



## Eaton 120677

Eaton Moeller series xPole - mRB4/6 RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 20A, 30mA, C-LS-Char, 3N pole, FI-Char: A

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<b>PRODUCT NAME</b>	Eaton Moeller series xPole - mRB4 RCBO - residual-current circuit breaker with overcurrent protection
<b>CATALOG NUMBER</b>	120677
<b>PRODUCT LENGTH/DEPTH</b>	80 mm
<b>PRODUCT HEIGHT</b>	75.5 mm
<b>PRODUCT WIDTH</b>	70 mm
<b>PRODUCT WEIGHT</b>	0.445 kg
<b>COMPLIANCES</b>	CE Marked RoHS conform
<b>CERTIFICATIONS</b>	CE

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VOLTAGE RATING	400 V
SURGE CURRENT CAPACITY	0.25 kA
VOLTAGE TYPE	AC
WIDTH IN NUMBER OF MODULAR SPACINGS	4
FEATURES	Concurrently switching N-neutral
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.
DEVICE HEIGHT	80 mm
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 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	Does not apply, since the

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CHARACTERISTIC CURVE	<a href="#">eaton-mcb-xpole-mrb4-6-characteristic-curve.eps</a>
□□□□□	<a href="#">eaton-rccb-rcho-g9-il019140zu.pdf</a>
□□□	<a href="#">eaton-mcb-xpole-mrb4-6-wiring-diagram.eps</a>
□□□□	<a href="#">eaton-xpole-mrb6-rcho-catalog-ca019057en-en-us.pdf</a> <a href="#">eaton-xpole-mrb4-rcho-catalog-ca019058en-en-us.pdf</a>
	<a href="#">eaton-xeffect-frbm6m-dimensions-004.jpg</a>
	<a href="#">eaton-mcb-xpole-mrb4-6-dimensions.eps</a>
□□	<a href="#">eaton-xeffect-frbm6m-wiring-diagram-002.jpg</a> <a href="#">eaton-xeffect-frbm6m-characteristic-curve-002.jpg</a>

<b>IMPACT</b>	entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>MOUNTING STYLE</b>	Tri-stable slide catch - enables removal from existing busbar combination
<b>OPERATING AMBIENT TEMPERATURE - MAX</b>	40 °C
<b>OPERATING AMBIENT TEMPERATURE - MIN</b>	-25 °C
<b>PRODUCT APPLICATION</b>	Switchgear for industrial and advanced commercial applications
<b>PRODUCT RANGE</b>	mRB4
<b>RATED CURRENT</b>	20 A
<b>RATED CURRENT OF PRODUCT RANGE</b>	6 - 25 Ampere
<b>RATED FAULT CURRENTS OF PRODUCT RANGE</b>	30, 100, 300 MilliAmpere
<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	20 A
<b>RATED SWITCHING CAPACITY (IEC/EN 60947-2)</b>	4.5 kA

<b>RATED SWITCHING CAPACITY (IEC/EN 61009)</b>	4.5 kA
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT</b>	0 W
<b>TRIPPING CHARACTERISTIC</b>	C
<b>BUILT-IN DEPTH</b>	70 mm
<b>CURRENT LIMITING CLASS</b>	3
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60947-2)</b>	4.5 kA
<b>FRAME</b>	45 mm
<b>TERMINAL PROTECTION</b>	Busbar tag shroud to VBG4
<b>TERMINALS (TOP AND BOTTOM)</b>	Twin-purpose
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	40 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>FAULT CURRENT RATING</b>	0.03 A
<b>HEAT DISSIPATION CAPACITY</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT</b>	0 W
<b>NUMBER OF POLES (PROTECTED)</b>	4
<b>NUMBER OF POLES (TOTAL)</b>	4
<b>RATED OPERATIONAL VOLTAGE (UE) - MAX</b>	400 V
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)</b>	4.5 kA
<b>RATED SWITCHING CAPACITY</b>	4.5 kA
<b>BACK-UP FUSE</b>	100 Ampere gL
<b>BASIC FUNCTION</b>	Combined RCD/MCB devices
<b>MOUNTING METHOD</b>	DIN rail
<b>CLIMATIC PROOFING</b>	IEC 68-2: 25 °C - 55 °C at 90 % - 95 % humidity
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT</b>	11.8 W
<b>RATED IMPULSE WITHSTAND VOLTAGE</b>	4 kV

<b>(UIMP)</b>	
<b>DEGREE OF PROTECTION (BUILT IN)</b>	IP40
<b>DEGREE OF PROTECTION</b>	IP20
<b>OPERATING AMBIENT TEMPERATURE HINT</b>	Keep in mind the derating at temperatures higher than 40 °C
<b>SOLID TERMINAL CAPACITIES</b>	1 - 25 Square Millimeter
<b>STANDARDS</b>	IEC/EN 61009
<b>TRIPPING</b>	Non-delayed
<b>OVERVOLTAGE CATEGORY</b>	III
<b>POLLUTION DEGREE</b>	2
<b>MATERIAL THICKNESS</b>	2 mm
<b>RATED NON-TRIPPING CURRENT</b>	0.5 x IΔn
<b>IMPULSE WITHSTAND CURRENT</b>	Partly surge-proof, 250 A
<b>LEAKAGE CURRENT TYPE</b>	A
<b>RELEASE CHARACTERISTIC</b>	C
<b>SENSITIVITY TYPE</b>	Type A, pulse-current sensitive
<b>FREQUENCY RATING</b>	50 Hz
<b>RATED INSULATION VOLTAGE (UI)</b>	500 V
<b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN</b>	1 mm <sup>2</sup>
<b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX</b>	25 mm <sup>2</sup>
<b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN</b>	1 mm <sup>2</sup>
<b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX</b>	25 mm <sup>2</sup>
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009)</b>	4.5 kA
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009-1)</b>	4.5 kA
<b>VOLTAGE RATING AT AC</b>	230 V / 400 V

NUMBER OF POLES	Three-pole + N
DISCONNECTION CHARACTERISTIC	Undelayed
TYPE	RCBO
APPLICATION	Switchgear for residential and commercial applications
SELECTIVITY CLASS	3
