DATASHEET - FRBMM-B32/1N/03-G

RCD/MCB combination, 32 A, 300 mA, MCB trip characteristic: B, 1p+N, RCD trip characteristic: AC

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Powering Business Worldwide™

| Part no. | **FRBMM-B32/1N/03-G**
170559 |

Similar to illustration

General specifications

Product name		Eaton Moeller series xEffect - FRBm6/M RCBO - residual-current circuit breaker with overcurrent protection
Part no.		FRBMM-B32/1N/03-G
EAN		4015081671540
Product Length/Depth		80 millimetre
Product height		75 millimetre
Product width		35 millimetre
Product weight		0.206 kilogram
Compliances		CE Marked RoHS conform
Certifications		CE IEC 61373 EN45545-2
Product Tradename		xEffect - FRBm6/M
Product Type		RCBO - Residual-current circuit breaker with overcurrent protection
Product Sub Type		None

Delivery program

Application		Switchgear for industrial and advanced commercial applications
Product range		FRBmM
Basic function		Combined RCD/MCB devices
Number of poles		Single-pole + N
Number of poles (protected)		1
Number of poles (total)		2
Tripping characteristic		B
Release characteristic		B
Amperage Rating		32 A
Rated current		32 A
Fault current rating		0.3 A
Sensitivity type		AC current sensitive
Type		RCBO

Technical Data - Electrical

Voltage type		AC
Voltage rating		240 V - 240 V
Rated operational voltage (Ue) - max		240 V
Rated insulation voltage (Ui)		500 V
Rated impulse withstand voltage (Uimp)		4 kV
Rated fault currents of product range		10, 30, 100, 300 MilliAmpere
Impulse withstand current		Surge-proof, 3 kA
Frequency rating		50 Hz
Leakage current type		AC
Rated switching capacity		10 kA
Rated switching capacity (IEC/EN 61009)		10 kA
Rated short-circuit breaking capacity (EN 60947-2)		10 kA
Rated short-circuit breaking capacity (EN 61009)		10 kA
Rated short-circuit breaking capacity (EN 61009-1)		10 kA
Rated short-circuit breaking capacity (IEC 60947-2)		10 kA

Surge current capacity		10 kA
Disconnection characteristic		Short-time delayed
Tripping		Short time-delayed
Pollution degree		2

Technical Data - Mechanical

Width in number of modular spacings		2
Built-in depth		75.5 mm
Degree of protection		IP20
Connectable conductor cross section (solid-core) - min		1 mm²
Connectable conductor cross section (solid-core) - max		25 mm²
Connectable conductor cross section (multi-wired) - min		1 mm²
Connectable conductor cross section (multi-wired) - max		25 mm²

Design verification as per IEC/EN 61439 - technical data

Rated operational current for specified heat dissipation (In)		32 A
Heat dissipation per pole, current-dependent		0 W
Equipment heat dissipation, current-dependent		6.1 W
Static heat dissipation, non-current-dependent		0 W
Heat dissipation capacity		0 W
Ambient operating temperature - max		40 °C
Ambient operating temperature - min		-25 °C

Design verification as per IEC/EN 61439

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.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.6 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.

Additional information

Current limiting class		3
Features		Concurrently switching N-neutral Anti-nuisance tripping version

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/RCCB combination (ecl@ss10.0.1-27-14-22-07 [AFZ810015])		
Number of poles (total)		2
Number of protected poles		1
Rated voltage	V	240
Rated insulation voltage Ui	V	500

Rated impulse withstand voltage Uimp		kV	4
Rated current		A	32
Rated fault current		A	0.3
Leakage current type			AC
Current limiting class			3
Rated short-circuit breaking capacity according to EN 61009		kA	10
Rated short-circuit breaking capacity according to IEC 60947-2		kA	10
Rated short-circuit breaking capacity Icn according to EN 61009-1		kA	10
Disconnection characteristic			Short-time delayed
Surge current capacity		kA	10
Voltage type			AC
Frequency			50 Hz
Release characteristic			B
Concurrently switching neutral conductor			Yes
With interlocking device			No
Over voltage category			3
Pollution degree			2
Ambient temperature during operating		°C	-25 - 40
Width in number of modular spacings			2
Built-in depth		mm	75.5
Flush-mounted installation			No
Anti-nuisance tripping version			Yes
Degree of protection (IP)			IP20
Connectable conductor cross section solid-core		mm²	1 - 25
Connectable conductor cross section multi-wired		mm²	1 - 25