Eaton 191430

NZMN4-MX1400. NZM4 PXR20 circuit breaker, 1400A, 3p, screw terminal

PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker electronic
CATALOG NUMBER	191430
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

Powering Business Worldwide

AMPERAGE RATING	1400 A
VOLTAGE RATING	690 V - 690 V
CIRCUIT BREAKER FRAME TYPE	NZM4
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

DECLARATIONS OF CONFORMITY	DA-DC-03_N4
	eaton-circuit-breaker-basic-unit-bg4-il012101zu.pdf
	eaton-circuit-breaker-nzm-mccb-dimensions-022.eps

	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	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.
FITTED WITH:	Thermal protection
POLLUTION DEGREE	3
MOUNTING METHOD	Fixed Built-in device fixed built-in technique
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	217.56 W
UTILIZATION CATEGORY	B (IEC/EN 60947-2)
ISOLATION	300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C

AMBIENT STORAGE TEMPERATURE - MIN	40 °C
PROTECTION AGAINST DIRECT CONTACT	Finger and back-of-hand proof to VDE 0106 part 100
RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATING POWER AT AC-3, 230 V	450 kW
RATED OPERATING POWER AT AC-3, 400 V	800 kW
SWITCH OFF TECHNIQUE	Electronic
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
LIFESPAN, MECHANICAL	10000 operations
OVERVOLTAGE CATEGORY	III
RATED OPERATIONAL CURRENT	1354 A (400 V AC-3)
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)	Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched) 10 segments of 50 mm x 1 mm (2x) at 1-hole module plate 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)

	Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal
LIFESPAN, ELECTRICAL	1000 operations at 690 V AC-3 2000 operations at 400 V AC-3 2000 operations at 415 V AC-3 2000 operations at 690 V AC-1 3000 operations at 400 V AC-1 3000 operations at 415 V AC-1
FUNCTIONS	Phase failure sensitive Motor protection
TYPE	Circuit breaker
SPECIAL FEATURES	• IEC/EN 60947-2 with characteristic conforming to IEC/EN 60947-4-1 with phase failure sensitivity • The circuit-breaker fulfills all requirements for AC-3 switching category. • R.m.s. value measurement and “thermal memory” • Adjustable time delay setting to overcome current peaks tr at 6 x Ir also infinity (without overload releases) • All AC-3 rating data applies to direct switching by the circuit-breaker under normal operating conditions. If, for example, a contactor takes over AC-3 switching under normal operating conditions, the full rated uninterrupted

	current applies to the circuit-breaker, In = Iu. • 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 Icn) • Rated current = rated uninterrupted current: 1400 A
APPLICATION	Use in unearthed supply systems at 525 V
SHOCK RESISTANCE	15 g (half-sinusoidal shock 11 ms)
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	1400 A
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	19.2 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	19.2 kA
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	19600 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	2800 A
HANDLE TYPE	Rocker lever
INSTANTANEOUS CURRENT SETTING (II) - MAX	14 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	2 A
NUMBER OF OPERATIONS PER HOUR - MAX	60
OVERLOAD CURRENT SETTING (IR) - MAX	1400 A

OVERLOAD CURRENT SETTING (IR) - MIN	560 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	26 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
STANDARD TERMINALS	Screw terminal
OPTIONAL TERMINALS	Connection on rear. Strip terminal. Tunnel terminal
RELEASE SYSTEM	Electronic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 25 ms (415 V); < 35 ms (> 415 V)
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	50 mm^2 - 240 mm^2 (4x) at 4-hole tunnel terminal
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. 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. 60 mm x 10 mm at rear-side width extension 50 mm x 10 mm (2x) at rear-side 2-hole module plate Max. 80 mm x 10 mm (2x) at rear-side width extension Min. 25 mm x 5 mm at rear-side 1-hole module plate M10 at rear-side screw connection

	Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	95 mm^2 - 240 mm^2 (6x) at rear-side width extension 35 mm^2 - 185 mm^2 (4x) at rear-side 2-hole module plate 95 mm^2 - 185 mm^2 (2x) at rear-side 2-hole module plate 300 mm^2 (4x) at rear-side width extension 120 mm^2 - 300 mm^2 (1x) at rear-side 1-hole module plate 95 mm^2 - 300 mm^2 (2x) at rear-side 1-hole module plate 50 mm^2 - 240 mm^2 (4x) at 4-hole tunnel terminal
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	50 mm^2 - 185 mm^2 (4x) direct at switch rear-side connection 120 mm^2 - 185 mm^2 (1x) direct at switch rear-side connection
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 230 V, 50/60 HZ	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 400/415 V, 50/60 HZ	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 690 V, 50/60 HZ	20 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 440 V, 50/60 HZ	35 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ	105 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ	74 kA
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ	53 kA
RATED SHORT-CIRCUIT	40 kA

MAKING CAPACITY ICM AT 690 V, 50/60 HZ	
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ	105 kA
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	8000 V
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 525 V, 50/60 HZ	25 kA

PROJECT NAME:
PROJECT NUMBY:
PREPARED BY:
:

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