



Eaton 190791

Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB. Miniature circuit breaker (MCB), 50 A, 3p, characteristic: C, NA

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PRODUCT NAME	Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB
CATALOG NUMBER	190791
PRODUCT LENGTH/DEPTH	105 mm
PRODUCT HEIGHT	75.5 mm
PRODUCT WIDTH	53.1 mm
PRODUCT WEIGHT	0.382 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC 60947-2 North America (UL listed, CSA certified) IEC/EN 60947-2 UL 489, CSA C22.2 No. 5 UL 489 CSA (Class No. 1432-01) UL (Category Control Number DIVQ) Specially designed for North America, suitable as BCPD CE marking CSA-C22.2 No. 5-09 UL (File No. E235139) CSA (File No. 204453) EN45545-2 IEC 61373



Powering Business Worldwide

USED WITH

FAZ-XAA-NA110-415V AC 102036 (Shunt trip release) FAZ-XAA-NA12-110V AC 102037 (Shunt trip release)
 Miniature circuit breaker FAZ-NA
 FAZ-XAA-NA110-415V AC 102036 (Shunt trip release)
 FAZ-XAA-NA12-110V AC 102037 (Shunt trip release)

AMPERAGE RATING

50 A

VOLTAGE RATING

277 V AC / 480 V AC

FEATURES

Additional equipment possible

ACCESSORIES REQUIRED

Z-IHK-NA 113895

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.

CHARACTERISTIC CURVE

[eaton-xeffect-faz-na,-mcb-dimensions-003.jpg](#)

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[eaton-xpole-mm4-6-m-mcb-wiring-diagram-005.jpg](#)

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 INSULATING MATERIAL	Is the panel builder's responsibility.
FITTED WITH:	Z-IS/SPE-1TE 274418
FRAME	45 mm
POLLUTION DEGREE	2
LIFESPAN, MECHANICAL	10000 operations
MOUNTING METHOD	Top-hat rail IEC/EN 60715
DEGREE OF PROTECTION	UL/CSA Type: - IP40 (when fitted) IP20 (IEC) IP20
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
ADMISSIBLE BACK-UP FUSE - MAX	125 A gL/gG
BREAKING CAPACITY	10 kA (UL489)
TERMINAL PROTECTION	Finger and hand touch

	safe, DGUV VS3, EN 50274
TERMINALS (TOP AND BOTTOM)	Lift terminal / ring-tongue
TRIPPING CHARACTERISTIC	C
AMBIENT OPERATING TEMPERATURE - MAX	75 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (UL) - MAX	40 °C
BUILT-IN DEPTH	60 mm
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	25 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	25 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1 mm ²
CURRENT LIMITING CLASS	3
ENCLOSURE WIDTH	105 mm
FREQUENCY RATING - MAX	60 Hz
FREQUENCY RATING - MIN	50 Hz
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
INTERNAL RESISTANCE AT ROOM TEMPERATURE (SINGLE-POLE, 50 HZ)	1.6 mΩ
DIRECTION OF INCOMING SUPPLY	As required
WIDTH IN NUMBER OF MODULAR SPACINGS	3
VOLTAGE RATING (IEC/EN 60947-2)	240 V AC / 415 V AC
VOLTAGE RATING (UL)	240 V

VOLTAGE RATING AT DC	60 V DC
AMBIENT OPERATING TEMPERATURE (UL) - MIN	-5 °C
VOLTAGE TYPE	AC
CONTACT POSITION INDICATOR COLOR	Red / green
MOUNTING POSITION	As required
OVERVOLTAGE CATEGORY	III
NUMBER OF POLES	Three-pole
FUNCTIONS	Current limiting circuit breaker
LIFESPAN, ELECTRICAL	min. 1500 operations min. 6000 operations (UL)
RELEASE CHARACTERISTIC	C
TYPE	• FAZ-NA • Miniature circuit breaker
SPECIAL FEATURES	• Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity • Tripping signal contact for subsequent installation Z-NHK 248434
APPLICATION	• Feeder circuits, branch circuits • Switchgear for export to North America (UL-listed) • xEffect - Switchgear for industrial and advanced commercial applications
MOUNTING WIDTH	17.7 mm
SELECTIVITY CLASS	3
MOUNTING WIDTH PER POLE	17.7 mm
NUMBER OF POLES (PROTECTED)	3
NUMBER OF POLES	3

(TOTAL)	
OPERATIONAL SWITCHING CAPACITY	7.5 kA
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	50 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	240 V
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60898-1) - ICN AT 230 V	15 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60898-1)- ICN AT 400 V	15 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)- ICU AT 230 V	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)- ICU AT 400 V	14 kA
RATED SWITCHING CAPACITY (IEC/EN 60947-2)	15 kA
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W
SUITABLE FOR	Flush-mounted installation
TERMINAL CAPACITY (CONTROL CABLE)	25 mm ² (1x)
TERMINAL CAPACITY OF SCREW TERMINALS FOR MAIN CABLE	10 mm ² (2x)
TIGHTENING TORQUE	UL: 2.4 Nm (21 lb-in) for AWG 18 - AWG 12 UL: 4 Nm (36 lb-in) for AWG 6 Max. 2.4 Nm UL: 2.8 Nm (25 lb-in) for AWG 10 - AWG 8
POWER LOSS	13.2 W

