

Specificații



Imaginile sunt doar cu titlu informativ

Eaton 111916

Eaton Moeller series Power Defense - Molded Case Circuit Breaker. Circuit-breaker LZM, 4 p, 125A, C1-4-A125-I

General specifications

PRODUCT NAME	Eaton Moeller series Power Defense molded case circuit-breaker
CATALOG NUMBER	111916
EAN	4015081114641
PRODUCT LENGTH/DEPTH	88 mm
PRODUCT HEIGHT	145 mm
PRODUCT WIDTH	120 mm
PRODUCT WEIGHT	1.324 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	VDE 0660 IEC IEC/EN 60947
MODEL CODE	LZMC1-4-A125-I

EATON

Powering Business Worldwide

Delivery program

APPLICATION	Use in unearthed supply systems at 690 V
TYPE	Circuit breaker
CIRCUIT BREAKER FRAME TYPE	LZM1
NUMBER OF POLES	Four-pole
AMPERAGE RATING	125 A
RELEASE SYSTEM	Thermomagnetic release
FEATURES	Protection unit
SPECIAL FEATURES	<ul style="list-style-type: none"> • Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity I_{cn}) • Rated current = rated uninterrupted current: 125 A • Set value in neutral conductor is synchronous with set value I_r of main pole.

Technical Data - Electrical

VOLTAGE RATING	690 V - 690 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	6000 V
CURRENT RATING OF NEUTRAL CONDUCTOR	200% of phase conductor
RATED OPERATIONAL CURRENT	125 A (415 V AC-3, making and breaking capacity) 160 A (380/400 V AC-1, making and breaking capacity) 160 A (690 V AC-1, making and breaking capacity) 125 A (415 V AC-1, making and breaking capacity) 125 A (660-690 V AC-3, making and breaking capacity)
AMPERAGE RATING	125 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	750 A
INSTANTANEOUS CURRENT SETTING (II) - MAX	1250 A
OVERLOAD CURRENT SETTING (IR)	100 A - 125 A
OVERLOAD CURRENT SETTING (IR) - MIN	100 A
OVERLOAD CURRENT SETTING (IR) - MAX	125 A
SHORT DELAY CURRENT SETTING (ISD) - MIN	0 A
SHORT DELAY CURRENT SETTING (ISD) - MAX	0 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	750 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	1250 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	55 kA
RATED SHORT-CIRCUIT	36 kA

BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	22.5 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	6 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	121 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	76 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	63 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	24 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ	14 kA
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Frame clamp
ISOLATION	300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
NUMBER OF OPERATIONS PER HOUR - MAX	120
HANDLE TYPE	Rocker lever
UTILIZATION CATEGORY	A (IEC/EN 60947-2)
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
LIFESPAN, ELECTRICAL	10000 operations at 415 V AC-1 7500 operations at 415 V AC-3 7500 operations at 690 V AC-1 5000 operations at 690 V AC-3 10000 operations at 400 V

AC-1

**DIRECTION OF
INCOMING SUPPLY**

As required

Technical Data - Mechanical

MOUNTING METHOD	DIN rail (top hat rail) mounting optional Built-in device fixed built-in technique Fixed
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MOUNTING METHOD	DIN rail (top hat rail) mounting optional Built-in device fixed built-in technique Fixed
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DEGREE OF PROTECTION	In the area of the HMI devices: IP20 (basic protection type) IP20
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DEGREE OF PROTECTION (IP), FRONT SIDE	IP66 (with door coupling rotary handle) IP40 (with insulating surround)
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DEGREE OF PROTECTION (TERMINATIONS)	IP10 (tunnel terminal) IP00 (terminations, phase isolator and band terminal)
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PROTECTION AGAINST DIRECT CONTACT	Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
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SHOCK RESISTANCE	20 g (half-sinusoidal shock 20 ms)
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NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
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NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
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NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
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POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Front side
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CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
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SPECIAL FEATURES	<ul style="list-style-type: none"> Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit
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Technical Data - Mechanical - Terminals

STANDARD TERMINALS	Box terminal
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TERMINAL CAPACITY (CONTROL CABLE)	0.75 mm ² - 1.5 mm ² (2x) 0.75 mm ² - 2.5 mm ² (1x)
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TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm ² (1x) at tunnel terminal
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TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	25 mm ² - 95 mm ² (1x) at tunnel terminal
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TERMINAL CAPACITY (COPPER BUSBAR)	M8 at rear-side screw connection Min. 12 mm x 5 mm direct at switch rear-side connection Max. 16 mm x 5 mm direct at switch rear-side connection
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TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	6 mm ² - 16 mm ² (2x) at box terminal 10 mm ² - 16 mm ² (1x) at box terminal 16 mm ² - 95 mm ² (1x) at tunnel terminal 10 mm ² - 16 mm ² (1x) direct at switch rear-side connection 6 mm ² - 16 mm ² (2x) direct at switch rear-side connection
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TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	25 mm ² - 95 mm ² (1x) at tunnel terminal 25 mm ² - 70 mm ² (1x) at box terminal 25 mm ² (2x) direct at switch rear-side connection 25 mm ² - 70 mm ² (1x) direct at switch rear-side connection 25 mm ² (2x) at box terminal
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TERMINAL CAPACITY (COPPER STRIP)	Max. 9 segments of 9 mm x 0.8 mm at box terminal Min. 2 segments of 9 mm x 0.8 mm at box terminal
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breaker (Rated short-circuit breaking capacity Icn)

- Rated current = rated uninterrupted current: 125 A
- Set value in neutral conductor is synchronous with set value Ir of main pole.

LIFESPAN, MECHANICAL 20000 operations

Design verification as per IEC/EN 61439 - technical data

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 125 A

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT 26.72 W

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 INSULATING MATERIAL	Is the panel builder's responsibility.
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.

Additional information

FUNCTIONS	System and cable protection
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Resurse

	eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-033.eps
CHARACTERISTIC CURVE	eaton-circuit-breaker-nzm-mccb-characteristic-curve-051.eps
	eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-039.eps
DESENE	eaton-circuit-breaker-nzm-mccb-dimensions-018.eps

DENUMIREA PROIECTULUI:

NUMĂRUL PROIECTULUI:

PREGĂTIT DE:

DATA:



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