## NZMH3 PXR20 circuit breaker, 250 A, 3-pole, Screw terminal, UL/CSA



Part no. NZMH3-VX250-NA 192533

General specifications	
Product name	Eaton Moeller series NZM molded case circuit breaker electronic
Part no.	NZMH3-VX250-NA
EAN	4015081932610
Product Length/Depth	166 millimetre
Product height	297 millimetre
Product width	140 millimetre
Product weight	6.34 kilogram
Compliances	RoHS conform
Certifications	CSA (File No. 22086) UL (File No. E31593) CSA (Class No. 1432-01) Specially designed for North America UL/CSA UL 489 CSA certified UL listed UL (Category Control Number DIVQ) IEC 60947-2 IEC CSA-C22.2 No. 5-09 CE marking
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Electronic
Delivery program	
Application	Branch circuits, feeder circuits
Туре	Rated current = rated uninterrupted current: 250 A Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate.
Circuit breaker frame type	NZM3
Number of poles	Three-pole
Amperage Rating	250 A
Release system	Electronic release
Features	Protection unit Motor drive optional
Special features	Circuit breaker
Technical Data - Electrical	
Voltage rating	690 V - 690 V
Rated operating voltage Ue (UL) - max	600 V
Rated insulation voltage (Ui)	690 V AC
Instantaneous current setting (li) - min	2 A
Instantaneous current setting (li) - max	18 A
Overload current setting (Ir) - min	100 A
Overload current setting (Ir) - max	250 A
Short delay current setting (Isd) - min	500 A
Short delay current setting (Isd) - max	2500 A
Short-circuit release delayed setting - min	200 A
Short-circuit release delayed setting - max	2500 A
Short-circuit release non-delayed setting - min	500 A
Short-circuit release non-delayed setting - max	4500 A
Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz	150 kA
Electrical connection type of main circuit	Screw connection
Handle type	Rocker lever

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Meets the product standard's requirements.  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.10 Temperature rise  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Functions  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  Is the panel builder is responsibility.  In panel builder is responsibility.  In panel builder's responsibility.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  In the panel builder's responsibility. The specifications for the switchgear mobserved.  In the device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  In the device meets the requirements, provided the information in the instructive leaflet (IL) is observed.	10.2.7 Inscriptions	Meets the product standard's requirements.
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10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Functions  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder is responsibility.  The panel builder is responsibility.  Is the panel builder is responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  The panel builder's responsibility. The specifications for the switchgear mobserved.  In the panel builder's responsibility.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  In the device meets the requirements, provided the information in the instructive fleaflet (IL) is observed.  Current limiting circuit breaker	10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.7 Internal electrical circuits and connections  1s the panel builder's responsibility.  10.8 Connections for external conductors  1s the panel builder's responsibility.  10.9.2 Power-frequency electric strength  1s the panel builder's responsibility.  10.9.3 Impulse withstand voltage  1s the panel builder's responsibility.  10.9.4 Testing of enclosures made of insulating material  1s the panel builder's responsibility.  10.10 Temperature rise  The panel builder is responsibility.  10.11 Short-circuit rating  Is the panel builder's responsibility.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  10.13 Mechanical function  The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  4dditional information  Functions  Current limiting circuit breaker	10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Functions  1 Is the panel builder's responsibility.  1 Is the panel builder is responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specifications for the switchgear mobserved.  1 Is the panel builder's responsibility. The specification for the switchgear mobserved.  1 Is the panel builder's responsibility. The specification for the switchgear mobserved.  1 Is the panel builder's responsibility.	10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Functions  10.14 Is the panel builder's responsibility.  15 the panel builder is responsibility.  16 the panel builder is responsibility. The specifications for the switchgear mobserved.  17 The panel builder's responsibility. The specifications for the switchgear mobserved.  18 the panel builder's responsibility. The specifications for the switchgear mobserved.  19 The device meets the requirements, provided the information in the instructive leaffet (IL) is observed.  10 The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  10 The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.	10.7 Internal electrical circuits and connections	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 of provide heat dissipation data for the devices.  10.11 Short-circuit rating  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  10.13 Mechanical function  The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  Kidditional information  Functions  Current limiting circuit breaker	10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Functions  Is the panel builder's responsibility.  The panel builder is responsible for the temperature rise calculation. Eaton oprovide heat dissipation data for the devices.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.  Current limiting circuit breaker	10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.10 Temperature rise  The panel builder is responsible for the temperature rise calculation. Eaton oprovide heat dissipation data for the devices.  10.11 Short-circuit rating  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  Additional information  Functions  Current limiting circuit breaker	10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
provide heat dissipation data for the devices.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  Additional information  Functions  Current limiting circuit breaker	10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
observed.  10.12 Electromagnetic compatibility  10.13 Mechanical function  Is the panel builder's responsibility. The specifications for the switchgear mobserved.  The device meets the requirements, provided the information in the instructive leaflet (IL) is observed.  Additional information  Functions  Current limiting circuit breaker	10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
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	10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear mus observed.
leaflet (IL) is observed.  Additional information  Functions  Current limiting circuit breaker	10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear mus observed.
Functions Current limiting circuit breaker	10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
	Additional information	
Systems, cable, selectivity and generator protection	Functions	Current limiting circuit breaker Systems, cable, selectivity and generator 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])

Rated permanent current lu	Α	250
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	150
Overload release current setting	Α	100 - 250

Adjustment range undelayed short-circuit release  A 2-18  Power loss  Device construction  Device construction  Integrated earth fault protection  Type of electrical connection of main circuit  Suitable for DIN rail (top hat rail) mounting  DIN rail (top hat rail) mounting optional  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as normally open contact  With switched-off indicator  With integrated under voltage release  Nouther of poles  Position of connection for main current circuit  Type of control element  Complete device fixed built-in technique  No  Screw connection  No  No  O  O  O  O  O  Front side  Front side  Rocker lever  Motor drive integrated  Motor drive integrated  Motor drive optional			
Power loss  Device construction  Device construction  Integrated earth fault protection  Type of electrical connection of main circuit  Suitable for DIN rail (top hat rail) mounting  DIN rail (top hat rail) mounting optional  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as change-over contact  With switched-off indicator  With integrated under voltage release  Nounter of poles  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive integrated  Motor drive optional  With control element  Motor drive optional	Adjustment range short-term delayed short-circuit release	Α	500 - 2500
Device construction Integrated earth fault protection Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No	Adjustment range undelayed short-circuit release	Α	2 - 18
Integrated earth fault protection Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional No No Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No With switched-off indicator No With integrated under voltage release No No With integrated under voltage release No	Power loss	W	
Type of electrical connection of main circuit  Suitable for DIN rail (top hat rail) mounting  DIN rail (top hat rail) mounting optional  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as change-over contact  No  With integrated under voltage release  No  No  Number of poles  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive optional	Device construction		Built-in device fixed built-in technique
Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as change-over contact O Number of auxiliary contacts as change-over contact O Number of indicator No With integrated under voltage release No No Number of poles O No Number of poles O No No Number of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional  No Motor drive optional  No	Integrated earth fault protection		No
DIN rail (top hat rail) mounting optional 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 Number of auxiliary contacts as change-over contact 0 With switched-off indicator No With integrated under voltage release No No Number of poles 3 Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional  No Motor drive optional  No	Type of electrical connection of main circuit		Screw connection
Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as change-over contact  Number of auxiliary contacts as change-over contact  No  With switched-off indicator  With switched-off indicator  No  No  Number of poles  Sa  Position of connection for main current circuit  Front side  Type of control element  Complete device with protection unit  Yes  Motor drive integrated  Motor drive optional  No  Yes	Suitable for DIN rail (top hat rail) mounting		No
Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as change-over contact  No  With switched-off indicator  With integrated under voltage release  No  Number of poles  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive optional  O  O  No  No  No  No  No  No  No  Yes	DIN rail (top hat rail) mounting optional		No
Number of auxiliary contacts as change-over contact  With switched-off indicator  No  With integrated under voltage release  No  Number of poles  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Wood of the protection unit  Motor drive optional  O  No  No  No  No  Yes	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator  With integrated under voltage release  No  Number of poles  Societion of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive optional  No  No  No  No  No  No  Yes	Number of auxiliary contacts as normally open contact		0
With integrated under voltage release  No Number of poles  3 Position of connection for main current circuit  Type of control element  Complete device with protection unit  Wotor drive integrated  Motor drive optional  No  Yes	Number of auxiliary contacts as change-over contact		0
Number of poles  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive optional  3  Rocker lever  Rocker lever  No  Yes  Motor drive optional	With switched-off indicator		No
Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive optional  Front side  Rocker lever  Yes  Yes  Yes	With integrated under voltage release		No
Type of control element Complete device with protection unit Wotor drive integrated No Yes Motor drive optional Yes	Number of poles		3
Complete device with protection unit  Yes  Motor drive integrated  No  Yes	Position of connection for main current circuit		Front side
Motor drive integrated No Yes	Type of control element		Rocker lever
Motor drive optional Yes	Complete device with protection unit		Yes
	Motor drive integrated		No
Degree of protection (IP)	Motor drive optional		Yes
	Degree of protection (IP)		IP20