## Eaton 102906

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 1.2A

PRODUCT NAME	Eaton Moeller series NZM molded case circuit breaker magnetic
CATALOG NUMBER	102906
PRODUCT LENGTH/DEPTH	88 mm
PRODUCT HEIGHT	165.5 mm
PRODUCT WIDTH	90 mm
PRODUCT WEIGHT	1.046 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	UL (Category Control Number DKPU2) UL 489 Specially designed for North America CSA (File No. 22086) CSA (Class No. 1432-01) UL (File No. E31593) CSA certified UL listed CSA-C22.2 No. 5-09 UL/CSA



AMPERAGE RATING	1.2 A
VOLTAGE RATING	440 V - 440 V
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	Does not apply, since the entire switchgear needs to
IMPACT	be evaluated.
	be evaluated.  Meets the product standard's requirements.

	eaton-circuit-breaker- characteristic-power- defense-mccb- characteristic-curve- 038.eps
CHARACTERISTIC CURVE	eaton-circuit-breaker-nzm- mccb-characteristic-curve- 058.eps
	eaton-circuit-breaker- characteristic-power- defense-mccb- characteristic-curve- 032.eps
	eaton-cirucit-breaker- switch-disconnector- nzmb-il01203004z.pdf
	eaton-circuit-breaker-nzm- mccb-dimensions-017.eps
	eaton-circuit-breaker- switch-nzm-mccb- dimensions-014.eps
	eaton-circuit-breaker- switch-nzm-mccb-3d- drawing-006.eps

PROTECTION OF ASSEMBLIES	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	ls 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.
POLLUTION DEGREE	3
MOUNTING METHOD	Built-in device fixed built- in technique Fixed
MOUNTING METHOD  CLIMATIC PROOFING	in technique
	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC
CLIMATIC PROOFING  EQUIPMENT HEAT DISSIPATION, CURRENT-	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
CLIMATIC PROOFING  EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  1.78 W  500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the
CLIMATIC PROOFING  EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT  ISOLATION  AMBIENT OPERATING	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  1.78 W  500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the auxiliary contacts)
CLIMATIC PROOFING  EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT  ISOLATION  AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  1.78 W  500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the auxiliary contacts)
CLIMATIC PROOFING  EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT  ISOLATION  AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  1.78 W  500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the auxiliary contacts)  70 °C  -25 °C
CLIMATIC PROOFING  EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT  ISOLATION  AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE TEMPERATURE - MAX AMBIENT STORAGE	in technique Fixed  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  1.78 W  500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the auxiliary contacts)  70 °C  -25 °C

	100
RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATING POWER AT AC-3, 230 V	0.18 kW
RATED OPERATING POWER AT AC-3, 400 V	0.37 kW
SWITCH OFF TECHNIQUE	Magnetic
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
LIFESPAN, MECHANICAL	20000 operations
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION (IP), FRONT SIDE	IP40 (with insulating surround) IP66 (with door coupling rotary handle)
DEGREE OF PROTECTION (TERMINATIONS)	IP10 (tunnel terminal) IP00 (terminations, phase isolator and strip terminal)
NUMBER OF POLES	Three-pole
TERMINAL CAPACITY (COPPER STRIP)	Min. 2 segments of 9 mm x 0.8 mm at box terminal Max. 9 segments of 9 mm x 0.8 mm at box terminal
LIFESPAN, ELECTRICAL	7500 operations at 415 V AC-3
FUNCTIONS	Short-circuit protection
ТҮРЕ	Circuit breaker
SPECIAL FEATURES	<ul> <li>Rated current = rated uninterrupted current: 1.2 A</li> <li>This circuit-breaker is only allowed to be used for UL/CSA applications.</li> <li>Motor protection in conjunction with contactor and overload relay</li> </ul>

	<ul><li>With short-circuit release</li><li>Without overload release Ir</li></ul>
APPLICATION	Branch circuits, feeder circuits
SHOCK RESISTANCE	20 g (half-sinusoidal shock 20 ms)
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	1.2 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	14.4 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	8.4 A
HANDLE TYPE	Rocker lever
INSTANTANEOUS CURRENT SETTING (II) - MAX	144 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	84 A
NUMBER OF OPERATIONS PER HOUR - MAX	120
OVERLOAD CURRENT SETTING (IR) - MAX	0 A
OVERLOAD CURRENT SETTING (IR) - MIN	0 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	25 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	25 kA
STANDARD TERMINALS	Box terminal
RATED OPERATING VOLTAGE UE (UL) - MAX	480 Y / 277 V
RELEASE SYSTEM	Thermomagnetic release
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm² (1x) at tunnel terminal

TERMINAL CAPACITY (CONTROL CABLE)	14 mm² - 18 mm² (1x) 16 mm² - 18 mm² (2x)
TERMINAL CAPACITY (COPPER BUSBAR)	Min. 12 mm x 5 mm direct at switch rear-side connection M6 at rear-side screw connection Max. 16 mm x 5 mm direct at switch rear-side connection
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	6 mm² (1x) at tunnel terminal 6 mm² - 12 mm² (1x) at box terminal 6 mm² - 12 mm² (1x) direct at switch rear-side connection 6 mm² - 9 mm² (2x) direct at switch rear-side connection
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	4 mm <sup>2</sup> - 2/0 mm <sup>2</sup> (1x) at box terminal 4 mm <sup>2</sup> - 3/0 mm <sup>2</sup> (1x) at tunnel terminal 4 mm <sup>2</sup> - 2/0 mm <sup>2</sup> (1x) direct at switch rear-side connection
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU (IEC/EN 60947) AT 400/415 V, 50/60 HZ	25 kA
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	6000 V
POWER LOSS	1.8 W

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	



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