Specifications

Photo is representative

Eaton 112768

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 40A, plug-in module, N1-S40-SVE

General specifications

PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker magnetic
CATALOG NUMBER	112768
MODEL CODE	NZMN1-S40-SVE
EAN	4015081123087
PRODUCT LENGTH/DEPTH	90 mm
PRODUCT HEIGHT	201 mm
PRODUCT WIDTH	95 mm
PRODUCT WEIGHT	1.2 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC IEC/EN 60947
GLOBAL CATALOG	112768

Powering Business Worldwide

Product specifications

AMPERAGE RATING	40 A
VOLTAGE RATING	690 V - 690 V
CIRCUIT BREAKER FRAME TYPE	NZM1
ACCESSORIES REQUIRED	NZM1-XSVS
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-058.eps eaton-circuit-breaker-nzm-mccb-characteristic-curve.eps eaton-circuit-breaker-let-through-current-nzm-mccb-characteristic-curve-002.eps
DECLARATIONS OF CONFORMITY	eaton-molded-case-circuit-breaker-declaration-of-conformity-eu250289en.pdf
DRAWINGS	eaton-circuit-breaker-adapter-nzm-mccb-dimensions.eps eaton-circuit-breaker-switch-nzm-mccb-dimensions-014.eps eaton-circuit-breaker-nzm-mccb-dimensions-017.eps
INSTALLATION INSTRUCTIONS	eaton-cirucit-breaker-switch-disconnector-nzmb-il01203004z.pdf
INSTALLATION VIDEOS	Introduction of the new digital circuit breaker NZM The new digital NZM Range
MCAD MODEL	eaton-molded-case-switches-mcad-drawings-nzm1-xsve.dwg eaton-molded-case-switches-mcad-3d-models-nzm1-xsve.stp DA-CS-nzm1_xsve DA-CD-nzm1_xsve
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	Built-in device plug-in technique Plug-in unit
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	10.66 W
UTILIZATION CATEGORY	A (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
PROTECTION AGAINST DIRECT CONTACT	Finger and back-of-hand proof to VDE 0106 part 100

RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATING POWER AT AC-3, 230 V	11 kW
RATED OPERATING POWER AT AC-3, 400 V	18.5 kW
SWITCH OFF TECHNIQUE	Magnetic
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	Other
LIFESPAN, MECHANICAL	20000 operations
OVERVOLTAGE CATEGORY	III
RATED OPERATIONAL CURRENT	36 A (400 V AC-3)
DEGREE OF PROTECTION (IP), FRONT SIDE	IP40 (with insulating surround) IP66 (with door coupling rotary handle)
DEGREE OF PROTECTION (TERMINATIONS)	IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal)
NUMBER OF POLES	Three-pole
TERMINAL CAPACITY (COPPER STRIP)	Min. 2 segments of 9 mm x 0.8 mm at box terminal Max. 9 segments of 9 mm x 0.8 mm at box terminal
LIFESPAN, ELECTRICAL	7500 operations at 400 V AC-3 7500 operations at 415 V AC-3 10000 operations at 415 V AC-1 5000 operations at 690 V AC-3 7500 operations at 690 V AC-1 10000 operations at 400 V AC-1
FUNCTIONS	Short-circuit 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) • Motor protection in conjunction with overload relay • With short-circuit release • Without overload release Ir • IEC/EN 60947-4-1, IEC/EN 60947-2 • The circuit-breaker fulfills all requirements for AC-3 switching category. • Rated current = rated uninterrupted current: 40 A • Terminal capacity hint: Up to 95 mm² can be connected depending on the cable manufacturer.
APPLICATION	Use in unearthed supply systems at 690 V
SHOCK RESISTANCE	20 g (half-sinusoidal shock 20 ms)
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	40 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	560 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	320 A
HANDLE TYPE	Rocker lever
INSTANTANEOUS CURRENT SETTING (II) - MAX	14 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	8 A
NUMBER OF OPERATIONS PER HOUR -	120

MAX	
OVERLOAD CURRENT SETTING (IR) - MAX	0 A
OVERLOAD CURRENT SETTING (IR) - MIN	0 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	85 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	35 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	35 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ	7.5 kA
STANDARD TERMINALS	Box terminal
OPTIONAL TERMINALS	Connection on rear. Screw terminal. Tunnel terminal
RELEASE SYSTEM	Thermomagnetic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm^2 (1x) at tunnel terminal 10 mm^2 - 16 mm^2 (1x) direct at switch rear-side connection 10 mm^2 - 16 mm^2 (2x) direct at switch rear-side connection
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	25 mm^2 - 35 mm^2 (1x) direct at switch rear-side connection 25 mm^2 - 95 mm^2 (1x) at tunnel terminal 25 mm^2 - 35 mm^2 (2x) direct at switch rear-side connection
TERMINAL CAPACITY (CONTROL CABLE)	0.75 mm^2 - 1.5 mm^2 (2x) 0.75 mm^2 - 2.5 mm^2 (1x)
TERMINAL CAPACITY (COPPER BUSBAR)	M6 at rear-side screw connection Max. 16 mm x 5 mm direct at switch rear-side connection

	Min. 12 mm x 5 mm direct at switch rear-side connection
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	10 mm² - 16 mm² (1x) direct at switch rear-side connection 6 mm² - 16 mm² (2x) at box terminal 10 mm² - 16 mm² (1x) at box terminal 6 mm² - 16 mm² (2x) direct at switch rear-side connection 16 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	10 mm² - 70 mm² (1x) direct at switch rear-side connection 6 mm² - 25 mm² (2x) at box terminal 10 mm² - 70 mm² (1x) at box terminal 25 mm² (2x) direct at switch rear-side connection 25 mm² - 95 mm² (1x) at 1-hole tunnel terminal
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 400/415 V, 50/60 HZ	35 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	105 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	74 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	40 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ	17 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	187 kA
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	6000 V
POWER LOSS	2.7 W

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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