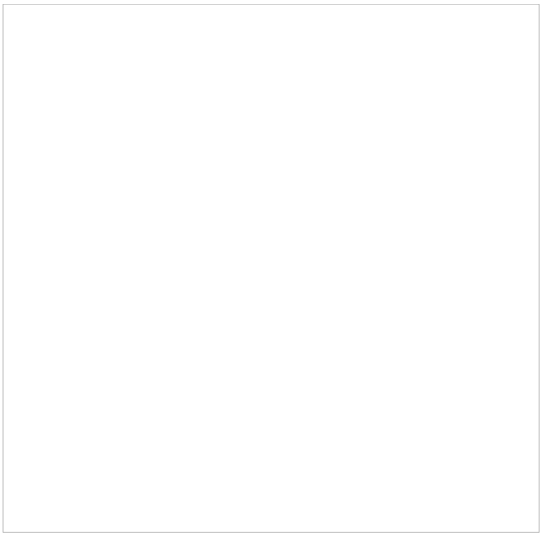
DIGITAL NZM MOLDED CASE CIRCUIT BREAKER

192165



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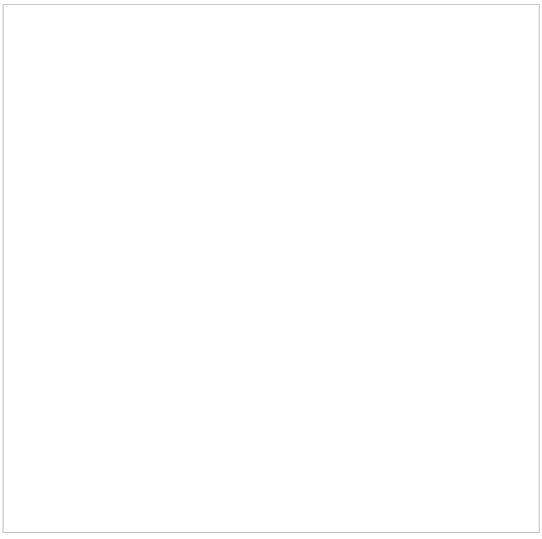

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192165

Eaton Moeller series NZM - Molded Case Circuit B
1, 160A, 3p, Screw terminal, plug-in technology, N,

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259832

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

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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 - Mol Circuit Breaker. Remote operator 240VAC, standard

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General specifications

Product specifications

GENERAL SPECIFICATIONS

PRODUCT NAME	Eaton Moeller series NZM molded case circuit break
CATALOG NUMBER	192165
MODEL CODE	NZMN2-PX160-SVE
EAN	4015081927166
PRODUCT LENGTH/DEPTH	190 mm
PRODUCT HEIGHT	160 mm
PRODUCT WIDTH	115 mm
PRODUCT WEIGHT	2.4 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947 IEC

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	160 A
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specificatio 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 specificatio must be observed.
MOUNTING METHOD	Plug-in unit DIN rail (top hat rail) mounting optional Built-in device plug-in technique
AMPERAGE RATING	160 A
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
TERMINAL CAPACITY (COPPER STRIP)	Max. 10 segments of 16 mm x 0.8 mm at box term Min. 2 segements of 16 mm x 0.8 mm at rear-side c Max. 10 segments of 24 mm x 0.8 mm at rear-side Max. 8 segments of 24 mm x 1 mm (2x) at box ter Min. 2 segments of 9 mm x 0.8 mm at box termina
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)	M8 at rear-side screw connection Max. 24 mm x 8 mm direct at switch rear-side conn Min. 16 mm x 5 mm direct at switch rear-side conn
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
SPECIAL FEATURES	LSI overload protection and delayed and non-delaye protective device Class 1 energy measurement, r.m.s and "thermal memory" USB interface for configuratio with Power Xpert Protection Manager software Inter equipment supplied. Optionally communication-cap Modbus RTU module or CAM Maximum back-up short-circuit currents at the installation location exce capacity of the circuit breaker (Rated short-circuit br Rated current = rated uninterrupted current: 160 A
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Front side
RATED INSULATION VOLTAGE (UI)	690 V AC
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	25 mm² - 185 mm² (1x) at box terminal 25 mm² - 185 mm² (1x) at 1-hole tunnel terminal 25 mm² - 70 mm² (2x) direct at switch rear-side con 25 mm² - 185 mm² (1x) direct at switch rear-side co 25 mm² - 70 mm² (2x) at box terminal
FEATURES	Motor drive optional Protection unit
	10000 operations at 415 V AC-1

LIFESPAN, ELECTRICAL	10000 operations at 400 V AC-1 7500 operations at 690 V AC-1
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
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	50 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 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	21.12 W
INSTANTANEOUS CURRENT SETTING (II) - MIN	2 A
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the inf 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	85 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	187 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	35 kA
SHORT-CIRCUIT RELEASE DELAYED SETTING - MAX	1600 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	53 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT	40 kA

690 V, 50/60 HZ	40 kA
INSTANTANEOUS CURRENT SETTING (II) - MAX	18 A
OVERLOAD CURRENT SETTING (IR) - MIN	64 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	160 A
VOLTAGE RATING	690 V - 690 V
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	16 mm² (1x) at tunnel terminal 6 mm² - 16 mm² (2x) at box terminal 6 mm² - 16 mm² (2x) direct at switch rear-side conn 10 mm² - 16 mm² (1x) at box terminal 10 mm² - 16 mm² (1x) direct at switch rear-side con
DEGREE OF PROTECTION (TERMINATIONS)	IP10 (tunnel terminal) IP00 (terminations, phase isolator and strip terminal
SHORT-CIRCUIT RELEASE DELAYED SETTING - MIN	320 A
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	25 mm² - 185 mm² (1x) at tunnel terminal
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	320 A
DEGREE OF PROTECTION	IP20 (basic degree of protection, in the operating co IP20
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	25 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 devi
FUNCTIONS	Systems, cable, selectivity and generator protection
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	2880 A
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	105 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	74 kA
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
ISOLATION	500 V AC (between auxiliary contacts and main cor 300 V AC (between the auxiliary 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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Characteristic curve

Drawings

Installation instructions

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mCAD model

Technical data sheets

Technical support

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