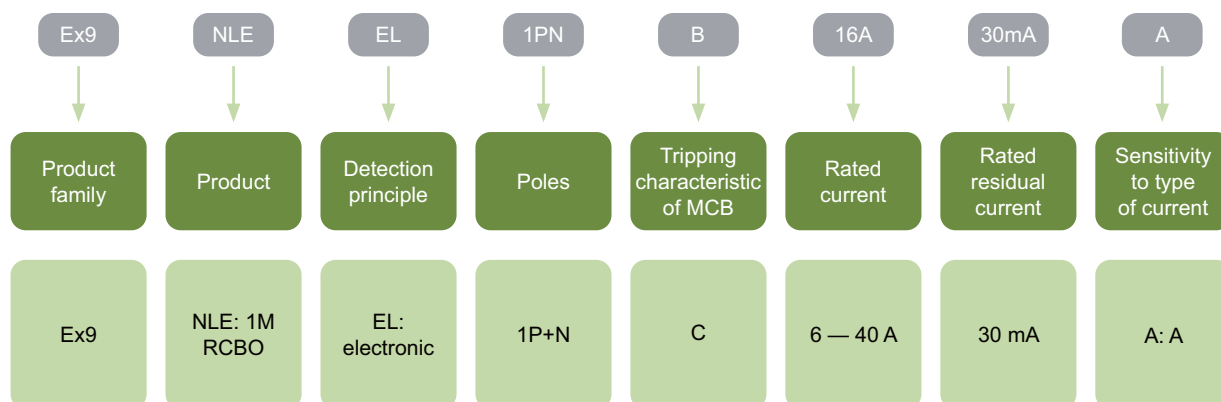


- One-module Residual Current circuit Breakers with Overload protection according to AS/NZS 61009.1:2015
- Rated breaking capacity  $I_{cn}$  6 kA
- 1P+N-pole version
- Rated residual current 30 mA
- Rated currents up to 40 A
- C tripping characteristics of integrated circuit breaker
- A type of RCBO
- 1-module (18 mm) width
- Suitable for applications from -35 to +70°C

Residual current circuit breakers with overload protection Ex9NLE are suitable mainly for households. These RCBOs have only 1 module, so they can save one modular space in enclosure comparison to classical RCBO. They are based on electronic evaluation principle - more accurate measuring of residual current. These devices also do not suffer with magnetization of the tripping unit. Thus, there is no mandatory testing period, but they must be tested regularly. On this testing period local law or regulations may apply. The recommendation is to test it every 6 months in fair environment and every month in heavy condition.

The insulation test must be performed in the top terminals and with the device in the OFF position.

## Type Key



## Certification marks



# One-module RCBOs Ex9NLE, 6 kA

## Accessories



Auxiliary or signal contacts  
**AXC, AXLC**  
Up to 3 units

Voltage or trip releases  
**SHTC, UVTC**  
Up to 2 units

RCBO  
**Ex9NLE**  
1-module width

Auxiliary contact AXC31

Signal contact AXLC31

Shunt trip release SHTC31

Undervoltage releases UVTC31

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All accessories are mounted to the Ex9NLE from the left side.

# One-module RCBOs Ex9NLE, 6 kA

## A type, characteristic C

- A type of residual current circuit breaker sensitive on residual AC and pulsating DC current
- C characteristic of integrated circuit breaker
- Without time delay
- Surge current-proof 3000 A
- Suitable for protection of people in case of direct and indirect contact with live parts and exposed conductive parts during a fault, respectively



Rated current	Rated residual current	MCB tripping char.	Article No.	Type	Packing
6 A	30 mA	C	90514	Ex9NLE EL 1PN C6 30mA A	1/12/144
10 A	30 mA	C	90515	Ex9NLE EL 1PN C10 30mA A	1/12/144
16 A	30 mA	C	90516	Ex9NLE EL 1PN C16 30mA A	1/12/144
20 A	30 mA	C	90517	Ex9NLE EL 1PN C20 30mA A	1/12/144
25 A	30 mA	C	90518	Ex9NLE EL 1PN C25 30mA A	1/12/144
32 A	30 mA	C	90519	Ex9NLE EL 1PN C32 30mA A	1/12/144
40 A	30 mA	C	90520	Ex9NLE EL 1PN C40 30mA A	1/12/144

# Technical Data Ex9NLE

## One-module Residual Current circuit Breakers with Overload protection Ex9NLE, 6 kA

### General parameters

Saves one modular space in comparison to classical RCBO
Tripping characteristics of integrated circuit breaker C
A type of residual current device
1+N-pole version
Electronic evaluation principle - more accurate measuring of residual current
The insulation test must be performed in the top terminals and with the device in the OFF position
Device must be tested regularly. Local laws or regulations can be applied. Recommend is a testing period of 6 months in normal condition, 1 month in heavy conditions

### Electrical parameters

Tested according to	AS/NZS 61009:2015
Rated operating voltage $U_e$	230 V AC
Min. voltage for RCD function	50 V AC
Voltage range of the test button T	195.5 — 253 V AC
Rated frequency f	50/60 Hz
Rated breaking capacity $I_{cn}$	6 kA
Rated current $I_n$	6 — 40 A
Rated residual current $I_{\Delta n}$	30 mA
Rated residual non-operating current $I_{\Delta no}$	15 mA
Sensitivity to residual current	A type - residual AC and pulsating DC current
Time characteristic of RCD	no time delay
Tripping characteristics of MCB	C
Rated impulse withstand voltage $U_{imp}$	4 kV
Rated insulation voltage $U_i$	500 V
Surge current proof	3000 A
Mechanical service life	10 000 operation cycles
Electrical service life	4 000 operation cycles
Selectivity class	3
Line voltage connection	from top or bottom connection

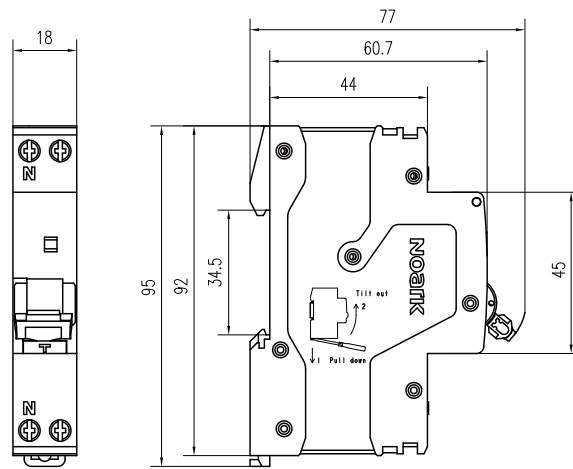
### Mechanical parameters

Device width	18 mm
Device height	95 mm (including rail clip)
Frame size	45 mm
Mounting	easy fastening onto 35 mm device rail (DIN)
Degree of protection	IP20
Terminals	combined lift + open mouthed
Terminal capacity	1 — 16 mm <sup>2</sup>
Fastening torque of terminals	1.5 Nm
Busbar thickness	0.8 — 1 mm
Ambient temperature	-35 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 95 %
Resistance to humidity and heat	class 2
Pollution degree	2
Installation class	III
Weight	0.12 kg

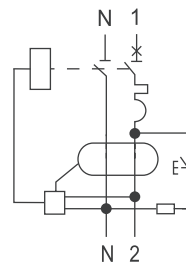
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## Dimensions



## Wiring diagram



## Tripping characteristics of MCB

Characteristic C

