Specifications

Photo is representative

Eaton 265988

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 4p, 800A, 500A in 4th pole, H4-4-VE800/500

General specifications

PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker electronic
CATALOG NUMBER	265988
MODEL CODE	NZMH4-4-VE800/500
EAN	4015082659882
PRODUCT LENGTH/DEPTH	401 mm
PRODUCT HEIGHT	207 mm
PRODUCT WIDTH	280 mm
PRODUCT WEIGHT	27 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947 IEC
GLOBAL CATALOG	265988

Powering Business Worldwide

Product specifications

AMPERAGE RATING	800 A
VOLTAGE RATING	690 V - 690 V
CIRCUIT BREAKER FRAME TYPE	NZM4
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.

Resources

BROCHURES	eaton-digital-nzm-brochure-br013003en-en-us.pdf eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf
CATALOGS	eaton-digital-nzm-catalog-ca013003en-en-us.pdf
CHARACTERISTIC CURVE	eaton-circuit-breaker-nzm-mccb-characteristic-curve-048.eps eaton-circuit-breaker-nzm-mccb-characteristic-curve-049.eps
DECLARATIONS OF CONFORMITY	eaton-molded-case-circuit-breaker-declaration-of-conformity-eu250294en.pdf
DRAWINGS	eaton-circuit-breaker-nzm-mccb-dimensions-023.eps
ECAD MODEL	ETN.265988.edz
INSTALLATION INSTRUCTIONS	eaton-circuit-breaker-basic-unit-nzmn4-il01210010z.pdf
INSTALLATION VIDEOS	The new digital NZM Range Introduction of the new digital circuit breaker NZM
MCAD MODEL	DA-CS-nzm4_4p DA-CD-nzm4_4p
PEP ECO-PASSPORT	eaton-molded-case-switches-pep-eato-00221-v0101-en.pdf
TECHNICAL DATA SHEETS	eaton-nzm-technical-information-sheet

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.
POLLUTION DEGREE	3
MOUNTING METHOD	Fixed Built-in device fixed built-in technique
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	79 W
UTILIZATION CATEGORY	B (IEC/EN 60947-2)
ISOLATION	300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	40 °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 (basic degree of protection, in the operating controls area) IP20
DIRECTION OF INCOMING SUPPLY	As required
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
CURRENT RATING OF NEUTRAL CONDUCTOR	500 A 200% of phase conductor
LIFESPAN, MECHANICAL	10000 operations
OVERVOLTAGE CATEGORY	III
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	Four-pole
TERMINAL CAPACITY (COPPER STRIP)	10 segments of 50 mm x 1 mm (2x) at 1-hole module plate Min. 5 segments of 25 mm x 1 mm at rear-side connection (punched) Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched) Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal 10 segments of 80 mm x 1 mm (2x) at rear-side width extension
LIFESPAN, ELECTRICAL	1000 operations at 690 V AC-3 3000 operations at 400 V

	AC-1 3000 operations at 415 V AC-1 2000 operations at 400 V AC-3 2000 operations at 690 V AC-1 2000 operations at 415 V AC-3
FUNCTIONS	Systems, cable, selectivity and generator protection
TYPE	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) • R.m.s. value measurement and “thermal memory” • Adjustable time delay setting to overcome current peaks tr at 6 x Ir also infinity (without overload releases) • Adjustable delay time tsd • i^2t constant function: switchable • Set value in neutral conductor is synchronous with set value Ir of main pole. • Rated current = rated uninterrupted current: 800 A • Reduced neutral conductor protection
APPLICATION	Use in unearthed supply systems at 690 V
SHOCK RESISTANCE	15 g (half-sinusoidal shock 11 ms)
POSITION OF	Front side

CONNECTION FOR MAIN CURRENT CIRCUIT	
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	800 A
RELEASE SYSTEM	Electronic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 25 ms (415 V); < 35 ms (> 415 V)
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	19.2 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	19.2 kA
SHORT-CIRCUIT RELEASE DELAYED SETTING - MAX	8000 A
SHORT-CIRCUIT RELEASE DELAYED SETTING - MIN	800 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	9600 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	1600 A
TERMINAL CAPACITY (CONTROL CABLE)	0.75 mm² - 2.5 mm² (1x) 0.75 mm² - 1.5 mm² (2x)
TERMINAL CAPACITY (COPPER BUSBAR)	M10 at rear-side screw connection Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate Min. 60 mm x 10 mm at rear-side width extension Max. 50 mm x 10 mm (2x) direct at switch rear-side connection Max. 80 mm x 10 mm (2x) at rear-side width extension Min. 25 mm x 5 mm direct at switch rear-side connection 50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 25 mm x 5 mm at rear-side 1-hole module plate
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	95 mm² - 185 mm² (2x) at rear-side 2-hole module plate 95 mm² - 240 mm² (6x) at rear-side width extension 50 mm² - 240 mm² (4x) at 4-hole tunnel terminal

	95 mm² - 300 mm² (2x) at rear-side 1-hole module plate 120 mm² - 300 mm² (1x) at rear-side 1-hole module plate 300 mm² (4x) at rear-side width extension 35 mm² - 185 mm² (4x) at rear-side 2-hole module plate
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 240 mm² (2x) at rear-side width extension 50 mm² (4x) at rear-side 2-hole module plate 70 mm² - 240 mm² (6x) at rear-side width extension 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	50 mm² - 185 mm² (4x) direct at switch rear-side connection 120 mm² - 185 mm² (1x) direct at switch rear-side connection
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	50 mm² - 240 mm² (4x) at 4-hole tunnel terminal
HANDLE TYPE	Rocker lever
SHORT DELAY CURRENT SETTING (ISD) - MAX	8000 A
SHORT DELAY CURRENT SETTING (ISD) - MIN	800 A
INSTANTANEOUS CURRENT SETTING (II) - MAX	9600 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	1600 A
NUMBER OF OPERATIONS PER HOUR - MAX	60
OVERLOAD CURRENT SETTING (IR) - MAX	800 A
OVERLOAD CURRENT SETTING (IR) - MIN	400 A
OVERLOAD CURRENT SETTING (IR)	250 A - 500 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS	63 kA

(IEC/EN 60947) AT 230 V, 50/60 HZ	
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ	37 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	187 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	187 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	100 kA
STANDARD TERMINALS	Screw terminal
OPTIONAL TERMINALS	Connection on rear. Strip terminal. Tunnel terminal
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	275 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:	
DATE:	

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