



**Residual-current circuit breaker trip block for FAZ, 40A, 2p, 300mA, type A**

**Part no. FBSMV-40/2/03-A  
170211**

<b>General specifications</b>		
Product name		Eaton Moeller series xEffect - FBSmV RCCB add-on unit
Part no.		FBSMV-40/2/03-A
EAN		4015081667178
Product Length/Depth		90 millimetre
Product height		75 millimetre
Product width		70 millimetre
Product weight		0.17 kilogram
Compliances		RoHS conform
Certifications		EN45545-2 IEC 61373 IEC/EN 61009
Product Tradename		FBSmV
Product Type		RCCB add-on unit
Product Sub Type		None
<b>Delivery program</b>		
Application		xEffect - Switchgear for industrial and advanced commercial applications Switchgear for industrial and advanced commercial applications
Number of poles		Two-pole
Tripping time		Non-delayed
Amperage Rating		40 A
Rated short-circuit strength		Same as connected FAZ up to max. 10 kA
Fault current rating		300 mA
Sensitivity type		Pulse-current sensitive
Impulse withstand current		Partly surge-proof 250 A
Type		Type A FBSmV Add-on residual current protection unit
<b>Technical Data - Electrical</b>		
Voltage rating - min		240 V
Voltage rating - max		415 V
Rated operational voltage (Ue) - max		240 V
Rated insulation voltage (Ui)		440 V
Rated impulse withstand voltage (Uimp)		4 kV
Rated fault current - min		0.3 A
Rated fault current - max		0.3 A
Frequency rating		50 Hz
Leakage current type		A
Rated short-time withstand current (Icw)		10 kA 0 kA
Surge current capacity		0.25 kA
Pollution degree		2
<b>Technical Data - Mechanical</b>		
Frame		45 mm
Width in number of modular spacings		4
Built-in width (number of units)		70 mm (2 SU)
Built-in depth		70 mm
Mounting Method		DIN rail Permanent screw connection with FAZ
Degree of protection		IP20, IP40 with suitable enclosure IP20

Terminals (top and bottom)		Lift terminals
Connectable conductor cross section (solid-core) - min		0.75 mm <sup>2</sup>
Connectable conductor cross section (solid-core) - max		35 mm <sup>2</sup>
Connectable conductor cross section (multi-wired) - min		0.75 mm <sup>2</sup>
Connectable conductor cross section (multi-wired) - max		35 mm <sup>2</sup>
Terminal protection		Finger and hand touch safe, DGUV VS3, EN 50274
Busbar material thickness		0.8 mm - 2 mm
Permitted storage and transport temperature - min		-35 °C
Permitted storage and transport temperature - max		60 °C
Climatic proofing		25-55 °C / 90-95% relative humidity according to IEC 60068-2
<b>Design verification as per IEC/EN 61439 - technical data</b>		
Rated operational current for specified heat dissipation (In)		40 A
Heat dissipation per pole, current-dependent		0 W
Equipment heat dissipation, current-dependent		13 W
Heat dissipation capacity		0 W
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		40 °C
<b>Design verification as per IEC/EN 61439</b>		
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects		Meets the product standard's requirements.
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
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.
10.6 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.
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
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.
<b>Additional information</b>		
Features		Additional equipment possible Add-on residual current protection unit
Fitted with:		Interlocking device
Special features		Ambient temperature hint: Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C
Used with		FBSmV Add-on residual current protection unit Type A

## Technical data ETIM 9.0

Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) module (EC002297)		
Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) module (ecl@ss13-27-14-22-10 [ACN357016])		
Nominal voltage	V	240 - 415
Nominal current	A	40
Rated fault current adjustable		No

Rated fault current	A	0.3 - 0.3
Max. delay time	ms	0
Delay adjustable		No
Number of poles		2
Leakage current type		A
Surge current capacity	kA	0.25
Frequency		50 Hz
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Power loss	W	3.1
Connectable conductor cross section solid-core	mm <sup>2</sup>	0.75 - 35
Connectable conductor cross section multi-wired	mm <sup>2</sup>	0.75 - 35
Anti- nuisance tripping version		No
With interlocking device		Yes
Degree of protection (IP)		IP20
Pollution degree		2
Ambient temperature during operating	°C	-25 - 40