

Select your language

- German
- English
- Spanish
- French
- Dutch
- Italian
- Polish
- Czech
- Norwegian Bokmål

Worldwide English



NmRB6-13/3N/C/003-A - RCD/MCB combination, 13 A, 30 mA, MCB trip characteristic: C, 3p+N, RCD trip characteristic: A



193844 NmRB6-13/3N/C/003-A

[Overview](#) [Specifications](#) [Resources](#)



## 193844 NmRB6-13/3N/C/003-A

RCD/MCB combination, 13 A, 30 mA, MCB trip characteristic: C, 3p+N, RCD trip characteristic: A  
EL-Nummer (Norway) 1667543

RCD/MCB combination switch, NmRB6, 3-pole+N, tripping characteristic: C, rated current  $I_n$ : 13 A, rated fault current: 0.03 A, rated switching capacity according to IEC/EN 60947-2  $I_{cs}/I_{cu}$ : 3 kA/6 kA, rated switching capacity according to IEC/EN 61009: 6 kA



• [Delivery program](#)

• [Technical data](#)

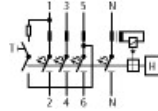
• [Design verification as per IEC/EN 61439](#)

• [Technical data ETIM 8.0](#)

### Delivery program

Basic function  
Combined RCD/MCB devices  
Number of poles  
3 pole+N  
Tripping characteristic  
C  
Application  
Switchgear for residential and commercial applications  
Rated current [ $I_n$ ]  
13 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 [ $I_{ΔN}$ ]  
0.03 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

Electrical  
 Standards  
 IEC/EN 61009  
 Tripping  
 non-delayed s...  
 Rated operating voltage [ $U_e$ ]  
 230/400 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 [ $I_{\Delta n}$ ]  
 30 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 [ $I_e$ ]  
 13 A  
 Rated impulse withstand voltage [ $U_{imp}$ ]  
 4 (1.2/50  $\mu$ s) kV  
 Characteristic  
 C  
 Maximum max. as short-circuit protective device  
 100 A gL  
 Selectivity Class  
 3  
 LifespanElectrical  
 > 4000 Operations  
 LifespanMechanical  
 > 20000 Operations  
 Mechanical  
 Standard front dimension  
 45 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 [ $I_n$ ]  
13 A  
Equipment heat dissipation, current-dependent [ $P_{\text{vid}}$ ]  
9.4 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)

4  
 Number of protected poles  
 4  
 Rated voltage  
 400 V  
 Rated insulation voltage  $U_i$   
 500 V  
 Rated impulse withstand voltage  $U_{imp}$   
 4 kV  
 Rated current  
 13 A  
 Rated fault current  
 0.03 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  
 6 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  
 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 mm<sup>2</sup>  
 Connectable conductor cross section multi-wired  
 1 - 25 mm<sup>2</sup>

## Product photo



wa\_sg91219\_c  
 Photo



[wa\\_sg91219\\_l](#)

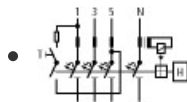
Photo



[wa\\_sg91219\\_r](#)

Photo

## Wiring diagram



[1220SWM-26](#)

Line drawing

## Declaration of Conformity

- [DA-DC-03\\_NrRB-3N](#)

Asset

(PDF, 07/2021)

## EU

- [DA-DC-03\\_NrRB.3](#)

Asset

(PDF, 07/2021)

- [DA-DC-03\\_NrRB.3N\\_281118](#)

Asset

(PDF)

## Download-Center

- [Download-Center \(this item\)](#)

Eaton EMEA Download-Center - download data for this item

- [Download-Center](#)

Eaton EMEA Download-Center



[Generate data sheet in PDF format](#)



[Generate data sheet in Excel format](#)



[Write a comment](#)

[Imprint](#) [Privacy Policy](#) [Legal Disclaimer](#) [Terms and Conditions](#)

© 2022 by Eaton Industries GmbH

