

# Eaton 286590

Catalog Number: 286590

Eaton Moeller series xPole - PL6 MCB. PL6, 3-pole, tripping characteristic: B, rated current In: 20 A, rated switching capacity IEC/EN 60898-1: 6 kA

## General specifications

|                                      |                      |
|--------------------------------------|----------------------|
| Product Name                         | Catalog Number       |
| Eaton Moeller series xPole - PL6 MCB | 286590               |
| EAN                                  | Product Length/Depth |
| 4015082865900                        | 85 mm                |
| Product Height                       | Product Width        |
| 73 mm                                | 53.1 mm              |
| Product Weight                       | Compliances          |
| 0.36 kg                              | RoHS conform         |
| Model Code                           |                      |
| PL6-B20/3                            |                      |



## Delivery program

### Application

Switchgear for residential  
and commercial applications  
xPole - Switchgear for  
residential and commercial  
applications

### Number of poles

Three-pole

### Number of poles (total)

4

### Number of poles (protected)

3

### Tripping characteristic

B

### Release characteristic

B

### Amperage Rating

20 A

### Type

Miniature circuit breaker  
PL6

## Technical data - electrical

### Voltage type

AC

### Rated operational voltage (U<sub>e</sub>) - max

400 V

### Rated insulation voltage (U<sub>i</sub>)

440 V

### Rated impulse withstand voltage (U<sub>imp</sub>)

4 kV

### Frequency rating - min

50 Hz

### Frequency rating - max

60 Hz

### Rated switching capacity (IEC/EN 60898-1)

6 kA

### Rated short-circuit breaking capacity (EN 60898) at 230 V

6 kA

### Rated short-circuit breaking capacity (EN 60898) at 400 V

6 kA

### Rated short-circuit breaking capacity (IEC 60947-2) at 230 V

0 kA

### Rated short-circuit breaking capacity (IEC 60947-2) at 400 V

0 kA

### Overvoltage category

III

### Pollution degree

2

## Technical data - mechanical

### Width in number of modular spacings

4

### Built-in depth

70.5 mm

### Degree of protection

IP20

## Design verification as per IEC/EN 61439 - technical data

### Rated operational current for specified heat dissipation (I<sub>n</sub>)

20 A

### Heat dissipation per pole, current-dependent

0 W

### Equipment heat dissipation, current-dependent

9.8 W

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>

Static heat dissipation, non-current-dependent

0 W

Heat dissipation capacity

0 W

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

75 °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.

#### 10.2.3.2 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 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.

## 10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

## Additional information

### Current limiting class

3

### Features

Additional equipment possible

### Special features

Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity

### Used with

PL6

Miniature circuit breaker

## Resources

### Catalogues

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

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

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

### Certification reports

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

### Characteristic curve

[eaton-xpole-mm4-6-m-mcb-characteristic-curve.jpg](#)

### Drawings

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

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

### Installation instructions

[IL019140ZU](#)

#### 10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

#### Wiring diagrams

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

#### 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.