

# Specifications



## Eaton 286606

Eaton Moeller series xPole - PL6 MCB. PL6, 3-pole, tripping characteristic: C, rated current In: 50 A, rated switching capacity IEC/EN 60898-1: 6 kA

### General specifications

<b>PRODUCT NAME</b>	Eaton Moeller series xPole - PL6 MCB
<b>CATALOG NUMBER</b>	286606
<b>EAN</b>	4015082866068
<b>PRODUCT LENGTH/DEPTH</b>	85 mm
<b>PRODUCT HEIGHT</b>	73 mm
<b>PRODUCT WIDTH</b>	53.1 mm
<b>PRODUCT WEIGHT</b>	0.36 kg
<b>COMPLIANCES</b>	RoHS conform
<b>MODEL CODE</b>	PL6-C50/3



Powering Business Worldwide

## Delivery program

<b>APPLICATION</b>	<ul style="list-style-type: none"><li>• Switchgear for residential and commercial applications</li><li>• xPole - Switchgear for residential and commercial applications</li></ul>
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<b>NUMBER OF POLES</b>	Three-pole
<b>NUMBER OF POLES (TOTAL)</b>	3
<b>NUMBER OF POLES (PROTECTED)</b>	3
<b>TRIPPING CHARACTERISTIC</b>	C
<b>RELEASE CHARACTERISTIC</b>	C
<b>AMPERAGE RATING</b>	50 A
<b>TYPE</b>	<ul style="list-style-type: none"><li>• Miniature circuit breaker</li><li>• PL6</li></ul>

## Technical data - electrical

<b>VOLTAGE TYPE</b>	AC
<b>RATED OPERATIONAL VOLTAGE (UE) - MAX</b>	400 V
<b>RATED INSULATION VOLTAGE (UI)</b>	440 V
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	4 kV
<b>FREQUENCY RATING - MIN</b>	50 Hz
<b>FREQUENCY RATING - MAX</b>	60 Hz
<b>RATED SWITCHING CAPACITY (IEC/EN 60898-1)</b>	6 kA
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 230 V</b>	6 kA
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 400 V</b>	6 kA
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 230 V</b>	0 kA
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 400 V</b>	0 kA
<b>OVERVOLTAGE CATEGORY</b>	III
<b>POLLUTION DEGREE</b>	2

## Technical data - mechanical

<b>WIDTH IN NUMBER OF MODULAR SPACINGS</b>	3
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<b>BUILT-IN DEPTH</b>	70.5 mm
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<b>DEGREE OF PROTECTION</b>	IP20
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<b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN</b>	1 mm <sup>2</sup>
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<b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX</b>	25 mm <sup>2</sup>
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<b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN</b>	1 mm <sup>2</sup>
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<b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX</b>	25 mm <sup>2</sup>
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## Design verification as per IEC/EN 61439 - technical data

<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	50 A
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<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT</b>	0 W
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<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT</b>	14.9 W
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<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT</b>	0 W
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<b>HEAT DISSIPATION CAPACITY</b>	0 W
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<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
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<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	75 °C
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## Design verification as per IEC/EN 61439

<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the 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</b>	Is the panel builder's responsibility.

## Additional information

<b>CURRENT LIMITING CLASS</b>	3
<b>FEATURES</b>	Additional equipment possible
<b>SPECIAL FEATURES</b>	Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
<b>USED WITH</b>	Miniature circuit breaker PL6

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**INSULATING MATERIAL**

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**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.

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**Resources****CATALOGUES**

[eaton-xpole-pl6-mcb-catalog-ca019069en-en-us.pdf](#)

[eaton-xpole-protective-devices-catalog-ca019014en-en-us.pdf](#)

[eaton-miniature-circuit-breaker-xpole-pl6-catalog-ca20190212-en-us.pdf](#)

**CHARACTERISTIC CURVE**

[eaton-xpole-mmc4-6-m-mcb-characteristic-curve-002.jpg](#)

**DECLARATIONS OF CONFORMITY**

[DA-DC-03\\_PL6](#)

**DRAWINGS**

[eaton-xpole-pl6-mcb-dimensions.jpg](#)

[eaton-xpole-pl6-mcb-3d-drawing-002.jpg](#)

**INSTALLATION INSTRUCTIONS**

[eaton-rccb-rcbo-g9-il019140zu.pdf](#)

**MCAD MODEL**

[pls\\_3p.stp pls\\_3p.dwg](#)

**WIRING DIAGRAMS**

[eaton-xpole-mmc4-6-m-mcb-wiring-diagram-005.jpg](#)

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**PROJECT NAME:**

**PROJECT NUMBER:**

**PREPARED BY:**

**DATE:**

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