

Specifications



Photo is representative

Eaton 168893

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 4p, 500A, withdrawable unit, H3-4-A500-SVE

General specifications

PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker thermo-magnetic
CATALOG NUMBER	168893
MODEL CODE	NZMH3-4-A500-SVE
EAN	4015081653843
PRODUCT LENGTH/DEPTH	335 mm
PRODUCT HEIGHT	215.2 mm
PRODUCT WIDTH	185 mm
PRODUCT WEIGHT	8.81 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC

Additional information

FUNCTIONS	System and cable protection
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Delivery programme

AMPERAGE RATING	500 A
FEATURES	Motor drive optional Protection unit
NUMBER OF POLES	Four-pole
SPECIAL FEATURES	Rated current = rated uninterrupted current: 500 A

Design verification to IEC/EN 61439

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.
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	Does not apply, since the

Design verification to IEC/EN 61439 - technical data

AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	130.5 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	500 A

AGAINST ELECTRIC SHOCK	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.

Technical data - electrical

AMPERAGE RATING	500 A
CURRENT RATING OF NEUTRAL CONDUCTOR	200% of phase conductor
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
HANDLE TYPE	Rocker lever
INSTANTANEOUS CURRENT SETTING (II) - MAX	10 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	6 A
OVERLOAD CURRENT SETTING (IR)	400 A - 500 A
OVERLOAD CURRENT SETTING (IR) - MAX	500 A
OVERLOAD CURRENT SETTING (IR) - MIN	400 A
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 500 V DC	70 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 750 V DC	70 kA
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	5000 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	3000 A
VOLTAGE RATING	690 V - 690 V

Technical data - mechanical

DEGREE OF PROTECTION	IP20
MOUNTING METHOD	Built-in device plug-in technique
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Front side
SPECIAL FEATURES	Rated current = rated uninterrupted current: 500 A

Resources

BROCHURES	eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf
	eaton-digital-nzm-brochure-br013003en-en-us.pdf
CATALOGUES	eaton-digital-nzm-catalog-ca013003en-en-us.pdf
DECLARATIONS OF CONFORMITY	eaton-molded-case-circuit-breaker-declaration-of-conformity-eu250292en.pdf
	eaton-molded-case-circuit-breaker-declaration-of-conformity-uk251454en.pdf
ECAD MODEL	DA-CE-ETN.NZMH3-4-A500-SVE
INSTALLATION INSTRUCTIONS	eaton-circuit-breaker-plugin-adaptor-nzm2-il01219023z.pdf
INSTALLATION VIDEOS	Introduction of the new digital circuit breaker NZM
	The new digital NZM Range
MCAD MODEL	eaton-molded-case-switches-mcad-3d-models-nzm3-4p-xsve.stp
	eaton-molded-case-switches-mcad-drawings-nzm3-4p-xsve.dwg
PEP ECO-PASSPORT	eaton-molded-case-switches-pep-eato-00231-v0101-en.pdf
TECHNICAL DATA SHEETS	eaton-nzm-technical-information-sheet

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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