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Eaton 191418

NZMN4-AX630. NZM4 PXR10 circuit breaker, 630A, 3p, screw terminal

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PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker electronic
CATALOG NUMBER	191418
PRODUCT LENGTH/DEPTH	375 mm
PRODUCT HEIGHT	170 mm
PRODUCT WIDTH	210 mm
PRODUCT WEIGHT	19 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC IEC/EN 60947



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AMPERAGE RATING	630 A
VOLTAGE RATING	690 V AC
CIRCUIT BREAKER FRAME TYPE	NZM4
FEATURES	Protection unit Motor drive optional
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.

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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	Is 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 INSULATING MATERIAL	ls the panel builder's responsibility.
POLLUTION DEGREE	3
LIFESPAN, MECHANICAL	10000 operations
LIFESPAN, MECHANICAL UTILIZATION CATEGORY	10000 operations A (IEC/EN 60947-2)
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UTILIZATION CATEGORY	A (IEC/EN 60947-2) Built-in device fixed built-in technique
MOUNTING METHOD	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to
UTILIZATION CATEGORY MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT-	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 65 W 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT ISOLATION AMBIENT OPERATING	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 65 W 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
UTILIZATION CATEGORY MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 65 W 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C
UTILIZATION CATEGORY MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 65 W 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C -25 °C
MOUNTING METHOD CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE TEMPERATURE - MAX AMBIENT STORAGE TEMPERATURE - MAX	A (IEC/EN 60947-2) Built-in device fixed built-in technique Fixed Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 65 W 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C -25 °C

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CONTACTS (CHANGE- OVER CONTACTS)	
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	Screw connection
OVERVOLTAGE CATEGORY	Ш
DEGREE OF PROTECTION (IP), FRONT SIDE	IP66 (with door coupling rotary handle) IP40 (with insulating surround)
DEGREE OF PROTECTION (TERMINATIONS)	IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal)
NUMBER OF POLES	Three-pole
TERMINAL CAPACITY (COPPER STRIP)	10 segments of 50 mm x 1 mm (2x) at 1-hole module plate Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal 10 segments of 80 mm x 1 mm (2x) at rear-side width extension Min. 5 segments of 25 mm x 1 mm at rear-side connection (punched) Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched) Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal
LIFESPAN, ELECTRICAL	3000 operations at 415 V AC-1 3000 operations at 400 V

	AC-1
FUNCTIONS	System and cable protection
ТҮРЕ	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 lcn) LI Overload and short-circuit protection R.m.s. value measurement and "thermal memory" USB interface for configuration and test function with Power Xpert Protection Manager software Rated current = rated uninterrupted current: 630 A
APPLICATION	Use in unearthed supply systems at 525 V
SHOCK RESISTANCE	15 g (half-sinusoidal shock 11 ms)
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Front side
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	630 A
RELEASE SYSTEM	Electronic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 25 ms (\(\Pi \) 415 V); < 35 ms (> 415 V)
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	12 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	12 kA
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING -	12 A

MAX	
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	2 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)	50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 60 mm x 10 mm at rear-side width extension M10 at rear-side screw connection Min. 25 mm x 5 mm direct at switch rear-side connection Max. 50 mm x 10 mm (2x) direct at switch rear-side connection Min. 25 mm x 5 mm at rear-side 1-hole module plate Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate Max. 80 mm x 10 mm (2x) at rear-side width extension
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	300 mm² (4x) at rear-side width extension 50 mm² - 240 mm² (4x) at 4-hole tunnel terminal 95 mm² - 185 mm² (2x) at rear-side 2-hole module plate 120 mm² - 300 mm² (1x) at rear-side 1-hole module plate 35 mm² - 185 mm² (4x) at rear-side 2-hole module plate 95 mm² - 300 mm² (2x) at rear-side 1-hole module plate
	95 mm ² - 240 mm ² (6x) at rear-side width extension
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	
(COPPER STRANDED	rear-side width extension 50 mm² - 185 mm² (4x) direct at switch rear-side connection 120 mm² - 185 mm² (1x) direct at switch rear-side
(COPPER STRANDED CONDUCTOR/CABLE) TERMINAL CAPACITY (ALUMINUM STRANDED	rear-side width extension 50 mm² - 185 mm² (4x) direct at switch rear-side connection 120 mm² - 185 mm² (1x) direct at switch rear-side connection 50 mm² - 240 mm² (4x) at

CURRENT SETTING (II) - MAX	
INSTANTANEOUS CURRENT SETTING (II) - MIN	1260 A
NUMBER OF OPERATIONS PER HOUR - MAX	60
OVERLOAD CURRENT SETTING (IR) - MAX	630 A
OVERLOAD CURRENT SETTING (IR) - MIN	252 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	37 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	37 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	26 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ	19 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ	15 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	110 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	77 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	55 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ	40 kA
STANDARD TERMINALS	Screw terminal
OPTIONAL TERMINALS	Connection on rear. Strip terminal. Tunnel terminal
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	110 kA
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY	6000 V

CONTACTS RATED IMPULSE WITHSTAND VOLTAGE 8000 V (UIMP) AT MAIN **CONTACTS RATED SHORT-CIRCUIT BREAKING CAPACITY ICU** 25 kA (IEC/EN 60947) AT 525 V, 50/60 HZ **RATED SHORT-CIRCUIT BREAKING CAPACITY ICU** 50 kA (IEC/EN 60947) AT 400/415 V, 50/60 HZ **RATED SHORT-CIRCUIT BREAKING CAPACITY ICU** 50 kA (IEC/EN 60947) AT 230 V, 50/60 HZ **RATED SHORT-CIRCUIT BREAKING CAPACITY ICU** 20 kA (IEC/EN 60947) AT 690 V, 50/60 HZ **RATED SHORT-CIRCUIT BREAKING CAPACITY ICU** 35 kA (IEC/EN 60947) AT 440 V, 50/60 HZ **RATED INSULATION** 690 V AC **VOLTAGE (UI)**

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