## DATASHEET - FBSMV-40/2/03-S/A



Residual-current circuit breaker trip block for FAZ, 40A, 2pole, 300mA, type S/A



Part no. FBSMV-40/2/03-S/A
Catalog No. 170160
Alternate Catalog FBSMV-40/2/03-S/A
No.

Similar to illustration

Delivery program			
Basic function			Add-on residual current protection unit
Number of poles			2 pole
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	40
Rated short-circuit strength	I <sub>cn</sub>	kA	same as connected FAZ up to max. 10
Rated fault current	$I_{\Delta N}$	Α	0.3
Туре			Type S/A
Tripping		s	selective switch off
Product range			FBSmV
Sensitivity			AC and pulsating DC current sensitive
Impulse withstand current			surge-proof 5 kA
Contact sequence			2 4 T-/ H

## **Technical data**

Terminal protection

Thickness of busbar material

Climatic proofing

Admissible ambient temperature range

Permissible storage and transport temperatures

FI	cf	vi	•	•

f	Hz	50
		AC and pulsating DC current sensitive
In	Α	40
	mm	45
	mm	90
	mm	70 (2TE)
		Permanent screw connection with FAZ
		IP20, IP40 with suitable enclosure
		Lift terminals
	f I <sub>n</sub>	I <sub>n</sub> A mm mm

mm

°C

°C

DGUV VS3, EN 50274

25-55°C/90-95% relative humidity according to IEC 60068-2

0.8 - 2

-25 - +40

Design	verification	as per	<b>IEC/EN</b>	61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	40
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	13
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40

	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 parts	
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects	Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation	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.
10.5 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.
10.9.3 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.

## **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) (ept@ss10.01-27-14-22-01 [AAR906014])

(ecl@ss10.0.1-27-14-22-01 [AAB906014])		
Number of poles		2
Rated voltage	V	240
Rated current	Α	40
Rated fault current	mA	300
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Mounting method		DIN rail
Leakage current type		A
Selective protection		Yes
Short-time delayed tripping		No
Short-circuit breaking capacity (Icw)	kA	0
Surge current capacity	kA	5
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	mm	70
Ambient temperature during operating	°C	-25 - 40
Pollution degree		2
Connectable conductor cross section multi-wired	mm²	0.75 - 35
Connectable conductor cross section solid-core	mm²	0.75 - 35

## **Dimensions**

