

Select your language

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

Worldwide English



FBSM-402/003-A-MW - Residual-current circuit breaker trip block for FLS. 40A, 2 p, 30mA, type A



262328 FBSM-402/003-A-MW

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



262328 FBSM-402/003-A-MW

Residual-current circuit breaker trip block for FLS. 40A, 2 p, 30mA, type A

EL-Nummer (Norway)

1609393

Becomes a "fixed" quality residual current/power switch combination through assembly with a high-quality miniature circuit-breakers of type FLHT, for fitting to screwable fault-current unit for 40 or 62 A (2 pole and 4 pole), great flexibility and ease of installation due to variable wiring, free selection of main supply, incl. auxiliary contact 1 NO, as standard in all PBHT versions, large variety of variations provided by a variety of rated operational currents and characteristics of the attachable FLHT miniature circuit-breaker, for commercial and industrial applications, for retroactive attachment to 2-, 3-, 3+N-, and 4-pole FLHT miniature circuit-breakers threaded connection on FLHT switch can be loosened at any time, i.e. the installation can be adjusted to new eventualities with no problem at any time in case of changes to the system

• [Delivery program](#)

• [Technical data](#)

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

• [Technical data ETIM 7.0](#)

Delivery program

Basic function

Add-on residual current protection unit

Number of poles

2 pole

Application

Switchgear for residential and commercial applications

Rated current [I_n]

40 A

Rated short-circuit strength [I_{cn}]

same as connected FLS up to max. 10 kA

Rated fault current [I_{kN}]

0.03 A

Type

Type A

Tripping

non-delayed s...

Product range

FBSM

Sensitivity

Pulse-current sensitive

Impulse withstand current

Partly surge-proof 250 A

Technical data

Electrical
 Types conform to
 IEC/EN 61009
 Rated frequency [f]
 50 Hz
 Sensitivity
 Pulse-current sensitive
 Rated current [I_n]
 40 A
 Rated impulse withstand voltage [U_{imp}]
 4 kV
 lifespanElectrical [Operations]
 □ 4000
 lifespanMechanical [Operations]
 □ 20000
 Mechanical
 Standard front dimension
 45 mm
 Device height
 90 mm
 Built-in width
 35 (2TE) mm
 Mounting
 fix mounted onto FLS
 Degree of Protection
 IP20, IP40 with suitable enclosure
 Terminals top and bottom
 Lift terminals
 Terminal protection
 BGV A3, ÖVE-EN6
 Thickness of busbar material
 0.8 - 2 mm
 Permissible storage and transport temperatures
 -35 - +60 °C
 Climatic proofing
 25-55°C/90-95% relative humidity according to IEC 60068-2

Design verification as per IEC/EN 61439

Technical data for design verification
 Rated operational current for specified heat dissipation [I_n]
 40 A
 Heat dissipation per pole, current-dependent [P_{vd}]
 0 W
 Equipment heat dissipation, current-dependent [P_{vd}]
 13 W
 Static heat dissipation, non-current-dependent [P_{vs}]
 0 W
 Heat dissipation capacity [P_{diss}]
 0 W
 Operating ambient temperature min.
 -25 °C
 Operating ambient temperature max.
 +40 °C
 Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C
 IEC/EN 61439 design verification
 10.2 Strength of materials and parts10.2.2 Corrosion resistance
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.3 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 parts10.2.4 Resistance to ultra-violet (UV) radiation
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.5 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 7.0

Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003)
Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system/ Residual current circuit breaker (RCCB) (ecl@ss10.0.1-27-14-22-01 [AAB906014])

Number of poles
2

Rated voltage
230 V

Rated current
40 A

Rated fault current
30 mA

Rated insulation voltage U_i
440 V

Rated impulse withstand voltage U_{imp}
4 kV

Mounting method
DIN rail

Leakage current type
A

Selective protection
No

Short-time delayed tripping
No

Short-circuit breaking capacity (I_{cw})
0 kA

Surge current capacity
0.25 kA

Frequency
50 Hz

Additional equipment possible
Yes

With interlocking device
Yes

Degree of protection (IP)
IP20

Width in number of modular spacings
4
Built-in depth
70 mm
Ambient temperature during operating
-25 - 40 °C
Pollution degree
2
Connectable conductor cross section multi-wired
0.75 - 35 mm²
Connectable conductor cross section solid-core
0.75 - 35 mm²

CAD data

- [3D Preview](#)
(Web)

DWG files

- [DA-CD-pbsm_2p](#)
File
(Web)

edz files

- [DA-CE-ETN.FBSM-402_003-A-MW](#)
File
(Web)

Step files

- [DA-CS-pbsm_2p](#)
File
(Web)

Product photo



[sg18011](#)
Photo
FI trip block

Instruction Leaflet

- [Add-on Residual Current Protection FBSM \(IL019075ZU\)](#)
Asset
MA180503226
(PDF, 03/2020, Language independent)

Declaration of Conformity

EU

- [DA-DC-03_FBSM_180518](#)
Asset
(PDF)

Download-Center

- [Download-Center \(this item\)](#)
Eaton EMEA Download-Center - download data for this item
- [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](#)

© 2021 by Eaton Industries GmbH

