DATASHEET - MRB4-25/3N/C/003-A

RCD/MCB combination, 25 A, 30 mA, MCB trip characteristic: C, 3p+N, RCD trip characteristic: A

Powering Business Worldwide™

Part no.	**mRB4-25/3N/C/003-A**
	120678
EL Number (Norway)	**1654845**

Similar to illustration

General specifications

Product name	Eaton Moeller series xPole - mRB4/6 RCBO - residual-current circuit breaker with overcurrent protection
Part no.	mRB4-25/3N/C/003-A
EAN	4015081185085
Product Length/Depth	80 millimetre
Product height	75.5 millimetre
Product width	70 millimetre
Product weight	0.445 kilogram
Compliances	CE Marked RoHS conform
Certifications	CE
Product Tradename	xPole - mRB4/6
Product Type	RCBO - Residual-current circuit breaker with overcurrent protection
Product Sub Type	None

Delivery program

Application	Switchgear for residential and commercial applications
Product range	mRB4
Basic function	Combined RCD/MCB devices
Product application	Switchgear for industrial and advanced commercial applications
Number of poles	Three-pole + N
Number of poles (protected)	4
Number of poles (total)	4
Tripping characteristic	C
Release characteristic	C
Rated current	25 A
Rated current of product range	6 - 25 Ampere
Fault current rating	0.03 A
Sensitivity type	Type A, pulse-current sensitive
Type	RCBO

Technical Data - Electrical

Voltage type	AC
Voltage rating	400 V
Voltage rating at AC	230 V / 400 V
Rated operational voltage (Ue) - max	400 V
Rated insulation voltage (Ui)	500 V
Rated impulse withstand voltage (Uimp)	4 kV
Rated fault currents of product range	30, 100, 300 MilliAmpere
Impulse withstand current	Partly surge-proof, 250 A
Frequency rating	50 Hz
Leakage current type	A
Rated switching capacity	4.5 kA
Rated switching capacity (IEC/EN 60947-2)	4.5 kA
Rated switching capacity (IEC/EN 61009)	4.5 kA
Rated non-tripping current	0.5 x I△n

Rated short-circuit breaking capacity (EN 60947-2)	4.5 kA
Rated short-circuit breaking capacity (EN 61009)	4.5 kA
Rated short-circuit breaking capacity (EN 61009-1)	4.5 kA
Rated short-circuit breaking capacity (IEC 60947-2)	4.5 kA
Surge current capacity	0.25 kA
Disconnection characteristic	Undelayed
Tripping	Non-delayed
Back-up fuse	100 Ampere gL
Selectivity class	3
Pollution degree	2

Technical Data - Mechanical

Frame	45 mm
Width in number of modular spacings	4
Device height	80 mm
Built-in depth	70 mm
Mounting style	Tri-stable slide catch - enables removal from existing busbar combination
Degree of protection	IP20
Degree of protection (built in)	IP40
Terminals (top and bottom)	Twin-purpose
Solid terminal capacities	1 - 25 Square Millimeter
Terminal protection	Busbar tag shroud to VBG4
Connectable conductor cross section (solid-core) - min	1 mm^2
Connectable conductor cross section (solid-core) - max	25 mm^2
Connectable conductor cross section (multi-wired) - min	1 mm^2
Connectable conductor cross section (multi-wired) - max	25 mm^2
Material thickness	2 mm
Climatic proofing	IEC 68-2: 25 °C - 55 °C at 90 % - 95 % humidity

Design verification as per IEC/EN 61439 - technical data

Rated operational current for specified heat dissipation (In)	25 A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	11.6 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
Standards			IEC/EN 61009

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)			4
Number of protected poles			4
Rated voltage		V	400
Rated insulation voltage Ui		V	500
Rated impulse withstand voltage Uimp		kV	4
Rated current		A	25
Rated fault current		A	0.03
Leakage current type			A
Current limiting class			3
Rated short-circuit breaking capacity according to EN 61009		kA	4.5
Rated short-circuit breaking capacity according to IEC 60947-2		kA	4.5
Rated short-circuit breaking capacity Icn according to EN 61009-1		kA	4.5
Disconnection characteristic			Undelayed
Surge current capacity		kA	0.25
Voltage type			AC
Frequency			50 Hz
Release characteristic			C
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			4
Built-in depth		mm	70
Flush-mounted installation			No
Anti-nuisance tripping version			No
Degree of protection (IP)			IP20
Connectable conductor cross section solid-core		mm^2	1 - 25
Connectable conductor cross section multi-wired		mm^2	1 - 25