

DIGITAL NZM MOLDED CASE CIRCUIT BREAKER

192178



Overview

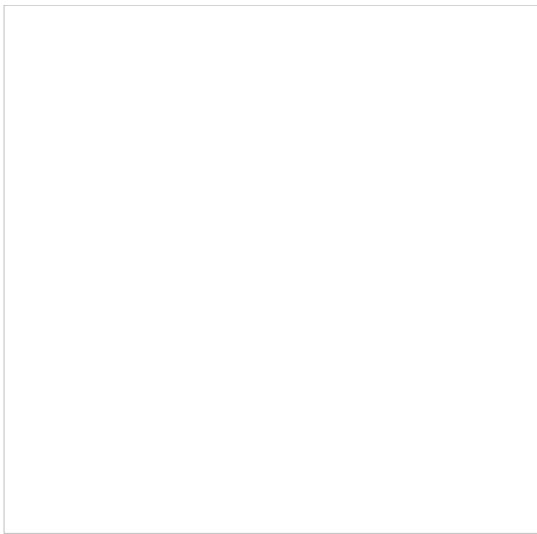


Specifications



Resources

Technical



192178

Eaton Moeller series NZM - Molded Case Circuit B
1, 100A, 3p, Screw terminal, plug-in technology, H,

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Photo is representative

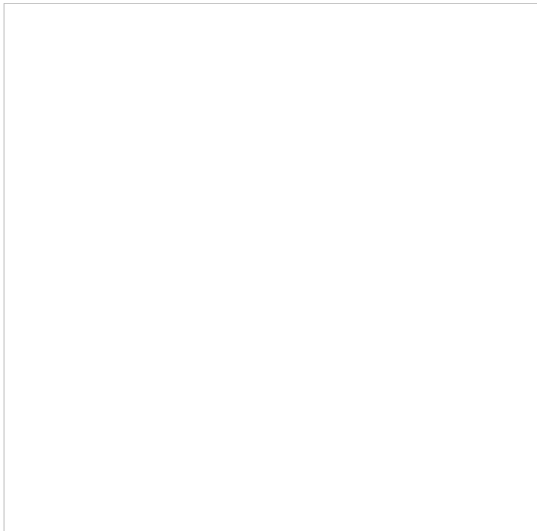


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259832

Eaton Moeller series NZM - Molded Case Circuit Breaker. Remote operator, 208-240VAC, for size 2

285557

Eaton Moeller series NZM - Molded Case Circuit Breaker. Earth-leakage circuit-breaker 0, 03-5 A

259763

Eaton Moeller series NZM - Molded Case Circuit Breaker. Shunt release, 208-240VAC/DC, 2/3

115391

Eaton Moeller series NZM - Molded Case Circuit Breaker. Remote operator, 208-240VAC, standard

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GENERAL SPECIFICATIONS

General specifications

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PRODUCT NAME Eaton Moeller series NZM molded case circuit breaker

CATALOG NUMBER 192178

Product specifications

>

MODEL CODE NZMH2-PX100-SVE

EAN 4015081927296

PRODUCT LENGTH/DEPTH 190 mm

PRODUCT HEIGHT 160 mm

PRODUCT WIDTH 115 mm

PRODUCT WEIGHT 2.4 kg

COMPLIANCES RoHS conform

CERTIFICATIONS IEC
IEC/EN 60947

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 100 A

10.11 SHORT-CIRCUIT RATING Is the panel builder's responsibility. The specifications must be observed.

RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ 5 kA

10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications must be observed.
MOUNTING METHOD	Plug-in unit Built-in device plug-in technique
AMPERAGE RATING	100 A
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
TERMINAL CAPACITY (COPPER STRIP)	Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Max. 10 segments of 24 mm x 0.8 mm at rear-side terminal 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 Min. 2 segments of 16 mm x 0.8 mm at rear-side terminal
HANDLE TYPE	Rocker lever
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
PROTECTION AGAINST DIRECT CONTACT	Finger and back-of-hand proof to DIN EN 50274/VD
TERMINAL CAPACITY (COPPER BUSBAR)	Max. 24 mm x 8 mm direct at switch rear-side connection Min. 16 mm x 5 mm direct at switch rear-side connection M8 at rear-side screw connection
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
SPECIAL FEATURES	LSI overload protection and delayed and non-delayed protective device Class 1 energy measurement, r.m.s. and "thermal memory" USB interface for configuration with Power Xpert Protection Manager software Inter equipment supplied. Optionally communication-capable Modbus RTU module or CAM Maximum back-up short-circuit currents at the installation location exceed capacity of the circuit breaker (Rated short-circuit breaking capacity) Rated current = rated uninterrupted current: 100 A
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Connection at separate chassis part
RATED INSULATION VOLTAGE (UI)	690 V AC
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	25 mm ² - 185 mm ² (1x) at 1-hole tunnel terminal 25 mm ² - 70 mm ² (2x) direct at switch rear-side connection 25 mm ² - 185 mm ² (1x) at box terminal 25 mm ² - 185 mm ² (1x) direct at switch rear-side connection 25 mm ² - 70 mm ² (2x) at box terminal
FEATURES	Motor drive optional Protection unit
LIFESPAN, ELECTRICAL	10000 operations at 400 V AC-1 7500 operations at 690 V AC-1

ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Other
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	8000 V
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	150 kA
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
UTILIZATION CATEGORY	A (IEC/EN 60947-2)
NUMBER OF POLES	Three-pole
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
TERMINAL CAPACITY (CONTROL CABLE)	0.75 mm ² - 2.5 mm ² (1x) 0.75 mm ² - 1.5 mm ² (2x)
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	8.25 W
INSTANTANEOUS CURRENT SETTING (II) - MIN	2 A
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the instruction leaflet (IL) is observed.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	150 kA
APPLICATION	Use in unearthed supply systems at 690 V
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	330 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	130 kA
SHORT-CIRCUIT RELEASE DELAYED SETTING - MAX	1000 A
DEGREE OF PROTECTION (IP), FRONT SIDE	IP40 (with insulating surround) IP66 (with door coupling rotary handle)
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	105 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ	40 kA

INSTANTANEOUS CURRENT SETTING (II) - MAX	18 A
OVERLOAD CURRENT SETTING (IR) - MIN	40 A
SHORT DELAY CURRENT SETTING (ISD) - MIN	2 A
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
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.
LIFESPAN, MECHANICAL	20000 operations
OVERLOAD CURRENT SETTING (IR) - MAX	100 A
VOLTAGE RATING	690 V - 690 V
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	10 mm ² - 16 mm ² (1x) at box terminal 10 mm ² - 16 mm ² (1x) direct at switch rear-side conn 6 mm ² - 16 mm ² (2x) at box terminal 6 mm ² - 16 mm ² (2x) direct at switch rear-side conn 16 mm ² (1x) at tunnel terminal
DEGREE OF PROTECTION (TERMINATIONS)	IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal)
SHORT-CIRCUIT RELEASE DELAYED SETTING - MIN	80 A
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	25 mm ² - 185 mm ² (1x) at tunnel terminal
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	200 A
DEGREE OF PROTECTION	IP20 IP20 (basic degree of protection, in the operating con
OVERVOLTAGE CATEGORY	III
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	1.9 kA
SHORT DELAY CURRENT SETTING (ISD) - MAX	10 A
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	1.9 kA
ACCESSORIES REQUIRED	NZM2-XSVS
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
RELEASE SYSTEM	Electronic release

RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	37.5 kA
OPTIONAL TERMINALS	Box terminal. Connection on rear. Tunnel terminal
POLLUTION DEGREE	3
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature. Eaton will provide heat dissipation data for the device.
FUNCTIONS	Systems, cable, selectivity and generator protection
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	1800 A
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	330 kA
STANDARD TERMINALS	Screw terminal
TYPE	Circuit breaker
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	286 kA
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
ISOLATION	300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
NUMBER OF OPERATIONS PER HOUR - MAX	120
CIRCUIT BREAKER FRAME TYPE	NZM2
DIRECTION OF INCOMING SUPPLY	As required
SHOCK RESISTANCE	20 g (half-sinusoidal shock 20 ms)
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm ² (1x) at tunnel terminal

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Brochures

Catalogs

Characteristic curve

Drawings

Installation instructions

Installation videos

mCAD model

Technical data sheets



Technical support

192178



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