



Eaton 170233

Eaton Distribution parts. Residual-current circuit breaker trip block for FAZ, 40A, 4p, 500mA, type A

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PRODUCT NAME	Eaton Moeller series xEffect - FBSmV RCCB add- on unit
CATALOG NUMBER	170233
PRODUCT LENGTH/DEPTH	90 mm
PRODUCT HEIGHT	75 mm
PRODUCT WIDTH	125 mm
PRODUCT WEIGHT	0.268 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	EN45545-2 IEC 61373 IEC/EN 61009

USED WITH

Type A
FBSmV
Add-on residual current
protection unit

AMPERAGE RATING

40 A

FEATURES

Additional equipment
possible
Add-on residual current
protection unit

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.

**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

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[eaton-pbsm-
dimensions.jpg](#)

	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 INSULATING MATERIAL	Is the panel builder's responsibility.
FITTED WITH:	Interlocking device
FRAME	45 mm
FREQUENCY RATING	50 Hz
POLLUTION DEGREE	2
MOUNTING METHOD	DIN rail Permanent screw connection with FAZ
CLIMATIC PROOFING	25-55 °C / 90-95% relative humidity according to IEC 60068-2
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	22 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	0 kA 10 kA
BUILT-IN WIDTH (NUMBER OF UNITS)	125 mm (4 SU)
BUSBAR MATERIAL THICKNESS	0.8 mm - 2 mm
TERMINAL PROTECTION	Finger and hand touch

	safe, DGUV VS3, EN 50274
TERMINALS (TOP AND BOTTOM)	Lift terminals
AMBIENT OPERATING TEMPERATURE - MAX	40 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
BUILT-IN DEPTH	70 mm
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	35 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	0.75 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	35 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	0.75 mm ²
FAULT CURRENT RATING	500 mA
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MAX	60 °C
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MIN	-35 °C
DEGREE OF PROTECTION	IP20 IP20, IP40 with suitable enclosure
IMPULSE WITHSTAND CURRENT	Partly surge-proof 250 A
NUMBER OF POLES	Four-pole
LEAKAGE CURRENT TYPE	A
TYPE	Ambient temperature hint: Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C
SPECIAL FEATURES	Add-on residual current protection

- unit
- FBSmV
- Type A

APPLICATION

- Switchgear for industrial and advanced commercial applications
- xEffect - Switchgear for industrial and advanced commercial applications

SENSITIVITY TYPE Pulse-current sensitive

RATED FAULT CURRENT - MAX 0.5 A

RATED FAULT CURRENT - MIN 0.5 A

RATED INSULATION VOLTAGE (UI) 440 V

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 40 A

RATED OPERATIONAL VOLTAGE (UE) - MAX 415 V

STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT 0 W

SURGE CURRENT CAPACITY 0.25 kA

VOLTAGE RATING - MAX 415 V

VOLTAGE RATING - MIN 240 V

WIDTH IN NUMBER OF MODULAR SPACINGS 7

TRIPPING TIME Non-delayed

RATED SHORT-CIRCUIT STRENGTH Same as connected FAZ up to max. 10 kA

POWER LOSS 8.9 W

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:



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