



**Electronic RCD/RCBO combination, 20 A, 30 mA, MCB trip characteristic: C, 1p, RCD trip characteristic: A**



**Part no. eRBM-20/1/C/003-A  
EMCH120R30C**

Similar to illustration

Product name	Eaton Moeller series xPole - eRB6/M RCBO - residual-current circuit breaker with overcurrent protection
Part no.	eRBM-20/1/C/003-A
EAN	4015081489374
Product Length/Depth	216 millimetre
Product height	72 millimetre
Product width	17.5 millimetre
Product weight	0.195 kilogram
Compliances	RoHS conform
Certifications	CE
Product Tradename	xPole - eRB6/M
Product Type	RCBO - Residual-current circuit breaker with overcurrent protection
Product Sub Type	None
Application	Switchgear for residential and commercial applications
Basic function	Combined RCD/RCBO devices
Product application	Switchgear for residential and commercial applications
Number of poles	Single-pole
Number of poles (protected)	1
Number of poles (total)	1
Release characteristic	C
Rated current	20 A
Fault current rating	0.03 A
Type	RCBO
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
Frequency rating	50/60 Hz
Leakage current type	A
Rated short-circuit breaking capacity (EN 60947-2)	0 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)	0 kA
Surge current capacity	0.25 kA
Disconnection characteristic	Undelayed
Pollution degree	2
Width in number of modular spacings	1
Built-in depth	69.5 mm
Degree of protection	IP20
Connectable conductor cross section (solid-core) - min	1 mm <sup>2</sup>
Connectable conductor cross section (solid-core) - max	25 mm <sup>2</sup>

Connectable conductor cross section (multi-wired) - min		1 mm <sup>2</sup>
Connectable conductor cross section (multi-wired) - max		25 mm <sup>2</sup>
Ambient operating temperature - max		40 °C
Ambient operating temperature - min		-25 °C
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.
Current limiting class		3

## 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 (ec1@ss10.0.1-27-14-22-07 [AFZ810015])		
Number of poles (total)		1
Number of protected poles		1
Rated voltage	V	240
Rated insulation voltage U <sub>i</sub>	V	500
Rated impulse withstand voltage U <sub>imp</sub>	kV	4
Rated current	A	20
Rated fault current	A	0.03
Leakage current type		A
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	0
Rated short-circuit breaking capacity I <sub>cn</sub> according to EN 61009-1	kA	10
Disconnection characteristic		Undelayed
Surge current capacity	kA	0.25
Voltage type		AC
Frequency		50/60 Hz
Release characteristic		C
Concurrently switching neutral conductor		No
With interlocking device		No
Over voltage category		3
Pollution degree		2

Ambient temperature during operating	°C	-25 - 40
Width in number of modular spacings		1
Built-in depth	mm	69.5
Flush-mounted installation		No
Anti-nuisance tripping version		No
Degree of protection (IP)		IP20
Connectable conductor cross section solid-core	mm <sup>2</sup>	1 - 25
Connectable conductor cross section multi-wired	mm <sup>2</sup>	1 - 25