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Eaton 269303

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 400A, H3-AE400-NA

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PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker electronic
CATALOG NUMBER	269303
PRODUCT LENGTH/DEPTH	166 mm
PRODUCT HEIGHT	297 mm
PRODUCT WIDTH	140 mm
PRODUCT WEIGHT	7.021 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC 60947-2 CSA (File No. 22086) UL (File No. E31593) Specially designed for North America UL listed UL/CSA IEC UL (Category Control Number DIVQ) CE marking CSA-C22.2 No. 5-09 CSA (Class No. 1432-01) UL 489 IEC/EN 60947 CSA certified



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AMPERAGE RATING	400 A
VOLTAGE RATING	690 V - 690 V
CIRCUIT BREAKER FRAME TYPE	NZM3
FEATURES	Motor drive optional 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 be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.

	eaton-circuit-breaker-nzm- mccb-characteristic-curve- 033.eps
CHARACTERISTIC CURVE	eaton-circuit-breaker-nzm- mccb-characteristic-curve- 030.eps
	eaton-circuit-breaker- tripping-characteristic- nzm-mccb-characteristic- curve.eps
00000	eaton-circuit-breaker- basic-device-nzmn-b- il01208009z.pdf
	eaton-circuit-breaker- switch-nzm-mccb- dimensions-016.eps
00	eaton-circuit-breaker-nzm- mccb-dimensions-020.eps
	eaton-circuit-breaker- switch-nzm-mccb-3d- drawing-002.eps

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	ls the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	ls the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
POLLUTION DEGREE	3
MOUNTING METHOD	Fixed Built-in device fixed built-in technique
	Fixed Built-in device fixed built-
MOUNTING METHOD	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT-	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 48 W
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE	Fixed Built-in device fixed built- in technique Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C -25 °C

NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
PROTECTION AGAINST DIRECT CONTACT	Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
DEGREE OF PROTECTION	IP20 IP20 (basic degree of protection, in the operating controls area)
DIRECTION OF INCOMING SUPPLY	As required
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
LIFESPAN, MECHANICAL	15000 operations
OVERVOLTAGE CATEGORY	Ш
RATED OPERATIONAL CURRENT	630 A (380/400 V AC-1, making and breaking capacity) 500 A (415 V AC-1, making and breaking capacity) 400 A (690 V AC -1, making and breaking capacity) 400 A (660-690 V AC-3, making and breaking capacity)
DEGREE OF PROTECTION (IP), FRONT SIDE	IP66 (with door coupling rotary handle) IP40 (with insulating surround)
DEGREE OF PROTECTION (TERMINATIONS)	IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal)
NUMBER OF POLES	Three-pole
TERMINAL CAPACITY (COPPER STRIP)	Max. 10 segments of 24 mm x 1 mm + 5 segments of 24 mm x 1 mm Max. 10 segments of 32 mm x 1 mm + 5 segments of 32 mm x 1 mm at rear- side connection (punched)
	10 segments of 50 mm x 1 mm (2x) at rear-side width extension

LIFESPAN, ELECTRICAL	Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Min. 6 segments of 16 mm x 0.8 mm at box terminal Min. 6 segments of 16 mm x 0.8 mm at rear-side connection (punched) 2000 operations at 400 V AC-3 2000 operations at 415 V AC-3 2000 operations at 690 V AC-3 3000 operations at 690 V AC-1 5000 operations at 400 V
FUNCTIONS	AC-1 Current limiting circuit breaker System and cable protection
ТҮРЕ	Circuit breaker
SPECIAL FEATURES	 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 Icn) Rated current = rated uninterrupted current: 400 A Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. Adjustable overload releases Ir R.m.s. value measurement and "thermal memory"
APPLICATION	Branch circuits, feeder circuits

 Use in unearthed supply systems at 690 V

SHOCK RESISTANCE	20 g (half-sinusoidal shock
	20 ms)
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Front side
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	400 A
RELEASE SYSTEM	Electronic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	3.3 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	3.3 kA
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	4400 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	800 A
TERMINAL CAPACITY (CONTROL CABLE)	14 mm² - 18 mm² (1x) 16 mm² - 18 mm² (2x)
TERMINAL CAPACITY (COPPER BUSBAR)	Min. 20 mm x 5 mm direct at switch rear-side connection Max. 10 mm x 50 mm (2x) at rear-side width extension M10 at rear-side screw connection
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	500 mm² (2x) at rear-side width extension 16 mm² - 185 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	2 mm ² - 500 mm ² (1x) at box terminal 350 mm ² (2x) direct at switch rear-side connection 4 mm ² - 350 mm ² (1x) at tunnel terminal 4 mm ² - 350 mm ² (1x) direct at switch rear-side

	connection
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	Max. 500 mm ² (1x) at 2- hole tunnel terminal Max. 500 mm ² (2x) at 2- hole tunnel terminal
HANDLE TYPE	Rocker lever
SHORT DELAY CURRENT SETTING (ISD) - MAX	0 A
SHORT DELAY CURRENT SETTING (ISD) - MIN	0 A
INSTANTANEOUS CURRENT SETTING (II) - MAX	4400 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	800 A
NUMBER OF OPERATIONS PER HOUR - MAX	60
OVERLOAD CURRENT SETTING (IR) - MAX	400 A
OVERLOAD CURRENT SETTING (IR) - MIN	200 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	130 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	33 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ	9 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	330 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	286 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	143 kA

RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ	74 kA
STANDARD TERMINALS	Screw terminal
RATED OPERATING VOLTAGE UE (UL) - MAX	600 V
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	330 kA
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	8000 V
RATED INSULATION VOLTAGE (UI)	1000 V AC

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
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Eaton House 30 Pembroke Road Dublin 4, □□□ Eaton.com

information.





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