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Eaton 192071

Eaton Moeller series NZM - Molded Case Circuit Breaker. NZM2 PXR25, class 1, 100A, 4p, variable, Screw terminal, plug-in technology, S, 2

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PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker electronic
CATALOG NUMBER	192071
PRODUCT LENGTH/DEPTH	190 mm
PRODUCT HEIGHT	160 mm
PRODUCT WIDTH	145 mm
PRODUCT WEIGHT	3 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947 IEC



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AMPERAGE RATING	100 A
VOLTAGE RATING	690 V - 690 V
CIRCUIT BREAKER FRAME TYPE	NZM2
FEATURES	Motor drive optional Protection unit
ACCESSORIES REQUIRED	NZM2-4-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	ls 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.

CHARACTERISTIC CURVE	eaton-circuit-breaker-nzm- mccb-characteristic-curve- 024.eps
	eaton-circuit-breaker-nzm- mccb-characteristic-curve- 020.eps
00000	eaton-circuit-breaker-plug- in-adapter-nzm2- il01219023z.pdf
	eaton-circuit-breakers- nzmb-nzmn-basic-unit- bg2-instruction-leaflet- il012099zu.pdf
	eaton-circuit-breaker- adapter-nzm-mccb- dimensions-002.eps
	eaton-circuit-breaker-nzm- mccb-dimensions-035.eps

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 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	ls the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	ls the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF	Is the panel builder's
INSULATING MATERIAL	responsibility.
	responsibility.
INSULATING MATERIAL	<u> </u>
INSULATING MATERIAL POLLUTION DEGREE	3 Built-in device plug-in technique
POLLUTION DEGREE MOUNTING METHOD	Built-in device plug-in technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC
INSULATING MATERIAL POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT-	Built-in device plug-in technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
INSULATING MATERIAL POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT	Built-in device plug-in technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 8.25 W
INSULATING MATERIAL POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY	Built-in device plug-in technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 8.25 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and
INSULATING MATERIAL POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING	Built-in device plug-in technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 8.25 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
INSULATING MATERIAL POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING	Built-in device plug-in technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 8.25 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C

NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
PROTECTION AGAINST DIRECT CONTACT	Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
DEGREE OF PROTECTION	IP20 IP20 (basic degree of protection, in the operating controls area)
DIRECTION OF INCOMING SUPPLY	As required
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Other
CURRENT RATING OF NEUTRAL CONDUCTOR	0 - 60% - 100% of phase conductor
LIFESPAN, MECHANICAL	20000 operations
OVERVOLTAGE CATEGORY	Ш
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	Four-pole
TERMINAL CAPACITY (COPPER STRIP)	Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Min. 2 segements of 16 mm x 0.8 mm at rear-side connection (punched) Max. 10 segments of 24 mm x 0.8 mm at rear-side connection (punched) 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
LIFESPAN, ELECTRICAL	10000 operations at 415 V AC-1 10000 operations at 400 V AC-1 7500 operations at 690 V AC-1

FUNCTIONS	Systems, cable, selectivity and generator protection
TYPE	Circuit breaker
SPECIAL FEATURES	 LSI overload protection and delayed and non-delayed short-circuit protective device energy measurement, r.m.s. value measurement, and "thermal memory" USB interface for configuration and test function with Power Xpert Protection Manager software Interface module in equipment supplied. Optionally communication-capable with internal Modbus RTU module or CAM 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 lcn) Rated current = rated uninterrupted current: 100 A
APPLICATION	Use in unearthed supply systems at 690 V
SHOCK RESISTANCE	20 g (half-sinusoidal shock 20 ms)
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Connection at separate chassis part
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	100 A

RELEASE SYSTEM	Electronic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	1.9 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	1.9 kA
SHORT-CIRCUIT RELEASE DELAYED SETTING - MAX	1000 A
SHORT-CIRCUIT RELEASE DELAYED SETTING - MIN	80 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	1800 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	200 A
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)	Min. 16 mm x 5 mm direct at switch rear-side connection M8 at rear-side screw connection Max. 24 mm x 8 mm direct at switch rear-side connection
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	16 mm² (1x) at tunnel terminal 10 mm² - 16 mm² (1x) at box terminal 6 mm² - 16 mm² (2x) at box terminal 10 mm² - 16 mm² (1x) direct at switch rear-side connection 6 mm² - 16 mm² (2x) direct at switch rear-side connection
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	25 mm² - 185 mm² (1x) at box terminal 25 mm² - 185 mm² (1x) direct at switch rear-side connection 25 mm² - 185 mm² (1x) at 1-hole tunnel terminal 25 mm² - 70 mm² (2x) at box terminal 25 mm² - 70 mm² (2x) direct at switch rear-side

	connection
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	25 mm² - 185 mm² (1x) at tunnel terminal
HANDLE TYPE	Rocker lever
SHORT DELAY CURRENT SETTING (ISD) - MAX	10 A
SHORT DELAY CURRENT SETTING (ISD) - MIN	2 A
INSTANTANEOUS CURRENT SETTING (II) - MAX	18 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	2 A
NUMBER OF OPERATIONS PER HOUR - MAX	120
OVERLOAD CURRENT SETTING (IR) - MAX	100 A
OVERLOAD CURRENT SETTING (IR) - MIN	40 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	100 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	70 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	65 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	36 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ	3 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	154 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	143 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	80 kA
RATED SHORT-CIRCUIT	40 kA

MAKING CAPACITY ICM AT 690 V, 50/60 HZ	
STANDARD TERMINALS	Screw terminal
OPTIONAL TERMINALS	Box terminal. Connection on rear. Tunnel terminal
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	220 kA
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	8000 V
RATED INSULATION VOLTAGE (UI)	690 V AC

F	PROJECT NAME:
F	PROJECT NUMBER:
F	PREPARED BY:
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