## Circuit-breaker, 3p, 125A



## Part no. NZMB2-A125-NA 269214

Product name	Eaton Moeller series NZM molded case circuit breaker thermo-magnetic
Part no.	NZMB2-A125-NA
EAN	4015082692148
Product Length/Depth	149 millimetre
Product height	195 millimetre
Product width	105 millimetre
Product weight	2.4 kilogram
Compliances	RoHS conform
Certifications	IEC 60947-2 CE marking IEC CSA (File No. 22086) UL (Category Control Number DIVQ) Specially designed for North America UL/CSA IEC/EN 60947 CSA (Class No. 1432-01) CSA-C22.2 No. 5-09 UL (File No. E31593) CSA certified UL 1889
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Thermo-magnetic
Application	Branch circuits, feeder circuits Use in unearthed supply systems at 440 V
Туре	Circuit breaker
Circuit breaker frame type	NZM2
Number of poles	Three-pole
Amperage Rating	125 A
Release system	Thermomagnetic release
Features	Motor drive optional Protection unit
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-circubreaking capacity Icn) Rated current = rated uninterrupted current: 125 A Switches 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	440 V - 440 V
Rated operating voltage Ue (UL) - max	600Y/347 V, 480 V
Rated insulation voltage (Ui)	690 V AC
Rated impulse withstand voltage (Uimp) at auxiliary contacts	6000 V
Rated impulse withstand voltage (Uimp) at main contacts	8000 V
Rated operational current	300 A (380/400 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity)
Instantaneous current setting (li) - min	750 A
Instantaneous current setting (li) - max	1250 A
Overload current setting (Ir) - min	100 A
Overload current setting (Ir) - max	125 A
Short delay current setting (Isd) - min	0 A
Short delay current setting (Isd) - max	0 A
onort delay current setting (13d) max	

Rate distance intra threating requesty to SICECH MERCH 14 4000 15 1000	Short-circuit release non-delayed setting - max	1250 A
Read abord-crical tracking especiely for IRCON 1997 in 449 V 5080 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read abord-crical making especiely from 120 V 5090 ft Read from 120 V 5090	Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz	30 kA
Race data re-incur making capacity (mar s200 to 500 to 10	Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz	25 kA
Rated abort-circuit making capacity from at 481/45 M (586) Ms. Rated abort-circuit making capacity from at 481/45 M (586) Ms. Rate abort-circuit making capacity from at 481/45 M (586) Ms. Rate control circuit making capacity from at 481/45 M (586) Ms. Rate control circuit making capacity from at 481/45 M (586) Ms. Rate control circuit making capacity from a control circuit making control circuit making capacity from a control circuit from a control circuit making capacity from a control circuit from a c	Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz	18.5 kA
Note of protection from at 40 V, 5000 Nt.   Stort-cerecut steal breaklame   100 min content of the protection of the p	Rated short-circuit making capacity Icm at 240 V, 50/60 Hz	63 kA
Store servent total breaktine   City man	Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz	53 kA
Convention NOC fines - max   Sist A gligit   Sinter connection	Rated short-circuit making capacity Icm at 440 V, 50/60 Hz	53 kA
Service of connection type of man circuit   Institution   2007 At Distriction the ancillary contacts		< 10 ms
Incidention	Low-voltage HBC fuse - max	355 A gG/gL
SOU AC Generoran auxiliary contracts and main contracts    Handlet type	Electrical connection type of main circuit	
Backer lover   Distance neepery   A IECCN 1998/-29   A IECN 1998/-29   A IECNN 1998/-29	Isolation	
Distriction category   III	Number of operations per hour - max	120
Descripting category   III	Handle type	Rocker lever
Pollution figure  Ulesgan, electrical  Direction of incoming supply  As required  Augusting Method  Dury and top har raily mounting optional Fand Boult-in device faced built-in technique Boult-in technique Boult-in device faced built-in techn	Utilization category	A (IEC/EN 60947-2)
Ureapon, electrical   SSOO operations at 41 EV AC.3   7900 operations at 40 EV AC.7   7900 o	Overvoltage category	III
Direction of incoming supply  As required  Mounting Method  Borre of protection  Degree of protection (IP), front side  Protection against direct contact  Protection against direct contact  Protection against direct contact  Degree of protection (IP), front side  Degree of protection (IP),	Pollution degree	3
Mounting Method    Dit Yail (top hat rail) mounting optional Fixed Built in dovice fixed built in technique Built in dovice fixed built in the operating controls area)  P86 (with door coupling retary handle) P86 (with door coupling reta	Lifespan, electrical	
Fixed   Fixe	Direction of incoming supply	As required
Fixed   Fixe		
P20 (basic degree of protection, in the operating controls area)   P20 (basic degree of protection, in the operating controls area)   P20 (basic degree of protection, in the operating controls area)   P30 (bit with door coupling rotary handle)   P40 (with insulating surround)   P40 (with insulating surround)   P40 (with insulating surround)   P50 (terminations, phase isolator and strip terminal)   P50 (terminations)   P50 (terminations)   P50 (terminations, phase isolator and strip terminal)   P50 (terminations)   P50 (termina	Mounting Method	Fixed
120	Degree of protection	· ·
P40 (reth insulating surround)   P60 (terminations)   P60 (terminations) phase isolator and strip terminal)   P70 (terminations) phase isolator and strip terminal phase isolato		IP20
Protection against direct contact Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110 Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110 Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110 Shock resistance Number of auxiliary contacts (change-over contacts) Number of auxiliary contacts (normally closed contacts) Number of auxiliary contacts (normally open contacts) O Sumber of auxiliary contacts (normally open contacts) O Special features Climatic proofing Climatic proofing Damp heat, constant, to IEC 60068-2-30 Damp heat		IP40 (with insulating surround)
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           Position of connection for main current circuit         Front side           Climatic proofing         Damp heat, cyclic, to IEC 80088-2-30           Damp heat, contact in the contact of the circuit breaker (Rated short-circuit breaker) (apparity (cf))         Maximum back-up fuse, if the expected short-circuit breaker (Rated short-circuit breaking capacity (cf))           Special features         Maximum back-up fuse, if the expected short-circuit breaker (Rated short-circuit breaking capacity (cf))           Sandard current - rate d uninterrupted current 125 A Switches conform to UL/CSA as well as the IEC regulations, IEC switching paper formance values are contained on the rating plate. Adjustable overload releases Ir           Lifespan, mechanical         20000 operations           Terminal capacity (control cable)         14 mm² - 18 mm² (2x)           Terminal capacity (control cable)         14 mm² - 18 mm² (2x)           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 Smr² - 12 mm² (1x) at tunnel terminal Is mm²		IP10 (tunnel terminal)
Number of auxiliary contacts (change-over contacts)  Number of auxiliary contacts (normally closed contacts)  Number of auxiliary contacts (normally open contacts)  Position of connection for main current circuit  Climatic proofing  Special features  Special features  Special features  Special features  Special features  Standard terminals  Standard terminals  Standard terminals  Screw terminal  Terminal capacity (control cable)  Terminal capacity (copper string)  Terminal capacity (copper stranded conductor/cable)  Terminal capacity (copper string)  Terminal capacity (copper string)  Max. 20 mm x 5 mm direct at switch rear-side connection  Max. 20 mm x 1 mm² (1x) at box terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  5 mm² - 11 mm² (1x) at tunnel terminal  5 mm² - 13 mm² (1x) at tunnel terminal  5 mm² - 13 mm² (1x) at tunnel terminal  6 mm² - 13 mm² (1x) at tunnel terminal  7 mm² - 350 mm² (1x) at tunnel terminal  8 mm² - 350 mm² (1x) at tunnel terminal  8 mm² - 350 mm² (1x) at tunnel terminal  8 mm² - 350 mm² (1x) at tunnel terminal  9 mm² - 350 mm² (1x) at tunnel terminal  9 mm² - 350 mm² (1x) at tunnel terminal  9 mm² - 350 mm² (1x) at tunnel terminal  1 mm² - 350 mm² (1x) at tunnel terminal  1 mm² - 350 mm² (1x) at tunnel terminal  1 mm² - 350 mm² (1x) at tunnel terminal  1 mm² - 350 mm² (1x) at tunnel terminal  1 mm² - 350 mm² (1x) at tunnel terminal  1 mm² - 350 mm² (1x) at tunnel terminal  2 mm² - 350 mm² (1x) at tunnel terminal  3 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal		
Number of auxiliary contacts (normally closed contacts)  Number of auxiliary contacts (normally open contacts)  Position of connection for main current circuit  Climatic proofing  Special features  Special features  Special features  Special features  Special features  Standard terminals  Standard terminals  Terminal capacity (control cable)  Terminal capacity (copper solid conductor/cable)  Terminal capacity (copper stranded conductor/cable)  Terminal capacity (copper stranded conductor/cable)  Terminal capacity (copper stranded conductor/cable)  Terminal capacity (copper strip)  Number of auxiliary contracts (normally open contacts)  O  Max. 10 segments of 16 mm x 0.8 mm at tox terminal  Number of auxiliary contracts (normally open contacts)  O  Max. 10 segments of 16 mm x 0.8 mm at tox terminal  Terminal capacity (copper strind)  Min. 2 segments of 16 mm x 0.8 mm at tox terminal  Max. 10 segments of 16 mm x 0.8 mm at tox terminal  Max. 10 segments of 16 mm x 0.8 mm at tox terminal  Max. 10 segments of 16 mm x 0.8 mm at tox terminal  Max. 10 segments of 16 mm x 0.8 mm at tox terminal		
Number of auxiliary contacts (normally open contacts)  Position of connection for main current circuit  Climatic proofing  Special features  Special features  Special features  Special features  Standard terminals  Standard terminals  Terminal capacity (control cable)  Terminal capacity (copper busbar)  Terminal capacity (copper stranded conductor/cable)  Terminal capacity (copper stranded conductor/	, , , , , , , , , , , , , , , , , , ,	
Position of connection for main current circuit  Climatic proofing  Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-30 Damp heat, constant to IEC 600		
Climatic proofing  Damp heat, cyclic, to IEC 60068-2-78  Special features  Special f	, , , , , , , , , , , , , , , , , , , ,	
Special features  Special feat		
location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity (con) Partial current - rated uninterrupted current: 125 A Switches conform to UL/CSA as well as the IEC regulations. IEC switching partial capacity (control cable)   20000 operations		Damp heat, constant, to IEC 60068-2-78
Standard terminals  Screw terminal  Terminal capacity (control cable)  14 mm² - 18 mm² (1x) 16 mm² - 18 mm² (2x)  Terminal capacity (aluminum solid conductor/cable)  16 mm² - 18 mm² (1x) 16 mm² - 18 mm² (2x)  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 Max arear-side screw connection  8 mm² - 11 mm² (1x) direct at switch rear-side connection 6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 30 mm² (1x) direct at switch rear-side connection  Max. 10 segments of 16 mm x 0.8 mm at tox terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal	Special features	location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity Icn) Rated current = rated uninterrupted current: 125 A Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate.
Terminal capacity (control cable)  14 mm² - 18 mm² (1x) 16 mm² - 18 mm² (2x)  16 mm² - 18 mm² (2x)  16 mm² - 18 mm² (2x)  16 mm² (1x) at tunnel terminal  16 mm² (1x) at tunnel terminal  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 M8 at rear-side screw connection 6 mm² - 11 mm² (1x) direct at switch rear-side connection 6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at box terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 30 mm² (1x) direct at switch rear-side connection  Max. 10 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 2 segments of 16 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal	Lifespan, mechanical	20000 operations
Terminal capacity (control cable)  14 mm² - 18 mm² (1x) 16 mm² - 18 mm² (2x)  16 mm² - 18 mm² (2x)  16 mm² - 18 mm² (2x)  16 mm² (1x) at tunnel terminal  16 mm² (1x) at tunnel terminal  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 M8 at rear-side screw connection 6 mm² - 11 mm² (1x) direct at switch rear-side connection 6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at box terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 30 mm² (1x) direct at switch rear-side connection  Max. 10 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 2 segments of 16 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal		
Terminal capacity (aluminum solid conductor/cable)  Terminal capacity (copper busbar)  Terminal capacity (copper solid conductor/cable)  Terminal capacity (copper solid conductor/cable)  Terminal capacity (copper solid conductor/cable)  Terminal capacity (copper stranded conductor/cable)  Max. 10 segments of 16 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal	Standard terminals	Screw 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  6 mm² - 11 mm² (1x) direct at switch rear-side connection 6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 370 mm² (1x) direct at switch rear-side connection  Terminal capacity (copper stranded conductor/cable)  Max. 10 segments 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	Terminal capacity (control cable)	
Max. 20 mm x 5 mm direct at switch rear-side connection M8 at rear-side screw connection  Ferminal capacity (copper solid conductor/cable)  6 mm² - 11 mm² (1x) direct at switch rear-side connection 6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at box terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 350 mm² (1x) at tunnel terminal 4 mm² - 370 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 segments of 9 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal	Terminal capacity (aluminum solid conductor/cable)	16 mm² (1x) at tunnel terminal
6 mm² - 12 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 350 mm² (1x) at tunnel terminal  4 mm² - 370 mm² (1x) at tunnel terminal  4 mm² - 370 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 segments of 9 mm x 0.8 mm at box terminal  Max. 10 segments of 16 mm x 0.8 mm at box terminal	Terminal capacity (copper busbar)	Max. 20 mm x 5 mm direct at switch rear-side connection
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 segments of 9 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal	Terminal capacity (copper solid conductor/cable)	6 mm <sup>2</sup> - 12 mm <sup>2</sup> (1x) at box terminal
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	Terminal capacity (copper stranded conductor/cable)	4 mm <sup>2</sup> - 350 mm <sup>2</sup> (1x) at tunnel terminal
	Terminal capacity (copper strip)	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

Rated operational current for specified heat dissipation (In)	125 A
Equipment heat dissipation, current-dependent	27.61 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
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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
Functions	System and cable protection Current limiting circuit breaker

## **Technical data ETIM 8.0**

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@ss10.0.1-27-37-04-09 [AJZ716013])

protection (consistent 27 or or or protection)		
Rated permanent current lu	Α	125
Rated voltage	V	440 - 440
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	25
Overload release current setting	Α	100 - 125
Adjustment range short-term delayed short-circuit release	А	0 - 0
Adjustment range undelayed short-circuit release	Α	750 - 1,250
Integrated earth fault protection		No
Type of electrical connection of main circuit		Screw connection
Device construction		Built-in device fixed built-in technique
Suitable for DIN rail (top hat rail) mounting		No
DIN rail (top hat rail) mounting optional		Yes
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
With switched-off indicator		No
With integrated under voltage release		No
Number of poles		3
Position of connection for main current circuit		Front side

Type of control element	F	Rocker lever
Complete device with protection unit	Y	Yes
Motor drive integrated	N	No
Motor drive optional	Y	Yes
Degree of protection (IP)	I	IP20