Circuit-breaker, 3p, 100A, box terminals



Part no. NZMH2-A100-BT-NA 107804

breaking capacity Icn) Rated current = rated uninterrupted current: 100 A Switch conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. Adjustable overload releases Ir	General specifications	
Product regit/Uppth 19 millimetre 19 mil	Product name	Eaton Moeller series NZM - Molded Case Circuit Breaker
Product langht/Depth Product velopit Product v	Part no.	NZMH2-A100-BT-NA
Product height Product veidth Product veidth Compliances Cornifications Cornifica	EAN	4015081074518
Product vewidth Product vewidth Cardinations Certifications Certif	Product Length/Depth	149 millimetre
Product weight Compliances Cartifications Cartifica	Product height	195 millimetre
Certifications Certifications	Product width	105 millimetre
Cash Cit2 No. 49 Listed Cash Cit2 No. 49 Listed Cash Cit2 No. 49 Listed Cash Cash Cash Cash Cash Cash Cash Cash	Product weight	2.345 kilogram
Life for CSB 1983 Listed CSB 1983 Listed CSB 1984 Listed CSB 1984	Compliances	RoHS conform
Product Type Product Sub Type Product Su	Certifications	UL (File No. E31593) UL listed CSA (File No. 22086) UL 489 Specially designed for North America CE marking UL (Category Control Number DIVQ) UL/CSA IEC 60947-2 CSA certified CSA (Class No. 1432-01) IEC/EN 60947
Product Sub Type Delivery program Application Application Application Application Type Circuit breaker There-pole Amperage Rating Amperage Rating Amperage Rating Amperage Rating Release system Features Amperage Rating Amainum Back-up fissa, if the expected short-circuit currents at the installation of vitive optional Special features Maximum Back-up fissa, if the expected short-circuit currents at the installation of vitive optional Amainum Back-up fissa, if the expected short-circuit currents at the installation of vitive optional Amainum Back-up fissa, if the expected short-circuit currents at the installation of vitive optional Amainum Back-up fissa, if the expected short-circuit currents at the installation of vitive optional or vitive optiona	Product Tradename	NZM
Application Application Application Application Application Application Type Circuit breaker frame type NZM2 Number of poles Amparage Rating Release system Features Protection unit Motor drive optional Special features Application Application Application Application Appearage Rating Features Application Application Application Appearage Rating Application Applicat	Product Type	Molded Case Circuit Breaker
Application Branch circuits, feeder circuits Use in unearthed supply systems at 690 V Type Circuit breaker Circuit breaker Circuit breaker Circuit breaker frame type NZM2 Number of poles Amperage Rating Amperage Rating Amperage Rating Feetures Protection unit Motor drive optional Motor drive optional Coaching Amperage Rating Special feetures Protection unit Motor drive optional Motor drive optional Incation exceed the switching apacity of the circuit breaker (Rated short-circuit currents at the installation location exceed the switching apacity of the circuit breaker (Rated short-circuit current to ULCSA as well as the IECs regulations. IEC switching performance values are contained on the rating plate. Adjustable overload releases Ir Feethrical Data - Electrical Voltage rating Rated operating voltage Ue (UL) - max Rated insulation voltage Ue (UL) - max Rated insulation voltage (Ulimp) at auxiliary contacts Rated impulse withstand voltage (Ulimp) at auxiliary contacts Rated impulse withstand voltage (Ulimp) at main contacts Rated operating current Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 1 s) In skale count in the case of the circuit surrents at the installation of the case of the circuit breaker (Rated short-time withstand current t t = 1 s) In skale count in the case of the circuit breaker (Rated short-time withstand current t t = 1 s) In skale count in the case of the circuit current setting (ii) - max Overload current setting (ii) - max Overload current setting (ii) - max Overload current setting (ii) - max 1000 A Overload current setting (ii) - max 1000 A	Product Sub Type	None
Application Branch circuits, feeder circuits Use in unearthed supply systems at 690 V Type Circuit breaker Circuit breaker Circuit breaker Circuit breaker frame type NZM2 Number of poles Amperage Rating Amperage Rating Amperage Rating Feetures Protection unit Motor drive optional Motor drive optional Coaching Amperage Rating Special feetures Protection unit Motor drive optional Motor drive optional Incation exceed the switching apacity of the circuit breaker (Rated short-circuit currents at the installation location exceed the switching apacity of the circuit breaker (Rated short-circuit current to ULCSA as well as the IECs regulations. IEC switching performance values are contained on the rating plate. Adjustable overload releases Ir Feethrical Data - Electrical Voltage rating Rated operating voltage Ue (UL) - max Rated insulation voltage Ue (UL) - max Rated insulation voltage (Ulimp) at auxiliary contacts Rated impulse withstand voltage (Ulimp) at auxiliary contacts Rated impulse withstand voltage (Ulimp) at main contacts Rated operating current Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 1 s) In skale count in the case of the circuit surrents at the installation of the case of the circuit breaker (Rated short-time withstand current t t = 1 s) In skale count in the case of the circuit breaker (Rated short-time withstand current t t = 1 s) In skale count in the case of the circuit current setting (ii) - max Overload current setting (ii) - max Overload current setting (ii) - max Overload current setting (ii) - max 1000 A Overload current setting (ii) - max 1000 A	Delivery program	
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Protection unit Motor drive optional 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) In Rated current = rated uninterrupted current: 100 A Switch conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. Adjustable overload releases Ir Voltage rating Rated operating voltage Ue (UL) - max Rated insulation voltage (Uii) Rated impulse withstand voltage (Uimp) at auxiliary contacts Rated impulse withstand voltage (Uimp) at main contacts Rated operational current 100 A (690 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking ca		
Special features Motor drive optional	·	· ·
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Voltage rating Rated operating voltage Ue (UL) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) at auxiliary contacts Rated impulse withstand voltage (Uimp) at main contacts Rated operational current Rated operational current Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 1 s) Instantaneous current setting (Ii) - min Overload current setting (Ir) - max 690 V - 690 V 6000 V 8000 V 100 A (690 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 3	Special features	location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity Icn) Rated current = rated uninterrupted current: 100 A Switche conform to UL/CSA as well as the IEC regulations. IEC switching performance
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Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) at auxiliary contacts Rated impulse withstand voltage (Uimp) at main contacts Rated operational current Rated operational current Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 1 s) Instantaneous current setting (Ii) - min Overload current setting (Ir) - min Overload current setting (Ir) - max 1000 V AC 1000 V 8000 V 100 A (660-690 V AC-1, making and breaking capacity) 300 A (380/400	Voltage rating	690 V - 690 V
Rated impulse withstand voltage (Uimp) at auxiliary contacts Rated impulse withstand voltage (Uimp) at main contacts Rated operational current Rated operational current Rated short-time withstand current (t = 0.3 s) Rated short-time withstand current (t = 1 s) Instantaneous current setting (Ii) - min Overload current setting (Ir) - min Overload current setting (Ir) - max 6000 V 8000 V 100 A (690 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 31.9 kA 1.9 kA	Rated operating voltage Ue (UL) - max	600Y/347 V, 480 V
Rated impulse withstand voltage (Uimp) at main contacts Rated operational current 100 A (690 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity) 100 A (660-690 V AC-3, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-3, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-3, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (38	Rated insulation voltage (Ui)	1000 V AC
Rated operational current 100 A (690 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity) 100 A (660-690 V AC-3, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/40	Rated impulse withstand voltage (Uimp) at auxiliary contacts	6000 V
300 A (415 V AC-1, making and breaking capacity) 100 A (660-690 V AC-3, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) 300 A (380/400 V AC-1, making and breaking capacity) Rated short-time withstand current (t = 0.3 s) 1.9 kA Instantaneous current setting (li) - min 600 A Instantaneous current setting (li) - max 1000 A Overload current setting (lr) - min 80 A Overload current setting (lr) - max 1000 A	Rated impulse withstand voltage (Uimp) at main contacts	8000 V
Rated short-time withstand current (t = 1 s) Instantaneous current setting (li) - min 600 A Instantaneous current setting (li) - max 1000 A Overload current setting (lr) - min 80 A Overload current setting (lr) - max 100 A	Rated operational current	300 A (415 V AC-1, making and breaking capacity) 100 A (660-690 V AC-3, making and breaking capacity)
Instantaneous current setting (Ii) - min Instantaneous current setting (Ii) - max Overload current setting (Ir) - min Overload current setting (Ir) - max	Rated short-time withstand current (t = 0.3 s)	1.9 kA
Instantaneous current setting (Ii) - max Overload current setting (Ir) - min 80 A Overload current setting (Ir) - max 1000 A	Rated short-time withstand current (t = 1 s)	1.9 kA
Overload current setting (Ir) - min 80 A Overload current setting (Ir) - max 100 A	Instantaneous current setting (Ii) - min	600 A
Overload current setting (Ir) - max 100 A	Instantaneous current setting (li) - max	1000 A
	Overload current setting (Ir) - min	80 A
Short delay current setting (Isd) - min 0 A	Overload current setting (Ir) - max	100 A
	Short delay current setting (Isd) - min	0 A

Short delay current setting (Isd) - max	0 A
Short-circuit release non-delayed setting - min	600 A
Short-circuit release non-delayed setting - max	1000 A
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz	150 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz	150 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz	130 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 V, 50/60 Hz	37.5 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz	5 kA
Rated short-circuit making capacity Icm at 240 V, 50/60 Hz	330 kA
Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz	330 kA
Rated short-circuit making capacity Icm at 440 V, 50/60 Hz	286 kA
Rated short-circuit making capacity Icm at 525 V, 50/60 Hz	105 kA
Rated short-circuit making capacity Icm at 690 V, 50/60 Hz	40 kA
Short-circuit total breaktime	< 10 ms
Low-voltage HBC fuse - max	355 A gG/gL
Electrical connection type of main circuit	Frame clamp
Isolation	300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts)
Number of operations per hour - max	120
Handle type	Rocker lever
Utilization category	A (IEC/EN 60947-2)
Overvoltage category	III
Pollution degree	3
Lifespan, electrical	6500 operations at 400 V AC-3 7500 operations at 690 V AC-1 10000 operations at 400 V AC-1 6500 operations at 415 V AC-3 5000 operations at 690 V AC-3
Direction of incoming supply	As required
Technical Data - Mechanical	
Mounting Method	Built-in device fixed built-in technique Fixed DIN rail (top hat rail) mounting optional
Degree of protection	IP20 IP20 (basic degree of protection, in the operating controls area)
Degree of protection (IP), front side	IP40 (with insulating surround) IP66 (with door coupling rotary handle)
Degree of protection (terminations)	IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal)
Protection against direct contact	Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
Shock resistance	20 g (half-sinusoidal shock 20 ms)
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Position of connection for main current circuit	Front side
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
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 Icn) Rated current = rated uninterrupted current: 100 A Switch conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. Adjustable overload releases Ir
Lifespan, mechanical	20000 operations
echnical Data - Mechanical - Terminals	
Standard terminals	Box terminal
Terminal capacity (control cable)	14 mm ² - 18 mm ² (1x) 16 mm ² - 18 mm ² (2x)
Terminal capacity (aluminum solid conductor/cable)	16 mm² (1x) at tunnel terminal
Terminal capacity (copper busbar)	Min. 16 mm x 5 mm direct at switch rear-side connection Max. 20 mm x 5 mm direct at switch rear-side connection M8 at rear-side screw connection
Terminal capacity (copper solid conductor/cable)	6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal

	2 2 44 24 14 14 14 14 14
	6 mm² - 11 mm² (1x) direct at switch rear-side connection
Terminal capacity (copper stranded conductor/cable)	4 mm² - 350 mm² (1x) at box terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 3/0 mm² (1x) direct at switch rear-side connection
Terminal capacity (copper strip)	Max. 10 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 2 segements of 16 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
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	100 A
Equipment heat dissipation, current-dependent	25.65 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	70 °C
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	70 °C
Design verification as per IEC/EN 61439	
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.
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.
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.
Additional information	
Functions	Current limiting circuit breaker System and cable protection

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss13-27-37-04-09 [AJZ716018])

Α	100
V	690 - 690
kA	150
А	80 - 100
А	0 - 0
А	600 - 1000
W	
	Built-in device fixed built-in technique
	No
	Frame clamp
	V kA A A

No
Yes
0
0
0
No
No
3
Front side
Rocker lever
Yes
No
Yes
IP20