Circuit-breaker, 3p, 125A

Part no. NZMB2-M125

265715

EL Number 4315564

(Norway)



(NOI Way)	
General specifications	
Product name	Eaton Moeller series NZM molded case circuit breaker thermo-magnetic
Part no.	NZMB2-M125
EAN	4015082657154
Product Length/Depth	149 millimetre
Product height Product height	184 millimetre
Product width	105 millimetre
Product weight Product weight	2.35 kilogram
Compliances	RoHS conform
Certifications	IEC IEC/EN 60947
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Thermo-magnetic
Delivery program	
Application	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
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: 125 A Tripping class 10 A IEC/EN 60947-4-1, IEC/EN 60947-2 The circuit-breaker fulfills all requirements for AC-3 switching category.
Fitted with:	Thermal protection
Technical Data - Electrical	
Voltage rating	440 V - 440 V
Rated insulation voltage (Ui)	690 V
Rated impulse withstand voltage (Uimp) at auxiliary contacts	6000 V
Rated impulse withstand voltage (Uimp) at main contacts	8000 V
Rated operational current	99 A (400 V AC-3)
Instantaneous current setting (Ii) - min	1000 A
Instantaneous current setting (Ii) - max	1750 A
Overload current setting (Ir) - min	100 A
Overload current setting (Ir) - max	125 A
Short-circuit release non-delayed setting - min	1000 A
Short-circuit release non-delayed setting - max	1750 A
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz	30 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz	18.5 kA
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz	18.5 kA
Rated short-circuit making capacity Icm at 240 V, 50/60 Hz	63 kA
Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz	53 kA
Rated short-circuit making capacity Icm at 440 V, 50/60 Hz	53 kA
Rated operating power at AC-3, 230 V	37 kW
Rated operating power at AC-3, 400 V	55 kW
Short-circuit total breaktime	< 10 ms

Electrical connection type of main circuit	Screw connection
Isolation	500 V AC (between auxiliary contacts and main contacts)
	300 V AC (between the auxiliary 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	10000 operations at 400 V AC-1 7500 operations at 415 V AC-1
Direction of incoming supply	As required
Technical Data - Mechanical	
Mounting Method	Fixed Built-in device fixed built-in technique
Degree of protection	IP20 (basic degree of protection, in the operating controls area) IP20
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)
Protection against direct contact	Finger and back-of-hand proof to VDE 0106 part 100
Shock resistance	20 g (half-sinusoidal shock 20 ms)
Switch off technique	Thermomagnetic
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
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: 125 A Tripping class 10 A IEC/EN 60947-4-1, IEC/EN 60947-2 The circuit-breaker fulfills all requirements for AC-3 switching category.
Lifespan, mechanical	20000 operations
Technical Data - Mechanical - Terminals	
Standard terminals	Screw terminal
Optional terminals	Box terminal. Connection on rear. Tunnel terminal
Terminal capacity (control cable)	0.75 mm ² - 2.5 mm ² (1x)
	0.75 mm² - 1.5 mm² (2x)
Terminal capacity (aluminum solid conductor/cable)	16 mm² (1x) at tunnel terminal 10 mm² - 16 mm² (2x) direct at switch rear-side connection 10 mm² - 16 mm² (1x) direct at switch rear-side connection
Terminal capacity (aluminum stranded conductor/cable)	25 mm 2 - 50 mm 2 (1x) direct at switch rear-side connection 25 mm 2 - 185 mm 2 (1x) at tunnel terminal 25 mm 2 - 50 mm 2 (2x) direct at switch rear-side connection
Terminal capacity (copper busbar)	Min. 16 mm x 5 mm direct at switch rear-side connection Max. 24 mm x 8 mm direct at switch rear-side connection M8 at rear-side screw connection
Terminal capacity (copper solid conductor/cable)	10 mm ² - 16 mm ² (1x) at box terminal 16 mm ² (1x) at tunnel terminal 6 mm ² - 16 mm ² (2x) at box terminal 10 mm ² - 16 mm ² (1x) direct at switch rear-side connection 6 mm ² - 16 mm ² (2x) direct at switch rear-side connection
Terminal capacity (copper stranded conductor/cable)	25 mm² - 185 mm² (1x) at box terminal 25 mm² - 185 mm² (1x) at 1-hole tunnel terminal 25 mm² - 70 mm² (2x) at box terminal 25 mm² - 70 mm² (2x) direct at switch rear-side connection 25 mm² - 185 mm² (1x) direct at switch rear-side connection
Terminal capacity (copper strip)	Max. 10 segments of 24 mm x 0.8 mm at rear-side connection (punched) Min. 2 segments of 9 mm x 0.8 mm at box terminal Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Min. 2 segements of 16 mm x 0.8 mm at rear-side connection (punched) 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)	125 A
Equipment heat dissipation, current-dependent	27.61 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	70 °C
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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	Motor protection

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss13-27-37-04-01 [AGZ529021])

Overload release current setting A 100-125 Adjustment range undelayed short-circuit release P 1000-1750 With thermal overload protection Y Yes Phase failure sensitive No Thermomagnetic Switch off technique Y 40-440 Rated perating voltage Y 40-440 Rated perating power at AC-3, 230 V A 125 Rated operating power at AC-3, 400 V W 37-6 Power loss Y 7-6 Type of electrical connection of main circuit Y 8-cver connection Type of control element Built-in device fixed built-in technique Device construction Y 8-cver connection With integrated under voltage release Y 8-cver connection With integrated under voltage release Y 9-cver lover Number of poles Y 9-cver lover Rated short-circuit breaking capacity lou at 400 V, AC Y 9-cver lover Begree of protection (IP) P 10-2 Height M 18-2 Begree of protection (IP) P 18-2 Begree of protection (IP) P 18-2 Begree of protection (IP) P 18-2 Begree of protection (IP) <th>[AGZ529021])</th> <th>cimology / on calc bro</th> <th>taker [LV \] kV// Moter procedure circuit breaker (coresisto 27 07 07 01</th>	[AGZ529021])	cimology / on calc bro	taker [LV \] kV// Moter procedure circuit breaker (coresisto 27 07 07 01
With thermal overload protection Yes Phase failure sensitive No Switch off technique Thermomagnetic Rated operating voltage V 440 - 440 Rated permanent current lu A 125 Rated operation power at AC-3, 230 V kW 37 Rated operation power at AC-3, 400 V kW 55 Power loss W 27.5 Type of electrical connection of main circuit Every connection Type of control element Rocker lever Device construction Built-in device fixed built-in technique With integrated auxiliary switch No With integrated under voltage release No Number of poles 3 Rated short-circuit breaking capacity lcu at 400 V, AC KA Begree of protection (IP) KA Height mm 1920 Height mm 194 With the Market mm 194 With integrated under voltage release mm 1920 Rated short-circuit breaking capacity lcu at 400 V, AC mm 1920	Overload release current setting	Α	100 - 125
Phase failure sensitive Switch off technique Rated operating voltage Rated operating voltage Rated operating nower at AC-3, 230 V Rated operation power at AC-3, 400 V Power loss Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated dunder voltage release Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Begin and some anamediate and some and some and some and some and some and some an	Adjustment range undelayed short-circuit release	Α	1000 - 1750
Switch off technique Rated operating voltage Rated operating voltage Rated operating voltage Rated operation power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Roter loss Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release Number of poles Rated short-circuit breaking capacity lcu at 400 V, AC Degree of protection (IP) Height With the protection (IP) Rote Power loss Rated short-circuit breaking capacity lcu at 400 V, AC Rote Roter lever	With thermal overload protection		Yes
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Rated operation power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rower loss Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height With Material AC-3, 230 V RATE AC-4, 240 V	Rated operating voltage	V	440 - 440
Rated operation power at AC-3, 400 V Power loss Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height With the service of service of poles Rated short-circuit breaking capacity Icu at 400 V, AC Height With the service of poles Rated short-circuit breaking capacity Icu at 400 V, AC Height With the service of protection (IP) Height Mith the service of poles Rated short-circuit breaking capacity Icu at 400 V, AC In the service of protection (IP) Mith the service of protection of main circuit Mith the service of protection (IP) Mith the service of protection (IP) Mith the service of protection of main circuit Mith the service of protection of main circuit Mith the service of protection (IP) Mith the service of protection of main circuit Mith the service of protection of m	Rated permanent current lu	А	125
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Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity lcu at 400 V, AC Degree of protection (IP) Height Width Midth Midth Midth Midth Midth Midth Midth Screw connection Screw connection Rocker lever Built-in device fixed built-in technique No No No A 84 18.5 19.0	Rated operation power at AC-3, 400 V	kW	55
Type of control element Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width Rocker lever No No No Po S S S S S S S S S S S S S	Power loss	W	27.6
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With integrated under voltage release With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width Width No No Rated short-circuit breaking capacity Icu at 400 V, AC IP20 IP20 IP3 IP4 IP5 IP5 IP5 IP5 IP5 IP5 IP5	Device construction		Built-in device fixed built-in technique
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Rated short-circuit breaking capacity Icu at 400 V, AC	With integrated under voltage release		No
Degree of protection (IP) Height mm 184 Width 105	Number of poles		3
Height mm 184 Width mm 105	Rated short-circuit breaking capacity Icu at 400 V, AC	kA	18.5
Width mm 105	Degree of protection (IP)		IP20
	Height	mm	184
Depth mm 149	Width	mm	105
	Depth	mm	149