

Specifications



Eaton 286542

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

General specifications

| | |
|-----------------------------|--------------------------------------|
| PRODUCT NAME | Eaton Moeller series xPole - PL6 MCB |
| CATALOG NUMBER | 286542 |
| EAN | 4015082865429 |
| PRODUCT LENGTH/DEPTH | 85 mm |
| PRODUCT HEIGHT | 73 mm |
| PRODUCT WIDTH | 17.7 mm |
| PRODUCT WEIGHT | 0.12 kg |
| COMPLIANCES | RoHS conform |
| MODEL CODE | PL6-D6/1 |



Powering Business Worldwide

Delivery program

| | |
|--------------------|---|
| APPLICATION | <ul style="list-style-type: none">• Switchgear for residential and commercial applications• xPole - Switchgear for residential and commercial applications |
|--------------------|---|

| | |
|------------------------------------|-------------|
| NUMBER OF POLES | Single-pole |
| NUMBER OF POLES (TOTAL) | 1 |
| NUMBER OF POLES (PROTECTED) | 1 |
| TRIPPING CHARACTERISTIC | D |
| RELEASE CHARACTERISTIC | D |
| AMPERAGE RATING | 6 A |

| | |
|-------------|---|
| TYPE | <ul style="list-style-type: none">• Miniature circuit breaker• PL6 |
|-------------|---|

Technical data - electrical

| | |
|---|-------|
| VOLTAGE TYPE | AC |
| RATED OPERATIONAL VOLTAGE (UE) - MAX | 230 V |
| RATED INSULATION VOLTAGE (UI) | 440 V |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 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 | 1 |
|--|---|

| | |
|-----------------------|---------|
| BUILT-IN DEPTH | 70.5 mm |
|-----------------------|---------|

| | |
|-----------------------------|------|
| DEGREE OF PROTECTION | IP20 |
|-----------------------------|------|

| | |
|---|-------------------|
| 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 |
|--|--------------------|

Design verification as per IEC/EN 61439 - technical data

| | |
|--|-----|
| RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) | 6 A |
|--|-----|

| | |
|---|-----|
| HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT | 0 W |
|---|-----|

| | |
|--|-------|
| EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT | 1.5 W |
|--|-------|

| | |
|---|-----|
| 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. |
|---|--|

| | |
|---|--|
| 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 | Is the panel builder's responsibility. |
|---|--|

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 |
|------------------|----------------------------------|

INSULATING MATERIAL

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.

Resources**CATALOGUES**

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

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

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

CHARACTERISTIC CURVE

[eaton-xpole-mmc4-6-m-mcb-characteristic-curve-003.jpg](#)

DECLARATIONS OF CONFORMITY

[DA-DC-03_PL6](#)

DRAWINGS

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

[eaton-xpole-mmc4-6-m-mcb-3d-drawing-005.jpg](#)

INSTALLATION INSTRUCTIONS

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

MCAD MODEL

[pls_1p.dwg pls_1p.stp](#)

WIRING DIAGRAMS

[eaton-xpole-mmc4-6-m-mcb-wiring-diagram-002.jpg](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



Eaton Corporation plc

Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2025 Eaton. All Rights Reserved.

Follow us on social media to get the latest product and support information.

