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NmRB6-40/2/C/01-A - RCD/MCB combination, 40 A, 100 mA, MCB trip characteristic: C, 2p, RCD trip characteristic: A



193829 NmRB6-40/2/C/01-A

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193829 NmRB6-40/2/C/01-A

RCD/MCB combination, 40 A, 100 mA, MCB trip characteristic: C, 2p, RCD trip characteristic: A
EL-Nummer (Norway) 1667540

RCD/MCB combination switch, NmRBM, 2-pole, tripping characteristic: C, rated current I_n : 40 A, rated switching capacity according to IEC/EN 61009: 10 kA, rated fault current: 0.1 A, pulse-current sensitive, partly surge-proof 250 A

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• [Technical data](#)

• [Design verification as per IEC/EN 61439](#)

• [Technical data ETIM 8.0](#)

Delivery program

Basic function

Combined RCD/MCB devices

Number of poles

2 pole

Tripping characteristic

C

Application

Switchgear for residential and commercial applications

Rated current [I_n]

40 A

Rated switching capacity acc. to IEC/EN 60947-2 [I_{cu}]

6 kA

Rated switching capacity according to IEC/EN 61009

6 kA

Rated fault current [I_{AN}]

0.1 A
Type
Type A
Tripping
non-delayed s...
Product range
NmRB6
Sensitivity
Pulse-current sensitive
Impulse withstand current
Partly surge-proof 250 A

Technical data

Electrical
Standards
IEC/EN 61009
Tripping
non-delayed s...
Rated operating voltage [U_e]
230 V AC
Limit values of the operating voltage
 $0.85 \times 1.1 \times U_n$ V AC
Rated frequency [f]
50 Hz
Rated fault currents [$I_{\Delta n}$]
100 mA
Rated non-tripping current [$I_{\Delta no}$]
 $0.5 \times I_{\Delta n}$
Sensitivity
DC and pulsed current
Rated switching capacity [I_{cn}]
6 kA
Rated current [I_e]
40 A
Rated impulse withstand voltage [U_{imp}]
4 (1.2/50 μ s) kV
Characteristic
C
Selectivity Class
3
LifespanElectrical
> 2000 Operations
LifespanMechanical
> 10000 Operations
Mechanical
Standard front dimension
45 mm
Enclosure height
80 mm
Terminal protection
finger and hand touch safe, DGUV VS3, EN 50274
Mounting width
35 (2 SU) mm
Mounting
Tristable slide catch enables removal from existing combination.
Degree of protectionSwitch
IP20
Degree of protectionIntegrated
IP40
Terminals top and bottom
Twin-purpose terminals
Terminal capacitiesSolid
1 - 25 mm²
Thickness of busbar material
0.8 ... 2 mm
Admissible ambient temperature range
-25 ... +40 °C
Climatic proofing

according to IEC 68-2 (25 - 55 °C, 90 - 95 % Humidity)

Design verification as per IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_n]

40 A

Equipment heat dissipation, current-dependent [P_{id}]

6.7 W

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+40 °C

IEC/EN 61439 design verification

10.2 Strength of materials and parts 10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.7 Inscriptions

Meets the product standard's requirements.

10.3 Degree of protection of ASSEMBLIES

Does not apply, since the entire switchgear needs to be evaluated.

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

10.8 Connections for external conductors

Is the panel builder's responsibility.

10.9 Insulation properties 10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

10.9 Insulation properties 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9 Insulation properties 10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 8.0

Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker (EC000905)

Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/ROCB combination (ec1@ss10.0.1-27-14-22-07 [AFZ810015])

Number of poles (total)

2

Number of protected poles

2

Rated voltage

230 V

Rated insulation voltage U_i
 250 V
 Rated impulse withstand voltage U_{imp}
 4 kV
 Rated current
 40 A
 Rated fault current
 0.1 A
 Leakage current type
 A
 Current limiting class
 3
 Rated short-circuit breaking capacity according to EN 61009
 6 kA
 Rated short-circuit breaking capacity according to IEC 60947-2
 0 kA
 Rated short-circuit breaking capacity I_{cn} according to EN 61009-1
 6 kA
 Disconnection characteristic
 Undelayed
 Surge current capacity
 0.25 kA
 Voltage type
 AC
 Frequency
 50 Hz
 Release characteristic
 C
 Concurrently switching neutral conductor
 No
 With interlocking device
 No
 Over voltage category
 3
 Pollution degree
 2
 Ambient temperature during operating
 -25 - 40 °C
 Width in number of modular spacings
 2
 Built-in depth
 70 mm
 Flush-mounted installation
 No
 Anti-nuisance tripping version
 No
 Degree of protection (IP)
 IP20
 Connectable conductor cross section solid-core
 1 - 25 mm²
 Connectable conductor cross section multi-wired
 1 - 25 mm²

Product photo



[wa_sg93019_c](#)

Photo



[wa_sg93019_l](#)

Photo

- 
[wa_sg93019_r](#)
Photo

Declaration of Conformity

- [DA-DC-03_NrRB-2](#)
Asset
(PDF, 07/2021)

EU

- [DA-DC-03_NrRB.2_070218](#)
Asset
(PDF)

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