Eaton 166415

Eaton Moeller series NZM - Molded Case Circuit Breaker. Switch-disconnector 4p 1250A 1500VDC

PRODUCT NAME	Eaton Moeller series NZM switch-disconnector
CATALOG NUMBER	166415
PRODUCT LENGTH/DEPTH	401 mm
PRODUCT HEIGHT	207 mm
PRODUCT WIDTH	280 mm
PRODUCT WEIGHT	22 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC

Powering Business Worldwide

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AMPERAGE RATING	1250 A
VOLTAGE RATING	1500 V - 1500 V
CIRCUIT BREAKER FRAME TYPE	N4
FEATURES	Version as main switch Version as maintenance-/service switch Motor drive optional Version as emergency stop installation Remote operation with shunt releases / remote operator
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

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□□	eaton-circuit-breaker-nzm-switch-disconnector-dimensions.eps eaton-circuit-breaker-cable-nzm-mccb-3d-drawing-004.eps eaton-circuit-breaker-terminals-nzm-switch-disconnector-3d-drawing.eps eaton-circuit-breaker-nzm-switch-disconnector-3d-drawing-003.eps eaton-circuit-breaker-nzm-switch-disconnector-3d-drawing-002.eps eaton-circuit-breaker-terminals-nzm-switch-disconnector-3d-drawing-002.eps

	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.
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.
POLLUTION DEGREE	3
MOUNTING METHOD	Intermediate mounting Ground mounting Built-in device fixed built-in technique Distribution board installation Fixed
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	231 W
UTILIZATION CATEGORY	DC-22 A
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	34 kA
DEGREE OF PROTECTION	IP20
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
AMBIENT OPERATING TEMPERATURE - MAX	70 °C

AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
CURRENT RATING (IU) AT 40°C WITH TERMINAL JUMPERS	1250 A
CURRENT RATING (IU) AT 65°C WITH TERMINAL JUMPERS	1250 A
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
RATED INSULATION VOLTAGE (UI)	1500 V
RATED OPERATING POWER AT AC-23, 400 V	0 kW
RATED OPERATING POWER AT AC-3, 400 V	0 kW
SWITCH POSITIONS	I, +, 0
LIFESPAN, MECHANICAL	10000 operations
OVERVOLTAGE CATEGORY	III
RATED OPERATIONAL CURRENT	1250 A (DC 22-A)
DEGREE OF PROTECTION (IP), FRONT SIDE	IP20
NUMBER OF POLES	Four-pole
TERMINAL CAPACITY (COPPER STRIP)	10 segments of 50 mm x 1 mm (2x) at 1-hole module plate Min. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched) Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal 10 segments of 80 mm x 1 mm (2x) at rear-side width extension Max. 10 segments of 50

	mm x 1 mm (2x) at rear-side connection (punched)
HANDLE COLOR	Black
FUNCTIONS	Voltage release optional Disconnectors/main switches Interlockable Photovoltaic applications
TYPE	DC switch-disconnector Switch-disconnector
SPECIAL FEATURES	IEC/EN 60947-3 CCC China Compulsory Certificate Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113. Isolating characteristics to IEC/EN 60947-3 and VDE 0660. N switch-disconnectors can, in addition, be combined with NZM...-XU, NZM...-XA shunt releases and auxiliary contacts as well as with NZM...-XR... remote operator. For DC switching, all 4 contacts must be connected in series. Refer to the information on jumper kit accessories. Supplied as standard: Screw connection box terminal optional. When working with ungrounded systems (e.g., IT), the installation must ensure that a double ground fault will be impossible. Switch can not be combined with plug-in/withdrawable units and/or connection on rear. Lifespan, mechanical: of which max. 50 % trip by shunt/undervoltage release Rated current = rated uninterrupted current: 1250 A Values for rated uninterrupted current at 65 °C include jumpers.
APPLICATION	Open areas Utility buildings
NUMBER OF SWITCHES	1
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	0 kA
RATED OPERATING	0 V

VOLTAGE (UE) AT AC - MAX	
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	1250 A
RATED PERMANENT CURRENT AT AC-21, 400 V	0 A
RATED PERMANENT CURRENT AT AC-23, 400 V	0 A
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.1 S)	34 kA
SWITCHING POWER AT 400 V	0 kW
HANDLE TYPE	Rocker lever
NUMBER OF OPERATIONS PER HOUR - MAX	60
STANDARD TERMINALS	Screw terminal
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 M10 at rear-side screw connection Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate 50 mm x 10 mm (2x) at rear-side 2-hole module plate Min. 60 mm x 10 mm at rear-side width extension Max. 80 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. 10 mm x 80 mm (2x) at rear-side width extension
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	300 mm^2 (4x) at rear-side width extension 120 mm^2 - 300 mm^2 (1x) at rear-side 1-hole module plate 35 mm^2 - 185 mm^2 (4x) at rear-side 2-hole module plate 50 mm^2 - 240 mm^2 (4x) at 4-hole tunnel terminal 95 mm^2 - 240 mm^2 (6x) at rear-side width extension

	95 mm² - 300 mm² (2x) at rear-side 1-hole module plate 95 mm² - 185 mm² (2x) at rear-side 2-hole module plate
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	50 mm² - 185 mm² (4x) direct at switch rear-side connection 120 mm² - 185 mm² (1x) direct at switch rear-side connection
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	50 mm² - 240 mm² (4x) at 4-hole tunnel terminal

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
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