

Specifications



Photo is representative



Eaton 278577

Eaton Moeller series xEffect - FAZ MCB. FAZ, 1-pole, tripping characteristic: D, rated current In: 5 A

General specifications

| | |
|-----------------------------|--|
| PRODUCT NAME | Eaton Moeller series xEffect - FAZ MCB |
| CATALOG NUMBER | 278577 |
| MODEL CODE | FAZ-D5/1 |
| EAN | 4015082785772 |
| PRODUCT LENGTH/DEPTH | 80 mm |
| PRODUCT HEIGHT | 75.5 mm |
| PRODUCT WIDTH | 17.7 mm |
| PRODUCT WEIGHT | 0.111 kg |
| COMPLIANCES | UL CSA09 (with supplementary protector only) RoHS conform |
| CERTIFICATIONS | UL 1077 IEC/EN 60898 CSA (File No. 204453) CSA (Class No. 3215-30) UL (File No. E177451) UL (Category Control Number QVNU2, QVNU8) North America (UL recognized, CSA certified) CSA-C22.2 No. 235 CE marking IEC/EN 60947-2 EN45545-2 IEC 61373 |
| CATALOG NOTES | Magnetic range for higher startup inrush levels that are usually seen in motors and transformers, and other high inductive systems. |

Delivery Programme

APPLICATION

- Branch circuits, not as BCPD
- Switchgear for industrial and advanced commercial applications
- xEffect - Switchgear for industrial and advanced commercial applications

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| NUMBER OF POLES | Single-pole |
|-----------------|-------------|

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| NUMBER OF POLES (TOTAL) | 1 |
|-------------------------|---|

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| NUMBER OF POLES (PROTECTED) | 1 |
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| TRIPPING CHARACTERISTIC | D |
|-------------------------|---|

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|------------------------|---|
| RELEASE CHARACTERISTIC | D |
|------------------------|---|

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| AMPERAGE RATING | 5 A |
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| TYPE | <ul style="list-style-type: none"> • FAZ • Miniature circuit breaker |
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Technical data - electrical

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| VOLTAGE TYPE | AC |
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|----------------|---------------------|
| VOLTAGE RATING | 240 V AC / 415 V AC |
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| VOLTAGE RATING (UL CSA 13) | 277 V AC; 48 V DC |
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| RATED OPERATIONAL VOLTAGE (UE) - MAX | 230 V |
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| RATED INSULATION VOLTAGE (UI) | 440 V |
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| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 4 kV |
|--|------|

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|------------------------|-------|
| FREQUENCY RATING - MIN | 50 Hz |
|------------------------|-------|

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|------------------------|-------|
| FREQUENCY RATING - MAX | 60 Hz |
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| RATED SWITCHING CAPACITY (IEC/EN 60947-2) | 15 kA |
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| RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 230 V | 10 kA |
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| RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 400 V | 10 kA |
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| RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 230 V | 15 kA |
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| RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 400 V | 15 kA |
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| OVERVOLTAGE CATEGORY | III |
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| POLLUTION DEGREE | 2 |
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Technical data - mechanical

**WIDTH IN NUMBER OF
MODULAR SPACINGS**

1

BUILT-IN DEPTH

70.5 mm

DEGREE OF PROTECTION

IP20 (IEC)
UL/CSA Type: -
IP20

**CONNECTABLE
CONDUCTOR CROSS
SECTION (SOLID-CORE) -
MIN**

1 mm²

**CONNECTABLE
CONDUCTOR CROSS
SECTION (SOLID-CORE) -
MAX**

25 mm²

**CONNECTABLE
CONDUCTOR CROSS
SECTION (MULTI-WIRED)
- MIN**

1 mm²

**CONNECTABLE
CONDUCTOR CROSS
SECTION (MULTI-WIRED)
- MAX**

25 mm²

Design verification as per IEC/EN 61439 - technical data

**RATED OPERATIONAL
CURRENT FOR SPECIFIED
HEAT DISSIPATION (IN)**

5 A

**HEAT DISSIPATION PER
POLE, CURRENT-
DEPENDENT**

0 W

**EQUIPMENT HEAT
DISSIPATION, CURRENT-
DEPENDENT**

1.7 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

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| 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

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| 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 | FAZ 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-xeffect-industrial-switchgear-range-catalog-ca003002en-en-us.pdf |
| CHARACTERISTIC CURVE | eaton-xeffect-faz-mcb-characteristic-curve.jpg |
| DECLARATIONS OF CONFORMITY | DA-DC-03 FAZ-DU DA-DC-03 FAZ-B-C-D |
| DRAWINGS | eaton-xeffect-faz-mcb-dimensions.jpg eaton-mcb-faz-xeffect-faz-3d-drawing.eps eaton-xeffect-faz-mcb-3d-drawing-011.jpg eaton-xeffect-faz-mcb-3d-drawing-012.jpg eaton-xeffect-faz-mcb-3d-drawing-003.jpg |
| ECAD MODEL | ETN.FAZ-D5 1.edz |
| INSTALLATION INSTRUCTIONS | eaton-rccb-rcbo-g9-il019140zu.pdf |
| MCAD MODEL | eaton-faz_mcb_1p-drawing.dwg eaton-faz_mcb_1p-3d-model.stp |
| PEP ECO-PASSPORT | EATO-00047-V01.01-EN |
| WIRING DIAGRAMS | eaton-mcb-xeffect-faz-wiring-diagram.eps eaton-xpole-mmc4-6-m-mcb-wiring-diagram-002.jpg |

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|-----------------|
| PROJECT NAME: |
| PROJECT NUMBER: |
| PREPARED BY: |
| DATE: |



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