

NZM2 PXR20 circuit breaker, 160A, 3p, box terminal, UL/CSA



**Part no.** **NZMN2-VX160-BT-NA**  
**192518**

Product name	Eaton Moeller series NZM molded case circuit breaker electronic
Part no.	NZMN2-VX160-BT-NA
EAN	4015081932467
Product Length/Depth	149 millimetre
Product height	195 millimetre
Product width	105 millimetre
Product weight	2.345 kilogram
Compliances	RoHS conform
Certifications	CSA certified UL 489 UL (File No. E31593) IEC 60947-2 IEC CSA (File No. 22086) UL listed Specially designed for North America CE marking CSA (Class No. 1432-01) UL (Category Control Number DIVQ) CSA-C22.2 No. 5-09 UL/CSA
Product Tradename	NZM
Product Type	Molded case circuit breaker
Product Sub Type	Electronic
Application	Branch circuits, feeder circuits
Type	Circuit breaker
Circuit breaker frame type	NZM2
Number of poles	Three-pole
Amperage Rating	160 A
Release system	Electronic release
Features	Protection unit Motor drive optional
Special features	Rated current = rated uninterrupted current: 160 A Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate.
Voltage rating	690 V - 690 V
Rated operating voltage Ue (UL) - max	600 V
Rated insulation voltage (Ui)	690 V AC
Instantaneous current setting (Ii) - min	2 A
Instantaneous current setting (Ii) - max	18 A
Overload current setting (Ir) - min	64 A
Overload current setting (Ir) - max	160 A
Short delay current setting (I <sub>sd</sub> ) - min	320 A
Short delay current setting (I <sub>sd</sub> ) - max	1600 A
Short-circuit release delayed setting - min	128 A
Short-circuit release delayed setting - max	1600 A
Short-circuit release non-delayed setting - min	320 A
Short-circuit release non-delayed setting - max	2880 A
Rated short-circuit breaking capacity I <sub>cs</sub> (IEC/EN 60947) at 400/415 V, 50/60 Hz	50 kA
Electrical connection type of main circuit	Frame clamp
Handle type	Rocker lever

Mounting Method		Fixed DIN rail (top hat rail) mounting optional Built-in device fixed built-in technique
Degree of protection		IP20
Protection against direct contact		Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110
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
Special features		Rated current = rated uninterrupted current: 160 A Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate.
Rated operational current for specified heat dissipation (In)		160 A
Equipment heat dissipation, current-dependent		21.12 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 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.
Functions		Systems, cable, selectivity and generator 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])		
Rated permanent current Iu	A	160
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	50
Overload release current setting	A	64 - 160
Adjustment range short-term delayed short-circuit release	A	320 - 1,600
Adjustment range undelayed short-circuit release	A	2 - 18

Integrated earth fault protection			No
Type of electrical connection of main circuit			Frame clamp
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			Rocker lever
Complete device with protection unit			Yes
Motor drive integrated			No
Motor drive optional			Yes
Degree of protection (IP)			IP20