

Specifikace



Eaton 170296

Eaton Moeller series xEffect - FRCmM Type AC, A, U, R RCCB. Residual current circuit breaker (RCCB), 63A, 4p, 30mA, type G/A

General specifications

PRODUCT NAME	Eaton Moeller series xEffect - FRCmM Type AC, A, U, R RCCB
CATALOG NUMBER	170296
EAN	4015081667949
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	80 mm
PRODUCT WIDTH	70 mm
PRODUCT WEIGHT	0.368 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	ÖVE E 8601 EN45545-2 IEC 61373 IEC/EN 61008
MODEL CODE	FRCMM-63/4/003-G/A



Powering Business Worldwide

Portfolio

APPLICATION

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

NUMBER OF POLES

Four-pole

TRIPPING TIME

Short time-delayed
10 ms delayed

AMPERAGE RATING

63 A

RATED SHORT-CIRCUIT STRENGTH

10 kA with back-up fuse

FAULT CURRENT RATING

30 mA

SENSITIVITY TYPE

Pulse-current sensitive

IMPULSE WITHSTAND CURRENT

3 kA (8/20 µs) surge-proof

TYPE

- Current test marks as per inscription
- Maximum operating temperature is 75 °C: Starting at 40 °C, the max. permissible continuous current decreases by 1.8% for every 1 °C

Technické údaje – elektrické

VOLTAGE RATING (IEC/EN 60947-2)

240 V AC / 415 V AC

RATED OPERATIONAL VOLTAGE (UE) - MAX

415 V

RATED INSULATION VOLTAGE (UI)

440 V

RATED IMPULSE WITHSTAND VOLTAGE (UIMP)

4 kV

RATED FAULT CURRENT - MIN

0.03 A

RATED FAULT CURRENT - MAX

0.03 A

FREQUENCY RATING

50 Hz / 60 Hz

SHORT-CIRCUIT RATING

63 A (max. admissible back-up fuse)

LEAKAGE CURRENT TYPE

A

RATED RESIDUAL MAKING AND BREAKING CAPACITY

630 A

ADMISSIBLE BACK-UP FUSE OVERLOAD - MAX

63 A gG/gL

RATED SHORT-TIME WITHSTAND CURRENT (ICW)

10 kA

SURGE CURRENT CAPACITY

3 kA

TEST CIRCUIT RANGE

184 V AC - 440 V AC

POLLUTION DEGREE

2

LIFESPAN, ELECTRICAL

4000 operations

Technické údaje – mechanické

FRAME	45 mm
WIDTH IN NUMBER OF MODULAR SPACINGS	4
BUILT-IN WIDTH (NUMBER OF UNITS)	70 mm (4 SU)
BUILT-IN DEPTH	70.5 mm
MOUNTING METHOD	DIN rail Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715
MOUNTING POSITION	As required
DEGREE OF PROTECTION	IP20 IP20, IP40 with suitable enclosure
STATUS INDICATION	White / blue
TERMINALS (TOP AND BOTTOM)	Twin-purpose terminals
TERMINAL CAPACITY (SOLID WIRE)	1.5 mm ² - 35 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1.5 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	35 mm ²
TERMINAL CAPACITY (STRANDED CABLE)	16 mm ² (2x)
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1.5 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	16 mm ²
TERMINAL CAPACITY (CABLE)	M5 (with cross-recessed screw as defined in EN ISO 4757-Z2, PZ2)
TERMINAL PROTECTION	Finger and hand touch safe, DGUV VS3, EN 50274
TIGHTENING TORQUE	2 Nm - 2.4 Nm
CONTACT POSITION INDICATOR COLOR	Red / green
BUSBAR MATERIAL THICKNESS	0.8 mm - 2 mm

Ověření návrhu podle ČSN EN 61439 – technické údaje

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	63 A
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	3.35 W
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	13.4 W
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W
HEAT DISSIPATION CAPACITY	0 W
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE - MAX	40 °C

LIFESPAN, MECHANICAL	20000 operations
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MIN	-35 °C
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MAX	60 °C
CLIMATIC PROOFING	25-55 °C / 90-95% relative humidity according to IEC 60068-2

Ověření návrhu podle ČSN 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.

Další informace

FEATURES	Residual current circuit breaker Additional equipment possible
FITTED WITH:	Interlocking device
FUNCTIONS	Short-time delayed tripping
SPECIAL FEATURES	• FRCmM • Residual current circuit breakers • Type G/A (ÖVE E 8601)
USED WITH	FRCmM Type G/A (ÖVE E 8601) Residual current circuit breakers

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.

Zdroje

ECAD MODEL

[ETN.FRCMM-63 4 003-G A.edz](#)

INSTALAČNÍ NÁVODY

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

MCAD MODEL

[eaton-residual-current-circuit-breakers-3d-models-f9-ul1053-4p.stp](#)

[eaton-residual-current-circuit-breakers-drawings-f9-ul1053-4p.dwg](#)

VÝKRESY

[eaton-circuit-breaker-xeffect-frcmm-rcb-dimensions.jpg](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATUM:



Eaton Corporation Plc.

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

© 2025 Eaton. Všechna práva vyhrazena.

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

