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Powering Business Worldwide

NmRB6-10/3N/C/01-A - RCD/MOB combination, 10 A, 100 mA, MOB trip characteristic: C, 3p+N, ROD trip characteristic: A



193847 NmRB6-10/3N/C/01-A

Overview Specifications Resources

#### 



# 193847 NmRB6-10/3N/C/01-A

ROD/MOB combination, 10 A, 100 mA, MOB trip characteristic: C, 3p+N, ROD trip characteristic: A EL-Nummer (Norway) 1667546

RCD/MOB combination switch, NmRB6, 3-pole+N, tripping characteristic: C, rated current In: 10 A, rated fault current: 0.1 A, rated switching capacity according to IEC/EN 60947-2 lcs/lcu: 3 kA/6 kA, rated switching capacity according to IEC/EN 61009: 6 kA



- Delivery program
- 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

3 pole+N

Tripping characteristic

С

Application

Switchgear for residential and commercial applications

Rated current [In]

10 A

Rated switching capacity acc. to IEC/EN 60947-2 [lau]

6 kA

Rated switching capacity according to IEC/EN 61009

6 kA

Rated fault current [I<sub>ΔN</sub>]

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

Contact sequence



### Technical data

**Bectrical** 

Standards

IEC/EN 61009

Tripping

non-delayed s...

Rated operating voltage [Ue]

230/400 V AC

Limit values of the operating voltage

0.85 x 1.1 x Uh V AC

Rated frequency [f]

50 Hz

Rated fault currents [I<sub>Δn</sub>]

100 mA

Rated non-tripping current [△no]

 $0.5\,x\,I_{\Delta n}$ 

Sensitivity

DC and pulsed current

Rated switching capacity [l<sub>cn</sub>]

6 kA

Rated current [le]

10 A

Rated impulse withstand voltage [U<sub>mp</sub>]

4 (1.2/50 µs) kV

Characteristic

С

Maximum max. as short-circuit protective device

100 A gL

Selectivity Class

3

Lifespan Ectrical

> 4000 Operations

LifespanMechanical

> 20000 Operations

Mechanical .

Standard front dimension

 $45\,\text{mm}$ 

Enclosure height

80 mm

Terminal protection

finger and hand touch safe, DGUV VS3, EN 50274

Mounting width

70 (4 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 mm<sup>2</sup>

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 [In]

10 A

Equipment heat dissipation, current-dependent [Pvid]

8.2 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 ASSEVBLIES

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 with stand 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/ MOB/RCCB combination (ecl@ss10.0.1-27-14-22-07 [AFZ810015])

Number of poles (total)

4

Number of protected poles

4

Rated voltage

400 V

Rated insulation voltage U

500 V

Rated impulse withstand voltage Ump

4 kV

Rated current

10 A

Rated fault current

0.1 A

Leakage current type

Α

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

о ка

Rated short-circuit breaking capacity Icn according to EN 61009-1

6kA

Disconnection characteristic

Undelayed

Surge current capacity

0.25 kA

Voltage type

AC

Frequency

50 Hz

Release characteristic

C

Concurrently switching neutral conductor

Yes

With interlocking device

No

Over voltage category

3

Pollution degree

2

Ambient temperature during operating

-25 - 40 °C

Width in number of modular spacings

4

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

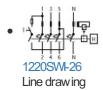
1 - 25 mm²

## **Product photo**





## Wiring diagram



Photo

# **Declaration of Conformity**

 DA-DC-03\_NmRB-3N Asset (PDF, 07/2021)

### EU

DA-DC-03\_NmRB.3
 Asset
 (PDF, 07/2021)

DA-DC-03\_NmRB.3N\_28

 DA-DC-03\_NmRB.3N\_281118
Asset (PDF)

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