

Specifications



Eaton 107651

Eaton Series NZM motor protection circuit breaker, NZM2-frame, NZMB2, Magnetic only trip type, Three-pole, 1.6A, 25 kAIC, Motor protection without overload release

General specifications

PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker magnetic
CATALOG NUMBER	107651
MODEL CODE	NZMB2-S1,6-BT-CNA
EAN	4015081073177
PRODUCT LENGTH/DEPTH	149 mm
PRODUCT HEIGHT	195 mm
PRODUCT WIDTH	105 mm
PRODUCT WEIGHT	2.345 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	UL Listed UL/CSA CSA certified CSA (Class No. 1432-01) CSA (File No. 22086) Specially designed for North America UL (Category Control Number DKPU2) UL (File No. E31593) UL 489 CSA-C22.2 No. 5-09
GLOBAL CATALOG	107651
PRODUCT TYPE	Molded case circuit breaker



Powering Business Worldwide

Product specifications

AMPERAGE RATING	1.6 A
VOLTAGE RATING	440 V - 440 V
TRIP TYPE	Magnetic only
CIRCUIT BREAKER TYPE	NZMB2
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	Does not apply, since the

Resources

BROCHURES	eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf eaton-digital-nzm-brochure-br013003en-en-us.pdf
CATALOGS	eaton-digital-nzm-catalog-ca013003en-en-us.pdf eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-034.eps eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-030.eps eaton-circuit-breaker-nzm-mccb-characteristic-curve-052.eps
CHARACTERISTIC CURVE	eaton-molded-case-circuit-breaker-declaration-of-conformity-eu250290en.pdf eaton-molded-case-circuit-breaker-declaration-of-conformity-uk251452en.pdf
DECLARATIONS OF CONFORMITY	eaton-circuit-breaker-nzm-mccb-dimensions-019.eps eaton-circuit-breaker-switch-nzm-mccb-dimensions-017.eps eaton-circuit-breaker-switch-nzm-mccb-3d-drawing.eps
DRAWINGS	eaton-circuit-breakers-basic-device-nzm2-il01206006z.pdf
INSTALLATION INSTRUCTIONS	Introduction of the new digital circuit breaker NZM The new digital NZM Range
INSTALLATION VIDEOS	eaton-molded-case-switches-mcad-3d-models-nzm2-3p-na-cna-bt.stp
MCAD MODEL	

PROTECTION OF ASSEMBLIES	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
CLASS	Motor protection without overload release
LIFESPAN, MECHANICAL	20000 operations
MOUNTING METHOD	Fixed Built-in device fixed built-in technique DIN rail (top hat rail) mounting optional
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	5.76 W
INTERRUPT RATING	25 kAIC
ISOLATION	500 V AC (between auxiliary contacts and main contacts)
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	Frame clamp

	eaton-molded-case-switches-mcad-drawings-nzm2-3p-na-cna-bt.dwg
PEP ECO-PASSPORT	eaton-molded-case-switches-pep-eato-00245-v0101-en.pdf
SPECIFICATIONS AND DATASHEETS	Eaton Specification Sheet - 107651
TECHNICAL DATA SHEETS	eaton-nzm-technical-information-sheet

OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION (IP), FRONT SIDE	IP66 (with door coupling rotary handle) IP40 (with insulating surround)
DEGREE OF PROTECTION (TERMINATIONS)	IP10 (tunnel terminal) IP00 (terminations, phase isolator and strip terminal)
NUMBER OF POLES	Three-pole
TERMINAL CAPACITY (COPPER STRIP)	Min. 2 segments of 9 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 2 segments of 16 mm x 0.8 mm at rear-side connection (punched)
LIFESPAN, ELECTRICAL	7500 operations at 400 V AC-1 6500 operations at 415 V AC-3
FUNCTIONS	Short-circuit protection
TYPE	Circuit breaker
SPECIAL FEATURES	<ul style="list-style-type: none"> • Rated current = rated uninterrupted current: 1.6 A • This circuit-breaker is only allowed to be used for UL/CSA applications. • Motor protection in conjunction with contactor and overload relay • With short-circuit release • Without overload release I_r
APPLICATION	Branch circuits, feeder circuits
SHOCK RESISTANCE	20 g (half-sinusoidal shock 20 ms)
RELEASE SYSTEM	Thermomagnetic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
TERMINAL CAPACITY (CONTROL CABLE)	14 mm ² - 18 mm ² (1x)

TERMINAL CAPACITY (COPPER BUSBAR)	Min. 16 mm x 5 mm direct at switch rear-side connection M8 at rear-side screw connection Max. 20 mm x 5 mm direct at switch rear-side connection
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	6 mm ² - 12 mm ² (1x) at box terminal 16 mm ² (1x) at tunnel terminal 6 mm ² - 11 mm ² (1x) direct at switch rear-side connection
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	4 mm ² - 350 mm ² (1x) at tunnel terminal 4 mm ² - 350 mm ² (1x) at box terminal

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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