# DATASHEET - FBHMV-125/2/05-S/A



Residual-current circuit breaker trip block for AZ, 125A, 2pole, 500mA, type S/A



Part no. FBHMV-125/2/05-S/A Catalog No. 170140

Alternate Catalog FBHMV-125/2/05-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	125
Rated short-circuit strength	I <sub>cn</sub>	kA	same as connected AZ
Rated fault current	$I_{\Delta N}$	Α	0.5
Туре			Type S/A
Tripping		s	selective switch off
Product range			FBHmV
Sensitivity			AC and pulsating DC current sensitive
Impulse withstand current			surge-proof 5 kA
Contact sequence			1 3/N 13 H

### **Technical data**

#### **Electrical**

Rated frequency	f	Hz	50
Sensitivity			AC and pulsating DC current sensitive
Rated current	In	Α	125
Rated impulse withstand voltage	U <sub>imp</sub>	kV	4
lifespan			
Electrical	Operations		≧ 1000
Mechanical	Operations		≧ 8000
Mechanical			

Mechanical		
Standard front dimension	mm	45
Device height	mm	90
Built-in width	mm	95 (5.5TE)
Mounting		screwed onto AZ 2-, 3-, 4-pole; Z-BHASA
Degree of Protection		IP40, IP54 (with moisture-proof enclosure)
Terminals top and bottom		Lift terminals
Terminal protection		DGUV VS3, EN 50274
Permissible storage and transport temperatures	°C	-35 - +60
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	In	Α	125
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	26.4
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
EN 61439 design verification		
10.2 Strength of materials and parts		
10.2.2 Corrosion resistance	1	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	1	Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	1	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	1	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	1	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	1	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	1	Meets the product standard's requirements.
10.5 Protection against electric shock	1	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	I	Is the panel builder's responsibility.
10.8 Connections for external conductors	I	Is the panel builder's responsibility.
10.9 Insulation properties		
10.9.2 Power-frequency electric strength	I	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	I	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	I	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 b observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must b 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)

Electric engineering, automation, process control engineering / Electrical insta (ecl@ss10.0.1-27-14-22-01 [AAB906014])	nauon, device / ne	Siduai cui	rein protection system / nesidual current circuit breaker (noco)
Number of poles			2
Rated voltage		V	240
Rated current		Α	125
Rated fault current		mA	500
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			5.5
Built-in depth		mm	70
Ambient temperature during operating		°C	-25 - 40
Pollution degree			2
Connectable conductor cross section multi-wired		mm²	2.5 - 50

### **Dimensions**

