

The future starts now



The new digital NZM compact • reliable • innovative Catalog 2021



Powering Business Worldwide

Compact circuit breakers, switch disconnectors

Content

System overview

Description, functions and technical data Page 4

1230PIC-785 Symbolphoto



1. Compact circuit breakers, switch disconnectors IEC

1.1 Circuit breakers, thermomagnetic releases, 3 pole Page 58
 1.2 Circuit breakers, magnetic short-circuit releases, 3 pole Page 72
 1.3 Circuit breakers IEC, electronic releases, 3 pole Page 78
 1.4 Circuit breakers IEC, electronic releases with energy meter function, 3 pole Page 94
 1.5 Circuit breakers IEC, thermomagnetic releases, 4 pole Page 108
 1.6 Circuit breakers IEC, electronic releases, 4 pole Page 118
 1.7 Circuit breakers IEC, electronic releases with energy meter function, 4 pole Page 132
 1.8 Compact circuit breakers IEC, thermomagnetic releases, 1 pole Page 140
 1.9 Switch disconnectors IEC, 3 pole Page 141
 1.10 Switch disconnectors IEC, 4 pole Page 145

1230PIC-785 Symbolphoto



2. Compact circuit breakers, switch disconnectors UL/CSA, IEC

2.1 Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole Page 148
 2.2 Circuit breakers UL/CSA, IEC, magnetic short-circuit releases, 3 pole Page 158
 2.3 Circuit breakers UL/CSA, IEC, electronic releases, 3 pole Page 162
 2.4 Circuit breakers UL/CSA, IEC, electronic releases with energy meter function, 3 pole Page 172
 2.5 Circuit breakers UL/CSA, IEC, thermomagnetic releases, 4 pole Page 176
 2.6 Molded case switches for North America Page 178

1230PIC-802 Symbolphoto



3. Compact circuit breakers, switch disconnectors IEC, EC, UL/CSA

3.1 Circuit breakers IEC for 1000 V AC, 3 pole Page 180
 3.2 Switch disconnectors UL/CSA, IEC for 1000 V DC, 1/2 pole Page 181
 3.3 Switch disconnectors UL/CSA, IEC for 1500 V DC, 1/2 pole Page 182
 3.4 Circuit breakers IEC for 1500 V AC Page 184
 3.5 Circuit breakers EC for 500/750 V DC, 1/2 pole Page 187

1230PIC-721 Symbolphoto



4. Accessories

4.1 Terminals, NZM1 Page 188
 4.2 Terminals, NZM2 Page 196
 4.3 Terminals, NZM3 Page 204
 4.4 Terminals, NZM4 Page 218
 4.5 Plug-in units, withdrawable units Page 231
 4.6 Auxiliary contacts with screw terminals/spring-cage terminal Page 233
 4.7 Undervoltage releases Page 234
 4.8 Shunt releases Page 242
 4.9 Relay modules Page 246
 4.10 Door coupling rotary handles Page 248
 4.11 Door coupling rotary handle with key lock Page 251
 4.12 Door coupling rotary handles for North America Page 252

1230PIC-677 Symbolphoto



System overview

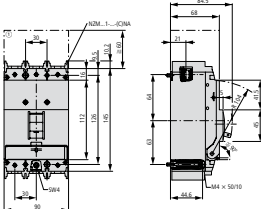
| | |
|--|----------|
| 4.13 Rotary handles | Page 254 |
| 4.14 Rotary handles with key lock | Page 255 |
| 4.15 Rotary handles with door interlock | Page 256 |
| 4.16 Main switch assembly kit | Page 257 |
| 4.17 Main switch assembly kit with additional handle | Page 263 |
| 4.18 Remote operators | Page 264 |
| 4.19 Accessories | Page 266 |
| 4.20 Mechanical interlock | Page 269 |
| 4.21 Paralleling mechanism | Page 270 |
| 4.22 Earth-fault release | Page 271 |
| 4.23 Power supply module / Interface module | Page 273 |
| 4.24 Communication module | Page 274 |
| 4.25 SASY 60i Busbar System | Page 275 |

5. Construction

| | |
|---|----------|
| 5.1 Construction size 1: Basic device 1 | Page 278 |
| 5.2 Construction size 1: Basic device 2 | Page 279 |
| 5.3 Construction size 1: Basic device 3 | Page 280 |
| 5.4 Construction size 1: Basic device 4 | Page 281 |

| | |
|------------------------|----------|
| More information | Page 282 |
|------------------------|----------|

00244478_0





Thinking ahead.
Shaping the future.



Switch,
protect
control,
measure,
communicate:



The energy supply and distribution systems of tomorrow have to contend with multiple competing demands. And Eaton has the right products to meet these challenges. Because Eaton, as a global leader in many technology areas, understands what panel building is all about.

For Eaton, future-oriented energy management means: to tackle complex tasks head-on with smart, simple solutions; to develop products that cover a broad range of applications and to provide all markets and sectors with the necessary systems for ensuring a safe, reliable and efficient energy future.

Eaton's product range leaves nothing to be desired, from the big picture down to the smallest detail:

- **MODAN** offers globally proven modular switchgears for a wide range of building and industrial applications up to 6,300 A
- With **xEnergy** Eaton is able to offer safety-tested switchgear systems for power distribution systems up to 5,000 A
- Eaton's new **digital NZM circuit breakers** are universally suitable for rated currents from 20 A to 1,600 A; they are now also equipped with the innovative **PXR electronic release** technology



MODAN modular switchgear

Low-voltage switchgear assemblies up to 6,300 A

MODAN® provides safe, communications-enabled power distribution systems for global markets, which can be easily combined while ensuring maximum availability. Even in the standard version, MODAN systems are renowned for their extreme reliability and safety.

The space-saving design with standardized function modules enables fast planning, handling and commissioning, offering tailor-made solutions for building and industrial applications up to 6,300 A.



xEnergy Main

Low-voltage power distribution systems up to 5,000 A

The xEnergy switchgear system has been designed to meet demands that are constantly growing: This makes it ideal for building infrastructure up to 5,000 A. Every function block has been carefully and systematically calibrated, from the switchgear and mounting technology to the enclosures and the requisite software. You will not only get safety-tested switchgear that represents the state of the art – you will also save time, money and space.

xEnergy combines maximum safety with easy planning:

- xEnergy fully complies with the IEC 61439 standard.
- To make the planning and assembly of an xEnergy system as easy as possible, we offer our established planning tool, the xEnergy configurator, free of charge.



The NZM series – circuit breakers up to 1,600 A

Best in class

Eaton's NZM series circuit breakers cover rated currents of 20 to 1,600 A – with only four frame sizes. And they are also optimally matched to each other. The wide range of possible applications covers every need. Eaton took a close look at what customers really want and designed the product accordingly.

What stands out, for example, is the comprehensive system of accessories, which can be individually assembled and easily installed in line with specific application requirements. The same goes for the flexible terminals, which offer increased safety for operators thanks to the variety of available covers.

The circuit breakers are thus suitable for universal use – from small distribution boards to machine controls and motor-starter combinations, and all the way to large power distribution systems with a short-circuit breaking capacity of up to 150 kA.





Full performance, compact design

The new digital NZM circuit breakers combine full performance with a compact design. The circuit breakers and accessories have been designed in such a way that their function, assembly and handling are the same throughout, in order to make your work as simple as possible.

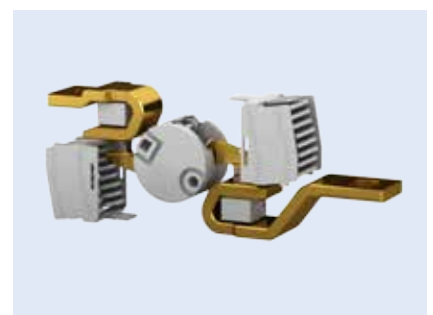


Various types of releases are available, including cost-effective versions with bimetallic strips and models with communications-enabled digital electronics, which can take on a variety of protective functions. This makes them suitable for use in both AC and DC networks – from cable protection to the protection of motors, generators and transformers. With switch-disconnectors up to 1,600 A, implementing applications such as main switches, emergency power-off switches and coupler switches is quick and simple.

Despite their slim design, the NZM circuit breakers can handle loads with rated currents up to 1,600 A, and they can safely switch off short-circuit currents up to 150 kA.

The innovative switching technology with double-break contacts helps to speed up the switching process. In the event of a short circuit, the special design and the selected materials will generate repulsive magnetic forces that fling open the contacts in a fraction of a sine wave. Switching capacities up to 150 kA and

operating voltages up to 690 V pose no problem at all. At the same time, thanks to their optimal rate of power loss, the devices have a positive impact on the size of the control panel. The digital NZM circuit breakers are suitable for use in even the toughest environments, such as mining (up to 1,000 V AC), renewable energy (up to 1,500 V DC) and other power-intensive applications with high switching capacities at 690 V AC (e.g. data center, marine and renewable energy applications etc.).



Circuit breakers offer comprehensive protection: They protect entire systems while offering many additional functions



1. The NZM protects systems

as well as cables across all levels, from the main distribution board all the way to the load itself.
See page 26



2. The NZM protects motors

as well as motor-starter combinations and input wiring against overloads and short circuits.
See page 27



3. The NZM offers full-range protection

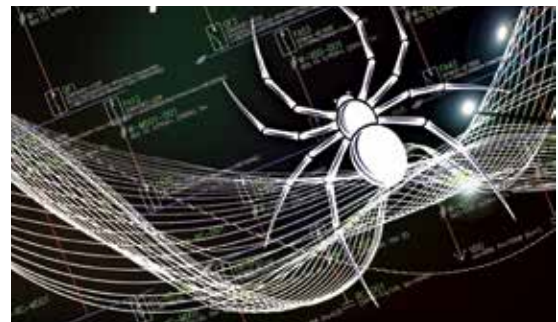
and selective protection for many applications.
See page 28



4. The NZM offers earth-fault protection

with integrated alert and trip functions as well as ARMS and ZSI.

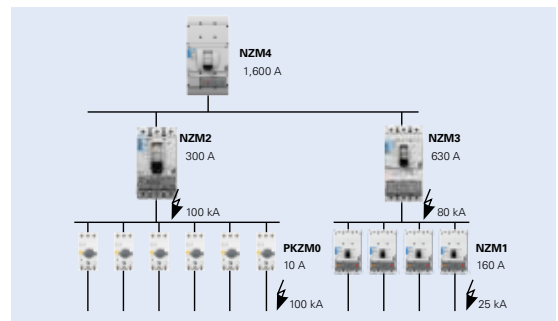
See page 28



5. The NZM offers selectivity and backup protection

against excessive short-circuit currents.

See page 29



6. The NZM offers zone selectivity and protection against electric arcs

with the patented Arcflash Reduction Maintenance System.

See page 30



7. The NZM offers protection against residual currents

for universal mounting, or for mounting directly on the circuit breaker.

See page 31



8. The NZM protects DC systems

either as a circuit breaker with thermo-magnetic release, or as a switch-disconnector.

See page 32



9. The NZM protects special applications

with high switching capacities at 690 V AC, at high frequencies, in IT networks, and at 1,000 V AC.

See page 33



10. The NZM offers protection and ISO 50001

energy metering with Class 1 accuracy in accordance with IEC 61557-12.

See page 36

Which release provides the right type of protection?

| Release | TMTU | | | | PXR10 | PXR20 | | | PXR25 | | |
|--|------|-----|----|----|-------|-------|-----|----------|-------|----------------|------|
| | -A | -AF | -M | -S | -AX | -MX | -VX | -VX...-T | -PX | -PX...-TZ(TAZ) | -PMX |
| T = Thermomagnetic E = Electronic | T | T | T | T | E | E | E | E | E | E | E |
| Protective features | | | | | | | | | | | |
| Overload protection | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Short-time delayed short-circuit protection | - | - | - | - | - | - | ✓ | ✓ | ✓ | ✓ | - |
| Non-delayed short-circuit protection | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Earth-fault protection | - | - | - | - | - | - | - | ✓ | - | ✓ | - |
| ARMS maintenance mode | - | - | - | - | - | - | - | - | - | ✓ | - |
| ZSI zone-selective interlocking | - | - | - | - | - | - | - | - | - | ✓ | - |
| Additional functions | | | | | | | | | | | |
| Suitable for DC protection | ✓ | - | - | - | - | - | - | - | - | - | - |
| USB interface | - | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Current measuring (data readout) | - | - | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Comprehensive data collection, including Class 1 energy metering | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ |
| Communications-enabled | - | - | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Is a thermo-magnetic or an electronic release the better option?

The right protection for the task at hand

Thermo-magnetic trip units offer protection against overloads and short circuits. Electronic releases, meanwhile, make it possible to fine-tune the protective effect and to enhance it exponentially. On the one hand, electronic systems trip much more flexibly and precisely thanks to the use of digital electronics. On the other hand, by recording the data digitally, they also open up new possibilities for analytics and predictive maintenance. The most important technical aspects of the two types of releases are explained in detail below.



Thermo-magnetic overcurrent releases

Thermo-magnetic releases are the basic release mechanism for protection against overloads and short circuits. This type of release is ideal for cost-effective system designs up to 500 A. It is suitable for use in three-phase networks, AC networks and DC networks as well as for 400 Hz applications.

Thermal releases

A so-called bimetallic strip is used as the release element in thermally (current-dependent) delayed overload releases. This bimetallic strip is composed of at least two different metals with different coefficients of thermal expansion. The coefficient of thermal or linear expansion indicates the expansion of an object at a temperature increase of 1 K. When a rotor stalls, for example, the motor will draw more current. As a result of this increased current consumption, the current-carrying components of the motor-protective circuit breaker will experience a greater increase in temperature. This means that the metal with the greater coefficient of thermal expansion will expand at a higher rate, causing the bimetallic strip to start bending. This bending results in the release of the internal breaker mechanism, thereby tripping the motor-protective circuit breaker. The circuit breaker's main contacts will then open, which interrupts the supply of power to the motor, so that the corresponding motor fault can be repaired without danger. Once the motor-protective circuit breaker is switched back on, the motor will again start up.



Magnetic releases

In a circuit breaker, a magnetic overload release performs the short-circuit tripping function. This release works based on the principle of an electromagnet and a current coil. This current coil is not energized by a separate voltage source – instead, the main current flows directly through it. In the event of a short circuit, a large overcurrent will flow through the current coil. The resulting magnetic field will pull the armature into the coil, meaning it will then hit the moving contact piece. This momentum, together with the dynamics of the short-circuit current itself, will cause the contacts to open abruptly, thereby safely disconnecting the short-circuit current. The breaker mechanism will be released simultaneously. As a result, the circuit breaker will remain in the "OFF" position after the short-circuit current has been switched off.



Ambient temperature compensation

The NZM1 and NZM3 type A releases are not temperature compensated. The NZM2-A and all NZM-M motor-protective releases compensate the ambient temperature by means of an additional bimetallic strip. This compensation significantly reduces the impact of the ambient temperature on the functioning of the thermal release, which in turn improves the current-carrying capacity.

The electronic releases have been equipped with a microprocessor to ensure improved operational continuity.



Electronic trip units

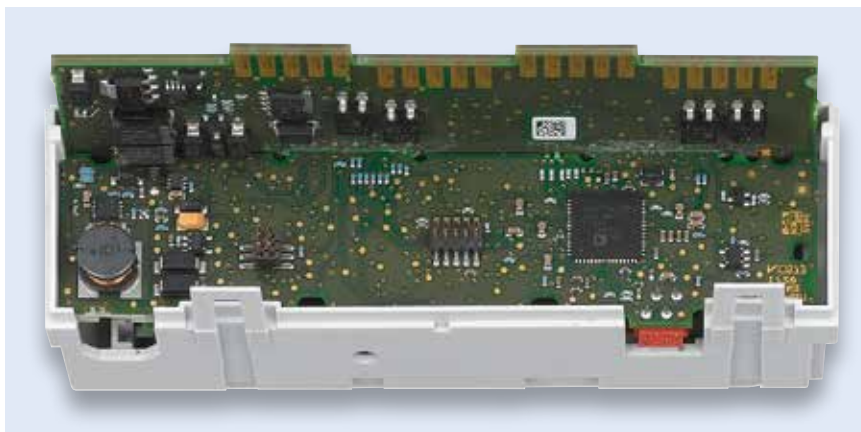
The digital electronics are controlled by the microprocessor, making it possible to determine the values of the load current that is being monitored. In contrast to analog electronic systems, the digital electronics will correctly evaluate any harmonics occurring in the network to prevent undesired early tripping. This helps to avoid unnecessary downtime.

Dedicated components simulate a thermal memory even when no current is present and the circuit breaker has tripped due to load overload. This ensures the reliable protection of the connected equipment – even if the cooling-down phase prior to the system restart was too short.

The proper functioning of the electronic components can be checked during protection via a run-in test. Thermocouples ensure the safe tripping of the circuit breaker in the unlikely event that the electronic components overheat.

Redundant safety

A parallel mechanical solution ensures maximum safety in the case of very high short-circuit currents, as the hinged armature functions as an additional magnetic release. This release will trip within only a few milliseconds.





Power Xpert Release

The next generation of electronic releases – now also available for the NZM



With the Power Xpert Release (PXR) Eaton has developed a new platform for trip units. This technology has already been integrated in the IZMX series of air circuit breakers, and is now also available for the compact circuit breakers of the NZM series.

The PXR is a powerful trip unit for professional users. Our customers' greatest possible benefit is always our main priority. Therefore, the PXR combines easy handling across all frame sizes with state of the art technology, a wide range of practical functions and, as always, a proven safety record.

The PXR technology makes it possible to configure and test the circuit breakers from a PC via a USB port. This makes it very easy to access the information generated by the switchgear, to save the test data and to print it. This is the fastest and most convenient way to continuously improve control and maintenance systems. All sensitive data and settings are password-protected to prevent unauthorized access.

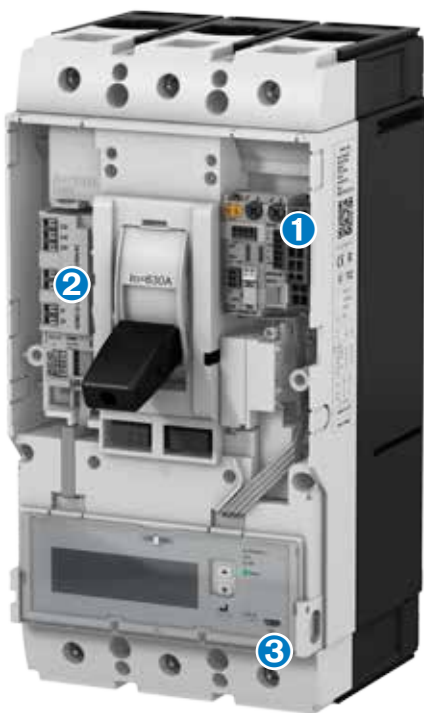


Improved lifecycle management through digital circuit protection

What does lifecycle management mean and what are the benefits for users? Different approaches from Eaton and their advantages and benefits are discussed in this white paper.



Convincing in every way



Saving our users time and offering them the broadest possible range of applications – these were the goals Eaton had in mind while developing the Power Xpert Release platform.

- 1 As such, we have equipped the PXR with a consistent design and clear menu navigation that will simplify your day-to-day work. With the PXR, communications are similarly easy: The many available communication modules for various bus systems allow for high-performance connections in line with the respective system requirements. Additionally, the integrated Modbus RTU connection also saves space during installation.

The new, fully integrated control and measurement technology creates additional benefits for customers

- 2 The integrated relays inside the voltage release enable the control of any associated components, alongside the display of operating states (such as alert notifications), the control of remote operators and motor-starter combinations, and much more.
- 3 The USB interface allows for easy connection to a PC to change the settings, conduct analyses or launch one of the test function.

The Rogowski coil transformer supports ISO 50001 energy management with Class 1 energy metering in accordance with IEC 61557-12.

The PXR25 premium version with display

With the PXR25 premium version (=NZM...PX), you can keep everything in sight. For intuitive handling and to make configuration even easier, the PXR25 is equipped with a high-resolution display. You can enter the desired settings via this display. You can choose between protection settings and soft settings (additional settings). The settings of PXR switches can also be easily adjusted by using the Power Xpert Protection Manager (PXPM) software for PC.

With the PXR20 version, you can adjust the protection settings using the rotary heads on the circuit breaker itself, while the soft settings can be adjusted using the PXPM software.



What the PXR is capable of

The most important benefits and features at a glance

One design for all products

The consistent design for all product groups and the clear, ergonomic arrangement of the various elements ensures that the operation is the same operation and configuration of the PXR across the whole range of compact and open circuit breakers.

Now also with LED light for status and overload indication

A green-red dual LED indicates the current status: In start-up mode, the LED is permanently green. Green flashing indicates normal operation. Red flashing indicates an error in the electronic trip unit (tripping unit). The overload LED indicates the load status of the circuit breaker. This warning can also be transmitted via the integrated communications. The PXR20 is fixed at 80 % and 105 % of I_r . The PXR25 has same default-values as the PXR20, but in this case they can be adjusted as required.

Everything under control – thanks to the high-resolution display

The high-quality, full graphic display features a premium pixel matrix for enhanced contrast and brightness. The uniform menu navigation has been designed for maximum user-friendliness.

Always the right setting

The new NZM is fully adjustable over an extended range. The customary PZ2 screwdriver can still be used. The VX trip unit of the NZM2 can now also be set for the instantaneous release range. In addition the NZM2 now comes with optional ground fault protection.

The PXR – a real knack for connectivity

The PXR electronic release uses the modern communications platform provided by the CAM interface and the internal Modbus RTU module, with possible connections to numerous systems such as PROFIBUS, ProfiNet, Modbus TCP etc.

New modules that make things easier

Interface module

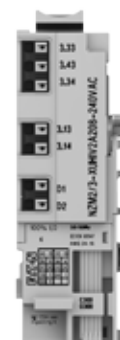
This module is used to detect the status of the circuit breaker by means of photoelectric light barriers, and for connection to enhanced functional interfaces. Each version has been specifically adapted to the respective circuit breaker type. A 24 V DC screw terminal supplies the tripping unit with power. Photoelectric sensors detect the respective device status (on/off/tripped) and relay it via the communication connection. In the event of a short circuit, zone selectivity ensures a faster and more precise shutdown. In addition, the module can be used to connect an internal Modbus RTU module, to remotely operate the ARMS maintenance mode, and to connect the CAM interface to any external communication modules.

The internal Modbus RTU module

A Modbus RTU connection can be integrated internally, so that no external communication components are required. The connection to a superordinate system saves space and allows for the quick and cost-effective transmission of data. As a result, your system will be optimally prepared for all Industry 4.0-related tasks.

Relay module

The relay module contains two programmable relays, in addition to established components such as the undervoltage release. These relays can be used, for example, for the remote control of drives or to control motor starters. They are equally suitable for alert notifications or status messages.



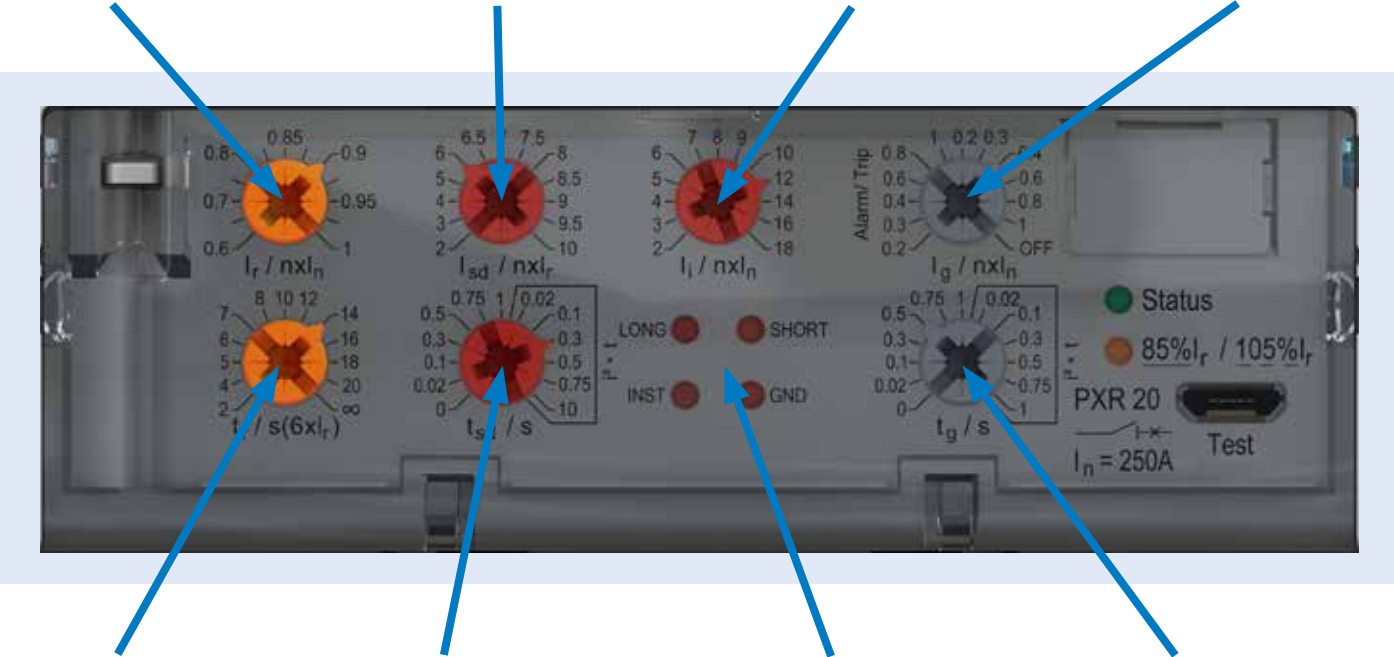
How to correctly adjust the PXR

Overload release I_r
 now with extended 13-point adjustment range (from 0.4 to $1 \times I_n$).

Delayed short-circuit release I_{sd}
 To ensure the selectivity of the mains connection, the circuit breaker will trip after the set delay time t_{sd} .

Non-delayed short-circuit release I_i
 The threshold value can be set between 2 and $18 \times I_n$. The I_i value refers to the rated current I_n .

Earth fault protection I_g
 Should excessive earth impedance prevent the tripping of the short-circuit release, the earth fault protection will automatically issue an alert and switch off the device.



Time lag t_r
 Stipulates the time lag after which an overload of $6 \times I_r$ causes the device to trip. Adjustable in increments of $t_r = 2$ to 20 or ∞ .

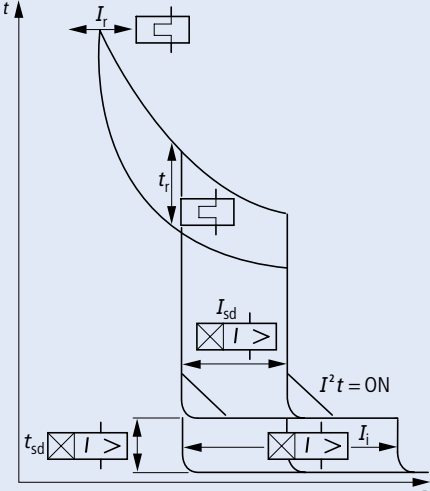
Time delay t_{sd} (with reference to I_{sd})
 Adjustable in 7 steps, from 0 ms to 1,000 ms, for delayed tripping in the event of a short circuit.

“Tripped” message
 If the circuit breaker trips, the corresponding LED will indicate the reason, e.g. an overload.


Time delay t_g (with reference to I_g)
 Thanks to the time delay $t_g = 0$ ms to 1,000 ms, a selective shutdown is possible even in the event of an earth fault.

Electrical parameters

| | | |
|----------|---|-----------------------------------|
| I_r | – | Overload release |
| t_r | – | Time lag |
| I_{sd} | – | Delayed short-circuit release |
| t_{sd} | – | Time delay |
| I_i | – | Non-delayed short-circuit release |



Product overview – IEC / UL circuit breakers

| TYPE | | | NZM1 | | | | | | |
|---|---|-------|---|---------|-----------|---|----------|---------------------|--------------|
| | | |  | | | | | | |
| General information | | | NZME1 | NZMB1 | NZMB1 | NZMC1 | NZMN1 | NZMS1 | NZMH1 |
| Number of poles | | | 1 | 1 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 |
| Degree of protection of the device (operating elements) | IP20 | | | | | ✓ | | | |
| of enclosure and bezel | IP40 | | - | - | | | ✓ | | |
| of enclosures with rotary handles | IP66 | | - | - | | | ✓ | | |
| Dimensions (WxHxD) | | mm | 30x145x84.5 | | | 3-pole: 90x145x84.5 4-pole: 120x145x84.5 | | | |
| Ambient temperature | Storage at -40 °C to +70 °C Operation at -25 °C to +70 °C | | | | | ✓ | | | |
| Feed-in top or bottom | | | | | | ✓ | | | |
| Mounting positions | In general | | Vertical and 90° in all directions | | | | | | |
| | NZM2 plug-in units | | - | - | - | - | - | - | - |
| | NZM withdrawable units | | - | - | - | - | - | - | - |
| Electrical properties in accordance with IEC 60947-2 | | | | | | | | | |
| Rated operational current I _n at 40 °C | AC-1 AC-3 for S,M, MX, PMX DC-1 | A | 16-125 | | | 16-160 36-81 | | | |
| Rated operational voltage U _e | AC 50/60 Hz DC* | V | 230 | | 440 | 690 | | 16-125 - 16-125 | |
| For use in IT networks | | V | - | | 440 | 690 | | | |
| Rated insulation voltage U _i | | V | 400 | | 690 | | | | |
| Rated impulse-withstand voltage U _{imp} | Main contacts Auxiliary contacts | kV | | | | 6 6 | | | |
| Utilization category | | | A | | | | | | |
| Overtoltage category | | | III | | | | | | |
| Pollution category | | | 3 | | | | | | |
| Protective separation in accordance with EN 61140 | | | Yes (see datasheet) | | | | | | |
| Switching capacity in accordance with IEC 60947-2 | | | | | | | | | |
| I _{cu} / I _{cs} @ 50/60 Hz | 240 V 400/415 V 440 V 525 V 690 V 1,000 V | kA | 18 / 18 | 25 / 25 | 30 / 30 | 55 / 55 | 85 / 85 | 90 / 90 | 100 / 100 |
| | | kA | - | 25 / 25 | 25 / 25 | 36 / 36 | 50 / 50 | 70 / 50 | 100 / 100 |
| | | kA | - | - | 25 / 18.5 | 30 / 22.5 | 35 / 35 | 35 / 35 | 70 / 35 |
| | | kA | - | - | - | 12 / 6 | 20 / 10 | 20 / 10 | 40 / 10 |
| | | kA | - | - | - | 8 / 4 | 10 / 7.5 | 10 / 7.5 | 10 / 7.5 |
| | | kA | - | - | - | - | - | - | - |
| I _{cu} / I _{cs} @ DC* | 500 V (3P) 750 V (3P) | kA | - | - | - | - | 15 / 15 | - | 30 / 30 |
| | | kA | - | - | - | - | - | - | - |
| I _{cm} @ 50/60 Hz | 240 V 400/415 V 440 V 525 V 690 V 1,000 V | kA | 36 | 53 | 63 | 121 | 187 | 198 | 220 |
| | | kA | - | 53 | 53 | 76 | 105 | 154 | 220 |
| | | kA | - | - | 53 | 63 | 74 | 77 | 74 |
| | | kA | - | - | - | 24 | 40 | 44 | 40 |
| | | kA | - | - | - | 14 | 17 | 20 | 17 |
| | | kA | - | - | - | - | - | - | - |
| Switching capacity in accordance with UL 489, CSA 22.2 No. 5-09 | | | | | | | | | |
| | 240 V 60 Hz | kA | - | - | 35 | - | 85 | - | - |
| | 480/277 V 60 Hz / 480 V 60 Hz | kA | - | - | 25 / - | - | 35 / - | - | - |
| | 600/347 V / 600 V 60 Hz | kA | - | - | - | - | - | - | - |
| Service life (AC-1) | | | | | | | | | |
| mechanical | max. 50 % tripping with XA/XU | O-C-O | 20000 | | | | | | |
| electrical 50/60 Hz | | | | | | | | | |
| AC-1 | 415 V 690 V 1,000 V | | 7500 | | | 5000 | | 10000 7500 | |
| | | | - | - | - | - | - | - | - |
| AC-3 for S, M, MX, PMX | 415 V 690 V | | - | | | - | | 7500 5000 | |
| | | | - | - | - | - | - | - | 7500 5000 |
| Trip units | | | | | | | | | |
| thermo-magnetic TM | -A | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| electronic (PXR) | -AX (LI) -VX (LSI) -VX...T (LSI-G) -PX (LSI + energy metering) -PX...TZ (LSI-G + energy metering + ZSI) -PX...TAZ (LSI-G + energy metering + ZSI + ARMS) | | - | - | - | - | - | - | - |
| For motor protection | | | | | | | | | |
| TM | -M | | - | - | ✓ | ✓ | ✓ | - | ✓ |
| PXR | -MX (LI) | | - | - | - | - | - | - | - |
| PXR | -PMX (LI + energy metering) | | - | - | - | - | - | - | - |

* The DC values are only valid for thermo-magnetic releases (-A). Additional technical information can be found in the product datasheet on our website.

NZM2



NZM3







NZM4



| NZM2 | | | | | | NZM3 | | | | | NZM4 | | |
|-----------|-----------|--|-----------------------------------|-----------|-----------|-----------|-----------|--|-----------|-----------|---------|--|----------|
| NZMB2 | NZMC2 | NZMN2 | NZMS2 | NZMH2 | NZML2 | NZMC3 | NZMN3 | NZMS3 | NZMH3 | NZML3 | NZMN4 | NZMH4 | NZML4 |
| 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 | 3, 4 |
| | | ✓ | | | | | | ✓ | | | | ✓ | |
| | | ✓ | | | | | | ✓ | | | | ✓ | |
| | | ✓ | | | | | | ✓ | | | | ✓ | |
| | | 3-pole: 105x184x149 4-pole: 140x184x149 | | | | | | 3-pole: 140x275x166 4-pole: 185x275x166 | | | | 3-pole: 210x401x207 4-pole: 280x401x207 | |
| | | ✓ | | | | | | ✓ | | | | ✓ | |
| | | ✓ | | | | | | ✓ | | | | ✓ | |
| | | ✓ | | | | | | ✓ | | | | ✓ | |
| | | Vertical and 90° in all directions Vertical and 90° right/left Vertical and 90° left | | | | | | Vertical and 90° in all directions Vertical and 90° right/left Vertical and 90° left | | | | Vertical and 90° in all directions - | Vertical |
| | | 20-300 81-196 | | | | | | 250-630 196-415 | | | | 630-1600 544-1600 | |
| - | - | 20-250 | - | 20-250 | - | | 250-500 | 250-500 | | | | - | |
| 440 | | | 690 | | | | | 690 | | | | 690 | |
| - | - | 750 | - | 750 | | | 750 | 750 | | | | - | |
| 440 | | | 690 | | | | | 690 | | | | 690 | |
| 690 | | | A/M: 1000 AX/VX/MX/PX/PMX: 690 | | | | | A/M: 1000 AX/VX/MX/PX/PMX: 690 | | | | 690 | |
| | | | 8 | | | | | 8 | | | | 8 | |
| | | | 6 | | | | | 6 | | | | 6 | |
| | | | A | | | | | A | | | | AX, MX, PMX: A VX, PX: B | |
| | | | III | | | | | III | | | | III | |
| | | | 3 | | | | | 3 | | | | 3 | |
| | | Yes (see datasheet) | | | | | | Yes (see datasheet) | | | | Yes (see datasheet) | |
| 30 / 30 | 55 / 55 | 85 / 85 | 100 / 100 | 150 / 150 | 150 / 150 | 55 / 55 | 85 / 85 | 100 / 100 | 150 / 150 | 150 / 150 | 50 / 37 | 125 / 63 | 125 / 63 |
| 25 / 25 | 36 / 36 | 50 / 50 | 70 / 70 | 150 / 150 | 150 / 150 | 36 / 36 | 50 / 50 | 70 / 70 | 150 / 150 | 150 / 150 | 50 / 37 | 85 / 50 | 100 / 50 |
| 25 / 18.5 | 30 / 22.5 | 35 / 35 | 65 / 65 | 130 / 130 | 130 / 130 | 30 / 22.5 | 35 / 35 | 65 / 65 | 130 / 130 | 130 / 130 | 35 / 26 | 85 / 50 | 85 / 50 |
| - | 12 / 6 | 25 / 25 | 36 / 36 | 50 / 37.5 | 100 / 100 | 12 / 9 | 25 / 13 | 36 / 18 | 65 / 33 | 100 / 50 | 25 / 19 | 65 / 50 | 65 / 50 |
| - | 8 / 4 | 20 / 5 | 20 / 6 | 20 / 5 | 80 / 80 | 8 / 4 | 20 / 5 | 25 / 6 | 35 / 9 | 80 / 20 | 20 / 15 | 50 / 37 | 50 / 37 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | 30 / 75 | - | 60 / 15 | - | - | 30 / 30 | - | 70 / 70 | - | - | - | - |
| - | - | 30 / 75 | - | 60 / 15 | - | - | 30 / 30 | - | 70 / 70 | - | - | - | - |
| 63 | 121 | 187 | 220 | 330 | 330 | 121 | 187 | 220 | 330 | 330 | 105 | 275 | 275 |
| 53 | 76 | 110 | 154 | 330 | 330 | 76 | 105 | 154 | 330 | 330 | 105 | 187 | 220 |
| 53 | 63 | 77 | 143 | 286 | 286 | 63 | 74 | 143 | 286 | 286 | 74 | 187 | 187 |
| - | 24 | 55 | 80 | 105 | 220 | 24 | 53 | 80 | 143 | 220 | 53 | 143 | 143 |
| - | 14 | 40 | 40 | 40 | 176 | 14 | 40 | 53 | 74 | 176 | 40 | 100 | 105 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 35 | - | 85 | - | 150 | - | - | 85 | 150 | - | - | 85 | 125 | - |
| 25 | - | 35 / 35 | - | 100 | - | - | 42 / 42 | 100 / 100 | - | - | 42 / 42 | 85 / 85 | - |
| 18 / - | - | 25 / - | - | 50 / - | - | - | 35 / 35 | 50 / 50 | - | - | 35 / 35 | 50 / 50 | - |
| | | 20000 | | | | | 15000 | | | 10000 | | 10000 | |
| | 7500 | | 10000 | | | | 5000 | | | 2000 | | 3000 | |
| - | 5000 | | 7500 | | | | 3000 | | | | | 2000 | |
| - | - | | - | | | | - | | | | | - | |
| - | - | | 6500 | | | | 2000 | | | | | 2000 | |
| - | - | | 5000 | | | | 2000 | | | | | 1000 | |
| ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ ≤ 500 A | ✓ ≤ 500 A | ✓ ≤ 500 A | ✓ ≤ 500 A | - | - | - | - |
| - | - | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| - | - | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| - | - | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| - | - | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| - | - | - | - | - | - | - | ✓ | - | ✓ | - | ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ | - | ✓ | - | - | - | - | - | - | - | - | - |
| - | - | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| - | - | ✓ | - | ✓ | ✓ | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ |

Product overview – switch-disconnectors

| TYPE | | | PN1/N1 | PN2/N2 | PN3/N3 | N4 |
|--|--|--------------------|---|---|---|---|
| | | |  |  |  |  |
| General information | | | | | | |
| Number of poles | | | 3, 4 | 3, 4 | 3, 4 | 3, 4 |
| Degree of protection of the device (operating elements) | IP20 | | | | ✓ | |
| of enclosure and bezel | IP40 | | | | ✓ | |
| of enclosures with rotary handles | IP66 | | | | ✓ | |
| Dimensions (WxHxD) | | mm | 3-pole: 90x145x84.5 4-pole: 120x145x84.5 | 3-pole: 105x184x149 4-pole: 140x184x149 | 3-pole: 140x275x166 4-pole: 185x275x166 | 3-pole: 210x401x207 4-pole: 280x401x207 |
| Ambient temperature | Storage at -40 °C to +70 °C Operation at -25 °C to +70 °C | | | | ✓ | |
| Direction of current supply top or bottom | | | | | ✓ | |
| Mounting positions | In general | | Vertical and 90° in all directions | | | |
| | with plug-in units | | - | Vertical and 90° left | Vertical and 90° right/left | - |
| | with withdrawable units | | - | - | Vertical and 90° left | Vertical |
| Electrical properties in accordance with IEC 60947-3 | | | | | | |
| Rated operational current I_n at 40 °C | AC-1 | A | max. 160 | max. 250 | max. 630 | max. 1,600 |
| | AC-22A, (AC-23 for (PIN...)) | A | max. 160 | max. 250 | max. 630 | max. 1,600 |
| | DC-22A (DC-21A for N...S15-PV-NA) | A | - | - | - | - |
| Rated operational voltage U_e | AC 50/60 Hz | V | 690 | 690 | 690 | 690 |
| | DC | V | - | - | - | - |
| For use in unearthed networks | | V AC | 690 | 690 | 690 | 525 |
| Rated insulation voltage U_i | | V | 690 | 690 | 1,000 | 1,000 |
| Rated impulse-withstand voltage U_{imp} | | | | | | |
| | Main contacts | kV | 6 | 8 | 8 | 8 |
| | Auxiliary contacts | kV | | | 6 | |
| Overvoltage category | | | | | III | |
| Pollution category | | | | | 3 | |
| Safe electrical disconnection in accordance with IEC 60947-3 | | | | | ✓ | |
| Switching capacity in accordance with IEC 60947-3 | | | | | | |
| Rated short-circuit making capacity | I_{cm} | kA | 2.8 | 5.5 | 25 | 53 |
| Rated short-time current | I_{cw} | | | | | |
| | t = 0.3 s | kA | 2 | 3.5 | 12 | 25 |
| | t = 1 s | kA | 2 | 3.5 | 12 | 25 |
| Rated short-circuit current I_q | With fuse upstream | A gG/gL A gR | PN1(N1)-63...125: 125 PN1(N1)-160: 160 | PN2(N2)-160...250: 250 | PN3(N3)-400...630: 630 | PN4(N4)-630...1600: 2x800 |
| | With fuse upstream | kA | 100 | 100 | 100 | 100 |
| | 400/415 V | kA | 80 | 80 | 80 | 80 |
| | 1,000 V | kA | - | - | - | - |
| | With fuse downstream | A gG/gL A gG/gL | PN1(N1)-63...125: 125 PN1(N1)-160: 160 | PN2(N2)-160...250: 250 | PN3(N3)-400...630: 630 | PN4(N4)-630...1600: 2x800 |
| | 400/415 V | kA | 100 | 100 | 100 | 100 |
| 690 V | kA | 10 | 80 | 80 | 80 | |
| Service life | | | | | | |
| Mechanical | | O-C-O | 20000 | 20000 | 15000 | 10000 |
| Maximum operating frequency | | Operations / h | 120 | 120 | 60 | 60 |
| Electrical 50/60 Hz | | | | | | |
| AC-1 | 415 V | | 10000 | 10000 | 5000 | 3000 |
| | 690 V | | 7500 | 7500 | 5000 | 2000 |
| | 1,000 V | | - | - | - | - |
| AC-3 ((PIN1: AC23) | 415 V | | 7500 | 7500 | 3000 | 2000 |
| | 690 V | | 5000 | 5500 | 2000 | 1000 |
| DC-22A (DC-21A for N...S15-PV-NA) | | | | | | |

Additional technical information can be found in the product datasheet on our website.

N2...-DC...



N3...-DC...



N4...-DC...







N4...-PV-NA




| | | | |
|---|---|---|---|
| 4 | 4 | 4 | 4 |
| | | ✓ | |
| | | ✓ | |
| | | ✓ | |
| 140x184x149 | 185x275x166 | 280x401x207 | |
| | | ✓ | |
| | | ✓ | |
| | | ✓ | |
| Vertical and 90° in all directions | | | |
| | | - | |
| | | - | |
| 250 | 550 | 1,600 | 1,200 |
| N...-S1-DC: 1,000 N...-S15-DC: 1,500 | N...-S1-DC: 1,000 N...-S15-DC: 1,500 | N...-S1-DC: 1,000 N...-S15-DC: 1,500 | N...-S1-DC: 1,000 N...-S15-DC: 1,500 |
| N...-S1-DC: 1,000 N...-S15-DC: 1,500 | N...-S1-DC: 1,000 N...-S15-DC: 1,500 | N...-S1-DC: 1,000 N...-S15-DC: 1,500 | N...-S1-DC: 1,000 N...-S15-DC: 1,500 |
| N...-S1-DC: 1,250 N...-S15-DC: 1,500 | N...-S1-DC: 1,250 N...-S15-DC: 1,500 | N...-S1-DC: 1,250 N...-S15-DC: 1,500 | N...-S1-DC: 1,250 N...-S15-DC: 1,500 |
| N...-S1-DC: 8 N...-S15-DC: 10 | N...-S1-DC: 8 N...-S15-DC: 10 | N...-S1-DC: 8 N...-S15-DC: 10 | N...-S1-PV-NA: 8 N...-S15-PV-NA: 10 |
| | | 6 | |
| | | III | |
| N...-S1-DC: 3 N...-S15-DC: 2 | N...-S1-DC: 3 N...-S15-DC: 2 | 3 | 3 |
| | | ✓ | |
| | | - | |
| | | - | |
| 3.6 | 6.6 | 34 (0.1 s) | 34 (0.1 s) |
| A gR/gPV 200 | A gR/gPV 2x250 | - | - |
| | | - | |
| | | - | |
| 15 | 15 | - | - |
| | | - | |
| | | - | |
| | | - | |
| | | - | |
| 20000 | 15000 | 10000 | 10000 |
| 120 | 60 | 60 | 60 |
| | | - | |
| | | - | |
| | | - | |
| | | - | |
| 1000 | 1000 | 500 | 500 |

Circuit breakers

| NS...-...NA | | | | NS1...-NA | NS2...-NA | NS3...-NA | NS4...-NA |
|--|--------------------|----------------------|------|---|---|---|---|
| | | | |  |  |  |  |
| Circuit breaker | | | | max. 125 A | max. 250 A | max. 600 A | max. 1,200 A |
| Rated peak-withstand current | | U_{imp} | | | | | |
| Main circuits | | V | | 6000 | 8000 | 8000 | 8000 |
| Auxiliary circuits | | V | | 6000 | 6000 | 6000 | 6000 |
| Rated operational voltage | | U_e | V AC | 690 | 690 | 690 | 690 |
| Max. rated uninterrupted current | | | | | | | |
| IEC/EN 60947-2 Annex L | | I_n | A | 125 | 250 | 600 | 1200 |
| UL489/CSA 22.2 No. 5.1 | | I_n | A | 125 | 250 | 600 | 1200 |
| Overtoltage category/degree of pollution | | | | III/3 | III/3 | III/3 | III/3 |
| Rated insulation voltage | | U_i | V | 690 | 1000 | 1000 | 1000 |
| Switching capacity in accordance with UL 489, CSA 22.2 No. 5.1 | | | | | | | |
| | 240 V 60 Hz | | kA | 85 | 150 | 150 | 85 |
| | 480 V 60 Hz | | kA | 35 | 100 | 100 | 65 |
| | 600 V 60 Hz | | kA | - | 50 | 50 | 42 |
| Products intended for the North American market have a different switching capacity | | | | | | | |
| Rated short-circuit making capacity | 240 V 50/60 Hz | I_{cm} | kA | 187 | 330 | 330 | 187 |
| | 400/415 V 50/60 Hz | I_{cm} | | 105 | 330 | 330 | 154 |
| | 440 V 50/60 Hz | I_{cm} | kA | 74 | 286 | 286 | 143 |
| | 525 V 50/60 Hz | I_{cm} | kA | 53 | 105 | 143 | 84 |
| | 690 V 50/60 Hz | I_{cm} | kA | 17 | 53 | 74 | 74 |
| Rated short-circuit breaking capacity $I_{cc} = I_{cu}$ in accordance with IEC/EN 60947-2 Annex L | | | | | | | |
| I_{cu} to IEC/EN 60947, switching sequence O-t-CO | 240 V 50/60 Hz | I_{cm} | kA | 85 | 150 | 150 | 85 |
| | 400/415 V 50/60 Hz | I_{cm} | kA | 50 | 150 | 150 | 70 |
| | 440 V 50/60 Hz | I_{cm} | | 35 | 130 | 130 | 65 |
| | 525 V 50/60 Hz | I_{cm} | kA | 20 | 50 | 85 | 40 |
| | 690 V 50/60 Hz | I_{cm} | kA | 10 | 20 | 35 | 35 |
| I_{cu} to IEC/EN 60947, switching sequence O-t-CO-t-CO | 240 V 50/60 Hz | I_{cm} | kA | 85 | 150 | 150 | 43 |
| | 400/415 V 50/60 Hz | I_{cm} | kA | 50 | 150 | 150 | 35 |
| | 440 V 50/60 Hz | I_{cm} | kA | 35 | 130 | 130 | 33 |
| | 525 V 50/60 Hz | I_{cm} | kA | 10 | 37.5 | 33 | 20 |
| | 690 V 50/60 Hz | I_{cm} | kA | 7.5 | 5 | 9 | 18 |
| Service life, mechanical (of which max. 50 % is tripped by the shunt/undervoltage release) | | Switching operations | | 20000 | 20000 | 15000 | 10000 |
| Maximum operating frequency | | ops./h | | 120 | 120 | 60 | 60 |
| Service life, electrical | | | | | | | |
| AC-1 | 400/415 V 50/60 Hz | Switching operations | | 10000 | 10000 | 5000 | 3000 |
| | 690 V 50/60 Hz | Switching operations | | 7500 | 7500 | 3000 | 2000 |
| Total downtime in the event of a short circuit | | ms | | < 10 | < 10 | < 10 | < 25 ≤ 415 V < 35 > 415 V |

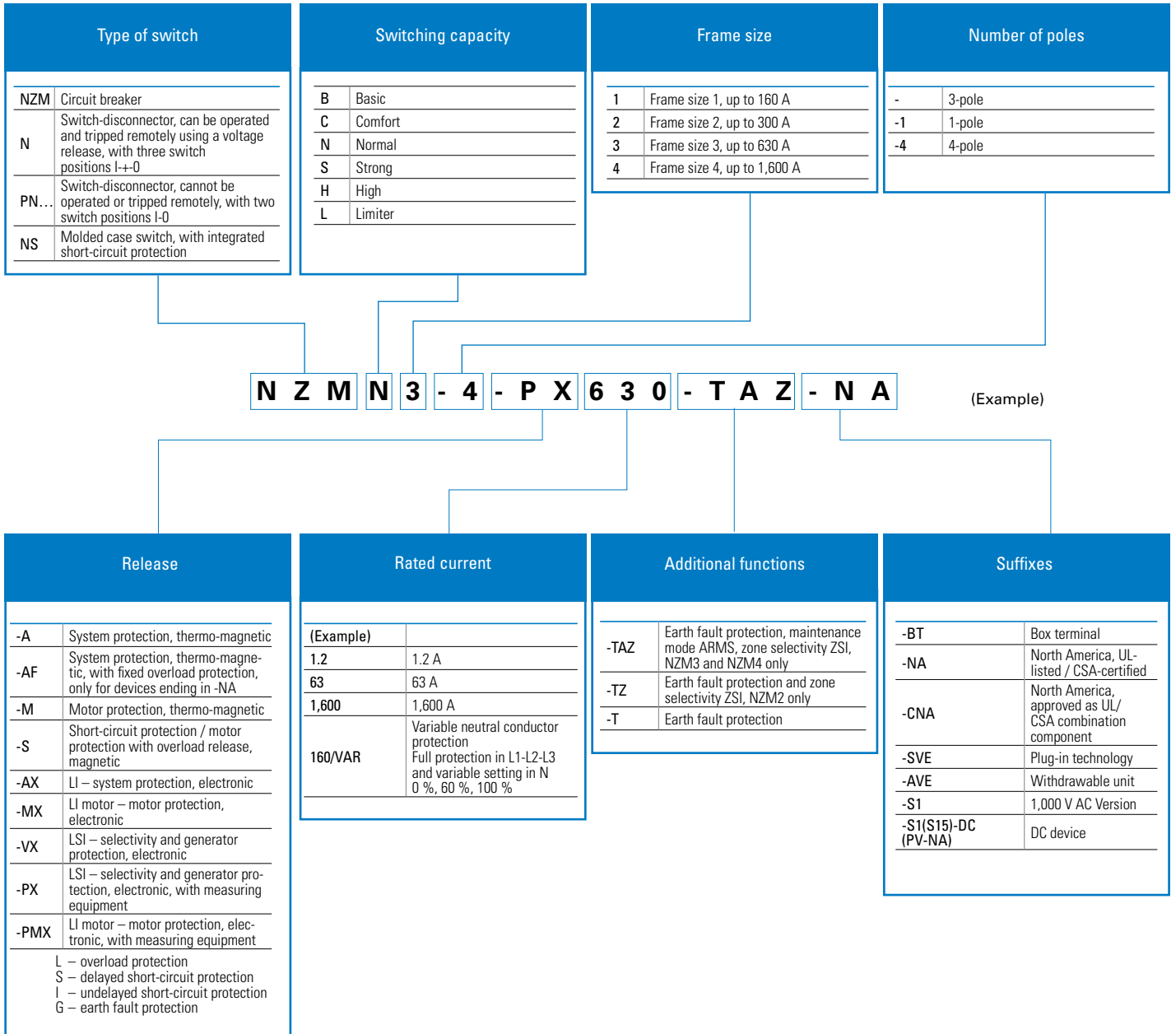
Additional technical information can be found in the product datasheet on our website.

Accessories

| TYPE | | NZM1 | | NZM2 | | NZM3 | | NZM4 | |
|---|------------------|---|-------|--|-------|---|-------|---|--|
| | |  | |  | |  | |  | |
| Internal accessories | | NZM1... / N... | PN... | NZM2... / N.... | PN... | NZM3.../N.... | PN... | NZM4... / N... | |
| Auxiliary contacts | M22-(C)K... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Trip-indicating auxiliary contacts | M22-(C)K... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Early-make auxiliary contacts | NZM...XHIV... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Undervoltage releases | NZM...XU... | ✓ | - | ✓ | - | ✓ | - | ✓ | |
| Undervoltage releases with relay module | NZM...XU...2A... | - | - | ✓ (PXR) | - | ✓ (PXR) | - | ✓ (PXR) | |
| Shunt releases | NZM...XA... | ✓ | - | ✓ | - | ✓ | - | ✓ | |
| Shunt releases with relay module | NZM...XA...2A... | - | - | ✓ (PXR) | - | ✓ (PXR) | - | ✓ (PXR) | |
| Interface Module | NZM...XBSM | - | - | ✓ (PXR) | - | ✓ (PXR) | - | ✓ (PXR) | |
| External accessories | | | | | | | | | |
| Actuator | | | | | | | | | |
| with thumb grip | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Rotary handle, direct | NZM...XDV... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Rotary handle with shaft extension | NZM...XTVD... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Rotary handle, lateral | NZM...XS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Rotary handle with side lever (UL/CSA) | NZM...SXH | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Rotary handle, at the rear | NZM...SXH | ✓ | ✓ | ✓ | ✓ | - | - | - | |
| Remote operator (electrical) | NZM...XR... | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Residual-current protection | | | | | | | | | |
| Residual-current circuit breaker – mountable | NZM...XFI | ✓ | ✓ | ✓ | ✓ | - | - | - | |
| Ground fault relay – cannot be mounted directly | ELR... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Type of installation | | | | | | | | | |
| Fixed | NZM... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Plug-in units | NZM...SVE | ✓ | - | ✓ | - | ✓ | - | - | |
| Withdrawable units | NZM...AV | - | - | - | - | ✓ | - | ✓ | |
| Covers | | | | | | | | | |
| Cable lug cover | NZM...XKSAE | - | - | ✓ | ✓ | ✓ | ✓ | - | |
| Terminal cover | NZM...XKSA... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Phase isolator | NZM...XKP... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Terminal cover | NZM...XKSFA... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | |
| Finger guard | NZM...XIPK... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | |
| Terminal type | | | | | | | | | |
| Screw-in/direct connection | NZM...XKS... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Box terminal | NZM...XKC... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | |
| Connection at rear | NZM...XKR... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Tunnel terminal | NZM...XKA... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Control-circuit terminal | NZM...XST... | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Connection expansion | NZM...XKV... | - | - | - | - | ✓ | ✓ | ✓ | |
| Module plate | NZM...XKM... | - | - | - | - | - | - | ✓ | |

Additional technical information can be found in the product datasheet on our website.

Type design of the basic devices



Conformity to standards

Circuit breakers for global use

All circuit breakers meet the requirements for global use. This also applies to the United States, Canada and the Chinese market, with UL, CSA and CCC (China Compulsory Certification) certifications.

In cooperation with the ship classification societies, Eaton is carrying out a series of tests in order to receive the following approvals: Lloyds Register of Shipping, Bureau Veritas, Det Norske Veritas, Polski Rejestr Statkow, China Classification Society, Germanischer Lloyd and Russian Maritime Register of Shipping.





System and cable protection

Across all levels



The NZM circuit breakers protect entire systems and cables across all levels, from the main distribution board all the way to the load itself.

Based on your requirements, you can choose between the Thermo-Magnetic version for standard applications and the Electronic Trip Unit version with a wider setting range as well as diagnostic and test functions via USB.

The Thermo-Magnetic version for system and cable protection features a robust design and a bimetallic strip release that ensures overload protection for the setting range of $I_r = 0.8$ to $1 \times I_n$.

The magnetic release has a setting range of 6 to $10 \times I_n$.

In the Electronic Trip Unit version, the setting range of the overload has been extended to $I_r = 0.4$ to $1 \times I_n$. This means, for example, that a 250 A circuit breaker can safely operate rated operational currents down to 100 A.

This provides enhanced flexibility when it comes to selection and planning. The circuit breakers for system and cable protection can also be tested via the integrated micro-USB interface, using the Power Xpert Protection Manager (PXPM) software. Thanks to the integrated test protocol function, a report in PDF format can be easily generated.



Protection of motors and motor-starter combinations in case of overload and short circuit events



With a range of 16 A to 1,400 A, the NZM circuit breakers provide reliable protection for motors and input wiring in the event of overloads, short circuits and phase failure. To prevent the protective device from switching off during start-up peaks, the short-circuit releases can be set at up to 18 times the rated current. The extended setting range even protects energy-efficient motors with high starting currents.

The NZM motor-protective circuit breakers meet the requirements for tripping characteristics outlined in IEC/EN 60947-4-1 as well as the associated requirements for phase-failure sensitivity and phase-failure protection.

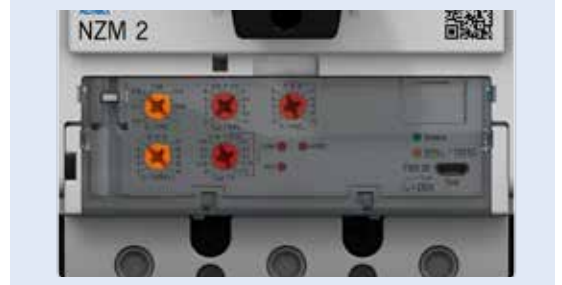
Motor-starter combinations can be controlled via the communication connection and the relay module (also in conjunction with an undervoltage release, for example). DOL starters, reversing starters and circuits with heavy starting duty can all be implemented. The contactor coils can either be automatically controlled directly from the NZM, or manually via the communication connection.

In the event of an overload, the relay module offers a sophisticated option for contactor release prior to the tripping of the NZM. As a result, temporary overloads of 110 % of I_n can be switched off and then automatically back on again without any need to trip or reset the NZM. Alternatively, the device can also be set to issue an alert only.

The devices intended for motor protection are all IE3/IE4-compatible, to prevent undesired tripping in energy-efficient motors. The new electronic releases have been further optimized for applications with high in-rush currents.

Full-range protection

For system protection, cable protection, selectivity and generator protection



As an incoming circuit breaker, the NZM naturally also offers overload protection on the secondary side of the transformer. A version with time-delayed short-circuit releases is also available, to ensure the selectivity of the mains connection. This option is especially suitable if power is supplied via a transformer or a generator, and in IT and TN networks with long cables.

You can fully rely on the NZM circuit breakers, even if the generators struggle to produce between two and six times the continuous current in the event of a short circuit. The NZM will safely switch off even very low short-circuit currents within just a few milliseconds. If special tasks require it, the circuit breakers can be set so that short-circuit currents up to 10 times the rated current will be ignored for up to one second.

Thanks to the extended setting range of the full-range release, the devices can be optimally adapted to any application. Whether it is generator protection, the support of extremely long outputs with low short-circuit currents, or the protection of transformers in case of very high in-rush currents, the NZM circuit breaker can do it all.

Earth fault protection

With current-dependent short-time delay



Residual currents to earth are detected based on the core-balance principle by means of the integrated converters. The circuit breaker will trip or issue an alert in line with the selected settings, and the setting range can be set at 20 % to 100 % of the rated operational current. It is possible to delay the tripping by up to one second.

Selectivity and backup protection

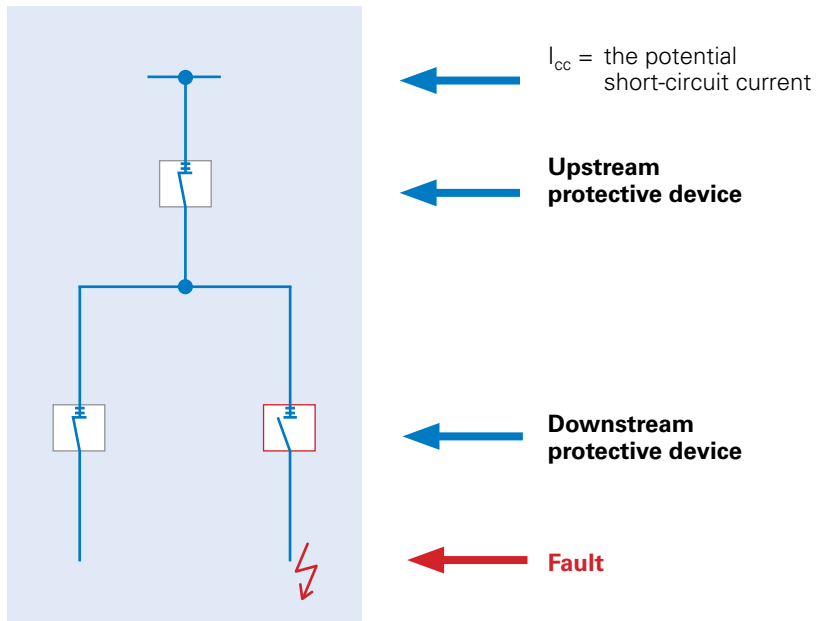
For maximum supply security

Selective overload and short-circuit protection

A combination of two or more short-circuit protection devices (such as circuit breakers or fuses) is selective when only the device closest to the fault detects and interrupts the fault current and the upstream breaker(s) do not trip.

This ensures that branches of the distribution not affected by the fault will continue operation. The NZM circuit breakers are able to achieve selectivity even without the addition of any electronic short-time delay devices.

Selectivity viewed schematically



Backup protection against excessive short-circuit currents

Backup protection is provided if the upstream protective device is able to protect the downstream protective device against excessive short-circuit currents. If the short-circuit current exceeds the short-circuit capacity I_{cu} of the downstream circuit breaker, the upstream circuit breaker will limit the current flow to ensure optimum protection of the system.

NZM frame sizes 1, 2 and 3 have a current-limiting effect. The take-over current I_B of the upstream circuit breaker, i.e. the current at which the latter trips, must not be greater than the I_{cu} of the downstream circuit breaker. This ensures backup protection against all potential short-circuit currents.

Detailed information on selectivity and backup protection can be found in Eaton's "Selectivity, Backup Protection and Coordination Guide".

Zone selectivity and ARMS maintenance mode

Precise disconnection of faults upstream from their location and protection against arc faults

Zone selectivity

Zone selectivity is the next stage in the concept of time selectivity. In contrast to time selectivity, any faults will be switched off instantaneously and at any point in the network. This keeps the energy that is being generated ($I^2 \times t$) –

and thus the thermal and dynamic system load – as low as possible.

For this purpose, the circuit breakers are connected to a signal cable. In the event of a fault, the signal cable ensures that only the circuit breaker located

directly upstream of the fault (i.e. the circuit breaker that feeds into the short circuit) switches off immediately. This keeps that part of the system that has not been affected by the fault operational and thereby minimizes downtime.



ARMS – Arcflash Reduction Maintenance System

Our circuit breakers can be optionally equipped with our new, patented Arcflash Reduction Maintenance System. In the event of an arc fault, this system

ensures an immediate and accelerated shutdown.

The disconnection is even faster than that effected by a non-delayed short-circuit release. This feature can either be activated

directly at the circuit breaker or via an external switch, for example when maintenance personnel enter a hazardous area. No special wiring is required.



More safety when working on live electrical circuits

Safety is Eaton's top priority. Therefore, we offer additional safety functions that go beyond the standard requirements. In this white paper you can find out what advantages this has for users.

Residual-current protection

For universal mounting, or for mounting directly on the circuit breaker



For universal mounting

Eaton's new relay/transformer combinations cover operating currents from 1 A to 1,800 A. The wide range of applications extends from general power distribution systems to individual motor feeders. The relay can detect and process residual currents between 30 mA and 5 A.

The scope of application of the individual relay/transformer combinations depends on the applicable regulations, and ranges from personnel and fire protection to general power protection for 1 to 4-pole networks.

Compact, safe, versatile...

... these are the qualities required of residual-current protection devices, especially in areas – such as installation boards – where space is limited. The measuring relay can be snapped onto a DIN rail as required. It forms a functional unit with the ring-type transformers, which are arranged along the power chain to save space.



For direct mounting on the circuit breaker

The residual-current release modules can be mounted flush with the bases of the NZM1 and NZM2 circuit breakers (in the case of the NZM1 also on the right). Eaton thus offers a compact product that is easy to install without the need for external auxiliary voltage.

The residual-current protection module of the NZM2 is fully independent of the mains voltage and can therefore be used for the purposes of personnel protection in Germany.

Both pulse-current and AC/DC-sensitive devices are available. For virtually any mains constellation, 3 and 4-pole versions are possible, with different rated residual currents ranging from 30 mA to 3 A (with time selectivity).

Protection of DC applications

For use as circuit breakers or switch-disconnectors



Circuit breakers DC applications

The NZM circuit breakers with thermo-magnetic releases can be used for DC applications. However, using the circuit breakers in DC environments alters their technical characteristics. As a result, the threshold value of the short-circuit release has to be adjusted. In addition, the short-circuit breaking capacity will also be affected.

The NZM...-S07-DC circuit breaker has been designed specifically for use in battery applications. As such, the threshold value of the short-circuit release is set especially low to ensure reliable control of the low short-circuit currents in the battery banks.

Switch-disconnectors for DC applications

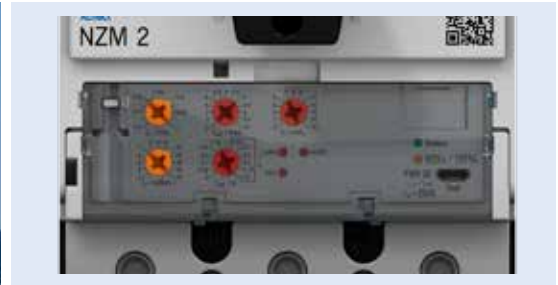
Our powerful range of switch-disconnectors for DC use comprises three frame sizes, from 160 A to 1,600 A, for applications with 1,000 V DC or 1,500 V DC. The devices are IEC 60947-3 and UL489B approved and can therefore be used worldwide. Together with the wide and versatile range of NZM accessories, the DC switch-disconnectors are the ideal choice for demanding DC applications, including (but not limited to) central inverters used in renewable energy systems.

The tested combination of switch-disconnector and 1 or 2-pole link set is especially powerful, and the perfect option for every type of connection situation and for environments with high ambient temperatures. Eaton can guarantee reliable derating values up to 70 °C. The DC switch-disconnectors can also be used without restriction in unearthed IT networks, provided the error case of a double earth fault can be ruled out by means of technical measures.



Protection for special applications

With high power density



Circuit breakers with high switching capacity at 690 V AC

The NZML2 and NZML3 circuit breakers complement the globally recognized NZM family and complete Eaton's offering for systems with high power density. High switching capacities at 690 V AC are not only required in mining, marine applications or the chemical industry; the new products have also been designed with renewable energy systems such as wind turbines in mind.

Our product portfolio covers virtually any demand: The NZML2 is available with up to 160 A, while the NZML3 covers the range up to 400 A. Both devices come with integrated electronic trip units. They offer a switching capacity of 80 kA at 690 V AC. The devices have been equipped with a communications interface and come in the same dimensions as our proven NZM2 and NZM3 circuit breakers. Users of the NZML series have the full range of NZM accessories at their disposal.

Main fields of application:

- Mining
- Shipbuilding
- Industrial applications
- Wind turbines
- Data centers

You can find more information in the Eaton brochure "The circuit breaker series NZML2 and NZML3 for high breaking capacities at 690 V"





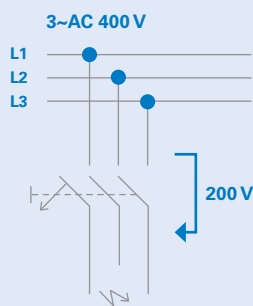
Using the NZM circuit breakers at 1,000 V AC

With the tailor-made models for rated operational voltages up to 1,000 V AC, we have further expanded the scope of application of our NZM circuit breakers and switch-disconnectors. These devices are particularly suitable for use in challenging environmental conditions, notably in the areas of mining, road tunnels, refineries, chemical plants and electric railways. Typical applications include high-power drives and general power supply systems for industrial applications with long supply lines.

Using the NZM circuit breakers in IT networks



1. Faults between the phases



All NZM circuit breakers can be used in unearthed IT networks, unless otherwise indicated. The following must be observed during project planning:

Why do I have to assume that the voltage in the IT system is $\sqrt{3}$ times the mains voltage?

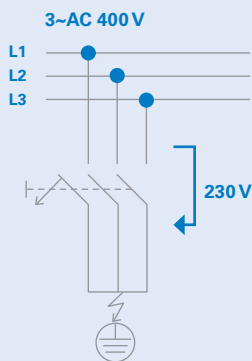
Behavior in TN and TT systems

For circuit breakers in TN and TT systems, the three-phase short circuit to earth is the short circuit with the highest load. To determine the voltage present at each contact, the mains voltage has to be divided by $\sqrt{3}$.

Example:

In a TN-S system with 400 V AC, each circuit breaker contact switches only 230 V AC in the event of a three-phase short circuit to earth. ($400 \text{ V} / 1.73$).

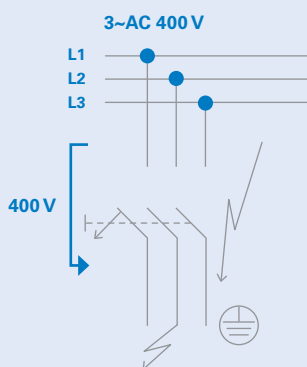
2. Earth fault (simple fault)



Short circuit in the IT system

Short circuits between the phases are also possible in IT systems. In this case, however, the short circuit will be disconnected by two separate contacts inside the circuit breaker, so that each contact only has to switch off half the mains voltage (as illustrated in figure 1, each contact should switch 200 V AC). The short circuit between two phases represents a lower load for the circuit breaker than the three-phase short circuit to earth.

3. Earth fault (double fault)



Double earth faults in IT systems

In IT systems, double earth faults are the short circuits with the highest possible loads. When planning for short circuits, it should always be assumed that a double earth fault will be present; this is also explicitly pointed out in IEC/EN 60947-2, Annex H. In case of a double earth fault, the full mains voltage will be applied to the circuit breaker contact in question (see figure 3 on the left). In this case, one contact alone has to switch off the entire chained voltage (mains voltage). Since the chained voltage is $\sqrt{3}$ times (1.73) the voltage to earth, the short-circuit breaking capacity in the IT network should be planned for as $\sqrt{3}$ the mains voltage.

Technical safety parameters

The NZM circuit breakers can be used in conjunction with undervoltage releases in order to calculate the safety-related parameters (e.g. $B10_d$ or $MTTF_d$). Detailed information can be found here:

Technical safety parameters
www.eaton.eu/safety

Energy metering with the digital NZM

Measurement data for ISO 50001

With Class 1 energy-metering accuracy in accordance with IEC 61557-12



Greater efficiency with ISO 50001

The EN ISO 50001 standard was defined at the international level to facilitate the implementation of in-house energy management systems. The most important aim of the standard is the sustainable reduction of energy costs, energy consumption and CO₂ emissions by means of organizational and technical changes. Both for globally connected companies and for small and medium-sized businesses, sound energy management can lead to enhanced cost transparency and cost savings, while also contributing to the protection of natural resources and to a better corporate image. Especially for power-intensive companies whose consumption exceeds 10 GWh, or whose electricity costs account for more than 14 % of the value added, the German Renewable Energy Sources Act harbors enormous cost reduction potentials in the form of lower energy taxes.

The importance of accurate metrics and analytics

Prerequisites for introducing an energy management system in accordance with ISO 50001 are accurate energy metrics, the identification of the main energy consumers and a full analysis of the company's energy costs. This creates a sound foundation for realizing concrete energy-efficiency improvements. Eaton offers a broad range of innovative products for monitoring, measuring and analyzing energy data.

ISO 50003 – new as of October 2017

Since October 2017, new energy-efficiency requirements have been in place following the publication of the ISO 50003 standard. From now on, companies with certified energy management systems will have to provide hard data to prove the energy-efficiency gains they have realized. With our innovative energy metering technology, we are able to support you in meeting the stricter certification criteria.

Product cost efficiency through precise measurement

To compete in today's markets, cost-optimized products must be manufactured. By measuring the energy requirements of production machines, the energy costs incurred for the production of the individual product can be precisely calculated. The more precise the measurement, the more precise the calculation of the proportional energy costs of the individual product. Especially when large production volumes and short cycle times come together, a very precise measurement is profitable, as incorrect values will otherwise falsify the cost calculation.

Communications

Effective energy management systems



Saving space – quick and safe connection

With the integrated Modbus RTU module, you will save space inside the control panel. In addition, the process of planning your system is now more flexible and cost-effective thanks to the modular interface module. This reduces the time and effort required for installation as well as the overall size of the control cabinet. The handling of the devices has also been simplified thanks to the new push-in terminals. This not only reduces the likelihood of errors, but also simplifies preparation and wiring and ensures that your installation concept meets the highest safety requirements.

Centralized data collection – integration into existing systems

Eaton's centralized data collection system consolidates the operating data of the entire system to ensure their rapid transmission.

The operating data are collected in a uniform format by all IZMX air circuit breakers, all NZM compact circuit breakers and all other PXR modules. For you, this means that the amount of programming work required across the system will be much lower.

In addition, the CAM module simplifies the integration of existing communications systems, such as Profibus DP, ProfiNet or Modbus TCP. Eaton has thus made it much easier to connect your existing architecture.

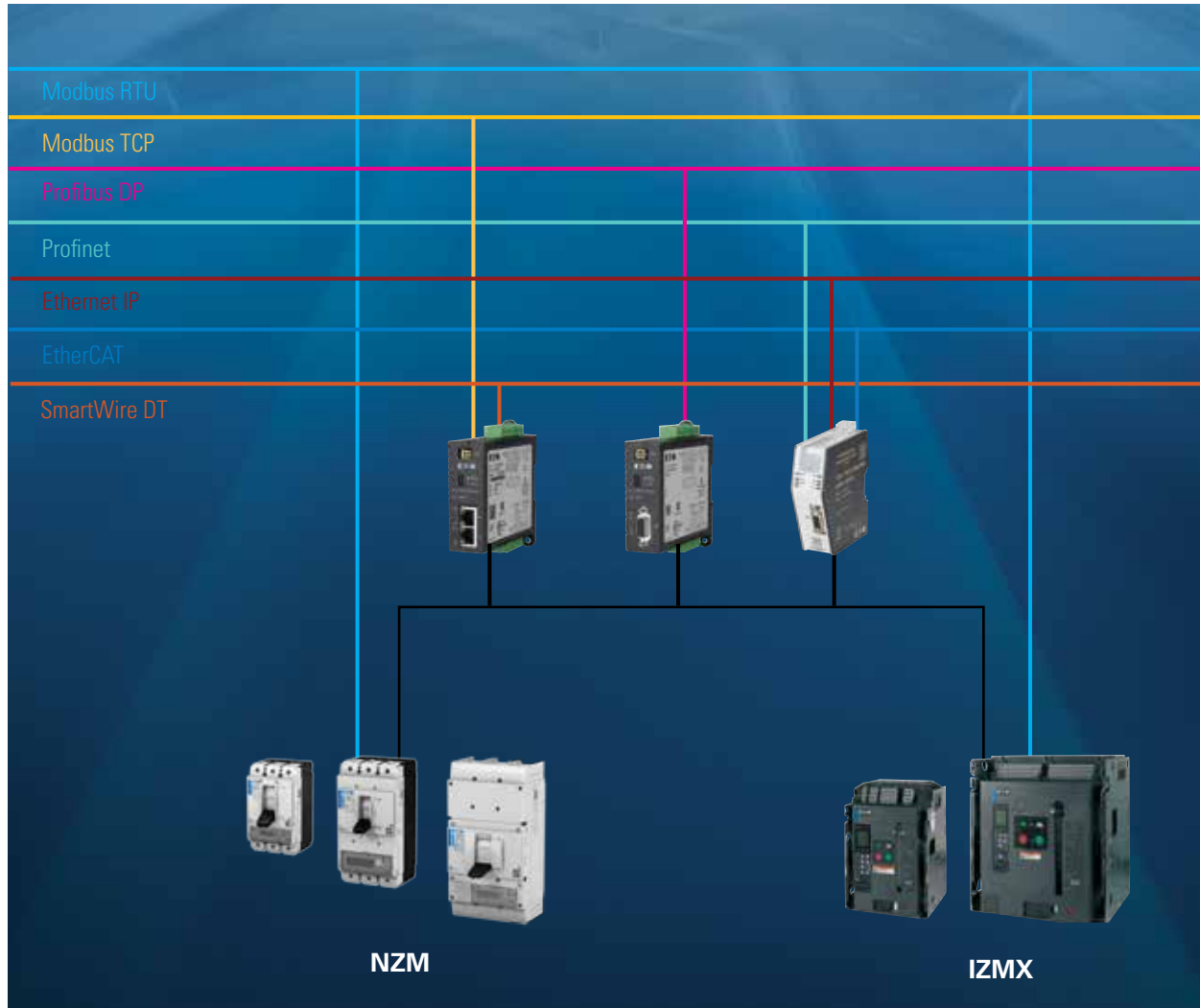
Full access at all times – conveniently with remote control

Via the integrated communications of the PXR and additional modules, such as a remote operator, motor-starter combinations etc., you will have full access to the circuit breaker at all times. The remote operator can be conveniently controlled via the communication connection in combination with the relay module. The relays can also be used to control other devices, e.g. automatic contactor releases at low overloads. You will thus benefit from a significant increase in security while saving time.



Everything at a glance

With the new, integrated communications platform



Reliable and efficient data collection, with Eaton's PXR circuit breakers and measurement and communication modules. Providing users with data in the required form and data format is a challenge, not least given the many different types of communications architectures used in industry today.

Eaton has answered this challenge by creating a variable topology of measuring points in order to meet the demands of users. Eaton offers a comprehensive range of communication interfaces to meet the demands of the market. Based on this structure, the data can be transferred to other communication platforms via various interfaces and gateways as required.

Features and measurement values of the PXR variants

| | NZM...-AX... | NZM...-VX/MX... | NZM...-PX/PMX... |
|---|---------------|----------------------------|------------------------------|
| Power Xpert Release version | PXR10 | PXR20 | PXR25 |
| Connectivity | | | |
| Test option / PXPm connection via USB | ✓ | ✓ | ✓ |
| Interface module with CAM connection | - | optional | ✓ |
| Internal Modbus RTU module | - | optional | optional |
| Relay module | - | optional | optional |
| Provision of the measured data | | | |
| Current | | | |
| In real time, value per phase and neutral conductor | ✓ | ✓ | ✓ |
| Average | ✓ | ✓ | ✓ |
| Asymmetry in % | ✓ | ✓ | ✓ |
| Min/max | ✓ | ✓ | ✓ |
| Voltage | | | |
| In real time, phase-phase / phase-neutral | - | - | ✓ |
| Asymmetry in % | - | - | ✓ |
| Min/max | - | - | ✓ |
| Frequency | | | |
| In real time | - | - | ✓ |
| Min/max | - | - | ✓ |
| Real/apparent/reactive energy Class 1 | | | |
| Total | - | - | ✓ |
| Forward | - | - | ✓ |
| Backward | - | - | ✓ |
| Net | - | - | ✓ |
| Real/apparent/reactive energy Class 1 | | | |
| In real time | - | - | ✓ |
| Min/max | - | - | ✓ |
| Power factor | | | |
| | - | - | ✓ |
| Maintenance information and notifications | | | |
| Service life indicator | - | - | ✓ |
| LED display | status, alert | status, alert, trip reason | status |
| LCD display | - | - | settings, alert, trip reason |
| Safety-related functions | | | |
| ARMS maintenance mode | - | - | optional |
| ZSI zone-selective interlocking | - | - | optional |
| Thermal memory | ✓ | ✓ | ✓ |
| Ambient temperature compensation | ✓ | ✓ | ✓ |

The universal PXPM software

One program for all Eaton devices with PXR electronics

Power Xpert Protection Manager

With the new PXPM software, Eaton has developed a universal program that will allow you to conveniently manage all Eaton PXR devices.



Main features:

- Configuration and settings
- Retrieval and evaluation of data
- Test function

With the PXR technology, configuring, controlling, protecting and testing the system architecture of your Eaton devices is easier than ever before, thanks to the Power Xpert Protection Manager. It is no longer necessary to manually identify the various devices, as the program automatically adapts to each. Guided and drop-down menus ensure that the configuration process is as user-friendly as possible. And the recorded data are always clearly displayed via a single screen.

The PXPM software speaks your language: Eaton provides you with a wide range of language packs; the system can either recognize the language of your computer automatically, or you can set it manually.

A wide selection of additional options allows you to select application-specific settings exactly as required:

- The protective function can be adapted and controlled via the display and by configuring the trip type.
- The waveforms of both current and voltage can be automatically captured and displayed before and after tripping, or manually via the "waveform capture" function.

Eaton software for a broad range of tasks

Configuration, project planning, visualization and much more



xEnergy configurator

The circuit breaker configurator is part of the xEnergy Configurator, and supports users in correctly configuring and ordering their Eaton products:

- Easy to operate
- Support of error-free selection and ordering of compact and open circuit breakers (NZM / IZMX)



xSpider

xSpider is the next generation of software for the sizing and planning of low-voltage networks. It supports the design, selection and optimal configuration of the requisite switchgear. The graphic-oriented drafting software is easy to use and the corresponding database contains all relevant Eaton devices. The ability to select a circuit breaker based on the network diagram, and to examine the tripping characteristic directly, allows for a quick assessment of the selectivity and the required backup fuse. The integrated ArcRisk module, which is currently unique on the market, offers a quick and clear assessment of the arc fault risk in the planned low-voltage switchgear assembly.

Product groups

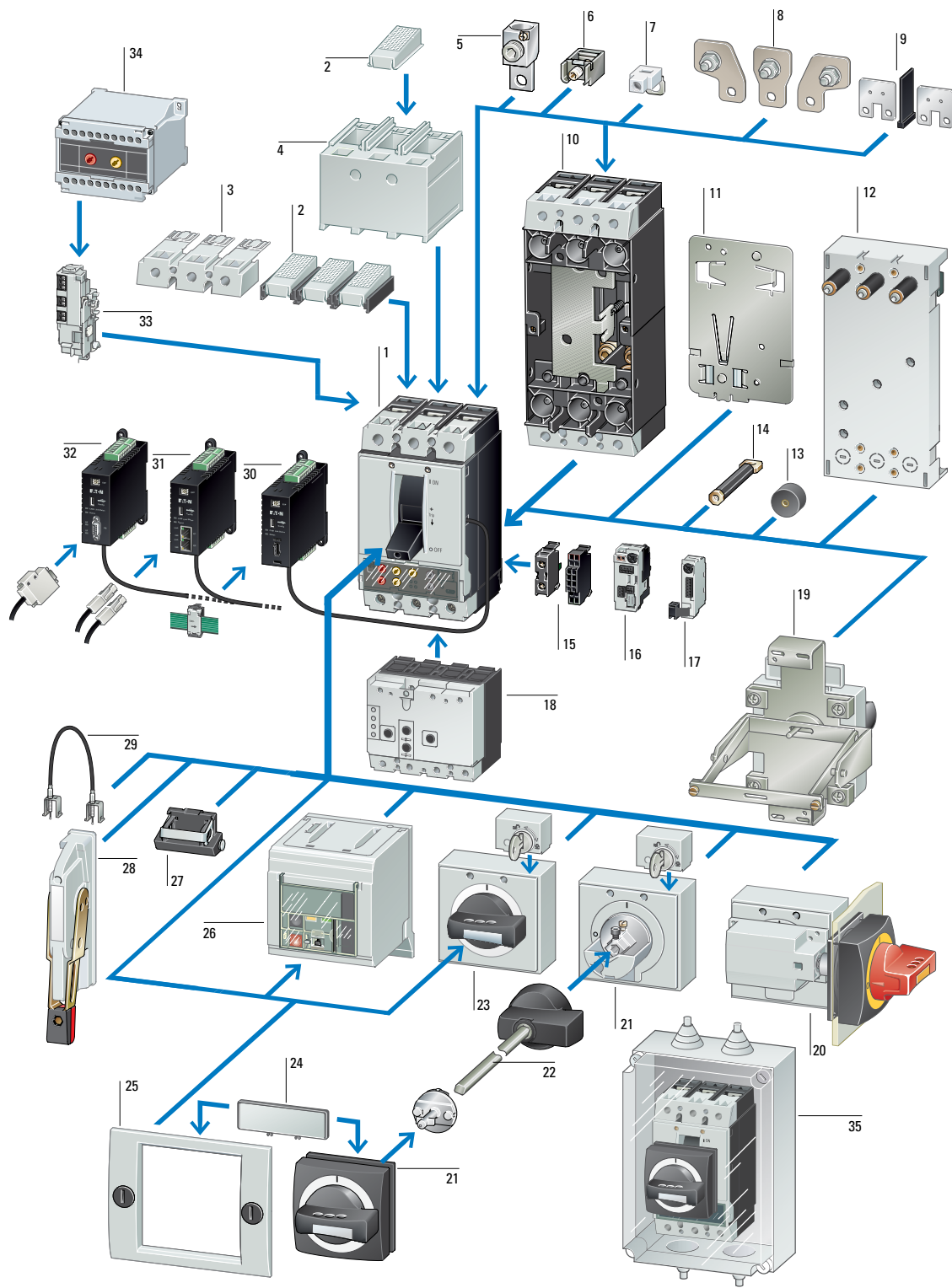
System overview – circuit breakers / switch-disconnectors

Benefit from our portfolio of integrated accessories

Assembly and function are identical for all accessories, independent of frame size. For example, the contact elements from the RMQ-Titan® range of control devices are used for the entire series of NZM circuit breakers. This reduces the number of separate product groups while simplifying the processes related to ordering and storage. The contact elements can simply be snapped on at the front.

The position determines the function: signaling contact or trip-indicating auxiliary contact. Shunt or under-voltage releases, which can also be combined with early-make auxiliary contacts (e.g. for interlocking or load-shedding circuits), offer a sophisticated approach to a wide range of applications.





- | | | |
|---|--|--|
| 1 Switch-disconnector; circuit breaker; circuit breaker for North America; molded case switches for North America | 13 Spacer | 24 External warning plate/marketing plate |
| 2 IP2X protection against finger-contact | 14 Connection on rear | 25 Insulating surround |
| 3 Terminal cover, knockout | 15 Standard auxiliary contacts, trip-indicating auxiliary switches | 26 Remote operator |
| 4 Terminal cover | 16 BSM interface module | 27 Toggle lever interlock device |
| 5 Tunnel terminals | 17 Interface communication module for Modbus RTU | 28 Side operator handle |
| 6 Box terminals | 18 Residual-current protection device | 29 Mechanical interlock |
| 7 Control circuit terminal | 19 Rear operator | 30 Communication module for SmartWire-DT |
| 8 Connection width extension | 20 Main switch rotary handle for side panel mounting | 31 Communication module for Profibus DP |
| 9 Link kit | 21 Door coupling rotary handle | 32 Communication module for Ethernet-based protocols |
| 10 Plug-in and withdrawable unit | 22 Extension shaft | 33 Voltage release/early-make auxiliary contact |
| 11 Adapter plate | 23 Rotary handle | 34 Delay unit for undervoltage releases |
| 12 Busbar adapter | | 35 Ci insulated enclosure |

Terminal types

The matching accessories for versatile applications

The terminal technology of the NZM circuit breakers enables you to address the specific requirements of your system in a flexible manner. Whether it is copper cables from 6 mm² to 300 mm² or aluminum cables, copper strips or copper bars – the NZM has the right solution for every type of connection. On the NZM2 and NZM3, for example, the box terminal can be opened upwards to simply swivel in the conductors. An IP20 (finger-safe) degree of protection can be achieved by means of accessories.

The heads of all the screws used in the circuit breakers, with the exception of the main terminal screws, have a plus-minus profile. This has the advantage that fast machine screwdrivers with standardized Pozidriv 2 drill bits can be used. Alternatively, a standard flat-bladed screwdriver may also be used. This applies to all fixing screws, auxiliary conductor terminals, flaps and covers as well as to all adjustment knobs.

Like the Pozidriv cross slot, the plus-minus slot can transmit a higher torque, which also makes it easier to center the tool while exerting less surface pressure. In addition, the plus-minus slot can be used for different types of tools and is particularly suitable for devices that require frequent maintenance.



1 Enhanced connectivity

The NZM circuit breakers and the PN and N switch-disconnectors can be connected by means of round conductors with or without cable lug, or by using laminated copper strips or copper bars. Another special feature: A narrow version of the cable lug is available to facilitate the connection of thick round conductors up to 300 mm².



2 Screw terminal

Screw terminals are an inexpensive option for connecting cable lugs, perforated strips or copper bars. Our product portfolio of switch-gear accessories also includes the matching cable lugs.

Furthermore, a stud version is offered which allows the simplest mounting of the cable lugs.



3 Box terminal for copper cable

If one or two flexible copper conductors or strips are to be directly connected, the box terminal ensures that the contact is safe. On the NZM2 and NZM3, the box terminal can be opened upwards for easy insertion of thick and rigid conductors, which makes connection particularly easy.



Back-of-hand and finger protection

Back-of-hand protection for cable lugs, box terminals or tunnel terminals can also be achieved by means of covers. IP2X finger protection, as required for main switches in accordance with IEC/EN 60204-1, can be quickly and easily implemented. The additional covers can be adapted to any cross section.

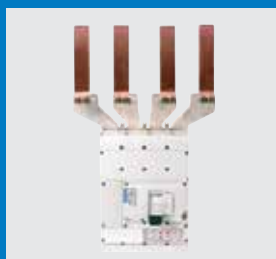
Control-circuit terminals

The control-circuit terminals are simply screwed on below the respective connection type. This makes it possible to quickly set up the taps for voltmeters, control transformers, undervoltage releases etc.



4 Tunnel terminal for aluminum and copper cables

The connection space of this special, tin-plated aluminum terminal is tunnel-shaped to reliably prevent the typical "flow behavior" of aluminum under high pressure. Depending on the model, up to six aluminum or copper conductors can be connected per phase.



5 Connection expansion for additional conductors

This allows for the connection of up to six conductors with cable lugs per phase. Auxiliary busbar systems are no longer required. Special covers for IP2X finger protection are available.



6 Connection at rear

This allows for the connection of rails or round conductors with cable lugs at the rear. The switch area, the cable connection area and the control area can be easily partitioned.



Plug-in and withdrawable units

Safe to operate, with quick switch replacement

Withdrawable units

In addition to the fixed installation type, the NZM3 and NZM4 circuit breakers are also available with plug-in and withdrawable units. You will benefit in more than one way: You will save money and time while eliminating sources of error. This makes it possible to react quickly to malfunctions or to replace the parts (e.g. as a result of an increase in the rated current), thereby avoiding long and expensive downtimes. The withdrawable units are operated using a uniform crank, which increases operational safety. This also makes it possible to put the switch into the test position for functional testing without any switching of the main contacts.

The position of the switch in the cassette can be detected by means of auxiliary contacts. This involves the following positions: connected/test position/disconnected. Even in the disconnected position, the switch is secured inside the cassette by means of a lock, to prevent it from falling out. Removal is only possible via manual release. In addition, the cassette can be locked in any position using a padlock. The standard terminals are compatible with the cassette base.





Plug-in units

The plug-in technology allows for the quick and easy replacement of switches, without the need to switch off the system. The equal width of the fixed circuit breakers and the plug-in units simplifies the planning and design of the system. In addition to its isolating characteristics, the plug-in technology also facilitates the implementation of a clearly visible isolating distance.

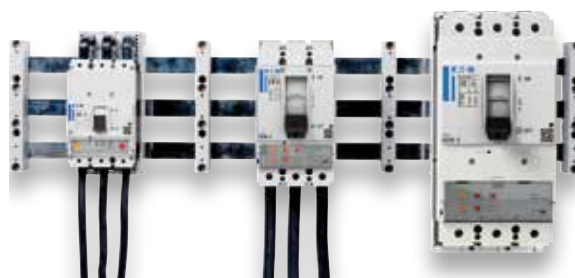
The socket features the same terminals as the fixed switches, while the open plug-in contacts provide for IP2X finger protection. During dismantling, the circuit breaker will be automatically opened and moved to the tripped position for safety reasons. The control-circuit cable can be disconnected by means of a control-circuit plug unit. If the system is to be modified at a later date, the use of plug-in sockets for reserve outlets is recommended.



The plug-in technology is available for the NZM1, NZM2 and NZM3 models. The technology enables the safe and simple electrical isolation of the system during maintenance or replacement of the circuit breaker. An optional control-circuit plug unit is also available. This control-circuit plug unit makes it possible to test the control commands to/from the circuit breaker (shunt/undervoltage release, auxiliary contacts), even if it is not installed as part of the system. The socket has the same types of terminals as the main device. The NZM system accessories can be used without restriction.

Multi-purpose adapter

For universal use and space-saving



Thanks to their space-saving contacts, the busbar adapters can be installed even in applications where space is limited. They are suitable for universal use on any 60 mm busbar system. They are compatible with three different frame sizes, for 160 A, 250 A and 550 A.

Releases and auxiliary contacts

Multi-purpose elements for easy handling



Identical function and assembly of accessories

Assembly and function are identical for all accessories, independent of frame size. This makes handling considerably easier, enabling you to save time while reducing installation and maintenance costs.

Push-in: Quick and safe connection

Both the new undervoltage and shunt releases up to 250 V and the relay modules now come with push-in terminals. This not only reduces the likelihood of errors, but also simplifies preparation and wiring while ensuring that your installation concept meets the highest safety requirements.



The relay modules allow for automated signaling and responses

The relay modules are available for voltages up to 230 V AC and 24 V DC. Combinations with a shunt release or undervoltage release, or with an optional early-make auxiliary contact, are also possible. If you do not require any additional functions, configurations with two relays will suffice. The modules can be activated in the event of certain alerts, statuses or functions. In addition, it is also possible to control a remote operator or a motor-starter combination, or to set up alert and status signaling to the PLC.

Simplified ordering thanks to the RMQ-Titan® contact elements

Like all standard auxiliary contacts in the 22-mm range, the trip-indicating switches use contact elements from the RMQ-Titan® range of control devices. The contact elements can simply be snapped on at the front. You can therefore choose from a wide range of auxiliary contacts, which are not only universally applicable, but also extremely robust and inexpensive. This simplifies the processes related to ordering and also reduces storage costs.

The position determines the function

Whether it's signaling contacts or trip-indicating auxiliary contacts – all contacts as well as releases are also available with screw terminals. This ensures quick wiring of the circuit breakers and switch-disconnectors. The double contacts allow for twice as many auxiliary and signaling contacts in the same space. They are equipped with spring-loaded cage clamps.

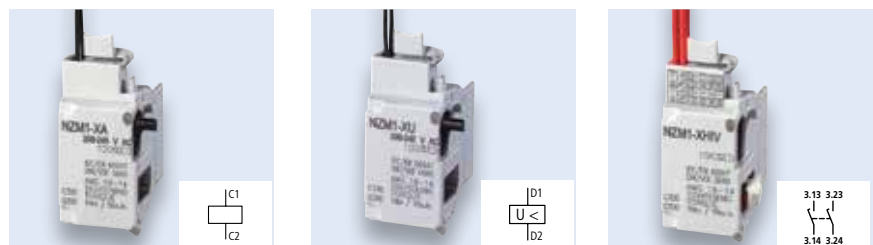
Flexible options for safety and locking tasks

Shunt or undervoltage releases are a sophisticated option for a wide range of applications – especially in combination with early-make auxiliary contacts, for example in interlocking or load-shedding circuits.



Voltage releases for a variety of tasks

Voltage releases are available for the following applications: as undervoltage releases (with or without early-make auxiliary contacts) for main switch applications in accordance with EN 60204; as shunt releases for remote release; and as mesh-network circuit breakers for increased trip reliability.



A special case: Mesh-network circuit breakers

Eaton offers two options for mesh-network circuit breakers: a shunt release that functions as intended in the range from 10 % to 110 % of the control voltage, and a special shunt release that ensures trip reliability up to 12 hours after a power failure, provided it is used in conjunction with a capacitor unit.

Variable operation

Toggle, turn, switch automatically

Door-coupling rotary handles – ergonomic switching

Shafts that can be cut to different lengths allow for installation in control panels and enclosures with depths up to 600 mm. A cost-effective and easy-to-install option is also available for tight installations where the switch is located directly on the inside of the cover.

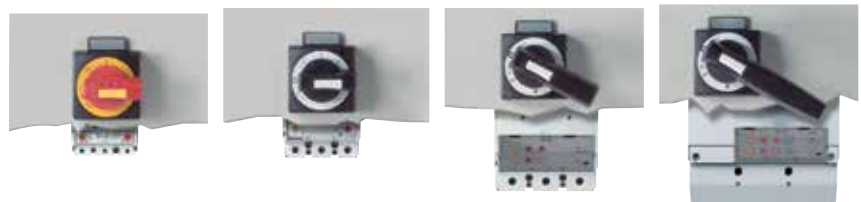
Consistent and flexible

All door-coupling rotary handles have the same drilling template. This consistency contributes to a faster installation process. The switches can be installed either vertically or horizontally inside the control panel.



Toggle or turn

The new circuit breaker series comes with the proven toggle lever as standard. The three switching positions ON, OFF and "TRIPPED" indicate the status of the device. For typical isolator applications where a voltage release is not required, Eaton offers the cost-effective PN switch-disconnector with the switch position indicators 0 and I. Depending on the individual requirements, the toggle mechanism can be converted to rotary action by means of a rotary drive. If a main switch or emergency power-off switch is used with a rotary handle, the latter can be locked with up to three padlocks. For the emergency power-off function, the rotary handles are also available in red/yellow.



Application-specific connections

For greater flexibility, the door-coupling rotary handle is available in various versions. The standard handle allows for automatic locking of the handle position, so that the control-panel doors can be conveniently closed even at different switching positions. The second version can be locked by means of padlocks, which will lock the doors automatically when closed. In the third version, an additional locking mechanism is available directly at the switch. In a large distribution board, for example, the switches can thus be individually locked. For the emergency-stop function, the handles are also available in contrasting red/yellow.

Rotary handles

For switches and various types of interlocks



Key locks for NZM circuit breakers

This function prevents the corresponding circuit breaker or switch-disconnector from being opened, and ensures the isolating condition for the OFF position in accordance with IEC/EN 60947-1. In this version, a cylinder lock combines with our proven rotary handles and door-coupling rotary handles and acts directly on the switch. To activate the lock, the circuit breaker or switch-disconnector must be first switched off. The safety key can only be removed in the "OFF" position. Once the machine has been switched off, operators can easily and safely work on it. They will also be able to lock multiple switches securely against one another.

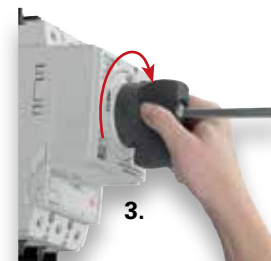
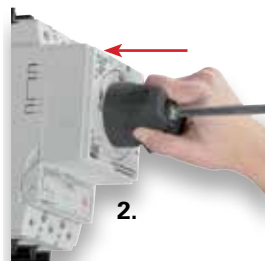
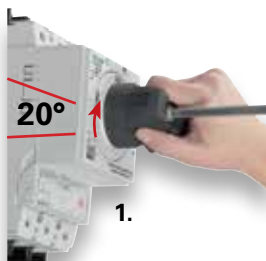
IEC and NA door-coupling rotary handles

Enhanced security by means of an additional handle on the switch

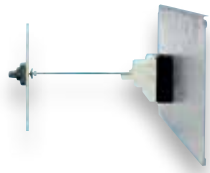


Door-coupling rotary handle for North America in accordance with NFPA79 and UL508A

The North American user guidelines stipulate that the actuator must always be connected to the switch. This also applies when the control panel door is open. The door-coupling rotary handle with additional handle on the switch fulfills this condition. The handle complies with the latest NFPA79 and UL508A regulations for "deliberate action". Deliberate action is ensured by the fact that the additional handle must first be moved by approximately 20° before being simultaneously pressed (2) and turned (3) to turn on the switch. All essential safety features, such as the means of actuation, the switch position indication and the locking capability, are present twice, i.e. both on the outside of the door-coupling rotary handle and on the inside of the switch. The rotary handle for North American standards is available for frame sizes 1, 2, 3, and 4.



Main switch assembly kits Operators and accessories



Flange operator

For applications up to 1,600 A, the flange operator allows the switch to be operated from the right or left hand side, as desired. With the optional addition of our mounting bracket for frame sizes 1 and 2, the space inside the control panel can be optimally used. The mounting plate can thus be used for other machine control elements.



Side-mounted handle

In UL applications, the side-mounted handle can be used for different frame sizes and for complete sets as well as for different degrees of protection and Bowden cable lengths. Caution: The side-mounted handle does not have IEC approval.



Rear operator

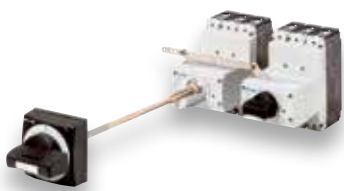
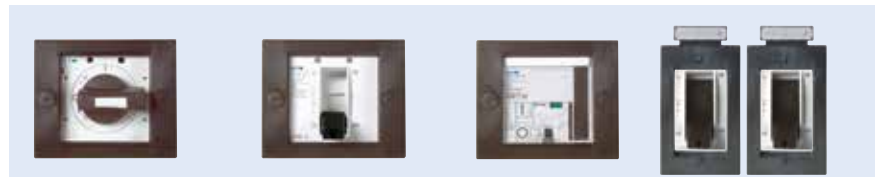
The innovative rear operators for circuit breakers and switch-disconnectors of frame sizes 1 and 2 offer an inexpensive and compact option for installing the switch and the door handle as a single unit in the enclosure doors or side panels. Typical applications include main switches with rated currents up to 250 A, for example in processing machines where space is limited (with or without emergency power-off function).

In addition to the optical benefits of this type of externally visible mounting, it also provides simple and fast access to the terminals, setting buttons, voltage releases and auxiliary contacts. Thanks to the UL/CSA approvals, the devices are suitable for global use, including North America. All circuit breakers and switch-disconnectors from the NZM1 and NZM2 range can be fitted with a rear operator. The compact mechanism and the solid rotary handle allow for quick installation and easy operation.



Accessories

A wide range of accessories, such as covers, locking devices, bezels and spacers etc., are available for all rotary handles and operators.



Paralling mechanism

The sophisticated paralling mechanism for disconnectors (PN) up to 630 A enables the simultaneous switching of multiple devices with just one movement. In a processing machine, for example, both the main and the auxiliary circuits can thus be safely switched at the same time.

Remote operators

A consistent functional concept for simplified operation

It is in Eaton's nature to move things forward, as proven by our efforts to continuously optimize the accessories of the NZM product family. For example, the remote operators have now been equipped with a new control-circuit terminal, in which the plug can be firmly screwed to the pin header. An additional advantage: The terminal system comes with time-saving push-in terminals as a standard.



The economic NZM2 remote operator for standard tasks with rated currents up to 300 A

The switching time of the new NZM2 remote operator is max. 170 ms, and it can therefore be used for automated or remote energy control in standard applications. The retractable mounting plate allows for quick checking of the built-in auxiliary contacts and voltage releases. Thanks to its slim design, the remote operator does not require any additional mounting surface. It has been equipped with a selector switch to ensure safe differentiation between the various operating positions. In addition, the switches can be securely locked in the 0 position by means of padlocks.

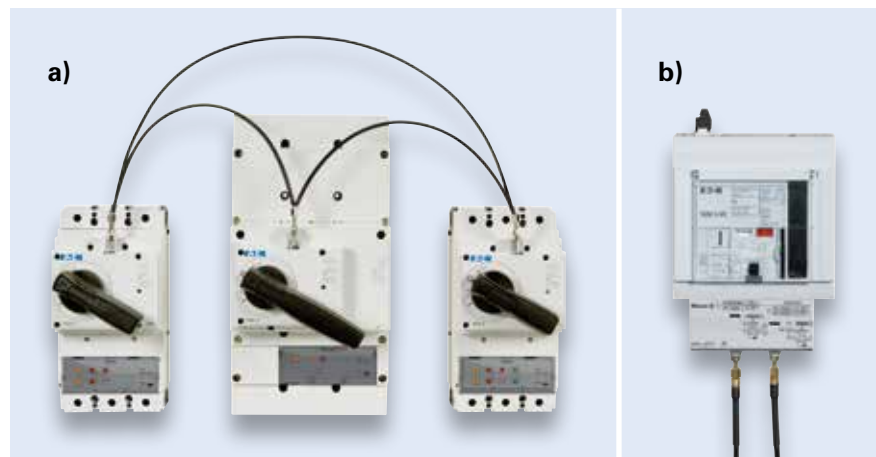
The convenient remote operator for synchronization tasks of the NZM2 to NZM4 series

The spring-loaded operator enables fast switch-on times of 60 ms or 100 ms, making it suitable for use with synchronization tasks. Short function sequences and the small number of parts ensure a high degree of stability and a long service life. The possibility to seal the auto function and the option of locking the remote operator with a padlock are further important contributions to safety.



Mechanical interlocks With Bowden cable

Mechanical lock modules allow for the locking of two or three switches (of identical or different frame sizes), which can either be equipped with rotary handles (a) or remote operators (b). The use of the Bowden cable makes it possible to mount the switches freely in various positions. The switches may be arranged up to 1 m apart – for example in separate enclosures.



Mounting tools

Save time and money

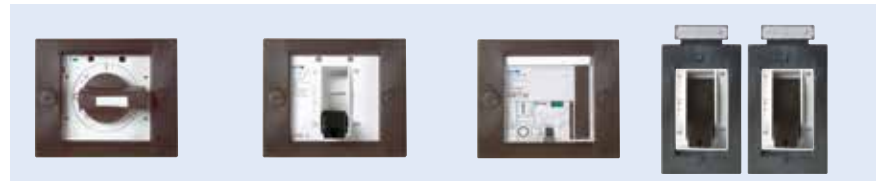


Spacers

All switches, including their accessories, have been designed on a grid with the spacer as the base unit. Different switch depths can be easily compensated with the quick addition of inexpensive spacers. If the circuit breaker is to be externally operated, this option offers a cost-effective alternative to the door-coupling rotary handle with shaft extension. This brand new technology thus results in significant time and cost savings.

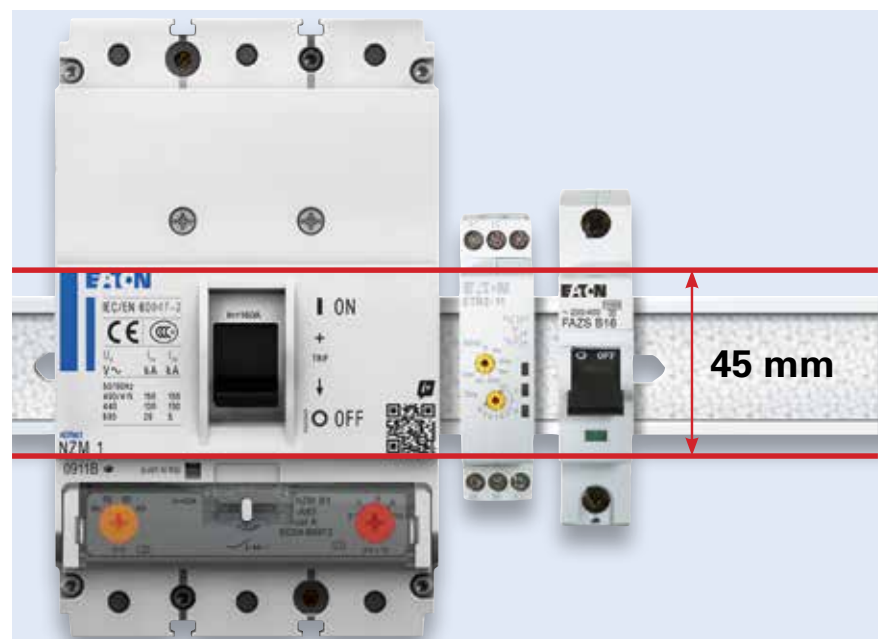
Bezels

Whether the switch is equipped with a toggle lever, a rotary operator or a remote operator, the bezel will always fit. There is thus no need to keep various types of bezels in stock. This is a low-cost option for operating switches from the outside when the control panel door is closed. The bezel has IP40 degree of protection, and the inscription labels can be simply snapped on.



Top-hat rail mounting



The top-hat rail mounting saves time thanks to the use of clip plates for NZM1 and NZM2. Simply attach the clip plate to the circuit breaker at the rear and then clip it onto the top-hat rail. A tiresome drilling of holes in the mounting plate is no longer necessary. A special advantage of the small NZM1: Thanks to the standardized front dimensions, add-on configurations (e.g. with narrow circuit breakers) are possible inside the distribution board.



1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | |  |  | | |

System and cable protection

- IEC/EN 60947-2

Basic switching capacity

1230PIC-785 Symbolphoto



| | | | | | |
|----|-----|-----------|--------------|-----------------------------------|--|
| 25 | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 20 - 25 | 350 A fixed | | |
| | 32 | 25 - 32 | 350 A fixed | | |
| | 40 | 32 - 40 | 8 - 10 | | |
| | 50 | 40 - 50 | 6 - 10 | | |
| | 63 | 50 - 63 | 6 - 10 | | |
| | 80 | 63 - 80 | 6 - 10 | | |
| | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 - 125 | 6 - 10 | | |
| | 160 | 125 - 160 | 1280 A fixed | | |

1230PIC-802 Symbolphoto



| | | | | |
|-----|-----------|---------|------------|--------|
| 125 | 100 - 125 | 6 - 10 | NZMB2-A125 | 259087 |
| 160 | 125 - 160 | 6 - 10 | NZMB2-A160 | 259088 |
| 200 | 160 - 200 | 6 - 10 | NZMB2-A200 | 259089 |
| 250 | 200 - 250 | 6 - 10 | NZMB2-A250 | 259090 |
| 300 | 240 - 300 | 5 - 8.3 | NZMB2-A300 | 107518 |

Comfort switching capacity

1230PIC-785 Symbolphoto



| | | | | | |
|----|-----|-----------|--------------|-----------------------------------|--|
| 36 | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 20 - 25 | 350 A fixed | | |
| | 32 | 25 - 32 | 350 A fixed | | |
| | 40 | 32 - 40 | 8 - 10 | | |
| | 50 | 40 - 50 | 6 - 10 | | |
| | 63 | 50 - 63 | 6 - 10 | | |
| | 80 | 63 - 80 | 6 - 10 | | |
| | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 - 125 | 6 - 10 | | |
| | 160 | 125 - 160 | 1280 A fixed | | |

1230PIC-802 Symbolphoto



| | | | | |
|-----|-----------|---------|------------|--------|
| 125 | 100 - 125 | 6 - 10 | NZMC2-A125 | 271420 |
| 160 | 125 - 160 | 6 - 10 | NZMC2-A160 | 271421 |
| 200 | 160 - 200 | 6 - 10 | NZMC2-A200 | 271422 |
| 250 | 200 - 250 | 6 - 10 | NZMC2-A250 | 271423 |
| 300 | 240 - 300 | 5 - 8.3 | NZMC2-A300 | 107519 |

1230PIC-703 Symbolphoto



| | | | | |
|-----|-----------|--------|------------|--------|
| 250 | 200 - 250 | 6 - 10 | NZMC3-A250 | 109664 |
| 320 | 250 - 320 | 6 - 10 | NZMC3-A320 | 109665 |
| 400 | 320 - 400 | 6 - 10 | NZMC3-A400 | 109666 |
| 500 | 400 - 500 | 6 - 10 | NZMC3-A500 | 109667 |

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

1.1

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | |
|------------|--------|----------------|--------|-------|
| NZMB1-A20 | 280987 | NZMB1-A20-SVE | 112733 | 1 Off |
| NZMB1-A25 | 280988 | NZMB1-A25-SVE | 112734 | |
| NZMB1-A32 | 280989 | NZMB1-A32-SVE | 112735 | |
| NZMB1-A40 | 259075 | NZMB1-A40-SVE | 112703 | |
| NZMB1-A50 | 259076 | NZMB1-A50-SVE | 112704 | |
| NZMB1-A63 | 259077 | NZMB1-A63-SVE | 112705 | |
| NZMB1-A80 | 259078 | NZMB1-A80-SVE | 112706 | |
| NZMB1-A100 | 259079 | NZMB1-A100-SVE | 112707 | |
| NZMB1-A125 | 259080 | NZMB1-A125-SVE | 112708 | |
| NZMB1-A160 | 281230 | - | | |

| | | | | |
|------------------------|--------|----------------|--------|--|
| Terminals as accessory | | NZMB2-A125-SVE | 113192 | |
| NZMB2-A160-BT | 110215 | NZMB2-A160-SVE | 113193 | |
| NZMB2-A200-BT | 110216 | NZMB2-A200-SVE | 113194 | |
| NZMB2-A250-BT | 110217 | NZMB2-A250-SVE | 113195 | |
| NZMB2-A300-BT | 110214 | - | | |

| | | | | |
|------------|--------|----------------|--------|-------|
| NZMC1-A20 | 283293 | NZMC1-A20-SVE | 112753 | 1 Off |
| NZMC1-A25 | 283294 | NZMC1-A25-SVE | 112754 | |
| NZMC1-A32 | 283295 | NZMC1-A32-SVE | 112755 | |
| NZMC1-A40 | 271392 | NZMC1-A40-SVE | 112737 | |
| NZMC1-A50 | 271393 | NZMC1-A50-SVE | 112738 | |
| NZMC1-A63 | 271394 | NZMC1-A63-SVE | 112739 | |
| NZMC1-A80 | 271395 | NZMC1-A80-SVE | 112740 | |
| NZMC1-A100 | 271396 | NZMC1-A100-SVE | 112741 | |
| NZMC1-A125 | 271397 | NZMC1-A125-SVE | 112742 | |
| NZMC1-A160 | 283296 | - | | |



| | | | | |
|------------------------|--------|----------------|--------|-------|
| Terminals as accessory | | NZMC2-A125-SVE | 113219 | 1 Off |
| NZMC2-A160-BT | 110219 | NZMC2-A160-SVE | 113220 | |
| NZMC2-A200-BT | 110280 | NZMC2-A200-SVE | 113221 | |
| NZMC2-A250-BT | 110281 | NZMC2-A250-SVE | 113222 | |
| NZMC2-A300-BT | 110218 | - | | |

| | | | | |
|------------------------|--------|----------------|--------|--|
| Terminals as accessory | | - | | |
| NZMC3-A320-BT | 110299 | NZMC3-A320-SVE | 168450 | |
| - | | NZMC3-A320-AVE | 113509 | |
| NZMC3-A400-BT | 110300 | NZMC3-A400-SVE | 168451 | |
| - | | NZMC3-A400-AVE | 113510 | |
| NZMC3-A500-BT | 110301 | NZMC3-A500-SVE | 168452 | |
| - | | NZMC3-A500-AVE | 113511 | |

1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | |  |  | | |

System and cable protection

- IEC/EN 60947-2

Normal switching capacity

1230PIC-785 Symbolphoto



| | | | | | |
|-----|-----------|--------------|-------------|-----------------------------------|--|
| 50 | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 20 - 25 | 350 A fixed | | |
| | 32 | 25 - 32 | 350 A fixed | | |
| | 40 | 32 - 40 | 8 - 10 | | |
| | 50 | 40 - 50 | 6 - 10 | | |
| | 63 | 50 - 63 | 6 - 10 | | |
| | 80 | 63 - 80 | 6 - 10 | | |
| | 100 | 80 - 100 | 6 - 10 | | |
| 125 | 100 - 125 | 6 - 10 | | | |
| 160 | 125 - 160 | 1280 A fixed | | | |

1230PIC-802 Symbolphoto



| | | | | |
|-----|-----------|---------|------------|--------|
| 125 | 100 - 125 | 6 - 10 | NZMN2-A125 | 259091 |
| 160 | 125 - 160 | 6 - 10 | NZMN2-A160 | 259092 |
| 200 | 160 - 200 | 6 - 10 | NZMN2-A200 | 259093 |
| 250 | 200 - 250 | 6 - 10 | NZMN2-A250 | 259094 |
| 300 | 240 - 300 | 5 - 8.3 | NZMN2-A300 | 107580 |

1230PIC-703 Symbolphoto



| | | | | |
|-----|-----------|--------|------------|--------|
| 250 | 125 - 250 | 6 - 10 | NZMN3-A250 | 109668 |
| 320 | 250 - 320 | 6 - 10 | NZMN3-A320 | 109669 |
| 400 | 320 - 400 | 6 - 10 | NZMN3-A400 | 109670 |
| 500 | 400 - 500 | 6 - 10 | NZMN3-A500 | 109671 |

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

1.1

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | |
|------------|--------|----------------|--------|-------|
| NZMN1-A20 | 281231 | NZMN1-A20-SVE | 112776 | 1 Off |
| NZMN1-A25 | 281232 | NZMN1-A25-SVE | 112777 | |
| NZMN1-A32 | 281233 | NZMN1-A32-SVE | 112778 | |
| NZMN1-A40 | 259081 | NZMN1-A40-SVE | 112757 | |
| NZMN1-A50 | 259082 | NZMN1-A50-SVE | 112758 | |
| NZMN1-A63 | 259083 | NZMN1-A63-SVE | 112759 | |
| NZMN1-A80 | 259084 | NZMN1-A80-SVE | 112760 | |
| NZMN1-A100 | 259085 | NZMN1-A100-SVE | 112761 | |
| NZMN1-A125 | 259086 | NZMN1-A125-SVE | 112762 | |
| NZMN1-A160 | 281234 | - | | |

| | | | | |
|------------------------|--------|----------------|--------|--|
| Terminals as accessory | | NZMN2-A125-SVE | 113243 | |
| NZMN2-A160-BT | 110283 | NZMN2-A160-SVE | 113244 | |
| NZMN2-A200-BT | 110284 | NZMN2-A200-SVE | 113245 | |
| NZMN2-A250-BT | 110285 | NZMN2-A250-SVE | 113246 | |
| NZMN2-A300-BT | 110282 | - | | |

| | | | | |
|------------------------|--------|----------------|--------|--|
| Terminals as accessory | | - | | |
| NZMN3-A320-BT | 110302 | NZMN3-A320-SVE | 168486 | |
| - | | NZMN3-A320-AVE | 110858 | |
| NZMN3-A400-BT | 110303 | NZMN3-A400-SVE | 168487 | |
| - | | NZMN3-A400-AVE | 110859 | |
| NZMN3-A500-BT | 110304 | NZMN3-A500-SVE | 168488 | |
| - | | NZMN3-A500-AVE | 110860 | |



1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|---------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | | | | | |

System and cable protection

- IEC/EN 60947-2

Strong switching capacity

1230PIC-785 Symbolphoto



| | | | | | |
|-----|-----------|--------------|-------------|-----------------------------------|--|
| 70 | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 20 - 25 | 350 A fixed | | |
| | 32 | 25 - 32 | 350 A fixed | | |
| | 40 | 32 - 40 | 8 - 10 | | |
| | 50 | 40 - 50 | 6 - 10 | | |
| | 63 | 50 - 63 | 6 - 10 | | |
| | 80 | 63 - 80 | 6 - 10 | | |
| | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 - 125 | 6 - 10 | | |
| 160 | 125 - 160 | 1280 A fixed | | | |

1230PIC-802 Symbolphoto



| | | | | |
|-----|-----------|-------------|------------|--------|
| 20 | 15 - 20 | 350 A fixed | NZMS2-A20 | 192020 |
| 32 | 25 - 32 | 350 A fixed | NZMS2-A32 | 192022 |
| 40 | 32 - 40 | 8 - 10 | NZMS2-A40 | 109958 |
| 50 | 40 - 50 | 6 - 10 | NZMS2-A50 | 109959 |
| 63 | 50 - 63 | 6 - 10 | NZMS2-A63 | 109960 |
| 80 | 63 - 80 | 6 - 10 | NZMS2-A80 | 109961 |
| 100 | 80 - 100 | 6 - 10 | NZMS2-A100 | 109962 |
| 125 | 100 - 125 | 6 - 10 | NZMS2-A125 | 109963 |
| 160 | 125 - 160 | 6 - 10 | NZMS2-A160 | 109964 |
| 200 | 160 - 200 | 6 - 10 | NZMS2-A200 | 109965 |
| 250 | 200 - 250 | 6 - 10 | NZMS2-A250 | 109966 |
| 300 | 150 - 300 | 5 - 8.3 | NZMS2-A300 | 109967 |

1230PIC-703 Symbolphoto



| | | | | |
|-----|-----------|--------|------------|--------|
| 250 | 200 - 250 | 6 - 10 | NZMS3-A250 | 192023 |
| 320 | 250 - 320 | 6 - 10 | NZMS3-A320 | 192024 |
| 400 | 320 - 400 | 6 - 10 | NZMS3-A400 | 192025 |
| 500 | 400 - 500 | 6 - 10 | NZMS3-A500 | 192026 |

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

1.1

Fixed mounting with box terminals


Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | | |
|------------|--------|---|----------------|--------|-------|
| NZMS1-A20 | 109933 |  | NZMS1-A20-SVE | 112780 | 1 Off |
| NZMS1-A25 | 109934 | | NZMS1-A25-SVE | 112781 | |
| NZMS1-A32 | 109935 | | NZMS1-A32-SVE | 112782 | |
| NZMS1-A40 | 109936 | | NZMS1-A40-SVE | 112783 | |
| NZMS1-A50 | 109937 | | NZMS1-A50-SVE | 112784 | |
| NZMS1-A63 | 109938 | | NZMS1-A63-SVE | 112785 | |
| NZMS1-A80 | 109939 | | NZMS1-A80-SVE | 112786 | |
| NZMS1-A100 | 109940 | | NZMS1-A100-SVE | 112787 | |
| NZMS1-A125 | 109941 | | NZMS1-A125-SVE | 112788 | |
| NZMS1-A160 | 109942 | | - | | |

Terminals as accessory

| |
|-------|
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |



| | |
|----------------|--------|
| - | |
| - | |
| NZMS2-A40-SVE | 113283 |
| NZMS2-A50-SVE | 113284 |
| NZMS2-A63-SVE | 113285 |
| NZMS2-A80-SVE | 113286 |
| NZMS2-A100-SVE | 113287 |
| NZMS2-A125-SVE | 113288 |
| NZMS2-A160-SVE | 113289 |
| NZMS2-A200-SVE | 113290 |
| NZMS2-A250-SVE | 113291 |
| - | |

Terminals as accessory

| |
|-------|
| _____ |
| _____ |
| _____ |

| |
|---|
| - |
| - |
| - |
| - |

1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|---------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | | | | | |

System and cable protection

- IEC/EN 60947-2

High switching capacity

1230PIC-785 Symbolphoto



| | | | | | |
|-----|-----------|--------------|-------------|-----------------------------------|--|
| 100 | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 20 - 25 | 350 A fixed | | |
| | 32 | 25 - 32 | 350 A fixed | | |
| | 40 | 32 - 40 | 8 - 10 | | |
| | 50 | 40 - 50 | 6 - 10 | | |
| | 63 | 50 - 63 | 6 - 10 | | |
| | 80 | 63 - 80 | 6 - 10 | | |
| | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 - 125 | 6 - 10 | | |
| 160 | 125 - 160 | 1280 A fixed | | | |

1230PIC-802 Symbolphoto



| | | | | | |
|-----|-----------|-----------|-------------|------------|--------|
| 150 | 20 | 15 - 20 | 350 A fixed | NZMH2-A20 | 281281 |
| | 25 | 20 - 25 | 350 A fixed | NZMH2-A25 | 281282 |
| | 32 | 25 - 32 | 350 A fixed | NZMH2-A32 | 281283 |
| | 40 | 32 - 40 | 8 - 10 | NZMH2-A40 | 259095 |
| | 50 | 40 - 50 | 6 - 10 | NZMH2-A50 | 259096 |
| | 63 | 50 - 63 | 6 - 10 | NZMH2-A63 | 259097 |
| | 80 | 63 - 80 | 6 - 10 | NZMH2-A80 | 259098 |
| | 100 | 80 - 100 | 6 - 10 | NZMH2-A100 | 259099 |
| | 125 | 100 - 125 | 6 - 10 | NZMH2-A125 | 259100 |
| | 160 | 125 - 160 | 6 - 10 | NZMH2-A160 | 259101 |
| | 200 | 160 - 200 | 6 - 10 | NZMH2-A200 | 259102 |
| | 250 | 200 - 250 | 6 - 10 | NZMH2-A250 | 259103 |
| 300 | 240 - 300 | 5 - 8.3 | NZMH2-A300 | 107581 | |

1230PIC-703 Symbolphoto



| | | | | | |
|--|-----|-----------|--------|------------|--------|
| | 250 | 200 - 250 | 6 - 10 | NZMH3-A250 | 109672 |
| | 320 | 250 - 320 | 6 - 10 | NZMH3-A320 | 109673 |
| | 400 | 400 - 500 | 6 - 10 | NZMH3-A400 | 109674 |
| | 500 | 400 - 500 | 6 - 10 | NZMH3-A500 | 109675 |
| | | | | | |

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

1.1

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | |
|------------|--------|
| NZMH1-A20 | 284376 |
| NZMH1-A25 | 284377 |
| NZMH1-A32 | 284378 |
| NZMH1-A40 | 284379 |
| NZMH1-A50 | 284410 |
| NZMH1-A63 | 284411 |
| NZMH1-A80 | 284412 |
| NZMH1-A100 | 284413 |
| NZMH1-A125 | 284414 |
| NZMH1-A160 | 284415 |



| | | |
|----------------|--------|-------|
| NZMH1-A20-SVE | 112795 | 1 Off |
| NZMH1-A25-SVE | 112796 | |
| NZMH1-A32-SVE | 112797 | |
| NZMH1-A40-SVE | 112798 | |
| NZMH1-A50-SVE | 112799 | |
| NZMH1-A63-SVE | 112800 | |
| NZMH1-A80-SVE | 112801 | |
| NZMH1-A100-SVE | 112802 | |
| NZMH1-A125-SVE | 112803 | |
| - | - | |

| | |
|---------------|--------|
| NZMH2-A20-BT | 110296 |
| NZMH2-A25-BT | 110297 |
| NZMH2-A32-BT | 110298 |
| NZMH2-A40-BT | 110287 |
| NZMH2-A50-BT | 110288 |
| NZMH2-A63-BT | 110289 |
| NZMH2-A80-BT | 110290 |
| NZMH2-A100-BT | 110291 |
| NZMH2-A125-BT | 110292 |
| NZMH2-A160-BT | 110293 |
| NZMH2-A200-BT | 110294 |
| NZMH2-A250-BT | 110295 |
| NZMH2-A300-BT | 110286 |



| | |
|----------------|--------|
| NZMH2-A20-SVE | 113351 |
| NZMH2-A25-SVE | 113352 |
| NZMH2-A32-SVE | 113353 |
| NZMH2-A40-SVE | 113328 |
| NZMH2-A50-SVE | 113329 |
| NZMH2-A63-SVE | 113330 |
| NZMH2-A80-SVE | 113331 |
| NZMH2-A100-SVE | 113332 |
| NZMH2-A125-SVE | 113333 |
| NZMH2-A160-SVE | 113334 |
| NZMH2-A200-SVE | 113335 |
| NZMH2-A250-SVE | 113336 |
| - | - |

| | |
|------------------------|--------|
| Terminals as accessory | |
| NZMH3-A320-BT | 110305 |
| - | |
| NZMH3-A400-BT | 110306 |
| - | |
| NZMH3-A500-BT | 110307 |
| - | |





| | |
|----------------|--------|
| - | |
| NZMH3-A320-SVE | 168913 |
| NZMH3-A320-AVE | 110861 |
| NZMH3-A400-SVE | 168914 |
| NZMH3-A400-AVE | 110862 |
| NZMH3-A500-SVE | 168915 |
| NZMH3-A500-AVE | 110863 |

1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...M

Fixed mounting with screw terminals

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Rated operational power 50/60 Hz | Rated operational current | Part no. | Article no. |
|--|--|---|---|--|------------------------------|----------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | AC-3 | | | |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_j = I_n \times \dots$ | 400 V P kW | 400 V I_e A | | |
| | |  |  | | | | |

Motor protection

- NZM...1-M...: with phase-failure sensitivity
- Tripping class 10 A
- IEC/EN 60947-2

Basic switching capacity

1230PIC-786 Symbolphoto



| | | | | | | | |
|----|-----|----------|----------|------|----|-----------------------------------|--|
| 25 | 40 | 32 - 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 40 - 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 40 - 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 63 - 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 80 - 100 | 8 - 12.5 | 45 | 81 | | |

1230PIC-803 Symbolphoto



| | | | | | | |
|-----|-----------|--------|-----|-----|------------|--------|
| 125 | 100 - 125 | 8 - 14 | 55 | 99 | NZMB2-M125 | 265715 |
| 160 | 125 - 160 | 8 - 14 | 75 | 134 | NZMB2-M160 | 265716 |
| 200 | 160 - 200 | 8 - 14 | 110 | 196 | NZMB2-M200 | 265717 |

Comfort switching capacity

1230PIC-786 Symbolphoto



| | | | | | | | |
|----|-----|----------|----------|------|----|-----------------------------------|--|
| 36 | 40 | 32 - 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 40 - 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 50 - 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 63 - 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 80 - 100 | 8 - 12.5 | 45 | 99 | | |

1230PIC-803 Symbolphoto



| | | | | | | |
|-----|-----------|--------|-----|-----|------------|--------|
| 125 | 100 - 125 | 8 - 14 | 55 | 99 | NZMC2-M125 | 271424 |
| 160 | 125 - 160 | 8 - 14 | 75 | 134 | NZMC2-M160 | 271425 |
| 200 | 160 - 200 | 8 - 14 | 110 | 196 | NZMC2-M200 | 271426 |

Compact circuit breakers, switch disconnectors

1.1

Circuit breakers, thermomagnetic releases, 3 pole NZM...M

Fixed mounting with box terminals

Part no. Article no.

Plug-in units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | |
|------------|--------|
| NZMB1-M40 | 265710 |
| NZMB1-M50 | 265711 |
| NZMB1-M63 | 265712 |
| NZMB1-M80 | 265713 |
| NZMB1-M100 | 265714 |



| | | |
|----------------|--------|-------|
| NZMB1-M40-SVE | 112709 | 1 Off |
| NZMB1-M50-SVE | 112720 | |
| NZMB1-M63-SVE | 112721 | |
| NZMB1-M80-SVE | 112722 | |
| NZMB1-M100-SVE | 112723 | |

| | |
|------------------------|--------|
| NZMB2-M125-BT | 115260 |
| Terminals as accessory | |



| | |
|----------------|--------|
| NZMB2-M125-SVE | 113196 |
| NZMB2-M160-SVE | 113197 |
| NZMB2-M200-SVE | 113198 |

| | |
|------------|--------|
| NZMC1-M40 | 271398 |
| NZMC1-M50 | 271399 |
| NZMC1-M63 | 271400 |
| NZMC1-M80 | 271401 |
| NZMC1-M100 | 271402 |



| | | |
|----------------|--------|-------|
| NZMC1-M40-SVE | 112743 | 1 Off |
| NZMC1-M50-SVE | 112744 | |
| NZMC1-M63-SVE | 112745 | |
| NZMC1-M80-SVE | 112746 | |
| NZMC1-M100-SVE | 112747 | |

| | |
|------------------------|--|
| Terminals as accessory | |
| | |



| | |
|----------------|--------|
| NZMC2-M125-SVE | 113223 |
| NZMC2-M160-SVE | 113224 |
| NZMC2-M200-SVE | 113225 |

1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...M

Fixed mounting with screw terminals

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range Overload releases | Short-circuit releases Non-delayed | Rated operational power AC-3 50/60 Hz 400 V P kW | Rated operational current 400 V I _e A | Part no. | Article no. |
|--|--|--|--|---|---|----------|-------------|
| I _{cu} kA | I _n = I _u A | I _r = I _n × ... A | I _s = I _n × ... A | | | | |



Motor protection

- NZM...1-M...: with phase-failure sensitivity
- Tripping class 10 A
- IEC/EN 60947-2

Normal switching capacity

1230PIC-786 Symbolphoto



| | | | | | | | |
|----|-----|----------|----------|------|----|-----------------------------------|--|
| 50 | 40 | 32 - 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 40 - 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 50 - 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 63 - 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 80 - 100 | 8 - 12.5 | 45 | 99 | | |

1230PIC-803 Symbolphoto



| | | | | | | | |
|--|-----|-----------|--------|-----|-----|------------|--------|
| | 125 | 100 - 125 | 8 - 14 | 55 | 99 | NZMN2-M125 | 265723 |
| | 160 | 125 - 160 | 8 - 14 | 75 | 134 | NZMN2-M160 | 265724 |
| | 200 | 160 - 200 | 8 - 14 | 110 | 196 | NZMN2-M200 | 265725 |

Strong switching capacity

1230PIC-803 Symbolphoto



| | | | | | | | |
|----|-----|-----------|-------------|------|------|------------|--------|
| 70 | 20 | 15 - 20 | 350 A fixed | 7.5 | 16 | NZMS2-M20 | 109968 |
| | 25 | 20 - 25 | 350 A fixed | 11 | 21.7 | NZMS2-M25 | 109969 |
| | 32 | 25 - 32 | 350 A fixed | 15 | 29.3 | NZMS2-M32 | 109970 |
| | 40 | 32 - 40 | 8 - 14 | 18.5 | 36 | NZMS2-M40 | 109971 |
| | 50 | 40 - 50 | 8 - 14 | 22 | 41 | NZMS2-M50 | 109972 |
| | 63 | 50 - 63 | 8 - 14 | 30 | 55 | NZMS2-M63 | 109973 |
| | 80 | 63 - 80 | 8 - 14 | 37 | 68 | NZMS2-M80 | 109974 |
| | 100 | 80 - 100 | 8 - 14 | 55 | 81 | NZMS2-M100 | 109975 |
| | 125 | 100 - 125 | 8 - 14 | 55 | 100 | NZMS2-M125 | 109976 |
| | 160 | 125 - 160 | 8 - 14 | 75 | 134 | NZMS2-M160 | 109977 |
| | 200 | 160 - 200 | 8 - 14 | 110 | 196 | NZMS2-M200 | 109978 |

Compact circuit breakers, switch disconnectors

1.1

Circuit breakers, thermomagnetic releases, 3 pole NZM...M

Fixed mounting with box terminals

Part no. Article no.

Plug-in units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | |
|------------|--------|
| NZMN1-M40 | 265718 |
| NZMN1-M50 | 265719 |
| NZMN1-M63 | 265720 |
| NZMN1-M80 | 265721 |
| NZMN1-M100 | 265722 |



| | | |
|----------------|--------|-------|
| NZMN1-M40-SVE | 112763 | 1 Off |
| NZMN1-M50-SVE | 112764 | |
| NZMN1-M63-SVE | 112765 | |
| NZMN1-M80-SVE | 112766 | |
| NZMN1-M100-SVE | 112767 | |

| | |
|------------------------|-------|
| Terminals as accessory | _____ |
| | _____ |



| | |
|----------------|--------|
| NZMN2-M125-SVE | 113250 |
| NZMN2-M160-SVE | 113251 |
| NZMN2-M200-SVE | 113252 |

| | |
|------------------------|-------|
| Terminals as accessory | _____ |
| | _____ |
| | _____ |
| | _____ |
| | _____ |
| | _____ |
| | _____ |
| | _____ |
| | _____ |
| | _____ |





| | | |
|----------------|--------|-------|
| NZMS2-M20-SVE | 113293 | 1 Off |
| NZMS2-M25-SVE | 113294 | |
| NZMS2-M32-SVE | 113295 | |
| NZMS2-M40-SVE | 113296 | |
| NZMS2-M50-SVE | 113297 | |
| NZMS2-M63-SVE | 113298 | |
| NZMS2-M80-SVE | 113299 | |
| NZMS2-M100-SVE | 113300 | |
| NZMS2-M125-SVE | 113301 | |
| NZMS2-M160-SVE | 113302 | |
| NZMS2-M200-SVE | 113303 | |

1.1

Compact circuit breakers, switch disconnectors

Circuit breakers, thermomagnetic releases, 3 pole
NZM...M

Fixed mounting with screw terminals

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range Overload releases | Short-circuit releases Non-delayed | Rated operational power AC-3 50/60 Hz 400 V P kW | Rated operational current 400 V I_e A | Part no. | Article no. |
|--|--|---|---|---|--|----------|-------------|
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_j = I_n \times \dots$ | | | | |
| | |  |  | | | | |

Motor protection

- NZM...1-M...: with phase-failure sensitivity
- Tripping class 10 A
- IEC/EN 60947-2

High switching capacity

1230PIC-786 Symbolphoto



| 100 | 40 | 32-40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
|-----|-----|--------|----------|------|----|-----------------------------------|--|
| | 50 | 40-50 | 8 - 14 | 22 | 41 | | |
| | 63 | 50-63 | 8 - 14 | 30 | 55 | | |
| | 80 | 63-80 | 8 - 14 | 37 | 68 | | |
| | 100 | 80-100 | 8 - 12.5 | 45 | 99 | | |

1230PIC-803 Symbolphoto



| | | | | | | |
|-----|---------|-------------|------|------|------------|--------|
| 25 | 20-25 | 350 A fixed | 11 | 21.7 | NZMH2-M25 | 281300 |
| 32 | 25-32 | 350 A fixed | 15 | 29.3 | NZMH2-M32 | 281301 |
| 40 | 32-40 | 8 - 14 | 18.5 | 36 | NZMH2-M40 | 281302 |
| 50 | 40-50 | 8 - 14 | 22 | 41 | NZMH2-M50 | 281303 |
| 63 | 50-63 | 8 - 14 | 30 | 55 | NZMH2-M63 | 281304 |
| 80 | 63-80 | 8 - 14 | 37 | 68 | NZMH2-M80 | 281305 |
| 100 | 80-100 | 8 - 14 | 45 | 99 | NZMH2-M100 | 281306 |
| 125 | 100-125 | 8 - 14 | 55 | 99 | NZMH2-M125 | 281307 |
| 160 | 125-160 | 8 - 14 | 75 | 134 | NZMH2-M160 | 281308 |
| 200 | 160-200 | 8 - 14 | 110 | 196 | NZMH2-M200 | 281309 |

Compact circuit breakers, switch disconnectors

1.1

Circuit breakers, thermomagnetic releases, 3 pole NZM...M

Fixed mounting with box terminals

Part no. Article no.

Plug-in units

Part no. Article no. Std. pack

Order base separately

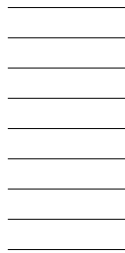
For further terminal types
see accessories

| | |
|------------|--------|
| NZMH1-M40 | 115450 |
| NZMH1-M50 | 115451 |
| NZMH1-M63 | 115452 |
| NZMH1-M80 | 115453 |
| NZMH1-M100 | 115454 |



| | | |
|----------------|--------|-------|
| NZMH1-M40-SVE | 115790 | 1 Off |
| NZMH1-M50-SVE | 115791 | |
| NZMH1-M63-SVE | 115792 | |
| NZMH1-M80-SVE | 115793 | |
| NZMH1-M100-SVE | 115794 | |

Terminals as accessory



| | |
|----------------|--------|
| NZMH2-M25-SVE | 113355 |
| NZMH2-M32-SVE | 113356 |
| NZMH2-M40-SVE | 113357 |
| NZMH2-M50-SVE | 113358 |
| NZMH2-M63-SVE | 113359 |
| NZMH2-M80-SVE | 113360 |
| NZMH2-M100-SVE | 113361 |
| NZMH2-M125-SVE | 113362 |
| NZMH2-M160-SVE | 113363 |
| NZMH2-M200-SVE | 113364 |

1.2

Compact circuit breakers, switch disconnectors

Circuit breakers, magnetic short-circuit releases, 3 pole
NZM...S

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range Short-circuit releases Non-delayed | Rated operational power AC-3 50/60 Hz 400 V P kW | Rated operational current AC-3 50/60 Hz 400 V I_e A | Fixed mounting with screw terminals | |
|--|--|---|--|---|-------------------------------------|-------------|
| | | | | | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_i = I_n \times \dots$ | | | | |



Short-circuit protection

Motor protection in conjunction with overload relay

- With short-circuit releases
- Without overload releases $I_r = I_n \times \dots$
- IEC/EN 60947-2

Basic switching capacity

1230PIC-787 Symbolphoto



| | | | | | | |
|----|-----|----------|------|----|-----------------------------------|--|
| 25 | 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 8 - 12.5 | 45 | 81 | | |

1230PIC-804 Symbolphoto



| | | | | | |
|-----|----------|-----|-----|------------|--------|
| 125 | 8 - 14 | 45 | 99 | NZMB2-S125 | 265736 |
| 160 | 8 - 14 | 75 | 134 | NZMB2-S160 | 265737 |
| 200 | 8 - 12.5 | 110 | 196 | NZMB2-S200 | 265738 |

Comfort switching capacity

1230PIC-787 Symbolphoto



| | | | | | | |
|----|-----|----------|------|----|-----------------------------------|--|
| 36 | 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 8 - 12.5 | 45 | 81 | | |

1230PIC-804 Symbolphoto



| | | | | | |
|-----|----------|-----|-----|------------|--------|
| 125 | 8 - 14 | 45 | 99 | NZMC2-S125 | 271427 |
| 160 | 8 - 14 | 75 | 134 | NZMC2-S160 | 271428 |
| 200 | 8 - 12.5 | 110 | 196 | NZMC2-S200 | 271429 |

1230PIC-881 Symbolphoto



| | | | | | |
|-----|----------|-----|-----|------------|--------|
| 250 | 8 - 14 | 132 | 231 | NZMC3-S250 | 109676 |
| 320 | 8 - 14 | 160 | 279 | NZMC3-S320 | 109677 |
| 400 | 7 - 12.5 | 200 | 349 | NZMC3-S400 | 109678 |
| 500 | 6 - 10 | 250 | 437 | NZMC3-S500 | 109679 |

Compact circuit breakers, switch disconnectors

1.2

Circuit breakers, magnetic short-circuit releases, 3 pole NZM...S

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | | |
|------------|--------|---|----------------|--------|-------|
| NZMB1-S40 | 265726 |  | NZMB1-S40-SVE | 112724 | 1 Off |
| NZMB1-S50 | 265727 | | NZMB1-S50-SVE | 112725 | |
| NZMB1-S63 | 265728 | | NZMB1-S63-SVE | 112726 | |
| NZMB1-S80 | 265729 | | NZMB1-S80-SVE | 112727 | |
| NZMB1-S100 | 265730 | | NZMB1-S100-SVE | 112728 | |

| | | | | | |
|------------------------|-------|--|----------------|--------|--|
| Terminals as accessory | _____ |  | NZMB2-S125-SVE | 113199 | |
| | _____ | | NZMB2-S160-SVE | 113200 | |
| | _____ | | NZMB2-S200-SVE | 113201 | |

| | | | | | |
|------------|--------|---|----------------|--------|-------|
| NZMC1-S40 | 271403 |  | NZMC1-S40-SVE | 112748 | 1 Off |
| NZMC1-S50 | 271404 | | NZMC1-S50-SVE | 112749 | |
| NZMC1-S63 | 271405 | | NZMC1-S63-SVE | 112750 | |
| NZMC1-S80 | 271406 | | NZMC1-S80-SVE | 112751 | |
| NZMC1-S100 | 271407 | | NZMC1-S100-SVE | 112752 | |

| | | | | | |
|------------------------|-------|---|----------------|--------|--|
| Terminals as accessory | _____ |  | NZMC2-S125-SVE | 113226 | |
| | _____ | | NZMC2-S160-SVE | 113227 | |
| | _____ | | NZMC2-S200-SVE | 113228 | |

| | | | | | |
|------------------------|-------|---|----------------|--------|--|
| Terminals as accessory | _____ |  | NZMC3-S250-SVE | 168453 | |
| | _____ | | NZMC3-S250-AVE | 113512 | |
| | _____ | | NZMC3-S320-SVE | 168454 | |
| | _____ | | NZMC3-S320-AVE | 113513 | |
| | _____ | | NZMC3-S400-SVE | 168455 | |
| | _____ | | NZMC3-S400-AVE | 113514 | |
| | _____ | | NZMC3-S500-SVE | 168456 | |
| | _____ | NZMC3-S500-AVE | 113515 | | |

1.2

Compact circuit breakers, switch disconnectors

Circuit breakers, magnetic short-circuit releases, 3 pole
NZM...S

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range Short-circuit releases Non-delayed | Rated operational power AC-3 50/60 Hz 400 V P kW | Rated operational current AC-3 50/60 Hz 400 V I _e A | Fixed mounting with screw terminals | |
|--|--|---|--|--|-------------------------------------|-------------|
| | | | | | Part no. | Article no. |
| | I _n = I _n A | I _i = I _n x... kA | | | | |



Short-circuit protection

Motor protection in conjunction with overload relay

- With short-circuit releases
- Without overload releases I_r = I_nx...
- IEC/EN 60947-2

Normal switching capacity

1230PIC-787 Symbolphoto



| | | | | | | |
|----|-----|----------|------|----|-----------------------------------|--|
| 50 | 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 8 - 12.5 | 45 | 81 | | |

1230PIC-804 Symbolphoto



| | | | | | |
|-----|----------|-----|-----|------------|--------|
| 125 | 8 - 14 | 45 | 99 | NZMN2-S125 | 265739 |
| 160 | 8 - 14 | 75 | 134 | NZMN2-S160 | 265740 |
| 200 | 8 - 12.5 | 110 | 196 | NZMN2-S200 | 265741 |

1230PIC-881 Symbolphoto



| | | | | | |
|-----|----------|-----|-----|------------|--------|
| 250 | 8 - 14 | 132 | 231 | NZMN3-S250 | 109680 |
| 320 | 8 - 14 | 160 | 279 | NZMN3-S320 | 109681 |
| 400 | 7 - 12.5 | 200 | 349 | NZMN3-S400 | 109682 |
| 500 | 6 - 10 | 250 | 437 | NZMN3-S500 | 109683 |

Strong switching capacity

1230PIC-787 Symbolphoto



| | | | | | | |
|----|-----|----------|------|----|-----------------------------------|--|
| 70 | 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 8 - 12.5 | 45 | 99 | | |

1230PIC-804 Symbolphoto



| | | | | | |
|-----|----------|-----|-----|------------|--------|
| 125 | 8 - 14 | 45 | 99 | NZMS2-S125 | 109979 |
| 160 | 8 - 14 | 75 | 134 | NZMS2-S160 | 109980 |
| 200 | 8 - 12.5 | 110 | 196 | NZMS2-S200 | 109981 |

Compact circuit breakers, switch disconnectors

1.2

Circuit breakers, magnetic short-circuit releases, 3 pole NZM...S

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | | |
|------------------------|--------|---|----------------|--------|-------|
| NZMN1-S40 | 265731 |  | NZMN1-S40-SVE | 112768 | 1 Off |
| NZMN1-S50 | 265732 | | NZMN1-S50-SVE | 112769 | |
| NZMN1-S63 | 265733 | | NZMN1-S63-SVE | 112770 | |
| NZMN1-S80 | 265734 | | NZMN1-S80-SVE | 112771 | |
| NZMN1-S100 | 265735 | | NZMN1-S100-SVE | 112772 | |
| Terminals as accessory | | | | | |

| | | | | | |
|------------------------|--|--|----------------|--------|--|
| Terminals as accessory | |  | NZMN2-S125-SVE | 113253 | |
| | | | NZMN2-S160-SVE | 113254 | |
| | | | NZMN2-S200-SVE | 113255 | |

| | | | | | |
|------------------------|--|---|----------------|--------|--|
| Terminals as accessory | |  | NZMN3-S250-SVE | 168489 | |
| | | | NZMN3-S250-AVE | 113523 | |
| | | | NZMN3-S320-SVE | 168490 | |
| | | | NZMN3-S320-AVE | 113524 | |
| | | | NZMN3-S400-SVE | 168491 | |
| | | | NZMN3-S400-AVE | 113525 | |
| | | | NZMN3-S500-SVE | 168492 | |
| | | | NZMN3-S500-AVE | 113526 | |
| | | | | | |

| | | | | | |
|------------------------|--------|---|----------------|--------|-------|
| NZMS1-S40 | 109943 |  | NZMS1-S40-SVE | 112790 | 1 Off |
| NZMS1-S50 | 109944 | | NZMS1-S50-SVE | 112791 | |
| NZMS1-S63 | 109945 | | NZMS1-S63-SVE | 112792 | |
| NZMS1-S80 | 109946 | | NZMS1-S80-SVE | 112793 | |
| NZMS1-S100 | 109947 | | NZMS1-S100-SVE | 112794 | |
| Terminals as accessory | | | | | |

| | | | | | |
|------------------------|--|---|----------------|--------|--|
| Terminals as accessory | |  | NZMS2-S125-SVE | 113304 | |
| | | | NZMS2-S160-SVE | 113305 | |
| | | | NZMS2-S200-SVE | 113306 | |

1.2

Compact circuit breakers, switch disconnectors

Circuit breakers, magnetic short-circuit releases, 3 pole
NZM...S

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range Short-circuit releases Non-delayed | Rated operational power AC-3 50/60 Hz 400 V P kW | Rated operational current AC-3 50/60 Hz 400 V I_e A | Fixed mounting with screw terminals | |
|--|--|--|---|--|-------------------------------------|-------------|
| | | | | | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_i = I_n \times \dots$ | | | | |



Short-circuit protection

Motor protection in conjunction with overload relay

- With short-circuit releases
- Without overload releases $I_r = I_n \times \dots$
- IEC/EN 60947-2

High switching capacity

1230PIC-787 Symbolphoto



| | | | | | | |
|-----|-----|----------|------|----|-----------------------------------|--|
| 100 | 40 | 8 - 14 | 18.5 | 36 | Screw terminals as accessories | |
| | 50 | 8 - 14 | 22 | 41 | | |
| | 63 | 8 - 14 | 30 | 55 | | |
| | 80 | 8 - 14 | 37 | 68 | | |
| | 100 | 8 - 12.5 | 45 | 81 | | |

1230PIC-804 Symbolphoto



| | | | | | | |
|-----|----------|----------|-----|------------|------------|--------|
| 150 | 40 | 8 - 14 | 22 | 41 | NZMH2-S40 | 265742 |
| | 50 | 8 - 14 | 30 | 55 | NZMH2-S50 | 265743 |
| | 63 | 8 - 14 | 37 | 68 | NZMH2-S63 | 265744 |
| | 80 | 8 - 14 | 45 | 99 | NZMH2-S80 | 265745 |
| | 100 | 8 - 14 | 45 | 99 | NZMH2-S100 | 265746 |
| | 125 | 8 - 14 | 75 | 134 | NZMH2-S125 | 265747 |
| | 160 | 8 - 12.5 | 110 | 196 | NZMH2-S160 | 265748 |
| 200 | 8 - 12.5 | 110 | 196 | NZMH2-S200 | 265749 | |

1230PIC-881 Symbolphoto



| | | | | | | |
|-----|--------|----------|-----|------------|------------|--------|
| 250 | 8 - 14 | 132 | 231 | NZMH3-S250 | 109684 | |
| | 320 | 8 - 14 | 160 | 279 | NZMH3-S320 | 109685 |
| | 400 | 7 - 12.5 | 200 | 349 | NZMH3-S400 | 109686 |
| | 500 | 6 - 10 | 250 | 437 | NZMH3-S500 | 109687 |
| | | | | | - | |

Compact circuit breakers, switch disconnectors

1.2

Circuit breakers, magnetic short-circuit releases, 3 pole NZM...S

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | | |
|------------|--------|---|----------------|--------|-------|
| NZMH1-S40 | 284436 |  | NZMH1-S40-SVE | 112805 | 1 Off |
| NZMH1-S50 | 284437 | | NZMH1-S50-SVE | 112806 | |
| NZMH1-S63 | 284438 | | NZMH1-S63-SVE | 112807 | |
| NZMH1-S80 | 284439 | | NZMH1-S80-SVE | 112808 | |
| NZMH1-S100 | 284440 | | NZMH1-S100-SVE | 112809 | |

| | | | | | |
|------------------------|-------|--|----------------|--------|--|
| Terminals as accessory | _____ |  | NZMH2-S40-SVE | 113340 | |
| | _____ | | NZMH2-S50-SVE | 113341 | |
| | _____ | | NZMH2-S63-SVE | 113342 | |
| | _____ | | NZMH2-S80-SVE | 113343 | |
| | _____ | | NZMH2-S100-SVE | 113344 | |
| | _____ | | NZMH2-S125-SVE | 113345 | |
| | _____ | | NZMH2-S160-SVE | 113346 | |
| | _____ | NZMH2-S200-SVE | 113347 | | |

| | | | | | |
|------------------------|-------|---|----------------|--------|--|
| Terminals as accessory | _____ |  | NZMH3-S250-SVE | 168916 | |
| | _____ | | NZMH3-S250-AVE | 113566 | |
| | _____ | | NZMH3-S320-SVE | 168917 | |
| | _____ | | NZMH3-S320-AVE | 113567 | |
| | _____ | | NZMH3-S400-SVE | 168918 | |
| | _____ | | NZMH3-S400-AVE | 113568 | |
| | _____ | | NZMH3-S500-SVE | 168919 | |
| | _____ | NZMH3-S500-AVE | 113569 | | |

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...AX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|---------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | | | | | |

System and cable protection

- IEC/EN 60947-2

Normal switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | |
|----|-----|-----------|--------|-------------|--------|
| 50 | 40 | 20 - 40 | 2 - 12 | NZMN2-AX40 | 192001 |
| | 63 | 25 - 63 | 2 - 12 | NZMN2-AX63 | 192002 |
| | 100 | 40 - 100 | 2 - 12 | NZMN2-AX100 | 192003 |
| | 160 | 64 - 160 | 2 - 12 | NZMN2-AX160 | 192004 |
| | 350 | 100 - 250 | 2 - 12 | NZMN2-AX250 | 192005 |

wa_ren_00918_r Symbolphoto



| | | | | |
|-----|-----------|--------|-------------|--------|
| 250 | 100 - 250 | 2 - 11 | NZMN3-AX250 | 191599 |
| 400 | 160 - 400 | 2 - 11 | NZMN3-AX400 | 191600 |
| 630 | 252 - 630 | 2 - 8 | NZMN3-AX630 | 191601 |

wa_ren_01418_r Symbolphoto



| | | | | |
|------|------------|--------|--------------|--------|
| 630 | 252 - 630 | 2 - 12 | NZMN4-AX630 | 191418 |
| 800 | 320 - 800 | 2 - 12 | NZMN4-AX800 | 191419 |
| 1000 | 400 - 1000 | 2 - 12 | NZMN4-AX1000 | 191420 |
| 1250 | 500 - 1250 | 2 - 12 | NZMN4-AX1250 | 191421 |
| 1600 | 640 - 1600 | 2 - 12 | NZMN4-AX1600 | 191422 |

Strong switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | |
|----|-----|-----------|---------|-------------|--------|
| 70 | 40 | 20 - 40 | 12 - 12 | NZMS2-AX40 | 192028 |
| | 63 | 25 - 63 | 12 - 12 | NZMS2-AX63 | 192029 |
| | 100 | 40 - 100 | 12 - 12 | NZMS2-AX100 | 192030 |
| | 160 | 64 - 160 | 12 - 12 | NZMS2-AX160 | 192031 |
| | 250 | 100 - 250 | 12 - 12 | NZMS2-AX250 | 192032 |

wa_ren_00918_r Symbolphoto



| | | | | |
|-----|-----------|--------|-------------|--------|
| 250 | 100 - 250 | 2 - 11 | NZMS3-AX250 | 192033 |
| 400 | 160 - 400 | 2 - 11 | NZMS3-AX400 | 191494 |
| 630 | 252 - 630 | 2 - 8 | NZMS3-AX630 | 191495 |

Compact circuit breakers, switch disconnectors

1.3

Circuit breakers IEC, electronic releases, 3 pole
NZM...AX

Fixed mounting with box terminals

Part no. Article no.

Withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

Terminals as accessory _____ - _____ 1 Off

Terminals as accessory _____
NZMN3-AX400-BT 191586 _____
NZMN3-AX630-BT 191587 _____



NZMN3-AX250-AVE 191574 _____
NZMN3-AX400-AVE 191575 _____
NZMN3-AX630-AVE 191576 _____

- _____ Withdrawable units as accessory _____

Terminals as accessory _____ - _____ 1 Off

Terminals as accessory _____





- _____
NZMS3-AX400-AVE 191503 _____
NZMS3-AX630-AVE 191504 _____

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...AX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | |  |  | | |

System and cable protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|-------------|--------|
| 150 | 40 | 20 - 40 | 2 - 12 | NZMH2-AX40 | 192007 |
| | 63 | 25 - 63 | 2 - 12 | NZMH2-AX63 | 192008 |
| | 100 | 40 - 100 | 2 - 12 | NZMH2-AX100 | 192009 |
| | 160 | 64 - 160 | 2 - 12 | NZMH2-AX160 | 192010 |
| | 250 | 100 - 250 | 2 - 12 | NZMH2-AX250 | 192011 |

wa_ren_00918_r Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|-------------|--------|
| 250 | 250 | 100 - 250 | 2 - 11 | NZMH3-AX250 | 191346 |
| | 400 | 160 - 400 | 2 - 11 | NZMH3-AX400 | 191347 |
| | 630 | 252 - 630 | 2 - 8 | NZMH3-AX630 | 191348 |

wa_ren_01418_r Symbolphoto



| | | | | | |
|----|------|------------|--------|--------------|--------|
| 85 | 630 | 252 - 630 | 2 - 12 | NZMH4-AX630 | 191447 |
| | 800 | 320 - 800 | 2 - 12 | NZMH4-AX800 | 191448 |
| | 1000 | 400 - 1000 | 2 - 12 | NZMH4-AX1000 | 191449 |
| | 1250 | 500 - 1250 | 2 - 12 | NZMH4-AX1250 | 191450 |
| | 1600 | 640 - 1600 | 2 - 12 | NZMH4-AX1600 | 191451 |

Limiter switching capacity

wa_ren_01418_r Symbolphoto



| | | | | | |
|-----|------|------------|--------|--------------|--------|
| 100 | 630 | 252 - 630 | 2 - 12 | NZML4-AX630 | 191363 |
| | 800 | 320 - 800 | 2 - 12 | NZML4-AX800 | 191364 |
| | 1000 | 400 - 1000 | 2 - 12 | NZML4-AX1000 | 191365 |
| | 1250 | 500 - 1250 | 2 - 12 | NZML4-AX1250 | 191366 |
| | 1600 | 640 - 1600 | 2 - 12 | NZML4-AX1600 | 191322 |

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...AX

1.3

Fixed mounting with box terminals
Part no.

Article no.

Withdrawable units
Part no.

Article no.

Std. pack

Order base separately

For further terminal types
see accessories

| | | | | |
|------------------------|-------|---|-------|-------|
| Terminals as accessory | _____ | - | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |
| | _____ | | _____ | |

| | | | | |
|------------------------|-------|--|------------------|--------|
| Terminals as accessory | _____ |  | NZMH3-AX2500-AVE | 191545 |
| | _____ | | NZMH3-AX400-AVE | 191546 |
| | | | NZMH3-AX630-AVE | 191547 |

| | | | |
|---|-------|---------------------------------|-------|
| - | _____ | Withdrawable units as accessory | _____ |
| | _____ | | _____ |
| | _____ | | _____ |
| | _____ | | _____ |

| | | | | |
|---|-------|---------------------------------|-------|-------|
| - | _____ | Withdrawable units as accessory | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |
| | _____ | | _____ | |

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...MX

| Switching capacity 400/415V 50/60 Hz | Rated current = Setting range | | | Rated operational power | | Rated operational current | | Fixed mounting with screw terminals | |
|--|-------------------------------|-------------------------------|---------------------------------------|-------------------------|------------------|---------------------------|---------------------|-------------------------------------|-------------|
| | Rated uninterrupted current | Overload releases | Short-circuit releases Non-delayed | AC-3 50/60 Hz | | AC-3 50/60 Hz | | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ A | 400 V P kW | 690 V P kW | 400 V I_e A | 690 V I_e A | | |



Motor protection

- IEC/EN 60947-2
- With phase-failure sensitivity

Normal switching capacity

wa_ren_00518_r Symbolphoto



| | | | | | | | | | |
|----|-----|----------|--------|-----|-----|-----|-----|-------------|--------|
| 50 | 90 | 36 - 90 | 2 - 18 | 45 | 75 | 81 | 78 | NZMN2-MX90 | 191631 |
| | 140 | 56 - 140 | 2 - 18 | 75 | 132 | 134 | 134 | NZMN2-MX140 | 191632 |
| | 220 | 88 - 220 | 2 - 14 | 110 | 200 | 196 | 202 | NZMN2-MX220 | 191633 |

wa_ren_01018_r Symbolphoto



| | | | | | | | | | |
|-----|-----------|--------|-----|-----|-----|-----|---|-------------|--------|
| 220 | 88 - 220 | 2 - 18 | 110 | 200 | 196 | 202 | - | NZMN3-MX220 | 191605 |
| 350 | 140 - 350 | 2 - 15 | 200 | 315 | 349 | 316 | - | NZMN3-MX350 | 191606 |
| 450 | 180 - 450 | 2 - 12 | 250 | 450 | 437 | 446 | - | NZMN3-MX450 | 191607 |

wa_ren_01518_r Symbolphoto



| | | | | | | | | | |
|------|------------|--------|-----|------|------|------|---|--------------|--------|
| 550 | 275 - 550 | 2 - 18 | 315 | 560 | 544 | 550 | - | NZMN4-MX550 | 191428 |
| 875 | 438 - 875 | 2 - 18 | 500 | 800 | 846 | 785 | - | NZMN4-MX875 | 191429 |
| 1400 | 560 - 1400 | 2 - 14 | 800 | 1400 | 1354 | 1374 | - | NZMN4-MX1400 | 191430 |

Strong switching capacity

wa_ren_00518_r Symbolphoto



| | | | | | | | | | |
|----|-----|----------|--------|-----|-----|-----|-----|-------------|--------|
| 70 | 90 | 36 - 90 | 2 - 18 | 45 | 75 | 81 | 78 | NZMS2-MX90 | 191650 |
| | 140 | 56 - 140 | 2 - 18 | 75 | 132 | 134 | 134 | NZMS2-MX140 | 191651 |
| | 220 | 88 - 220 | 2 - 14 | 110 | 200 | 196 | 202 | NZMS2-MX220 | 191652 |

wa_ren_01018_r Symbolphoto



| | | | | | | | | | |
|-----|-----------|--------|-----|-----|-----|-----|---|-------------|--------|
| 220 | 88 - 220 | 2 - 18 | 110 | 200 | 196 | 202 | - | NZMS3-MX220 | 191498 |
| 350 | 140 - 350 | 2 - 15 | 200 | 315 | 349 | 316 | - | NZMS3-MX350 | 191499 |
| 450 | 180 - 450 | 2 - 12 | 250 | 450 | 437 | 446 | - | NZMS3-MX450 | 191500 |

Compact circuit breakers, switch disconnectors

1.3

Circuit breakers IEC, electronic releases, 3 pole NZM...MX

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

Terminals as accessory



| | | |
|-----------------|--------|-------|
| NZMN2-MX90-SVE | 191622 | 1 Off |
| NZMN2-MX140-SVE | 191623 | |
| NZMN2-MX220-SVE | 191624 | |

Terminals as accessory



| | |
|-----------------|--------|
| NZMN3-MX220-SVE | 191596 |
| NZMN3-MX220-AVE | 191580 |
| NZMN3-MX350-SVE | 191597 |
| NZMN3-MX350-AVE | 191581 |
| NZMN3-MX450-SVE | 191598 |
| NZMN3-MX450-AVE | 191582 |

Terminals as accessory

Withdrawable units as accessory

Terminals as accessory



| | | |
|-----------------|--------|-------|
| NZMS2-MX90-SVE | 191656 | 1 Off |
| NZMS2-MX140-SVE | 191657 | |
| NZMS2-MX220-SVE | 191658 | |

Terminals as accessory





| | |
|-----------------|--------|
| NZMS3-MX220-SVE | 191514 |
| NZMS3-MX220-AVE | 191507 |
| NZMS3-MX350-SVE | 191515 |
| NZMS3-MX350-AVE | 191508 |
| NZMS3-MX450-SVE | 191516 |
| NZMS3-MX450-AVE | 191509 |

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...MX

| Switching capacity 400/415V 50/60 Hz | Rated current = Setting range | | | Rated operational power | | Rated operational current | | Fixed mounting with screw terminals | |
|--|-------------------------------|-------------------------------|---------------------------------------|-------------------------|------------------|---------------------------|---------------------|---|--|
| | Rated uninterrupted current | Overload releases | Short-circuit releases Non-delayed | AC-3 50/60 Hz | AC-3 50/60 Hz | Part no. | Article no. | | |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | 400 V P kW | 690 V P kW | 400 V I_e A | 690 V I_e A | | |
| | | | | | | | |   | |

Motor protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00518_r Symbolphoto



| | | | | | | | | | |
|-----|-----|----------|--------|-----|-----|-----|-----|-------------|--------|
| 150 | 90 | 36 - 90 | 2 - 18 | 45 | 75 | 81 | 78 | NZMH2-MX90 | 191681 |
| | 140 | 56 - 140 | 2 - 18 | 75 | 132 | 134 | 134 | NZMH2-MX140 | 191682 |
| | 220 | 88 - 220 | 2 - 14 | 110 | 200 | 196 | 202 | NZMH2-MX220 | 191683 |

wa_ren_01018_r Symbolphoto



| | | | | | | | | | |
|-----|----------|-----------|--------|-----|-----|-----|-----|-------------|--------|
| 220 | 88 - 220 | 2 - 18 | 110 | 200 | 196 | 202 | - | NZMH3-MX220 | 191352 |
| | 350 | 140 - 350 | 2 - 15 | 200 | 315 | 349 | 316 | NZMH3-MX350 | 191367 |
| | 450 | 180 - 450 | 2 - 12 | 250 | 450 | 437 | 446 | NZMH3-MX450 | 191368 |

wa_ren_01518_r Symbolphoto



| | | | | | | | | | |
|----|------|------------|--------|-----|------|------|------|--------------|--------|
| 85 | 550 | 275 - 550 | 2 - 18 | 315 | 560 | 544 | 550 | NZMH4-MX550 | 191457 |
| | 875 | 438 - 875 | 2 - 18 | 500 | 800 | 846 | 785 | NZMH4-MX875 | 191458 |
| | 1400 | 560 - 1400 | 2 - 14 | 800 | 1400 | 1354 | 1374 | NZMH4-MX1400 | 191459 |

Limiter switching capacity

wa_ren_01518_r Symbolphoto



| | | | | | | | | | |
|-----|------|------------|--------|-----|------|------|------|--------------|--------|
| 100 | 550 | 275 - 550 | 2 - 18 | 315 | 560 | 544 | 550 | NZML4-MX550 | 191328 |
| | 875 | 438 - 875 | 2 - 18 | 500 | 800 | 846 | 785 | NZML4-MX875 | 191329 |
| | 1400 | 560 - 1400 | 2 - 14 | 800 | 1400 | 1354 | 1374 | NZML4-MX1400 | 191330 |

Compact circuit breakers, switch disconnectors

1.3

Circuit breakers IEC, electronic releases, 3 pole NZM...MX

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

Terminals as accessory



| | | |
|-----------------|--------|-------|
| NZMH2-MX90-SVE | 191675 | 1 Off |
| NZMH2-MX140-SVE | 191676 | |
| NZMH2-MX220-SVE | 191677 | |

Terminals as accessory



| | | |
|-----------------|--------|--|
| NZMH3-MX220-SVE | 191372 | |
| NZMH3-MX220-AVE | 191551 | |
| NZMH3-MX350-SVE | 191373 | |
| NZMH3-MX350-AVE | 191552 | |
| NZMH3-MX450-SVE | 191374 | |
| NZMH3-MX450-AVE | 191553 | |

Terminals as accessory

Withdrawable units as accessory _____

Terminals as accessory

Withdrawable units as accessory _____ 1 Off

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...VX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_r = I_n \times \dots$ | | |
| | | | | | | |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

Normal switching capacity

wa_ren_00618_r Symbolphoto



| | | | | | | |
|----|-----|-----------|--------|--------|-------------|--------|
| 50 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | NZMN2-VX40 | 192013 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | NZMN2-VX63 | 192014 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMN2-VX100 | 191628 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | NZMN2-VX160 | 191629 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | NZMN2-VX250 | 191630 |

wa_ren_01118_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|-------------|-------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | NZMN3-VX250 | 191602 | |
| | 400 | 160 - 400 | 2 - 10 | 2 - 12 | NZMN3-VX400 | 191603 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMN3-VX630 | 191604 |

wa_ren_01618_r Symbolphoto



| | | | | | | |
|-----|-----------|------------|--------|-------------|--------------|--------|
| 630 | 252 - 630 | 2 - 10 | 2 - 18 | NZMN4-VX630 | 191423 | |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | NZMN4-VX800 | 191424 |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | NZMN4-VX1000 | 191425 |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | NZMN4-VX1250 | 191426 |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | NZMN4-VX1600 | 191427 |

Strong switching capacity

wa_ren_00618_r Symbolphoto



| | | | | | | |
|----|-----|-----------|--------|--------|-------------|--------|
| 70 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | NZMS2-VX40 | 192035 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | NZMS2-VX63 | 192036 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMS2-VX100 | 191647 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | NZMS2-VX160 | 191648 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | NZMS2-VX250 | 191649 |

wa_ren_01118_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|-------------|-------------|--------|
| 250 | 125 - 250 | 2 - 10 | 2 - 18 | NZMS3-VX250 | 192037 | |
| | 400 | 160 - 400 | 2 - 10 | 2 - 12 | NZMS3-VX400 | 191496 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMS3-VX630 | 191497 |

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...VX

1.3

Fixed mounting with box terminals

Part no. _____ Article no. _____

Plug-in/withdrawable units

Part no. _____ Article no. _____ Std. pack _____

Order base separately

For further terminal types
see accessories

Terminals as accessory _____ 1 Off

NZMN2-VX100-BT 191625
NZMN2-VX160-BT 191626
NZMN2-VX250-BT 191627



NZMN2-VX100-SVE 191619
NZMN2-VX160-SVE 191620
NZMN2-VX250-SVE 191621

Terminals as accessory _____

NZMN3-VX400-BT 191588

Terminals as accessory _____

NZMN3-VX630-BT 191589

Terminals as accessory _____



NZMN3-VX250-SVE 191593
NZMN3-VX250-AVE 191577
NZMN3-VX400-SVE 191594
NZMN3-VX400-AVE 191578
NZMN3-VX630-SVE 191595
NZMN3-VX630-AVE 191579



NZMN4-VX630-AVE 191413
NZMN4-VX800-AVE 191414
NZMN4-VX1000-AVE 191415
NZMN4-VX1250-AVE 191416
NZMN4-VX1600-AVE 191417

Terminals as accessory _____



_____ 1 Off

NZMS2-VX100-SVE 191653
NZMS2-VX160-SVE 191654
NZMS2-VX250-SVE 191655

Terminals as accessory _____



NZMS3-VX400-SVE 191512
NZMS3-VX400-AVE 191505
NZMS3-VX630-SVE 191513
NZMS3-VX630-AVE 191506

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...VX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_r = I_n \times \dots$ | | |
| | | | | | | |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00618_r Symbolphoto



| | | | | | | |
|-----|-----|-----------|--------|--------|-------------|--------|
| 150 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | NZMH2-VX40 | 192017 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | NZMH2-VX63 | 192018 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMH2-VX100 | 191678 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | NZMH2-VX160 | 191679 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | NZMH2-VX250 | 191680 |

wa_ren_01118_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|-------------|-------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | NZMH3-VX250 | 191349 | |
| | 400 | 160 - 400 | 2 - 10 | 2 - 12 | NZMH3-VX400 | 191350 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMH3-VX630 | 191351 |
| | - | - | - | - | - | - |

wa_ren_01618_r Symbolphoto



| | | | | | | |
|----|------|------------|--------|--------|--------------|--------|
| 85 | 630 | 252 - 630 | 2 - 10 | 2 - 18 | NZMH4-VX630 | 191452 |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | NZMH4-VX800 | 191453 |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | NZMH4-VX1000 | 191454 |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | NZMH4-VX1250 | 191455 |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | NZMH4-VX1600 | 191456 |

Limiter switching capacity

wa_ren_01618_r Symbolphoto



| | | | | | | |
|-----|------|------------|--------|--------|--------------|--------|
| 100 | 630 | 252 - 630 | 2 - 10 | 2 - 18 | NZML4-VX630 | 191323 |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | NZML4-VX800 | 191324 |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | NZML4-VX1000 | 191325 |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | NZML4-VX1250 | 191326 |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | NZML4-VX1600 | 191327 |

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 3 pole
NZM...VX

1.3

Fixed mounting with box terminals

Part no. _____ Article no. _____

Plug-in/withdrawable units

Part no. _____ Article no. _____ Std. pack _____

Order base separately

For further terminal types
see accessories

Terminals as accessory _____ 1 Off



| | |
|-----------------|--------|
| NZMH2-VX100-SVE | 191672 |
| NZMH2-VX160-SVE | 191673 |
| NZMH2-VX250-SVE | 191674 |

Terminals as accessory _____

- _____

NZMH3-VX400-BT 191557 _____

- _____

NZMH3-VX630-BT 191558 _____

- _____



| | |
|-----------------|--------|
| NZMH3-VX250-SVE | 191369 |
| NZMH3-VX250-AVE | 191548 |
| NZMH3-VX400-SVE | 191370 |
| NZMH3-VX400-AVE | 191549 |
| NZMH3-VX630-SVE | 191371 |
| NZMH3-VX630-AVE | 191550 |

- _____



| | |
|------------------|--------|
| NZMH4-VX630-AVE | 193328 |
| NZMH4-VX800-AVE | 193329 |
| NZMH4-VX1000-AVE | 193330 |
| NZMH4-VX1250-AVE | 193331 |
| NZMH4-VX1600-AVE | 193332 |

- _____ Withdrawable units as accessory _____ 1 Off

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers, electronic releases, 3 pole
NZM...VX...-T

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|--------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_p \times \dots$ A | $I_{sd} = I_p \times \dots$ | $I_l = I_p \times \dots$ | $I_g = I_p \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity, generator and earth fault protection

- IEC/EN 60947-2

Normal switching capacity

wa_ren_00218_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|--------|--------|----------|---------------|--------|
| 50 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMN2-VX40-T | 193287 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMN2-VX63-T | 193288 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMN2-VX100-T | 193289 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMN2-VX160-T | 193290 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMN2-VX250-T | 193291 |

wa_ren_01218_r Symbolphoto



| | | | | | | |
|-----|-----------|---------|--------|-----------|---------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMN3-VX250-T | 191583 |
| 400 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMN3-VX400-T | 191584 |
| 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | 125 - 630 | NZMN3-VX630-T | 191585 |

wa_ren_01718_r Symbolphoto



| | | | | | | |
|------|------------|--------|--------|------------|----------------|--------|
| 630 | 315 - 630 | 2 - 10 | 2 - 18 | 125 - 630 | NZMN4-VX630-T | 193310 |
| 800 | 400 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMN4-VX800-T | 193311 |
| 1000 | 500 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMN4-VX1000-T | 193312 |
| 1250 | 630 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMN4-VX1250-T | 193313 |
| 1600 | 800 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMN4-VX1600-T | 193314 |

Compact circuit breakers, switch disconnectors

1.3

Circuit breakers, electronic releases, 3 pole
NZM...VX...-T

Fixed mounting with box terminals
 Part no.

Article no.

Withdrawable units
 Part no.

Article no.

Std. pack

Order base separately

For further terminal types
 see accessories

| | | | | |
|------------------------|-------|---|-------|-------|
| Terminals as accessory | _____ | - | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |
| | _____ | | _____ | |

| | | | | | |
|------------------------|-------|--|-------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMN3-VX250-T-AVE | 191590 | 1 Off |
| | _____ | | NZMN3-VX400-T-AVE | 191591 | |
| | | | NZMN3-VX630-T-AVE | 191592 | |

| | | | | |
|---|-------|---------------------------------|-------|-------|
| - | _____ | Withdrawable units as accessory | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |
| | _____ | | _____ | |

1.3

Compact circuit breakers, switch disconnectors

Circuit breakers, electronic releases, 3 pole
NZM...VX...-T

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|-----------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release Alarm or trip | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_p \times \dots$ A | $I_{sd} = I_p \times \dots$ | $I_l = I_p \times \dots$ | $I_g = I_p \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity, generator and earth fault protection

• IEC/EN 60947-2

Strong switching capacity

wa_ren_01218_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|---------|--------|-----------|---------------|--------|
| 70 | 400 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMS3-VX400-T | 191501 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMS3-VX630-T | 191502 |

High switching capacity

wa_ren_00218_r Symbolphoto



| | | | | | | | |
|-----|-----|-----------|--------|--------|----------|---------------|--------|
| 150 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMH2-VX40-T | 193293 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMH2-VX63-T | 193294 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMH2-VX100-T | 193295 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMH2-VX160-T | 193296 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMH2-VX250-T | 193297 |

wa_ren_01218_r Symbolphoto



| | | | | | | |
|-----|-----------|---------|--------|-----------|---------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMH3-VX250-T | 191554 |
| | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMH3-VX400-T | 191555 |
| | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMH3-VX630-T | 191556 |

wa_ren_01718_r Symbolphoto



| | | | | | | | |
|----|------|------------|--------|--------|------------|----------------|--------|
| 85 | 630 | 252 - 630 | 2 - 10 | 2 - 18 | 125 - 630 | NZMH4-VX630-T | 193315 |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMH4-VX800-T | 193316 |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMH4-VX1000-T | 193317 |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMH4-VX1250-T | 193318 |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMH4-VX1600-T | 193319 |

Compact circuit breakers, switch disconnectors

Circuit breakers, electronic releases, 3 pole
NZM...VX...-T

1.3

Fixed mounting with box terminals
Part no.

Article no.

Withdrawable units
Part no.

Article no.

Std. pack

Order base separately

For further terminal types
see accessories

| | | | | |
|------------------------|-------|-------------------|--------|-------|
| Terminals as accessory | _____ | NZMS3-VX400-T-AVE | 191510 | 1 Off |
| | | NZMS3-VX630-T-AVE | 191511 | |

| | | | | |
|------------------------|-------|-------|-------|-------|
| Terminals as accessory | _____ | _____ | _____ | 1 Off |
| | _____ | _____ | _____ | |
| | _____ | _____ | _____ | |
| | _____ | _____ | _____ | |



| | | | | | |
|------------------------|-------|---|-------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMH3-VX250-T-AVE | 191559 | 1 Off |
| | _____ | | NZMH3-VX400-T-AVE | 191560 | |
| | | | NZMH3-VX630-T-AVE | 191561 | |

| | | | | |
|---|-------|---------------------------------|-------|-------|
| - | _____ | Withdrawable units as accessory | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |
| | _____ | | _____ | |

1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PMX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | |  |  | | |

Motor protection

- Energy metering class I up to IEC61557-12
- With phase-failure sensitivity
- IEC/EN 60947-2

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | |
|----|-----|----------|--------|--------------|--------|
| 50 | 40 | 20 - 40 | 2 - 18 | NZMN2-PMX40 | 192104 |
| | 63 | 25 - 63 | 2 - 18 | NZMN2-PMX63 | 192105 |
| | 100 | 40 - 100 | 2 - 18 | NZMN2-PMX100 | 192106 |
| | 160 | 64 - 160 | 2 - 18 | NZMN2-PMX160 | 192107 |
| | 220 | 88 - 220 | 2 - 14 | NZMN2-PMX220 | 192108 |

wa_ren_00818_r Symbolphoto



| | | | | |
|-----|-----------|-----------|--------------|--------------|
| 250 | 100 - 250 | 2 - 18 | NZMN3-PMX250 | 192322 |
| | - | - | - | - |
| | 350 | 140 - 350 | 2 - 15 | NZMN3-PMX350 |
| 450 | 180 - 450 | 2 - 12 | NZMN3-PMX450 | 192324 |
| | - | - | - | - |

wa_ren_01818_r Symbolphoto



| | | | | | |
|-----|-----------|------------|--------------|---------------|--------|
| 550 | 220 - 550 | 2 - 18 | NZMN4-PMX550 | 189681 | |
| | 875 | 350 - 875 | 2 - 18 | NZMN4-PMX875 | 189682 |
| | 1400 | 560 - 1400 | 2 - 14 | NZMN4-PMX1400 | 189683 |

Compact circuit breakers, switch disconnectors

1.4

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PMX

Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units

Part no.

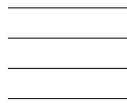
Article no.

Std. pack

Order base separately

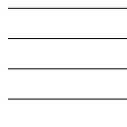
For further terminal types
see accessories

Terminals as accessory



| | | |
|------------------|--------|-------|
| NZMN2-PMX40-SVE | 192116 | 1 Off |
| NZMN2-PMX63-SVE | 192117 | |
| NZMN2-PMX100-SVE | 192118 | |
| NZMN2-PMX160-SVE | 192119 | |
| NZMN2-PMX220-SVE | 192120 | |

Terminals as accessory



| | | |
|------------------|--------|--|
| NZMN3-PMX250-SVE | 192328 | |
| NZMN3-PMX250-AVE | 192334 | |
| NZMN3-PMX350-SVE | 192329 | |
| NZMN3-PMX350-AVE | 192335 | |
| NZMN3-PMX450-SVE | 192330 | |
| NZMN3-PMX450-AVE | 192336 | |

-



| | | |
|-------------------|--------|--|
| NZMN4-PMX550-AVE | 189687 | |
| NZMN4-PMX875-AVE | 189688 | |
| NZMN4-PMX1400-AVE | 189689 | |

1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PMX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|---------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | | | | | |

Motor protection

- Energy metering class I up to IEC61557-12
- With phase-failure sensitivity
- IEC/EN 60947-2

High switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | |
|-----|-----|----------|--------|--------------|--------|
| 150 | 40 | 20 - 40 | 2 - 18 | NZMH2-PMX40 | 192110 |
| | 63 | 25 - 63 | 2 - 18 | NZMH2-PMX63 | 192111 |
| | 100 | 40 - 100 | 2 - 18 | NZMH2-PMX100 | 192112 |
| | 160 | 64 - 160 | 2 - 18 | NZMH2-PMX160 | 192113 |
| | 220 | 88 - 220 | 2 - 14 | NZMH2-PMX220 | 192114 |

wa_ren_00818_r Symbolphoto



| | | | | | |
|-----|-----------|-----------|--------------|--------------|--------|
| 250 | 100 - 250 | 2 - 18 | NZMH3-PMX250 | 192325 | |
| | 350 | 140 - 350 | 2 - 15 | NZMH3-PMX350 | 192326 |
| | 450 | 180 - 450 | 2 - 12 | NZMH3-PMX450 | 192327 |

wa_ren_01818_r Symbolphoto



| | | | | | |
|----|------|------------|--------|---------------|--------|
| 85 | 550 | 220 - 550 | 2 - 18 | NZMH4-PMX550 | 189684 |
| | 875 | 350 - 875 | 2 - 18 | NZMH4-PMX875 | 189685 |
| | 1400 | 560 - 1400 | 2 - 14 | NZMH4-PMX1400 | 189686 |

Limiter switching capacity

wa_ren_01818_r Symbolphoto



| | | | | | |
|-----|------|------------|--------|---------------|--------|
| 100 | 550 | 220 - 550 | 2 - 18 | NZML4-PMX550 | 189706 |
| | 875 | 350 - 875 | 2 - 18 | NZML4-PMX875 | 189707 |
| | 1400 | 560 - 1400 | 2 - 14 | NZML4-PMX1400 | 189708 |

Compact circuit breakers, switch disconnectors

1.4

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PMX

Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units

Part no.

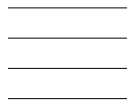
Article no.

Std. pack

Order base separately

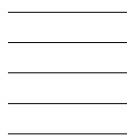
For further terminal types
see accessories

Terminals as accessory



| | | |
|------------------|--------|-------|
| NZMH2-PMX40-SVE | 192122 | 1 Off |
| NZMH2-PMX63-SVE | 192123 | |
| NZMH2-PMX100-SVE | 192124 | |
| NZMH2-PMX160-SVE | 192125 | |
| NZMH2-PMX220-SVE | 192126 | |

Terminals as accessory



| | | |
|------------------|--------|--|
| NZMH3-PMX250-SVE | 192331 | |
| NZMH3-PMX250-AVE | 192337 | |
| NZMH3-PMX350-SVE | 192332 | |
| NZMH3-PMX350-AVE | 192338 | |
| NZMH3-PMX450-SVE | 192333 | |
| NZMH3-PMX450-AVE | 192339 | |

-



| | | |
|-------------------|--------|--|
| NZMH4-PMX550-AVE | 189690 | |
| NZMH4-PMX875-AVE | 189691 | |
| NZMH4-PMX1400-AVE | 189692 | |

1 Off

1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_s = I_r \times \dots$ | | |
| | | | | | | |

System and cable protection, selectivity and generator protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | |
|----|-----|-----------|--------|--------|-------------|--------|
| 50 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | NZMN2-PX40 | 192237 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | NZMN2-PX63 | 192238 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMN2-PX100 | 192239 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | NZMN2-PX160 | 192240 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | NZMN2-PX250 | 192241 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|-------------|-------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | NZMN3-PX250 | 192354 | |
| | 400 | 160 - 400 | 2 - 10 | 2 - 12 | NZMN3-PX400 | 192355 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMN3-PX630 | 192356 |

wa_ren_01818_r Symbolphoto



| | | | | | | |
|------|------|------------|--------|--------|--------------|--------|
| 1600 | 630 | 252 - 630 | 2 - 10 | 2 - 18 | NZMN4-PX630 | 189601 |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | NZMN4-PX800 | 189602 |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | NZMN4-PX1000 | 189603 |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | NZMN4-PX1250 | 189604 |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | NZMN4-PX1600 | 189605 |

Compact circuit breakers, switch disconnectors

1.4

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PX

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | |
|----------------|--------|
| NZMN2-PX40-BT | 192046 |
| NZMN2-PX63-BT | 192047 |
| NZMN2-PX100-BT | 192048 |
| NZMN2-PX160-BT | 192049 |
| NZMN2-PX250-BT | 192050 |



| | | |
|-----------------|--------|-------|
| NZMN2-PX40-SVE | 192162 | 1 Off |
| NZMN2-PX63-SVE | 192163 | |
| NZMN2-PX100-SVE | 192164 | |
| NZMN2-PX160-SVE | 192165 | |
| NZMN2-PX250-SVE | 192166 | |

| | |
|----------------|--------|
| NZMN3-PX250-BT | 192363 |
| - | |
| NZMN3-PX400-BT | 192364 |
| - | |
| NZMN3-PX630-BT | 192365 |
| - | |



| | |
|-----------------|--------|
| NZMN3-PX250-SVE | 192264 |
| NZMN3-PX250-AVE | 192348 |
| NZMN3-PX400-SVE | 192340 |
| NZMN3-PX400-AVE | 192349 |
| NZMN3-PX630-SVE | 192341 |
| NZMN3-PX630-AVE | 192350 |

| | |
|---|--|
| - | |
| | |
| | |
| | |



| | |
|------------------|--------|
| NZMN4-PX630-AVE | 189621 |
| NZMN4-PX800-AVE | 189622 |
| NZMN4-PX1000-AVE | 189623 |
| NZMN4-PX1250-AVE | 189624 |
| NZMN4-PX1600-AVE | 189625 |

1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_s = I_r \times \dots$ | | |
| | | | | | | |

System and cable protection, selectivity and generator protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2

Strong switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | |
|----|-----|-----------|--------|--------|-------------|--------|
| 70 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | NZMS2-PX40 | 192244 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | NZMS2-PX63 | 192245 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMS2-PX100 | 192246 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | NZMS2-PX160 | 192247 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | NZMS2-PX250 | 192248 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|-------------|-------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | NZMS3-PX250 | 192357 | |
| | 400 | 160 - 400 | 2 - 10 | 2 - 12 | NZMS3-PX400 | 192358 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMS3-PX630 | 192359 |

High switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | |
|-----|-----|-----------|--------|--------|-------------|--------|
| 150 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | NZMH2-PX40 | 192039 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | NZMH2-PX63 | 192040 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMH2-PX100 | 192041 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | NZMH2-PX160 | 192042 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | NZMH2-PX250 | 192043 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|-------------|-------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | NZMH3-PX250 | 192360 | |
| | 400 | 160 - 400 | 2 - 10 | 2 - 12 | NZMH3-PX400 | 192361 |
| | 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMH3-PX630 | 192362 |

wa_ren_01818_r Symbolphoto



| | | | | | | |
|----|------|------------|--------|--------|--------------|--------|
| 85 | 630 | 315 - 630 | 2 - 10 | 2 - 18 | NZMH4-PX630 | 189606 |
| | 800 | 400 - 800 | 2 - 10 | 2 - 18 | NZMH4-PX800 | 189607 |
| | 1000 | 500 - 1000 | 2 - 10 | 2 - 18 | NZMH4-PX1000 | 189608 |
| | 1250 | 630 - 1250 | 2 - 10 | 2 - 15 | NZMH4-PX1250 | 189609 |
| | 1600 | 800 - 1600 | 2 - 10 | 2 - 12 | NZMH4-PX1600 | 189610 |

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PX

1.4

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | |
|----------------|--------|
| NZMS2-PX40-BT | 192127 |
| NZMS2-PX63-BT | 192128 |
| NZMS2-PX100-BT | 192129 |
| NZMS2-PX160-BT | 192130 |
| NZMS2-PX250-BT | 192131 |



| | | |
|-----------------|--------|-------|
| NZMS2-PX40-SVE | 192169 | 1 Off |
| NZMS2-PX63-SVE | 192170 | |
| NZMS2-PX100-SVE | 192171 | |
| NZMS2-PX160-SVE | 192172 | |
| NZMS2-PX250-SVE | 192173 | |

| | |
|----------------|--------|
| NZMS3-PX250-BT | 192366 |
| - | |
| NZMS3-PX400-BT | 192367 |
| - | |
| NZMS3-PX630-BT | 192251 |
| - | |



| | |
|-----------------|--------|
| NZMS3-PX250-SVE | 192342 |
| NZMS3-PX250-AVE | 192351 |
| NZMS3-PX400-SVE | 192343 |
| NZMS3-PX400-AVE | 192352 |
| NZMS3-PX630-SVE | 192344 |
| NZMS3-PX630-AVE | 192353 |

| | |
|----------------|--------|
| NZMH2-PX40-BT | 192134 |
| NZMH2-PX63-BT | 192135 |
| NZMH2-PX100-BT | 192136 |
| NZMH2-PX160-BT | 192137 |
| NZMH2-PX250-BT | 192138 |



| | | |
|-----------------|--------|-------|
| NZMH2-PX40-SVE | 192176 | 1 Off |
| NZMH2-PX63-SVE | 192177 | |
| NZMH2-PX100-SVE | 192178 | |
| NZMH2-PX160-SVE | 192179 | |
| NZMH2-PX250-SVE | 192180 | |

| | |
|----------------|--------|
| NZMH3-PX250-BT | 192252 |
| - | |
| NZMH3-PX400-BT | 192253 |
| - | |
| NZMH3-PX630-BT | 192254 |
| - | |



| | |
|-----------------|--------|
| NZMH3-PX250-SVE | 192345 |
| NZMH3-PX250-AVE | 192265 |
| NZMH3-PX400-SVE | 192346 |
| NZMH3-PX400-AVE | 192266 |
| NZMH3-PX630-SVE | 192347 |
| NZMH3-PX630-AVE | 192267 |

| | |
|---|--|
| - | |
| - | |
| - | |
| - | |



| | |
|------------------|--------|
| NZMH4-PX630-AVE | 189626 |
| NZMH4-PX800-AVE | 189627 |
| NZMH4-PX1000-AVE | 189628 |
| NZMH4-PX1250-AVE | 189629 |
| NZMH4-PX1600-AVE | 189630 |

1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | Fixed mounting with screw terminals | | |
|--|--|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|-----------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. | Std. pack |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_i = I_n \times \dots$ | | | |
| | | | | | | | |

System and cable protection, selectivity and generator protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2

Limiting switching capacity

| | | | | | | | |
|-----|------|------------|--------|--------|--------------|--------|-------|
| 100 | 630 | 252 - 630 | 2 - 10 | 2 - 18 | NZML4-PX630 | 189697 | 1 Off |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | NZML4-PX800 | 189698 | |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | NZML4-PX1000 | 189699 | |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | NZML4-PX1250 | 189700 | |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | NZML4-PX1600 | 189701 | |

wa_ren_01818_r Symbolphoto





1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PX...-TZ, ...-TAZ

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|--------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_l = I_r \times \dots$ | $I_G = I_n \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity, generator and earth fault protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2
- NZM3, NZM4: with maintenance mode ARMs and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|--------|--------|----------|----------------|--------|
| 50 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMN2-PX40-TZ | 192141 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMN2-PX63-TZ | 192142 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMN2-PX100-TZ | 192143 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMN2-PX160-TZ | 192144 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMN2-PX250-TZ | 192145 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|---------|--------|-----------|-----------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMN3-PX250-TAZ | 192255 |
| 400 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMN3-PX400-TAZ | 192256 |
| 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMN3-PX630-TAZ | 192257 |

wa_ren_01818_r Symbolphoto



| | | | | | | |
|------|------------|--------|--------|------------|------------------|--------|
| 630 | 252 - 630 | 2 - 10 | 2 - 18 | 126 - 630 | NZMN4-PX630-TAZ | 189611 |
| 800 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMN4-PX800-TAZ | 189612 |
| 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMN4-PX1000-TAZ | 189613 |
| 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMN4-PX1250-TAZ | 189614 |
| 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMN4-PX1600-TAZ | 189615 |

Strong switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|--------|--------|----------|----------------|--------|
| 70 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMS2-PX40-TZ | 192148 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMS2-PX63-TZ | 192149 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMS2-PX100-TZ | 192150 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMS2-PX160-TZ | 192151 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMS2-PX250-TZ | 192152 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|---------|--------|-----------|-----------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMS3-PX250-TAZ | 192258 |
| 400 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMS3-PX400-TAZ | 192259 |
| 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMS3-PX630-TAZ | 192260 |

Compact circuit breakers, switch disconnectors

1.4

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
 NZM...PX...-TZ, ...-TAZ

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
 see accessories

| | | | | | |
|------------------------|-------|---|--------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMN2-PX40-TZ-SVE | 192183 | 1 Off |
| | _____ | | NZMN2-PX63-TZ-SVE | 192184 | |
| | _____ | | NZMN2-PX100-TZ-SVE | 192185 | |
| | _____ | | NZMN2-PX160-TZ-SVE | 192186 | |
| | _____ | | NZMN2-PX250-TZ-SVE | 192187 | |

| | | | | |
|------------------------|-------|--|---------------------|--------|
| Terminals as accessory | _____ |  | NZMN3-PX250-TAZ-AVE | 192268 |
| | _____ | | NZMN3-PX400-TAZ-AVE | 192269 |
| | _____ | | NZMN3-PX630-TAZ-AVE | 192270 |

| | | | | |
|---|-------|---|----------------------|--------|
| - | _____ |  | NZMN4-PX630-TAZ-AVE | 189631 |
| | _____ | | NZMN4-PX800-TAZ-AVE | 189632 |
| | _____ | | NZMN4-PX1000-TAZ-AVE | 189633 |
| | _____ | | NZMN4-PX1250-TAZ-AVE | 189634 |
| | _____ | | NZMN4-PX1600-TAZ-AVE | 189635 |

| | | | | | |
|------------------------|-------|---|--------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMS2-PX40-TZ-SVE | 192190 | 1 Off |
| | _____ | | NZMS2-PX63-TZ-SVE | 192191 | |
| | _____ | | NZMS2-PX100-TZ-SVE | 192192 | |
| | _____ | | NZMS2-PX160-TZ-SVE | 192193 | |
| | _____ | | NZMS2-PX250-TZ-SVE | 192194 | |

| | | | | |
|------------------------|-------|---|---------------------|--------|
| Terminals as accessory | _____ |  | NZMS3-PX250-TAZ-AVE | 192271 |
| | _____ | | NZMS3-PX400-TAZ-AVE | 192272 |
| | _____ | | NZMS3-PX630-TAZ-AVE | 192273 |

1.4

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
 NZM...PX...-TZ, ...-TAZ

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|-------------------------------|--------------------------------|------------------------------------|--------------------------|-------------------------------------|-------------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_l = I_r \times \dots$ | $I_G = I_n \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity, generator and earth fault protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2
- NZM3, NZM4: with maintenance mode ARMs and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

High switching capacity

sg04718_r Symbolphoto



| | | | | | | | |
|-----|-----|-----------|--------|--------|----------|----------------|--------|
| 150 | 40 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMH2-PX40-TZ | 192155 |
| | 63 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMH2-PX63-TZ | 192156 |
| | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMH2-PX100-TZ | 192157 |
| | 160 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMH2-PX160-TZ | 192158 |
| | 250 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMH2-PX250-TZ | 192159 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|---------|--------|-----------|-----------------|--------|
| 250 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMH3-PX250-TAZ | 192261 |
| 400 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMH3-PX400-TAZ | 192262 |
| 630 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMH3-PX630-TAZ | 192263 |

wa_ren_01818_r Symbolphoto



| | | | | | | | |
|----|------|------------|--------|--------|------------|------------------|--------|
| 85 | 630 | 252 - 630 | 2 - 10 | 2 - 18 | 126 - 630 | NZMH4-PX630-TAZ | 189616 |
| | 800 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMH4-PX800-TAZ | 189617 |
| | 1000 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMH4-PX1000-TAZ | 189618 |
| | 1250 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMH4-PX1250-TAZ | 189619 |
| | 1600 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMH4-PX1600-TAZ | 189620 |

Compact circuit breakers, switch disconnectors

1.4

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
 NZM...PX...-TZ, ...-TAZ

Fixed mounting with box terminals

Part no.

Article no.

Withdrawable units

Part no.

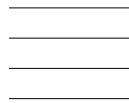
Article no.

Std. pack

Order base separately

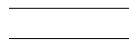
For further terminal types
 see accessories

Terminals as accessory



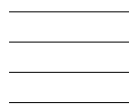
| | | |
|--------------------|--------|-------|
| NZMH2-PX40-TZ-SVE | 192197 | 1 Off |
| NZMH2-PX63-TZ-SVE | 192198 | |
| NZMH2-PX100-TZ-SVE | 192199 | |
| NZMH2-PX160-TZ-SVE | 192200 | |
| NZMH2-PX250-TZ-SVE | 192201 | |

Terminals as accessory



| | |
|---------------------|--------|
| NZMH3-PX250-TAZ-AVE | 192274 |
| NZMH3-PX400-TAZ-AVE | 192275 |
| NZMH3-PX630-TAZ-AVE | 192276 |

-





| | |
|----------------------|--------|
| NZMH4-PX630-TAZ-AVE | 189636 |
| NZMH4-PX800-TAZ-AVE | 189637 |
| NZMH4-PX1000-TAZ-AVE | 189638 |
| NZMH4-PX1250-TAZ-AVE | 189639 |
| NZMH4-PX1600-TAZ-AVE | 189640 |

1.5

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity 400/415V 50/60 Hz | Rated current = | | Setting range | | Fixed mounting with screw terminals | |
|--|-----------------------------|---|---|--|-------------------------------------|-------------|
| | Rated uninterrupted current | | Overload releases | Short-circuit releases | | Part no. |
| | Phase conductor | Neutral conductor | | Non-delayed | | Article no. |
| I_{cu} | $I_n = I_u$ | $I_r = I_r \times \dots \times \% \text{ of phase conductor}$ | $I_r = I_r \times \dots$ | $I_r = I_r \times \dots$ | | |
| kA | A | % | A | | | |
| | | |  |  | | |

System and cable protection

- IEC/EN 60947-2

Basic switching capacity

1230PIC-784 Symbolphoto



| | | | | | | |
|----|-----|-----|-----------|--------------|-----------------------------------|--|
| 25 | 20 | 100 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 100 | 20 - 25 | 350 A fixed | | |
| | 32 | 100 | 25 - 32 | 350 A fixed | | |
| | 40 | 100 | 32 - 40 | 8 - 10 | | |
| | 50 | 100 | 40 - 50 | 6 - 10 | | |
| | 63 | 100 | 50 - 63 | 6 - 10 | | |
| | 80 | 100 | 63 - 80 | 6 - 10 | | |
| | 100 | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 | 100 - 125 | 6 - 10 | | |
| | 160 | 100 | 125 - 160 | 1280 A fixed | | |

1230PIC-801 Symbolphoto



| | | | | | |
|-----|-----|-----------|---------|------------------|--------|
| 125 | 100 | 100 - 125 | 6 - 10 | NZMB2-4-A125 | 265847 |
| | 60 | 125 - 160 | 6 - 10 | NZMB2-4-A160/100 | 265849 |
| 160 | 100 | 125 - 160 | 6 - 10 | NZMB2-4-A160/100 | 265850 |
| | 60 | 160 - 200 | 6 - 10 | NZMB2-4-A200/125 | 265852 |
| 200 | 100 | 160 - 200 | 6 - 10 | NZMB2-4-A200 | 265853 |
| | 60 | 160 - 200 | 6 - 10 | NZMB2-4-A200/125 | 265855 |
| 250 | 100 | 200 - 250 | 6 - 10 | NZMB2-4-A250 | 265856 |
| | 60 | 200 - 250 | 6 - 10 | NZMB2-4-A250/160 | 107582 |
| 300 | 100 | 240 - 300 | 5 - 8.3 | NZMB2-4-A300 | 107583 |
| | 60 | 240 - 300 | 5 - 8.3 | NZMB2-4-A300/200 | |

Compact circuit breakers, switch disconnectors

1.5

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

Fixed mounting with box terminals

Part no. Article no.

Plug-in units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | |
|--------------|--------|---|---|-----|
| NZMB1-4-A20 | 281237 | - | 1 | Off |
| NZMB1-4-A25 | 281239 | | | |
| NZMB1-4-A32 | 281241 | | | |
| NZMB1-4-A40 | 265799 | | | |
| NZMB1-4-A50 | 265801 | | | |
| NZMB1-4-A63 | 265803 | | | |
| NZMB1-4-A80 | 265805 | | | |
| NZMB1-4-A100 | 265807 | | | |
| NZMB1-4-A125 | 265809 | | | |
| NZMB1-4-A160 | 281243 | | | |

Terminals as accessory

| |
|-------|
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |





| | |
|----------------------|--------|
| NZMB2-4-A125-SVE | 113207 |
| NZMB2-4-A160-SVE | 113209 |
| NZMB2-4-A160/100-SVE | 113210 |
| NZMB2-4-A200-SVE | 113212 |
| NZMB2-4-A200/125-SVE | 113213 |
| NZMB2-4-A250-SVE | 113215 |
| NZMB2-4-A250/160-SVE | 113216 |
| - | |
| - | |

1.5

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|--|---------------------------------------|
| | | Phase conductor | Neutral conductor | Overload releases | Short-circuit releases Non-delayed |
| I_{cu} | $I_n = I_u$ | $I_r = I_n \times \dots \times \% \text{ of phase conductor}$ | $I_r = I_n \times \dots$ | $I_r = I_n \times \dots$ | |
| kA | A | % | A | | |
| | | |  |  | |

System and cable protection

- IEC/EN 60947-2

Comfort switching capacity

1230PIC-784 Symbolphoto



| | | | | | | |
|-----|-----|-----------|--------------|-------------|-----------------------------------|--|
| 36 | 20 | 100 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 100 | 20 - 25 | 350 A fixed | | |
| | 32 | 100 | 25 - 32 | 350 A fixed | | |
| | 40 | 100 | 32 - 40 | 8 - 10 | | |
| | 50 | 100 | 40 - 50 | 6 - 10 | | |
| | 63 | 100 | 50 - 63 | 6 - 10 | | |
| | 80 | 100 | 63 - 80 | 6 - 10 | | |
| | 100 | 100 | 80 - 100 | 6 - 10 | | |
| 125 | 100 | 100 - 125 | 6 - 10 | | | |
| 160 | 100 | 125 - 160 | 1280 A fixed | | | |

1230PIC-801 Symbolphoto



| | | | | | |
|-----|-----|-----------|---------|------------------|--------|
| 125 | 100 | 100 - 125 | 6 - 10 | NZMC2-4-A125 | 271430 |
| 160 | 100 | 125 - 160 | 6 - 10 | NZMC2-4-A160 | 271432 |
| | 60 | 125 - 160 | 6 - 10 | NZMC2-4-A160/100 | 271433 |
| 200 | 100 | 160 - 200 | 6 - 10 | NZMC2-4-A200 | 271435 |
| | 60 | 160 - 200 | 6 - 10 | NZMC2-4-A200/125 | 271436 |
| 250 | 100 | 200 - 250 | 6 - 10 | NZMC2-4-A250 | 271438 |
| | 60 | 200 - 250 | 6 - 10 | NZMC2-4-A250/160 | 271439 |
| 300 | 100 | 240 - 300 | 5 - 8.3 | NZMC2-4-A300 | 107584 |
| | 60 | 240 - 300 | 5 - 8.3 | NZMC2-4-A300/200 | 107585 |

1230PIC-702 Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|------------------|--------|
| 320 | 100 | 250 - 320 | 6 - 10 | - | |
| | 60 | 250 - 320 | 6 - 10 | - | |
| | 100 | 250 - 320 | 6 - 10 | NZMC3-4-A320 | 109688 |
| | 60 | 250 - 320 | 6 - 10 | NZMC3-4-A320/200 | 109689 |
| 400 | 100 | 320 - 400 | 6 - 10 | - | |
| | 60 | 320 - 400 | 6 - 10 | - | |
| | 100 | 320 - 400 | 6 - 10 | NZMC3-4-A400 | 109690 |
| 500 | 60 | 320 - 400 | 6 - 10 | NZMC3-4-A400/250 | 109691 |
| | 100 | 400 - 500 | 6 - 10 | - | |
| | 60 | 400 - 500 | 6 - 10 | - | |
| | 100 | 400 - 500 | 6 - 10 | NZMC3-4-A500 | 109692 |
| | 60 | 400 - 500 | 6 - 10 | NZMC3-4-A500/320 | 109693 |

Compact circuit breakers, switch disconnectors

1.5

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | |
|--------------|--------|---|-------|
| NZMC1-4-A20 | 283300 | - | 1 Off |
| NZMC1-4-A25 | 283302 | - | |
| NZMC1-4-A32 | 283304 | - | |
| NZMC1-4-A40 | 271408 | - | |
| NZMC1-4-A50 | 271410 | - | |
| NZMC1-4-A63 | 271412 | - | |
| NZMC1-4-A80 | 271414 | - | |
| NZMC1-4-A100 | 271416 | - | |
| NZMC1-4-A125 | 271418 | - | |
| NZMC1-4-A160 | 283306 | - | |

Terminals as accessory



| | |
|----------------------|--------|
| NZMC2-4-A125-SVE | 113231 |
| NZMC2-4-A160-SVE | 113233 |
| NZMC2-4-A160/100-SVE | 113234 |
| NZMC2-4-A200-SVE | 113236 |
| NZMC2-4-A200/125-SVE | 113237 |
| NZMC2-4-A250-SVE | 113239 |
| NZMC2-4-A250/160-SVE | 113240 |
| - | |
| - | |

Terminals as accessory





| | |
|----------------------|--------|
| NZMC3-4-A320-SVE | 168464 |
| NZMC3-4-A320/200-SVE | 168465 |
| NZMC3-4-A320-AVE | 113516 |
| NZMC3-4-A320/200-AVE | 113517 |
| NZMC3-4-A400-SVE | 168466 |
| NZMC3-4-A400/250-SVE | 168467 |
| NZMC3-4-A400-AVE | 113518 |
| NZMC3-4-A400/250-AVE | 113519 |
| NZMC3-4-A500-SVE | 168468 |
| NZMC3-4-A500/320-SVE | 168469 |
| NZMC3-4-A500-AVE | 113520 |
| NZMC3-4-A500/320-AVE | 113521 |

1.5

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|--|-------------------------------------|-------------|
| | Phase conductor $I_n = I_u$ | Neutral conductor $I_n = I_p \times \dots \times$ % of phase conductor | Overload releases $I_r = I_p \times \dots$ | Short-circuit releases Non-delayed $I_t = I_p \times \dots$ | Part no. | Article no. |
| I_{cu} | A | % | A | | | |
| kA | | |  |  | | |

System and cable protection

- IEC/EN 60947-2

Normal switching capacity

1230PIC-784 Symbolphoto



| | | | | | | |
|----|-----|-----|-----------|--------------|-----------------------------------|--|
| 50 | 20 | 100 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 100 | 20 - 25 | 350 A fixed | | |
| | 32 | 100 | 25 - 32 | 350 A fixed | | |
| | 40 | 100 | 32 - 40 | 8 - 10 | | |
| | 50 | 100 | 40 - 50 | 6 - 10 | | |
| | 63 | 100 | 50 - 63 | 6 - 10 | | |
| | 80 | 100 | 63 - 80 | 6 - 10 | | |
| | 100 | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 | 100 - 125 | 6 - 10 | | |
| | 160 | 100 | 125 - 160 | 1280 A fixed | | |

1230PIC-801 Symbolphoto



| | | | | | |
|-----|-----|-----------|---------|------------------|--------|
| 125 | 100 | 100 - 125 | 6 - 10 | NZMN2-4-A125 | 265858 |
| | 60 | 125 - 160 | 6 - 10 | NZMN2-4-A160/100 | 265860 |
| 160 | 60 | 125 - 160 | 6 - 10 | NZMN2-4-A160/100 | 265861 |
| | 60 | 160 - 200 | 6 - 10 | NZMN2-4-A200/125 | 265863 |
| 200 | 100 | 160 - 200 | 6 - 10 | NZMN2-4-A200 | 265864 |
| | 60 | 160 - 200 | 6 - 10 | NZMN2-4-A200/125 | 265866 |
| 250 | 100 | 200 - 250 | 6 - 10 | NZMN2-4-A250 | 265867 |
| | 60 | 200 - 250 | 6 - 10 | NZMN2-4-A250/160 | 107586 |
| 300 | 100 | 240 - 300 | 5 - 8.3 | NZMN2-4-A300 | 107587 |
| | 60 | 240 - 300 | 5 - 8.3 | NZMN2-4-A300/200 | |

1230PIC-702 Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|------------------|--------|
| 320 | 100 | 250 - 320 | 6 - 10 | - | |
| | 60 | 250 - 320 | 6 - 10 | - | |
| | 100 | 250 - 320 | 6 - 10 | NZMN3-4-A320 | 109694 |
| | 60 | 250 - 320 | 6 - 10 | NZMN3-4-A320/200 | 109695 |
| 400 | 100 | 320 - 400 | 6 - 10 | - | |
| | 60 | 320 - 400 | 6 - 10 | - | |
| | 100 | 320 - 400 | 6 - 10 | NZMN3-4-A400 | 109696 |
| 500 | 60 | 320 - 400 | 6 - 10 | NZMN3-4-A400/250 | 109697 |
| | 100 | 400 - 500 | 6 - 10 | - | |
| | 60 | 400 - 500 | 6 - 10 | - | |
| | 100 | 400 - 500 | 6 - 10 | NZMN3-4-A500 | 109698 |
| | 60 | 400 - 500 | 6 - 10 | NZMN3-4-A500/320 | 109699 |

Compact circuit breakers, switch disconnectors

1.5

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

Fixed mounting with box terminals

Part no. Article no.

Withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | |
|--------------|--------|---|-------|
| NZMN1-4-A20 | 281245 | - | 1 Off |
| NZMN1-4-A25 | 281247 | - | |
| NZMN1-4-A32 | 281249 | - | |
| NZMN1-4-A40 | 265811 | - | |
| NZMN1-4-A50 | 265813 | - | |
| NZMN1-4-A63 | 265815 | - | |
| NZMN1-4-A80 | 265817 | - | |
| NZMN1-4-A100 | 265819 | - | |
| NZMN1-4-A125 | 265821 | - | |
| NZMN1-4-A160 | 281251 | - | |

| | |
|------------------------|--------|
| Terminals as accessory | |
| NZMN2-4-A160-BT | 147393 |
| Terminals as accessory | |
| NZMN2-4-A200-BT | 147394 |
| Terminals as accessory | |
| NZMN2-4-A250-BT | 147395 |
| Terminals as accessory | |



| | |
|----------------------|--------|
| NZMN2-4-A125-SVE | 113264 |
| NZMN2-4-A160-SVE | 113266 |
| NZMN2-4-A160/100-SVE | 113267 |
| NZMN2-4-A200-SVE | 113269 |
| NZMN2-4-A200/125-SVE | 113270 |
| NZMN2-4-A250-SVE | 113272 |
| NZMN2-4-A250/160-SVE | 113273 |
| - | |
| - | |

| | |
|------------------------|--|
| Terminals as accessory | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |





| | |
|----------------------|--------|
| NZMN3-4-A320-SVE | 168508 |
| NZMN3-4-A320/200-SVE | 168509 |
| NZMN3-4-A320-AVE | 113532 |
| NZMN3-4-A320/200-AVE | 113533 |
| NZMN3-4-A400-SVE | 168510 |
| NZMN3-4-A400/250-SVE | 168511 |
| NZMN3-4-A400-AVE | 113534 |
| NZMN3-4-A400/250-AVE | 113535 |
| NZMN3-4-A500-SVE | 168512 |
| NZMN3-4-A500/320-SVE | 168513 |
| NZMN3-4-A500-AVE | 113536 |
| NZMN3-4-A500/320-AVE | 113537 |

1.5

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|--|-------------------------------------|-------------|
| | Phase conductor | Neutral conductor | Overload releases | Short-circuit releases | Part no. | Article no. |
| I_{cu} | $I_n = I_u$ | $I_r = I_n \times \dots \times \% \text{ of phase conductor}$ | $I_r = I_n \times \dots$ | $I_r = I_n \times \dots$ | | |
| kA | A | % | A | | | |
| | | |  |  | | |

System and cable protection

- IEC/EN 60947-2

Strong switching capacity

1230PIC-784 Symbolphoto



| | | | | | | |
|----|-----|-----|-----------|--------------|-----------------------------------|--|
| 70 | 20 | 100 | 16 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 100 | 20 - 25 | 350 A fixed | | |
| | 32 | 100 | 25 - 32 | 350 A fixed | | |
| | 40 | 100 | 32 - 40 | 8 - 10 | | |
| | 50 | 100 | 40 - 50 | 6 - 10 | | |
| | 63 | 100 | 50 - 63 | 6 - 10 | | |
| | 80 | 100 | 63 - 80 | 6 - 10 | | |
| | 100 | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 | 100 - 125 | 6 - 10 | | |
| | 160 | 100 | 125 - 160 | 1280 A fixed | | |

1230PIC-801 Symbolphoto



| | | | | | |
|-----|-----|-----------|---------|------------------|--------|
| 125 | 100 | 100 - 125 | 6 - 10 | NZMS2-4-A125 | 109988 |
| 160 | 100 | 125 - 160 | 6 - 10 | NZMS2-4-A160 | 109989 |
| 160 | 60 | 125 - 160 | 6 - 10 | NZMS2-4-A160/100 | 109990 |
| 200 | 100 | 160 - 200 | 6 - 10 | NZMS2-4-A200 | 109991 |
| 200 | 60 | 160 - 200 | 6 - 10 | NZMS2-4-A200/125 | 109992 |
| 250 | 100 | 200 - 250 | 6 - 10 | NZMS2-4-A250 | 109993 |
| 250 | 60 | 200 - 250 | 6 - 10 | NZMS2-4-A250/160 | 109994 |
| 300 | 100 | 240 - 300 | 5 - 8.3 | NZMS2-4-A300 | 110205 |
| 300 | 60 | 240 - 300 | 5 - 8.3 | NZMS2-4-A300/200 | 110206 |

Compact circuit breakers, switch disconnectors

1.5

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

Fixed mounting with box terminals

Part no. Article no.

Plug-in units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | |
|--------------|--------|---|-------|
| NZMS1-4-A20 | 109948 | - | 1 Off |
| NZMS1-4-A25 | 109949 | | |
| NZMS1-4-A32 | 109950 | | |
| NZMS1-4-A40 | 109951 | | |
| NZMS1-4-A50 | 109952 | | |
| NZMS1-4-A63 | 109953 | | |
| NZMS1-4-A80 | 109954 | | |
| NZMS1-4-A100 | 109955 | | |
| NZMS1-4-A125 | 109956 | | |
| NZMS1-4-A160 | 109957 | | |

Terminals as accessory

| |
|-------|
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |





| | |
|----------------------|--------|
| NZMS2-4-A125-SVE | 113313 |
| NZMS2-4-A160-SVE | 113314 |
| NZMS2-4-A160/100-SVE | 113315 |
| NZMS2-4-A200-SVE | 113316 |
| NZMS2-4-A200/125-SVE | 113317 |
| NZMS2-4-A250-SVE | 113318 |
| NZMS2-4-A250/160-SVE | 113319 |
| - | |
| - | |

1.5

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with screw terminals | |
|--|--|--|--------------------------|---|--|
| | | Phase conductor | Neutral conductor | Part no. | Article no. |
| I_{cu} | $I_n = I_u$ | $I_r = I_n \times \dots \times$ % of phase conductor | $I_r = I_n \times \dots$ | Overload releases | Short-circuit releases Non-delayed |
| kA | A | % | A |  |  |

System and cable protection

- IEC/EN 60947-2

High switching capacity

1230PIC-784 Symbolphoto



| | | | | | | |
|-----|-----|-----|-----------|--------------|-----------------------------------|--|
| 100 | 20 | 100 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | 25 | 100 | 20 - 25 | 350 A fixed | | |
| | 32 | 100 | 25 - 32 | 350 A fixed | | |
| | 40 | 100 | 32 - 40 | 8 - 10 | | |
| | 50 | 100 | 40 - 50 | 6 - 10 | | |
| | 63 | 100 | 50 - 63 | 6 - 10 | | |
| | 80 | 100 | 63 - 80 | 6 - 10 | | |
| | 100 | 100 | 80 - 100 | 6 - 10 | | |
| | 125 | 100 | 100 - 125 | 6 - 10 | | |
| | 160 | 100 | 125 - 160 | 1280 A fixed | | |

1230PIC-801 Symbolphoto



| | | | | | | |
|-----|-----|-----------|-----------|------------------|------------------|--------|
| 150 | 20 | 100 | 15 - 20 | 350 A fixed | NZMH2-4-A20 | 281287 |
| | 25 | 100 | 20 - 25 | 350 A fixed | NZMH2-4-A25 | 281289 |
| | 32 | 100 | 25 - 32 | 350 A fixed | NZMH2-4-A32 | 281291 |
| | 40 | 100 | 32 - 40 | 8 - 10 | NZMH2-4-A40 | 265823 |
| | 50 | 100 | 40 - 50 | 6 - 10 | NZMH2-4-A50 | 265825 |
| | 63 | 100 | 50 - 63 | 6 - 10 | NZMH2-4-A63 | 265827 |
| | 80 | 100 | 63 - 80 | 6 - 10 | NZMH2-4-A80 | 265829 |
| | 100 | 100 | 80 - 100 | 6 - 10 | NZMH2-4-A100 | 265831 |
| | 125 | 100 | 100 - 125 | 6 - 10 | NZMH2-4-A125 | 265833 |
| | 160 | 100 | 125 - 160 | 6 - 10 | NZMH2-4-A160 | 265871 |
| | | 60 | 125 - 160 | 6 - 10 | NZMH2-4-A160/100 | 265872 |
| | 200 | 100 | 160 - 200 | 6 - 10 | NZMH2-4-A200 | 265874 |
| | | 60 | 160 - 200 | 6 - 10 | NZMH2-4-A200/125 | 265875 |
| | 250 | 100 | 200 - 250 | 6 - 10 | NZMH2-4-A250 | 265877 |
| | | 60 | 200 - 250 | 6 - 10 | NZMH2-4-A250/160 | 265878 |
| | 300 | 100 | 240 - 300 | 5 - 8.3 | NZMH2-4-A300 | 107588 |
| 60 | | 240 - 300 | 5 - 8.3 | NZMH2-4-A300/200 | 107589 | |

1230PIC-702 Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|------------------|--------|
| 320 | 100 | 250 - 320 | 6 - 10 | NZMH3-4-A320 | 109700 |
| | 60 | 250 - 320 | 6 - 10 | NZMH3-4-A320/200 | 109701 |
| | 100 | 250 - 320 | 6 - 10 | - | |
| | 60 | 250 - 320 | 6 - 10 | - | |
| 400 | 100 | 320 - 400 | 6 - 10 | NZMH3-4-A400 | 109702 |
| | 60 | 320 - 400 | 6 - 10 | NZMH3-4-A400/250 | 109703 |
| | 100 | 320 - 400 | 6 - 10 | - | |
| | 60 | 320 - 400 | 6 - 10 | - | |
| 500 | 100 | 400 - 500 | 6 - 10 | NZMH3-4-A500 | 109704 |
| | 60 | 400 - 500 | 6 - 10 | NZMH3-4-A500/320 | 109705 |
| | 100 | 400 - 500 | 6 - 10 | - | |
| | 60 | 400 - 500 | 6 - 10 | - | |

Compact circuit breakers, switch disconnectors

1.5

Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

Fixed mounting with box terminals

Part no. Article no.

Withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | |
|--------------|--------|---|-------|
| NZMH1-4-A20 | 284416 | - | 1 Off |
| NZMH1-4-A25 | 284418 | | |
| NZMH1-4-A32 | 284420 | | |
| NZMH1-4-A40 | 284422 | | |
| NZMH1-4-A50 | 284424 | | |
| NZMH1-4-A63 | 284426 | | |
| NZMH1-4-A80 | 284428 | | |
| NZMH1-4-A100 | 284430 | | |
| NZMH1-4-A125 | 284432 | | |
| NZMH1-4-A160 | 284434 | | |

Terminals as accessory



| | |
|----------------------|--------|
| NZMH2-4-A20-SVE | 113396 |
| NZMH2-4-A25-SVE | 113398 |
| NZMH2-4-A32-SVE | 113400 |
| NZMH2-4-A40-SVE | 113367 |
| NZMH2-4-A50-SVE | 113369 |
| NZMH2-4-A63-SVE | 113371 |
| NZMH2-4-A80-SVE | 113373 |
| NZMH2-4-A100-SVE | 113375 |
| NZMH2-4-A125-SVE | 113377 |
| NZMH2-4-A160-SVE | 113379 |
| NZMH2-4-A160/100-SVE | 113380 |
| NZMH2-4-A200-SVE | 113382 |
| NZMH2-4-A200/125-SVE | 113383 |
| NZMH2-4-A250-SVE | 113385 |
| NZMH2-4-A250/160-SVE | 113386 |
| - | |
| - | |

Terminals as accessory





| | |
|----------------------|--------|
| NZMH3-4-A320-SVE | 168889 |
| NZMH3-4-A320/200-SVE | 168890 |
| NZMH3-4-A320-AVE | 113578 |
| NZMH3-4-A320/200-AVE | 113579 |
| NZMH3-4-A400-SVE | 168891 |
| NZMH3-4-A400/250-SVE | 168892 |
| NZMH3-4-A400-AVE | 113580 |
| NZMH3-4-A400/250-AVE | 113581 |
| NZMH3-4-A500-SVE | 168893 |
| NZMH3-4-A500/320-SVE | 168894 |
| NZMH3-4-A500-AVE | 113582 |
| NZMH3-4-A500/320-AVE | 113583 |

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-AX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor I_n x % of phase conductor % | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|--|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ A | | |
| | | |  |  | | |

System and cable protection

- IEC/EN 60947-2

Normal switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | | |
|----|-----|-----|-----------|--------|---------------|--------|
| 50 | 40 | 100 | 20 - 40 | 2 - 12 | NZMN2-4-AX40 | 193357 |
| | 63 | 100 | 25 - 63 | 2 - 12 | NZMN2-4-AX63 | 193358 |
| | 100 | 100 | 40 - 100 | 2 - 12 | NZMN2-4-AX100 | 193359 |
| | 160 | 100 | 64 - 160 | 2 - 12 | NZMN2-4-AX160 | 193360 |
| | 250 | 100 | 100 - 250 | 2 - 12 | NZMN2-4-AX250 | 193361 |

wa_ren_00918_r Symbolphoto



| | | | | | |
|-----|-----------|-----------|--------|-------------------|--------|
| 400 | 100 | 160 - 400 | 2 - 11 | NZMN3-4-AX400 | 191486 |
| | 0.60, 100 | 160 - 400 | 2 - 11 | NZMN3-4-AX400/VAR | 191487 |
| 630 | 100 | 252 - 630 | 2 - 8 | NZMN3-4-AX630 | 191488 |
| | 0.60, 100 | 252 - 630 | 2 - 8 | NZMN3-4-AX630/VAR | 191489 |

wa_ren_01418_r Symbolphoto



| | | | | | |
|------|-----------|------------|--------|--------------------|--------|
| 800 | 100 | 320 - 800 | 2 - 12 | NZMN4-4-AX800 | 191431 |
| | 0.60, 100 | 320 - 800 | 2 - 12 | NZMN4-4-AX800/VAR | 191432 |
| 1000 | 100 | 400 - 1000 | 2 - 12 | NZMN4-4-AX1000 | 191433 |
| | 0.60, 100 | 400 - 1000 | 2 - 12 | NZMN4-4-AX1000/VAR | 191434 |
| 1250 | 100 | 500 - 1250 | 2 - 12 | NZMN4-4-AX1250 | 191435 |
| | 0.60, 100 | 500 - 1250 | 2 - 12 | NZMN4-4-AX1250/VAR | 191436 |
| 1600 | 100 | 640 - 1600 | 2 - 12 | NZMN4-4-AX1600 | 191437 |
| | 0.60, 100 | 640 - 1600 | 2 - 12 | NZMN4-4-AX1600/VAR | 191438 |

Strong switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | | |
|----|-----|-----|-----------|--------|---------------|--------|
| 70 | 40 | 100 | 20 - 40 | 2 - 12 | NZMS2-4-AX40 | 193371 |
| | 63 | 100 | 25 - 63 | 2 - 12 | NZMS2-4-AX63 | 193372 |
| | 100 | 100 | 40 - 100 | 2 - 12 | NZMS2-4-AX100 | 193373 |
| | 160 | 100 | 64 - 160 | 2 - 12 | NZMS2-4-AX160 | 193374 |
| | 250 | 100 | 100 - 250 | 2 - 12 | NZMS2-4-AX250 | 193375 |

wa_ren_00918_r Symbolphoto



| | | | | | |
|-----|-----------|-----------|--------|-------------------|--------|
| 400 | 100 | 160 - 400 | 2 - 11 | NZMS3-4-AX400 | 191517 |
| | 0.60, 100 | 160 - 400 | 2 - 11 | NZMS3-4-AX400/VAR | 191518 |
| 630 | 100 | 252 - 630 | 2 - 8 | NZMS3-4-AX630 | 191519 |
| | 0.60, 100 | 252 - 630 | 2 - 8 | NZMS3-4-AX630/VAR | 191520 |

Compact circuit breakers, switch disconnectors

1.6

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-AX

Fixed mounting with box terminals

Part no. Article no.

Withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

Terminals as accessory _____ - _____ 1 Off

NZMN3-4-AX400-BT 191612
Terminals as accessory _____
NZMN3-4-AX630-BT 191613
Terminals as accessory _____



NZMN3-4-AX400-AVE 191608
NZMN3-4-AX400/VAR-AVE 191614
NZMN3-4-AX630-AVE 191609
NZMN3-4-AX630/VAR-AVE 191615

Terminals as accessory _____

Withdrawable units as accessory _____

Terminals as accessory _____ - _____ 1 Off

Terminals as accessory _____





NZMS3-4-AX400-AVE 191529
NZMS3-4-AX400/VAR-AVE 191530
NZMS3-4-AX630-AVE 191531
NZMS3-4-AX630/VAR-AVE 191532

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-AX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_n \times \%$ of phase conductor % | Setting range | | Fixed mounting with screw terminals | |
|--|--|---|---|--|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_s = I_n \times \dots$ | | |
| | | |  |  | | |

System and cable protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | | |
|-----|-----|-----|-----------|--------|---------------|--------|
| 150 | 40 | 100 | 20 - 40 | 2 - 12 | NZMH2-4-AX40 | 193364 |
| | 63 | 100 | 25 - 63 | 2 - 12 | NZMH2-4-AX63 | 193365 |
| | 100 | 100 | 40 - 100 | 2 - 12 | NZMH2-4-AX100 | 193366 |
| | 160 | 100 | 64 - 160 | 2 - 12 | NZMH2-4-AX160 | 193367 |
| | 250 | 100 | 100 - 250 | 2 - 12 | NZMH2-4-AX250 | 193368 |

wa_ren_00918_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|-----------|-------------------|---------------|--------|
| 400 | 100 | 160 - 400 | 2 - 11 | NZMH3-4-AX400 | 191387 | |
| | 0.60, 100 | 160 - 400 | 2 - 11 | NZMH3-4-AX400/VAR | 191388 | |
| | 630 | 100 | 252 - 630 | 2 - 8 | NZMH3-4-AX630 | 191389 |
| | 0.60, 100 | 252 - 630 | 2 - 8 | NZMH3-4-AX630/VAR | 191390 | |

wa_ren_01418_r Symbolphoto



| | | | | | | |
|----|-----------|------------|------------|--------------------|----------------|--------|
| 85 | 800 | 100 | 320 - 800 | 2 - 12 | NZMH4-4-AX800 | 191473 |
| | 0.60, 100 | 320 - 800 | 2 - 12 | NZMH4-4-AX800/VAR | 191474 | |
| | 1000 | 100 | 400 - 1000 | 2 - 12 | NZMH4-4-AX1000 | 191475 |
| | 0.60, 100 | 400 - 1000 | 2 - 12 | NZMH4-4-AX1000/VAR | 191476 | |
| | 1250 | 100 | 500 - 1250 | 2 - 12 | NZMH4-4-AX1250 | 191477 |
| | 0.60, 100 | 500 - 1250 | 2 - 12 | NZMH4-4-AX1250/VAR | 191478 | |
| | 1600 | 100 | 640 - 1600 | 2 - 12 | NZMH4-4-AX1600 | 191353 |
| | 0.60, 100 | 640 - 1600 | 2 - 12 | NZMH4-4-AX1600/VAR | 191354 | |

Limiting switching capacity

wa_ren_01418_r Symbolphoto



| | | | | | | |
|-----|-----------|------------|------------|--------------------|----------------|--------|
| 100 | 800 | 100 | 320 - 800 | 2 - 12 | NZML4-4-AX800 | 191331 |
| | 0.60, 100 | 320 - 800 | 2 - 12 | NZML4-4-AX800/VAR | 191332 | |
| | 1000 | 100 | 400 - 1000 | 2 - 12 | NZML4-4-AX1000 | 191333 |
| | 0.60, 100 | 400 - 1000 | 2 - 12 | NZML4-4-AX1000/VAR | 191334 | |
| | 1250 | 100 | 500 - 1250 | 2 - 12 | NZML4-4-AX1250 | 191335 |
| | 0.60, 100 | 500 - 1250 | 2 - 12 | NZML4-4-AX1250/VAR | 191336 | |
| | 1600 | 100 | 640 - 1600 | 2 - 12 | NZML4-4-AX1600 | 191337 |
| | 0.60, 100 | 640 - 1600 | 2 - 12 | NZML4-4-AX1600/VAR | 191338 | |

Compact circuit breakers, switch disconnectors

1.6

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-AX

Fixed mounting with box terminals

Part no. Article no.

Withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | |
|------------------------|-------|---|-------|-------|
| Terminals as accessory | _____ | - | _____ | 1 Off |
|------------------------|-------|---|-------|-------|

| | | | | |
|------------------------|-------|--|-----------------------|--------|
| Terminals as accessory | _____ |  | NZMH3-4-AX400-AVE | 191375 |
| | _____ | | NZMH3-4-AX400/VAR-AVE | 191379 |
| | _____ | | NZMH3-4-AX630-AVE | 191376 |
| | _____ | | NZMH3-4-AX630/VAR-AVE | 191380 |

| | | | | |
|---|-------|---------------------------------|-------|-------|
| - | _____ | Withdrawable units as accessory | _____ | 1 Off |
|---|-------|---------------------------------|-------|-------|

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor I_N x % of phase conductor % | Setting range | | | Fixed mounting with screw terminals | |
|--|--|---|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_s = I_n \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

Normal switching capacity

wa_ren_00618_r Symbolphoto



| | | | | | | | |
|-----|-----------|-----------|----------|--------|--------|-------------------|--------|
| 50 | 100 | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMN2-4-VX100 | 191642 |
| | 160 | 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMN2-4-VX160 | 191643 |
| 250 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | 2 - 18 | NZMN2-4-VX160/VAR | 191644 |
| | 100 | 100 - 250 | 2 - 10 | 2 - 12 | 2 - 12 | NZMN2-4-VX250 | 191645 |
| | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | 2 - 12 | NZMN2-4-VX250/VAR | 191646 |

wa_ren_01118_r Symbolphoto



| | | | | | | | |
|-----|-----------|-----------|---------|--------|--------|-------------------|--------|
| 400 | 100 | 160 - 400 | 2 - 10 | 2 - 12 | 2 - 12 | NZMN3-4-VX400 | 191490 |
| | 100 | 160 - 400 | 2 - 10 | 2 - 12 | 2 - 12 | - | - |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | 2 - 12 | NZMN3-4-VX400/VAR | 191491 |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | 2 - 12 | - | - |
| 630 | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 2 - 8 | NZMN3-4-VX630 | 191492 |
| | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 2 - 8 | - | - |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 2 - 8 | NZMN3-4-VX630/VAR | 191493 |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 2 - 8 | - | - |

wa_ren_01618_r Symbolphoto



| | | | | | | | |
|------|-----------|------------|--------|--------|--------|--------------------|--------|
| 800 | 100 | 320 - 800 | 2 - 10 | 2 - 18 | 2 - 18 | NZMN4-4-VX800 | 191439 |
| | 0.60, 100 | 320 - 800 | 2 - 10 | 2 - 18 | 2 - 18 | NZMN4-4-VX800/VAR | 191440 |
| 1000 | 100 | 400 - 1000 | 2 - 10 | 2 - 18 | 2 - 18 | NZMN4-4-VX1000 | 191441 |
| | 0.60, 100 | 400 - 1000 | 2 - 10 | 2 - 18 | 2 - 18 | NZMN4-4-VX1000/VAR | 191442 |
| 1250 | 100 | 500 - 1250 | 2 - 10 | 2 - 15 | 2 - 15 | NZMN4-4-VX1250 | 191443 |
| | 0.60, 100 | 500 - 1250 | 2 - 10 | 2 - 15 | 2 - 15 | NZMN4-4-VX1250/VAR | 191444 |
| 1600 | 100 | 640 - 1600 | 2 - 10 | 2 - 12 | 2 - 12 | NZMN4-4-VX1600 | 191445 |
| | 0.60, 100 | 640 - 1600 | 2 - 10 | 2 - 12 | 2 - 12 | NZMN4-4-VX1600/VAR | 191446 |

Compact circuit breakers, switch disconnectors

1.6

Switch disconnectors IEC, electronic releases, 4 pole NZM...-4-VX

Fixed mounting with box terminals



Part no. Article no.

Withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
see accessories

| | | | | | |
|------------------------|--------|---|---------------------------------|--------|-------|
| NZMN2-4-VX100-BT | 191639 |  | NZMN2-4-VX100-SVE | 191634 | 1 Off |
| NZMN2-4-VX160-BT | 191640 | | NZMN2-4-VX160-SVE | 191635 | |
| Terminals as accessory | | | NZMN2-4-VX160/VAR-SVE | 191636 | |
| NZMN2-4-VX250-BT | 191641 | | NZMN2-4-VX250-SVE | 191637 | |
| Terminals as accessory | | | NZMN2-4-VX250/VAR-SVE | 191638 | |
| Terminals as accessory | |  | NZMN3-4-VX400-SVE | 191482 | |
| | | | NZMN3-4-VX400-AVE | 191610 | |
| | | | NZMN3-4-VX400/VAR-SVE | 191484 | |
| | | | NZMN3-4-VX400/VAR-AVE | 191616 | |
| | | | NZMN3-4-VX630-SVE | 191483 | |
| | | | NZMN3-4-VX630-AVE | 191611 | |
| | | | NZMN3-4-VX630/VAR-SVE | 191485 | |
| | | NZMN3-4-VX630/VAR-AVE | 191617 | | |
| | |  | NZMN4-4-VX800-AVE | 193333 | |
| | | | Withdrawable units as accessory | | |
| | | | NZMN4-4-VX1000-AVE | 193334 | |
| | | | Withdrawable units as accessory | | |
| | | | NZMN4-4-VX1250-AVE | 193335 | |
| | | | Withdrawable units as accessory | | |
| | | NZMN4-4-VX1600-AVE | 193336 | | |
| | | Withdrawable units as accessory | | | |

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_N \times \%$ of phase conductor % | Setting range | | | Fixed mounting with screw terminals | |
|--|--|---|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_i = I_n \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

Strong switching capacity

wa_ren_00618_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|-----------|--------|--------|-------------------|--------|
| 70 | 100 | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMS2-4-VX100 | 191659 |
| | 160 | 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMS2-4-VX160 | 191660 |
| | | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMS2-4-VX160/VAR | 191661 |
| | 250 | 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMS2-4-VX250 | 191662 |
| | | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMS2-4-VX250/VAR | 191663 |

wa_ren_01118_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|--------|-------------------|--------|
| 400 | 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMS3-4-VX400 | 191521 |
| | 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMS3-4-VX400/VAR | 191522 |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| 630 | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMS3-4-VX630 | 191523 |
| | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMS3-4-VX630/VAR | 191524 |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |

Compact circuit breakers, switch disconnectors

1.6

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX

Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units

Part no.

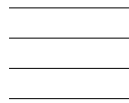
Article no.

Std. pack

Order base separately

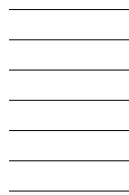
For further terminal types
see accessories

Terminals as accessory



| | | |
|-----------------------|--------|-------|
| NZMS2-4-VX100-SVE | 191664 | 1 Off |
| NZMS2-4-VX160-SVE | 191665 | |
| NZMS2-4-VX160/VAR-SVE | 191666 | |
| NZMS2-4-VX250-SVE | 191667 | |
| NZMS2-4-VX250/VAR-SVE | 191668 | |

Terminals as accessory






| | |
|-----------------------|--------|
| NZMS3-4-VX400-SVE | 191541 |
| NZMS3-4-VX400-AVE | 191533 |
| NZMS3-4-VX400/VAR-SVE | 191542 |
| NZMS3-4-VX400/VAR-AVE | 191534 |
| NZMS3-4-VX630-SVE | 191543 |
| NZMS3-4-VX630-AVE | 191535 |
| NZMS3-4-VX630/VAR-SVE | 191544 |
| NZMS3-4-VX630/VAR-AVE | 191536 |

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_n \times \%$ of phase conductor | Setting range | | | Fixed mounting with screw terminals | |
|--|--|--|---|---|---|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| | | | | | | | |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_s = I_n \times \dots$ | | |
| | | |  |  |  | | |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00618_r Symbolphoto



| | | | | | | | |
|-----|-----|-----------|-----------|--------|--------|-------------------|--------|
| 150 | 100 | 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMH2-4-VX100 | 191689 |
| | 160 | 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMH2-4-VX160 | 191690 |
| | | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMH2-4-VX160/VAR | 191691 |
| | 250 | 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMH2-4-VX250 | 191692 |
| | | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMH2-4-VX250/VAR | 191693 |

wa_ren_01118_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|--------|-------------------|--------|
| 400 | 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMH3-4-VX400 | 191391 |
| | 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMH3-4-VX400/VAR | 191392 |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| 630 | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMH3-4-VX630 | 191393 |
| | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMH3-4-VX630/VAR | 191394 |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |

wa_ren_01618_r Symbolphoto



| | | | | | | | |
|----|------|-----------|------------|--------|--------|--------------------|--------|
| 85 | 800 | 100 | 320 - 800 | 2 - 10 | 2 - 18 | NZMH4-4-VX800 | 191355 |
| | | 0.60, 100 | 320 - 800 | 2 - 10 | 2 - 18 | NZMH4-4-VX800/VAR | 191356 |
| | 1000 | 100 | 400 - 1000 | 2 - 10 | 2 - 18 | NZMH4-4-VX1000 | 191357 |
| | | 0.60, 100 | 400 - 1000 | 2 - 10 | 2 - 18 | NZMH4-4-VX1000/VAR | 191358 |
| | 1250 | 100 | 500 - 1250 | 2 - 10 | 2 - 15 | NZMH4-4-VX1250 | 191359 |
| | | 0.60, 100 | 500 - 1250 | 2 - 10 | 2 - 15 | NZMH4-4-VX1250/VAR | 191360 |
| | 1600 | 100 | 640 - 1600 | 2 - 10 | 2 - 12 | NZMH4-4-VX1600 | 191361 |
| | | 0.60, 100 | 640 - 1600 | 2 - 10 | 2 - 12 | NZMH4-4-VX1600/VAR | 191362 |

Compact circuit breakers, switch disconnectors

1.6

Circuit breakers IEC, electronic releases, 4 pole NZM...-4-VX

Fixed mounting with box terminals

Part no. Article no.

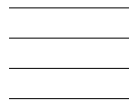
Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

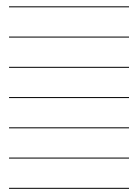
For further terminal types
see accessories

Terminals as accessory



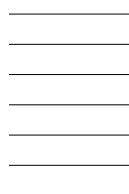
| | | |
|-----------------------|--------|-------|
| NZMH2-4-VX100-SVE | 191684 | 1 Off |
| NZMH2-4-VX160-SVE | 191685 | |
| NZMH2-4-VX160/VAR-SVE | 191686 | |
| NZMH2-4-VX250-SVE | 191687 | |
| NZMH2-4-VX250/VAR-SVE | 191688 | |

Terminals as accessory



| | |
|-----------------------|--------|
| NZMH3-4-VX400-SVE | 191395 |
| NZMH3-4-VX400-AVE | 191377 |
| NZMH3-4-VX400/VAR-SVE | 191397 |
| NZMH3-4-VX400/VAR-AVE | 191381 |
| NZMH3-4-VX630-SVE | 191396 |
| NZMH3-4-VX630-AVE | 191378 |
| NZMH3-4-VX630/VAR-SVE | 191398 |
| NZMH3-4-VX630/VAR-AVE | 191382 |

-






| | |
|---------------------------------|--------|
| NZMH4-4-VX800-AVE | 193337 |
| Withdrawable units as accessory | |
| NZMH4-4-VX1000-AVE | 193338 |
| Withdrawable units as accessory | |
| NZMH4-4-VX1250-AVE | 193339 |
| Withdrawable units as accessory | |
| NZMH4-4-VX1600-AVE | 193340 |
| Withdrawable units as accessory | |

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX...-T

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor I_n x % of phase conductor % | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|--|---|---|---|--------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_s = I_n \times \dots$ | $I_G = I_n \times \dots$ | | |
| | | |  |  |  | | | |

System and cable protection, selectivity, generator and earth fault protection

• IEC/EN 60947-2

Normal switching capacity

wa_ren_00218_r Symbolphoto



| | | | | | | | | |
|----|-----|-----|-----------|--------|--------|----------|-----------------|--------|
| 50 | 40 | 100 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMN2-4-VX40-T | 193299 |
| | 63 | 100 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMN2-4-VX63-T | 193300 |
| | 100 | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMN2-4-VX100-T | 193301 |
| | 160 | 100 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMN2-4-VX160-T | 193302 |
| | 250 | 100 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMN2-4-VX250-T | 193303 |

wa_ren_01218_r Symbolphoto



| | | | | | | | |
|-----|-----|-----------|---------|--------|-----------|-----------------|--------|
| 400 | 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMN3-4-VX400-T | 191480 |
| 630 | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMN3-4-VX630-T | 191481 |

wa_ren_01718_r Symbolphoto



| | | | | | | | |
|------|-----|------------|--------|--------|------------|------------------|--------|
| 800 | 100 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMN4-4-VX800-T | 193320 |
| 1000 | 100 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMN4-4-VX1000-T | 193321 |
| 1250 | 100 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMN4-4-VX1250-T | 193322 |
| 1600 | 100 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMN4-4-VX1600-T | 193323 |

Strong switching capacity

wa_ren_01218_r Symbolphoto



| | | | | | | | | |
|-----|-----|-----------|-----------|---------|-----------|-----------------|---------------------|--------|
| 70 | 400 | 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMS3-4-VX400-T | 191525 |
| | | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMS3-4-VX400/VAR-T | 191526 |
| 630 | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMS3-4-VX630-T | 191527 | |
| | | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMS3-4-VX630/VAR-T | 191528 |

Compact circuit breakers, switch disconnectors

1.6

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX...-T

Fixed mounting with box terminals

Part no. _____ Article no. _____

Plug-in/withdrawable units

Part no. _____ Article no. _____ Std. pack _____

Order base separately

For further terminal types
see accessories

| | | | | |
|------------------------|-------|---|-------|-------|
| Terminals as accessory | _____ | - | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |
| | _____ | | _____ | |

| | | | | | |
|------------------------|-------|--|---------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMN3-4-VX400-T-AVE | 191618 | 1 Off |
| | _____ | | NZMN3-4-VX630-T-AVE | 191479 | |




| | | | | |
|---|-------|---------------------------------|-------|-------|
| - | _____ | Withdrawable units as accessory | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |

| | | | | | |
|------------------------|-------|---|-------------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMS3-4-VX400-T-AVE | 191537 | 1 Off |
| | _____ | | NZMS3-4-VX400/VAR-T-AVE | 191538 | |
| | _____ | | NZMS3-4-VX630-T-AVE | 191539 | |
| | _____ | | NZMS3-4-VX630/VAR-T-AVE | 191540 | |

1.6

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX...-T

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_n \times \%$ of phase conductor % | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|--|---|---|---|--------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| | | | | | | | | |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_s = I_n \times \dots$ | $I_G = I_n \times \dots$ | | |
| | | |  |  |  | | | |

System and cable protection, selectivity, generator and earth fault protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00218_r Symbolphoto



| | | | | | | | | |
|-----|-----|-----|-----------|--------|--------|----------|-----------------|--------|
| 150 | 40 | 100 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMH2-4-VX40-T | 193305 |
| | 63 | 100 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMH2-4-VX63-T | 193306 |
| | 100 | 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMH2-4-VX100-T | 193307 |
| | 160 | 100 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMH2-4-VX160-T | 193308 |
| | 250 | 100 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMH2-4-VX250-T | 193309 |

wa_ren_01218_r Symbolphoto



| | | | | | | | |
|-----|-----|-----------|---------|--------|-----------|-----------------|--------|
| 400 | 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMH3-4-VX400-T | 191385 |
| 630 | 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMH3-4-VX630-T | 191386 |

wa_ren_01718_r Symbolphoto



| | | | | | | | | |
|----|------|-----|------------|--------|--------|------------|------------------|--------|
| 85 | 800 | 100 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMH4-4-VX800-T | 193324 |
| | 1000 | 100 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMH4-4-VX1000-T | 193325 |
| | 1250 | 100 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMH4-4-VX1250-T | 193326 |
| | 1600 | 100 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMH4-4-VX1600-T | 193327 |

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases, 4 pole
 NZM...-4-VX...-T

1.6

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

Order base separately

For further terminal types
 see accessories

| | | | | |
|------------------------|-------|---|-------|-------|
| Terminals as accessory | _____ | - | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |

| | | | | | |
|------------------------|-------|--|---------------------|--------|-------|
| Terminals as accessory | _____ |  | NZMH3-4-VX400-T-AVE | 191383 | 1 Off |
| | | | NZMH3-4-VX630-T-AVE | 191384 | |

| | | | | |
|---|-------|---------------------------------|-------|-------|
| - | _____ | Withdrawable units as accessory | _____ | 1 Off |
| | _____ | | _____ | |
| | _____ | | _____ | |

1.7

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 4 pole
NZM...PX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_N \times \%$ of phase conductor % | Setting range | | | Fixed mounting with screw terminals | |
|--|--|---|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_p \times \dots$ A | $I_{sd} = I_p \times \dots$ | $I_s = I_p \times \dots$ | | |
| | | | | | | | |

System and cable protection

- IEC/EN 60947-2

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|-----------|--------|--------|-------------------|--------|
| 50 | 40 | 0.60, 100 | 20 - 40 | 2 - 10 | 2 - 18 | NZMN2-4-PX40/VAR | 192204 |
| | 63 | 0.60, 100 | 25 - 63 | 2 - 10 | 2 - 18 | NZMN2-4-PX63/VAR | 192205 |
| | 100 | 0.60, 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMN2-4-PX100/VAR | 192206 |
| | 160 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMN2-4-PX160/VAR | 192207 |
| | 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMN2-4-PX250/VAR | 192208 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|--------|-------------------|--------|
| 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | NZMN3-4-PX250/VAR | 192277 |
| | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | - | |
| 400 | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMN3-4-PX400/VAR | 192278 |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| 630 | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMN3-4-PX630/VAR | 192279 |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |

wa_ren_01818_r Symbolphoto



| | | | | | | |
|------|-----------|------------|--------|--------|--------------------|--------|
| 630 | 0.60, 100 | 252 - 630 | 2 - 10 | 2 - 12 | NZMN4-4-PX630/VAR | 189641 |
| 800 | 0.60, 100 | 320 - 800 | 2 - 10 | 2 - 18 | NZMN4-4-PX800/VAR | 189642 |
| 1000 | 0.60, 100 | 500 - 1000 | 2 - 10 | 2 - 12 | NZMN4-4-PX1000/VAR | 189643 |
| 1250 | 0.60, 100 | 630 - 1250 | 2 - 10 | 2 - 12 | NZMN4-4-PX1250/VAR | 189644 |
| 1600 | 0.60, 100 | 800 - 1600 | 2 - 10 | 2 - 12 | NZMN4-4-PX1600/VAR | 189645 |

Strong switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | |
|----|-----|-----------|-----------|--------|--------|-------------------|--------|
| 70 | 40 | 0.60, 100 | 20 - 40 | 2 - 10 | 2 - 18 | NZMS2-4-PX40/VAR | 192211 |
| | 63 | 0.60, 100 | 25 - 63 | 2 - 10 | 2 - 18 | NZMS2-4-PX63/VAR | 192212 |
| | 100 | 0.60, 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMS2-4-PX100/VAR | 192213 |
| | 160 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMS2-4-PX160/VAR | 192214 |
| | 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMS2-4-PX250/VAR | 192215 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|--------|-------------------|--------|
| 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | NZMS3-4-PX250/VAR | 192280 |
| | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | - | |
| 400 | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMS3-4-PX400/VAR | 192281 |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| 630 | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMS3-4-PX630/VAR | 192282 |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PX

1.7

Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units

Part no.

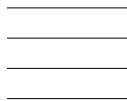
Article no.

Std. pack

Order base separately

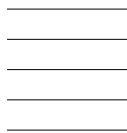
For further terminal types
see accessories

Terminals as accessory



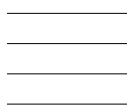
| | | |
|-----------------------|--------|-------|
| NZMN2-4-PX40/VAR-SVE | 192062 | 1 Off |
| NZMN2-4-PX63/VAR-SVE | 192063 | |
| NZMN2-4-PX100/VAR-SVE | 192064 | |
| NZMN2-4-PX160/VAR-SVE | 192065 | |
| NZMN2-4-PX250/VAR-SVE | 192066 | |

Terminals as accessory



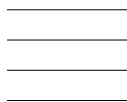
| | |
|-----------------------|--------|
| NZMN3-4-PX250/VAR-SVE | 192295 |
| NZMN3-4-PX250/VAR-AVE | 192304 |
| NZMN3-4-PX400/VAR-SVE | 192296 |
| NZMN3-4-PX400/VAR-AVE | 192305 |
| NZMN3-4-PX630/VAR-SVE | 192297 |
| NZMN3-4-PX630/VAR-AVE | 192306 |

-



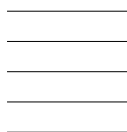
| | |
|------------------------|--------|
| NZMN4-4-PX630/VAR-AVE | 189661 |
| NZMN4-4-PX800/VAR-AVE | 189662 |
| NZMN4-4-PX1000/VAR-AVE | 189663 |
| NZMN4-4-PX1250/VAR-AVE | 189664 |
| NZMN4-4-PX1600/VAR-AVE | 189665 |

Terminals as accessory



| | | |
|-----------------------|--------|-------|
| NZMS2-4-PX40/VAR-SVE | 192069 | 1 Off |
| NZMS2-4-PX63/VAR-SVE | 192070 | |
| NZMS2-4-PX100/VAR-SVE | 192071 | |
| NZMS2-4-PX160/VAR-SVE | 192072 | |
| NZMS2-4-PX250/VAR-SVE | 192073 | |

Terminals as accessory



| | |
|-----------------------|--------|
| NZMS3-4-PX250/VAR-SVE | 192298 |
| NZMS3-4-PX250/VAR-AVE | 192307 |
| NZMS3-4-PX400/VAR-SVE | 192299 |
| NZMS3-4-PX400/VAR-AVE | 192308 |
| NZMS3-4-PX630/VAR-SVE | 192300 |
| NZMS3-4-PX630/VAR-AVE | 192309 |

1.7

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_N \times \%$ of phase conductor | Setting range | | | Fixed mounting with screw terminals | |
|--|--|--|-------------------------------|--------------------------------|------------------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Part no. | Article no. |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_n \times \dots$ | $I_i = I_n \times \dots$ | | |
| | | | | | | | |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

High switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | |
|-----|-----|-----------|-----------|--------|--------|-------------------|--------|
| 150 | 40 | 0.60, 100 | 20 - 40 | 2 - 10 | 2 - 18 | NZMH2-4-PX40/VAR | 192218 |
| | 63 | 0.60, 100 | 25 - 63 | 2 - 10 | 2 - 18 | NZMH2-4-PX63/VAR | 192219 |
| | 100 | 0.60, 100 | 40 - 100 | 2 - 10 | 2 - 18 | NZMH2-4-PX100/VAR | 192220 |
| | 160 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | NZMH2-4-PX160/VAR | 192221 |
| | 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | NZMH2-4-PX250/VAR | 192222 |

wa_ren_00818_r Symbolphoto



| | | | | | | |
|-----|-----------|-----------|---------|--------|-------------------|--------|
| 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | NZMH3-4-PX250/VAR | 192283 |
| | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | - | |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | NZMH3-4-PX400/VAR | 192284 |
| | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | - | |
| 630 | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | NZMH3-4-PX630/VAR | 192285 |
| | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | - | |

wa_ren_01818_r Symbolphoto



| | | | | | | | |
|----|------|-----------|------------|--------|--------|--------------------|--------|
| 85 | 630 | 0.60, 100 | 252 - 630 | 2 - 10 | 2 - 18 | NZMH4-4-PX630/VAR | 189646 |
| | 800 | 0.60, 100 | 320 - 800 | 2 - 10 | 2 - 18 | NZMH4-4-PX800/VAR | 189647 |
| | 1000 | 0.60, 100 | 500 - 1000 | 2 - 10 | 2 - 18 | NZMH4-4-PX1000/VAR | 189648 |
| | 1250 | 0.60, 100 | 630 - 1250 | 2 - 10 | 2 - 15 | NZMH4-4-PX1250/VAR | 189649 |
| | 1600 | 0.60, 100 | 800 - 1600 | 2 - 10 | 2 - 12 | NZMH4-4-PX1600/VAR | 189650 |
| | | | | | | | |

Compact circuit breakers, switch disconnectors

1.7

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
NZM...PX

Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units

Part no.

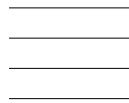
Article no.

Std. pack

Order base separately

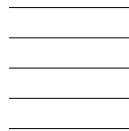
For further terminal types
see accessories

Terminals as accessory



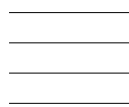
| | | |
|-----------------------|--------|-------|
| NZMH2-4-PX40/VAR-SVE | 192076 | 1 Off |
| NZMH2-4-PX63/VAR-SVE | 192077 | |
| NZMH2-4-PX100/VAR-SVE | 192078 | |
| NZMH2-4-PX160/VAR-SVE | 192079 | |
| NZMH2-4-PX250/VAR-SVE | 192080 | |

Terminals as accessory



| | |
|-----------------------|--------|
| NZMH3-4-PX250/VAR-SVE | 192301 |
| NZMH3-4-PX250/VAR-AVE | 192310 |
| NZMH3-4-PX400/VAR-SVE | 192302 |
| NZMH3-4-PX400/VAR-AVE | 192311 |
| NZMH3-4-PX630/VAR-SVE | 192303 |
| NZMH3-4-PX630/VAR-AVE | 192312 |

-



| | |
|------------------------|--------|
| NZMH4-4-PX630/VAR-AVE | 189666 |
| NZMH4-4-PX800/VAR-AVE | 189667 |
| NZMH4-4-PX1000/VAR-AVE | 189668 |
| NZMH4-4-PX1250/VAR-AVE | 189669 |
| NZMH4-4-PX1600/VAR-AVE | 189670 |

1.7

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX...-TZ, ...-TAZ

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor I_n x % of phase conductor % | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|--|-------------------------------|--------------------------------|------------------------------------|--------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| | | | | | | | | |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_s = I_n \times \dots$ | $I_G = I_n \times \dots$ | | |



System and cable protection, selectivity, generator and earth fault protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2
- NZM3, NZM4: with maintenance mode ARMs and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | | |
|----|-----|-----------|-----------|--------|--------|----------|----------------------|--------|
| 50 | 40 | 0.60, 100 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMN2-4-PX40/VAR-TZ | 192225 |
| | 63 | 0.60, 100 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMN2-4-PX63/VAR-TZ | 192226 |
| | 100 | 0.60, 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMN2-4-PX100/VAR-TZ | 192227 |
| | 160 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMN2-4-PX160/VAR-TZ | 192228 |
| | 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMN2-4-PX250/VAR-TZ | 192229 |

wa_ren_00818_r Symbolphoto



| | | | | | | | |
|-----|-----------|-----------|---------|--------|-----------|-----------------------|--------|
| 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMN3-4-PX250/VAR-TAZ | 192286 |
| 400 | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMN3-4-PX400/VAR-TAZ | 192287 |
| 630 | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMN3-4-PX630/VAR-TAZ | 192288 |

wa_ren_01818_r Symbolphoto



| | | | | | | | |
|------|-----------|------------|--------|--------|------------|------------------------|--------|
| 630 | 0.60, 100 | 252 - 630 | 2 - 10 | 2 - 18 | 126 - 630 | NZMN4-4-PX630/VAR-TAZ | 189651 |
| 800 | 0.60, 100 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMN4-4-PX800/VAR-TAZ | 189652 |
| 1000 | 0.60, 100 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMN4-4-PX1000/VAR-TAZ | 189653 |
| 1250 | 0.60, 100 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMN4-4-PX1250/VAR-TAZ | 189654 |
| 1600 | 0.60, 100 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMN4-4-PX1600/VAR-TAZ | 189655 |

Strong switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | | |
|----|-----|-----------|-----------|--------|--------|----------|----------------------|--------|
| 70 | 40 | 0.60, 100 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMS2-4-PX40/VAR-TZ | 192232 |
| | 63 | 0.60, 100 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMS2-4-PX63/VAR-TZ | 192233 |
| | 100 | 0.60, 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMS2-4-PX100/VAR-TZ | 192234 |
| | 160 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMS2-4-PX160/VAR-TZ | 192235 |
| | 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMS2-4-PX250/VAR-TZ | 192236 |

wa_ren_00818_r Symbolphoto



| | | | | | | | |
|-----|-----------|-----------|---------|--------|-----------|-----------------------|--------|
| 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMS3-4-PX250/VAR-TAZ | 192289 |
| 400 | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMS3-4-PX400/VAR-TAZ | 192290 |
| 630 | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMS3-4-PX630/VAR-TAZ | 192291 |

Compact circuit breakers, switch disconnectors

1.7

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
 NZM...PX...-TZ, ...-TAZ

Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units

Part no.

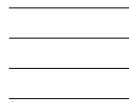
Article no.

Std. pack

Order base separately

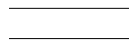
For further terminal types
 see accessories

Terminals as accessory



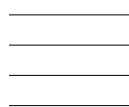
| | | |
|--------------------------|--------|-------|
| NZMN2-4-PX40/VAR-TZ-SVE | 192083 | 1 Off |
| NZMN2-4-PX63/VAR-TZ-SVE | 192084 | |
| NZMN2-4-PX100/VAR-TZ-SVE | 192085 | |
| NZMN2-4-PX160/VAR-TZ-SVE | 192086 | |
| NZMN2-4-PX250/VAR-TZ-SVE | 192087 | |

Terminals as accessory



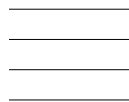
| | |
|---------------------------|--------|
| NZMN3-4-PX250/VAR-TAZ-AVE | 192313 |
| NZMN3-4-PX400/VAR-TAZ-AVE | 192314 |
| NZMN3-4-PX630/VAR-TAZ-AVE | 192315 |

-



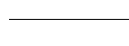
| | |
|----------------------------|--------|
| NZMN4-4-PX630/VAR-TAZ-AVE | 189671 |
| NZMN4-4-PX800/VAR-TAZ-AVE | 189672 |
| NZMN4-4-PX1000/VAR-TAZ-AVE | 189673 |
| NZMN4-4-PX1250/VAR-TAZ-AVE | 189674 |
| NZMN4-4-PX1600/VAR-TAZ-AVE | 189675 |

Terminals as accessory



| | | |
|--------------------------|--------|-------|
| NZMS2-4-PX40/VAR-TZ-SVE | 192090 | 1 Off |
| NZMS2-4-PX63/VAR-TZ-SVE | 192091 | |
| NZMS2-4-PX100/VAR-TZ-SVE | 192092 | |
| NZMS2-4-PX160/VAR-TZ-SVE | 192093 | |
| NZMS2-4-PX250/VAR-TZ-SVE | 192094 | |

Terminals as accessory



| | |
|---------------------------|--------|
| NZMS3-4-PX250/VAR-TAZ-AVE | 192316 |
| NZMS3-4-PX400/VAR-TAZ-AVE | 192317 |
| NZMS3-4-PX630/VAR-TAZ-AVE | 192318 |

1.7

Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
 NZM...PX...-TZ, ...-TAZ

| Switching capacity 400/415V 50/60 Hz | Rated current = Rated uninterrupted current | Neutral conductor $I_n \times \%$ of phase conductor % | Setting range | | | | Fixed mounting with screw terminals | |
|--|--|---|-------------------------------|--------------------------------|------------------------------------|--------------------------|-------------------------------------|-------------|
| | | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | Earth-fault release | Part no. | Article no. |
| | | | | | | | | |
| I_{cu} kA | $I_n = I_u$ A | | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_s = I_n \times \dots$ | $I_G = I_n \times \dots$ | | |



System and cable protection, selectivity, generator and earth fault protection

- Energy metering class I up to IEC61557-12
- IEC/EN 60947-2
- NZM3, NZM4: with maintenance mode ARMs and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | | |
|-----|-----|-----------|-----------|--------|--------|----------|----------------------|--------|
| 150 | 40 | 0.60, 100 | 20 - 40 | 2 - 10 | 2 - 18 | 20 - 40 | NZMH2-4-PX40/VAR-TZ | 192055 |
| | 63 | 0.60, 100 | 25 - 63 | 2 - 10 | 2 - 18 | 20 - 63 | NZMH2-4-PX63/VAR-TZ | 192056 |
| | 100 | 0.60, 100 | 40 - 100 | 2 - 10 | 2 - 18 | 20 - 100 | NZMH2-4-PX100/VAR-TZ | 192057 |
| | 160 | 0.60, 100 | 64 - 160 | 2 - 10 | 2 - 18 | 32 - 160 | NZMH2-4-PX160/VAR-TZ | 192058 |
| | 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 12 | 50 - 250 | NZMH2-4-PX250/VAR-TZ | 192059 |

wa_ren_00818_r Symbolphoto



| | | | | | | | |
|-----|-----------|-----------|---------|--------|-----------|-----------------------|--------|
| 250 | 0.60, 100 | 100 - 250 | 2 - 10 | 2 - 18 | 50 - 250 | NZMH3-4-PX250/VAR-TAZ | 192292 |
| 400 | 0.60, 100 | 160 - 400 | 2 - 10 | 2 - 12 | 80 - 400 | NZMH3-4-PX400/VAR-TAZ | 192293 |
| 630 | 0.60, 100 | 252 - 630 | 1.5 - 7 | 2 - 8 | 126 - 630 | NZMH3-4-PX630/VAR-TAZ | 192294 |

wa_ren_01818_r Symbolphoto



| | | | | | | | | |
|----|------|-----------|------------|--------|--------|------------|------------------------|--------|
| 85 | 630 | 0.60, 100 | 252 - 630 | 2 - 10 | 2 - 18 | 126 - 630 | NZMH4-4-PX630/VAR-TAZ | 189656 |
| | 800 | 0.60, 100 | 320 - 800 | 2 - 10 | 2 - 18 | 160 - 800 | NZMH4-4-PX800/VAR-TAZ | 189657 |
| | 1000 | 0.60, 100 | 400 - 1000 | 2 - 10 | 2 - 18 | 200 - 1000 | NZMH4-4-PX1000/VAR-TAZ | 189658 |
| | 1250 | 0.60, 100 | 500 - 1250 | 2 - 10 | 2 - 15 | 250 - 1250 | NZMH4-4-PX1250/VAR-TAZ | 189659 |
| | 1600 | 0.60, 100 | 640 - 1600 | 2 - 10 | 2 - 12 | 320 - 1600 | NZMH4-4-PX1600/VAR-TAZ | 189660 |

Compact circuit breakers, switch disconnectors

1.7

Circuit breakers IEC, electronic releases with energy meter function, 3 pole

NZM...PX...-TZ, ...-TAZ

Fixed mounting with box terminals
Part no.

Article no.

Plug-in/withdrawable units
Part no.

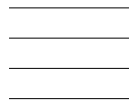
Article no.

Std. pack

Order base separately

For further terminal types
see accessories

Terminals as accessory

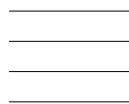


| | | |
|--------------------------|--------|-------|
| NZMH2-4-PX40/VAR-TZ-SVE | 192097 | 1 Off |
| NZMH2-4-PX63/VAR-TZ-SVE | 192098 | |
| NZMH2-4-PX100/VAR-TZ-SVE | 192099 | |
| NZMH2-4-PX160/VAR-TZ-SVE | 192100 | |
| NZMH2-4-PX250/VAR-TZ-SVE | 192101 | |

Terminals as accessory



| | |
|---------------------------|--------|
| NZMH3-4-PX250/VAR-TAZ-AVE | 192319 |
| NZMH3-4-PX400/VAR-TAZ-AVE | 192320 |
| NZMH3-4-PX630/VAR-TAZ-AVE | 192321 |





| | |
|----------------------------|--------|
| NZMH4-4-PX630/VAR-TAZ-AVE | 189676 |
| NZMH4-4-PX800/VAR-TAZ-AVE | 189677 |
| NZMH4-4-PX1000/VAR-TAZ-AVE | 189678 |
| NZMH4-4-PX1250/VAR-TAZ-AVE | 189679 |
| NZMH4-4-PX1600/VAR-TAZ-AVE | 189680 |

1.8

Compact circuit breakers, switch disconnectors

Compact circuit breakers IEC, thermomagnetic releases, 1 pole
NZM...AF

| Switching capacity 230V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting with box terminals | | |
|--|--|---|---|-----------------------------------|-------------|-----------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. | Std. pack |
| I_{cu} kA | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | I_i | | | |
| | |  |  | | | |

System and cable protection

- IEC/EN 60947-2

Economy switching capacity

1230PIC-471 Symbolphoto



| 18 | | | | | | |
|----|-----|-------------|--------------|---------------|--------|-------|
| | 16 | 16 A fixed | 320 A fixed | NZME1-1-AF16 | 152561 | 1 Off |
| | 20 | 20 A fixed | 320 A fixed | NZME1-1-AF20 | 152540 | |
| | 25 | 25 A fixed | 320 A fixed | NZME1-1-AF25 | 152541 | |
| | 32 | 32 A fixed | 340 A fixed | NZME1-1-AF32 | 152542 | |
| | 40 | 40 A fixed | 340 A fixed | NZME1-1-AF40 | 152543 | |
| | 50 | 50 A fixed | 600 A fixed | NZME1-1-AF50 | 152544 | |
| | 63 | 63 A fixed | 600 A fixed | NZME1-1-AF63 | 152545 | |
| | 80 | 80 A fixed | 1000 A fixed | NZME1-1-AF80 | 152546 | |
| | 100 | 100 A fixed | 1000 A fixed | NZME1-1-AF100 | 152547 | |
| | 125 | 125 A fixed | 1000 A fixed | NZME1-1-AF125 | 152548 | |

Basic switching capacity

1230PIC-471 Symbolphoto



| 25 | | | | | | |
|----|-----|-------------|--------------|---------------|--------|-------|
| | 16 | 16 A fixed | 320 A fixed | NZMB1-1-AF16 | 152560 | 1 Off |
| | 20 | 20 A fixed | 320 A fixed | NZMB1-1-AF20 | 152531 | |
| | 25 | 25 A fixed | 320 A fixed | NZMB1-1-AF25 | 152532 | |
| | 32 | 32 A fixed | 340 A fixed | NZMB1-1-AF32 | 152533 | |
| | 40 | 40 A fixed | 340 A fixed | NZMB1-1-AF40 | 152534 | |
| | 50 | 50 A fixed | 600 A fixed | NZMB1-1-AF50 | 152535 | |
| | 63 | 63 A fixed | 600 A fixed | NZMB1-1-AF63 | 152536 | |
| | 80 | 80 A fixed | 1000 A fixed | NZMB1-1-AF80 | 152537 | |
| | 100 | 100 A fixed | 1000 A fixed | NZMB1-1-AF100 | 152538 | |
| | 125 | 125 A fixed | 1000 A fixed | NZMB1-1-AF125 | 152539 | |

| Rated current = Rated uninterrupt- ed current | Short-circuit protection max. fuse gL- characteristic | Fixed mounting with screw terminals | | Fixed mounting with box terminals | | Std. pack |
|---|--|-------------------------------------|-------------|-----------------------------------|-------------|-----------|
| | | Part no. | Article no. | Part no. | Article no. | |
| $I_n = I_u$ A | A gL | | | | | |

Switch disconnectors

- IEC/EN 60947-2

For further terminal types
see accessories

2 switch positions I, 0

1230PIC-752 Symbolphoto



| | | | | | | |
|-----|-----|---|--|---------|--------|-------|
| 63 | 125 | - | | PN1-63 | 259140 | 1 Off |
| 100 | 125 | | | PN1-100 | 259141 | |
| 125 | 125 | | | PN1-125 | 259142 | |
| 160 | 160 | | | PN1-160 | 281235 | |

1230PIC-796 Symbolphoto



| | | | | | | |
|-----|-----|---------|--------|------------|--------|--|
| 160 | 250 | PN2-160 | 266005 | PN2-160-BT | 110308 | |
| 200 | 250 | PN2-200 | 266006 | PN2-200-BT | 110309 | |
| 250 | 250 | PN2-250 | 266007 | PN2-250-BT | 110310 | |

1230PIC-671 Symbolphoto



| | | | | | | |
|-----|-----|---------|--------|------------|--------|--|
| 400 | 630 | PN3-400 | 266017 | PN3-400-BT | 110314 | |
| 630 | 630 | PN3-630 | 266018 | PN3-630-BT | 110315 | |

1.9

Compact circuit breakers, switch disconnectors

Switch disconnectors IEC, 3 pole
PN..., N...

| | | | |
|--|---|--|-------------|
| Rated current = Rated uninterrupted current | Short-circuit protection max. fuse gL-characteristic | Fixed mounting with screw terminals Part no. | Article no. |
| $I_n = I_u$ A | A gL | | |

Switch disconnectors

- IEC/EN 60947-2

3 switch positions I, +, 0

Can be remotely operated with shunt release XU/XA, remote operator XR
Can be equipped with trip-indicating auxiliary contact M22-K...

1230PIC-752 Symbolphoto



| | | | |
|-----|-----|-----------------|--|
| 63 | 125 | Screw terminals | |
| 100 | 125 | as accessories | |
| 125 | 125 | | |
| 160 | 160 | | |

1230PIC-796 Symbolphoto



| | | | |
|-----|-----|--------|--------|
| 160 | 250 | N2-160 | 266008 |
| 200 | 250 | N2-200 | 266009 |
| 250 | 250 | N2-250 | 266010 |

1230PIC-671 Symbolphoto



| | | | |
|-----|-----|--------|--------|
| 400 | 630 | N3-400 | 266019 |
| 630 | 630 | N3-630 | 266020 |

1230PIC-674 Symbolphoto



| | | | |
|------|------|---------|--------|
| 800 | 1600 | N4-800 | 266025 |
| 1000 | 1600 | N4-1000 | 266026 |
| 1250 | 1600 | N4-1250 | 266027 |
| 1600 | 1600 | N4-1600 | 266028 |

Compact circuit breakers, switch disconnectors

1.9

Switch disconnectors IEC, 3 pole
PN..., N...

Fixed mounting with box terminals

Part no. Article no.

Plug-in/withdrawable units

Part no. Article no. Std. pack

For further terminal types
see accessories

| | |
|--------|--------|
| N1-63 | 259143 |
| N1-100 | 259144 |
| N1-125 | 259145 |
| N1-160 | 281236 |



| | | |
|------------|--------|-------|
| N1-63-SVE | 113729 | 1 Off |
| N1-100-SVE | 113730 | |
| N1-125-SVE | 113731 | |
| - | | |

| | |
|-----------|--------|
| N2-160-BT | 110311 |
| N2-200-BT | 110312 |
| N2-250-BT | 110313 |



| | |
|------------|--------|
| N2-160-SVE | 113733 |
| N2-200-SVE | 113734 |
| N2-250-SVE | 113735 |

| | |
|-----------|--------|
| N3-400-BT | 110316 |
| - | |
| N3-630-BT | 110317 |
| - | |

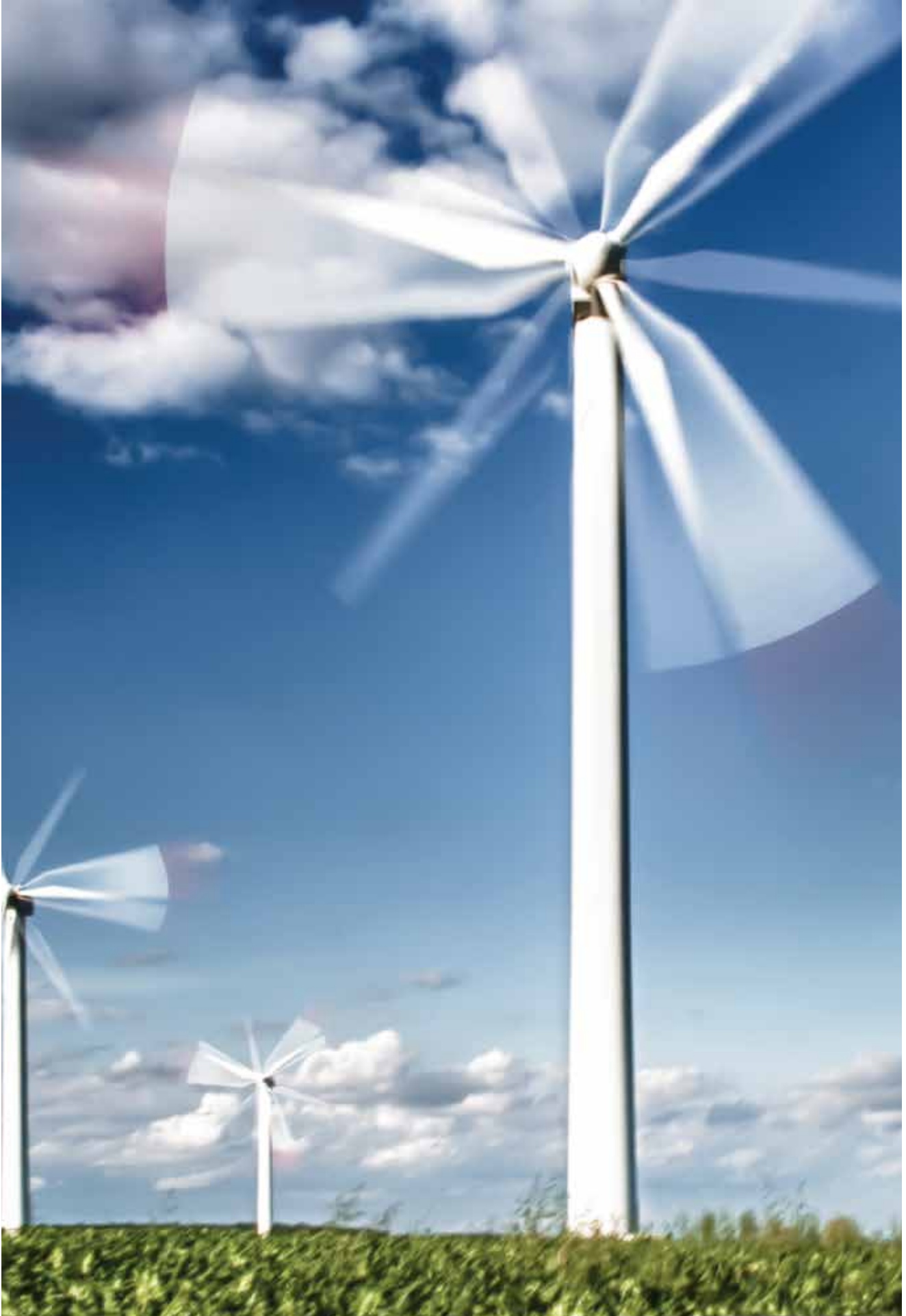


| | |
|------------|--------|
| N3-400-SVE | 168544 |
| N3-400-AVE | 110768 |
| N3-630-SVE | 168545 |
| N3-630-AVE | 110769 |

Withdrawable units as accessory

1.10

Compact circuit breakers, switch disconnectors



| Rated current = Rated uninter- rupted current | Short-circuit protection max. fuse gL- characteristic | Fixed mounting with screw terminals | | Fixed mounting with box terminals | | Std. pack |
|---|--|-------------------------------------|-------------|-----------------------------------|-------------|-----------|
| | | Part no. | Article no. | Part no. | Article no. | |
| $I_n = I_u$ A | A gL | | | | | |

Switch disconnectors

- IEC/EN 60947-2

For further terminal types
see accessories

2 switch positions I, 0

1230PIC-751 Symbolphoto



| | | | | | | |
|-----|-----|---|--|-----------|--------|-------|
| 63 | 125 | - | | PN1-4-63 | 265999 | 1 Off |
| 100 | 125 | | | PN1-4-100 | 266000 | |
| 125 | 125 | | | PN1-4-125 | 266001 | |
| 160 | 160 | | | PN1-4-160 | 281253 | |

1230PIC-797 Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|--------------|--------|
| 160 | 250 | PN2-4-160 | 266011 | PN2-4-160-BT | 118880 |
| 200 | 250 | PN2-4-200 | 266012 | PN2-4-200-BT | 118881 |
| 250 | 250 | PN2-4-250 | 266013 | PN2-4-250-BT | 118882 |

1230PIC-672 Symbolphoto



| | | | | | |
|-----|-----|-----------|--------|--------------|--------|
| 400 | 630 | PN3-4-400 | 266021 | PN3-4-400-BT | 111653 |
| 630 | 630 | PN3-4-630 | 266022 | PN3-4-630-BT | 111654 |

1.10

Compact circuit breakers, switch disconnectors

Switch disconnectors IEC, 4 pole
PN...-4, N...-4

| | | | |
|--|---|--|-------------|
| Rated current = Rated uninterrupted current | Short-circuit protection max. fuse gL-characteristic | Fixed mounting with screw terminals Part no. | Article no. |
| $I_n = I_u$ A | A gL | | |

Switch disconnectors

- IEC/EN 60947-2

3 switch positions I, +, 0

Can be remotely operated with shunt release XU/XA, remote operator XR
Can be equipped with trip-indicating auxiliary contact M22-K...

1230PIC-751 Symbolphoto



| | | | |
|-----|-----|----------|--------|
| 63 | 125 | N1-4-63 | 266002 |
| 100 | 125 | N1-4-100 | 266003 |
| 125 | 125 | N1-4-125 | 266004 |
| 160 | 160 | N1-4-160 | 281254 |

1230PIC-757 Symbolphoto



| | | | |
|-----|-----|----------|--------|
| 160 | 250 | N2-4-160 | 266014 |
| 200 | 250 | N2-4-200 | 266015 |
| 250 | 250 | N2-4-250 | 266016 |

1230PIC-672 Symbolphoto



| | | | |
|-----|-----|----------|--------|
| 400 | 630 | N3-4-400 | 266023 |
| | 630 | - | |
| 630 | 630 | N3-4-630 | 266024 |
| | 630 | - | |

1230PIC-673 Symbolphoto



| | | | |
|------|------|-----------|--------|
| 800 | 1600 | N4-4-800 | 266029 |
| 1000 | 1600 | N4-4-1000 | 266030 |
| 1250 | 1600 | N4-4-1250 | 266031 |
| 1600 | 1600 | N4-4-1600 | 266032 |

Compact circuit breakers, switch disconnectors

1.10

Switch disconnectors IEC, 4 pole
PN...-4, N...-4

Fixed mounting with box terminals

Part no. _____ Article no. _____

Plug-in/withdrawable units

Part no. _____ Article no. _____ Std. pack _____

For further terminal types
see accessories

| | | | |
|---------------------------------|-------|---------------------------------|-------------|
| Withdrawable units as accessory | _____ | Withdrawable units as accessory | _____ 1 Off |
| | _____ | | _____ |
| | _____ | | _____ |

| | | | | |
|-------------|--------|--|--------------|--------|
| N2-4-160-BT | 118883 |  | N2-4-160-SVE | 113736 |
| N2-4-200-BT | 118884 | | N2-4-200-SVE | 113737 |
| N2-4-250-BT | 118885 | | N2-4-250-SVE | 113738 |

| | | | | |
|-------------|--------|---|--------------|--------|
| N3-4-400-BT | 111651 |  | N3-4-400-SVE | 168470 |
| - | | | N3-4-400-AVE | 110872 |
| N3-4-630-BT | 111652 | | N3-4-630-SVE | 168471 |
| - | | | N3-4-630-AVE | 110873 |

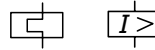
| | | | |
|---|-------|---------------------------------|-------|
| - | _____ | Withdrawable units as accessory | _____ |
| | _____ | | _____ |
| | _____ | | _____ |

2.1

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...A...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|-------------------|---------------------------------------|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_f = I_n \times \dots$ | | |



System and cable protection

Fixed overload releases I_r

Basic switching capacity

1230PIC-785 Symbolphoto



| | | | | | | | | |
|----|---|---|-----|-----------|----------|-------------|-----------------------------------|--|
| 25 | - | - | - | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | | | | 25 | 20 - 25 | 350 A fixed | | |
| | | | | 32 | 25 - 32 | 350 A fixed | | |
| | | | | 40 | 32 - 40 | 8 - 10 | | |
| | | | | 50 | 40 - 50 | 6 - 10 | | |
| | | | | 63 | 50 - 63 | 6 - 10 | | |
| | | | | 80 | 63 - 80 | 6 - 10 | | |
| | | | | 100 | 80 - 100 | 6 - 10 | | |
| | | | 125 | 100 - 125 | 6 - 10 | | | |

1230PIC-802 Symbolphoto



| | | | | | | | | |
|----|----|----|---|-----|-----------|-------------|---------------|--------|
| 25 | 25 | 18 | - | 20 | 15 - 20 | 350 A fixed | NZMB2-A20-NA | 269206 |
| | | | | 25 | 20 - 25 | 350 A fixed | NZMB2-A25-NA | 269207 |
| | | | | 32 | 25 - 32 | 350 A fixed | NZMB2-A32-NA | 269208 |
| | | | | 40 | 32 - 40 | 8 - 10 | NZMB2-A40-NA | 269209 |
| | | | | 50 | 40 - 50 | 6 - 10 | NZMB2-A50-NA | 269210 |
| | | | | 63 | 50 - 63 | 6 - 10 | NZMB2-A63-NA | 269211 |
| | | | | 80 | 63 - 80 | 6 - 10 | NZMB2-A80-NA | 269212 |
| | | | | 100 | 80 - 100 | 6 - 10 | NZMB2-A100-NA | 269213 |
| | | | | 125 | 100 - 125 | 6 - 10 | NZMB2-A125-NA | 269214 |
| | | | | 160 | 125 - 160 | 6 - 10 | NZMB2-A160-NA | 269215 |
| | | | | 200 | 160 - 200 | 6 - 10 | NZMB2-A200-NA | 269216 |
| | | | | 250 | 200 - 250 | 6 - 10 | NZMB2-A250-NA | 271105 |

Normal switching capacity

1230PIC-785 Symbolphoto



| | | | | | | | | |
|----|---|---|-----|-----------|----------|-------------|-----------------------------------|--|
| 35 | - | - | - | 20 | 15 - 20 | 350 A fixed | Screw terminals as accessories | |
| | | | | 25 | 20 - 25 | 350 A fixed | | |
| | | | | 32 | 25 - 32 | 350 A fixed | | |
| | | | | 40 | 32 - 40 | 8 - 10 | | |
| | | | | 50 | 40 - 50 | 6 - 10 | | |
| | | | | 63 | 50 - 63 | 6 - 10 | | |
| | | | | 80 | 63 - 80 | 6 - 10 | | |
| | | | | 100 | 80 - 100 | 6 - 10 | | |
| | | | 125 | 100 - 125 | 6 - 10 | | | |

1230PIC-802 Symbolphoto



| | | | | | | | | |
|----|----|----|---|-----|-----------|-------------|---------------|--------|
| 35 | 35 | 25 | - | 20 | 15 - 20 | 350 A fixed | NZMN2-A20-NA | 269217 |
| | | | | 25 | 20 - 25 | 350 A fixed | NZMN2-A25-NA | 269218 |
| | | | | 32 | 25 - 32 | 350 A fixed | NZMN2-A32-NA | 269219 |
| | | | | 40 | 32 - 40 | 8 - 10 | NZMN2-A40-NA | 269220 |
| | | | | 50 | 40 - 50 | 6 - 10 | NZMN2-A50-NA | 269221 |
| | | | | 63 | 50 - 63 | 6 - 10 | NZMN2-A63-NA | 269222 |
| | | | | 80 | 63 - 80 | 6 - 10 | NZMN2-A80-NA | 269223 |
| | | | | 100 | 80 - 100 | 6 - 10 | NZMN2-A100-NA | 269224 |
| | | | | 125 | 100 - 125 | 6 - 10 | NZMN2-A125-NA | 269225 |
| | | | | 160 | 125 - 160 | 6 - 10 | NZMN2-A160-NA | 269226 |
| | | | | 200 | 160 - 200 | 6 - 10 | NZMN2-A200-NA | 269227 |
| | | | | 250 | 200 - 250 | 6 - 10 | NZMN2-A250-NA | 271106 |

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...A...NA

2.1

Fixed mounting with box terminals








Part no.

Article no.

Std. pack

Information relevant for export to North America





| | | | | | |
|------------------|--------|-------|---|----------------------------------|---|
| NZMB1-A20-NA | 281559 | 1 Off | | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMB1-A25-NA | 281560 | |   | UL File No. | E31593 |
| NZMB1-A32-NA | 281561 | | | UL Category Control No. | DIVQ |
| NZMB1-A40-NA | 272253 | | | CSA File No. | 022086 |
| NZMB1-A50-NA | 272254 | | | CSA Class No. | 1432-01 |
| NZMB1-A63-NA | 272255 | | | North America Certification | UL listed, CSA certified |
| NZMB1-A80-NA | 272256 | | | Specially designed for NA | Yes |
| NZMB1-A100-NA | 272258 | | | Suitable for | Feeder circuits, branch circuits |
| NZMB1-A125-NA | 281562 | | | Current Limiting Circuit breaker | Yes |
| | | | | Max. Voltage Rating | 480Y/277 V |
| | | | | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| NZMB2-A20-BT-NA | 107773 | 1 Off | | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMB2-A25-BT-NA | 107774 | |   | UL File No. | E31593 |
| NZMB2-A32-BT-NA | 107775 | | | UL Category Control No. | DIVQ |
| NZMB2-A40-BT-NA | 107776 | | | CSA File No. | 022086 |
| NZMB2-A50-BT-NA | 107777 | | | CSA Class No. | 1432-01 |
| NZMB2-A63-BT-NA | 107778 | | | North America Certification | UL listed, CSA certified |
| NZMB2-A80-BT-NA | 107779 | | | Specially designed for NA | Yes |
| NZMB2-A100-BT-NA | 107780 | | | Suitable for | Feeder circuits, branch circuits |
| NZMB2-A125-BT-NA | 107781 | | | Current Limiting Circuit breaker | Yes |
| NZMB2-A160-BT-NA | 107782 | | | Max. Voltage Rating | 600Y/347 V, 480 V |
| NZMB2-A200-BT-NA | 107783 | | | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| NZMB2-A250-BT-NA | 107784 | | | | |
| NZMN1-A20-NA | 281570 | 1 Off | | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMN1-A25-NA | 281571 | |   | UL File No. | E31593 |
| NZMN1-A32-NA | 281572 | | | UL Category Control No. | DIVQ |
| NZMN1-A40-NA | 274237 | | | CSA File No. | 022086 |
| NZMN1-A50-NA | 274239 | | | CSA Class No. | 1432-01 |
| NZMN1-A63-NA | 274240 | | | North America Certification | UL listed, CSA certified |
| NZMN1-A80-NA | 274241 | | | Specially designed for NA | Yes |
| NZMN1-A100-NA | 274242 | | | Suitable for | Feeder circuits, branch circuits |
| NZMN1-A125-NA | 281573 | | | Current Limiting Circuit breaker | Yes |
| | | | | Max. Voltage Rating | 480Y/277 V |
| | | | | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| NZMN2-A20-BT-NA | 107785 | 1 Off | | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMN2-A25-BT-NA | 107786 | |   | UL File No. | E31593 |
| NZMN2-A32-BT-NA | 107787 | | | UL Category Control No. | DIVQ |
| NZMN2-A40-BT-NA | 107788 | | | CSA File No. | 022086 |
| NZMN2-A50-BT-NA | 107789 | | | CSA Class No. | 1432-01 |
| NZMN2-A63-BT-NA | 107790 | | | North America Certification | UL listed, CSA certified |
| NZMN2-A80-BT-NA | 107791 | | | Specially designed for NA | Yes |
| NZMN2-A100-BT-NA | 107792 | | | Suitable for | Feeder circuits, branch circuits |
| NZMN2-A125-BT-NA | 107793 | | | Current Limiting Circuit breaker | Yes |
| NZMN2-A160-BT-NA | 107794 | | | Max. Voltage Rating | 600Y/347 V, 480 V |
| NZMN2-A200-BT-NA | 107795 | | | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| NZMN2-A250-BT-NA | 107796 | | | | |

2.1

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...A...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|---|---|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_n \times \dots$ | | |
| | | | | |  |  | | |

System and cable protection

Fixed overload releases I_r

High switching capacity

1230PIC-802 Symbolphoto



| | | | | | | | | | | | | |
|-----|-----|----|---|-----|-----------|-------------|---------------|--------|-----------|--------|---------------|--------|
| 150 | 150 | 65 | - | 20 | 15 - 20 | 350 A fixed | NZMH2-A20-NA | 269228 | | | | |
| | | | | 25 | 20 - 25 | 350 A fixed | NZMH2-A25-NA | 269229 | | | | |
| | | | | 32 | 25 - 32 | 350 A fixed | NZMH2-A32-NA | 269230 | | | | |
| | | | | 40 | 32 - 40 | 8 - 10 | NZMH2-A40-NA | 269231 | | | | |
| | | | | 50 | 40 - 50 | 6 - 10 | NZMH2-A50-NA | 269232 | | | | |
| | | | | 63 | 50 - 63 | 6 - 10 | NZMH2-A63-NA | 269233 | | | | |
| | | | | 80 | 63 - 80 | 6 - 10 | NZMH2-A80-NA | 269234 | | | | |
| | | | | 100 | 80 - 100 | 6 - 10 | NZMH2-A100-NA | 269235 | | | | |
| | | | | 125 | 100 - 125 | 6 - 10 | NZMH2-A125-NA | 269236 | | | | |
| | | | | 100 | 100 | 50 | - | 160 | 125 - 160 | 6 - 10 | NZMH2-A160-NA | 269237 |
| | | | | | | | | 200 | 160 - 200 | 6 - 10 | NZMH2-A200-NA | 269238 |
| | | | | | | | | 250 | 200 - 250 | 6 - 10 | NZMH2-A250-NA | 271107 |

Compact circuit breakers, switch disconnectors

2.1

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...A...NA

Fixed mounting with box terminals

Part no.

Article no.

Std. pack

Information relevant for export to North America



| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|------------------|-------------|-----------|---|
| NZMH2-A20-BT-NA | 107797 | 1 Off | Product Standards |
| NZMH2-A25-BT-NA | 107798 | | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMH2-A32-BT-NA | 107799 | | UL File No. |
| NZMH2-A40-BT-NA | 107800 | | E31593 |
| NZMH2-A50-BT-NA | 107801 | | UL Category Control No. |
| NZMH2-A63-BT-NA | 107802 | | DIVQ |
| NZMH2-A80-BT-NA | 107803 | | CSA File No. |
| NZMH2-A100-BT-NA | 107804 | | 022086 |
| NZMH2-A125-BT-NA | 107805 | | CSA Class No. |
| NZMH2-A160-BT-NA | 107806 | | 1432-01 |
| NZMH2-A200-BT-NA | 107807 | | North America Certification |
| NZMH2-A250-BT-NA | 107808 | | UL listed, CSA certified |
| | | | Specially designed for NA |
| | | | Yes |
| | | | Suitable for |
| | | | Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker |
| | | | Yes |
| | | | Max. Voltage Rating |
| | | | 600Y/347 V, 480 V |
| | | | Degree of Protection |
| | | | IEC: IP20; UL/CSA Type: - |

2.1

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|-------------------|---------------------------------------|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_n \times \dots$ | | |



System and cable protection

Fixed overload releases I_r

Basic switching capacity

sg04515 Symbolphoto



| | | | | | | | | |
|----|---|---|---|-----|-------------|-------------|-----------------------------------|--|
| 25 | - | - | - | 20 | 20 A fixed | 350 A fixed | Screw terminals as accessories | |
| | | | | 25 | 25 A fixed | 350 A fixed | | |
| | | | | 30 | 30 A fixed | 350 A fixed | | |
| | | | | 35 | 35 A fixed | 8 - 10 | | |
| | | | | 40 | 40 A fixed | 8 - 10 | | |
| | | | | 45 | 45 A fixed | 6 - 10 | | |
| | | | | 50 | 50 A fixed | 6 - 10 | | |
| | | | | 60 | 60 A fixed | 6 - 10 | | |
| | | | | 70 | 70 A fixed | 6 - 10 | | |
| | | | | 80 | 80 A fixed | 6 - 10 | | |
| | | | | 90 | 90 A fixed | 6 - 10 | | |
| | | | | 100 | 100 A fixed | 6 - 10 | | |
| | | | | 110 | 110 A fixed | 6 - 10 | | |
| | | | | 125 | 125 A fixed | 6 - 10 | | |

sg04215 Symbolphoto



| | | | | | | | | |
|----|----|----|---|-----|-------------|-------------|----------------|--------|
| 25 | 25 | 18 | - | 15 | 15 A fixed | 350 A fixed | NZMB2-AF15-NA | 269142 |
| | | | | 20 | 20 A fixed | 350 A fixed | NZMB2-AF20-NA | 269143 |
| | | | | 25 | 25 A fixed | 350 A fixed | NZMB2-AF25-NA | 269144 |
| | | | | 30 | 30 A fixed | 350 A fixed | NZMB2-AF30-NA | 269145 |
| | | | | 35 | 35 A fixed | 8 - 10 | NZMB2-AF35-NA | 269146 |
| | | | | 40 | 40 A fixed | 8 - 10 | NZMB2-AF40-NA | 269147 |
| | | | | 45 | 45 A fixed | 6 - 10 | NZMB2-AF45-NA | 269148 |
| | | | | 50 | 50 A fixed | 6 - 10 | NZMB2-AF50-NA | 269149 |
| | | | | 60 | 60 A fixed | 6 - 10 | NZMB2-AF60-NA | 269160 |
| | | | | 70 | 70 A fixed | 6 - 10 | NZMB2-AF70-NA | 269161 |
| | | | | 80 | 80 A fixed | 6 - 10 | NZMB2-AF80-NA | 269162 |
| | | | | 90 | 90 A fixed | 6 - 10 | NZMB2-AF90-NA | 269163 |
| | | | | 100 | 100 A fixed | 6 - 10 | NZMB2-AF100-NA | 269164 |
| | | | | 110 | 110 A fixed | 6 - 10 | NZMB2-AF110-NA | 269165 |
| | | | | 125 | 125 A fixed | 6 - 10 | NZMB2-AF125-NA | 269166 |
| | | | | 150 | 150 A fixed | 6 - 10 | NZMB2-AF150-NA | 269167 |
| | | | | 175 | 175 A fixed | 6 - 10 | NZMB2-AF175-NA | 269168 |
| | | | | 200 | 200 A fixed | 6 - 10 | NZMB2-AF200-NA | 269169 |
| | | | | 225 | 225 A fixed | 6 - 10 | NZMB2-AF225-NA | 271089 |
| | | | | 250 | 250 A fixed | 6 - 10 | NZMB2-AF250-NA | 271100 |

Compact circuit breakers, switch disconnectors

2.1

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

Fixed mounting with box terminals

Part no.

Article no.

Std. pack

Information relevant for export to North America



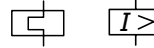
| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------------------|-------------|-----------|---|
| NZMB1-AF20-NA | 281554 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMB1-AF25-NA | 281555 | | UL File No. E31593 |
| NZMB1-AF30-NA | 281556 | | UL Category Control No. DIVQ |
| NZMB1-AF35-NA | 272204 | | CSA File No. 022086 |
| NZMB1-AF40-NA | 272205 | | CSA Class No. 1432-01 |
| NZMB1-AF45-NA | 272206 | | North America Certification UL listed, CSA certified |
| NZMB1-AF50-NA | 272207 | | Specially designed for NA Yes |
| NZMB1-AF60-NA | 272208 | | Suitable for Feeder circuits, branch circuits |
| NZMB1-AF70-NA | 272209 | | Current Limiting Circuit breaker Yes |
| NZMB1-AF80-NA | 272250 | | Max. Voltage Rating 480Y/277 V |
| NZMB1-AF90-NA | 272251 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMB1-AF100-NA | 272252 | | |
| NZMB1-AF110-NA | 281557 | | |
| NZMB1-AF125-NA | 281558 | | |
| NZMB2-AF15-BT-NA | 107611 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMB2-AF20-BT-NA | 107612 | | UL File No. E31593 |
| NZMB2-AF25-BT-NA | 107613 | | UL Category Control No. DIVQ |
| NZMB2-AF30-BT-NA | 107614 | | CSA File No. 022086 |
| NZMB2-AF35-BT-NA | 107615 | | CSA Class No. 1432-01 |
| NZMB2-AF40-BT-NA | 107616 | | North America Certification UL listed, CSA certified |
| NZMB2-AF45-BT-NA | 107617 | | Specially designed for NA Yes |
| NZMB2-AF50-BT-NA | 107618 | | Suitable for Feeder circuits, branch circuits |
| NZMB2-AF60-BT-NA | 107619 | | Current Limiting Circuit breaker Yes |
| NZMB2-AF70-BT-NA | 107620 | | Max. Voltage Rating 600Y/347 V, 480 V |
| NZMB2-AF80-BT-NA | 107621 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMB2-AF90-BT-NA | 107622 | | |
| NZMB2-AF100-BT-NA | 107623 | | |
| NZMB2-AF110-BT-NA | 107624 | | |
| NZMB2-AF125-BT-NA | 107625 | | |
| NZMB2-AF150-BT-NA | 107626 | | |
| NZMB2-AF175-BT-NA | 107627 | | |
| NZMB2-AF200-BT-NA | 107628 | | |
| NZMB2-AF225-BT-NA | 107629 | | |
| NZMB2-AF250-BT-NA | 107630 | | |

2.1

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|-------------------|---------------------------------------|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_n \times \dots$ | | |



System and cable protection

Fixed overload releases I_r

Normal switching capacity

sg04515 Symbolphoto



| Switching capacity | Rated current | Overload releases | Short-circuit releases | Fixed mounting | Article no. |
|--------------------|---------------|-------------------|------------------------|-----------------------------------|-------------|
| 35 | - | - | - | Screw terminals as accessories | |
| | 20 | 20 A fixed | 350 A fixed | | |
| | 25 | 25 A fixed | 350 A fixed | | |
| | 30 | 30 A fixed | 350 A fixed | | |
| | 35 | 35 A fixed | 8 - 10 | | |
| | 40 | 40 A fixed | 8 - 10 | | |
| | 45 | 45 A fixed | 6 - 10 | | |
| | 50 | 50 A fixed | 6 - 10 | | |
| | 60 | 60 A fixed | 6 - 10 | | |
| | 70 | 70 A fixed | 6 - 10 | | |
| | 80 | 80 A fixed | 6 - 10 | | |
| | 90 | 90 A fixed | 6 - 10 | | |
| | 100 | 100 A fixed | 6 - 10 | | |
| | 110 | 110 A fixed | 6 - 10 | | |
| | 125 | 125 A fixed | 6 - 10 | | |

sg04215 Symbolphoto



| Switching capacity | Rated current | Overload releases | Short-circuit releases | Fixed mounting | Article no. |
|--------------------|---------------|-------------------|------------------------|----------------|-------------|
| 35 | 35 | 25 | - | | |
| | 15 | 15 A fixed | 350 A fixed | NZMN2-AF15-NA | 269170 |
| | 20 | 20 A fixed | 350 A fixed | NZMN2-AF20-NA | 269171 |
| | 25 | 25 A fixed | 350 A fixed | NZMN2-AF25-NA | 269172 |
| | 30 | 30 A fixed | 350 A fixed | NZMN2-AF30-NA | 269173 |
| | 35 | 35 A fixed | 8 - 10 | NZMN2-AF35-NA | 269174 |
| | 40 | 40 A fixed | 8 - 10 | NZMN2-AF40-NA | 269175 |
| | 45 | 45 A fixed | 6 - 10 | NZMN2-AF45-NA | 269176 |
| | 50 | 50 A fixed | 6 - 10 | NZMN2-AF50-NA | 269177 |
| | 60 | 60 A fixed | 6 - 10 | NZMN2-AF60-NA | 269178 |
| | 70 | 70 A fixed | 6 - 10 | NZMN2-AF70-NA | 269179 |
| | 80 | 80 A fixed | 6 - 10 | NZMN2-AF80-NA | 269180 |
| | 90 | 90 A fixed | 6 - 10 | NZMN2-AF90-NA | 269181 |
| | 100 | 100 A fixed | 6 - 10 | NZMN2-AF100-NA | 269182 |
| | 110 | 110 A fixed | 6 - 10 | NZMN2-AF110-NA | 269183 |
| | 125 | 125 A fixed | 6 - 10 | NZMN2-AF125-NA | 269184 |
| | 150 | 150 A fixed | 6 - 10 | NZMN2-AF150-NA | 269185 |
| | 175 | 175 A fixed | 6 - 10 | NZMN2-AF175-NA | 269186 |
| | 200 | 200 A fixed | 6 - 10 | NZMN2-AF200-NA | 269187 |
| | 225 | 225 A fixed | 6 - 10 | NZMN2-AF225-NA | 271101 |
| | 250 | 250 A fixed | 6 - 10 | NZMN2-AF250-NA | 271102 |

Compact circuit breakers, switch disconnectors

2.1

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

Fixed mounting with box terminals

Part no. Article no. Std. pack Information relevant for export to North America



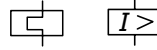
| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------------------|-------------|-----------|---|
| NZMN1-AF20-NA | 281565 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMN1-AF25-NA | 281566 | | UL File No. E31593 |
| NZMN1-AF30-NA | 281567 | | UL Category Control No. DIVQ |
| NZMN1-AF35-NA | 274220 | | CSA File No. 022086 |
| NZMN1-AF40-NA | 274223 | | CSA Class No. 1432-01 |
| NZMN1-AF45-NA | 274230 | | North America Certification UL listed, CSA certified |
| NZMN1-AF50-NA | 274231 | | Specially designed for NA Yes |
| NZMN1-AF60-NA | 274232 | | Suitable for Feeder circuits, branch circuits |
| NZMN1-AF70-NA | 274233 | | Current Limiting Circuit breaker Yes |
| NZMN1-AF80-NA | 274234 | | Max. Voltage Rating 480Y/277 V |
| NZMN1-AF90-NA | 274235 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMN1-AF100-NA | 274236 | | |
| NZMN1-AF110-NA | 281568 | | |
| NZMN1-AF125-NA | 281569 | | |
| NZMN2-AF15-BT-NA | 107631 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMN2-AF20-BT-NA | 107632 | | UL File No. E31593 |
| NZMN2-AF25-BT-NA | 107633 | | UL Category Control No. DIVQ |
| NZMN2-AF30-BT-NA | 107634 | | CSA File No. 022086 |
| NZMN2-AF35-BT-NA | 107635 | | CSA Class No. 1432-01 |
| NZMN2-AF40-BT-NA | 107636 | | North America Certification UL listed, CSA certified |
| NZMN2-AF45-BT-NA | 107637 | | Specially designed for NA Yes |
| NZMN2-AF50-BT-NA | 107638 | | Suitable for Feeder circuits, branch circuits |
| NZMN2-AF60-BT-NA | 107639 | | Current Limiting Circuit breaker Yes |
| NZMN2-AF70-BT-NA | 107640 | | Max. Voltage Rating 600Y/347 V, 480 V |
| NZMN2-AF80-BT-NA | 107641 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMN2-AF90-BT-NA | 107642 | | |
| NZMN2-AF100-BT-NA | 107643 | | |
| NZMN2-AF110-BT-NA | 107644 | | |
| NZMN2-AF125-BT-NA | 107645 | | |
| NZMN2-AF150-BT-NA | 107646 | | |
| NZMN2-AF175-BT-NA | 107647 | | |
| NZMN2-AF200-BT-NA | 107648 | | |
| NZMN2-AF225-BT-NA | 107649 | | |
| NZMN2-AF250-BT-NA | 107650 | | |

2.1

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
 NZM...AF...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|-------------------|---------------------------------------|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_f = I_n \times \dots$ | | |



System and cable protection

Fixed overload releases I_r

High switching capacity

sg04215 Symbolphoto



| 150 | 150 | 65 | - | 15 | 15 A fixed | 350 A fixed | NZMH2-AF15-NA | 269188 |
|-----|-----|----|---|-----|-------------|-------------|----------------|--------|
| | | | | 20 | 20 A fixed | 350 A fixed | NZMH2-AF20-NA | 269189 |
| | | | | 25 | 25 A fixed | 350 A fixed | NZMH2-AF25-NA | 269190 |
| | | | | 30 | 30 A fixed | 350 A fixed | NZMH2-AF30-NA | 269191 |
| | | | | 35 | 35 A fixed | 8 - 10 | NZMH2-AF35-NA | 269192 |
| | | | | 40 | 40 A fixed | 8 - 10 | NZMH2-AF40-NA | 269193 |
| | | | | 45 | 45 A fixed | 6 - 10 | NZMH2-AF45-NA | 269194 |
| | | | | 50 | 50 A fixed | 6 - 10 | NZMH2-AF50-NA | 269195 |
| | | | | 60 | 60 A fixed | 6 - 10 | NZMH2-AF60-NA | 269196 |
| | | | | 70 | 70 A fixed | 6 - 10 | NZMH2-AF70-NA | 269197 |
| | | | | 80 | 80 A fixed | 6 - 10 | NZMH2-AF80-NA | 269198 |
| | | | | 90 | 90 A fixed | 6 - 10 | NZMH2-AF90-NA | 269199 |
| | | | | 100 | 100 A fixed | 6 - 10 | NZMH2-AF100-NA | 269200 |
| | | | | 110 | 110 A fixed | 6 - 10 | NZMH2-AF110-NA | 269201 |
| | | | | 125 | 125 A fixed | 6 - 10 | NZMH2-AF125-NA | 269202 |
| 100 | 100 | 50 | - | 150 | 150 A fixed | 6 - 10 | NZMH2-AF150-NA | 269203 |
| | | | | 175 | 175 A fixed | 6 - 10 | NZMH2-AF175-NA | 269204 |
| | | | | 200 | 200 A fixed | 6 - 10 | NZMH2-AF200-NA | 269205 |
| | | | | 225 | 225 A fixed | 6 - 10 | NZMH2-AF225-NA | 271103 |
| | | | | 250 | 250 A fixed | 6 - 10 | NZMH2-AF250-NA | 271104 |

Compact circuit breakers, switch disconnectors

2.1

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

Fixed mounting with box terminals

Part no.

Article no.

Std. pack

Information relevant for export to North America



| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------------------|-------------|-----------|---|
| NZMH2-AF15-BT-NA | 107809 | 1 Off | Product Standards |
| NZMH2-AF20-BT-NA | 107810 | | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMH2-AF25-BT-NA | 107811 | | UL File No. |
| NZMH2-AF30-BT-NA | 107812 | | E31593 |
| NZMH2-AF35-BT-NA | 107813 | | UL Category Control No. |
| NZMH2-AF40-BT-NA | 107814 | | DIVQ |
| NZMH2-AF45-BT-NA | 107815 | | CSA File No. |
| NZMH2-AF50-BT-NA | 107816 | | 022086 |
| NZMH2-AF60-BT-NA | 107817 | | CSA Class No. |
| NZMH2-AF70-BT-NA | 107818 | | 1432-01 |
| NZMH2-AF80-BT-NA | 107819 | | North America Certification |
| NZMH2-AF90-BT-NA | 107820 | | UL listed, CSA certified |
| NZMH2-AF100-BT-NA | 107821 | | Specially designed for NA |
| NZMH2-AF110-BT-NA | 107822 | | Yes |
| NZMH2-AF125-BT-NA | 107823 | | Suitable for |
| NZMH2-AF150-BT-NA | 107824 | | Feeder circuits, branch circuits |
| NZMH2-AF175-BT-NA | 107825 | | Current Limiting Circuit breaker |
| NZMH2-AF200-BT-NA | 107826 | | Yes |
| NZMH2-AF225-BT-NA | 107827 | | Max. Voltage Rating |
| NZMH2-AF250-BT-NA | 107828 | | 600Y/347 V, 480 V |
| | | | Degree of Protection |
| | | | IEC: IP20; UL/CSA Type: - |

2.2

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, magnetic short-circuit releases, 3 pole
NZM...-S...CNA

Rated current =
Rated uninterrupted current
 $I_n = I_u$
A

Setting range short-circuit release
Non-delayed
 $I_i = I_n \times \dots$



Fixed mounting with screw terminals

Part no.

Article no.

Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- with short-circuit release
- without overload release I_r

Basic switching capacity

1230PIC-787 Symbolphoto



| | | | |
|-----|--------|-----------------|--|
| 1,2 | 7 - 12 | Screw terminals | |
| 2 | 6 - 11 | as accessories | |
| 3 | 6 - 11 | | |
| 5 | 6 - 11 | | |
| 8 | 6 - 11 | | |
| 12 | 7 - 12 | | |
| 18 | 7 - 12 | | |
| 26 | 8 - 13 | | |
| 33 | 8 - 14 | | |
| 40 | 8 - 14 | | |
| 50 | 8 - 14 | | |
| 63 | 8 - 14 | | |
| 80 | 8 - 14 | | |
| 100 | 8 - 13 | | |

1230PIC-804 Symbolphoto



| | | | |
|-----|--------|----------------|--------|
| 1,6 | 8 - 14 | NZMB2-S1,6-CNA | 269472 |
| 2,4 | 8 - 14 | NZMB2-S2,4-CNA | 269473 |
| 5 | 6 - 11 | NZMB2-S5-CNA | 103034 |
| 8 | 6 - 11 | NZMB2-S8-CNA | 103035 |
| 12 | 7 - 12 | NZMB2-S12-CNA | 103036 |
| 18 | 7 - 12 | NZMB2-S18-CNA | 103037 |
| 26 | 8 - 13 | NZMB2-S26-CNA | 103038 |
| 33 | 8 - 14 | NZMB2-S33-CNA | 103039 |
| 40 | 8 - 14 | NZMB2-S40-CNA | 269243 |
| 50 | 8 - 14 | NZMB2-S50-CNA | 269244 |
| 63 | 8 - 14 | NZMB2-S63-CNA | 269245 |
| 80 | 8 - 14 | NZMB2-S80-CNA | 269246 |
| 100 | 8 - 14 | NZMB2-S100-CNA | 269247 |
| 125 | 8 - 14 | NZMB2-S125-CNA | 269248 |
| 160 | 8 - 14 | NZMB2-S160-CNA | 269249 |
| 200 | 8 - 13 | NZMB2-S200-CNA | 269250 |
| 250 | 8 - 10 | NZMB2-S250-CNA | 102478 |

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, magnetic short-circuit releases, 3 pole
NZM...-S...CNA

2.2

Fixed mounting with box terminals

Part no. Article no. Std. pack Information relevant for export to North America



For further terminal types
see accessories

| | | | | |
|-------------------|--------|-------|----------------------------------|--|
| NZMB1-S1,2-CNA | 102906 | 1 Off | Product Standards | UL 489; CSA-C22.2 No. 5-09 |
| NZMB1-S2-CNA | 102907 | | UL File No. | E31593 |
| NZMB1-S3-CNA | 102908 | | UL Category Control No. | DKPU2 |
| NZMB1-S5-CNA | 102909 | | CSA File No. | 022086 |
| NZMB1-S8-CNA | 103020 | | CSA Class No. | 1432-01 |
| NZMB1-S12-CNA | 103021 | | North America Certification | UL recognized, CSA certified |
| NZMB1-S18-CNA | 103022 | | Conditions of Acceptability | Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay. |
| NZMB1-S26-CNA | 103023 | | Specially designed for NA | Yes |
| NZMB1-S33-CNA | 103024 | | Suitable for | Branch circuits, feeder circuits |
| NZMB1-S40-CNA | 281263 | | Current Limiting Circuit breaker | No |
| NZMB1-S50-CNA | 281264 | | Max. Voltage Rating | 480Y/277 V |
| NZMB1-S63-CNA | 281265 | | Degree of Protection | UL/CSA Type: - |
| NZMB1-S80-CNA | 281266 | | | |
| NZMB1-S100-CNA | 281267 | | | |
| NZMB2-S1,6-BT-CNA | 107651 | 1 Off | Product Standards | UL 489; CSA-C22.2 No. 5-09 |
| NZMB2-S2,4-BT-CNA | 107652 | | UL File No. | E31593 |
| NZMB2-S5-BT-CNA | 107653 | | UL Category Control No. | DKPU2 |
| NZMB2-S8-BT-CNA | 107654 | | CSA File No. | 022086 |
| NZMB2-S12-BT-CNA | 107655 | | CSA Class No. | 1432-01 |
| NZMB2-S18-BT-CNA | 107656 | | North America Certification | UL recognized, CSA certified |
| NZMB2-S26-BT-CNA | 107657 | | Conditions of Acceptability | Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay. |
| NZMB2-S33-BT-CNA | 107658 | | Specially designed for NA | Yes |
| NZMB2-S40-BT-CNA | 107659 | | Suitable for | Branch circuits, feeder circuits |
| NZMB2-S50-BT-CNA | 107660 | | Current Limiting Circuit breaker | No |
| NZMB2-S63-BT-CNA | 107661 | | Max. Voltage Rating | 600Y/347 V, 480 V |
| NZMB2-S80-BT-CNA | 107662 | | Degree of Protection | UL/CSA Type: - |
| NZMB2-S100-BT-CNA | 107663 | | | |
| NZMB2-S125-BT-CNA | 107664 | | | |
| NZMB2-S160-BT-CNA | 107665 | | | |
| NZMB2-S200-BT-CNA | 107666 | | | |
| NZMB2-S250-BT-CNA | 107667 | | | |

2.2

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, magnetic short-circuit releases, 3 pole
NZM...-S...CNA

Rated current =
Rated uninterrupted current
 $I_n = I_u$
A

Setting range
Short-circuit releases Non-delayed
 $I_r = I_n \times \dots$



Fixed mounting with screw terminals

Part no.

Article no.

Std. pack

Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- With short-circuit releases
- Without overload releases I_r

Normal switching capacity

1230PIC-787 Symbolphoto



| Rated current (A) | Setting range | Part no. | Article no. | Std. pack |
|-------------------|---------------|----------------|-------------|-----------|
| 1,2 | 7 - 12 | NZMN1-S1,2-CNA | 103025 | 1 Off |
| 2 | 6 - 11 | NZMN1-S2-CNA | 103026 | USA, CAN |
| 3 | 6 - 11 | NZMN1-S3-CNA | 103027 | |
| 5 | 6 - 11 | NZMN1-S5-CNA | 103028 | |
| 8 | 6 - 11 | NZMN1-S8-CNA | 103029 | |
| 12 | 7 - 12 | NZMN1-S12-CNA | 103030 | |
| 18 | 7 - 12 | NZMN1-S18-CNA | 103031 | |
| 26 | 8 - 13 | NZMN1-S26-CNA | 103032 | |
| 33 | 8 - 14 | NZMN1-S33-CNA | 103033 | |
| 40 | 8 - 14 | NZMN1-S40-CNA | 281276 | |
| 50 | 8 - 14 | NZMN1-S50-CNA | 281277 | |
| 63 | 8 - 14 | NZMN1-S63-CNA | 281278 | |
| 80 | 8 - 14 | NZMN1-S80-CNA | 281279 | |
| 100 | 8 - 13 | NZMN1-S100-CNA | 281280 | |

1230PIC-804 Symbolphoto



| Rated current (A) | Setting range | Part no. | Article no. | Std. pack |
|-------------------|---------------|----------------|-------------|-----------|
| 1,6 | 8 - 14 | NZMN2-S1,6-CNA | 269478 | 1 Off |
| 2,4 | 8 - 14 | NZMN2-S2,4-CNA | 269479 | USA, CAN |
| 5 | 6 - 11 | NZMN2-S5-CNA | 103040 | |
| 8 | 6 - 11 | NZMN2-S8-CNA | 103041 | |
| 12 | 7 - 12 | NZMN2-S12-CNA | 103042 | |
| 18 | 7 - 12 | NZMN2-S18-CNA | 103043 | |
| 26 | 8 - 13 | NZMN2-S26-CNA | 103044 | |
| 33 | 8 - 14 | NZMN2-S33-CNA | 103045 | |
| 40 | 8 - 14 | NZMN2-S40-CNA | 269255 | |
| 50 | 8 - 14 | NZMN2-S50-CNA | 269256 | |
| 63 | 8 - 14 | NZMN2-S63-CNA | 269257 | |
| 80 | 8 - 14 | NZMN2-S80-CNA | 269258 | |
| 100 | 8 - 14 | NZMN2-S100-CNA | 269259 | |
| 125 | 8 - 14 | NZMN2-S125-CNA | 269260 | |
| 160 | 8 - 14 | NZMN2-S160-CNA | 269261 | |
| 200 | 8 - 13 | NZMN2-S200-CNA | 269262 | |
| 250 | 8 - 10 | NZMN2-S250-CNA | 102479 | |

High switching capacity

1230PIC-804 Symbolphoto



| Rated current (A) | Setting range | Part no. | Article no. | Std. pack |
|-------------------|---------------|----------------|-------------|-----------|
| 1,6 | 8 - 14 | NZMH2-S1,6-CNA | 269482 | 1 Off |
| 2,4 | 8 - 14 | NZMH2-S2,4-CNA | 269483 | USA, CAN |
| 5 | 6 - 11 | NZMH2-S5-CNA | 103046 | |
| 8 | 6 - 11 | NZMH2-S8-CNA | 103047 | |
| 12 | 7 - 12 | NZMH2-S12-CNA | 103048 | |
| 18 | 5 - 9 | NZMH2-S18-CNA | 103049 | |
| 26 | 8 - 13 | NZMH2-S26-CNA | 103050 | |
| 33 | 8 - 14 | NZMH2-S33-CNA | 103051 | |
| 40 | 8 - 14 | NZMH2-S40-CNA | 269267 | |
| 50 | 8 - 14 | NZMH2-S50-CNA | 269268 | |
| 63 | 8 - 14 | NZMH2-S63-CNA | 269269 | |
| 80 | 8 - 14 | NZMH2-S80-CNA | 269270 | |
| 100 | 8 - 14 | NZMH2-S100-CNA | 269271 | |
| 125 | 8 - 14 | NZMH2-S125-CNA | 269272 | |
| 200 | 8 - 13 | NZMH2-S160-CNA | 269273 | |
| 250 | 8 - 10 | NZMH2-S200-CNA | 269274 | |
| 160 | 8 - 14 | NZMH2-S250-CNA | 102490 | |

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, magnetic short-circuit releases, 3 pole
NZM...-S...CNA

2.2

Information relevant for export to North America



For further terminal types
see accessories

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09 |
| UL File No. | E31593 |
| UL Category Control No. | DKPU2 |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL recognized, CSA certified |
| Conditions of Acceptability | Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay. |
| Specially designed for NA | Yes |
| Suitable for | Branch circuits, feeder circuits |
| Current Limiting Circuit breaker | No |
| Max. Voltage Rating | 480Y/277 V |
| Degree of Protection | UL/CSA Type: - |

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09 |
| UL File No. | E31593 |
| UL Category Control No. | DKPU2 |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| NA Certification | UL recognized, CSA certified |
| Conditions of Acceptability | Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay. |
| Specially designed for NA | Yes |
| Suitable for | Branch circuits, feeder circuits |
| Current Limiting Circuit breaker | No |
| Max. Voltage Rating | 600Y/347 V, 480 V |
| Degree of Protection | UL/CSA Type: - |

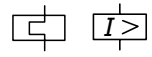
| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09 |
| UL File No. | E31593 |
| UL Category Control No. | DKPU2 |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| NA Certification | UL recognized, CSA certified |
| Conditions of Acceptability | Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay. |
| Specially designed for NA | Yes |
| Suitable for | Branch circuits, feeder circuits |
| Current Limiting Circuit breaker | No |
| Max. Voltage Rating | 600Y/347 V, 480 V |
| Degree of Protection | UL/CSA Type: - |

2.3

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
 NZM...-AX...NA

| Switching capacity | | | | Rated current = Rated uninter- rupted current | Setting range | | Fixed mounting with screw terminals | | |
|-----------------------------|------------------------|-----------------------------|------------------------|---|-------------------|---------------------------------------|-------------------------------------|-------------|-----------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. | Std. pack |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_r = I_n \times \dots$ | | | |



System and cable protection

Adjustable overload release I_r
 R.m.s. value measurement and "thermal memory"

Normal switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | | | | | |
|----|----|----|---|-----|-----------|--------|----------------|--------|-------|
| 35 | 35 | 25 | - | 40 | 20 - 40 | 2 - 12 | NZMN2-AX40-NA | 195224 | 1 Off |
| | | | | 100 | 40 - 100 | 2 - 12 | NZMN2-AX100-NA | 195225 | |
| | | | | 160 | 64 - 160 | 2 - 12 | NZMN2-AX160-NA | 195226 | |
| | | | | 250 | 100 - 250 | 2 - 12 | NZMN2-AX250-NA | 195227 | |

sg04015 Symbolphoto



| | | | | | | | | | |
|----|----|----|----|-----|-----------|--------|----------------|--------|-------|
| 42 | 42 | 35 | 35 | 250 | 100 - 250 | 2 - 11 | NZMN3-AX250-NA | 192484 | 1 Off |
| | | | | 400 | 160 - 400 | 2 - 11 | NZMN3-AX400-NA | 192485 | |
| | | | | 600 | 240 - 600 | 2 - 8 | NZMN3-AX600-NA | 192486 | |

sg04715 Symbolphoto



| | | | | | | | | | |
|----|----|----|----|------|------------|--------|-----------------|--------|-------|
| 42 | 42 | 35 | 35 | 800 | 320 - 800 | 2 - 12 | NZMN4-AX800-NA | 192542 | 1 Off |
| | | | | 1000 | 400 - 1000 | 2 - 12 | NZMN4-AX1000-NA | 192543 | |
| | | | | 1200 | 480 - 1200 | 2 - 12 | NZMN4-AX1200-NA | 192544 | |

Compact circuit breakers, switch disconnectors

2.3

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...-AX...NA

Information relevant for export to North America



For further terminal types
see accessories

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 600Y/347 V, 480 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

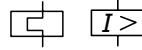
| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

2.3

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
 NZM...-AX...NA

| Switching capacity | | | | Rated current = Rated uninter- rupted current | Setting range | | Fixed mounting with screw terminals | | |
|-----------------------------|------------------------|-----------------------------|------------------------|---|-------------------|---------------------------------------|-------------------------------------|-------------|-----------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. | Std. pack |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_r = I_n \times \dots$ | | | |



System and cable protection

Adjustable overload release I_r
 R.m.s. value measurement and "thermal memory"

High switching capacity

wa_ren_00418_r Symbolphoto



| | | | | | | | | | |
|-----|-----|----|---|-----|-----------|--------|----------------|--------|-------|
| 100 | 100 | 50 | - | 40 | 20 - 40 | 2 - 12 | NZMH2-AX40-NA | 195229 | 1 Off |
| | | | | 100 | 40 - 100 | 2 - 12 | NZMH2-AX100-NA | 195228 | |
| | | | | 160 | 64 - 160 | 2 - 12 | NZMH2-AX160-NA | 195230 | |
| | | | | 250 | 100 - 250 | 2 - 12 | NZMH2-AX250-NA | 195231 | |

sg04015 Symbolphoto



| | | | | | | | | | |
|-----|-----|----|----|-----|-----------|--------|----------------|--------|-------|
| 100 | 100 | 50 | 50 | 250 | 100 - 250 | 2 - 11 | NZMH3-AX250-NA | 192496 | 1 Off |
| | | | | 400 | 160 - 400 | 2 - 11 | NZMH3-AX400-NA | 192497 | |
| | | | | 600 | 240 - 600 | 2 - 8 | NZMH3-AX600-NA | 192498 | |

sg04715 Symbolphoto



| | | | | | | | | | |
|----|----|----|----|------|------------|--------|-----------------|--------|-------|
| 85 | 85 | 50 | 50 | 800 | 320 - 800 | 2 - 12 | NZMH4-AX800-NA | 192560 | 1 Off |
| | | | | 1000 | 400 - 1000 | 2 - 12 | NZMH4-AX1000-NA | 192561 | |
| | | | | 1200 | 480 - 1200 | 2 - 12 | NZMH4-AX1200-NA | 192562 | |

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...-AX...NA

2.3

Information relevant for export to North America



For further terminal types
see accessories



| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 600Y/347 V, 480 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

2.3

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...MX...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|---|---|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_n \times \dots$ | | |
| | | | | |  |  | | |

Motor protection 100 % rated

Adjustable overload releases

For use in motor circuits with contactor.

Additional motor protective characteristics (calibration) to UL508, CSA-C22.2 No. 14-05.

Normal switching capacity

1230PIC-854 Symbolphoto



| | | | | | | | | |
|----|----|---|---|-----|--------|--------|----------------|--------|
| 35 | 35 | - | - | 90 | 36-90 | 2 - 14 | NZMN2-MX90-NA | 192523 |
| | | | | 140 | 56-140 | 2 - 18 | NZMN2-MX140-NA | 192524 |
| | | | | 200 | 80-200 | 2 - 15 | NZMN2-MX200-NA | 192439 |

High switching capacity

1230PIC-854 Symbolphoto



| | | | | | | | | |
|-----|-----|---|---|-----|--------|--------|----------------|--------|
| 100 | 100 | - | - | 90 | 36-90 | 2 - 14 | NZMH2-MX90-NA | 192462 |
| | | | | 140 | 56-140 | 2 - 18 | NZMH2-MX140-NA | 192463 |
| | | | | 200 | 80-200 | 2 - 15 | NZMH2-MX200-NA | 192464 |

wa_ren_01018_r Symbolphoto



| | | | | | | | | |
|-----|-----|---|---|-----|-----------|--------|----------------|--------|
| 100 | 100 | - | - | 250 | 100 - 250 | 2 - 18 | NZMH3-MX250-NA | 193347 |
| | | | | 350 | 140 - 350 | 2 - 15 | NZMH3-MX350-NA | 193348 |
| | | | | 450 | 180 - 450 | 2 - 12 | NZMH3-MX450-NA | 193349 |

Compact circuit breakers, switch disconnectors

2.3

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...MX...NA

Fixed mounting with box terminals

Part no.

Article no.

Std. pack

Information relevant for export to North America



| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------------------|-------------|-----------|---|
| NZMN2-MX90-BT-NA | 192440 | 1 Off | Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection |
| NZMN2-MX140-BT-NA | 192441 | | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DIVQ 022086 1432-01 UL Listed, CSA certified Yes, additionally calibrated according to UL 508 Feeder circuits, branch circuits Yes 480 V IEC: IP20; UL/CSA Type: - |
| NZMN2-MX200-BT-NA | 192442 | | |



| | | | |
|-------------------|--------|-------|---|
| NZMH2-MX90-BT-NA | 192465 | 1 Off | Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection |
| NZMH2-MX140-BT-NA | 192466 | | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DIVQ 022086 1432-01 UL Listed, CSA certified Yes, additionally calibrated according to UL 508 Feeder circuits, branch circuits Yes 480 V IEC: IP20; UL/CSA Type: - |
| NZMH2-MX200-BT-NA | 192467 | | |

| | | | |
|------------------------|--|-------|---|
| Terminals as accessory | | 1 Off | Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection |
| | | | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DIVQ 022086 1432-01 UL Listed, CSA certified Yes, additionally calibrated according to UL 508 Feeder circuits, branch circuits Yes 600 V IEC: IP20; UL/CSA Type: - |

2.3

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
 NZM...VX...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|---|---|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_n \times \dots$ | | |
| | | | | |  |  | | |

System and cable protection, selectivity and generator protection

Adjustable overload release I_r
 R.m.s. value measurement and "thermal memory"

Normal switching capacity



| | | | | | | | | | |
|---------------------|----|----|----|---|-----|-----------|--------|----------------|--------|
| sg04315 Symbolphoto | 35 | 35 | 25 | - | 100 | 40 - 100 | 2 - 18 | NZMN2-VX100-NA | 192448 |
| | | | | | 160 | 64 - 160 | 2 - 18 | NZMN2-VX160-NA | 192449 |
| | | | | | 250 | 100 - 250 | 2 - 12 | NZMN2-VX250-NA | 192450 |



| | | | | | | | | | |
|-------------------------|----|----|----|----|-----|-----------|--------|----------------|--------|
| 1230PIC-711 Symbolphoto | 42 | 42 | 35 | 35 | 250 | 100 - 250 | 2 - 18 | NZMN3-VX250-NA | 192502 |
| | | | | | 400 | 160 - 400 | 2 - 12 | NZMN3-VX400-NA | 192503 |
| | | | | | 600 | 240 - 600 | 2 - 8 | NZMN3-VX600-NA | 192504 |



| | | | | | | | | | |
|-------------------------|----|----|----|----|------|------------|--------|-----------------|--------|
| 1230PIC-715 Symbolphoto | 42 | 42 | 35 | 35 | 800 | 320 - 800 | 2 - 18 | NZMN4-VX800-NA | 192551 |
| | | | | | 1000 | 400 - 1000 | 2 - 18 | NZMN4-VX1000-NA | 192552 |
| | | | | | 1200 | 480 - 1200 | 2 - 15 | NZMN4-VX1200-NA | 192553 |

Compact circuit breakers, switch disconnectors

2.3

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...VX...NA

Fixed mounting with box terminals

Part no.

Article no.

Std. pack

Information relevant for export to North America



| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------------------|-------------|-----------|---|
| NZMN2-VX100-BT-NA | 192517 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMN2-VX160-BT-NA | 192518 | | UL File No. E31593 |
| NZMN2-VX250-BT-NA | 192519 | | UL Category Control No. DIVQ |
| | | | CSA File No. 022086 |
| | | | CSA Class No. 1432-01 |
| | | | North America Certification UL listed, CSA certified |
| | | | Specially designed for NA Yes |
| | | | Suitable for Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker Yes |
| | | | Max. Voltage Rating 600Y/347 V, 480 V |
| | | | Degree of Protection IEC: IP20; UL/CSA Type: - |



| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|------------------------|-------------|-----------|---|
| Terminals as accessory | | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| | | | UL File No. E31593 |
| | | | UL Category Control No. DIVQ |
| | | | CSA File No. 022086 |
| | | | CSA Class No. 1432-01 |
| | | | North America Certification UL listed, CSA certified |
| | | | Specially designed for NA Yes |
| | | | Suitable for Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker Yes |
| | | | Max. Voltage Rating 600 V |
| | | | Degree of Protection IEC: IP20; UL/CSA Type: - |

| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|------------------------|-------------|-----------|---|
| Terminals as accessory | | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| | | | UL File No. E31593 |
| | | | UL Category Control No. DIVQ |
| | | | CSA File No. 022086 |
| | | | CSA Class No. 1432-01 |
| | | | North America Certification UL listed, CSA certified |
| | | | Specially designed for NA Yes |
| | | | Suitable for Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker No |
| | | | Max. Voltage Rating 600 V |
| | | | Degree of Protection IEC: IP20; UL/CSA Type: - |

2.3

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...VX...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|---|---|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_r \times \dots$ | | |
| | | | | |  |  | | |

System and cable protection

Fixed overload releases I_r

High switching capacity

sg04315 Symbolphoto



| | | | | | | | | |
|-----|-----|----|---|-----|-----------|--------|----------------|--------|
| 100 | 100 | 50 | - | 100 | 40 - 100 | 2 - 18 | NZMH2-VX100-NA | 192473 |
| | | | | 160 | 64 - 160 | 2 - 18 | NZMH2-VX160-NA | 192474 |
| | | | | 250 | 100 - 250 | 2 - 12 | NZMH2-VX250-NA | 192475 |

1230PIC-711 Symbolphoto



| | | | | | | | | |
|-----|-----|----|----|-----|-----------|--------|----------------|--------|
| 100 | 100 | 50 | 50 | 250 | 100 - 250 | 2 - 18 | NZMH3-VX250-NA | 192533 |
| | | | | 400 | 160 - 400 | 2 - 12 | NZMH3-VX400-NA | 192534 |
| | | | | 600 | 240 - 600 | 2 - 8 | NZMH3-VX600-NA | 192535 |

1230PIC-715 Symbolphoto



| | | | | | | | | |
|----|----|----|----|------|------------|--------|-----------------|--------|
| 85 | 85 | 50 | 50 | 800 | 320 - 800 | 2 - 18 | NZMH4-VX800-NA | 192569 |
| | | | | 1000 | 400 - 1000 | 2 - 18 | NZMH4-VX1000-NA | 192570 |
| | | | | 1200 | 480 - 1200 | 2 - 15 | NZMH4-VX1200-NA | 192571 |

Compact circuit breakers, switch disconnectors

2.3

Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...VX...NA

Fixed mounting with box terminals

Part no.

Article no.

Std. pack

Information relevant for export to North America



| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------------------|-------------|-----------|--|
| NZMH2-VX100-BT-NA | 192459 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMH2-VX160-BT-NA | 192460 | | UL File No. E31593 |
| NZMH2-VX250-BT-NA | 192461 | | UL Category Control No. DIVQ |
| | | | CSA File No. 022086 |
| | | | CSA Class No. 1432-01 |
| | | | North America Certification UL listed, CSA certified |
| | | | Specially designed for NA Yes |
| | | | Suitable for Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker Yes |
| | | | Max. Voltage Rating 600Y/347 V, 480 V |
| | | | Degree of Protection IEC: IP20; UL/CSA Type: - |

| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|------------------------|-------------|-----------|--|
| Terminals as accessory | | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| | | | UL File No. E31593 |
| | | | UL Category Control No. DIVQ |
| | | | CSA File No. 022086 |
| | | | CSA Class No. 1432-01 |
| | | | North America Certification UL listed, CSA certified |
| | | | Specially designed for NA Yes |
| | | | Suitable for Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker Yes |
| | | | Max. Voltage Rating 600 V |
| | | | Degree of Protection IEC: IP20; UL/CSA Type: - |

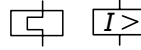
| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|------------------------|-------------|-----------|--|
| Terminals as accessory | | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| | | | UL File No. E31593 |
| | | | UL Category Control No. DIVQ |
| | | | CSA File No. 022086 |
| | | | CSA Class No. 1432-01 |
| | | | North America Certification UL listed, CSA certified |
| | | | Specially designed for NA Yes |
| | | | Suitable for Feeder circuits, branch circuits |
| | | | Current Limiting Circuit breaker No |
| | | | Max. Voltage Rating 600 V |
| | | | Degree of Protection IEC: IP20; UL/CSA Type: - |

2.4

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases with energy meter function, 3 pole
NZM... PMX...NA

| Switching capacity | | | | Rated current = Rated uninter- rupted current | Setting range | | Fixed mounting with screw terminals | | |
|-----------------------------|------------------------|-----------------------------|------------------------|---|-------------------|---------------------------------------|-------------------------------------|-------------|-----------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. | Std. pack |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_s = I_n \times \dots$ | | | |



Motor protection

Fixed overload releases I_r

Normal switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | | | |
|----|----|----|---|-----|----------|--------|-----------------|--------|-------|
| 35 | 35 | 25 | - | 90 | 36 - 90 | 2 - 18 | NZMN2-PMX90-NA | 192580 | 1 Off |
| | | | | 140 | 56 - 140 | 2 - 18 | NZMN2-PMX140-NA | 192581 | |
| | | | | 200 | 88 - 220 | 2 - 15 | NZMN2-PMX220-NA | 192582 | |

wa_ren_00818_r Symbolphoto



| | | | | | | | | | |
|----|----|----|----|-----|-----------|--------|-----------------|--------|-------|
| 42 | 42 | 35 | 35 | 250 | 100 - 250 | 2 - 18 | NZMN3-PMX250-NA | 193350 | 1 Off |
| | | | | 350 | 175 - 350 | 2 - 15 | NZMN3-PMX350-NA | 193351 | |
| | | | | 450 | 225 - 450 | 2 - 12 | NZMN3-PMX450-NA | 193352 | |

High switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | | | |
|-----|-----|----|---|-----|----------|--------|-----------------|--------|-------|
| 100 | 100 | 50 | - | 90 | 36 - 90 | 2 - 18 | NZMH2-PMX90-NA | 192583 | 1 Off |
| | | | | 140 | 56 - 140 | 2 - 18 | NZMH2-PMX140-NA | 192584 | |
| | | | | 200 | 88 - 220 | 2 - 15 | NZMH2-PMX200-NA | 192585 | |

wa_ren_00818_r Symbolphoto



| | | | | | | | | | |
|-----|-----|----|----|-----|-----------|--------|-----------------|--------|-------|
| 100 | 100 | 50 | 50 | 250 | 175 - 350 | 2 - 18 | NZMH3-PMX250-NA | 193353 | 1 Off |
| | | | | 350 | 175 - 350 | 2 - 15 | NZMH3-PMX350-NA | 193354 | |
| | | | | 450 | 225 - 450 | 2 - 12 | NZMH3-PMX450-NA | 193355 | |

Compact circuit breakers, switch disconnectors

2.4

Circuit breakers UL/CSA, IEC, electronic releases with energy meter function, 3 pole
NZM... PMX...NA

Information relevant for export to North America



For further terminal types
see accessories

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes, additionally calibrated according to UL 508 |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 480 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes, additionally calibrated according to UL 508 |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes, additionally calibrated according to UL 508 |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 480 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

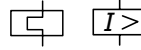
| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes, additionally calibrated according to UL 508 |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

2.4

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, electronic releases with energy meter function, 3 pole NZM...PX...NA

| Switching capacity | | | | Rated current = | Setting range | | Fixed mounting with screw terminals | | |
|--------------------|----------|------------|----------|-----------------|---------------|--------------------------|-------------------------------------|-------------|-----------|
| SCCR | SCCR | SCCR | SCCR | Rated | Overload | Short-circuit | Part no. | Article no. | Std. pack |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V | uninterrupted | releases | releases | | | |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz | current | | Non-delayed | | | |
| I_{cu} | I_{cu} | I_{cu} | I_{cu} | $I_n = I_u$ | I_r | $I_s = I_n \times \dots$ | | | |
| kA | kA | kA | kA | A | A | | | | |



System and cable protection

For further terminal types see accessories

Fixed overload releases I_r

Normal switching capacity

wa_ren_00318_r Symbolphoto



| I_{cu} (kA) | I_{cu} (kA) | I_{cu} (kA) | I_{cu} (kA) | Rated current (A) | Overload releases | Short-circuit releases | Part no. | Article no. | Std. pack |
|---------------|---------------|---------------|---------------|-------------------|-------------------|------------------------|----------------|-------------|-----------|
| 35 | 35 | 25 | - | 40 | 20 - 40 | 2 - 18 | NZMN2-PX40-NA | 192572 | 1 Off |
| | | | | 100 | 40 - 100 | 2 - 18 | NZMN2-PX100-NA | 192573 | |
| | | | | 160 | 64 - 160 | 2 - 18 | NZMN2-PX160-NA | 192574 | |
| | | | | 250 | 100 - 250 | 2 - 12 | NZMN2-PX250-NA | 192575 | |

wa_ren_00318_r Symbolphoto



| | | | | | | | | | |
|----|----|----|----|-----|-----------|--------|----------------|--------|-------|
| 42 | 42 | 35 | 35 | 250 | 100 - 250 | 2 - 18 | NZMN3-PX250-NA | 192586 | 1 Off |
| | | | | 400 | 160 - 400 | 2 - 12 | NZMN3-PX400-NA | 192587 | |
| | | | | 600 | 240 - 600 | 2 - 8 | NZMN3-PX600-NA | 192588 | |

wa_ren_01818_r Symbolphoto



| | | | | | | | | | |
|----|----|----|----|------|------------|--------|-----------------|--------|-------|
| 42 | 42 | 35 | 35 | 800 | 320 - 800 | 2 - 18 | NZMN4-PX800-NA | 192592 | 1 Off |
| | | | | 1000 | 400 - 1000 | 2 - 18 | NZMN4-PX1000-NA | 192593 | |
| | | | | 1200 | 480 - 1200 | 2 - 15 | NZMN4-PX1200-NA | 192594 | |

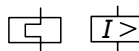
| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIV0 |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | No |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

Compact circuit breakers, switch disconnectors

2.4

Circuit breakers UL/CSA, IEC, electronic releases with energy meter function, 3 pole
NZM...PX...NA

| Switching capacity | | | | Rated current = Rated uninter- rupted current | Setting range | | Fixed mounting with screw terminals | | |
|-----------------------------|------------------------|-----------------------------|------------------------|---|-------------------|---------------------------------------|-------------------------------------|-------------|-----------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | Overload releases | Short-circuit releases Non-delayed | Part no. | Article no. | Std. pack |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_r = I_n \times \dots$ | | | |



System and cable protection

For further terminal types
see accessories

Fixed overload releases I_r

High switching capacity

wa_ren_00318_r Symbolphoto



| | | | | | | | | | |
|-----|-----|----|---|-----|-----------|--------|----------------|--------|-------|
| 100 | 100 | 50 | - | 40 | 20 - 40 | 2 - 18 | NZMH2-PX40-NA | 192576 | 1 Off |
| | | | | 100 | 40 - 100 | 2 - 18 | NZMH2-PX100-NA | 192577 | |
| | | | | 160 | 64 - 160 | 2 - 18 | NZMH2-PX160-NA | 192578 | |
| | | | | 250 | 100 - 250 | 2 - 12 | NZMH2-PX250-NA | 192579 | |

wa_ren_00818_r Symbolphoto



| | | | | | | | | | |
|-----|-----|----|----|-----|-----------|--------|----------------|--------|-------|
| 100 | 100 | 50 | 50 | 250 | 100 - 250 | 2 - 18 | NZMH3-PX250-NA | 192589 | 1 Off |
| | | | | 400 | 160 - 400 | 2 - 12 | NZMH3-PX400-NA | 192590 | |
| | | | | 600 | 240 - 600 | 2 - 8 | NZMH3-PX600-NA | 192591 | |

wa_ren_01818_r Symbolphoto



| | | | | | | | | | |
|----|----|----|----|------|------------|--------|-----------------|--------|-------|
| 85 | 85 | 50 | 50 | 800 | 320 - 800 | 2 - 18 | NZMH4-PX800-NA | 192595 | 1 Off |
| | | | | 1000 | 400 - 1000 | 2 - 18 | NZMH4-PX1000-NA | 192596 | |
| | | | | 1200 | 480 - 1200 | 2 - 15 | NZMH4-PX1200-NA | 192597 | |

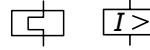
| | |
|----------------------------------|---|
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| UL File No. | E31593 |
| UL Category Control No. | DIV0 |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for NA | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit breaker | No |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

2.5

Compact circuit breakers, switch disconnectors

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 4 pole
NZM...-4-AF...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range | | | Fixed mounting Part no. | Article no. |
|--------------------------------------|-------------------------|--------------------------------------|-------------------------|--|---|--------------------------|---------------------------------------|----------------------------|-------------|
| SCCR 480Y/277 V 480 V 60 Hz | SCCR V480 V 60 Hz | SCCR 600Y/347 V 600 V 60 Hz | SCCR V600 V 60 Hz | | Neutral conductor I_r x % of phase conductor | Overload releases | Short-circuit releases Non-delayed | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_r A | $I_r = I_n \times \dots$ | | | |



System and cable protection

Fixed overload releases I_r

Basic switching capacity

1230PIC-801 Symbolphoto



| I_{cu} | I_{cu} | I_{cu} | I_{cu} | $I_n = I_u$ | Neutral conductor | Overload releases | Short-circuit releases | Fixed mounting | Article no. |
|----------|----------|----------|----------|-------------|-------------------|-------------------|------------------------|----------------|-------------|
| 25 | 25 | - | - | 60 | 100 | 60 A fixed | 6 - 10 | - | |
| | | | | 70 | 100 | 70 A fixed | 6 - 10 | - | |
| | | | | 80 | 100 | 80 A fixed | 6 - 10 | - | |
| | | | | 90 | 100 | 90 A fixed | 6 - 10 | - | |
| | | | | 100 | 100 | 100 A fixed | 6 - 10 | - | |
| | | | | 110 | 100 | 110 A fixed | 6 - 10 | - | |
| | | | | 125 | 100 | 125 A fixed | 6 - 10 | - | |
| | | | | 150 | 100 | 150 A fixed | 6 - 10 | - | |
| | | | | 175 | 100 | 175 A fixed | 6 - 10 | - | |
| | | | | 200 | 100 | 200 A fixed | 6 - 10 | - | |
| | | | | 225 | 100 | 225 A fixed | 6 - 10 | - | |
| | | | | 250 | 100 | 250 A fixed | 6 - 10 | - | |

Normal switching capacity

1230PIC-801 Symbolphoto



| I_{cu} | I_{cu} | I_{cu} | I_{cu} | $I_n = I_u$ | Neutral conductor | Overload releases | Short-circuit releases | Fixed mounting | Article no. |
|----------|----------|----------|----------|-------------|-------------------|-------------------|------------------------|------------------|-------------|
| 35 | 35 | - | - | 60 | 100 | 60 A fixed | 6 - 10 | NZMN2-4-AF60-NA | 190347 |
| | | | | 70 | 100 | 70 A fixed | 6 - 10 | - | |
| | | | | 80 | 100 | 80 A fixed | 6 - 10 | NZMN2-4-AF80-NA | 190348 |
| | | | | 90 | 100 | 90 A fixed | 6 - 10 | - | |
| | | | | 100 | 100 | 100 A fixed | 6 - 10 | NZMN2-4-AF100-NA | 190349 |
| | | | | 110 | 100 | 110 A fixed | 6 - 10 | - | |
| | | | | 125 | 100 | 125 A fixed | 6 - 10 | NZMN2-4-AF125-NA | 190350 |
| | | | | 150 | 100 | 150 A fixed | 6 - 10 | NZMN2-4-AF150-NA | 190351 |
| | | | | 175 | 100 | 175 A fixed | 6 - 10 | - | |
| | | | | 200 | 100 | 200 A fixed | 6 - 10 | NZMN2-4-AF200-NA | 190352 |
| | | | | 225 | 100 | 225 A fixed | 6 - 10 | NZMN2-4-AF225-NA | 190353 |
| | | | | 250 | 100 | 250 A fixed | 6 - 10 | NZMN2-4-AF250-NA | 190354 |

High switching capacity

1230PIC-801 Symbolphoto



| I_{cu} | I_{cu} | I_{cu} | I_{cu} | $I_n = I_u$ | Neutral conductor | Overload releases | Short-circuit releases | Fixed mounting | Article no. |
|----------|----------|----------|----------|-------------|-------------------|-------------------|------------------------|------------------|-------------|
| 150 | 150 | - | - | 60 | 100 | 60 A fixed | 6 - 10 | - | |
| | | | | 70 | 100 | 70 A fixed | 6 - 10 | - | |
| | | | | 80 | 100 | 80 A fixed | 6 - 10 | - | |
| | | | | 90 | 100 | 90 A fixed | 6 - 10 | - | |
| | | | | 100 | 100 | 100 A fixed | 6 - 10 | - | |
| | | | | 110 | 100 | 110 A fixed | 6 - 10 | - | |
| | | | | 125 | 100 | 125 A fixed | 6 - 10 | - | |
| | | | | 150 | 100 | 150 A fixed | 6 - 10 | - | |
| | | | | 175 | 100 | 175 A fixed | 6 - 10 | - | |
| | | | | 200 | 100 | 200 A fixed | 6 - 10 | - | |
| | | | | 225 | 100 | 225 A fixed | 6 - 10 | - | |
| | | | | 250 | 100 | 250 A fixed | 6 - 10 | NZMH2-4-AF250-NA | 172967 |

Compact circuit breakers, switch disconnectors

2.5

Circuit breakers UL/CSA, IEC, thermomagnetic releases, 4 pole
NZM...-4-AF...NA

Fixed mounting with box terminals

Part no. Article no. Std. pack Information relevant for export to North America



For further terminal types
see accessories

| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|---------------------|-------------|-----------|---|
| NZMB2-4-AF60-BT-NA | 153380 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMB2-4-AF70-BT-NA | 153381 | | UL File No. E31593 |
| NZMB2-4-AF80-BT-NA | 153382 | | UL Category Control No. DIVQ |
| NZMB2-4-AF90-BT-NA | 153383 | | CSA File No. - |
| NZMB2-4-AF100-BT-NA | 153384 | | CSA Class No. - |
| NZMB2-4-AF110-BT-NA | 153385 | | North America Certification UL listed |
| NZMB2-4-AF125-BT-NA | 113011 | | Specially designed for NA Yes |
| NZMB2-4-AF150-BT-NA | 113012 | | Suitable for Feeder circuits, branch circuits |
| NZMB2-4-AF175-BT-NA | 113013 | | Current Limiting Circuit breaker Yes |
| NZMB2-4-AF200-BT-NA | 113014 | | Max. Voltage Rating 480 V |
| NZMB2-4-AF225-BT-NA | 113015 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMB2-4-AF250-BT-NA | 113016 | | |

| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|---------------------|-------------|-----------|---|
| NZMN2-4-AF60-BT-NA | 153386 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMN2-4-AF70-BT-NA | 153387 | | UL File No. E31593 |
| NZMN2-4-AF80-BT-NA | 153388 | | UL Category Control No. DIVQ |
| NZMN2-4-AF90-BT-NA | 153389 | | CSA File No. - |
| NZMN2-4-AF100-BT-NA | 153390 | | CSA Class No. - |
| NZMN2-4-AF110-BT-NA | 153391 | | North America Certification UL listed |
| NZMN2-4-AF125-BT-NA | 113005 | | Specially designed for NA Yes |
| NZMN2-4-AF150-BT-NA | 113006 | | Suitable for Feeder circuits, branch circuits |
| NZMN2-4-AF175-BT-NA | 113007 | | Current Limiting Circuit breaker Yes |
| NZMN2-4-AF200-BT-NA | 113008 | | Max. Voltage Rating 480 V |
| NZMN2-4-AF225-BT-NA | 113009 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMN2-4-AF250-BT-NA | 113010 | | |

| Part no. | Article no. | Std. pack | Information relevant for export to North America |
|---------------------|-------------|-----------|---|
| NZMH2-4-AF60-BT-NA | 153392 | 1 Off | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
| NZMH2-4-AF70-BT-NA | 153393 | | UL File No. E31593 |
| NZMH2-4-AF80-BT-NA | 153394 | | UL Category Control No. DIVQ |
| NZMH2-4-AF90-BT-NA | 153395 | | CSA File No. - |
| NZMH2-4-AF100-BT-NA | 153396 | | CSA Class No. - |
| NZMH2-4-AF110-BT-NA | 153397 | | North America Certification UL listed |
| NZMH2-4-AF125-BT-NA | 113017 | | Specially designed for NA Yes |
| NZMH2-4-AF150-BT-NA | 113018 | | Suitable for Feeder circuits, branch circuits |
| NZMH2-4-AF175-BT-NA | 113019 | | Current Limiting Circuit breaker Yes |
| NZMH2-4-AF200-BT-NA | 113020 | | Max. Voltage Rating 480 V |
| NZMH2-4-AF225-BT-NA | 113021 | | Degree of Protection IEC: IP20; UL/CSA Type: - |
| NZMH2-4-AF250-BT-NA | 113022 | | |

2.6

Compact circuit breakers, switch disconnectors

Molded case switches for North America NS...NA

| Switching capacity | | | | Rated current = Rated uninterrupted current | Setting range Short-circuit release | Fixed mounting Part no. | Article no. |
|-----------------------------|------------------------|-----------------------------|------------------------|--|--|----------------------------|-------------|
| SCCR 480Y/277 V 60 Hz | SCCR 480 V 60 Hz | SCCR 600Y/347 V 60 Hz | SCCR 600 V 60 Hz | | | | |
| I_{cu} kA | I_{cu} kA | I_{cu} kA | I_{cu} kA | $I_n = I_u$ A | I_j A | | |

Molded case switches for North America

With permanently set short-circuit release (self-protection)

Can be remotely operated with shunt release XU/XA, remote operator XR,

Can be equipped with trip-indicating auxiliary contact M22-K...

3 switch positions I, +, 0

1230PIC-752 Symbolphoto



| | | | | | | | |
|----|---|---|---|-----|--------------|------------|--------|
| 35 | - | - | - | 63 | 1250 A fixed | NS1-63-NA | 102681 |
| | | | | 100 | 1250 A fixed | NS1-100-NA | 102682 |
| | | | | 125 | 1250 A fixed | NS1-125-NA | 102683 |

1230PIC-796 Symbolphoto



| | | | | | | | |
|-----|-----|----|---|-----|--------------|------------|--------|
| 100 | 100 | 50 | - | 160 | 2500 A fixed | NS2-160-NA | 102684 |
| | | | | 200 | 2500 A fixed | NS2-200-NA | 102685 |
| | | | | 250 | 2500 A fixed | NS2-250-NA | 102686 |

1230PIC-671 Symbolphoto



| | | | | | | | |
|-----|-----|----|----|-----|--------------|------------|--------|
| 100 | 100 | 50 | 50 | 400 | 6600 A fixed | NS3-400-NA | 102687 |
| | | | | 600 | 6600 A fixed | NS3-600-NA | 102688 |

1230PIC-674 Symbolphoto



| | | | | | | | |
|----|----|----|----|------|---------------|-------------|--------|
| 65 | 65 | 42 | 42 | 800 | 25000 A fixed | NS4-800-NA | 102689 |
| | | | | 1000 | 25000 A fixed | NS4-1000-NA | 102690 |
| | | | | 1200 | 25000 A fixed | NS4-1200-NA | 102691 |

Fixed mounting with box terminals

Part no. Article no. Std. pack Information relevant for export to North America



For further terminal types
see accessories

| Part no. | Article no. | Std. pack | Information relevant for export to North America | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|-----------|--|-------------------|---|-------------|---------|-------------------------|------|--------------|--------|---------------|---------|-----------------------------|--------------------------|---------------------------|-----|--------------|----------------------------------|----------------------------------|----|---------------------|------------|----------------------|---------------------------|
| Terminals as accessory | | 1 Off | <table border="0"> <tr> <td>Product Standards</td> <td>UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking</td> </tr> <tr> <td>UL File No.</td> <td>E148671</td> </tr> <tr> <td>UL Category Control No.</td> <td>WJAZ</td> </tr> <tr> <td>CSA File No.</td> <td>022086</td> </tr> <tr> <td>CSA Class No.</td> <td>4652-06</td> </tr> <tr> <td>North America Certification</td> <td>UL listed, CSA certified</td> </tr> <tr> <td>Specially designed for NA</td> <td>Yes</td> </tr> <tr> <td>Suitable for</td> <td>Feeder circuits, branch circuits</td> </tr> <tr> <td>Current Limiting Circuit breaker</td> <td>No</td> </tr> <tr> <td>Max. Voltage Rating</td> <td>480Y/277 V</td> </tr> <tr> <td>Degree of Protection</td> <td>IEC: IP20; UL/CSA Type: -</td> </tr> </table> | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking | UL File No. | E148671 | UL Category Control No. | WJAZ | CSA File No. | 022086 | CSA Class No. | 4652-06 | North America Certification | UL listed, CSA certified | Specially designed for NA | Yes | Suitable for | Feeder circuits, branch circuits | Current Limiting Circuit breaker | No | Max. Voltage Rating | 480Y/277 V | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking | | | | | | | | | | | | | | | | | | | | | | | | |
| UL File No. | E148671 | | | | | | | | | | | | | | | | | | | | | | | | |
| UL Category Control No. | WJAZ | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA File No. | 022086 | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA Class No. | 4652-06 | | | | | | | | | | | | | | | | | | | | | | | | |
| North America Certification | UL listed, CSA certified | | | | | | | | | | | | | | | | | | | | | | | | |
| Specially designed for NA | Yes | | | | | | | | | | | | | | | | | | | | | | | | |
| Suitable for | Feeder circuits, branch circuits | | | | | | | | | | | | | | | | | | | | | | | | |
| Current Limiting Circuit breaker | No | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Voltage Rating | 480Y/277 V | | | | | | | | | | | | | | | | | | | | | | | | |
| Degree of Protection | IEC: IP20; UL/CSA Type: - | | | | | | | | | | | | | | | | | | | | | | | | |
| NS2-160-BT-NA | 107578 | | | | | | | | | | | | | | | | | | | | | | | | |
| NS2-200-BT-NA | 107579 | | | | | | | | | | | | | | | | | | | | | | | | |
| NS2-250-BT-NA | 107610 | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminals as accessory | | | <table border="0"> <tr> <td>Product Standards</td> <td>UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking</td> </tr> <tr> <td>UL File No.</td> <td>E148671</td> </tr> <tr> <td>UL Category Control No.</td> <td>WJAZ</td> </tr> <tr> <td>CSA File No.</td> <td>022086</td> </tr> <tr> <td>CSA Class No.</td> <td>4652-06</td> </tr> <tr> <td>North America Certification</td> <td>UL listed, CSA certified</td> </tr> <tr> <td>Specially designed for NA</td> <td>Yes</td> </tr> <tr> <td>Suitable for</td> <td>Feeder circuits, branch circuits</td> </tr> <tr> <td>Current Limiting Circuit breaker</td> <td>No</td> </tr> <tr> <td>Max. Voltage Rating</td> <td>600Y/347 V</td> </tr> <tr> <td>Degree of Protection</td> <td>IEC: IP20; UL/CSA Type: -</td> </tr> </table> | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking | UL File No. | E148671 | UL Category Control No. | WJAZ | CSA File No. | 022086 | CSA Class No. | 4652-06 | North America Certification | UL listed, CSA certified | Specially designed for NA | Yes | Suitable for | Feeder circuits, branch circuits | Current Limiting Circuit breaker | No | Max. Voltage Rating | 600Y/347 V | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking | | | | | | | | | | | | | | | | | | | | | | | | |
| UL File No. | E148671 | | | | | | | | | | | | | | | | | | | | | | | | |
| UL Category Control No. | WJAZ | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA File No. | 022086 | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA Class No. | 4652-06 | | | | | | | | | | | | | | | | | | | | | | | | |
| North America Certification | UL listed, CSA certified | | | | | | | | | | | | | | | | | | | | | | | | |
| Specially designed for NA | Yes | | | | | | | | | | | | | | | | | | | | | | | | |
| Suitable for | Feeder circuits, branch circuits | | | | | | | | | | | | | | | | | | | | | | | | |
| Current Limiting Circuit breaker | No | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Voltage Rating | 600Y/347 V | | | | | | | | | | | | | | | | | | | | | | | | |
| Degree of Protection | IEC: IP20; UL/CSA Type: - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminals as accessory | | | <table border="0"> <tr> <td>Product Standards</td> <td>UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking</td> </tr> <tr> <td>UL File No.</td> <td>E148671</td> </tr> <tr> <td>UL Category Control No.</td> <td>WJAZ</td> </tr> <tr> <td>CSA File No.</td> <td>022086</td> </tr> <tr> <td>CSA Class No.</td> <td>4652-06</td> </tr> <tr> <td>North America Certification</td> <td>UL listed, CSA certified</td> </tr> <tr> <td>Specially designed for NA</td> <td>Yes</td> </tr> <tr> <td>Suitable for</td> <td>Feeder circuits, branch circuits</td> </tr> <tr> <td>Current Limiting Circuit breaker</td> <td>No</td> </tr> <tr> <td>Max. Voltage Rating</td> <td>600 V</td> </tr> <tr> <td>Degree of Protection</td> <td>IEC: IP20; UL/CSA Type: -</td> </tr> </table> | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking | UL File No. | E148671 | UL Category Control No. | WJAZ | CSA File No. | 022086 | CSA Class No. | 4652-06 | North America Certification | UL listed, CSA certified | Specially designed for NA | Yes | Suitable for | Feeder circuits, branch circuits | Current Limiting Circuit breaker | No | Max. Voltage Rating | 600 V | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking | | | | | | | | | | | | | | | | | | | | | | | | |
| UL File No. | E148671 | | | | | | | | | | | | | | | | | | | | | | | | |
| UL Category Control No. | WJAZ | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA File No. | 022086 | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA Class No. | 4652-06 | | | | | | | | | | | | | | | | | | | | | | | | |
| North America Certification | UL listed, CSA certified | | | | | | | | | | | | | | | | | | | | | | | | |
| Specially designed for NA | Yes | | | | | | | | | | | | | | | | | | | | | | | | |
| Suitable for | Feeder circuits, branch circuits | | | | | | | | | | | | | | | | | | | | | | | | |
| Current Limiting Circuit breaker | No | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Voltage Rating | 600 V | | | | | | | | | | | | | | | | | | | | | | | | |
| Degree of Protection | IEC: IP20; UL/CSA Type: - | | | | | | | | | | | | | | | | | | | | | | | | |

3.1

Compact circuit breakers, switch disconnectors

Circuit breakers IEC for 1000 V AC, 3 pole
NZM... Releases

| Switching capacity 1000 V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting Part no. | Article no. | Std. pack |
|--|--|-------------------|---------------------------------------|----------------------------|-------------|-----------|
| | | Overload releases | Short-circuit releases Non-delayed | | | |
| I_{cu} kA | $I_n = I_u$ A | I_r A | $I_{sd} = I_r \times \dots$ | | | |
| | | | | | | |

System and cable protection

Thermomagnetic releases

1230PIC-802 Symbolphoto



| | | | | | | |
|----|-----|-----------|-------------|---------------|--------|-------|
| 10 | 20 | 15 - 20 | 350 A fixed | NZMH2-A20-S1 | 290355 | 1 Off |
| | 25 | 20 - 25 | 350 A fixed | NZMH2-A25-S1 | 290356 | |
| | 32 | 25 - 32 | 350 A fixed | NZMH2-A32-S1 | 290357 | |
| | 40 | 32 - 40 | 8 - 10 | NZMH2-A40-S1 | 290358 | |
| | 50 | 40 - 50 | 6 - 10 | NZMH2-A50-S1 | 290359 | |
| | 63 | 50 - 63 | 6 - 10 | NZMH2-A63-S1 | 290360 | |
| | 80 | 63 - 80 | 6 - 10 | NZMH2-A80-S1 | 290361 | |
| | 100 | 80 - 100 | 6 - 10 | NZMH2-A100-S1 | 290362 | |
| | 125 | 100 - 125 | 6 - 10 | NZMH2-A125-S1 | 290363 | |
| | 160 | 125 - 160 | 6 - 10 | NZMH2-A160-S1 | 290364 | |
| | 200 | 160 - 200 | 6 - 10 | NZMH2-A200-S1 | 290365 | |
| | 250 | 200 - 250 | 6 - 10 | NZMH2-A250-S1 | 290366 | |
| | 300 | 120 - 300 | 5 - 8.3 | NZMH2-A300-S1 | 107577 | |

Compact circuit breakers, switch disconnectors

Switch disconnectors UL/CSA, IEC for 1000 V DC, 1/2 pole
N...DC

3.2

| Rated current = Rated uninterrupted current | Rated operating voltage | Rated short-time withstand current | Short-circuit protection max. fuse gR characteristic | Fixed mounting Part no. | Article no. | Std. pack |
|--|----------------------------|---------------------------------------|--|-----------------------------------|-------------|-----------|
| I_n | U_e | I_{ow} (N2/N3: t=1s, N4: t=0.1s) | | | | |
| A | V | kA | A | | | |

Switch disconnectors for 1000 V DC

1230PIC-797 Symbolphoto



| | | | | | | |
|-----|------|-----|-----|----------------|--------|-------|
| 160 | 1000 | 3.6 | 200 | N2-4-160-S1-DC | 127732 | 1 Off |
| 200 | 1000 | 3.6 | 200 | N2-4-200-S1-DC | 127733 | |
| 250 | 1000 | 3.6 | 200 | N2-4-250-S1-DC | 154940 | |

1230PIC-672 Symbolphoto



| | | | | | | |
|-----|------|-----|-------|----------------|--------|-------|
| 320 | 1000 | 6.6 | 2x250 | N3-4-320-S1-DC | 127734 | 1 Off |
| 400 | 1000 | 6.6 | 2x250 | N3-4-400-S1-DC | 142267 | |
| 500 | 1000 | 6.6 | 2x250 | N3-4-500-S1-DC | 142268 | |
| 550 | 1000 | 6.6 | 2x250 | N3-4-550-S1-DC | 168567 | |

1230PIC-673 Symbolphoto



| | | | | | | |
|------|------|----|---|-----------------|--------|-------|
| 800 | 1000 | 34 | - | N4-4-800-S1-DC | 119890 | 1 Off |
| 1000 | 1000 | 34 | - | N4-4-1000-S1-DC | 119891 | |
| 1250 | 1000 | 34 | - | N4-4-1250-S1-DC | 119886 | |
| 1400 | 1000 | 34 | - | N4-4-1400-S1-DC | 119887 | |
| 1600 | 1000 | 34 | - | N4-4-1600-S1-DC | 152552 | |

1230PIC-673 Symbolphoto



| | | | | | | |
|------|------|----|---|--------------------|--------|-------|
| 800 | 1000 | 34 | - | N4-4-800-S1-PV-NA | 179325 | 1 Off |
| 1000 | 1000 | 34 | - | N4-4-1000-S1-PV-NA | 179326 | |
| 1100 | 1000 | 34 | - | N4-4-1100-S1-PV-NA | 179591 | |
| 1200 | 1000 | 34 | - | N4-4-1200-S1-PV-NA | 179327 | |

3.3

Compact circuit breakers, switch disconnectors

Switch disconnectors UL/CSA, IEC for 1500 V DC, 1/2 pole
N...DC

| | | | | Fixed mounting | | | |
|-----------------------------|-------------------------|------------------------------------|--|-----------------------------|----------|-------------|-----------|
| Rated current = | | | | Short-circuit protection | Part no. | Article no. | Std. pack |
| Rated uninterrupted current | Rated operating voltage | Rated short-time withstand current | | max. fuse gR characteristic | | | |
| I_n | U_e | I_{ow} (N2/N3: t=1s, N4: t=0.1s) | | | | | |
| A | V | kA | | A | | | |

Switch disconnectors for 1500 V DC

1230PIC-797 Symbolphoto



| | | | | | | |
|-----|------|-----|---|-----------------|--------|-------|
| 160 | 1500 | 3.6 | - | N2-4-160-S15-DC | 167688 | 1 Off |
| 200 | 1500 | 3.6 | - | N2-4-200-S15-DC | 167689 | |
| 250 | 1500 | 3.6 | - | N2-4-250-S15-DC | 167690 | |

1230PIC-672 Symbolphoto



| | | | | | | |
|-----|------|-----|---|-----------------|--------|-------|
| 320 | 1500 | 6.6 | - | N3-4-320-S15-DC | 166407 | 1 Off |
| 400 | 1500 | 6.6 | - | N3-4-400-S15-DC | 166408 | |
| 500 | 1500 | 6.6 | - | N3-4-500-S15-DC | 166409 | |
| 550 | 1500 | 6.6 | - | N3-4-550-S15-DC | 168568 | |

1230PIC-673 Symbolphoto



| | | | | | | |
|------|------|----|---|------------------|--------|-------|
| 800 | 1500 | 34 | - | N4-4-800-S15-DC | 166413 | 1 Off |
| 1000 | 1500 | 34 | - | N4-4-1000-S15-DC | 166414 | |
| 1250 | 1500 | 34 | - | N4-4-1250-S15-DC | 166415 | |
| 1400 | 1500 | 34 | - | N4-4-1400-S15-DC | 166416 | |
| 1600 | 1500 | 34 | - | N4-4-1600-S15-DC | 166417 | |

1230PIC-673 Symbolphoto



| | | | | | | |
|------|------|----|---|---------------------|--------|-------|
| 800 | 1500 | 34 | - | N4-4-800-S15-PV-NA | 179328 | 1 Off |
| 1000 | 1500 | 34 | - | N4-4-1000-S15-PV-NA | 179329 | |
| 1100 | 1500 | 34 | - | N4-4-1100-S15-PV-NA | 179592 | |
| 1200 | 1500 | 34 | - | N4-4-1200-S15-PV-NA | 179330 | |



3.4

Compact circuit breakers, switch disconnectors

Photovoltaic - Switch disconnectors up to 1500 V
Bridge kits

| Rated current = | Protection class | For use with | Notes | Part no. | Article no. | Std. pack |
|------------------------------|------------------|--------------|-------|----------|-------------|-----------|
| 2 pole (+ and -) on one side | | | | | | |
| I_n A | | | | | | |

Bridge kits NZM...-XKV...2P...

Model contains parts for upper or lower row of switchgear side for 4 pole switches N4-4...-S1(S15)... that are used as 2 pole switches for DC

The links each connect two contacts in series

Incoming unit and outgoer at bottom according to the switching diagrams

N4-4... ≥1250A at 65°C alternate connection at bottom through module plates NZM4-4-XKM2S-1600

For IEC application: For N4-4...-S15-PV-NA, feed only from below in connection with NZM4-4-XKV(I)2P(-K).

1230PIC-690, 1230PIC-1015 Symbolphoto



Incl. cover

| | | | | | | |
|----------------------------|------|---|-----------------------|----------------|--------|-------|
| 225 (40°C, 170 (65°C) | IP2X | N2-4...-S1(-S15)-DC | | NZM2-4-XKV2P | 131730 | 1 Off |
| 250 (40°C, 190 (65°C) | IP2X | N2-4...-S1(-S15)-DC | Incl. cooling unit | NZM2-4-XKV2P-K | 168585 | |
| 517 (40°C, 435 (65°C) | IP2X | N3-4...-S1(-S15)-DC | | NZM3-4-XKV2P | 131731 | |
| 550 (40°C, 468 (65°C) | IP2X | N3-4...-S1(-S15)-DC | Incl. cooling unit | NZM3-4-XKV2P-K | 142271 | |
| 1400 (40°C) 1260 (65°C) | IP2X | N4-4...-S1(-S15)-DC N4-4...-S1(-S15)-PV-NA | | NZM4-4-XKV2P | 119888 | |

1230PIC-1016, 1230PIC-1017 Symbolphoto



Incl. insulation plates and phase separator

| | | | | | | |
|------------------------------|------|--|-----------------------|-----------------|--------|-------|
| 238 (40°C) 180 (65°C) | IP00 | N2-4...-S1(-S15)-DC | | NZM2-4-XKV12P | 168586 | 1 Off |
| 250 (40°C) 213 (65°C) | IP00 | N2-4...-S1(-S15)-DC | Incl. cooling unit | NZM2-4-XKV12P-K | 168587 | |
| 400 (40°C, 338 (65°C) | IP2X | N3-4...-S1(-S15)-DC | | NZM3-4-XKV2POU | 168589 | |
| 550 (40°C) 501 (65°C) | IP00 | N3-4...-S1(-S15)-DC | Incl. cooling unit | NZM3-4-XKV12P-K | 142270 | |
| 1400A (40°C) 1260A (65°C) | IP00 | N4-4-800(1000)(1250)(1400)-S1(S15)-DC N4-4...-S1(S15)-PV-NA | | NZM4-4-XKV12P | 180020 | |
| 1600 (40°C) 1500 (65°C) | IP00 | N4-4...-S1(-S15)-DC N4-4...-S1(-S15)-PV-NA | Incl. cooling unit | NZM4-4-XKV2P-K | 152553 | |

| Rated current = | Protecton class | For use with | Notes | Part no. | Article no. | Std. pack |
|----------------------------------|-----------------|--------------|-------|----------|-------------|-----------|
| 2 pole (+ and -) Double-sided | | | | | | |
| I_n A | | | | | | |

Bridge kits NZM...-XKV...2POU...

Model contains parts for upper and lower row of switchgear side for 4 pole switches N...-S1(S15)-DC that are used as 2 pole switches for DC

The links each connect three contacts in series

Incoming unit and outgoer at bottom or top, according to the switching diagrams

1230PIC-1138, 1230PIC-1311 Symbolphoto



| Incl. cover | | | | | | |
|--------------------------|------|----------------------|--------------------|------------------|--------|-------|
| 200 (40°C) 160 (65°C) | IP2X | N2-4-...-S1(-S15)-DC | | NZM2-4-XKV2POU | 144070 | 1 Off |
| 225 (40°C) 170 (65°C) | IP2X | N2-4-...-S1(-S15)-DC | Incl. cooling unit | NZM2-4-XKV2POU-K | 168588 | |
| 400 (40°C) 388 (65°C) | IP2X | N3-4-...S1(S15)-DC | | NZM3-4-XKV2POU | 168589 | |
| 517 (40°C) 435 (65°C) | IP2X | N3-4-...-S1(-S15)-DC | Incl. cooling unit | NZM3-4-XKV2POU-K | 168590 | |

1230PIC-1144, 1230PIC-1146 Symbolphoto



| Incl. insulation plates and phase separator | | | | | | |
|---|------|----------------------|--------------------|-------------------|--------|-------|
| 213 (40°C) 160 (65°C) | IP00 | N2-4-...-S1(-S15)-DC | | NZM2-4-XKVI2POU | 170118 | 1 Off |
| 238 (40°C) 180 (65°C) | IP00 | N2-4-...-S1(-S15)-DC | Incl. cooling unit | NZM2-4-XKVI2POU-K | 170119 | |
| 501 (40°C) 418 (65°C) | IP00 | N3-4-...-S1(-S15)-DC | | NZM3-4-XKVI2POU | 170120 | |
| 534 (40°C) 451 (65°C) | IP00 | N3-4-...-S1(-S15)-DC | Incl. cooling unit | NZM3-4-XKVI2POU-K | 170121 | |

3.4

Compact circuit breakers, switch disconnectors

Photovoltaic - Switch disconnectors up to 1500 V
Bridge kits

| Rated current = | Protection class | For use with | Notex | Part no. | Article no. | Std. pack |
|-----------------------------|------------------|--------------|-------|----------|-------------|-----------|
| 1 pole (+ or -) on one side | | | | | | |
| I_n A | | | | | | |

Bridge kits NZM...-XKV...1P...

Model contains parts for upper and lower row of switchgear side for 4 pole switches N4-4...-S1(S15)...

that are used as 1 pole switches for DC

The links each connect four contact in series (plus or minus)

Incoming unit and outgoing at bottom or top, according to the switching diagrams

1230PIC-1313, 1230PIC-1310 Symbolphoto



| Incl. cover | | | | | | |
|----------------------------|------|---|--------------------|----------------|--------|-------|
| 200 (40°C) 160 (65°C) | IP2X | N2-4-160(200)-S1 (-S15)-DC | | NZM2-4-XKV1P | 168591 | 1 Off |
| 225 (40°C) 170 (65°C) | IP2X | N2-4-...-S1(-S15)-DC | Incl. cooling unit | NZM2-4-XKV1P-K | 168592 | |
| 400 (40°C) 338 (65°C) | IP2X | N3-4-320(400)-S1(-S15)-DC | | NZM3-4-XKV1P | 168593 | |
| 517 (40°C) 435 (65°C) | IP2X | N3-4-400(500)-S1(-S15)-DC | Incl. cooling unit | NZM3-4-XKV1P-K | 168594 | |
| 1274 (40°C) 1138 (65°C) | IP2X | N4-4-...-S1(-S15)-DC N4-4-800(1000)(1100)-S1(-S15)-PV-NA | | NZM4-4-XKV1P | 119889 | |

1230PIC-1145, 1230PIC-1315 Symbolphoto



| Incl. insulation plates | | | | | | |
|----------------------------|------|---|--------------------|----------------|--------|-------|
| 213 (40°C) 160 (65°C) | IP00 | N2-4-...-S1(-S15)-DC | | NZM2-4-XKV1P | 168595 | 1 Off |
| 238 (40°C) 180 (65°C) | IP00 | N2-4-200(250)-S1(-S15)-DC | Incl. cooling unit | NZM2-4-XKV1P-K | 168596 | |
| 501 (40°C) 418 (65°C) | IP00 | N3-4-...-S1(S15)-DC | | NZM3-4-XKV1P | 168597 | |
| 534 (40°C) 451 (65°C) | IP00 | N3-4-...-S1(S15)-DC | Incl. cooling unit | NZM3-4-XKV1P-K | 168598 | |
| 1260 (40°C) 1138 (65°C) | IP00 | N4-4-(800)(1000)(1250)(1400)-S1(-S15)-DC N4-4-...-S1(-S15)-PV-NA | | NZM4-4-XKV1P | 180019 | |
| 1552 (40°C) 1448 (65°C) | IP00 | N4-4-...-S1(-S15)-DC N4-4-...-S1(-S15)-PV-NA | Incl. cooling unit | NZM4-4-XKV1P-K | 179331 | |

Compact circuit breakers, switch disconnectors

3.5

Circuit breakers EC for 500/750 V DC, 1/2 pole
NZM... -A Releases

| Switching capacity 1000 V 50/60 Hz | Rated current = Rated uninterrupted current | Setting range | | Fixed mounting | Article no. | Std. pack |
|--|--|-------------------|---------------------------------------|----------------|-------------|-----------|
| | | Overload releases | Short-circuit releases Non-delayed | Part no. | | |
| I_{cu} kA | $I_n = I_u$ A | I_r A | $I_{sd} = I_n \dots$ | | | |
| | | | | | | |

System and cable protection

Thermomagnetic -A Releases

1230PIC-703 Symbolphoto



| | | | | | | |
|----|-----|-----------|-----------------|-------------------|--------|-------|
| 30 | 400 | 320 - 400 | 2150 A DC fixed | NZMN3-A400-S07-DC | 189599 | 1 Off |
|----|-----|-----------|-----------------|-------------------|--------|-------|

1230PIC-702 Symbolphoto



| | | | | | | |
|----|-----|-----------|-----------------|-----------------------|--------|-------|
| 30 | 400 | 320 - 400 | 2150 A DC fixed | NZMN3-A400-S07-DC-PIT | 189600 | 1 Off |
|----|-----|-----------|-----------------|-----------------------|--------|-------|

4.1

Compact circuit breakers, switch disconnectors

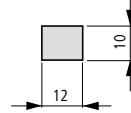
Terminals NZM1

| Max. cable connection area | Number of poles | For use with | Terminal capacity | | Terminal capacity | | |
|----------------------------|-----------------|--------------|---------------------|--------------------------------------|-------------------|---|---------------------------------|
| | | | Cable Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |

Box terminal

Standard equipment

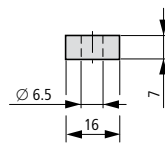
1230PIC-721 Symbolphoto



| | | | | | | |
|--------|---------------------|--------------|---------------------------------|--------------|---------------|---|
| 3 pole | NZM1, PN1, N(S)1 | Copper cable | 1 x 10 - 70 2 x 6 - 25 1) | 1 x 12 - 2/0 | ≥ 2 x 9 x 0.8 | - |
| 4 pole | NZM1-4, PN1-4, N1-4 | Copper cable | 1 x 10 - 70 2 x 6 - 25 1) | 1 x 12 - 2/0 | ≥ 2 x 9 x 0.8 | - |

Screw terminals

sg08415 Symbolphoto



| | | | | | | |
|--------|---------------------|----------------------|----------------------------------|--------------|---|----------|
| 1 pole | NZM1-1 | Copper cable lugs | 1 x 10 - 70 2 x 6 - 25 | 1 x 12 - 2/0 | - | ≥ 12 x 5 |
| | | Aluminium cable lugs | 1 x 10 - 35 2 x 10 - 35 1) | | | |
| 3 pole | NZM1, PN1, N(S)1 | Copper cable lugs | 1 x 10 - 70 2 x 6 - 25 | 1 x 12 - 2/0 | - | ≥ 12 x 5 |
| | | Aluminium cable lugs | 1 x 10 - 35 2 x 10 - 35 1) | | | |
| 4 pole | NZM1-4, PN1-4, N1-4 | Copper cable lugs | 1 x 10 - 70 2 x 6 - 25 | 1 x 12 - 2/0 | - | ≥ 12 x 5 |
| | | Aluminium cable lugs | 1 x 10 - 35 2 x 10 - 35 1) | | | |

1230PIC-677 Symbolphoto



Notes: ¹⁾ Up to 95 mm² can be connected depending on make of cable

Part no. Article no. Std. pack Notes Information relevant for export to North America

Article no.
when ordered separately









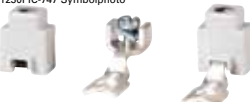


| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|------------|-------------|-----------|---|--|
| NZM1-XKC | 260015 | 1 set | Standard connection with all NZM1, PN1 and N(S)1 switches. Conversion kit for circuit breaker with screw terminal. Contains parts for a 3 or 4 pole switch side. Fitted within the switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| NZM1-4-XKC | 267075 | 1 set | | - |
| NZM1-1-XKS | 152620 | 1 set | Contains parts for a terminal located at top or bottom for 1 pole circuit breaker. Flush mounting outside the switch housing. Cover NZM1(-4)-XKSA must be fitted (included as standard). | - |
| NZM1-XKS | 260019 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Flush mounting outside the switch housing. Cover NZM1(-4)-XKSA must be fitted (included as standard). | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| NZM1-4-XKS | 266725 | 1 set | | - |

4.1

Compact circuit breakers, switch disconnectors

Terminals NZM1

| | Max. cable connection area | Number of poles | For use with | Terminal capacity | | Terminal capacity | | |
|---|---|-----------------|------------------------------------|---|---|----------------------------|--|------------------------------------|
| | | | | Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| Tunnel terminal | | | | | | | | |
| sg08115 Symbolphoto  |  | 3 pole | NZM1, PN1, N(S)1 | Copper cable ☉▽ 6 x 2.5 - 16 Aluminium cable ¹⁾ ☉▽ | 6 x 14 - 6 | - | - | - |
| 1230PIC-683 Symbolphoto  | | | NZM1, PN1, N(S)1 | Copper cable ☉▽ 1 x 16 - 95 Aluminium cable ¹⁾ ☉▽ | 1 x 6 - 3/0 | - | - | - |
| sg08015 Symbolphoto  | | 4 pole | NZM1-4, PN1-4, N1-4 | Copper cable ☉▽ 6 x 2.5 - 16 Aluminium cable ¹⁾ ☉▽ | 6 x 14 - 6 | - | - | - |
| 1230PIC-676 Symbolphoto  | | | NZM1-4, PN1-4, N1-4 | Copper cable ☉▽ 1 x 16 - 95 Aluminium cable ¹⁾ ☉▽ | 1 x 6 - 3/0 | - | - | - |
| Rear terminal bolts Not UL/CSA approved | | | | | | | | |
| 1230PIC-1428 Symbolphoto  | - | 3 pole | NZM1, PN1, N1 | Copper cable lugs Aluminium cable lugs | - 1 x 10 - 70 2 x 6 - 25 | - | - | min. 12 x 5 max. 16 x 5 |
| 1230PIC-898 Symbolphoto  | - | 4 pole | NZM1-4, PN1-4, N1-4 | Copper cable lugs Aluminium cable lugs | - 1 x 10 - 70 2 x 6 - 25 1 x 10 - 35 2 x 10 - 35 ¹⁾ | - | - | min. 12 x 5 max. 16 x 5 |
| Control cable terminals | | | | | | | | |
| 1230PIC-729 Symbolphoto  | - | 3 and 4 pole | NZM1(-4), PN1(-4), N(S)1(-4) | Screw terminals | 1 x 0.75 - 2.5 2 x 0.75 - 1.5 | 1 x 18 - 14 2 x 18 - 16 | - | - |
| 1230PIC-747 Symbolphoto  | - | 3 and 4 pole | NZM1(-4), PN1(-4), N(S)1(-4) | Screw terminals | 1 x 0.75 - 2.5 2 x 0.75 - 1.5 | 1 x 18 - 14 2 x 18 - 16 | - | - |

Notes: ¹⁾ Up to 95 mm² can be connected depending on make of cable

Part no. Article no. Std. pack Notes Information relevant for export to North America

Article no.
when ordered separately










| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|-------------|-------------|-----------|--|---|
| NZM1-XKAM | 144112 | 1 set | <p>Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. With control circuit terminal for 1 x 0.75 - 2.5 mm² (18 - 14 AWG) or 2 x 0.75 - 1.5 mm² (18 - 14 AWG) copper conductor. Flush mounting outside the switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. Cover NZM1(-4)-XKSA must be fitted (included as standard).</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information</p> |
| NZM1-XKA | 266730 | | | |
| NZM1-4-XKAM | 144114 | 1 set | | - |
| NZM1-4-XKA | 266731 | | | |
| NZM1-XKR | 266734 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. | - |
| NZM1-4-XKR | 266737 | 1 set | | - |
| NZM1-XSTS | 260150 | 1 set | <p>Contains for two terminal locations located at top or bottom for 3 or 4 pole circuit breakers. Included as standard with tunnel terminal. Degree of protection IP1X NZM-XSTK cannot be combined with NZM1(-4)-XIPK IP2X protection against contact with a finger. Height or thickness of connections: NZM-XSTK = 2 mm NZM-XSTS = 2 mm</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information</p> |
| NZM-XSTK | 266739 | | | |

4.1

Compact circuit breakers, switch disconnectors

Terminals NZM1

| | Max. cable connection area | Number of poles | For use with | Connection | Terminal capacity | AWG/kcmil |
|---|----------------------------|-----------------|---------------------------|------------|-------------------|-----------|
| Terminal covers knockout | | | | | | |
| Not UL/CSA approved. For box terminal | | | | | | |
| 1230PIC-176 Symbolphoto  | - | 3 pole | NZM1, PN1, N1 | - | - | - |
| 1230PIC-678 Symbolphoto  | - | 4 pole | NZM1-4, PN1-4, N1-4 | - | - | - |
| Cover | | | | | | |
| wa_sg02316 Symbolphoto  | - | 1 pole | NZM1-1 | - | - | - |
| 1230PIC-686 Symbolphoto  | - | 3 pole | NZM1, PN1, N1 | - | - | - |
| 1230PIC-686 Symbolphoto  | - | 4 pole | NZM1-4, PN1-4, N1-4 | - | - | - |
| Phase isolators | | | | | | |
| sg09115 Symbolphoto  | - | 3 pole | NZM1, PN1, N(S)1 | - | - | - |
| 1230PIC-1014 Symbolphoto  | - | 4 pole | NZM1-4, PN1-4, N1-4 | - | - | - |

Part no. Article no. Std. pack Notes Information relevant for export to North America

Article no.
when ordered separately





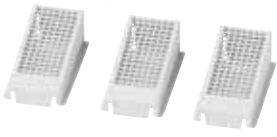



| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|----------------|-------------|-----------|---|---|
| NZM1-XKSFA | 100780 | 1 Off | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Enhanced contact protection (simplified finger protection). Cannot be combined with NZM-XSTK control circuit terminal. | UL/CSA certification not required |
| NZM1-XKSFA-GVP | 112632 | 50 Off | | |
| NZM1-4-XKSFA | 100781 | 1 Off | - | - |
| NZM1-1-XKSA | 152549 | 1 Off | Contains parts for a terminal located at top or bottom for 1 pole switches. Contact protection against direct contact where cable lugs, bars or tunnel terminals are used. When using insulated conductor material to degree of protection IP1X. | - |
| NZM1-XKSA | 260021 | 1 Off | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection against direct contact where cable lugs, bars or tunnel terminals are used. Contained in the set with tunnel terminals and screw terminals. When using insulated conductor material to degree of protection IP1X | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| NZM1-4-XKSA | 266741 | 1 Off | | - |
| NZM1-XKP | 119862 | 1 set | Contains parts, including insulating plate for mounting plate, for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Can not be combined with connection on rear NZM1/2(-4)-XKR. Insulation protection up to a rated operating voltage U_n von 415V AC when minimum distances are not maintained. | UL/CSA certification not required |
| NZM1-4-XKP | 119863 | 1 set | | |

4.1

Compact circuit breakers, switch disconnectors

Terminals NZM1

| | Max. cable connection area | Number of poles | For use with | Connection | Terminal capacity | AWG/kcmil |
|---|----------------------------|-----------------|---------------------------|------------|-------------------|-----------|
| IP2X Protection against contact with finger | | | | | | |
| For box terminal | | | | | | |
| 1230PIC-1360 Symbolphoto  | - | 1 pole | NZM1-1 | - | - | - |
| 1230PIC-1368 Symbolphoto  | - | 3 pole | NZM1, PN1, N1 | - | - | - |
| 1230PIC-675 Symbolphoto  | - | 4 pole | NZM1-4, PN1-4, N1-4 | - | - | - |
| IP2X Protection against contact with finger | | | | | | |
| For covers NZM1(-4)-XKSA or NZM1...(C)NA, N(S)1...NA | | | | | | |
| 1230PIC-1359 Symbolphoto  | - | 1 pole | NZM1-1 | - | - | - |
| 1230PIC-1367 Symbolphoto  | - | 3 pole | NZM1, PN1, N1 | - | - | - |
| 1230PIC-720 Symbolphoto  | - | 4 pole | NZM1-4, PN1-4, N1-4 | - | - | - |

Part no. Article no. Std. pack Notes Information relevant for export to North America

Article no.
when ordered separately


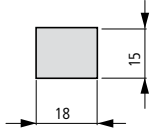


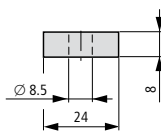





| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|-------------|-------------|-----------|--|--|
| NZM1-1-XIPK | 152551 | 1 set | Contains parts for a terminal located at top or bottom for 1 pole switches. Enhanced contact protection to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. Cannot be combined with NZM-XSTK control circuit terminal. | UL/CSA certification not required |
| NZM1-XIPK | 266744 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches Enhanced contact protection to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. Cannot be combined with NZM-XSTK control circuit terminal. | UL/CSA certification not required |
| NZM1-4-XIPK | 266745 | 1 set | | - |
| NZM1-1-XIPA | 152550 | 1 set | Contains parts for a terminal located at top or bottom for 1 pole switches. Enhanced contact protection to IP2X. | UL/CSA certification not required |
| NZM1-XIPA | 266748 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X. | UL/CSA certification not required |
| NZM1-4-XIPA | 266749 | 1 set | | - |


4.2

Compact circuit breakers, switch disconnectors

Terminals NZM2

| Max. cable connection area | Number of poles | For use with | Terminal capacity | | Terminal capacity | | |
|--|---|--------------|--------------------------------|--|-------------------|--|---------------------------------------|
| | | | Cable Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| Box terminal | | | | | | | |
| 1230PIC-725 Symbolphoto  |  | 3 pole | NZM2, PN2, N(S)2 ≤ 160 A | Copper cable 1 x 10 - 185 2 x 4 - 70 | 1 x 12 - 350 | ≥ 2 x 9 x 0.8 | - |
| | | | NZM2, PN2, N(S)2 > 160 A | Copper cable 1 x 10 - 185 2 x 4 - 70 | 1 x 12 - 350 | ≥ 2 x 9 x 0.8 | - |
| 1230PIC-721 Symbolphoto  | | 4 pole | NZM2-4, PN2-4, N2-4 ≤ 160 A | Copper cable 1 x 10 - 185 2 x 4 - 70 | 1 x 12 - 350 | ≥ 2 x 9 x 0.8 | - |
| | | | NZM2-4, PN2-4, N2-4 > 160 A | Copper cable 1 x 10 - 185 2 x 4 - 70 | 1 x 12 - 350 | ≥ 2 x 9 x 0.8 | - |
| Screw terminals | | | | | | | |
| Standard equipment | | | | | | | |
| 1230PIC-731 Symbolphoto  |  | 3 pole | NZM2, PN2, N(S)2 | Copper cable lugs 1 x 10 - 185 2 x 4 - 70 | 1 x 12 - 350 | ≥ 2 x 16 x 0.8 | ≥ 16 x 5 |
| | | | | Aluminium cable lugs 1 x 10 - 50 2 x 10 - 50 | | | |
| 1230PIC-725 Symbolphoto  | | 4 pole | NZM2-4, PN2-4, N2-4 | Copper cable lugs 1 x 10 - 185 2 x 4 - 70 | 1 x 12 - 350 | ≥ 2 x 16 x 0.8 | ≥ 16 x 5 |
| | | | | Aluminium cable lugs 1 x 10 - 50 2 x 10 - 50 | | | |








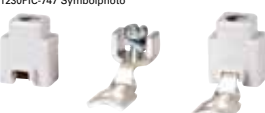
| Part no. suffix | Article no. | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|--------------------------------------|-------------|---|--|--|
| Article no. for ordering with basic device | | Article no. when ordering separately | | | |  |
| +NZM2-160-XKCO | 262218 | NZM2-160-XKC | 262240 | 1 set | Part no. suffix and part no. contain parts for a circuit breaker side at top or bottom for 3 or 4 pole switches. Conversion kit for circuit breaker with screw terminal. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| +NZM2-160-XKCU | 262223 | - | |  | | |
| +NZM2-250-XKCO | 262242 | NZM2-250-XKC | 262244 | 1 set | Fitted within the switch housing. O = for fitting at the top U = for fitting at the bottom U _e ≥ 525 V AC: Use NZM2(-4)-XKSA cover. | |
| +NZM2-250-XKCU | 262243 | - | | | | |
| +NZM2-4-160-XKCO | 266751 | NZM2-4-160-XKC | 266755 | | Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. | |
| +NZM2-4-160-XKCU | 266753 | - | | | | |
| +NZM2-4-250-XKCO | 266752 | NZM2-4-250-XKC | 266756 | | | |
| +NZM2-4-250-XKCU | 266754 | - | | | | |

| | | | | | | |
|---|--|------------|--------|---|--|--|
| - | | NZM2-XKS | 260030 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Standard connection with all NZM2, PN2 and N2 circuit breakers. Conversion kit for circuit breaker with box terminal. Use special cable lugs narrow version → 059775 Fitted within the switch housing. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| | | | |  | | |
| - | | NZM2-4-XKS | 266750 | 1 set | If a bar is used, insulation (400 mm) e.g. sleeving and a NZM2(-4)-XKSA cover are required. U _e ≥ 525 V AC: With all other connection materials, e.g. cables and strips, use cover NZM2(-4)-XKSA. | |

4.2


Compact circuit breakers, switch disconnectors

Terminals NZM2

| | Max. cable connection area | Number of poles | For use with | Terminal capacity | | | Terminal capacity | |
|---|----------------------------|------------------------------|---------------------|--|--------------------------------------|----------------------------------|---|---------------------------------|
| | | | | Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| Tunnel terminal | | | | | | | | |
| sg07815 Symbolphoto  | | 3 pole | NZM2, PN2, N(S)2 | Copper cable ☉▽ 6 x 2.5 - 35 Aluminium cable plugs ☉▽ | 6 x 14 - 2 | - | - | |
| 1230PIC-683 Symbolphoto  | | | NZM2, PN2, N(S)2 | Copper cable ☉▽ 1 x 16 - 185 Aluminium cable ☉▽ Up to 240 mm ² can be connected depending on the cable manufacturer | 1 x 6 - 350 1 x 16 - 185 | - | - | |
| sg07915 Symbolphoto  | | 4 pole | | Copper cable ☉▽ 6 x 2.5 - 35 Aluminium cable ☉▽ | 6 x 14 - 2 | - | - | |
| 1230PIC-676 Symbolphoto  | | | NZM2-4, PN2-4, N2-4 | Copper cable ☉▽ 1 x 16 - 185 Aluminium cable ☉▽ Up to 240 mm ² can be connected depending on the cable manufacturer | 1 x 6 - 350 | - | - | |
| Rear terminal bolts | | | | | | | | |
| Not UL/CSA approved When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated. | | | | | | | | |
| 1230PIC-1378 Symbolphoto  | - | 3 pole | NZM2, PN2, N(S)2 | Copper cable lugs 1 x 10 - 185 2 x 4 - 70 Aluminium cable lugs 1 x 10 - 50 2 x 10 - 50 | - | ≧ 2 x 16 x 0.8 ≧ 6 x 24 x 0.5 | ≧ 16 x 5 ≧ 20 x 5 | |
| 1230PIC-1376 Symbolphoto  | | 4 pole | NZM2-4, PN2-4, N2-4 | Copper cable lugs 1 x 10 - 185 2 x 4 - 70 Aluminium cable lugs 1 x 10 - 50 2 x 10 - 50 | - | ≧ 2 x 16 x 0.8 ≧ 6 x 24 x 0.5 | ≧ 16 x 5 ≧ 20 x 5 | |
| Control cable terminals | | | | | | | | |
| 1230PIC-729 Symbolphoto  | 3 and 4 pole | NZM2(-4), PN2(-4), N(S)2(-4) | Screw terminals | 1 x 0.75 - 2.5 2 x 0.75 - 1.5 | 1 x 18 - 14 2 x 18 - 16 | - | | |
| 1230PIC-747 Symbolphoto  | 3 and 4 pole | NZM2(-4), PN2(-4), N(S)2(-4) | Box terminal | 1 x 0.75 - 2.5 2 x 0.75 - 1.5 | 1 x 18 - 14 2 x 18 - 16 | - | | |

Part no. Article no. Std. pack Notes Information relevant for export to North America

Article no. when ordered separately 



| | | | | | |
|-----------|--------|-------|---|---|--|
| NZM2-XKAM | 144113 | 1 set |  | <p>Contains parts for a terminal located at top or bottom for 3 or 4 pole switches.</p> <p>With control circuit terminal for 1 x 0.75 - 2.5 mm² (18 - 14 AWG) or 2 x 0.75 - 1.5 mm² (18 - 16 AWG) copper conductor.</p> <p>Flush mounting outside the switch housing.</p> <p>Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules</p> <p>Cover NZM2(-4)-XKSA must be fitted (included as standard).</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking</p> <p>UL File No. E31593</p> <p>UL CCN DIHS</p> <p>CSA File No. 022086</p> <p>CSA Class No. 1437-01</p> <p>NA Certification UL Listed, CSA certified</p> <p>Suitable for Refer to main component information</p> |
| NZM1-XKA | 266730 | | | | |

| | | | | | |
|-------------|--------|-------|--|--|--|
| NZM2-4-XKAM | 144115 | 1 set | | | |
|-------------|--------|-------|--|--|--|

| | | | | | |
|------------|--------|--|--|--|--|
| NZM2-4-XKA | 271458 | | | | |
|------------|--------|--|--|--|--|

| | | | | | |
|------------|--------|----------|--------|-------|--|
| +NZM2-XKRO | 266763 | NZM2-XKR | 266765 | 1 set | <p>Part no. suffix and part no. contain parts for a circuit breaker side at top or bottom for 3 or 4 pole switches.</p> <p>O = for fitting at the top</p> <p>U = for fitting at the bottom</p> |
| +NZM2-XKRU | 266764 | - | | | |









| | | | | | |
|--------------|--------|------------|--------|--|--|
| +NZM2-4-XKRO | 266766 | NZM2-4-XKR | 266768 | | |
| +NZM2-4-XKRU | 266767 | - | | | |

| | | | | | |
|-----------|--------|-------|---|---|---|
| NZM2-XSTS | 260156 | 1 set |  | <p>Contains parts for two terminal locations located at top or bottom for 3 or 4 pole switches.</p> <p>Included as standard with tunnel terminal</p> <p>Degree of protection IP1X</p> <p>NZM-XSTK cannot be combined with IP2X protection against contact with a finger and NZM1(-4)-XIPK.</p> <p>Height or thickness of connections:</p> <p>NZM-XSTK = 2 mm</p> <p>NZM-XSTS = 2 mm</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking</p> <p>UL File No. E140305</p> <p>UL CCN DIHS</p> <p>CSA File No. 022086</p> <p>CSA Class No. 1437-01</p> <p>NA Certification UL Listed, CSA certified</p> <p>Suitable for Refer to main component information</p> |
| NZM-XSTK | 266739 | 1 set |  | | |





4.2

Compact circuit breakers, switch disconnectors

Terminals NZM2

| | Number of poles | For use with | Terminal capacity | | | Part no. suffix | Article no. |
|--|-----------------|---------------------------|---|--|-----------|----------------------------------|------------------|
| | | | Connection | Terminal capacity mm ² | AWG/kcmil | | |
| Cable lug cover | | | | | | | |
| 1230PIC-694 Symbolphoto  | 3 pole | NZM2, PN2, N(S)2 | Copper cable lugs Aluminium cable lugs | 1 x 10-185 2 x 4-70 1 x 10-50 2 x 10-50 | - | - | |
| 1230PIC-698 Symbolphoto  | 4 pole | NZM2-4, PN2-4, N2-4 | Copper cable lugs Aluminium cable lugs | 1 x 10-185 2 x 4-70 1 x 10-50 2 x 10-50 | - | - | |
| Cover | | | | | | | |
| 1230PIC-686 Symbolphoto  | 3 pole | NZM2, PN2, N(S)2 | - | - | - | - | |
| wa_sg07018 Symbolphoto  | 4 pole | NZM2-4, PN2-4, N2-4 | - | - | - | - | |
| Phase isolators | | | | | | | |
| sg08915 Symbolphoto  | 3 pole | NZM2, PN2, N(S)2 | - | - | - | - | |
| sg09015 Symbolphoto  | 4 pole | NZM2-4, PN2-4, N2-4 | - | - | - | - | |
| Terminal covers, knockout | | | | | | | |
| 1230PIC-695 Symbolphoto  | 3 pole | NZM2, PN2, N(S)2 | - | - | - | +NZM2-XKSFAO +NZM2-XKSFAU | 108269 108270 |
| 1230PIC-689 Symbolphoto  | 4 pole | NZM2-4, PN2-4, N2-4 | - | - | - | +NZM2-4-XKSFAO +NZM2-4-XKSFAU | 108271 108272 |

| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|-----------|-------|--|
| Article no. when ordered separately | | | |  |

| | | | | |
|--------------|--------|--|--|---|
| NZM2-XKSAE | 119868 | 1 set  | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection where cable lugs are used on screw terminals. When using insulated conductor material, degree of protection IP2X. | UL/CSA certification not required |
| NZM2-4-XKSAE | 119870 | 1 set | | - |
| NZM2-XKSA | 260038 | 1 Off  | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches Contact protection where cable lugs, bars or tunnel terminals are used. Included in set with tunnel terminals. When using insulated conductor material, degree of protection IP1X | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| NZM2-4-XKSA | 266770 | 1 Off | | - |
| NZM2-XKP | 119864 | 1 set  | Contains parts, including insulating plate for mounting plate, for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Can not be combined with connection on rear NZM1/2(-4)-XKR. Insulation protection up to a rated operating voltage U_e of 415V AC when minimum distances are not maintained. | UL/CSA certification not required |
| NZM2-4-XKP | 119865 | 1 set | | - |
| NZM2-XKSFA | 104640 | 1 set  | Contains parts for a terminal located at top or bottom for 3 pole switches. Enhanced contact protection (simplified finger protection). | UL/CSA certification not required |
| NZM2-4-XKSFA | 104641 | 1 Off | | - |

4.2

Compact circuit breakers, switch disconnectors

Terminals NZM2

| Number of poles | For use with | Terminal capacity | | | Part no. suffix | Article no. |
|-----------------|--------------|-------------------|--------------------------------------|-----------|-----------------|-------------|
| | | Connection | Terminal capacity mm ² | AWG/kcmil | | |

IP2X Protection against contact with finger

For box terminal

1230PIC-1377 Symbolphoto



3 pole

NZM2,
PN2,
N(S)2

-

-

-

-

1230PIC-675 Symbolphoto



4 pole

NZM2-4,
PN2-4,
N2-4

-

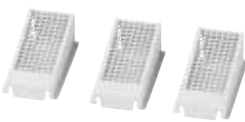
-

-

-

For covers NZM2(-4)-XKSA or NZM2(-4) or NZM2...(C)NA and N(S)2...NA

1230PIC-1367 Symbolphoto



3 pole

NZM2,
PN2,
N(S)2

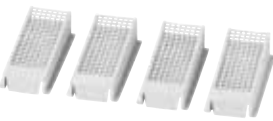
-

-

-

-

1230PIC-1375 Symbolphoto



4 pole

NZM2-4,
PN2-4,
N2-4

-

-

-

-

Copper cable lug

Not UL/CSA approved

When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.

1230PIC-693 Symbolphoto



3 and 4 pole

NZM2(-4),
PN2(-4),
N2(-4)

-

150 mm²

-

-

-

120 mm²

-

-

-

95 mm²

-

-

-

185 mm²

-

-

Mounting adapter plate

1230PIC-316 Symbolphoto



3 pole

NZM2
PN2
N2


-


-

-

-

| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|-----------|-------|--|
| Article no. when ordered separately | | | |  |

| | | | | |
|-------------|--------|--|---|-----------------------------------|
| NZM2-XIPK | 266773 | 1 set  | Contains parts for a terminal located at top or bottom for 3 switches. Enhanced contact protection to IP2X. Protection on grasping terminal chamber when connecting cables in box terminals. With two conductors maximum cross-section 25 mm ² or AWG4. | UL/CSA certification not required |
| NZM2-4-XIPK | 266774 | 1 set | Can not be combined with control cable terminal NZM-XSTK. | - |

| | | | | |
|-------------|--------|--|--|-----------------------------------|
| NZM2-XIPA | 266777 | 1 set  | Contains parts for a terminal located at top or bottom for 3 switches. Enhanced contact protection to IP2X. When fitting to NZM2-...(C)NA or NZM...-NA: With 2 conductors maximum cross-section 25 mm ² or AWG4. | UL/CSA certification not required |
| NZM2-4-XIPA | 266778 | 1 set | | - |

| | | | | |
|-------------|--------|-------|--|---|
| KS150-NZM7 | 059777 | 3 Off | In order to crimp cable lugs when using stranded conductors, e.g., VDE 0295 Class 2 and rounded stranded sector-shaped conductors, you will need a Klauke K22, HK60/22, or EK22 crimping tool with the following crimping dies: R22/95 for 95 mm ² R22/120 for 120 mm ² R22/150 for 150 mm ² R22/185 for 185 mm ² R22/240 for 240 mm ² R22/300 for 300 mm ² Flexible conductors are adequate to a limited extent. They must be indent-crimped with a Klauke series 13 or series 25 crimping die. | - |
| KS120-NZM7 | 059776 | | | |
| KS95-NZM7 | 059775 | | | |
| NZM2-XKS185 | 260032 | | | |

| | | | | |
|-----------|--------|-------|---|-----------------------------------|
| NZM2-XAP7 | 119381 | 1 set | The replacement device can be positioned identically either with the connection side or the actuation shaft. NZM7 door coupling rotary handle can continue to be used if there is a minimum dimension of 213 mm between the mounting plate and the inside of the door. Otherwise, use new handle NZM2-XTVD...-0 with the new shaft. | UL/CSA certification not required |
|-----------|--------|-------|---|-----------------------------------|

4.3

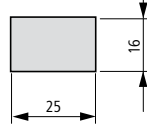
Compact circuit breakers, switch disconnectors

Terminals NZM3

| Max. cable connection area | Number of poles | For use with | Rated current I_n | Terminal capacity | | | Terminal capacity | |
|----------------------------|-----------------|--------------|---------------------|---------------------|-------------------|-----------|--|------------------------------|
| | | | | Cable Cable lugs | Terminal capacity | AWG/kcmil | Copper strip No. of discs x width x disc thickness | Copper bar Width x thickness |
| | | | A | | mm ² | | mm | mm |

Box terminal

1230PIC-725 Symbolphoto



| | | | | | | | |
|--------|------------------------------------|----------------------------|--------------|------------------------------|-------------|---|---|
| 3 pole | NZM3(-4), PN3(-4), N(S)3(-4) | max. 500 400 UL/ CSA | Copper cable | 1 x 35 - 240 | 1 x 2 - 350 | min. 6 x 16 x 0.8 | - |
| | | | Copper cable | 2 x 16 - 120 | | max. 10 x 24 x 1.0 oder max. 11 x 21 x 1 | |
| | | 630 | Copper cable | 1 x 35 - 240 2 x 16 - 120 | 1 x 2 - 350 | 10 x 24 x 1.0 + 5 x 24 x 1.0 oder (2 x) 8 x 24 x 1.0 | - |

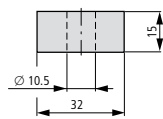
1230PIC-721 Symbolphoto



| | | | | | | | |
|--------|------------------------------------|----------------------------|--------------|--------------|-------------|---|---|
| 4 pole | NZM3(-4), PN3(-4), N(S)3(-4) | max. 500 400 UL/ CSA | Copper cable | 1 x 35 - 240 | 1 x 2 - 350 | min. 6 x 16 x 0.8 | - |
| | | | Copper cable | 2 x 16 - 120 | | max. 10 x 24 x 1.0 oder max. 11 x 21 x 1 | |
| | | 630 | Copper cable | | | 10 x 24 x 1.0 + 5 x 24 x 1.0 oder (2 x) 8 x 24 x 1.0 | - |

Screw connection Standard

1230PIC-731 Symbolphoto






| | | | | | | | |
|--------|------------------------|----------|-----------------|------------------------------|------------------------|----------------|----------|
| 3 pole | NZM3, PN3, N(S)3 | 630 | Copper cable | 1 x 16 - 300 | 1 x 4 - 350 | 10 x 32 x 1.0 | 30 x 10 |
| | | | lugs | 2 x 16 - 240 | 2 x 350 | + 5 x 32 x 130 | + 30 x 5 |
| | | max. 400 | Aluminium cable | 1 x 10 - 120 2 x 10 - 120 | 1 x 4 - 350 2 x 350 | | |

1230PIC-731 Symbolphoto



| | | | | | | | |
|--------|------------------------------|----------|-----------------|------------------------------|------------------------|----------------|----------|
| 4 pole | NZM3-4, PN3-4, N(S)3-4 | 630 | Copper cable | 1 x 16 - 300 | 1 x 4 - 350 | 10 x 32 x 1.0 | 30 x 10 |
| | | | lugs | 2 x 16 - 240 | 2 x 350 | + 5 x 32 x 1.0 | + 30 x 5 |
| | | max. 400 | Aluminium cable | 1 x 10 - 120 2 x 10 - 120 | 1 x 4 - 350 2 x 350 | | |

| Part no. suffix | Article no. | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|--------------------------------------|-------------|---|--|---|
| | | | | | |  |
| Article no. for ordering with basic device | | Article no. when ordering separately | | | | |
| +NZM3-XKCO | 262246 | - | | 1 set | Part no. suffix and part no. contain parts for a circuit breaker side at top or bottom for 3 or 4 pole switches. Conversion kit for circuit breaker with screw terminal. Fitted within the switch housing O = for fitting at the top U = for fitting at the bottom $U_0 \geq 525$ V AC: Use NZM3(-4)-XKSA cover. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| +NZM3-XKCU | 262245 | - | |  | | |
| - | | NZM3-XKC | 260042 | | | |
| +NZM3-4-XKCU | 266782 | - | | 1 set | Use ferrules with flexible and highly flexible conductors. Observe limited cable cross-section through sleeve. | - |
| +NZM3-4-XKCO | 266781 | NZM3-4-XKC | 266783 | | | |

| | | | | | | |
|---|--|------------|--------|---|--|---|
| - | | NZM3-XKS | 260039 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Standard connection with all NZM3, PN3 and N3 circuit breakers. Conversion kit for circuit breaker with box terminal. Use special cable lugs narrow version, → 059775 Fitted within the switch housing. If a bar is used, insulation (400 mm) heat-shrink tubing and a cover NZM3(-4)-XKSA are required. $U_0 \geq 525$ V AC: For all other connection types use cover NZM3(-4)-XKSA. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| | | | |  | | |
| - | | NZM3-4-XKS | 266780 | 1 set | | |

4.3

Compact circuit breakers, switch disconnectors

Terminals NZM3

| Max. cable connection area | Number of poles | For use with | Rated current I_n | Terminal capacity | | | Terminal capacity | |
|----------------------------|-----------------|--------------|---------------------|-------------------|-------------------|-----------|---|---------------------------------|
| | | | | Cable lugs | Terminal capacity | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| | | | A | | mm ² | | | |

Connection width extension

One hole, for screws or terminals

1230PIC-773 Symbolphoto



| | | | | | | | |
|--------|------------------|-----|-------------------|---------|---------|-------------------|---------------|
| 3 pole | NZM3, PN3, N(S)3 | 630 | Copper cable lugs | 2 x 300 | 2 x 500 | 2 x 10 x 50 x 1.0 | (2 x) 10 x 50 |
|--------|------------------|-----|-------------------|---------|---------|-------------------|---------------|

1230PIC-772 Symbolphoto



| | | | | | | | |
|--------|---------------------|-----|-------------------|---------|---------|-------------------|---------------|
| 4 pole | NZM3-4, PN3-4, N3-4 | 630 | Copper cable lugs | 2 x 300 | 2 x 500 | 2 x 10 x 50 x 1.0 | (2 x) 10 x 50 |
|--------|---------------------|-----|-------------------|---------|---------|-------------------|---------------|

1230PIC-774 Symbolphoto



| | | | | | | | |
|--------|------------------|-----|-------------------|---|---|--|---------------|
| 3 pole | NZM3, PN3, N(S)3 | 630 | Copper cable lugs | NZM3-XKV70-2: 4 x 35 - 185 NZM3-XKV70-2 + NZM4-XKA: 4 x 50 - 240 | NZM3-XKV70-2: 2 x 350 NZM3-XKV70-2 + NZM4-XKA: 4 x 500 | NZM3-XKV70-2 + NZM4-XKB: \cong 6 x 16 - 0.8 \cong (2 x) 10 x 32 x 1 | (2 x) 10 x 50 |
|--------|------------------|-----|-------------------|---|---|--|---------------|

1230PIC-774 Symbolphoto




| | | | | | | | |
|--------|------------------------|-----|-------------------|---------|---------|---------------------|---------------|
| 4 pole | NZM3-4, PN3-4, N(S)3-4 | 630 | Copper cable lugs | 2 x 300 | 2 x 500 | (2 x) 10 x 50 x 1.0 | (2 x) 10 x 50 |
|--------|------------------------|-----|-------------------|---------|---------|---------------------|---------------|

1230PIC-775 Symbolphoto



| | | | | | | | |
|--------|------------------|-----|-------------------|--------------|---------|---------------------|---------------|
| 3 pole | NZM3, PN3, N(S)3 | 630 | Copper cable lugs | 2 x 95 - 300 | 2 x 500 | (2 x) 10 x 32 x 1.0 | (2 x) 10 x 40 |
|--------|------------------|-----|-------------------|--------------|---------|---------------------|---------------|

Terminals NZM3

| Part no. suffix | Article no. | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|--------------------------------------|-------------|-----------|---|---|
| Article no. for ordering with basic device | | Article no. when ordering separately | | | |  |
| - | | NZM3-XKV70 | 100514 | 1 set | <p>Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Central drilling for e.g. up to 2 cable lugs per phase. For fitting to switches with screw terminal. Phase isolator and insulation plate are included as standard. Distance between pole centres with NZM3(-4)-XKV70: 70 mm.</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking</p> <p>UL File No. E140305</p> <p>UL CCN DIHS</p> <p>CSA File No. 022086</p> <p>CSA Class No. 1432-01</p> <p>NA Certification UL Listed, CSA certified</p> |
| - | | NZM3-4-XKV70 | 100515 | 1 set | <p>Hole for control wire exists. Connection terminals NZM3(-4)-XK300 and NZM3(-4)-XK22X21 can be installed</p> | - |
| - | | NZM3-XKV70-2 | 119860 | 1 set | <p>Contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Double hole fitting for up to four 185 mm² cable lugs, 50 mm bar or large flat cable terminal NZM4-XKB or large tunnel terminal NZM4-XKA. For fitting to switches with screw terminal. Phase isolator, insulation plate and 2 control circuit terminals supplied.</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking</p> <p>NA Certification Request filed for UL and CSA</p> <p>Suitable for Refer to main component information</p> |
| - | | NZM3-4-XKV70-2 | 132673 | 1 set | <p>Contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Double hole fitting for up to four 185 mm² cable lugs, 50 mm bar or large flat cable terminal NZM4-XKB or large tunnel terminal NZM4-XKA. For fitting to switches with screw terminal. Phase isolator, insulation plate and 2 control circuit terminals supplied.</p> | - |
| - | | NZM3-XKV70KB | 112884 | 1 set | <p>Contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Threaded stud for cable lugs up to 2 × 300mm². For fitting to switches with screw terminal. Phase isolator, insulation plate and 2 control circuit terminals supplied</p> | <p>Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking</p> <p>NA Certification Request filed for UL and CSA</p> <p>Suitable for Refer to main component information</p> |

4.3

Compact circuit breakers, switch disconnectors

Terminals NZM3

| Max. cable connection area | Number of poles | For use with | Rated current I_n | Terminal capacity | | | Terminal capacity | |
|----------------------------|-----------------|--------------|---------------------|-------------------|-------------------|-----------|---|---------------------------------|
| | | | | Cable lugs | Terminal capacity | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |

A

mm²

mm

mm

Terminals for connection width extension

1230PIC-1432 Symbolphoto



| | | | | | | |
|--------|------------------|----------|--------------|-----------------|---|---|
| 3 pole | NZM3, PN3, N(S)3 | max. 500 | Copper cable | 1 x 120 - 300 - | - | - |
|--------|------------------|----------|--------------|-----------------|---|---|

1230PIC-868 Symbolphoto



| | | | | | | |
|--------|---------------------|----------|--------------|-----------------|---|---|
| 4 pole | NZM3-4, PN3-4, N3-4 | max. 500 | Copper cable | 1 x 120 - 300 - | - | - |
|--------|---------------------|----------|--------------|-----------------|---|---|

1230PIC-1431 Symbolphoto



| | | | | | | |
|--------|------------------|-----|---|---|---|-----------------------|
| 3 pole | NZM3, PN3, N(S)3 | 630 | - | - | - | (2 x) 11 x 21 x 1.0 - |
|--------|------------------|-----|---|---|---|-----------------------|

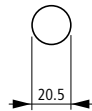
1230PIC-867 Symbolphoto



| | | | | | | |
|--------|---------------------|-----|---|---|---|-----------------------|
| 4 pole | NZM3-4, PN3-4, N3-4 | 630 | - | - | - | (2 x) 11 x 21 x 1.0 - |
|--------|---------------------|-----|---|---|---|-----------------------|

Tunnel terminal

1230PIC-683 Symbolphoto



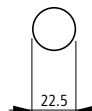
| | | | | | | |
|--------|------------------|----------|---|--------------|---------------|---|
| 3 pole | NZM3, PN3, N(S)3 | max. 350 | Copper cable ⊖ ∇ Aluminium cable ⊖ ∇ | 1 x 16 - 185 | 1 x 6 - 350 - | - |
|--------|------------------|----------|---|--------------|---------------|---|

1230PIC-683 Symbolphoto



| | | | | | | |
|--------|---------------------|----------|---|--------------|---------------|---|
| 4 pole | NZM3-4, PN3-4, N3-4 | max. 350 | Copper cable ⊖ ∇ Aluminium cable ⊖ ∇ | 1 x 16 - 185 | 1 x 6 - 350 - | - |
|--------|---------------------|----------|---|--------------|---------------|---|

1230PIC-1433 Symbolphoto




| | | | | | | |
|--------|------------------|----------|---|------------------------------|------------------------------|---|
| 3 pole | NZM3, PN3, N(S)3 | max. 630 | Copper cable ⊖ ∇ Aluminium cable ⊖ ∇ | 1 x 50 - 240 2 x 50 - 240 | 1 x 0 - 500 - 2 x 0 - 500 | - |
|--------|------------------|----------|---|------------------------------|------------------------------|---|

1230PIC-771 Symbolphoto



| | | | | | | |
|--------|---------------------|----------|---|------------------------------|------------------------------|---|
| 4 pole | NZM3-4, PN3-4, N3-4 | max. 630 | Copper cable ⊖ ∇ Aluminium cable ⊖ ∇ | 1 x 50 - 240 2 x 50 - 240 | 1 x 0 - 500 - 2 x 0 - 500 | - |
|--------|---------------------|----------|---|------------------------------|------------------------------|---|



Terminals NZM3



| Part no. suffix | Article no. | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|--------------------------------------|-------------|-----------|--|---|
| Article no. for ordering with basic device | | Article no. when ordering separately | | | |  |
| - | | NZM3-XK300 | 100782 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Only in combination with connection width extension NZM3(-4)-XKV70. Use ferrules with flexible and highly flexible conductors. With control cable terminal for 1 x 0.75 - 2.5 mm ² or 2 x 0.75 - 1.5 mm ² copper conductor. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| - | | NZM3-4-XK300 | 100783 | 1 set | | - |
| - | | NZM3-XK22X21 | 100784 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Only in combination with connection width extension NZM3(-4)-XKV70. Use ferrules with flexible and highly flexible conductors. With control cable terminal for | Not UL/CSA approved |
| - | | NZM3-4-XK22X21 | 100785 | 1 set | 1 x 0.75 - 2.5 mm ² or 2 x 0.75 - 1.5 mm ² copper conductor. | Not UL/CSA approved |
| - | | NZM3-XKA1 | 271459 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. With control cable terminal for 1 x 0.75 - 2.5 mm ² (18 - 14 AWG) or 2 x 0.75 - 1.5 mm ² (18 - 16 AWG) copper conductor. | - |
| - | | NZM3-4-XKA1 | 271460 | 1 set | Fitting outside switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. Cover NZM3(-4)-XKSA must be fitted (included as standard). | - |
| - | | NZM3-XKA2 | 271461 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. With control cable terminal for 1 x 0.75 - 2.5 mm ² (18 - 14 AWG) or 2 x 0.75 - 1.5 mm ² (18 - 16 AWG) copper conductor. Fitting outside switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. Cover NZM3(-4)-XKSA must be fitted (included as standard). | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| - | | NZM3-4-XKA2 | 271462 | 1 set | | - |

4.3

Compact circuit breakers, switch disconnectors

Terminals NZM3

| Max. cable connection area | Number of poles | For use with | Rated current I_n | Terminal capacity | | | Terminal capacity | | |
|--|-----------------|--------------|----------------------|----------------------|---|--|---|---|-----------------------------------|
| | | | | Cable lugs | Terminal capacity | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm | |
| A | | | | | | | | | |
| Rear terminal bolts | | | | | | | | | |
| 1230PIC-1385 Symbolphoto  | - | 3 pole | NZM3, PN3, N3 | max. 630 max. 500 | Copper cable lugs Aluminium cable lugs | 1 x 16 - 240 2 x 16 - 240 1 x 10 - 120 2 x 10 - 120 | - | min. 6 x 16 x 0.8 max. 10 x 32 x 1.0 | min. 20 x 5 max. 30 - 10 |
| 1230PIC-1380 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | max. 630 max. 500 | Copper cable lugs Aluminium cable lugs | 1 x 16 - 240 2 x 16 - 240 1 x 10 - 120 2 x 10 - 120 | - | min. 6 x 16 x 0.8 max. 10 x 32 x 1.0 | min. 20 x 5 max. 30 - 10 |
| Control cable terminals | | | | | | | | | |
| 1230PIC-729 Symbolphoto  | - | 3 and 4 pole | NZM3, PN3, N(S)3 | - | Screw terminals | 1 x 0.75 - 2.5 2 x 0.75 - 1.5 | 1 x 18 - 14 2 x 18 - 16 | - | - |
| 1230PIC-747 Symbolphoto  | - | 3 and 4 pole | NZM3-4, PN3, N(S)3-4 | - | Box terminal | 1 x 0.75 - 2.5 2 x 0.75 - 1.5 | 1 x 18 - 14 2 x 18 - 16 | - | - |




| Part no. suffix | Article no. | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|--------------------------------------|-------------|-----------|--|--|
| Article no. for ordering with basic device | | Article no. when ordering separately | | | |  |
| +NZM3-XKRO | 266790 | NZM3-XKR | 266792 | 1 set | Part no. suffix and part no. contain parts for a circuit breaker side at top or bottom for 3 or 4 pole switches. O = for fitting at the top U = for fitting at the bottom | Not UL/CSA approved |
| +NZM3-XKRU | 266791 | - | | | | |
| +NZM3-4-XKRO | 266793 | NZM3-4-XKR | 266795 | 1 set | | Not UL/CSA approved |
| +NZM3-4-XKRU | 266794 | - | | | | |
| - | | NZM3/4-XSTS | 266797 | 1 set |  Contains for two terminal locations located at top or bottom for 3 or 4 pole circuit breakers. Included as standard with tunnel terminal. Degree of protection IP1X Height or thickness of connections NZM-XSTS = 2 mm | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| - | | NZM-XSTK | 266739 | 1 set | | |

4.3

Compact circuit breakers, switch disconnectors

Terminals NZM3








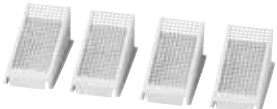
| | Max. cable connection area | Number of poles | For use with | Part no. Article no. when ordering separately | Article no. |
|---|----------------------------|-----------------|------------------------------------|--|-------------|
| Cable lug cover | | | | | |
| 1230PIC-684 Symbolphoto  | - | 3 pole | NZM3, PN3, N(S)3 | NZM3-XKSAE | 119869 |
| 1230PIC-688 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | NZM3-4-XKSAE | 119871 |
| Cover | | | | | |
| 1230PIC-1352 Symbolphoto  | - | 3 pole | NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XKSA | 260045 |
| 1230PIC-1353 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | NZM3-4-XKSA | 266801 |
| Phase isolators | | | | | |
| sg08715 Symbolphoto  | - | 3 pole | NZM3-4, PN3-4, N(S)3-4 | NZM3-XKP | 100512 |
| sg08815 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | NZM3-4-XKP | 100513 |


| Std. pack | Notes | Information relevant for export to North America |
|--|--|---|
| 1 set  | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection where cable lugs are used on screw terminals. When using insulated conductor material, degree of protection IP2X. | UL/CSA certification not required |
| 1 set | | |
| 1 Off  | Contains parts for a terminal located at top or bottom for 3 pole switches. Insulation/protection against direct contact where cable lugs, bars or tunnel terminals are used. Included in set with tunnel terminals. When using insulated conductor material to degree of protection IP1X. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| 1 Off | | |
| 1 set  | Contains parts, including insulating plate for mounting plate, for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Included with the connection width extension. Cannot be combined with the NZM3(-4)-XKA tunnel terminal, NZM3(-4)-XKR connection on rear. Insulation protection where cable lugs, bars, or flat conductor are used. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information |
| 1 set | | |


4.3

Compact circuit breakers, switch disconnectors

Terminals NZM3

| | Max. cable connection area | Number of poles | For use with | Part no. Article no. when ordering separately | Article no. |
|---|----------------------------|-----------------|---|--|-------------|
| Terminal covers, knockout | | | | | |
| 1230PIC-695 Symbolphoto  | - | 3 pole | NZM3-4, PN3-4, N(S)3-4 | NZM3-XKSFA | 104642 |
| 1230PIC-689 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | NZM3-4-XKSFA | 104643 |
| Large cover for connection width extension | | | | | |
| 1230PIC-699 Symbolphoto  | - | 3 pole | NZM3, PN3, N3 + NZM3-XKV70(-2) | NZM3-XKSAV | 119858 |
| 1230PIC-696 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 + NZM3-4-XKV70 | NZM3-4-XKSAV | 132675 |
| IP2X Protection against contact with finger | | | | | |
| For box terminal | | | | | |
| 1230PIC-1384 Symbolphoto  | - | 3 pole | NZM3, PN3, N3 | NZM3-XIPK | 266804 |
| 1230PIC-675 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | NZM3-4-XIPK | 266805 |
| For covers NZM3(-4)-XKSA or NZM3...(C)INA and N(S)3...NA | | | | | |
| wa_sg07118 Symbolphoto  | - | 3 pole | NZM3, PN3, N(S)3 | NZM3-XIPA | 266808 |
| 1230PIC-1379 Symbolphoto  | - | 4 pole | NZM3-4, PN3-4, N3-4 | NZM3-4-XIPA | 266809 |


| Part no. suffix | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--|-------------|-----------|-------|---|
| Article no. for ordering with basic device | | | |  |

| | | | | |
|--------------|--------|---|--|-----------------------------------|
| +NZM3-XKSFAO | 108273 | 1 Off | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection (simplified finger protection). | UL/CSA certification not required |
| +NZM3-XKSFAU | 108274 |  | | |


| | | | |
|----------------|--------|-------|---|
| +NZM3-4-XKSFAO | 108275 | 1 Off | - |
| +NZM3-4-XKSFAU | 108276 | | |

| | | | | |
|---|--|-------|---|---|
| - | | 1 Off | Contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Insulation protection/protection against direct contact for connection of cable lugs or bars to connection width extension. Can also be used for connection width extension NZM3-XKV70 or NZM3-XKV70-2 with terminals NZM3-XK300 or NZM3-XK22x21 or NZM4-XKA. | - |
|---|--|-------|---|---|

| | | | | |
|---|--|-------|--|---|
| - | | 1 Off | Cannot be combined with connection width NZM3-XKV70KB. When using insulated conductor material, degree of protection IP2X. | - |
|---|--|-------|--|---|

| | | | | |
|---|--|---|---|-----------------------------------|
| - | | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Enhanced contact protection to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. With 2 conductors max. cross section 70mm ² . | UL/CSA certification not required |
| | |  | | |

| | | | | |
|---|--|-------|--|---|
| - | | 1 set | Cannot be combined with NZM-XSTK control circuit terminal. | - |
|---|--|-------|--|---|



| | | | | |
|---|--|---|--|-----------------------------------|
| - | | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X. When fitting to NZM3...-(C)NA or N3...-NA: with 2 conductors max. cross section 70 mm ² . | UL/CSA certification not required |
| | |  | | |

| | | | |
|---|--|-------|---|
| - | | 1 set | - |
|---|--|-------|---|

4.3

Compact circuit breakers, switch disconnectors

Terminals NZM3

| | Max. cable connection area | Number of poles | For use with | Part no. Article no. when ordering separately | Article no. |
|---|----------------------------|-----------------|--------------|--|---------------------------|
| Copper cable lug | | | | | |
| Not UL/CSA approved | | | | | |
| When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated. | | | | | |
|  1230PIC-693 Symbolphoto | 185 mm ² | - | 3 and 4 pole | NZM3(-4), PN3(-4), N3(-4) | NZM3-XKS185 260040 |
| | 240 mm ² | | | | NZM3-XKS240 260041 |
| | 300 mm ² | | | NZM3(-4), PN3(-4), N3(-4), NZM4(-4), N(-4) | NZM3-XKS300 153186 |
| Mounting adapter plate | | | | | |
|  1230PIC-317 Symbolphoto | - | - | 3 pole | NZM3 PN3 N3 | NZM3-XAP10 119382 |

Std. pack

Notes

Information relevant for export to North America



| | | |
|-------|---|-----------------------------------|
| 3 Off | <p>In order to crimp cable lugs when using stranded conductors, e.g., VDE 0295 Class 2 and rounded stranded sector-shaped conductors, you will need a Klauke K22, HK60/22, or EK22 crimping tool with the following crimping dies:</p> <ul style="list-style-type: none"> • R22/95 for 95 mm² • R22/120 for 120 mm² • R22/150 for 150 mm² • R22/185 for 185 mm² • R22/240 for 240 mm² • R22/300 for 300 mm² <p>Flexible conductors are adequate to a limited extent. They must be indent-crimped with a Klauke series 13 or series 25 crimping die.</p> | - |
| 1 set | <p>The replacement device can be positioned identically either with the connection side or the actuation shaft.</p> <p>The NZM10 door coupling rotary handle can continue to be used if the shaft has a thickness of 12 mm. Otherwise, use new handle NZM3 with the new shaft.</p> | UL/CSA certification not required |

4.4

Compact circuit breakers, switch disconnectors

Terminals NZM4

| Space requirement | Number of poles | For use with | Rated current ¹⁾ I_n | Terminal capacity | | | Terminal capacity | |
|-------------------|-----------------|--------------|--------------------------------------|---------------------|----------------------|-----------|--|--|
| | | | | Cable Cable lugs | Terminal capacity | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| | | | A | | mm ² | | | |

Screw terminals

Threaded stud standard equipment

Screws

1230PIC-731 Symbolphoto




| 2-hole | 3 pole | For use with | Rated current ¹⁾ | Copper cable- lugs | 1 x 120 - 185 | 1 x 250 - 350 | (2 x) | (2 x) |
|--------|--------|--------------|-----------------------------|--------------------|---------------|---------------|---------------|---------|
| | | NZM4, N(S)4 | max. 1600 | | 4 x 50 - 185 | 4 x 0 - 350 | 10 x 50 x 1.0 | 50 x 10 |
| | | | | | | | | |
| 2-hole | 4 pole | For use with | Rated current ¹⁾ | Copper cable- lugs | 1 x 120 - 185 | 1 x 250 - 350 | (2 x) | (2 x) |
| | | NZM4-4, N4-4 | max. 1600 | | 4 x 50 - 185 | 4 x 0 - 350 | 10 x 50 x 1.0 | 50 x 10 |
| | | | | | | | | |

Part no. Article no. Std. pack Notes

Information relevant for export to North America

Article no. when
ordering separately






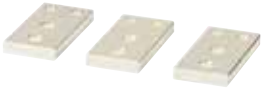

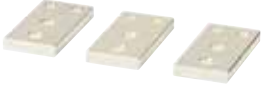

| | | | | |
|----------|--------|-------|--|-----------------------------------|
| NZM4-XKS | 127736 | 1 set |  Double hole fitting with M10 threaded stud at 25 mm spacing. Use special cable lug narrow version. M10x50 socket cap screw + M10x40 socket cap screw + self locking nut. | UL/CSA certification not required |
|----------|--------|-------|--|-----------------------------------|

| | | | | |
|------------|--------|-------|---|---|
| NZM4-4-XKS | 127737 | 1 set | - | - |
|------------|--------|-------|---|---|

4.4

Compact circuit breakers, switch disconnectors

Terminals NZM4





| | Space requirement | Number of poles | For use with | Rated current ¹⁾ I_n A | Terminal capacity | | | Terminal capacity | |
|---|-------------------|-----------------|-----------------|---|---|--------------------------------------|--|---|--|
| | | | | | Cable lugs Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| Module plate | | | | | | | | | |
| 1230PIC-744 Symbolphoto  | 1-hole | 3 pole | NZM4, N(S)4 | max. 1250 | Copper cable- lugs 1 x 120 - 300 2 x 95 - 300 | 1 x 250 - 600 2 x 000 - 600 | (2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0 | (2 x) 40 x 10 (2 x) 50 x 10 | |
| 1230PIC-742 Symbolphoto  | 1-hole | 4 pole | NZM4-4, N4-4 | max. 1250 | Copper cable- lugs 1 x 120 - 300 2 x 95 - 300 | 1 x 250 - 600 2 x 000 - 600 | (2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0 | (2 x) 40 x 10 (2 x) 50 x 10 | |
| 1230PIC-1407 Symbolphoto  | 2-hole | 3 pole | NZM4, N(S)4 | max. 1400 | Copper cable- lugs 2 x 95 - 185 4 x 35 - 185 | 2 x 000 - 350 4 x 2 - 350 | (2 x) 10 x 50 x 1.0 | (2 x) 10 x 50 x 1.0 | |
| 1230PIC-870 Symbolphoto  | 2-hole | 4 pole | NZM4-4, N4-4 | max. 1400 | Copper cable- lugs 2 x 95 - 185 4 x 35 - 185 | 2 x 000 - 350 4 x 2 - 350 | (2 x) 10 x 50 x 1.0 | (2 x) 10 x 50 x 1.0 | |
| 1230PIC-1408 Symbolphoto  | 2-hole | 3 pole | NZM4, N(S)4 | max. 1250 | Copper cable- lugs 2 x 95 - 300 | 2 x 000 - 600 | (2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0 | (2 x) 40 x 10 (2 x) 50 x 10 | |
| sg08515 Symbolphoto  | 2-hole | 4 pole | NZM4-4, N4-4 | max. 1250 | Copper cable- lugs 2 x 95 - 300 | 2 x 000 - 600 | (2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0 | (2 x) 40 x 10 (2 x) 50 x 10 | |
| 1230PIC-1408 Symbolphoto  | 2-hole | 3 pole | NZM4, N(S)4 | max. 1600 | Copper cable- lugs 2 x 95 - 300 | 2 x 000 - 600 | (2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0 | (2 x) 40 x 10 (2 x) 50 x 10 | |
| 1230PIC-871 Symbolphoto  | 2-hole | 4 pole | NZM4-4, N4-4 | max. 1600 | Copper cable- lugs 2 x 95 - 300 | 2 x 000 - 600 | (2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0 | (2 x) 40 x 10 (2 x) 50 x 10 | |

Part no. Article no. Std. pack Notes

Information relevant for export to North America

Article no. when ordering separately






| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|-------------------|-------------|-----------|--|--|
| NZM4-XKM1 | 266814 | 1 set |  Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. For M10 screws. Can be enlarged for M12 screws. Use special cable lug narrow version. Can be fitted to circuit breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 22086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKM1 | 266815 | 1 set | - | - |
| NZM4-XKM2 | 266820 | 1 set |  Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. For M10 screws. Can be enlarged for M12 screws. Use special cable lug narrow version. Can be fitted to circuit breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 22086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKM2 | 266821 | 1 set | - | - |
| NZM4-XKM2S-1250 | 284471 | 1 set |  Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 22086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKM2S-1250 | 284472 | 1 set | - | - |
| NZM4-XKM2S-1600 | 284473 | 1 set |  Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 22086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKM2S-1600 | 284474 | 1 set | - | - |

4.4

Compact circuit breakers, switch disconnectors

Terminals NZM4

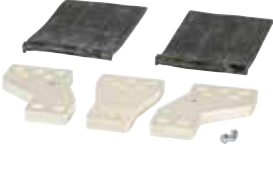
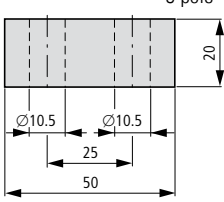
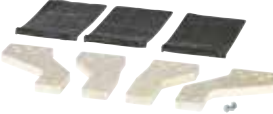
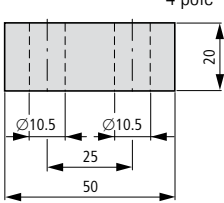
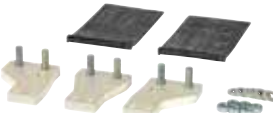
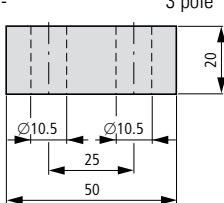
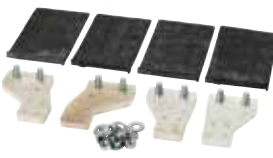
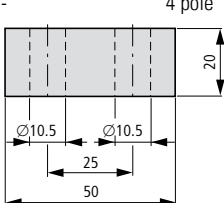
| | Number of poles | For use with | Rated current ¹⁾ I_n A | Terminal capacity | | | Terminal capacity | |
|---|-----------------|---------------------|---|--|--|----------------------------|--|--|
| | | | | Cable Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| Flat cable terminal | | | | | | | | |
|  | 3 pole | NZM4, N(S)4 | max. 1100 | - | - | - | min. 6 x 16 x 0.8 max. (2 x) 10 x 32 x 1.0 | - |
| | 4 pole | NZM4-4, N4-4 | max. 1100 | - | - | - | min. 6 x 16 x 0.8 max. (2 x) 10 x 32 x 1.0 | - |
| Tunnel terminal | | | | | | | | |
|  | 3 pole | NZM4, N(S)4 | max. 1400 | Copper cable ⊙▽ Aluminium cable ⊙▽ | 1 x 50 - 240 4 x 50 - 240 | 1 x 0 - 500 4 x 0 - 500 | - | - |
|  | 4 pole | NZM4-4, N4-4 | max. 1400 | Copper cable ⊙▽ Aluminium cable ⊙▽ | 1 x 50 - 240 4 x 50 - 240 | 1 x 0 - 500 4 x 0 - 500 | - | - |
| Rear terminal bolts | | | | | | | | |
|  | 3 pole | NZM4, N4 | max. 1250 | Copper cable- lugs Aluminium cable lugs | 1 x 120 - 185 2 x 95 - 185 4 x 35 - 185 1 x 185 2 x 70 - 185 4 x 50 - 185 | - | (2 x) 10 x 50 x 1.0 | (2 x) 50 x 10 |
| | 4 pole | NZM4(-4), N4(-4) | max. 1250 | Copper cable- lugs Aluminium cable lugs | 1 x 120 - 185 2 x 95 - 185 4 x 35 - 185 1 x 185 2 x 70 - 185 4 x 50 - 185 | - | (2 x) 10 x 50 x 1.0 | (2 x) 50 x 10 |

| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|---|-------------|--|--|--|
| Article no. when ordering separately  | | | | |
| NZM4-XKB | 266829 | 1 set  | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Conversion kit for circuit breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. When the circuit breaker is installed on a conductive mounting plate, cover NZM4(-4)-XKSA must be used | Product Standards CSA-C22.2 No. 5-09; IEC60947, CE marking NA Certification Request filed for CSA |
| NZM4-4-XKB | 266831 | 1 set | With control circuit terminal for 1 x 0.75 - 2.5 mm ² or 2x 0.75 - 1.5 mm ² copper conductors as standard. | - |
| NZM4-XKA | 266836 | 1 set  | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. With control circuit terminal for 1 x 0.75 - 2.5 mm ² (18 - 14 AWG) or 2 x 0.75 - 1.5 mm ² (18 - 16 AWG) copper cable as standard. Can be fitted to circuit breaker with screw terminal. Use ferrules with flexible and highly flexible conductors. Cover NZM4(-4)-XKSA must be fitted | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 22086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKA | 266837 | 1 set | (included as standard). | - |
| NZM4-XKR | 266842 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Can also be retrofitted: Module plate NZM4...-XKM... or connection width extension NZM4...-XKV... | Not UL/CSA approved |
| NZM4-4-XKR | 266843 | 1 set | | Not UL/CSA approved |

4.4

Compact circuit breakers, switch disconnectors

Terminals NZM4

| Space requirement | Number of poles | For use with | Rated current ¹⁾ I_n | Terminal capacity | | | Terminal capacity | |
|---|-----------------|---|--------------------------------------|-------------------|---|--------------------------|---|---------------------------------|
| | | | | Cable lugs | Terminal capacity mm ² | AWG/kcmil | Copper strip No. of discs x width x disc thickness mm | Copper bar Width x thickness mm |
| Connection width extension | | | | | | | | |
| 1230PIC-1412 Symbolphoto  | - | 3 pole | NZM4 N(S)4 | max. 1600 | Copper cable- lugs 4 x 300 6 x 95 - 240 | 4 x 600 6 x 000 - 500 | max. (2 x) 10 x 80 x 1.0 | max. (2 x) 80 x 10 |
| | |  | | | | | | |
| wa_sg02416 Symbolphoto  | - | 4 pole | NZM4-4, N4-4 | max. 1600 | Copper cable- lugs 4 x 300 6 x 95 - 240 | 4 x 600 6 x 000 - 500 | max. (2 x) 10 x 80 x 1.0 | max. (2 x) 80 x 10 |
| | |  | | | | | | |
| With two threaded studs | | | | | | | | |
| 1230PIC-1411 Symbolphoto  | - | 3 pole | NZM4, N(S)4 | 1600 | Copper cable- lugs 4 x 95 - 300 | 4 x 500 | (2 x) 10 x 80 x 1.0 | (2 x) 10 x 80 |
| | |  | | | | | | |
| 1230PIC-1147 Symbolphoto  | - | 4 pole | NZM4-4, N4-4 | 1600 | Copper cable- lugs 4 x 95 - 300 | 4 x - 500 | (2x) 10 x 80 x 1.0 | (2 x) 10 x 80 |
| | |  | | | | | | |

Part no. Article no. Std. pack Notes

Information relevant for export to North America

Article no. when ordering separately








| Part no. | Article no. | Std. pack | Notes | Product Standards |
|---------------|-------------|-----------|--|--|
| NZM4-XKV95 | 281591 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| NZM4-XKV110 | 281593 | | Five-hole fitting, for example, for up to nine cable lugs per phase. Can be fitted to circuit breaker with screw terminal. Phase isolator included as standard. Distance between pole centers: 95 mm Installation conditions for current transformer up to 130 mm width with 80 mm busbar width. | UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKV95 | 281592 | 1 set | 4 mm holes predrilled for control circuit terminal. Contains hole for large cover NZM4(-4)-XKSAV | - |
| NZM4-4-XKV120 | 281594 | | | |

| Part no. | Article no. | Std. pack | Notes | Product Standards |
|------------------|-------------|-----------|---|---|
| NZM4-XKV95-2KB | 119861 | 1 set | Type contains parts for 3 to 4-pole switches on top or bottom of switch. Double stud bolts M12 for e. g. up to 4 cable lugs 300 mm ² per phase. For fitting to switches with screw connection. Distance between pole centers if 95 mm Can be fitted to current transformers up to 130 mm in width and with a bar width of 80 mm. 4 mm drilling dimensions for control circuit terminal available. Hole for large cover NZM4(-4)-XKSAV included | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKV95-2KB | 132674 | 1 set | | |

4.4

Compact circuit breakers, switch disconnectors









Terminals NZM4

| | Number of poles | For use with | Terminal capacity Connection | Terminal capacity mm ² | AWG/kcmil |
|--|-----------------|--|---------------------------------|--------------------------------------|-----------|
| Cover | | | | | |
| 1230PIC-1354 Symbolphoto  | 3 pole | NZM4, N(S)4 | - | - | - |
| 1230PIC-1355 Symbolphoto  | 4 pole | NZM4-4 N4-4 | - | - | - |
| Cover size | | | | | |
| For connection width extension | | | | | |
| 1230PIC-699 Symbolphoto  | 3 pole | NZM4, N(S)4 + NZM4-XKV95(KB) | - | - | - |
| 1230PIC-696 Symbolphoto  | 4 pole | NZM4-4, N(S)4-4 + NZM4-4-XKV95(KB) | - | - | - |
| Insulation plate | | | | | |
| 1230PIC-315 Symbolphoto  | 3 pole | NZM4, - N(S)4 + NZM4-XKV... | - | - | - |
| | 4 pole | NZM4-4 N4-4 + NZM4-4-XKV... | - | - | - |

Part no. Article no. Std. pack Notes Information relevant for export to North America

Article no. when ordering separately




| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------|-------------|--|---|--|
| NZM4-XKSA | 266846 | 1 set   | Type contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Insulation/protection against direct contact where cable lugs or busbars are connected or tunnel terminals are used. Included in the set with tunnel terminals. When using insulated conductor material to IP1X. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for UL listed, CSA certified |
| NZM4-4-XKSA | 266847 | 1 set | | - |
| NZM4-XKSAV | 119876 | 1 set   | Type contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Insulation protection/busbar tag shroud for connection of cable lugs or busbars to connection width extension. When using insulated conductor material to IP2X. Cannot be combined with connection width extension NZM4-XKV110. | UL/CSA certification not required |
| NZM4-4-XKSAV | 132676 | 1 set   | Type contains parts for a terminal located at top or bottom for 4 pole circuit breakers. Insulation protection / busbar tag shroud for connection of cable lugs or busbars to connection width extension. Cannot be combined with connection width extension NZM4-4-XKV120. When using insulated conductor material to IP2X. | - |
| NZM4-XISP | 119866 | 1 set   | Type contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. Insulation protection to mounting plate when minimum clearances are not maintained. Included with the connection width extension. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking NA Certification Request filed for UL and CSA Suitable for Refer to main component information |
| NZM4-4-XISP | 119867 | 1 set | | - |

4.4

Compact circuit breakers, switch disconnectors

Terminals NZM4

| | Number of poles | For use with | Terminal capacity Connection | Terminal capacity mm ² | AWG/kcmil |
|--|-----------------|-----------------|---------------------------------|--------------------------------------|-----------|
| Terminal covers, knockout | | | | | |
| 1230PIC-745 Symbolphoto  | 3 pole | NZM4, N(S)4 | - | - | - |
| wa_sg07218 Symbolphoto  | 4 pole | NZM4-4, N4-4 | - | - | - |
| Phase isolators | | | | | |
| sg09215 Symbolphoto  | 3 pole | NZM4, N(S)4 | - | - | - |
| sg08815 Symbolphoto  | 4 pole | NZM4-4, N4-4 | - | - | - |

| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------------------------------|-------------|-----------|---|---|
| Article no. when ordering separately | | | |  |
| NZM4-XKSFA | 292193 | 1 set | Part no. includes parts for a top or bottom terminal for 3 pole circuit breakers, including in combination with NZM4-XKSA cover. Increased busbar tag shroud with connection of insulated bars or flat band. | UL/CSA certification not required |
| NZM4-4-XKSFA | 292194 | 1 set | - | - |
| NZM4-XKP | 281595 | 1 set | Type contains parts for a terminal located at top or bottom for 3 or 4-pole circuit breakers. Included with the connection width extension. Cannot be combined with the tunnel terminal NZM4(-4)-XKA, connection NZM4-XKR on rear. Insulation protection where cable lugs, busbars, module plates or flat cable terminals are used. | Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL listed, CSA certified Suitable for Refer to main component information |
| NZM4-4-XKP | 281596 | 1 set | - | - |

4.4




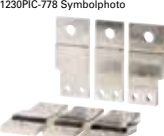




Compact circuit breakers, switch disconnectors

Terminals NZM4

| For use with | Rated current I_n | Number of poles | Part no. Article no. when ordering separately | Article no. | Std. pack | Notes |
|--------------|---------------------|-----------------|--|-------------|-----------|-------|
| A | | | | | | |

Adapter set N(ZM)4/N(ZM)12

Not UL/CSA approved

| | | | | | | | |
|--|-------------|-----------|--------|-----------------|--------|-------|---|
| 1230PIC-778 Symbolphoto  | N4 | max. 1000 | 3 pole | N4-XAS12-1000 | 285609 | 1 set | Conversion kit from N(ZM)12 to N(ZM)4. With the terminal lugs of the replacement kit all three-pole NZM12 and N12 can be adapted to the connection dimensions of the NZM4 or N4 supplied from model year 1983. |
| 1230PIC-779 Symbolphoto  | N4 | max. 1250 | 3 pole | N4-XAS12-1250 | 285610 | | 4 pole basic devices, withdrawable units and basic devices with remote operator can not be replaced. |
| 1230PIC-780 Symbolphoto  | N4 | max. 1600 | 3 pole | N4-XAS12-1600 | 285611 | | Contents of replacement kits N(ZM)4-XAS12...: 3 connection extensions on outlet side 3 connection extensions on trip block side 2 mounting brackets 4 fixing screws 4 phase isolators 6 fixing screws, nuts and washers Paper drilling template in the instructional leaflet (AWA) The replacement kits have the same dimensions as models N(ZM)12... which correspond to production status 02/97 to the present. |
| 1230PIC-778 Symbolphoto  | NZM4 | max. 1000 | 3 pole | NZM4-XAS12-1000 | 285612 | 1 set | Special feature: Prior to 02/97 the N(ZM)12-800 was supplied with 10 mm instead of 8 mm terminal lugs. With these models the customer must determine the device's year of manufacture by measuring the thickness of the terminal lug and order replacement kit N(ZM)4-XAS12-1250. |
| 1230PIC-779 Symbolphoto  | NZM4 | max. 1250 | 3 pole | NZM4-XAS12-1250 | 285613 | | Example: N(ZM)12-800...(1000) > N(ZM)4-XAS12-1000 N(ZM)12-800 before 02/97 > N(ZM)4-XAS12-1250 N(ZM)12-1250 > N(ZM)4-XAS12-1250 N(ZM)12-1600 > N(ZM)4-XAS12-1600 |
| 1230PIC-780 Symbolphoto  | NZM4 | max. 1600 | 3 pole | NZM4-XAS12-1600 | 285614 | | Addition for devices constructed prior to 1983! Here the replacement kit for switch-disconnectors can be used in full. For circuit-breakers with "long" ZM design, the adapter fit only at the top! At the bottom the devices are about 65 mm longer and the lower connection is about 26 mm deeper. Consequently the bottom adapters are too short and the heights do not correspond. |
| 1230PIC-781 Symbolphoto  | NZM4, N4 | max. 1250 | 3 pole | NZM4-XAS14-1250 | 283291 | 1 set | Conversion kit for NZM14 to NZM4. Same connections as NZM14. Contains for both sides of switch. 3 connection extensions on outlet side 3 connection extensions on trip block side. 1 long shroud for the outlet side Paper drilling template in the instructional leaflet (AWA) |
| 1230PIC-847 Symbolphoto  | NZM4, N4 | 1600 | 3 pole | NZM4-XAS14-1600 | 283292 | | Cannot be combined with the module plate (NZM4-XKM...), flat cable terminal (NZM4-XKB), connection width extension (NZM4-XKV...), tunnel terminal (NZM4-XKA), connection on rear (NZM4-XKR) and withdrawable unit (NZM4-XAV...) |

| For use with | Number of poles | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------|----------|-------------|-----------|-------|
|--------------|-----------------|----------|-------------|-----------|-------|

Plug-in units

For circuit breakers NZM and switch disconnectors N
Not UL/CSA approved
Not for $U_e > 690$ V

Plug-in socket

1230PIC-818 Symbolphoto



Completion through switches with plug-in insert NZM...-SVE...

| | | | | | |
|---------|--------|-----------|--------|-------|---|
| NZM1 N1 | 3 pole | NZM1-XSVS | 109777 | 1 Off | Mounting position: vertical, 90° right, 90° left Order control circuit plug unit separately! |
|---------|--------|-----------|--------|-------|---|

1230PIC-818 Symbolphoto



| | | | | | |
|---------|--------|-----------|--------|-------|--|
| NZM2 N2 | 3 pole | NZM2-XSVS | 266699 | 1 Off | |
|---------|--------|-----------|--------|-------|--|

1230PIC-815 Symbolphoto



| | | | | | |
|-------------|--------|-------------|--------|-------|--|
| NZM2-4 N2-4 | 4 pole | NZM2-4-XSVS | 266700 | 1 Off | |
|-------------|--------|-------------|--------|-------|--|

1230PIC-818 Symbolphoto



| | | | | | |
|---------|--------|-----------|--------|--|--|
| NZM3 N3 | 3 pole | NZM3-XSVS | 168472 | | Mounting position: vertical, 90° right, 90° left Order control circuit plug unit separately! Lockable base |
|---------|--------|-----------|--------|--|--|

1230PIC-815 Symbolphoto



| | | | | | |
|-------------|--------|-------------|--------|--|--|
| NZM3-4 N3-4 | 4 pole | NZM3-4-XSVS | 168473 | | |
|-------------|--------|-------------|--------|--|--|

Control circuit plug unit

1230PIC-770 Symbolphoto



| | | | | | |
|---|---|------------|--------|-------|--------------|
| - | NZM1, N1 For auxiliary contact, shunt/overvoltage release | NZM2-XSVHI | 266705 | 1 Off | 10 terminals |
|---|---|------------|--------|-------|--------------|

1230PIC-845 Symbolphoto



| | | | | | |
|---|------------------------------|-----------|--------|-------|--|
| - | NZM2(-4) For remote operator | NZM2-XSVR | 266706 | 1 Off | |
|---|------------------------------|-----------|--------|-------|--|

4.5

Compact circuit breakers, switch disconnectors

Plug-in units, withdrawable units NZM1, NZM2, NZM3, NZM4

| For use with | Number of poles | Part no. Article no. when ordering separately | Article no. | Std. pack | Notes |
|--------------|-----------------|---|-------------|-----------|-------|
|--------------|-----------------|---|-------------|-----------|-------|

Withdrawable unit

For circuit breakers NZM and switch disconnectors N
Not UL/CSA approved
Not for $U_e > 690$ V

Socket base

For switches with withdrawable carrier.
Also for reserved compartments.

1230PIC-897 Symbolphoto



| | | | | | |
|------------|--------|-----------|--------|-------|--|
| NZM3 N3 | 3 pole | NZM3-XAVS | 266711 | 1 Off | I_{nmax} at: 20°C: 605 A (NZM3), 1600 A (NZM4) 40°C: 550 A (NZM3), 1500 A (NZM4) |
|------------|--------|-----------|--------|-------|--|

1230PIC-866 Symbolphoto



| | | | | | |
|----------------|--------|-------------|--------|-------|--|
| NZM3-4 N3-4 | 4 pole | NZM3-4-XAVS | 266712 | 1 Off | Mounting position: NZM3: vertical, 90° left NZM4: vertical |
|----------------|--------|-------------|--------|-------|--|

1230PIC-897 Symbolphoto



| | | | | | |
|------------|--------|-----------|--------|-------|--|
| NZM4 N4 | 3 pole | NZM4-XAVS | 266713 | 1 Off | 3 positions: Connected, test, disconnected Position indication is mechanical with pointers. Additional electrical indication with auxiliary contacts possible. One N/O or NC contact M22-(C)K01 or M22-(C)K10 each per position. Alternatively also double contacts M22-CK... |
|------------|--------|-----------|--------|-------|--|

1230PIC-866 Symbolphoto



| | | | | | |
|----------------|--------|-------------|--------|-------|---|
| NZM4-4 N4-4 | 4 pole | NZM4-4-XAVS | 266714 | 1 Off | Complete with control circuit plug unit. All auxiliary contact (HIA, HIN, HIV) and shunt release connections to the control circuit plug unit are already present. Maximum configuration: 3 contacts HIN, 2 contacts HIA, 2 contacts HIV Cannot be combined with adapter set NZM4/NZM14 (NZM4-XSAS14-...) or N(ZM)4/N(ZM)12. |
|----------------|--------|-------------|--------|-------|---|

Withdrawable carrier

Suitable for socket base
Only in combination with switch

1230PIC-1178 Symbolphoto



| | | | | | |
|----------------|--------|-------------|--------|-------|--|
| NZM4-4 N4-4 | 3 pole | NZM4-4-XAVE | 266717 | 1 Off | |
| NZM4-4 N4-4 | 4 pole | NZM4-4-XAVE | 266718 | 1 Off | |

Auxiliary contacts with screw terminals/spring-cage terminals M22-...

For use with

Contact configuration:
⊕ = safety function by positive opening according to IEC/EN 60947-5-1

Contact sequences

Part no.

Article no.

Std. pack












Article no. when ordering separately

N/O = normally open contact NC = normally closed contact

Auxiliary contacts

Standard auxiliary contacts (HIN)

Switches with the main contacts. Used for indicating and interlocking tasks.

| | | | | | | | | |
|--|--|--|-------|---|----------|--------|--------|---|
|  | Single contact with screw terminal | NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | 1 N/O |  | M22-K10 | 216376 | 20 Off |  |
| | | | 1 NC |  | M22-K01 | 216378 | | |
|  | Single contact with spring-cage terminal | NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | 1 N/O |  | M22-CK10 | 216384 | | |
| | | | 1 NC |  | M22-CK01 | 216385 | | |
|  | Double contact with spring cage terminal | NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | 2 N/O |  | M22-CK11 | 107940 | | |
| | | | 2 NC |  | M22-CK02 | 107899 | | |
| | | | 2 N/O |  | M22-CK20 | 107898 | | |

Notes

Information relevant for export to North America



The following can be clipped into the switch:

- NZM1: One standard auxiliary contact
- NZM2: Up to 2 standard auxiliary contacts M22-(C)K...
- NZM3: Up to 3 standard auxiliary contacts M22-(C)K...
- NZM4: Up to 3 standard auxiliary contacts M22-(C)K...

Any combinations of the auxiliary contact types are possible.

Marking on switch: HIN

On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts.

Product Standards IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking

UL File No. E29184

UL CCN NKCR

CSA File No. 012528

CSA Class No. 3211-03

NA Certification UL Listed, CSA certified

4.6

Compact circuit breakers, switch disconnectors

Auxiliary contacts with screw terminals/spring-cage terminals M22-...

For use with

Contact configuration:
⊕ = safety function by positive opening according to IEC/EN 60947-5-1

Contact sequences

Part no.

Article no.

Std. pack












Article no. when ordering separately

N/O = normally open contact NC = normally closed contact

Auxiliary contacts

Trip-indicating auxiliary contact (HIA), (HIAFI)¹

General trip-indication "+", when tripped by shunt release, overload release, short-circuit release or earth-fault release due to fault current.

| | | | | | | | | |
|--|--|--|-------|---|----------|--------|--------|---|
|  | Single contact with screw terminal | NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | 1 N/O |  | M22-K10 | 216376 | 20 Off |  |
| | | | 1 NC |  | M22-K01 | 216378 | | |
|  | Single contact with spring-cage terminal | NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | 1 N/O |  | M22-CK10 | 216384 | | |
| | | | 1 NC |  | M22-CK01 | 216385 | | |
|  | Double contact with spring-cage terminal | NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | 2 N/O |  | M22-CK11 | 107940 | | |
| | | | 2 NC |  | M22-CK02 | 107899 | | |
| | | | 2 N/O |  | M22-CK20 | 107898 | | |

Notes

Information relevant for export to North America



The following can be clipped into the switch:

- NZM1: One trip-indicating auxiliary switch
- NZM2: One trip-indicating auxiliary switch M22-(C)K...
- NZM3: One trip-indicating auxiliary switch M22-(C)K...
- NZM4: Up to 2 trip-indicating auxiliary switches M22-(C)K...

Any combinations of the auxiliary contact types are possible.

Not in combination with switch-disconnector PN...

Marking on switch: HIA.

Labeling in residual current-block: HIAFI.

Product Standards IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking

UL File No. E29184

UL CCN NKCR

CSA File No. 012528

CSA Class No. 3211-03

NA Certification UL Listed, CSA certified

If the trip-indicating auxiliary contacts are used in the residual current-block, the NC contacts operate as N/O contacts and the N/O contact operates as an NC contact.

Auxiliary contacts with screw terminals/spring-cage terminal NZM1, NZM2/3..., NZM4

For use with

Contact configuration:
⊕ = safety function by positive opening according to IEC/EN 60947-5-1

Contact sequences

Part no. Article no. when ordering separately

Article no. Std. pack

N/O = normally open contact NC = normally closed contact

Auxiliary contacts

Early-make auxiliary contact

For interlocking and load shedding circuits, as well as for early make of the undervoltage release in main switch/emergency switching off applications

1230PIC-763 Symbolphoto



With clamp terminal on left switch side

NZM1(-4), 2(-4), 3(-4), 4(-4) 2 N/O
PN1(-4), 2(-4), 3(-4)
N(S)1(-4), 2(-4), 3(-4), 4(-4)



NZM1-XHIV

259426

1 Off



1230PIC-765 Symbolphoto



With clamp terminal on right switch side.

2 N/O



NZM1-XHIVR

292195

1230PIC-764 Symbolphoto



With 3 m connection cable instead of screw connection.

2 N/O



NZM1-XHIVL

259432

Notes

Information relevant for export to North America



Not in conjunction with undervoltage release NZM...-XU... or shunt release NZM...-XA...

Early make with switch on and switch off (manual actuation): approx. 20 ms

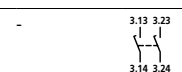
Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No. E140305
UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified

1230PIC-767 Symbolphoto



NZM2(-4), 3(-4)
PN2(-4), 3(-4)
N(S)2(-4), 3(-4)

2 N/O



NZM2/3-XHIV

259430¹⁾

1 N/O



NZM2/3-XHIV-PI

189748¹⁾

1230PIC-782 Symbolphoto



NZM4(-4)
N(S)4(-4)

2 N/O



NZM4-XHIV

266172²⁾

1 N/O



NZM4-XHIV-PI

189749²⁾

Notes

Information relevant for export to North America



¹⁾ Not in conjunction with undervoltage release NZM...-XU..., shunt releases NZM...-XA...
Early make with switch on and switch off (manual actuation): approx. 20 ms

²⁾ Not in conjunction with undervoltage release NZM...-XU..., shunt releases NZM...-XA... or remote operator NZM...-XR...
Early make (manual operation): approx. ca. 90 ms

Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No. E140305
UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified

4.7

Compact circuit breakers, switch disconnectors

Undervoltage releases NZM1

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Undervoltage releases

Without auxiliary contacts

Non-delayed disconnection of circuit breaker NZM or switch disconnector N when control voltage drops below 35 – 70 % U_s .
For use with emergency switching off devices in conjunction with emergency switching off button.

1230PIC-1127 Symbolphoto



| With clamp terminal on left switch side. | NZM1(-4), 24 V 50/60 Hz N(S)1(-4) 48 V 50/60 Hz | NZM1-XU24AC NZM1-XU48AC | 259434 259436 | 1 Off | When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
|--|--|----------------------------|------------------|-------|--|
| | 60 V 50/60 Hz | NZM1-XU60AC | 259438 | | |
| | 110 V - 130 V 50/60 Hz | NZM1-XU110-130AC | 259440 | | |
| | 208 V - 240 V 50/60 Hz | NZM1-XU208-240AC | 259442 | | |
| | 380 V - 440 V 50/60 Hz | NZM1-XU380-440AC | 259444 | | |
| | 480 V - 525 V 50/60 Hz | NZM1-XU480-525AC | 259446 | | |
| | 600 V 50/60 Hz | NZM1-XU600AC | 259448 | | |
| | 12 V DC | NZM1-XU12DC | 259450 | | |
| | 18 V DC | NZM1-XU18DC | 171798 | | |
| | 24 V DC | NZM1-XU24DC | 259452 | | |
| | 48 V DC | NZM1-XU48DC | 262631 | | |
| | 60 V DC | NZM1-XU60DC | 259454 | | |
| | 110 V - 130 V DC | NZM1-XU110-130DC | 259458 | | |
| | 220 V - 250 V DC | NZM1-XU220-250DC | 259460 | | |

1230PIC-1131 Symbolphoto



| With 3 m connection cable instead of screw terminal. | NZM1(-4), 24 V 50/60 Hz N(S)1(-4) 110 V - 130 V 50/60 Hz | NZM1-XUL24AC NZM1-XUL110-130AC | 259462 259468 | 1 Off | |
|--|---|-----------------------------------|------------------|-------|--|
| | 208 V - 240 V 50/60 Hz | NZM1-XUL208-240AC | 259471 | | |
| | 380 V - 440 V 50/60 Hz | NZM1-XUL380-440AC | 259473 | | |
| | 480 V - 525 V 50/60 Hz | NZM1-XUL480-525AC | 259475 | | |
| | 600 V 50/60 Hz | NZM1-XUL600AC | 259477 | | |
| | 12 V DC | NZM1-XUL12DC | 259479 | | |
| | 18 V DC | NZM1-XUL18DC | 171799 | | |
| | 24 V DC | NZM1-XUL24DC | 259481 | | |
| | 110 V - 130 V DC | NZM1-XUL110-130DC | 259487 | | |
| | 220 V - 250 V DC | NZM1-XUL220-250DC | 259489 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

Undervoltage releases NZM2/3..., NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |


Undervoltage releases

Without auxiliary contacts

Non-delayed disconnection of circuit breaker NZM or switch disconnector N when control voltage drops below 35 – 70 % U_s .
For use with emergency switching off devices in conjunction with emergency switching off button


1230PIC-1133 Symbolphoto



| | | | | | |
|---------------------|------------------------|--------------------|--------|-------|---|
| NZM2(-4), N(S)2(-4) | 24 V 50/60 Hz | NZM2/3-XU24AC | 259491 | 1 Off |  <p>When the undervoltage release is de-energized, accidental contact with the main switches of the switch during attempts to switch on is reliably prevented. Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XA...</p> |
| NZM3(-4), N(S)3(-4) | 48 V 50/60 Hz | NZM2/3-XU48AC | 259493 | | |
| | 60 V 50/60 Hz | NZM2/3-XU60AC | 259495 | | |
| | 110 V - 130 V 50/60 Hz | NZM2/3-XU110-130AC | 259497 | | |
| | 208 V - 240 V 50/60 Hz | NZM2/3-XU208-240AC | 259499 | | |
| | 380 V - 440 V 50/60 Hz | NZM2/3-XU380-440AC | 259501 | | |
| | 480 V - 525 V 50/60 Hz | NZM2/3-XU480-525AC | 259503 | | |
| | 600 V 50/60 Hz | NZM2/3-XU600AC | 259505 | | |
| | 12 V DC | NZM2/3-XU12DC | 259507 | | |
| | 18 V DC | NZM2/3-XU18DC | 171802 | | |
| | 24 V DC | NZM2/3-XU24DC | 259509 | | |
| | 48 V DC | NZM2/3-XU48DC | 259511 | | |
| | 60 V DC | NZM2/3-XU60DC | 259513 | | |
| | 110 V - 130 V DC | NZM2/3-XU110-130DC | 259515 | | |
| | 220 V - 250 V DC | NZM2/3-XU220-250DC | 259517 | | |

1230PIC-1148 Symbolphoto



| | | | | | |
|---------------------|------------------------|------------------|--------|-------|---|
| NZM4(-4), N(S)4(-4) | 24 V 50/60 Hz | NZM4-XU24AC | 266189 | 1 Off |  |
| | 48 V 50/60 Hz | NZM4-XU48AC | 266190 | | |
| | 60 V 50/60 Hz | NZM4-XU60AC | 266191 | | |
| | 110 V - 130 V 50/60 Hz | NZM4-XU110-130AC | 266192 | | |
| | 208 V - 240 V 50/60 Hz | NZM4-XU208-240AC | 266193 | | |
| | 380 V - 440 V 50/60 Hz | NZM4-XU380-440AC | 266194 | | |
| | 480 V - 525 V 50/60 Hz | NZM4-XU480-525AC | 266195 | | |
| | 600 V 50/60 Hz | NZM4-XU600AC | 266196 | | |
| | 12 V DC | NZM4-XU12DC | 266203 | | |
| | 18 V DC | NZM4-XU18DC | 171804 | | |
| | 24 V DC | NZM4-XU24DC | 266204 | | |
| | 48 V DC | NZM4-XU48DC | 266205 | | |
| | 60 V DC | NZM4-XU60DC | 266206 | | |
| | 110 V - 130 V DC | NZM4-XU110-130DC | 266207 | | |
| | 220 V - 250 V DC | NZM4-XU220-250DC | 266208 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

4.7

Compact circuit breakers, switch disconnectors

Undervoltage releases NZM1, NZM2/3

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Undervoltage releases


With two early-make auxiliary contacts

For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.
For use with emergency switching off devices in conjunction with emergency switching off button.

1230PIC-1128 Symbolphoto




With clamp terminal on left switch side.

| | | | | |
|--------------------------|---------------------|--------|-------|--|
| NZM1(-4), 24 V 50/60 Hz | NZM1-XUHIV24AC | 259531 | 1 Off |  When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms. Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
| N(S)1(-4), 48 V 50/60 Hz | NZM1-XUHIV48AC | 259533 | | |
| 60 V 50/60 Hz | NZM1-XUHIV60AC | 259535 | | |
| 110 V - 130 V 50/60 Hz | NZM1-XUHIV110-130AC | 259537 | | |
| 208 V - 240 V 50/60 Hz | NZM1-XUHIV208-240AC | 259539 | | |
| 380 V - 440 V 50/60 Hz | NZM1-XUHIV380-440AC | 259541 | | |
| 480 V - 525 V 50/60 Hz | NZM1-XUHIV480-525AC | 259543 | | |
| 12 V DC | NZM1-XUHIV12DC | 259545 | | |
| 18 V DC | NZM1-XUHIV18DC | 171800 | | |
| 24 V DC | NZM1-XUHIV24DC | 259547 | | |
| 48 V DC | NZM1-XUHIV48DC | 259549 | | |
| 60 V DC | NZM1-XUHIV60DC | 259551 | | |
| 110 V - 130 V DC | NZM1-XUHIV110-130DC | 259553 | | |
| 220 V - 250 V DC | NZM1-XUHIV220-250DC | 259555 | | |

1230PIC-1306 Symbolphoto




With 3 m connection cable instead of screw connection.

| | | | | |
|-----------------------------------|----------------------|--------|-------|---|
| NZM1(-4), 24 V 50/60 Hz | NZM1-XUHIVL24AC | 259557 | 1 Off |  |
| N(S)1(-4), 110 V - 130 V 50/60 Hz | NZM1-XUHIVL110-130AC | 259563 | | |
| 208 V - 240 V 50/60 Hz | NZM1-XUHIVL208-240AC | 259565 | | |
| 380 V - 440 V 50/60 Hz | NZM1-XUHIVL380-440AC | 259567 | | |
| 480 V - 525 V 50/60 Hz | NZM1-XUHIVL480-525AC | 259569 | | |
| 12 V DC | NZM1-XUHIVL12DC | 259571 | | |
| 18 V DC | NZM1-XUHIVL18DC | 171801 | | |
| 24 V DC | NZM1-XUHIVL24DC | 259573 | | |
| 110 V - 130 V DC | NZM1-XUHIVL110-130DC | 259579 | | |
| 220 V - 250 V DC | NZM1-XUHIVL220-250DC | 259581 | | |

1230PIC-1134 Symbolphoto



| | | | | |
|-----------------------------------|-----------------------|--------|-------|--|
| NZM2(-4), 24 V 50/60 Hz | NZM2/3-XUHIV24AC | 259583 | 1 Off |  When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms. Cannot be used in conjunction with remote operator NZM...-XR.... Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... |
| N(S)2(-4), 48 V 50/60 Hz | NZM2/3-XUHIV48AC | 259585 | | |
| NZM3(-4), 60 V 50/60 Hz | NZM2/3-XUHIV60AC | 259587 | | |
| N(S)3(-4), 110 V - 130 V 50/60 Hz | NZM2/3-XUHIV110-130AC | 259589 | | |
| 208 V - 240 V 50/60 Hz | NZM2/3-XUHIV208-240AC | 259591 | | |
| 380 V - 440 V 50/60 Hz | NZM2/3-XUHIV380-440AC | 259594 | | |
| 480 V - 525 V 50/60 Hz | NZM2/3-XUHIV480-525AC | 259598 | | |
| 12 V DC | NZM2/3-XUHIV12DC | 259600 | | |
| 18 V DC | NZM2/3-XUHIV18DC | 171803 | | |
| 24 V DC | NZM2/3-XUHIV24DC | 259602 | | |
| 48 V DC | NZM2/3-XUHIV48DC | 259604 | | |
| 60 V DC | NZM2/3-XUHIV60DC | 259606 | | |
| 110 V - 130 V DC | NZM2/3-XUHIV110-130DC | 259608 | | |
| 220 V - 250 V DC | NZM2/3-XUHIV220-250DC | 259610 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

Undervoltage releases NZM2/3..., NZM4

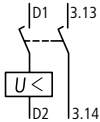
| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Undervoltage releases

With two early-make auxiliary contacts

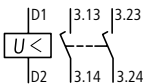
For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications. For use with emergency switching off devices in conjunction with emergency switching off button.

1230PIC-1149 Symbolphoto



| | | | | | |
|-----------|------------------------|---------------------|--------|-------|---|
| NZM4(-4), | 24 V 50/60 Hz | NZM4-XUHIV24AC | 266217 | 1 Off | When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early make of auxiliary contacts on switching on (manual operation): approx. 90 ms Cannot be used in conjunction with remote operator NZM...-XR... Undervoltage release cannot be installed together with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
| N(S)4(-4) | 48 V 50/60 Hz | NZM4-XUHIV48AC | 266218 | | |
| | 60 V 50/60 Hz | NZM4-XUHIV60AC | 266219 | | |
| | 110 V - 130 V 50/60 Hz | NZM4-XUHIV110-130AC | 266220 | | |
| | 208 V - 240 V 50/60 Hz | NZM4-XUHIV208-240AC | 266221 | | |
| | 380 V - 440 V 50/60 Hz | NZM4-XUHIV380-440AC | 266222 | | |
| | 480 V - 525 V 50/60 Hz | NZM4-XUHIV480-525AC | 266223 | | |
| | 12 V DC | NZM4-XUHIV12DC | 266231 | | |
| | 18 V DC | NZM4-XUHIV18DC | 171805 | | |
| | 24 V DC | NZM4-XUHIV24DC | 266232 | | |
| | 48 V DC | NZM4-XUHIV48DC | 266233 | | |
| | 60 V DC | NZM4-XUHIV60DC | 266234 | | |
| | 110 V - 130 V DC | NZM4-XUHIV110-130DC | 266235 | | |
| | 220 V - 250 V DC | NZM4-XUHIV220-250DC | 266236 | | |

1230PIC-1130 Symbolphoto



With 2 separate early-make auxiliary contacts

With 3 m connection cable instead of screw terminal.

| | | | | | |
|-----------|------------------------|-------------------------|--------|-------|---|
| NZM1(-4), | 24 V 50/60 Hz | NZM1-XUHIV20L24AC | 259612 | 1 Off | When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early make of auxiliary contacts on switching on (manual operation): approx. 20 ms Cannot be used in conjunction with remote operator NZM...-XR... Undervoltage release cannot be installed together with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
| N(S)1(-4) | 110 V - 130 V 50/60 Hz | NZM1-XUHIV20L110-130AC | 259620 | | |
| | 208 V - 240 V 50/60 Hz | NZM1-XUHIV20L208-240AC | 259622 | | |
| | 380 V - 440 V 50/60 Hz | NZM1-XUHIV20L380-440AC | 259624 | | |
| | 420 - 480 V 50/60 Hz | NZM1-XUHIV20L420-480VAC | 105946 | | |
| | 24 V DC | NZM1-XUHIV20L24DC | 259630 | | |
| | 18 V DC | NZM1-XUHIV20L18DC | 171807 | | |

Contacts 3.23 and 3.24 with separate 3 m connection cables.

| | | | | | |
|------------|------------------------|--------------------------|--------|-------|---|
| NZM2(-4), | 24 V 50/60 Hz | NZM2/3-XUHIV2024AC | 259640 | 1 Off | When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early make of auxiliary contacts on switching on (manual operation): approx. 20 ms Cannot be used in conjunction with remote operator NZM...-XR... Undervoltage release cannot be installed together with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
| N(S)2(-4), | 48 V 50/60 Hz | NZM2/3-XUHIV2048AC | 259643 | | |
| NZM3(-4), | 110 V - 130 V 50/60 Hz | NZM2/3-XUHIV20110-130AC | 259648 | | |
| N(S)3(-4) | 208 V - 240 V 50/60 Hz | NZM2/3-XUHIV20208-240AC | 259651 | | |
| | 380 V - 440 V 50/60 Hz | NZM2/3-XUHIV20380-440AC | 259653 | | |
| | 420 - 480 V 50/60 Hz | NZM2/3-XUHIV20420-480VAC | 105947 | | |
| | 24 V DC | NZM2/3-XUHIV2024DC | 259659 | | |
| | 18 V DC | NZM2/3-XUHIV2018DC | 171808 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

4.7

Compact circuit breakers, switch disconnectors

Undervoltage releases

NZM1, NZM2/3..., NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

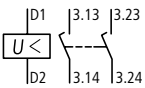
Undervoltage releases

With 2 separate early-make auxiliary contacts

For use with emergency switching off devices in conjunction with emergency switching off button.

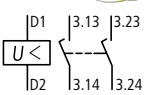
Coil connections wired to clamp terminals, auxiliary contact connections with 3 m loose connection cables.

1230PIC-1181 Symbolphoto



| | | | | | |
|-----------|------------------------|-------------------------|--------|-------|--|
| NZM1(-4), | 24 V 50/60 Hz | NZM1-XUHIV20KL24AC | 284388 | 1 Off | When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. |
| N(S)1(-4) | 110 V - 130 V 50/60 Hz | NZM1-XUHIV20KL110-130AC | 284389 | | |
| | 208 V - 240 V 50/60 Hz | NZM1-XUHIV20KL208-240AC | 284400 | | |
| | 24 V DC | NZM1-XUHIV20KL24DC | 284387 | | |

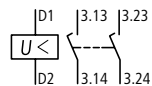
1230PIC-1129 Symbolphoto



Coil connections with 3 m loose connection cables, auxiliary contact connections wired to clamp terminals

| | | | | | |
|-----------|------------------------|-------------------------|--------|-------|---|
| NZM1(-4), | 24 V 50/60 Hz | NZM1-XUHIV20LK24AC | 284402 | 1 Off | Cannot be used in conjunction with remote operator NZM...-XR... Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
| N(S)1(-4) | 110 V - 130 V 50/60 Hz | NZM1-XUHIV20LK110-130AC | 284403 | | |
| | 208 V - 240 V 50/60 Hz | NZM1-XUHIV20LK208-240AC | 284404 | | |
| | 24 V DC | NZM1-XUHIV20LK24DC | 284401 | | |

1230PIC-1319 Symbolphoto



Contacts 3.23 and 3.24 with separate 3 m connection cables

| | | | | | |
|-----------|------------------------|-----------------------|--------|-------|--|
| NZM4(-4), | 24 V 50/60 Hz | NZM4-XUHIV2024AC | 266244 | 1 Off | |
| N(S)4(-4) | 110 V - 130 V 50/60 Hz | NZM4-XUHIV20110-130AC | 266247 | | |
| | 208 V - 240 V 50/60 Hz | NZM4-XUHIV20208-240AC | 266248 | | |
| | 380 V - 440 V 50/60 Hz | NZM4-XUHIV20380-440AC | 266249 | | |
| | 18 V DC | NZM4-XUHIV2018DC | 171809 | | |
| | 24 V DC | NZM4-XUHIV2024DC | 266258 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CEN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

Undervoltage releases NZM2/3..., NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Undervoltage releases

Without auxiliary contact - with push in terminal

Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70 % U_s .
For use with emergency-stop devices in connection with an emergency-stop button.

wa_sg07618 Symbolphoto



| | | | | | |
|-----------|-------------------------|-----------------------|--------|-------|---|
| NZM2(-4), | 24 V AC 50/60 Hz | NZM2/3-XU24AC-PI | 189750 | 1 Off | If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on. Undervoltage release modules cannot be installed simultaneously with early-make contact NZM...-XHIV, shunt release NZM...-XA... or relays modules NZM...-X2A... |
| N(S)2(-4) | 48 V AC 50/60 Hz | NZM2/3-XU48AC-PI | 189751 | | |
| NZM3(-4), | 60 V AC 50/60 Hz | NZM2/3-XU60AC-PI | 189752 | | |
| N(S)3(-4) | 110 - 130 V AC 50/60 Hz | NZM2/3-XU110-130AC-PI | 189753 | | |
| | 208 - 240 V AC 50/60 Hz | NZM2/3-XU208-240AC-PI | 189754 | | |
| | 12 V DC | NZM2/3-XU12DC-PI | 189755 | | |
| | 18 V DC | NZM2/3-XU18DC-PI | 189756 | | |
| | 24 V DC | NZM2/3-XU24DC-PI | 189757 | | |
| | 48 V DC | NZM2/3-XU48DC-PI | 189758 | | |
| | 60 V DC | NZM2/3-XU60DC-PI | 189759 | | |
| | 110 - 130 V DC | NZM2/3-XU110-130DC-PI | 189760 | | |
| | 220 - 250 V DC | NZM2/3-XU220-250DC-PI | 189761 | | |

wa_sg08018 Symbolphoto



| | | | | | |
|-----------|-------------------------|---------------------|--------|-------|--|
| NZM4(-4), | 24 V AC 50/60 Hz | NZM4-XU24AC-PI | 189762 | 1 Off | |
| N(S)4(-4) | 48 V AC 50/60 Hz | NZM4-XU48AC-PI | 189763 | | |
| | 60 V AC 50/60 Hz | NZM4-XU60AC-PI | 189764 | | |
| | 110 - 130 V AC 50/60 Hz | NZM4-XU110-130AC-PI | 189765 | | |
| | 208 - 240 V AC 50/60 Hz | NZM4-XU208-240AC-PI | 189766 | | |
| | 12 V DC | NZM4-XU12DC-PI | 189767 | | |
| | 18 V DC | NZM4-XU18DC-PI | 189768 | | |
| | 24 V DC | NZM4-XU24DC-PI | 189769 | | |
| | 48 V DC | NZM4-XU48DC-PI | 189770 | | |
| | 60 V DC | NZM4-XU60DC-PI | 189771 | | |
| | 110 - 130 V DC | NZM4-XU110-130DC-PI | 189772 | | |
| | 220 - 250 V DC | NZM4-XU220-250DC-PI | 189773 | | |

Information relevant for export to North America



Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking

UL File No. E140305

UL CCN DIHS

CSA File No. 022086

CSA Class No. 1437-01

NA Certification UL Listed, CSA certified

4.7

Compact circuit breakers, switch disconnectors

Undervoltage releases NZM2/3, NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Undervoltage releases

With two early-make auxiliary contacts - with Push-In terminals

For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications. For use with emergency switching off devices in conjunction with emergency switching off button.

wa_sg07518 Symbolphoto



| | | | | | |
|-----------|-------------------------|--------------------------|--------|-------|--|
| NZM2(-4), | 24 V AC 50/60 Hz | NZM2/3-XUHIV24AC-PI | 189774 | 1 Off | |
| N(S)2(-4) | 48 V AC 50/60 Hz | NZM2/3-XUHIV48AC-PI | 189775 | | |
| NZM3(-4), | 60 V AC 50/60 Hz | NZM2/3-XUHIV60AC-PI | 189776 | | |
| N(S)3(-4) | 110 - 130 V AC 50/60 Hz | NZM2/3-XUHIV110-130AC-PI | 189777 | | |
| | 208 - 240 V AC 50/60 Hz | NZM2/3-XUHIV208-240AC-PI | 189778 | | |
| | 12 V DC | NZM2/3-XUHIV12DC-PI | 189779 | | |
| | 18 V DC | NZM2/3-XUHIV18DC-PI | 189780 | | |
| | 24 V DC | NZM2/3-XUHIV24DC-PI | 189781 | | |
| | 48 V DC | NZM2/3-XUHIV48DC-PI | 189782 | | |
| | 60 V DC | NZM2/3-XUHIV60DC-PI | 189783 | | |
| | 110 - 130 V DC | NZM2/3-XUHIV110-130DC-PI | 189784 | | |
| | 220 - 250 V DC | NZM2/3-XUHIV220-250DC-PI | 189785 | | |

When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms. Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... .

wa_sg07818 Symbolphoto



| | | | | | |
|-----------|-------------------------|------------------------|--------|-------|--|
| NZM1(-4), | 24 V AC 50/60 Hz | NZM4-XUHIV24AC-PI | 189786 | 1 Off | |
| N(S)1(-4) | 48 V AC 50/60 Hz | NZM4-XUHIV48AC-PI | 189787 | | |
| | 60 V AC 50/60 Hz | NZM4-XUHIV60AC-PI | 189788 | | |
| | 110 - 130 V AC 50/60 Hz | NZM4-XUHIV110-130AC-PI | 189789 | | |
| | 208 - 240 V AC 50/60 Hz | NZM4-XUHIV208-240AC-PI | 189790 | | |
| | 12 V DC | NZM4-XUHIV12DC-PI | 189791 | | |
| | 18 V DC | NZM4-XUHIV18DC-PI | 189792 | | |
| | 24 V DC | NZM4-XUHIV24DC-PI | 189793 | | |
| | 48 V DC | NZM4-XUHIV48DC-PI | 189794 | | |
| | 60 V DC | NZM4-XUHIV60DC-PI | 189795 | | |
| | 110 - 130 V DC | NZM4-XUHIV110-130DC-PI | 189796 | | |
| | 220 - 250 V DC | NZM4-XUHIV220-250DC-PI | 189797 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

Undervoltage releases, switch-off delayed NZM2/3..., NZM4

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Undervoltage releases, off-delayed

Combination of separate delay unit and special releases.

For use with emergency switching off devices in conjunction with emergency switching off button. Not UL/CSA approved.

Delay unit

Voltage dips of less than 0.06 – 16 s do not cause disconnection of the NZM circuit breaker or N switch disconnector.

| | | | | |
|---|---------|--------|-------|--|
| NZM1(-4), 2(-4), 3(-4), 4(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) | UVU-NZM | 260154 | 1 Off | Delay time can be set from 70 ms - 4 s. With additional external capacitor: <ul style="list-style-type: none"> • 30.000 $\mu\text{F} \geq 35 \text{ V}$ up to 8 s • 90.000 $\mu\text{F} \geq 35 \text{ V}$ up to 16 s Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... Delay unit for separate installation (mounting: top-hat rail or screws). For other operating voltages use a control transformer. |
| 50/60 Hz 220 V - 240 V 380 V - 440 V 480 V - 550 V | | | | |
| DC/AC 24 V | | | | |

1230PIC-795 Symbolphoto



Special trip block

For combination with separate delay unit

Without auxiliary contacts

NZM1 with 3 m loose connection cables instead of screw terminal, NZM2, 3, and 4 with screw terminals.

| | | | | |
|--|------------|--------|-------|---|
| NZM1(-4) N(S)1(-4) | NZM1-XUVL | 271607 | 1 Off | Delay unit UVU-NZM is additionally required. Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... |
| NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) | NZM2/3-XUV | 259527 | | |
| NZM4(-4) N(S)4(-4) | NZM4-XUV | 266588 | | |

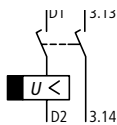
1230PIC-1148 Symbolphoto



With two early-make auxiliary contacts

| | | | | |
|--|---------------|--------|-------|--|
| NZM1(-4) N(S)1(-4) | NZM1-XUVHIVL | 271608 | 1 Off | Cannot be used in conjunction with remote operator NZM...-XR... Delay unit UVU-NZM is additionally required. Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... |
| NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) | NZM2/3-XUVHIV | 259684 | | |
| NZM4(-4) N(S)4(-4) | NZM4-XUVHIV | 266596 | | |

1230PIC-1149 Symbolphoto

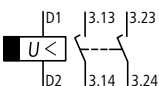


With two independently operating early-make auxiliary contacts

NZM1 with 3 m separate connection cables instead of screw terminal, NZM2, 3 and 4 with screw terminal, contact 3.23 and 3.24 with 3 m separate connection cables

| | | | | |
|--|-----------------|--------|-------|--|
| NZM1(-4) N(S)1(-4) | NZM1-XUVHIV20L | 271609 | 1 Off | NZM1, 2, 3: Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms. NZM4: Early make of auxiliary contacts on switching on (manual operation): approx. 90 ms. |
| NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) | NZM2/3-XUVHIV20 | 259688 | | |
| NZM4(-4) N(S)4(-4) | NZM4-XUVHIV20 | 266604 | | |

1230PIC-1319 Symbolphoto



4.8

Compact circuit breakers, switch disconnectors

Shunt releases

NZM1, NZM2/3, NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Shunt releases

Without auxiliary contacts

Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.

1230PIC-756 Symbolphoto



| With clamp terminal on left switch side | NZM1(-4), N(S)1(-4) | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|---|---------------------|-----------------------|---------------------|-------------|-----------|--|
| | | 12 V AC/DC | NZM1-XA12AC/DC | 259706 | 1 Off | When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XU... . |
| | | 24 V AC/DC | NZM1-XA24AC/DC | 259708 | | |
| | | 48 V AC/DC | NZM1-XA48AC/DC | 259720 | | |
| | | 60 V AC/DC | NZM1-XA60AC/DC | 259722 | | |
| | | 110 V - 130 V AC/DC | NZM1-XA110-130AC/DC | 259724 | | |
| | | 208 V - 250 V AC/DC | NZM1-XA208-250AC/DC | 259726 | | |
| | | 380 V - 440 V AC/DC | NZM1-XA380-440AC/DC | 259728 | | |
| | | 480 V - 525 V AC/DC | NZM1-XA480-525AC/DC | 259730 | | |

1230PIC-838 Symbolphoto



| With 3 m connection cable instead of screw terminal | NZM1(-4), N(S)1(-4) | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|---|---------------------|-----------------------|----------------------|-------------|-----------|-------|
| | | 12 V AC/DC | NZM1-XAL12AC/DC | 259734 | 1 Off | |
| | | 24 V AC/DC | NZM1-XAL24AC/DC | 259736 | | |
| | | 110 V - 130 V AC/DC | NZM1-XAL110-130AC/DC | 259742 | | |
| | | 208 V - 250 V AC/DC | NZM1-XAL208-250AC/DC | 259744 | | |
| | | 380 V - 440 V AC/DC | NZM1-XAL380-440AC/DC | 259746 | | |
| | | 480 V - 525 V AC/DC | NZM1-XAL480-525AC/DC | 259748 | | |

1230PIC-1370 Symbolphoto



| | NZM2(-4), N(S)2(-4) | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--|---------------------|-----------------------|-----------------------|-------------|-----------|-------|
| | | 12 V AC/DC | NZM2/3-XA12AC/DC | 259752 | 1 Off | |
| | | 24 V AC/DC | NZM2/3-XA24AC/DC | 259754 | | |
| | NZM3(-4), N(S)3(-4) | 48 V AC/DC | NZM2/3-XA48AC/DC | 259756 | | |
| | | 60 V AC/DC | NZM2/3-XA60AC/DC | 259758 | | |
| | | 110 V - 130 V AC/DC | NZM2/3-XA110-130AC/DC | 259760 | | |
| | | 208 V - 250 V AC/DC | NZM2/3-XA208-250AC/DC | 259763 | | |
| | | 380 V - 440 V AC/DC | NZM2/3-XA380-440AC/DC | 259766 | | |
| | | 480 V - 525 V AC/DC | NZM2/3-XA480-525AC/DC | 259768 | | |

1230PIC-1387 Symbolphoto



| | NZM4(-4), N(S)4(-4) | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--|---------------------|-----------------------|---------------------|-------------|-----------|-------|
| | | 12 V AC/DC | NZM4-XA12AC/DC | 266446 | 1 Off | |
| | | 24 V AC/DC | NZM4-XA24AC/DC | 266447 | | |
| | | 48 V AC/DC | NZM4-XA48AC/DC | 266448 | | |
| | | 60 V AC/DC | NZM4-XA60AC/DC | 266449 | | |
| | | 110 V - 130 V AC/DC | NZM4-XA110-130AC/DC | 266450 | | |
| | | 208 V - 250 V AC/DC | NZM4-XA208-250AC/DC | 266451 | | |
| | | 380 V - 440 V AC/DC | NZM4-XA380-440AC/DC | 266452 | | |
| | | 480 V - 525 V AC/DC | NZM4-XA480-525AC/DC | 266453 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

Shunt releases NZM...-XA...

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|---------------------|-------------|-----------|-------|
| | Mit Screw terminals | | | |

Shunt releases

Capacitor unit 230 V 50/60 Hz in conjunction with shunt release NZM...-XA208-250 AC/DC
Enclosure: degree of protection IP20
Not UL/CSA approved

1230PIC-788 Symbolphoto

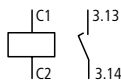


| | | | | |
|--|---------|--------|-------|--|
| NZM1(-4), N(S)1(-4) NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4) | NZM-XCM | 229413 | 1 Off | <p>Enables the reliable use of circuit breakers as mesh network circuit breakers in the range from 0 – 110 % U_n with constant switch-off time of 40 ms.</p> <p>If the mains voltage is absent, the installed capacitor supplies power for actuating the shunt release for at least 12 hours.</p> <p>The capacitor unit is arranged independently of the circuit breaker.</p> <p>Connect NZM-XCM to the power feed side.</p> <p>Note on engineering: Connect a standard auxiliary contact (HIN) as N/O in series with the coil of the shunt release!</p> <p>Standard auxiliary contact not included as standard</p> |
|--|---------|--------|-------|--|

Shunt releases

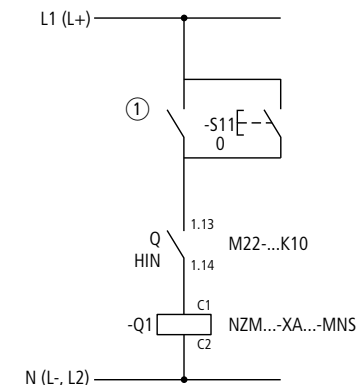
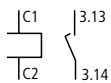
For mesh network circuit breakers
For intermittent operation
Maximum On-time = 1 s
Operating range 10-110 % U_s
Not UL/CSA approved

1230PIC-1382 Symbolphoto



| | | | | |
|-----------------------------------|----------------------|--------|-------|---|
| Without auxiliary contacts | NZM3-XA-230AC-MNS | 274097 | 1 Off | <p>Rated control voltage 230 V AC For use with NZM3(-4), N3(-4) and NZM4(-4), N4(-4) Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...</p> <p>Intermittent operation guaranteed by series connection of a make contact M22-(C)K10. The maximum duty factor of the shunt releases for mesh network circuit breakers is 1 s.</p> |
| With early-make auxiliary contact | NZM3-XAHIV-230AC-MNS | 274141 | | |
| Without auxiliary contacts | NZM4-XA-230AC-MNS | 274138 | | <p>NZM...-XAHIV: Cannot be used in conjunction with remote operator NZM...-XR... NZM3: Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms. NZM4: Early make of auxiliary contact on switching on (manual operation): approx. 90 ms.</p> |
| With early-make auxiliary contact | NZM4-XAHIV-230AC-MNS | 274143 | | |

sg07615 Symbolphoto



- ① Reverse power relay contact from mesh network relay
- S11 Remote off
- Q Standard auxiliary contacts
- Q1 Shunt releases

4.8

Compact circuit breakers, switch disconnectors

Shunt releases

NZM1, NZM2/3, NZM4

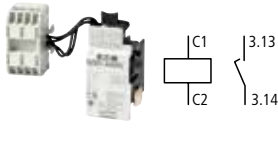
| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Shunt releases

With early-make auxiliary contact

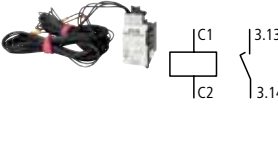
Not in combination with remote operator.

1230PIC-1364 Symbolphoto



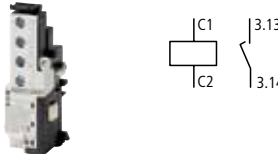
| | | | | | | |
|--|------------------------|------------------------|--------|-------|--|---|
| With clamp terminal on left switch side. | NZM1(-4), 12 V AC/DC | NZM1-XAHIV12AC/DC | 259772 | 1 Off | | When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms. |
| | N(S)1(-4) 24 V AC/DC | NZM1-XAHIV24AC/DC | 259774 | | | |
| | 48 V AC/DC | NZM1-XAHIV48AC/DC | 259776 | | | |
| | 60 V AC/DC | NZM1-XAHIV60AC/DC | 259778 | | | |
| | 110 V - 130 V AC/DC | NZM1-XAHIV110-130AC/DC | 259780 | | | |
| | 208 V - 250 V AC/DC | NZM1-XAHIV208-250AC/DC | 259782 | | | |
| 380 V - 440 V AC/DC | NZM1-XAHIV380-440AC/DC | 259784 | | | | |

1230PIC-1366 Symbolphoto



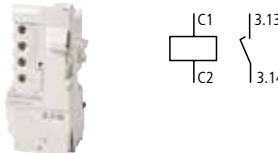
| | | | | | | |
|---|----------------------|-------------------------|--------|-------|--|---|
| With 3 m connection cable instead of screw terminal | NZM1(-4), 12 V AC/DC | NZM1-XAHIVL12AC/DC | 259790 | 1 Off | | Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...XHIV... or undervoltage release NZM...XU... |
| | N(S)1(-4) 24 V AC/DC | NZM1-XAHIVL24AC/DC | 259792 | | | |
| | 110 V - 130 V AC/DC | NZM1-XAHIVL110-130AC/DC | 259798 | | | |
| | 208 V - 250 V AC/DC | NZM1-XAHIVL208-250AC/DC | 259800 | | | |
| | 380 V - 440 V AC/DC | NZM1-XAHIVL380-440AC/DC | 259802 | | | |

1230PIC-1374 Symbolphoto



| | | | | | | |
|----------------------|--------------------------|--------------------------|--------|-------|--|--|
| with Screw terminals | NZM2(-4), 12 V AC/DC | NZM2/3-XAHIV12AC/DC | 259808 | 1 Off | | |
| | N(S)2(-4) 24 V AC/DC | NZM2/3-XAHIV24AC/DC | 259810 | | | |
| | NZM3(-4), 48 V AC/DC | NZM2/3-XAHIV48AC/DC | 259812 | | | |
| | N(S)3(-4) 60 V AC/DC | NZM2/3-XAHIV60AC/DC | 259814 | | | |
| | 110 V - 130 V AC/DC | NZM2/3-XAHIV110-130AC/DC | 259816 | | | |
| | 208 V - 250 V AC/DC | NZM2/3-XAHIV208-250AC/DC | 259818 | | | |
| 380 V - 440 V AC/DC | NZM2/3-XAHIV380-440AC/DC | 259820 | | | | |

1230PIC-1388 Symbolphoto



| | | | | | | |
|----------------------|------------------------|------------------------|--------|-------|--|--|
| with Screw terminals | NZM4(-4), 12 V AC/DC | NZM4-XAHIV12AC/DC | 266470 | 1 Off | | When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Early make of auxiliary contact on switching on (manual operation): approx. 90 ms. Cannot be used in conjunction with remote operator NZM...XR.... Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...XHIV... or undervoltage release NZM...XU.... |
| | N(S)4(-4) 24 V AC/DC | NZM4-XAHIV24AC/DC | 266471 | | | |
| | 48 V AC/DC | NZM4-XAHIV48AC/DC | 266472 | | | |
| | 60 V AC/DC | NZM4-XAHIV60AC/DC | 266473 | | | |
| | 110 V - 130 V AC/DC | NZM4-XAHIV110-130AC/DC | 266474 | | | |
| | 208 V - 250 V AC/DC | NZM4-XAHIV208-250AC/DC | 266475 | | | |
| 380 V - 440 V AC/DC | NZM4-XAHIV380-440AC/DC | 266476 | | | | |

Information relevant for export to North America



Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking

UL File No. E140305

UL CCN DIHS

CSA File No. 022086

CSA Class No. 1437-01

NA Certification UL Listed, CSA certified

Shunt releases NZM2/3, NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |


Shunt releases

Without auxiliary contacts - with push in terminal

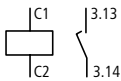
Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70 % U_s .
For use with emergency-stop devices in connection with an emergency-stop button.


wa_sg07618 Symbolphoto



| | | | | | |
|------------------------|---------------------|--------------------------|--------|-------|--|
| NZM2(-4), N(S)2(-4) | 12 V AC/DC | NZM2/3-XA12AC/DC-PI | 189798 | 1 Off |  When the shunt release is live, contact with the circuit breaker's main contacts on switching on is reliably prevented. Shunt release modules cannot be installed simultaneously with early-make contact NZM...-XHIV, undervoltage release NZM...-XU..., or relays modules NZM...-X2A... |
| NZM3(-4), N(S)3(-4) | 24 V AC/DC | NZM2/3-XA24AC/DC-PI | 189799 | | |
| | 48 V AC/DC | NZM2/3-XA48AC/DC-PI | 189800 | | |
| | 60 V AC/DC | NZM2/3-XA60AC/DC-PI | 189801 | | |
| | 110 V - 130 V AC/DC | NZM2/3-XA110-130AC/DC-PI | 189802 | | |
| | 208 V - 250 V AC/DC | NZM2/3-XA208-250AC/DC-PI | 189803 | | |

wa_sg08018 Symbolphoto




| | | | | | |
|------------------------|---------------------|------------------------|--------|--|--|
| NZM4(-4), N(S)4(-4) | 12 V AC/DC | NZM4-XA12AC/DC-PI | 189804 | |  When the shunt release is live, contact with the circuit breaker's main contacts on switching on is reliably prevented. Shunt release modules cannot be installed simultaneously with early-make contact NZM...-XHIV, undervoltage release NZM...-XU..., or relays modules NZM...-X2A... |
| | 24 V AC/DC | NZM4-XA24AC/DC-PI | 189805 | | |
| | 48 V AC/DC | NZM4-XA48AC/DC-PI | 189806 | | |
| | 60 V AC/DC | NZM4-XA60AC/DC-PI | 189807 | | |
| | 110 V - 130 V AC/DC | NZM4-XA110-130AC/DC-PI | 189808 | | |
| | 208 V - 250 V AC/DC | NZM4-XA208-250AC/DC-PI | 189809 | | |

With early-make auxiliary contact - with push in terminal

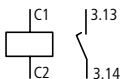
Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70 % U_s .
For use with emergency-stop devices in connection with an emergency-stop button.


wa_sg07518 Symbolphoto



| | | | | | |
|-----------------------------------|---------------------|-----------------------------|--------|-------|--|
| NZM2(-4), N(S)2(-4), N3(-4) | 12 V AC/DC | NZM2/3-XAHIV12AC/DC-PI | 189810 | 1 Off |  When the shunt release is live, contact with the circuit breaker's main contacts on switching on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4). Shunt release modules cannot be installed simultaneously with early-make contact NZM...-XHIV, undervoltage release NZM...-XU..., relays modules NZM...-X2A..., or remote operator NZM...-XR... |
| | 24 V AC/DC | NZM2/3-XAHIV24AC/DC-PI | 189811 | | |
| | 48 V AC/DC | NZM2/3-XAHIV48AC/DC-PI | 189812 | | |
| | 60 V AC/DC | NZM2/3-XAHIV60AC/DC-PI | 189813 | | |
| | 110 V - 130 V AC/DC | NZM2/3-XAHIV110-130AC/DC-PI | 189814 | | |
| | 208 V - 250 V AC/DC | NZM2/3-XAHIV208-250AC/DC-PI | 189815 | | |

wa_sg07818 Symbolphoto



| | | | | | |
|------------------------|---------------------|---------------------------|--------|--|--|
| NZM4(-4), N(S)4(-4) | 12 V AC/DC | NZM4-XAHIV12AC/DC-PI | 189816 | |  When the shunt release is live, contact with the circuit breaker's main contacts on switching on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4). Shunt release modules cannot be installed simultaneously with early-make contact NZM...-XHIV, undervoltage release NZM...-XU..., relays modules NZM...-X2A..., or remote operator NZM...-XR... |
| | 24 V AC/DC | NZM4-XAHIV24AC/DC-PI | 189817 | | |
| | 48 V AC/DC | NZM4-XAHIV48AC/DC-PI | 189818 | | |
| | 60 V AC/DC | NZM4-XAHIV60AC/DC-PI | 189819 | | |
| | 110 V - 130 V AC/DC | NZM4-XAHIV110-130AC/DC-PI | 189820 | | |
| | 208 V - 250 V AC/DC | NZM4-XAHIV208-250AC/DC-PI | 189821 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

4.9

Compact circuit breakers, switch disconnectors

Relay modules NZM2/3, NZM4

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Relay modules

Undervoltage releases with two relays

wa_sg06918 Symbolphoto



| | | | | |
|------------------|----------------------|--------|-------|--|
| PXR20(25) | NZM2/3-XU2A24AC | 189724 | 1 Off | <p>Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70 % U_S.</p> <p>For use with emergency-stop devices in connection with an emergency-stop button.</p> <p>For signaling commands or different states of the circuit breaker. Two relays per unit.</p> <p>The activation criteria can be configured in the trip unit. Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager. When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on.</p> <p>Only for use in combination with circuit breakers with electronic trips.</p> <p>Under-voltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.</p> <p>Relay contacts for control wiring.</p> <p>Control wiring on push-in clamps.</p> <p>Cannot be used with the PXR10 NZM-AX electronic trip.</p> |
| NZM2(-4)-...X... | NZM2/3-XU2A24DC | 189725 | | |
| PXR20(25) | NZM2/3-XU2A110-130AC | 189726 | | |
| NZM3(-4)-...X... | NZM2/3-XU2A208-240AC | 189727 | | |

wa_sg06518 Symbolphoto



| | | | | |
|------------------|--------------------|--------|--|--|
| PXR20(25) | NZM4-XU2A24AC | 189728 | | <p>Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager. When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on.</p> <p>Only for use in combination with circuit breakers with electronic trips.</p> <p>Under-voltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.</p> <p>Relay contacts for control wiring.</p> <p>Control wiring on push-in clamps.</p> <p>Cannot be used with the PXR10 NZM-AX electronic trip.</p> |
| NZM4(-4)-...X... | NZM4-XU2A24DC | 189729 | | |
| | NZM4-XU2A110-130AC | 189730 | | |
| | NZM4-XU2A208-240AC | 189731 | | |

sg05318 Symbolphoto



Undervoltage releases and 1 early-make auxiliary contact and 2 Relays

| | | | | |
|------------------|-------------------------|--------|-------|--|
| PXR20(25) | NZM2/3-XUHIV2A24AC | 189732 | 1 Off | <p>For interlock circuits and load-shedding circuits as well as make-before-break interruption of the shunt trip for primary breaker use.</p> <p>Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70 % U_S.</p> <p>For use with emergency-stop devices in connection with an emergency-stop button.</p> <p>For signaling commands or different states of the circuit breaker.</p> <p>Two relays per unit.</p> <p>The activation criteria can be configured in the trip unit. Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager. When the undervoltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Make-before-break activation of auxiliary contact when switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4). Only for use in combination with circuit breakers with electronic trips. Cannot be used in conjunction with NZM...-XR... remote operator.</p> <p>Undervoltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.</p> <p>Relay coil is controlled by trip unit.</p> <p>Relay contacts for control wiring.</p> <p>Control wiring on push-in clamps.</p> <p>Cannot be used with the PXR10 NZM-AX electronic trip.</p> |
| NZM2(-4)-...X... | NZM2/3-XUHIV2A24DC | 189733 | | |
| PXR20(25) | NZM2/3-XUHIV2A110-130AC | 189734 | | |
| NZM3(-4)-...X... | NZM2/3-XUHIV2A208-240AC | 189735 | | |

sg05018 Symbolphoto



| | | | | |
|------------------|-----------------------|--------|--|---|
| PXR20(25) | NZM4-XUHIV2A24AC | 189736 | | <p>Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager. When the undervoltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Make-before-break activation of auxiliary contact when switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4). Only for use in combination with circuit breakers with electronic trips. Cannot be used in conjunction with NZM...-XR... remote operator.</p> <p>Undervoltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.</p> <p>Relay coil is controlled by trip unit.</p> <p>Relay contacts for control wiring.</p> <p>Control wiring on push-in clamps.</p> <p>Cannot be used with the PXR10 NZM-AX electronic trip.</p> |
| NZM4(-4)-...X... | NZM4-XUHIV2A24DC | 189737 | | |
| | NZM4-XUHIV2A110-130AC | 189738 | | |
| | NZM4-XUHIV2A208-240AC | 189739 | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Relay modules

Shunt release with two relays

wa_sg06918 Symbolphoto



| | | | |
|------------------|----------------------|--------|-------|
| PXR20(25) | NZM2/3-XA2A24AC | 189740 | 1 Off |
| NZM2(-4)-...X... | NZM2/3-XA2A24DC | 189741 | |
| PXR20(25) | NZM2/3-XA2A110-130AC | 189742 | |
| NZM3(-4)-...X... | NZM2/3-XA2A208-240AC | 189743 | |

The breakers are actuated by a voltage pulse or by applying a no-break current.
For signaling commands or different states of the circuit breaker.
Two relays per unit.
The activation criteria can be configured in the trip unit.
Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager.
If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.
Only for use in combination with circuit breakers with electronic trips.
Shunt trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.
Relay coil is controlled by trip unit.
Relay contacts for control wiring.
Control wiring on push-in clamps.
Cannot be used with the PXR10 NZM-AX electronic trip.

wa_sg06518 Symbolphoto



| | | | |
|------------------|--------------------|--------|--|
| PXR20(25) | NZM4-XA2A24AC | 189744 | |
| NZM4(-4)-...X... | NZM4-XA2A24DC | 189745 | |
| | NZM4-XA2A110-130AC | 189746 | |
| | NZM4-XA2A208-240AC | 189747 | |

Relay module

wa_sg07318 Symbolphoto



| | | | |
|------------------|------------|--------|-------|
| PXR20(25) | NZM2/3-X2A | 189722 | 1 Off |
| NZM2(-4)-...X... | | | |
| PXR20(25) | | | |
| NZM3(-4)-...X... | | | |

For signaling commands or different states of the circuit breaker. Two relays per unit. The activation criteria can be configured in the trip unit.
Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager.
24 V DC, 24 - 240 V 50/60 Hz.
Only for use in combination with circuit breakers with electronic trips.
Relay components cannot be installed simultaneously with make-before-break auxiliary breaker NZM...-XHIV, the under-voltage trip NZM...-XU... or the shunt trip NZM...-XA....
Relay contacts for control wiring.
Control wiring on push-in clamps.
Cannot be used with the PXR10 NZM-AX electronic trip.

wa_sg07418 Symbolphoto



| | | | |
|------------------|----------|--------|--|
| PXR20(25) | NZM4-X2A | 189723 | |
| NZM4(-4)-...X... | | | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

4.10

Compact circuit breakers, switch disconnectors

Door coupling rotary handles NZM1, NZM2, NZM3, NZM4

| Product view | For use with | Standard Part no. | Article no. | Std. pack | Notes |
|--------------|--------------|--------------------------------------|-------------|-----------|-------|
| | | Article no. when ordering separately | | | |

Door coupling rotary handles


Complete including rotary drive and coupling parts
An additional extension shaft is necessary with the NZM...-XT(V)D(V)(R)(-60) part numbers.
Degree of protection IP66/UL/CSA type 4X, 12

Standard, black/grey

1230PIC-681, sg06315, 1230PIC-1419 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks.
With door interlock

| | | | | |
|------------------------------------|-----------|--------|-------|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XTVD | 260166 | 1 Off |  Circuit breaker can also be installed in a horizontal position 90° left/right, with the handle still in the same position. |
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XTVD | 260168 | | |
| NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XTVD | 260170 | | |
| NZM4(-4), N(S)4(-4) | NZM4-XTVD | 266614 | | |

1230PIC-681, sg06115, 1230PIC-1419 Symbolphoto



Lockable on handle and switch with up to 3 padlocks.
Can be locked in 0 position, with adequate modification also in I position.
With door interlock.
Lockable on switch in 0 position.


| | | | | |
|------------------------------------|------------|--------|--|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XTVDV | 260172 | | |
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XTVDV | 260174 | | |
| NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XTVDV | 260176 | | |
| NZM4(-4), N(S)4(-4) | NZM4-XTVDV | 266616 | | |

Red-yellow for emergency switching off

1230PIC-682, 1230PIC-696, sg05315 Symbolphoto



Lockable on handle and switch with up to 3 padlocks.
Lockable in 0 position on handle.
With door interlock.
Lockable on switch in 0 position.

| | | | | |
|------------------------------------|-------------|--------|-------|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XTVDVR | 260178 | 1 Off |  Circuit breaker can also be installed in a horizontal position 90° left/right, with the handle still in the same position. |
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XTVDVR | 260180 | | |
| NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XTVDVR | 260182 | | |
| NZM4(-4), N(S)4(-4) | NZM4-XTVDVR | 266618 | | |

Information relevant for export to North America



| | |
|----------------------|--|
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |
| Degree of Protection | IEC: IP66, UL/CSA Type 4X, 12 |

Door coupling rotary handles NZM1, NZM2, NZM3, NZM4

For maximum shaft length 60 mm









Part no. Article no. Std. pack Notes

Article no. when
ordering separately

Extremely narrow fittings

Article no. Std. pack Notes

Article no. when
ordering separately

| Part no. | Article no. | Std. pack | Notes | Part no. | Article no. | Std. pack | Notes | | |
|----------------|-------------|---|--|--|---------------|---|--|---|--|
| NZM1-XTVD-60 | 271504 | 1 Off | Door interlock <ul style="list-style-type: none"> • Can not be defeated in the locked OFF and ON positions • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM...-XTVD(V)-60 • For maximum shaft length 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on. | NZM1-XTVD-0 | 279392 | 1 Off | Circuit breaker can also be installed in a horizontal position 90° left/right, with the handle still in the same position. | | |
| NZM2-XTVD-60 | 271505 |   | | NZM2-XTVD-0 | 279393 |   | | | |
| NZM3-XTVD-60 | 271506 | | | NZM3-XTVD-0 | 279394 | | | | |
| NZM4-XTVD-60 | 271507 | | | NZM4-XTVD-0 | 279395 | | | | |
| NZM1-XTVDV-60 | 271508 | | | NZM1-XTVDV-0 | 279396 | | | | |
| NZM2-XTVDV-60 | 271509 | | | NZM2-XTVDV-0 | 279397 | | | | |
| NZM3-XTVDV-60 | 271510 | | | NZM3-XTVDV-0 | 279398 | | | | |
| NZM4-XTVDV-60 | 271511 | | | NZM4-XTVDV-0 | 279399 | | | | |
| NZM1-XTVDVR-60 | 271512 | 1 Off | | Door interlock <ul style="list-style-type: none"> • Can not be defeated in the locked OFF position. • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM...-XTVDVR-60 • For maximum shaft length 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on. | NZM1-XTVDVR-0 | 279400 | | 1 Off | Circuit breaker can also be installed in a horizontal position 90° left/right, with the handle still in the same position. |
| NZM2-XTVDVR-60 | 271513 |   | | | NZM2-XTVDVR-0 | 279401 | |   | |
| NZM3-XTVDVR-60 | 271514 | | NZM3-XTVDVR-0 | | 279402 | | | | |
| NZM4-XTVDVR-60 | 271515 | | NZM4-XTVDVR-0 | | 279403 | | | | |

4.10



Compact circuit breakers, switch disconnectors

Door coupling rotary handles NZM1, NZM2, NZM3, NZM4

| For use with | Standard Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Extension shaft













UL/CSA certification not required

| | | | | |
|-------------------------------|---|--------|---|--|
| 400 mm max. mounting depth | NZM1(-4), PN1(-4), NZM1/2-XV4 N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4) | 261232 | 1 Off   | Length 290 mm, can be cut to required length. |
| | NZM3(-4), PN3(-4), NZM3/4-XV4 N(S)3(-4) NZM4(-4), N(S)4(-4) | 261234 | | |
| 600 mm max. mounting depth | NZM1(-4), PN1(-4), NZM1/2-XV6 N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4) | 260191 | | Length 425 mm, can be cut to required length. |
| | NZM3(-4), PN3(-4), NZM3/4-XV6 N(S)3(-4) NZM4(-4), N(S)4(-4) | 260193 | | |

1230PIC-153 Symbolphoto



Door coupling rotary handle with key lock NZM1, NZM2, NZM3, NZM4

| | For use with | Part no. | Article no. | Std. pack | Notes |
|---|---|--------------------------------------|-----------------------------|------------------|--|
| | | Article no. when ordering separately | | | |
| Door coupling rotary handle with key lock | | | | | |
| Door coupling rotary handle for operating the switch through a closed control panel door. | | | | | |
| Standard, black/grey | | | | | |
| 1230PIC-1159 Symbolphoto  | Lockable in position 0 using cylinder lock and key withdrawable Also possible: lockable on the 0 position on the handle using up to 3 padlocks With door interlock | NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XTVDKL NZM1-XTVDKLR | 172528 172529 | 1 Off   |
| 1230PIC-1160 Symbolphoto  | Not defeatable in the locked OFF and ON positions with padlock on the handle. Can be modified in the unlocked ON position. Can be modified such that it can be defeated from the outside using a screwdriver. | NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XTVDKL NZM2-XTVDKLR | 172530 172531 | 1 Off   |
| 1230PIC-1161 Symbolphoto  | Door to be opened in the OFF position when not locked. External warning plate/designation label can be clipped on. Complete including rotary drive and coupling parts. | NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XTVDKL NZM3-XTVDKLR | 172532 172533 | 1 Off   |
| 1230PIC-1162 Symbolphoto  | Extension shaft additionally required. obtainable in two lengths. | NZM4(-4), N(S)4(-4) | NZM4-XTVDKL NZM4-XTVDKLR | 172534 172535 | 1 Off   |

Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

- Cannot be combined with:
- Remote operator
 - Side panel mounting
 - Mechan. interlock
 - Insulating surround

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

4.12

Compact circuit breakers, switch disconnectors

Door coupling rotary handles for North America NZM1, NZM2, NZM3, NZM4

| For use with | Standard Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Door coupling rotary handles


Complete including rotary drive and coupling parts. Extension shaft additionally required. Degree of protection IP66/UL/CSA type 4X, 12. Difference to normal IEC handles: Door opening only possible with active rotation beyond the 0 position.

Standard, black/grey

1230PIC-681, sg06315, 1230PIC-1419 Symbolphoto



Lockable in 0 position on handle.
With door interlock.

| | | | | |
|-------------|--------------|--------|-------|---|
| NZM1 N1 | NZM1-XTVD-NA | 271445 | 1 Off |  <ul style="list-style-type: none"> • Door interlock • Can not be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on |
| NZM2, N2 | NZM2-XTVD-NA | 271446 | | |
| NZM3, N3 | NZM3-XTVD-NA | 271447 | | |
| NZM4, N4 | NZM4-XTVD-NA | 271448 | | |

1230PIC-681, sg06115, 1230PIC-1419 Symbolphoto



Lockable on handle and switch with up to 3 padlocks.
Lockable in 0 position on handle.
With door interlock.
Lockable on switch in 0 position


| | | | | |
|-------------|---------------|--------|--|---|
| NZM1, N(S)1 | NZM1-XTVDV-NA | 100683 | | <ul style="list-style-type: none"> • Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. • Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on. |
| NZM2, N(S)2 | NZM2-XTVDV-NA | 100684 | | |
| NZM3, N(S)3 | NZM3-XTVDV-NA | 100685 | | |
| NZM4, N(S)4 | NZM4-XTVDV-NA | 100686 | | |

Red-yellow for emergency switching off

1230PIC-682, 1230PIC-698, sg05315 Symbolphoto



Lockable on handle and switch with up to 3 padlocks.
Lockable in 0 position on handle.
With door interlock.
Lockable on switch in 0 position

| | | | | |
|-------------|---------------|--------|-------|--|
| NZM1, N(S)1 | NZM1-XTVDV-NA | 271449 | 1 Off |  <ul style="list-style-type: none"> • Door interlock • Can not be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on. |
| NZM2, N(S)2 | NZM2-XTVDV-NA | 271450 | | |
| NZM3, N(S)3 | NZM3-XTVDV-NA | 271451 | | |
| NZM4, N(S)4 | NZM4-XTVDV-NA | 271452 | | |

Information relevant for export to North America



| | |
|----------------------|--|
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |
| Degree of Protection | IEC: IP66, UL/CSA Type 4X, 12 |

Door coupling rotary handles NZM1, NZM2, NZM3, NZM4




For maximum shaft length 60 mm

Extremely narrow fittings

| Part no. | Article no. | Std. pack | Notes | Part no. | Article no. | Std. pack | Notes |
|----------|-------------|-----------|-------|----------|-------------|-----------|-------|
|----------|-------------|-----------|-------|----------|-------------|-----------|-------|

Article no. when ordering separately















Article no. when ordering separately

| | | | | | | | |
|-------------------|--------|-------|--|------------------|--------|-------|---|
| NZM1-XTVDV-60-NA | 100667 | 1 Off |  <ul style="list-style-type: none"> Door interlock • Can not be defeated in the locked OFF position | NZM1-XTVDV-0-NA | 100675 | 1 Off | <ul style="list-style-type: none"> Door interlock • Can not be defeated in the locked OFF position |
| NZM2-XTVDV-60-NA | 100668 | | <ul style="list-style-type: none"> • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. | NZM2-XTVDV-0-NA | 100676 | | <ul style="list-style-type: none"> • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. |
| NZM3-XTVDV-60-NA | 100669 | | <ul style="list-style-type: none"> • Cannot be combined with mechanical interlock NZM...-XTVDV-60-NA | NZM3-XTVDV-0-NA | 100677 | | <ul style="list-style-type: none"> • Cannot be combined with mechanical interlock NZM...-XTVDV-0-NA |
| NZM4-XTVDV-60-NA | 100670 | | <ul style="list-style-type: none"> • For a maximum shaft length of 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on. | NZM4-XTVDV-0-NA | 100678 | | <ul style="list-style-type: none"> For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • AExternal warning plate/ designation label can be clipped on. |
| NZM1-XTVDVR-60-NA | 100671 | 1 Off |  <ul style="list-style-type: none"> Door interlock • Can not be defeated in the locked OFF position | NZM1-XTVDVR-0-NA | 100679 | 1 Off |  <ul style="list-style-type: none"> Door interlock • Can not be defeated in the locked OFF position |
| NZM2-XTVDVR-60-NA | 100672 | | <ul style="list-style-type: none"> • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. | NZM2-XTVDVR-0-NA | 100680 | | <ul style="list-style-type: none"> • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. |
| NZM3-XTVDVR-60-NA | 100673 | | <ul style="list-style-type: none"> • Door can be opened in OFF NZM...-XTVDVR-60 | NZM3-XTVDVR-0-NA | 100681 | | <ul style="list-style-type: none"> • Door can be opened in OFF NZM...-XTVDVR-0 |
| NZM4-XTVDVR-60-NA | 100674 | | <ul style="list-style-type: none"> • For a maximum shaft length of 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on. | NZM4-XTVDVR-0-NA | 100682 | | <ul style="list-style-type: none"> • For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on. |

4.13

Compact circuit breakers, switch disconnectors

Rotary handles NZM...-XDV

| | For use with | Part no. | Article no. | Std. pack | Notes |
|--|---|---|-------------|-----------|--|
| | | Article no. when ordering separately | | | |
| Rotary handle on circuit breaker | | | | | |
| Complete with rotary drive | | | | | |
| Standard, black/grey | | | | | |
|  <p>1230PIC-759, 1230PIC-819, sg07015 Symbolphoto</p> | Lockable in 0 position on switch with up to 3 padlocks. | NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XDV | 260125 | 1 Off   Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position. |
| | | NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XDV | 260127 | |
| | | NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XDV | 260129 | |
| | | NZM4(-4), N(S)4(-4) | NZM4-XDV | 266608 | |
|  <p>1230PIC-760, sg07215, sg07015 Symbolphoto</p> | Lockable in 0 position on handle with up to 3 padlocks. | NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XDVG | 285247 | 1 Off   Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position. |
| | | NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XDVG | 285248 | |
| | | NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XDVG | 165716 | |
| | | NZM4(-4), N(S)4(-4) | NZM4-XDVG | 165718 | |
| Red-yellow for emergency switch off | | | | | |
|  <p>1230PIC-762, 1230PIC-820, sg07115 Symbolphoto</p> | Lockable in 0 position on switch with up to 3 padlocks. | NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XDVR | 260135 | 1 Off   Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position. |
| | | NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XDVR | 260137 | |
| | | NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XDVR | 260140 | |
| | | NZM4(-4), N(S)4(-4) | NZM4-XDVR | 266610 | |
|  <p>1230PIC-761, sg07315, sg07115 Symbolphoto</p> | Lockable in 0 position on switch with up to 3 padlocks. | NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XDVGR | 285249 | 1 Off   Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position. |
| | | NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XDVGR | 285280 | |
| | | NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XDVGR | 165717 | |
| | | NZM4(-4), N(S)4(-4) | NZM4-XDVGR | 165719 | |
| Information relevant for export to North America | | | | | |
| | |   | | | |
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking | | | | |
| UL File No. | E140305 | | | | |
| UL CCN | DIHS | | | | |
| CSA File No. | 022086 | | | | |
| CSA Class No. | 1437-01 | | | | |
| NA Certification | UL Listed, CSA certified | | | | |

Rotary handles with key lock NZM...XDKL

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Rotary handles with key lock

Complete with rotary drive

Standard, black/grey

1230PIC-1272 Symbolphoto



Lockable in position 0 using cylinder lock and key withdrawable

NZM1(-4),
PN1(-4),
N(S)1(-4)

172536

1 Off



Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

Cannot be combined with:

- Remote operator
- Side panel mounting
- Mechan. interlock
- Insulating surround

1230PIC-1273 Symbolphoto



NZM2(-4),
PN2(-4),
N(S)2(-4)

NZM2(-4), NZM2-XDKL

172537

1 Off



1230PIC-1274 Symbolphoto



NZM3(-4),
PN3(-4),
N(S)3(-4)

NZM3(-4), NZM3-XDKL

172538

1 Off



1230PIC-1275 Symbolphoto



NZM4(-4),
N(S)4(-4)

NZM4(-4), NZM4-XDKL

172539

Information relevant for export to North America



IP66
UL/CSA Type 4X, Type 12

4.15

Compact circuit breakers, switch disconnectors

Rotary handles with door interlock NZM...XDTV

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Rotary handles on switch with door interlock

Complete with rotary drive and insulating surround

Standard, black/grey

1230PIC-840 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position.

| | | | | |
|------------------------------|-----------|--------|-------|---|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XDTV | 260131 | 1 Off | Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position. |
|------------------------------|-----------|--------|-------|---|

Also available with door interlock e.g. for MCC service distribution.

| | | | |
|------------------------------|-----------|--------|--|
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XDTV | 260133 | |
|------------------------------|-----------|--------|--|

Red-yellow for emergency switching off

1230PIC-758 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks.

| | | | | |
|------------------------------|------------|--------|-------|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XDTVR | 260142 | 1 Off | |
|------------------------------|------------|--------|-------|--|

Also available with door interlock e.g. for MCC service distribution.

| | | | |
|------------------------------|------------|--------|--|
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XDTVR | 260144 | |
|------------------------------|------------|--------|--|

Rotary handles on switch with door interlock for UL/CSA approved NA switches

Difference to normal IEC handles: Door opening only possible with active rotation beyond the 0 position.

Complete with rotary drive and insulating surround

Standard, black/grey

1230PIC-840 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position.

| | | | | |
|-------------|--------------|--------|-------|--|
| NZM1, N(S)1 | NZM1-XDTV-NA | 271453 | 1 Off | |
|-------------|--------------|--------|-------|--|

Also available with door interlock e.g. for MCC service distribution.

| | | | |
|-------------|--------------|--------|--|
| NZM2, N(S)2 | NZM2-XDTV-NA | 271454 | |
|-------------|--------------|--------|--|

- Door interlock
- In the ON position, can be defeated from the outside using a 1 mm pin
- Can not be defeated in the locked OFF and ON positions
- Door opening only possible with active rotation beyond the 0 position.
- Can only be switched ON when the door is closed
- Cannot be combined with mechanical interlock

Red-yellow for emergency switching off

1230PIC-758 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks.

| | | | | |
|-------------|---------------|--------|-------|--|
| NZM1, N(S)1 | NZM1-XDTVR-NA | 271455 | 1 Off | |
|-------------|---------------|--------|-------|--|

Also available with door interlock e.g. for MCC service distribution.

| | | | |
|-------------|---------------|--------|--|
| NZM2, N(S)2 | NZM2-XDTVR-NA | 271456 | |
|-------------|---------------|--------|--|

Circuit breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

Information relevant for export to North America



| | |
|-------------------|--|
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

| Model | For use with | Part no. | Article no. | Std. pack |
|-------|--------------|--------------------------------------|-------------|-----------|
| | | Article no. when ordering separately | | |

Main switch assembly kit

Equipment supplied:

- Door coupling rotary handle
- External warning plate/designation label in German/English
- Extension shaft NZM...-XV4
- Black and yellow flash



For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered. Other external warning plates/designation labels can be clipped on.

Degree of protection IP66/UL/CSA type 4X, 12.

With black door coupling rotary handle

1230PIC-739 Symbolphoto



| | | | | | |
|--|---|-----------------------------------|----------|--------|---|
| Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. | - | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XHB | 266626 | 1 Off   |
| With door interlock | - | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XHB | 266627 | |
| | - | NZM3(-4) PN3(-4), N(S)3(-4) | NZM3-XHB | 266628 | |
| | - | NZM4(-4) N(S)4(-4) | NZM4-XHB | 271779 | |

With red door coupling rotary handle for use of switch as emergency switching off device to IEC/EN 60204-1

1230PIC-698 Symbolphoto



| | | | | | |
|---|---|-----------------------------------|-----------|--------|--|
| Lockable in 0 position on handle with up to 3 padlocks. | - | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XHBR | 266632 | |
| Lockable door as additional feature, locking facility on circuit breaker in 0 position: | - | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XHBR | 266633 | |
| | - | NZM3(-4) PN3(-4), N(S)3(-4) | NZM3-XHBR | 266634 | |
| | - | NZM4(-4) N(S)4(-4) | NZM4-XHBR | 271842 | |

Information relevant for export to North America



| | |
|----------------------|--|
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |
| Degree of Protection | IEC: IP66, UL/CSA Type 4X, 12 |

4.16

Compact circuit breakers, switch disconnectors

Main switch assembly kit NZM...-XS...

| Model | For use with | Part no. | Article no. | Std. pack |
|-------|--------------|----------|-------------|-----------|
|-------|--------------|----------|-------------|-----------|

Article no. when ordering separately

Main switch assembly kit

Equipment supplied:

- Door coupling rotary handle
- External warning plate/designation label in German/English
- Extension shaft NZM...-XV4
- Black and yellow flash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered. Other external warning plates/designation labels can be clipped on. Degree of protection IP66/UL/CSA type 4X, 12.

NZM4-XS types

For side wall installation

Actuation of the switch on the control panel side wall
Switch mounting on mounting plate

Standard, black/grey

1230PIC-740 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks, with adequate modification also in I position.

For operation on the left

NZM1(-4)
PN1(-4), N(S)1(-4)

NZM1-XS-L

266641

1 Off



NZM2(-4)
PN2(-4), N(S)2(-4)

NZM2-XS-L

266642

NZM3(-4)
PN3(-4), N(S)3(-4)

NZM3-XS-L

266643

NZM4(-4)
N(S)4(-4)

NZM4-XS-L

289806

1230PIC-736 Symbolphoto



For operation on the right

NZM1(-4)
PN1(-4), N(S)1(-4)

NZM1-XS-R

266644

NZM2(-4)
PN2(-4), N(S)2(-4)

NZM2-XS-R

266645

NZM3(-4)
PN3(-4), N(S)3(-4)

NZM3-XS-R

266646

NZM4(-4)
N(S)4(-4)

NZM4-XS-R

289807

Red-yellow for emergency switching off

1230PIC-741 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks.

For operation on the left

NZM1(-4)
PN1(-4), N(S)1(-4)

NZM1-XSR-L

266653

1 Off



NZM2(-4)
PN2(-4), N(S)2(-4)

NZM2-XSR-L

266654

NZM3(-4)
PN3(-4), N(S)3(-4)

NZM3-XSR-L

266655

NZM4(-4)
N(S)4(-4)

NZM4-XSR-L

289808

1230PIC-737 Symbolphoto



For operation on the right

NZM1(-4)
PN1(-4), N(S)1(-4)

NZM1-XSR-R

266656

NZM2(-4)
PN2(-4), N(S)2(-4)

NZM2-XSR-R

266657

NZM3(-4)
PN3(-4), N(S)3(-4)

NZM3-XSR-R

266658

NZM4(-4)
N(S)4(-4)

NZM4-XSR-R

289809

Information relevant for export to North America



| | |
|----------------------|--|
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |
| Degree of Protection | IEC: IP66, UL/CSA Type 4X, 12 |

Main switch assembly kit NZM...XS(R)M...

| Model | For use with | Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------|--------------|--------------------------------------|-------------|-----------|---|
| | | Article no. when ordering separately | | |  |

Main switch assembly kit for side wall installation with mounting bracket

For direct mounting of circuit breaker and handle in the side wall of the control cabinet.

Equipment supplied:

- Door coupling rotary handle
- Special short extension shaft
- External warning plate/designation label in German/English
- Mounting bracket
- Black and yellow flash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered.

Other external warning plates/designation labels can be clipped on.

Degree of protection IP66/UL/CSA type 4X, 12.

Standard, black/grey

1230PIC-727 Symbolphoto



| | | | | | | |
|---|----------------------------|-----------------------------------|------------|--------|-------|--|
| Lockable in 0 position, with adequate modification also in I position. Minimum clearance between control panel side walls and circuit breaker is defined by mounting bracket. Extension cannot be used. | For operation on the left | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XSM-L | 266663 | 1 Off | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Degree of Protection IEC: IP66, UL/CSA Type 4X, 12 |
| | | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XSM-L | 266664 | | |
| | For operation on the right | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XSM-R | 266665 | | |
| | | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XSM-R | 266666 | | |

Red-yellow for emergency switching off

1230PIC-728 Symbolphoto



| | | | | | | |
|---|----------------------------|-----------------------------------|-------------|--------|-------|--|
| Lockable in 0 position on handle. Minimum clearance between control panel side walls and circuitbreaker is defined by mounting bracket. Extension cannot be used. | For operation on the left | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XSRM-L | 266671 | 1 Off | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Degree of Protection IEC: IP66, UL/CSA Type 4X, 12 |
| | | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XSRM-L | 266672 | | |
| | For operation on the right | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XSRM-R | 266673 | | |
| | | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XSRM-R | 266674 | | |

Additional plate

For fitting to the mounting bracket when using neutral conductor or PE conductor terminals K25, K50, K95 or K150.

1230PIC-719 Symbolphoto



| | | | | | | |
|---|---|--|------------|--------|-------|-----------------------------------|
| - | - | NZM1, NZM1-4, N1, N1-4, PN1, PN1-4, NS1, NZM2, NZM2-4, N2, N2-4, PN2, PN2-4, NS2, NZM1-NA, NZM2-NA | NZM1/2-XZB | 266676 | 1 Off | UL/CSA certification not required |
|---|---|--|------------|--------|-------|-----------------------------------|

4.16

Compact circuit breakers, switch disconnectors

Main switch assembly kit NZM...-XHB...

| Model | For use with | Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------|--------------|--------------------------------------|-------------|-----------|--|
| | | Article no. when ordering separately | | | |

Main switch assembly kit with additional rotary handle

Main switch assembly kit with additional rotary handle for switching with opened control panel door.

Equipment supplied:

- Door coupling rotary handle
- Additional rotary handle on switch with "Deliberate Action" operation
- External warning plate/designation label in German/English
- Extension shaft NZM...-XV6 for mounting depth 600 mm, NZM1/2-XV4 with NZM1 for mounting depth 400 mm
- Black and yellow flash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered.

Other external warning plates/designation labels can be clipped on.

Degree of protection IP66/UL/CSA type 4X, 12.

With black door coupling rotary handle

1230PIC-899 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. Lockable door as additional feature, locking facility on circuit breaker in 0 position.

| | | | | | |
|--------|-----------------------------------|----------------|--------|-------|--|
| IEC | NZM1(-4) PN1(-4), N1(-4) | NZM1-XHB-DA | 125956 | 1 Off | |
| UL/CSA | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XHB-DA-NA | 125958 | | |

| Product Standards | |
|-------------------|--------------------------|
| UL489; | UL File No. E140305 |
| CSA-C22.2 | UL CCN DIHS |
| No. 5-09; | CSA File No. 022086 |
| IEC60947, | CSA Class No. 1437-01 |
| CE marking | NA Certification |
| | UL Listed, CSA certified |
| | Degree of Protection |
| | IEC: IP66, |
| | UL/CSA |
| | Type 4X, 12 |

1230PIC-1402 Symbolphoto



| | | | | | |
|--------|-----------------------------------|----------------|--------|--|--|
| IEC | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XHB-DA | 116895 | | |
| UL/CSA | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XHB-DA-NA | 116897 | | |

1230PIC-1300 Symbolphoto



| | | | | | |
|--------|-----------------------------------|----------------|--------|--|--|
| IEC | NZM3(-4) PN3(-4), N(S)3(-4) | NZM3-XHB-DA | 118988 | | |
| UL/CSA | NZM3(-4) PN3(-4), N(S)3(-4) | NZM3-XHB-DA-NA | 119000 | | |

1230PIC-1302 Symbolphoto



| | | | | | |
|--------|-----------------------------------|----------------|--------|--|--|
| IEC | NZM4(-4) PN4(-4), N(S)4(-4) | NZM4-XHB-DA | 119002 | | |
| UL/CSA | NZM4(-4) PN4(-4), N(S)4(-4) | NZM4-XHB-DA-NA | 119004 | | |

Information relevant for export to North America



| | |
|----------------------|--|
| Product Standards | UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |
| Degree of Protection | IEC: IP66, UL/CSA Type 4X, 12 |

Main switch assembly kit with additional handle NZM...-XHB...

| Model | For use with | Part no. | Article no. | Std. pack | Information relevant for export to North America |
|-------|--------------|--------------------------------------|-------------|-----------|--|
| | | Article no. when ordering separately | | | |

Main switch assembly kit with additional rotary handle

Main switch assembly kit with additional rotary handle for switching with opened control panel door.

Equipment supplied:

- Door coupling rotary handle
- Additional rotary handle on switch with "Deliberate Action" operation
- External warning plate/designation label in German/English
- Extension shaft NZM...-XV6 for mounting depth 600 mm, NZM1/2-XV4 with NZM1 for mounting depth 400 mm
- Black and yellow flash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered. Other external warning plates/designation labels can be clipped on.

Degree of protection IP66/UL/CSA type 4X, 12.

With red door coupling rotary handle for use of switch as emergency switching off device

1230PIC-900 Symbolphoto



Lockable in 0 position on handle with up to 3 padlocks.

With door interlock and lockable on switch in 0 position.

| | | | | | |
|-----|--------------------------------|--------------|--------|-------|--|
| IEC | NZM1(-4) PN1(-4), N1(-4) | NZM1-XHB-DAR | 125957 | 1 Off | |
|-----|--------------------------------|--------------|--------|-------|--|

| | | | | | |
|--------|-----------------------------------|-----------------|--------|--|--|
| UL/CSA | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XHB-DAR-NA | 125959 | | |
|--------|-----------------------------------|-----------------|--------|--|--|

Product Standards

UL489;
CSA-C22.2
No. 5-09;
IEC60947,
CE marking
UL File No. E140305
UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification

UL Listed,
CSA certified

Degree of Protection

IEC: IP66,
UL/CSA
Type 4X, 12

1230PIC-1403 Symbolphoto



| | | | | | |
|-----|-----------------------------------|--------------|--------|--|--|
| IEC | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XHB-DAR | 116896 | | |
|-----|-----------------------------------|--------------|--------|--|--|

| | | | | | |
|--------|-----------------------------------|-----------------|--------|--|--|
| UL/CSA | NZM2(-4) PN2(-4), N(S)2(-4) | NZM2-XHB-DAR-NA | 116898 | | |
|--------|-----------------------------------|-----------------|--------|--|--|

1230PIC-1301 Symbolphoto



| | | | | | |
|-----|-----------------------------------|--------------|--------|--|--|
| IEC | NZM3(-4) PN3(-4), N(S)3(-4) | NZM3-XHB-DAR | 118989 | | |
|-----|-----------------------------------|--------------|--------|--|--|

| | | | | | |
|--------|-----------------------------------|-----------------|--------|--|--|
| UL/CSA | NZM3(-4) PN3(-4), N(S)3(-4) | NZM3-XHB-DAR-NA | 119001 | | |
|--------|-----------------------------------|-----------------|--------|--|--|

1230PIC-1303 Symbolphoto



| | | | | | |
|-----|-----------------------------------|--------------|--------|--|--|
| IEC | NZM4(-4) PN4(-4), N(S)4(-4) | NZM4-XHB-DAR | 119003 | | |
|-----|-----------------------------------|--------------|--------|--|--|

| | | | | | |
|--------|-----------------------------------|-----------------|--------|--|--|
| UL/CSA | NZM4(-4) PN4(-4), N(S)4(-4) | NZM4-XHB-DAR-NA | 119005 | | |
|--------|-----------------------------------|-----------------|--------|--|--|

Main switch assembly kit with additional rotary handle

External warning plate/designation label can be clipped on.

For enhanced busbar tag shroud on the incomer side, please order IP2X protection against contact with a finger.

IP66; UL/CSA Type 4X, Type 12.

1230PIC-899 Symbolphoto



Handle black + additional handle black, shaft 600 mm

| | | | | | |
|--|-----------------------------------|-------------------------------------|------------------|-------|--|
| | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XHB-DA-V6 NZM1-XHB-DA-V6-NA | 144905 144906 | 1 Off | |
|--|-----------------------------------|-------------------------------------|------------------|-------|--|

Product Standards

UL489;
CSA-C22.2
No. 5-09;
IEC60947,
CE marking

1230PIC-900 Symbolphoto



Handle red + additional handle red, shaft 600 mm

| | | | | | |
|--|-----------------------------------|---------------------------------------|------------------|-------|--|
| | NZM1(-4) PN1(-4), N(S)1(-4) | NZM1-XHB-DAR-V6 NZM1-XHB-DAR-V6-NA | 144907 144908 | 1 Off | |
|--|-----------------------------------|---------------------------------------|------------------|-------|--|

UL File No.

E140305
UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification

UL Listed,
CSA certified



Degree of Protection

IEC: IP66,
UL/CSA
Type 4X, 12

4.16

Compact circuit breakers, switch disconnectors

Main switch assembly kit, Rear-mounted drives
 NZM...-XS..., NZM...-XRAV...

| For use with | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------|--------------------------------------|-------------|-----------|-------|---|
| | Article no. when ordering separately | | | |   |

Main switch assembly kit, bottom

External warning plate/designation label can be clipped on.

For enhanced busbar tag shroud on the incomer side, please order IP2X protection against contact with a finger. IP66; UL/CSA Type 4X, Type 12.

1230PIC-736 Symbolphoto





| | | | | | |
|-------------|-----------|--------|-------|--|-------------------|
| UL/CSA, IEC | NZM1-XS-U | 110106 | 1 Off |   | Product Standards |
|-------------|-----------|--------|-------|--|-------------------|

UL489;
 CSA-C22.2
 No. 5-09;
 IEC60947,
 CE marking

1230PIC-737 Symbolphoto



| | | | | | |
|-------------|------------|--------|-------|--|-------------------|
| UL/CSA, IEC | NZM1-XSR-U | 110107 | 1 Off |   | Product Standards |
|-------------|------------|--------|-------|--|-------------------|

UL File No. E140305
 UL CCN DIHS
 CSA File No. 022086
 CSA Class No. 1437-01
 NA Certification
 UL Listed,
 CSA certified
 Degree of Protection
 IEC: IP66,
 UL/CSA
 Type 4X, 12

Rear-mounted drives

For direct rear connection of the switch to the side of the control panel or control panel door.

Switch actuation on rear through side wall or control panel door. For switch with toggle lever.

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered. Degree of protection IP66, UL/CSA type 4X, 12.

1230PIC-726 Symbolphoto



| | | | | | | |
|----------------------|--|--|--|--|--|-------------------|
| Standard, black/grey | | | | | | Product Standards |
|----------------------|--|--|--|--|--|-------------------|

| | | | | | | | |
|---|--------------------|-----------|--------|-------|--|--|-------------------|
| Lockable in 0 position on handle with up to 3 padlocks. | NZM1, N1, NS1, PN1 | NZM1-XRAV | 107245 | 1 Off |   | External warning plate can be clipped on | Product Standards |
|---|--------------------|-----------|--------|-------|--|--|-------------------|



UL489;
 CSA-C22.2
 No. 5-09;
 IEC60947,
 CE marking

| | | | | | | | |
|--|---------------------|-------------|--------|--|--|--|--|
| | NZM1-4, N1-4, PN1-4 | NZM1-4-XRAV | 107246 | | | | UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification |
|--|---------------------|-------------|--------|--|--|--|--|

| | | | | | | | |
|--|--------------------|-----------|--------|--|--|--|---|
| | NZM2, N2, NS2, PN2 | NZM2-XRAV | 107247 | | | | UL Listed, CSA certified Degree of Protection |
|--|--------------------|-----------|--------|--|--|--|---|

| | | | | | | | |
|--|---------------------|-------------|--------|--|--|--|-------------------------------------|
| | NZM2-4, N2-4, PN2-4 | NZM2-4-XRAV | 107248 | | | | IEC: IP66, UL/CSA Type 4X, 12 |
|--|---------------------|-------------|--------|--|--|--|-------------------------------------|

Red-yellow for emergency switching off


| | | | | | | | |
|---|--------------------|------------|--------|-------|--|--|-------------------|
| Lockable in 0 position on handle with up to 3 padlocks. | NZM1, N1, NS1, PN1 | NZM1-XRAVR | 107249 | 1 Off |   | External warning plate can be clipped on | Product Standards |
|---|--------------------|------------|--------|-------|--|--|-------------------|

| | | | | | | | |
|--|---------------------|--------------|--------|--|--|--|--|
| | NZM1-4, N1-4, PN1-4 | NZM1-4-XRAVR | 107260 | | | | UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification |
|--|---------------------|--------------|--------|--|--|--|--|

| | | | | | | | |
|--|--------------------|------------|--------|--|--|--|---|
| | NZM2, N2, NS2, PN2 | NZM2-XRAVR | 107261 | | | | UL Listed, CSA certified Degree of Protection |
|--|--------------------|------------|--------|--|--|--|---|

| | | | | | | | |
|--|---------------------|--------------|--------|--|--|--|-------------------------------------|
| | NZM2-4, N2-4, PN2-4 | NZM2-4-XRAVR | 107262 | | | | IEC: IP66, UL/CSA Type 4X, 12 |
|--|---------------------|--------------|--------|--|--|--|-------------------------------------|

Side-mounted handle NZM...-XSH...-NA


| For use with | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------|--------------------------------------|-------------|-----------|-------|---|
| | Article no. when ordering separately | | | |  |

Side mounted handle

Complete kit, includes handle, mechanical system, and Bowden cable (Length: 48, 72, 84 and 120 Inch).

1230PIC-1424 Symbolphoto



| | | | | |
|-------------------------|-----------------------|--|----------------------------|--|
| UL/CSA Type 4X, Type 12 | NZM2...-NA, NS2...-NA | NZM2-XSH-12-48-NA NZM2-XSH-12-84-NA NZM2-XSH-12-120-NA | 155482 155483 155484 | 1 Off  |
|-------------------------|-----------------------|--|----------------------------|--|

Lockable in the 0 position using up to 3 padlocks on the handle
For 1 door on an American-style control panel (door plus wide bar next to door)

Caution! Intended exclusively for use outside the scope of application of IEC/EN 60947.

1230PIC-1406 Symbolphoto



| | | | | |
|--|-----------------------|--|----------------------------|--|
| | NZM3...-NA, NS3...-NA | NZM3-XSH-12-48-NA NZM3-XSH-12-84-NA NZM3-XSH-12-120-NA | 155488 155489 155500 | |
|--|-----------------------|--|----------------------------|--|


1230PIC-1425 Symbolphoto



| | | | | |
|--|-----------------------|--|----------------------------|--|
| | NZM4...-NA, NS4...-NA | NZM4-XSH-12-48-NA NZM4-XSH-12-72-NA NZM4-XSH-12-120-NA | 155504 155505 155506 | |
|--|-----------------------|--|----------------------------|--|

1230PIC-1404 Symbolphoto



| | | | | |
|----------------|-----------------------|--|----------------------------|--|
| UL/CSA Type 4X | NZM2...-NA, NS2...-NA | NZM2-XSH-4X-48-NA NZM2-XSH-4X-84-NA NZM2-XSH-4X-120-NA | 155485 155486 155487 | 1 Off  |
|----------------|-----------------------|--|----------------------------|--|

Lockable in the 0 position using up to 3 padlocks on the handle
For 1 door on an American-style control panel (door plus wide bar next to door)

Caution! Intended exclusively for use outside the scope of application of IEC/EN 60947.

1230PIC-1405 Symbolphoto



| | | | | |
|--|-----------------------|--|----------------------------|--|
| | NZM3...-NA, NS3...-NA | NZM3-XSH-4X-48-NA NZM3-XSH-4X-84-NA NZM3-XSH-4X-120-NA | 155501 155502 155503 | |
|--|-----------------------|--|----------------------------|--|

1230PIC-1426 Symbolphoto



| | | | | |
|--|-----------------------|--|----------------------------|--|
| | NZM4...-NA, NS4...-NA | NZM4-XSH-4X-48-NA NZM4-XSH-4X-72-NA NZM4-XSH-4X-120-NA | 155507 155508 155509 | |
|--|-----------------------|--|----------------------------|--|

4.18

Compact circuit breakers, switch disconnectors

Remote operators NZM1, NZM2/3, NZM4

| For use with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
|--------------|-----------------------|--------------------------------------|-------------|-----------|-------|
| | U_s | Article no. when ordering separately | | | |
| | V | | | | |

Remote operators

For remote switching of circuit breakers and switch disconnectors.
ON and OFF switching and resetting by means of two-wire or three-wire control.
Local switching by hand possible.
Lockable in the 0 position of the remote operator with up to 3 padlocks (hasp thickness: 4 – 8 mm).
When mounting the remote drive NZM2(3)-XR(D)... on 4 pole switch an additional cover NZM...-XAVPR is required.

Closing delay 110 – 170 ms, opening delay 110 – 170 ms

1230PIC-817 Symbolphoto



| | | | | | |
|-----------|------------------------------------|-------------------|--------|-------|--|
| NZM2(-4) | 110 - 130 V 50/60 Hz | NZM2-XRD110-130AC | 115390 | 1 Off | Sliding switch for „Auto“ or „Manual“ Max. number auxiliary contacts: 2 standard auxiliary contacts, 1 trip-indicating auxiliary switches Cannot be combined with switch-disconnector PN... Cannot be combined with mechanical interlock. Do not install M22-CK11(20/02) dual auxiliary contacts in the center auxiliary contact slot in NZM2-XRD. |
| N(S)2(-4) | 208 - 240 V 50/60 Hz | NZM2-XRD208-240AC | 115391 | | |
| | 380 - 440 V 50/60 Hz ¹⁾ | NZM2-XRD380-440AC | 115392 | | |
| | 24 - 30 V DC | NZM2-XRD24-30DC | 115393 | | |
| | 110 - 130 V DC | NZM2-XRD110-130DC | 115394 | | |
| | 220 - 250 V DC | NZM2-XRD220-250DC | 115395 | | |

Closing delay 60 – 100 ms, opening delay 300 – 3000 ms

1230PIC-769 Symbolphoto



| | | | | | |
|---------------------|----------------------|------------------|--------|--|--|
| Can be synchronized | | | | | |
| NZM2(-4) | 110 - 130 V 50/60 Hz | NZM2-XR110-130AC | 259830 | | Cannot be combined with switch disconnector PN... Dual auxiliary switch M 22-CK11 (20/02) can not be combined with remote operator NZM3-XR... |
| N(S)2(-4) | 208 - 240 V 50/60 Hz | NZM2-XR208-240AC | 259832 | | |
| | 380 - 440 V 50/60 Hz | NZM2-XR380-440AC | 259834 | | |
| | 24 - 30 V DC | NZM2-XR24-30DC | 259836 | | |
| | 48 - 60 V DC | NZM2-XR48-60DC | 259838 | | |
| | 110 - 130 V DC | NZM2-XR110-130DC | 259840 | | |
| | 220 - 250 V DC | NZM2-XR220-250DC | 259842 | | |

1230PIC-1434 Symbolphoto



| | | | | |
|-----------|----------------------|------------------|--------|--|
| NZM3(-4) | 110 - 130 V 50/60 Hz | NZM3-XR110-130AC | 259848 | |
| N(S)3(-4) | 208 - 240 V 50/60 Hz | NZM3-XR208-240AC | 259850 | |
| | 380 - 440 V 50/60 Hz | NZM3-XR380-440AC | 259852 | |
| | 24 - 30 V DC | NZM3-XR24-30DC | 259854 | |
| | 48 - 60 V DC | NZM3-XR48-60DC | 259856 | |
| | 110 - 130 V DC | NZM3-XR110-130DC | 259858 | |
| | 220 - 250 V DC | NZM3-XR220-250DC | 259860 | |

1230PIC-1414 Symbolphoto



| | | | | |
|-----------|----------------------|------------------|--------|--|
| NZM4(-4) | 110 - 130 V 50/60 Hz | NZM4-XR110-130AC | 266684 | |
| N(S)4(-4) | 208 - 240 V 50/60 Hz | NZM4-XR208-240AC | 266685 | |
| | 380 - 440 V 50/60 Hz | NZM4-XR380-440AC | 266686 | |
| | 24 - 30 V DC | NZM4-XR24-30DC | 266691 | |
| | 48 - 60 V DC | NZM4-XR48-60DC | 266692 | |
| | 110 - 130 V DC | NZM4-XR110-130DC | 266693 | |
| | 220 - 250 V DC | NZM4-XR220-250DC | 266694 | |

Information relevant for export to North America



| | |
|-------------------|---|
| Product Standards | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No. | E140305 |
| UL CCN | DIHS |
| CSA File No. | 022086 |
| CSA Class No. | 1437-01 |
| NA Certification | UL Listed, CSA certified |

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Plug screw terminal for remote operator

Plug with screw terminals for remote operator.

wa_sg06118 Symbolphoto



| | | | | |
|--------------|---------|--------|-------|--|
| NZM...-XR... | NZM-XRS | 180429 | 1 Off | |
|--------------|---------|--------|-------|--|

Cover, 4 pole for remote operator

Additional shroud for mounting the NZM2(3)-XR(D)... on a 4 pole switch is required.

1230PIC-732 Symbolphoto



| | | | | |
|--------------|------------------|--------|-------|---|
| NZM2-4, N2-4 | NZM2-XAVPR | 266677 | 1 Off | - |
| N2-4...-DC | NZM2-XAVPR-S1-DC | 158477 | | |
| NZM3-4, N3-4 | NZM3-XAVPR | 266678 | 1 Off | |
| N3-4...-DC | NZM3-XAVPR-S1-DC | 158478 | | |

Sealing device, for NZM2-XRD

Manual operation possible only after removing seal.

1230PIC-1429 Symbolphoto



| | | | | |
|-----------------------|------------|--------|-------|---------------------------------------|
| NZM2(-4) N(S)2(-4) | NZM2-XRDPL | 137305 | 1 Off | Suitable for remote operator NZM2-XRD |
|-----------------------|------------|--------|-------|---------------------------------------|

Enclosure Cover

Degree of protection IP65
For increasing the mounting depth by 105 mm
For switching devices that shall not be operated by laymen
Transparent
Also usable for NZM remote operators

vt19318_r Symbolphoto



| | | | | |
|---------|---------|--------|-------|----------------|
| CI44... | NZM-RTR | 194557 | 1 Off | Width: 265 mm |
| CI45... | | | | Height: 253 mm |
| CI48... | | | | |

4.19

Compact circuit breakers, switch disconnectors

Accessories
ZFS..., BPF...

| Model | For use with | Part no. | Article no. | Std. pack | Notes |
|-------|--------------|----------|-------------|-----------|-------|
|-------|--------------|----------|-------------|-----------|-------|



Article no. when ordering separately

External warning plate/designation label

115A023 Symbolphoto



| | | | | | | |
|----------------------------------|-----------------------------------|------------------------------|---------------|--------|--------|---|
| Main switch – open in 0 position | german/english | NZM1(-4), PN1(-4), N(S)1(-4) | ZFS61/62-NZM7 | 272525 | 10 Off | A bilingual external warning plate/designation label in German/English is already included in the main switch assembly kit. |
| | german | | ZFS61-NZM7 | 051089 | | |
| | english | | ZFS62-NZM7 | 065957 | | |
| | french | | ZFS63-NZM7 | 065958 | | |
| | chinese/english | PN2(-4), N(S)2(-4) | ZFS82-NZM | 104910 | 1 Off | |
| | chinese | NZM3(-4), PN3(-4), N(S)3(-4) | ZFS83-NZM | 105945 | | |
| Symbol | Circuit breaker symbol | N(S)3(-4), NZM4(-4) | ZFS-LS-NZM | 104829 | | |
| | Switch disconnector symbol | N(S)4(-4) | ZFS-LTS-NZM | 104828 | | |
| | Disconnector symbol | | ZFS-TS-NZM | 115365 | | |
| Blanko | Blank (for engraving or printing) | | ZFS60-NZM7 | 065896 | 10 Off | |

| | | | | | | |
|-------------------------------------|-----------------|---|-----------------|--------|---|---|
| NA main switch – open in 0 position | german/english | NZM1(-4), PN1(-4), N(S)1(-4) | ZFS61/62-NZM-NA | 144901 | 10 Off | A bilingual external warning plate/designation label in German/English is already included in the main switch assembly kit. |
| | english | | ZFS62-NZM-NA | 144902 |   | |
| | english/spanish | NZM2(-4), PN2(-4), N(S)2(-4) | ZFS62/77-NZM-NA | 144903 | | |
| | english/french | NZM3(-4), PN3(-4), N(S)3(-4), NZM4(-4), N(S)4(-4) | ZFS62/63-NZM-NA | 144904 | | |
| | | | | | | |


Lightning symbol

Including terminal marking for main switch

1230PIC-294 Symbolphoto



| | | | | | |
|-------|--|-----------|--------|--------|--|
| small | NZM1(-4), PN1(-4), N(S)1(-4), NZM2(-4), PN2(-4), N(S)2(-4) | BPF-NZM7 | 217294 | 10 Off | Included as standard in main switch assembly kit. Marking of the input side of the switch is possible. |
| large | NZM3(-4), PN3(-4), N(S)3(-4), NZM4(-4), N(S)4(-4) | BPF-NZM10 | 231363 | | |


| For use with | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------|--------------------------------------|-------------|-----------|-------|---|
| | Article no. when ordering separately | | | |  |

Additional handle

Enables switching when control panel door is open

1230PIC-753 Symbolphoto




| | | | | | | |
|--|------------|--------|-------|---|---|--|
| NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4) | NZM1/2-XDZ | 266621 | 1 Off |  | Push-fits on to the extension shaft. 100 mm free extension shaft required. Cannot be combined with door coupling rotary handles NZM...-XT...-60 or NZM...-XT...0. | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 UL File No. UL CCN CSA File No. CSA Class No. NA Certification |
| NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4) | NZM3/4-XDZ | 266622 | | | | UL Listed, CSA certified |

Insulating surround

For toggle levers, rotary handles with rotary drive and remote operators. Degree of protection IP40

1230PIC-679 Symbolphoto



| | | | | | | |
|------------------------------------|----------|--------|-------|---|--|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XBR | 260195 | 1 Off |  | For rectangular cut-out on doors and enclosures with material thicknesses of 1.5 – 5 mm. External warning plate/ designation label can be clipped on. NZM4-XBR can not be combined with rotary handle with NZM2(-4) rotary mechanism | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 UL File No. UL CCN CSA File No. CSA Class No. NA Certification |
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XBR | 260197 | | | | UL Listed, CSA certified |
| NZM3(-4), PN3(-4), N(S)3(-4) | NZM3-XBR | 284645 | | | | |
| NZM4(-4), N(S)4(-4) | NZM4-XBR | 284646 | | | | |

1230PIC-691 Symbolphoto



For toggle lever, narrow. Degree of protection IP40

1230PIC-722 Symbolphoto




| | | | | | | |
|---|-------------|--------|--|--|--|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XBRS | 115274 | | | For rectangular cutouts on doors and enclosures with a material thickness of 1 - 3 mm. Clip-in external warning plate/ marking plate. Switches with slim insulating surrounds can be placed in a row next to each other. The required minimum clearance must be observed when doing so | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 UL File No. UL CCN CSA File No. CSA Class No. NA Certification |
| NZM2(-4), NZM3(-4), PN2(-4), N(S)2(-4), PN3(-4), N(S)3(-4) | NZM2/3-XBRS | 115275 | | | | UL Listed, CSA certified |
| NZM4(-4), N(S)4(-4) | NZM4-XBRS | 115277 | | | | |

Toggle lever locking device

Lockable in Off position with up to three padlocks (hasp thickness 4 – 8 mm).

sg00711 Symbolphoto



| | | | | | | |
|---|-------------|--------|-------|---|--|--|
| NZM1(-4), NZM1(-1), PN1(-4), N(S)1(-4) | NZM1-XKAV | 260199 | 1 Off |  | Cannot be combined with insulating surround. | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 UL File No. UL CCN CSA File No. CSA Class No. NA Certification |
| NZM2(-4), PN2(-4), N(S)2(-4), NZM3(-4), PN3(-4), N(S)3(-4) | NZM2/3-XKAV | 260201 | | | | UL Listed, CSA certified |

1230PIC-684 Symbolphoto




4.19

Compact circuit breakers, switch disconnectors

Accessories

NZM...-XDZ, NZM...-XBR, NZM...-X...


| For use with | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------|--------------------------------------|-------------|-----------|-------|---|
| | Article no. when ordering separately | | | |  |


Spacers

Enables fast and attractively priced offsetting of varying construction sizes with/without rotary handle or remote operator to the same front depth.

1230PIC-717 Symbolphoto



| | | | | | |
|--|------------|--------|--|--|---|
| NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4) | NZM1/2-XAB | 260203 | 1 Off  | Grid depth 17.5 mm, M4 thread One set contains 4 spacers Maximum component fitting: NZM1: 4 off per fixing screw, NZM2: 2 off per fixing screw, 2 (NZM1) or 4 (NZM2) fixing screws contained per switch | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified |
|--|------------|--------|--|--|---|


| | | | | | |
|--|----------|--------|--|---|--|
| NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4) | NZM3-XAB | 260211 | 1 Off  | Grid depth 17.5 mm, M5 thread One set contains 4 spacers NZM3, NZM4: 1 off per fixing screw 4 fixing screws per switch included | |
|--|----------|--------|--|---|--|

Clips


Allows switches to be clipped onto DIN rails.

1230PIC-723 Symbolphoto



| | | | | | |
|------------------------------------|-----------|--------|--|--|--|
| NZM1(-4), PN1(-4), N(S)1(-4) | NZM1-XC35 | 260213 | 1 Off  | For 35 mm top-hat rails. Cannot be combined with plug-in units | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| NZM2(-4), PN2(-4), N(S)2(-4) | NZM2-XC75 | 260215 | | For 75 mm top-hat rails. Cannot be combined with remote operator and plug-in units. | UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified |

Mechanical interlock NZM...XMV(R)(L), NZM-XBZ...

| For use with | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
|--------------|--------------------------------------|-------------|-----------|-------|---|
| | Article no. when ordering separately | | | |  |

Mechanical interlock for (door coupling) rotary handles

1230PIC-766 Symbolphoto



NZM1(-4) NZM1-XMV
PN1(-4),
N(S)1(-4)

281581



1 Off

Cannot be combined with NZM...-XTV...-NA door coupling rotary handles.

At least 2 interlock modules are required in order to assemble a mechanical interlock.

Possible combinations and interlock versions Engineering Order Bowden cable separately

Product Standards

UL489;
CSA-C22.2
No. 5-09;
IEC60947,
CE marking

UL File No.

E140305

UL CCN

DIHS

CSA File No.

022086

CSA Class No.1437-01

NA Certification

UL Listed,
CSA certified

sg07515 Symbolphoto



NZM2(-4) NZM2-XMV
PN2(-4),
N(S)2(-4)

281582

sg07415 Symbolphoto



NZM3(-4) NZM3-XMV
PN3(-4),
N(S)3(-4)

281583

sg07415 Symbolphoto



NZM4(-4) NZM4-XMV
N(S)4(-4)

281584

Bowden cables

For mechanical interlock for (door coupling) rotary handles

1230PIC-807 Symbolphoto



Length: 225 mm NZM1(-4), NZM-XBZ225
PN1(-4),

281585



1 Off

Selection and combinations of Bowden cables

Product Standards

UL489;
CSA-C22.2
No. 5-09;
IEC60947,
CE marking

Length: 600 mm N(S)1(-4) NZM-XBZ600
NZM2(-4),
PN2(-4),

281586

Length: 1000 mm N(S)2(-4) NZM-XBZ1000
NZM3(-4),
PN3(-4),
N(S)3(-4),
NZM4(-4),
N(S)4(-4)

281587

UL File No.

E140305

UL CCN

DIHS

CSA File No.

022086

CSA Class No.1437-01

NA Certification

UL Listed,
CSA certified

4.20/21 Compact circuit breakers, switch disconnectors

Mechanical interlock / Paralleling mechanism NZM...XMV(R)(L), NZM-XBZ...

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Information relevant for export to North America



Mechanical interlock for remote operator

For 2 switches of the same or different construction size with opposed operation. Adjacent mounting.

1230PIC-734 Symbolphoto



| | | | | |
|---|-------------|--------|-------|--|
| NZM2(-4), N(S)2(-4) +NZM2(-4), N(S)2(-4) | NZM2-XMVR | 104543 | 1 Off | Contains parts for both switch sides. - Extension shaft additionally required. Maximum switch spacing Can not be combined with rotary handles, door coupling rotary handles, early-make auxiliary contacts, and direct- switching remote operator NZM2-XRD. |
| NZM2(-4), N(S)2(-4) +NZM3(-4), N(S)3(-4) | NZM2/3-XMVR | 104544 | | |
| NZM3(-4), N(S)3(-4) +NZM3(-4), N(S)3(-4) | NZM3-XMVR | 104545 | | |
| NZM3(-4), N(S)3(-4) +NZM4(-4), N(S)4(-4) | NZM3/4-XMVR | 104546 | | |
| NZM4(-4), N(S)4(-4) +NZM4(-4), N(S)4(-4) | NZM4-XMVR | 104547 | | |

For 2 switches of the same or different construction size with opposed operation.

Extra long Bowden cable for mounting one above the other or in adjacent enclosures.

| | | | | |
|---|--------------|--------|-------|--|
| NZM2(-4), N(S)2(-4) +NZM2(-4), N(S)2(-4) | NZM2-XMVRL | 104548 | 1 Off | Contains parts for both switch sides. - Extension shaft additionally required. Maximum switch spacing Can not be combined with rotary handles, door coupling rotary handles, early-make auxiliary contacts, and direct- switching remote operator NZM2-XRD. |
| NZM2(-4), N(S)2(-4) +NZM3(-4), N(S)3(-4) | NZM2/3-XMVRL | 104549 | | |
| NZM3(-4), N(S)3(-4) +NZM3(-4), N(S)3(-4) | NZM3-XMVRL | 104550 | | |
| NZM3(-4), N(S)3(-4) +NZM4(-4), N(S)4(-4) | NZM3/4-XMVRL | 104551 | | |
| NZM4(-4), N(S)4(-4) +NZM4(-4), N(S)4(-4) | NZM4-XMVRL | 104552 | | |

Paralleling mechanism

Simultaneous actuation of 2 PN switch disconnectors of the same type mounted side-by-side.

1230PIC-749 Symbolphoto



| | | | | | |
|----------------------|---------|--------|-------|--|------------------------|
| PN1(-4) + PN1(-4) | PN1-XPA | 283471 | 1 Off | PN1, PN2 • 1 x rotary handle on circuit (-XD) supplied. • 1 x door coupling rotary handle (-XTVD) supplied. | Not UL/CSA approved |
| PN2(-4) + PN2(-4) | PN2-XPA | 283472 | | | |

1230PIC-750 Symbolphoto



| | | | | |
|----------------------|---------|--------|--|---|
| PN3(-4) + PN3(-4) | PN3-XPA | 283473 | | PN3 • 1 x rotary handle on switch (not lockable) supplied. • 1 x door coupling rotary handle (not lockable) supplied. • Not suitable for use as a main switch. |
|----------------------|---------|--------|--|---|

| Number of poles | Rated current = Rated uninterrupted current | Setting range | | | Part no. | Article no. | Std. pack |
|-----------------|--|-------------------------------|--------------------------------|------------------------------------|----------|-------------|-----------|
| | | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed | | | |
| | $I_n = I_u$ A | $I_r = I_n \times \dots$ A | $I_{sd} = I_r \times \dots$ | $I_r = I_n \times \dots$ | | | |
| | | | | | | | |

Circuit breakers with earth-fault release, 3 pole For apparatus with power electronics, such as power inverters and frequency inverters



AC/DC sensitive according to core-balance principle in range of 0 – 100 kHz residual-current frequency.
Not UL/CSA approved.

Suitable for use in three-phase systems.

Rated operating voltage: 400 V (50/60 Hz)

Rated fault current $I_{\Delta n} = 0.03$ A

Internal power supply $U_g = 50 - 400$ V

Turnkey combination of current-limiting circuit breaker and residual-current device.

Adjusting buttons can be sealed.

Depending on the cable manufacturer up to 240 mm² can be connected.

High switching capacity 150 kA; 415 V 50/60 Hz

1230PIC-1421 Symbolphoto



| 3 pole | Rated current (A) | Overload releases (A) | Short-circuit releases delayed (A) | Short-circuit releases non-delayed (A) | Part no. | Article no. | Std. pack |
|--------|-------------------|-----------------------|------------------------------------|--|------------------------|-------------|-----------|
| | 100 | 80 - 100 | 600 - 1000 | 6 - 10 | NZMH2-A100-FIA30 | 158530 | 1 Off |
| | 125 | 100 - 125 | 750...1250 | 6 - 10 | NZMH2-A125-FIA30 | 129710 | |
| | 160 | 125 - 160 | 960...1600 | 6 - 10 | NZMH2-A160-FIA30 | 112627 | |
| | 200 | 160 - 200 | 1200...2000 | 6 - 10 | NZMH2-A200-FIA30 | 112628 | |
| | 250 | 200 - 250 | 1500...2500 | 6 - 10 | NZMH2-A250-FIA30 | 112629 | |
| | 100 | 80 - 100 | 600 - 1000 | 6 - 10 | NZMH2-A100-FIA30-BT | 158531 | |
| | 125 | 100 - 125 | 750...1250 | 6 - 10 | NZMH2-A125-FIA30-BT | 129711 | |
| | 160 | 125 - 160 | 960...1600 | 6 - 10 | NZMH2-A160-FIA30-BT | 116304 | |
| | 200 | 160 - 200 | 1200...2000 | 6 - 10 | NZMH2-A200-FIA30-BT | 116305 | |
| | 250 | 200 - 250 | 1500...2500 | 6 - 10 | NZMH2-A250-FIA30-BT | 116306 | |
| | 100 | 80 - 100 | 600 - 1000 | 6 - 10 | NZMH2-A100-FIA30-500AC | 184959 | |
| | 125 | 100 - 125 | 750...1250 | 6 - 10 | NZMH2-A125-FIA30-500AC | 184960 | |
| | 160 | 125 - 160 | 960...1600 | 6 - 10 | NZMH2-A160-FIA30-500AC | 184961 | |
| | 200 | 160 - 200 | 1200...2000 | 6 - 10 | NZMH2-A200-FIA30-500AC | 184962 | |
| | 250 | 200 - 250 | 1500...2500 | 6 - 10 | NZMH2-A250-FIA30-500AC | 184963 | |

4.22

Compact circuit breakers, switch disconnectors

Earth-fault release NZM...XFI...


| For use with | Number of conductors | Part no. Article no. when ordering separately | Article no. | Std. pack | Notes |
|--------------|----------------------|--|-------------|-----------|-------|
|--------------|----------------------|--|-------------|-----------|-------|

Earth-fault release

To IEC/EN 60947-2

Not UL/CSA approved

Suitable for use in three- and single-phase systems

Pulse-current sensitive according to core-balance principle 

For 3 and 4 pole NZM1(-4) circuit breakers and N1(-4)

Switch disconnectors, dependant on mains power $U_b = 200 \dots 415 \text{ V } 50/60 \text{ Hz}$

Mounting on right side up to $I_n = 160 \text{ A}$ at $I_{cu} = 50 \text{ kA}$

1230PIC-799 Symbolphoto



| | | | | | |
|--|-------|--------|-------------|--------|-------|
| Rated fault current $I_{\Delta n} = 0.03 \text{ A}$ | NZM1 | 3 pole | NZM1-XFI30R | 104603 | 1 Off |
| | N(S)1 | | | | |

| | | | |
|--------|--------|---------------|--------|
| NZM1-4 | 4 pole | NZM1-4-XFI30R | 104606 |
| N1-4 | | | |

1230PIC-864 Symbolphoto



| | | | | |
|---|-------|--------|--------------|--------|
| Rated fault current $I_{\Delta n} = 0.3 \text{ A}$ | NZM1 | 3 pole | NZM1-XFI300R | 104604 |
| | N(S)1 | | | |

| | | | |
|--------|--------|----------------|--------|
| NZM1-4 | 4 pole | NZM1-4-XFI300R | 104607 |
| N1-4 | | | |

1230PIC-841 Symbolphoto



| | | | | |
|--|-------|--------|-----------|--------|
| Rated fault current $I_{\Delta n} = 0.03 - 0.1 - 0.3 - 0.5 - 1 - 3 \text{ A}$ | NZM1 | 3 pole | NZM1-XFIR | 104605 |
| | N(S)1 | | | |

| | | | | |
|--|--------|--------|-------------|--------|
| Delay time $t_v = 10 - 60 - 150 - 300 - 450 \text{ ms}$ | NZM1-4 | 4 pole | NZM1-4-XFIR | 104608 |
| | N1-4 | | | |

1230PIC-865 Symbolphoto



| | | | | | |
|--|-------|--------|-------------|--------|-------|
| Rated fault current $I_{\Delta n} = 0.03 \text{ A}$ | NZM1 | 3 pole | NZM1-XFI30U | 104609 | 1 Off |
| | N(S)1 | | | | |

| | | | |
|--------|--------|---------------|--------|
| NZM1-4 | 4 pole | NZM1-4-XFI30U | 104612 |
| N1-4 | | | |

1230PIC-896 Symbolphoto



| | | | | |
|---|-------|--------|--------------|--------|
| Rated fault current $I_{\Delta n} = 0.3 \text{ A}$ | NZM1 | 3 pole | NZM1-XFI300U | 104610 |
| | N(S)1 | | | |

| | | | |
|--------|--------|----------------|--------|
| NZM1-4 | 4 pole | NZM1-4-XFI300U | 104613 |
| N1-4 | | | |

1230PIC-755 Symbolphoto



| | | | | |
|--|-------|--------|-----------|--------|
| Rated fault current $I_{\Delta n} = 0.03 - 0.1 - 0.3 - 0.5 - 1 - 3 \text{ A}$ | NZM1 | 3 pole | NZM1-XFIU | 104611 |
| | N(S)1 | | | |

| | | | | |
|--|--------|--------|-------------|--------|
| Delay time $t_v = 10 - 60 - 150 - 300 - 450 \text{ ms}$ | NZM1-4 | 4 pole | NZM1-4-XFIU | 104614 |
| | N1-4 | | | |

At $I_{\Delta n} = 0.03 \text{ A}$: delay time t_v always fixed at 10 ms.
Alarm indication $> 30 \% I_{\Delta n}$ by yellow LED.
Trip indication by up to 2 auxiliary contacts (HIAFI) can be retrofitted:
N/O = M22-K01, NC = M22-K10 are reset with the reset toggle lever.
If the trip-indicating auxiliary contact in the fault current block is used, the NC contacts operates as a N/O contact and the NC contact operates as N/O contacts. Double contact not permissible.
Not in combination with insulated enclosure or main switch assembly kit for side wall installation with mounting bracket.
NZM1-XFI...R can not be used in combination with lower cover NZM1-XKSA.
NZM1-XFI...U not in combination with shunt or undervoltage release, early-make auxiliary contacts.
Rated ultimate short-circuit breaking capacity is determined by the fitted NZM1 or NS1, or, if a switch disconnector N1 is used, by the fitted back-up fuse.
Technical data.
Adjusting buttons can be sealed.

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Power supply module, 24 VDC

24 V DC supply to the electronic trip.

wa_sg06318 Symbolphoto



| | | | | |
|--------------------|--------------|--------|-------|---|
| NZM2(-4)-VX(MX)... | NZM2-XPS24DC | 189822 | 1 Off | Mechanical pass-through of the switch's status (I, O) for use by the remote operator. |
| NZM3(-4)-VX(MX)... | NZM3-XPS24DC | 189823 | | |
| NZM4(-4)-VX(MX)... | NZM4-XPS24DC | 189824 | | |

Interface module, PXR20, connection for communication

For universal connection of optional circuit breaker functions. Required for communication. The connection types depend on the design of the interface module. Circuit breaker status detection (I, +, 0) for the electronic trip unit. The switch's status can be communicated. 24 V DC auxiliary power connection. Connection for Communications Adapter Module (CAM). Optional CAM available for various Fieldbus communication systems (Profibus DP, SmartWire-DT, Ethernet-based Fieldbus). Connection to optional, internal Modbus RTU module.

wa_sg06318 Symbolphoto



| | | | | |
|---------------------------------------|-------------|--------|-------|--|
| NZM2(-4)-VX(MX)(PX)(PMX)... | NZM2-XBSM | 189825 | 1 Off | Mechanical pass-through of the switch's status (I, O) for use by the remote operator. |
| NZM3(-4)-VX(MX)(PX)(PMX)... | NZM3-XBSM | 189826 | | |
| NZM4(-4)-VX(MX)..., NZM4-4-PX(PMX)... | NZM4-XBSM | 189827 | | Connection to neutral voltage Vn. Mechanical pass-through of the switch's status (I, O) for use by the remote operator |
| NZM4-PX(PMX)... | NZM4-XBSM-N | 189830 | | |

Interface module, PXR25, connection for communication, zone selectivity, ARMS

For universal connection of optional circuit breaker functions. Required for communication. The connection types depend on the design of the interface module. Circuit breaker status detection (I, +, 0) for the electronic trip unit. The switch's status can be communicated. 24 V DC auxiliary power connection. Connection for Communications Adapter Module (CAM). Optional CAM available for various Fieldbus communication systems (Profibus DP, SmartWire-DT, Ethernet-based Fieldbus). Connection to optional, internal Modbus RTU module. Connector for Logical Zone Selectivity (ZSI) function. Mechanical pass-through of the switch's status (I, O) for use by the remote operator. The interface module is included in the standard delivery of PXR25 trip units.

sg05118 Symbolphoto



| | | | | |
|--------------------|-----------------|--------|-------|---|
| NZM2(-4)-PX...-TZ | NZM2-XBSM-TZ | 189832 | 1 Off | Connection for maintenance mode (ARMS). |
| NZM3(-4)-PX...-TAZ | NZM3-XBSM-TAZ | 189833 | | |
| NZM4-4-PX...-TAZ | NZM4-XBSM-TAZ | 189835 | | |
| NZM4-PX...-TAZ | NZM4-XBSM-TAZ-N | 189834 | | Connection to neutral voltage Vn. Connection for maintenance mode (ARMS). |

4.24

Compact circuit breakers, switch disconnectors

Communication module NZM...

| For use with | Part no. | Article no. | Std. pack | Notes |
|--------------|--------------------------------------|-------------|-----------|-------|
| | Article no. when ordering separately | | | |

Internal communication module

For the Fieldbus connection. The module is mounted in the right hand accessory pocket of the circuit breaker.
For connection to Modbus RTU. RS485 interface.

sg05218



| | | | | |
|--------------------------------|-----------------|--------|-------|---|
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) | PXR-RCAM-MRTU-I | 189836 | 1 Off | Cannot be used with the PXR10 NZM-AX electronic trip. |
|--------------------------------|-----------------|--------|-------|---|

Communication module

For Fieldbus connection to the IZMX and NZM circuit breakers.
The module is mounted externally near the circuit breaker.

sg04818, wa_sg06218



| | | | | |
|---|----------|--------|-------|--|
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) IZMX... | PXR-PCAM | 195565 | 1 Off | Connection to Profibus DP Cannot be used with the PXR10 NZM-AX electronic trip. |
|---|----------|--------|-------|--|

| | | | | |
|---|---------------|--------|--|--|
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) IZMX... | PXR-ECAM-MTCP | 195566 | | For connection to Modbus TCP. Cannot be used with the PXR10 NZM-AX electronic trip. |
|---|---------------|--------|--|--|

For Industrial Ethernet connection to the NZM circuit breakers.
Requires PXR-RCAM-MRTU-I module for connection to the circuit breaker.



| | | | | |
|--------------------------------|---------------|--------|-------|--|
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) | PXR-ECAM-PNET | 302050 | 1 Off | For connection to Profinet. Cannot be used with the PXR10 NZM-AX electronic trip. |
|--------------------------------|---------------|--------|-------|--|

| | | | | |
|--------------------------------|-------------|--------|--|---|
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) | PXR-ECAM-IP | 302051 | | For connection to Ethernet/IP. Cannot be used with the PXR10 NZM-AX electronic trip. |
|--------------------------------|-------------|--------|--|---|

| | | | | |
|--------------------------------|--------------|--------|--|--|
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) | PXR-ECAM-ECT | 302052 | | For connection to EtherCAT. Cannot be used with the PXR10 NZM-AX electronic trip. |
|--------------------------------|--------------|--------|--|--|

Connection cable

| | | | | |
|--------------------------|-------------------|--------|-------|--|
| PXR-PCAM / PXR-ECAM-MTCP | PXR-XCAM-NZMCABLE | 195905 | 1 Off | For fieldbus connection to NZM circuit breakers. The connecting cable is mounted between the NZM and the external communication module. Connection to NZM prefabricated. Connection to CAM open. Length 3 m. Can be shortened as needed. |
|--------------------------|-------------------|--------|-------|--|

| Max. Rated Operational Current I_e (A) | Rated Operational Voltage U_e (V) | Adapter Width (mm) | Adapter Length (mm) | Special Features | For use with | Notes | Part no. | Article no. | Std. pack (Stk.) |
|---|--|-----------------------|------------------------|------------------|--------------|-------|----------|-------------|------------------|
|---|--|-----------------------|------------------------|------------------|--------------|-------|----------|-------------|------------------|

NZM Busbar Adapter, 3-pole

Busbar Adapter NZM

- For use on flat copper bars 12 - 30 x 5/10, Double-T-Profiles and Triple-T-Profiles.
- Self-extinguishing according to UL 94.
- Track resistance CTI 200.
- Temperature-resistant up to 120 °C.

1230PIC-668 AO



| | | | | | | | | | |
|-----|-----|----|-----|--|-------------------|--|-------------|--------|---|
| 160 | 690 | 92 | 200 | For connecting to the system at the top or bottom through fixed connection bars included in the scope of delivery. ¹⁾²⁾ | NZM1 N1 NS1 | For switches with standard frame-type terminals. To be snapped onto the busbar by means of a combi-base. | NZM1-XAD160 | 104554 | 1 |
|-----|-----|----|-----|--|-------------------|--|-------------|--------|---|

wa_vt12213



| | | | | | | | | | |
|-----|-----|-----|-----|---|-------------------|---|-------------|--------|---|
| 250 | 690 | 106 | 190 | For connecting to the system at the top/bottom through a tube-type of connection at the rear. Tube included in the scope of delivery. ³⁾ | NZM2 N2 NS2 | Use only in combination with auxiliary type (+)NZM2-XKR4. To be screwed onto the busbar by means of a claw-type of clamp. | NZM2-XAD250 | 104555 | 1 |
|-----|-----|-----|-----|---|-------------------|---|-------------|--------|---|

wa_vt22513, wa_vt12213



| | | | | | | | | | |
|-----|-----|-----|-----|---|------------|--|-------------|--------|---|
| 630 | 690 | 140 | 300 | For connecting to the system at the top/bottom through a tube-type of connection at the rear. Tube included in the scope of delivery. ³⁾ | NZM3 N3 | Use only in combination with auxiliary type (+)NZM3-XKR13. To be screwed onto the busbar by means of a claw-type of clamp. | NZM3-XAD630 | 107206 | 1 |
|-----|-----|-----|-----|---|------------|--|-------------|--------|---|

Terminal for Device Adapter NZM

wa_vt12713



| | | | | | | | | | |
|-----|-----|---|---|--|--------------------------|--|-----------|--------|---|
| 250 | 690 | – | – | To cover the connection to the system at the top/bottom. | NZM2 PN2 N2 NS2 | For device combination NZM2 use with auxiliary type +NZM2-XKR40 or +NZM2- XKR4U. | NZM2-XKR4 | 281666 | 1 |
|-----|-----|---|---|--|--------------------------|--|-----------|--------|---|

wa_vt12613



| | | | | | | | | | |
|-----|-----|---|---|--|-------------------|--|------------|--------|---|
| 630 | 690 | – | – | To cover the connection to the system at the top/bottom. | NZM3 PN3 N3 | For device combination NZM3 use with auxiliary type +NZM3- XKR130 or +NZM3-XKR13U. | NZM3-XKR13 | 281668 | 1 |
|-----|-----|---|---|--|-------------------|--|------------|--------|---|

¹⁾ To be snapped onto the voltage-free busbar.

²⁾ Thanks to the combi-base it can be adjusted to a bar width of both 5 and 10 mm.

³⁾ To be screwed onto the voltage-free busbar.

4.25

SASY 60i Busbar System

NZM Busbar Adapter, 4-pole

| Max. Rated Operational Current I_e (A) | Rated Operational Voltage U_e (V) | Adapter Width (mm) | Adapter Length (mm) | Special Features | For use with | Notes | Part no. | Article no. | Std. pack (Stk.) |
|---|--|-----------------------|------------------------|------------------|--------------|-------|----------|-------------|------------------|
|---|--|-----------------------|------------------------|------------------|--------------|-------|----------|-------------|------------------|

NZM Busbar Adapter, 4-pole

Busbar Adapter NZM

- For use on fl at copper bars 12 - 30 x 5/10, Double-T-Profiles and Triple-T-Profiles.
- Self-extinguishing according to UL 94.
- Track resistance CTI 200.
- Temperature-resistant up to 120 °C.

01063591_0



| | | | | | | | | | |
|-----|-----|-----|---|---|--|---|---------------|--------|---|
| 250 | 690 | 140 | – | For connecting to the system at the top through a tubetype of connection at the rear. Tube included in the scope of delivery. ³⁾ | NZM2(-4) PN2(-4) N2(-4) NS2(-4) | Use only in combination with auxiliary type (+)NZM2-4-XKR4. To be screwed onto the busbar by means of a claw-type of clamp. | NZM2-4-XAD250 | 138388 | 1 |
|-----|-----|-----|---|---|--|---|---------------|--------|---|

01063598_0



| | | | | | | | | | |
|-----|-----|-----|---|---|--|---|---------------|--------|---|
| 630 | 690 | 185 | – | For connecting to the system at the top through a tubetype of connection at the rear. Tube included in the scope of delivery. ³⁾ | NZM3(-4) PN3(-4) N3(-4) NS3(-4) | Use only in combination with auxiliary type (+)NZM3-4-XKR13. To be screwed onto the busbar by means of a clawtype of clamp. | NZM3-4-XAD630 | 138389 | 1 |
|-----|-----|-----|---|---|--|---|---------------|--------|---|

Terminal for Device Adapter NZM

NZM2-4-XKR4



| | | | | | | | | | |
|-----|-----|---|---|---|----------------------------------|--|-------------|--------|---|
| 250 | 690 | – | – | To cover the connection to the system at the top. | NZM2-4 PN2-4 N2-4 NS2-4 | For device combination NZM2 use with auxiliary type +NZM2-4-XKR40. | NZM2-4-XKR4 | 118907 | 1 |
|-----|-----|---|---|---|----------------------------------|--|-------------|--------|---|

NZM3-4-XKR4



| | | | | | | | | | |
|-----|-----|---|---|---|----------------------------------|---|--------------|--------|---|
| 630 | 690 | – | – | To cover the connection to the system at the top. | NZM3-4 PN3-4 N3-4 NS3-4 | For device combination NZM3 use with auxiliary type +NZM3-4-XKR130. | NZM3-4-XKR13 | 119020 | 1 |
|-----|-----|---|---|---|----------------------------------|---|--------------|--------|---|

¹⁾ To be snapped onto the voltage-free busbar.

²⁾ Thanks to the combi-base it can be adjusted to a bar width of both 5 and 10 mm, cross-section of conductor 6 x 9 x 0.8.

³⁾ To be screwed onto the voltage-free busbar.

Busbar Adapter NZM

| | NZM1-XAD160 | NZM2-XAD250 | NZM3-XAD630 |
|-----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Design | 3-pole, 690 V~ | 3-pole, 690 V~ | 3-pole, 690 V~ |
| Bar system | 60 mm | 60 mm | 60 mm |
| Bar contacting | combi-base | claw-type terminal | claw-type terminal |
| Connection of the switchgear | top/bottom | top or bottom | top or bottom |
| Short circuit current rating SCCR | 32 kA at 480 V | 35 kA at 480 V 50 kA at 600 V | 65 kA at 480 V 50 kA at 600 V |
| Base body: | | | |
| | Thermoplastic | Thermoplastic | Thermoplastic |
| | Temperature resistant up to 120 °C | Temperature resistant up to 120 °C | Temperature resistant up to 120 °C |
| | Self-extinguishing according to UL 94 | Self-extinguishing according to UL 94 | Self-extinguishing according to UL 94 |
| | Track resistance CTI 200 | Track resistance CTI 200 | Track resistance CTI 200 |
| | Halogen-free | Halogen-free | Halogen-free |

NZM1-XAD160

Derating:

| | | | | | | | |
|---------------------------|-----|------|------|------|------|------|------|
| Ambient temperature | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Permissible rated current | 160 | 155 | 150 | 146 | 141 | 136 | 130 |
| Derating to 160 A | 1 | 0.97 | 0.94 | 0.91 | 0.88 | 0.85 | 0.81 |

NZM2-XAD250

No derating

NZM3-XAD630

Derating:

| | | | | | | | |
|---------------------------|-----|------|------|------|------|------|------|
| Ambient temperature | 20 | 30 | 40 | 50 | 60 | 65 | 70 |
| Permissible rated current | 630 | 605 | 580 | 554 | 529 | 517 | 504 |
| Derating to 630 A | 1 | 0.96 | 0.92 | 0.88 | 0.84 | 0.82 | 0.80 |

Notes:

Please observe the de-rating coefficients listed in the table above to determine the maximum ampacity allowed at different ambient temperatures!

Example:

An NZM3...3-...630... device with an NZM3-XAD630 device adapter should be operated at an ambient temperature of 50 °C.

Question:

What is the maximum rated operating current I_b allowed I_b ? =>

Solution:

At an ambient temperature of 50 °C, the de-rating coefficient is 0.88. This means that $I_b = 630 \text{ A} \times 0.88 = 544 \text{ A}$.

At an ambient temperature of 50 °C, the device can therefore be operated at a maximum of $I_b = 544 \text{ A}$.

5.1

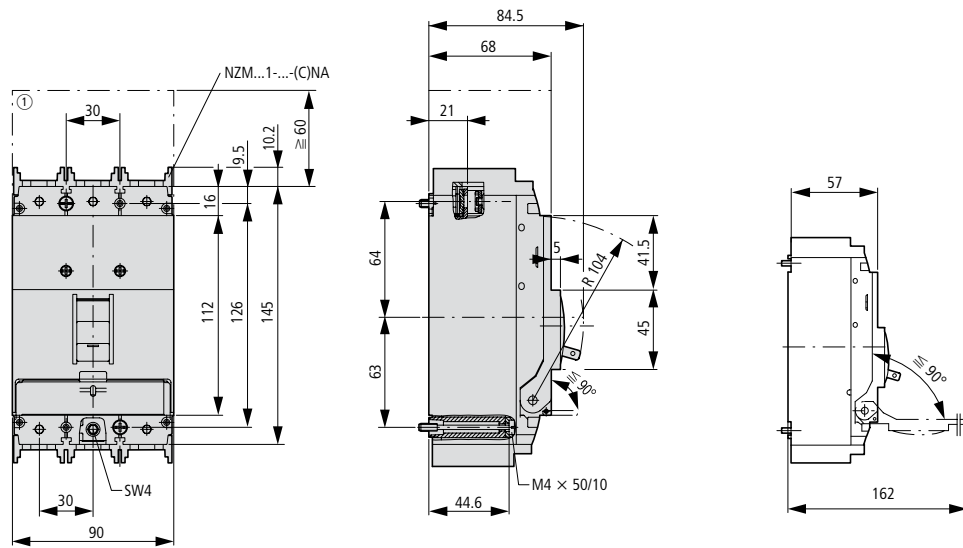
Compact circuit breakers, switch disconnectors

Construction size 1: Basic devices
 NZM1, PN1, N1, NS1

Dimensions (mm)

3 pole

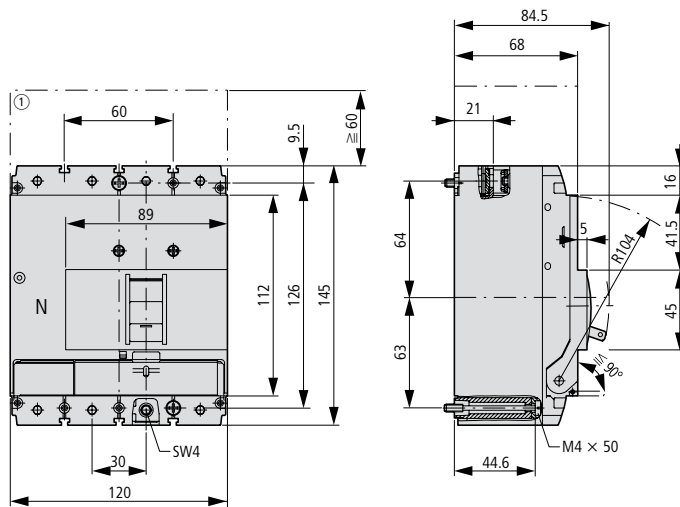
- NZMB1
- NZMC1
- NZMN1
- NZMH1
- PN1
- N1
- NS1



① Blow-out area, minimum distance to other parts ≥ 60 mm

4 pole

- NZMB1-4
- NZMC1-4
- NZMN1-4
- NZMH1-4
- PN1-4
- N1-4

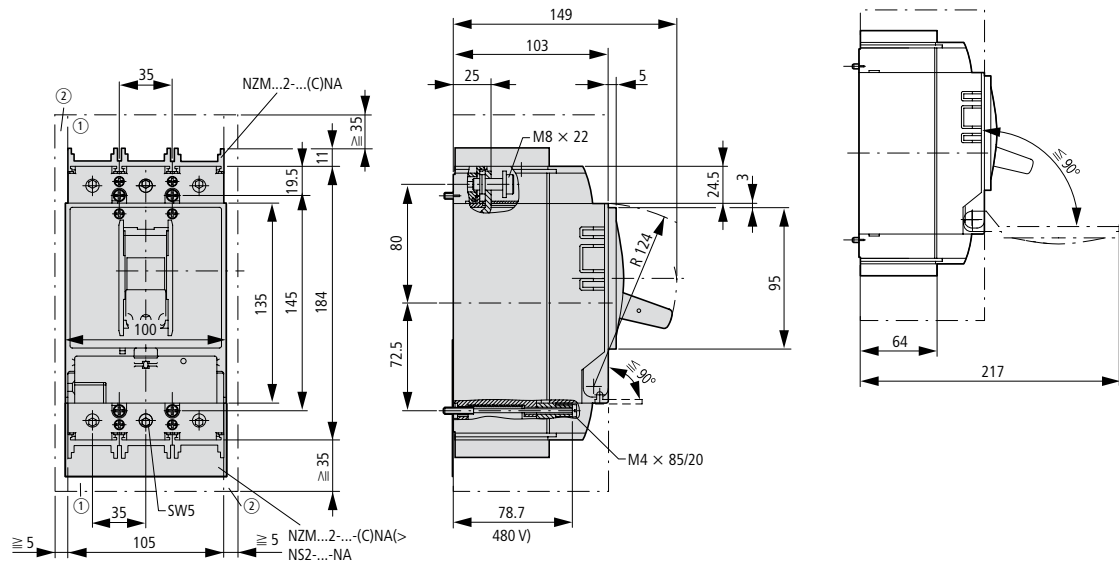


① Blow-out area, minimum distance to other parts ≥ 60 mm

Dimensions (mm)

3 pole

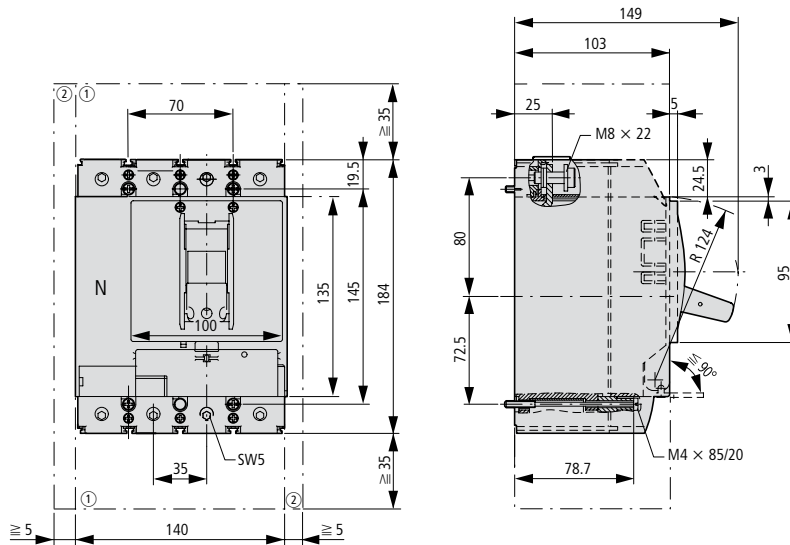
NZMB2
NZMC2
NZMN2
NZMH2
PN2
N2
NS2



- ① Blow-out area, minimum distance to other parts ≥ 35 mm
- ② Minimum distance to adjacent parts ≥ 5 mm

4 pole

NZMB2-4
NZMC2-4
NZMN2-4
NZMH2-4
PN2-4
N2-4



- ① Blow-out area, minimum distance to other parts ≥ 35 mm
- ② Minimum distance to adjacent parts ≥ 5 mm

5.3

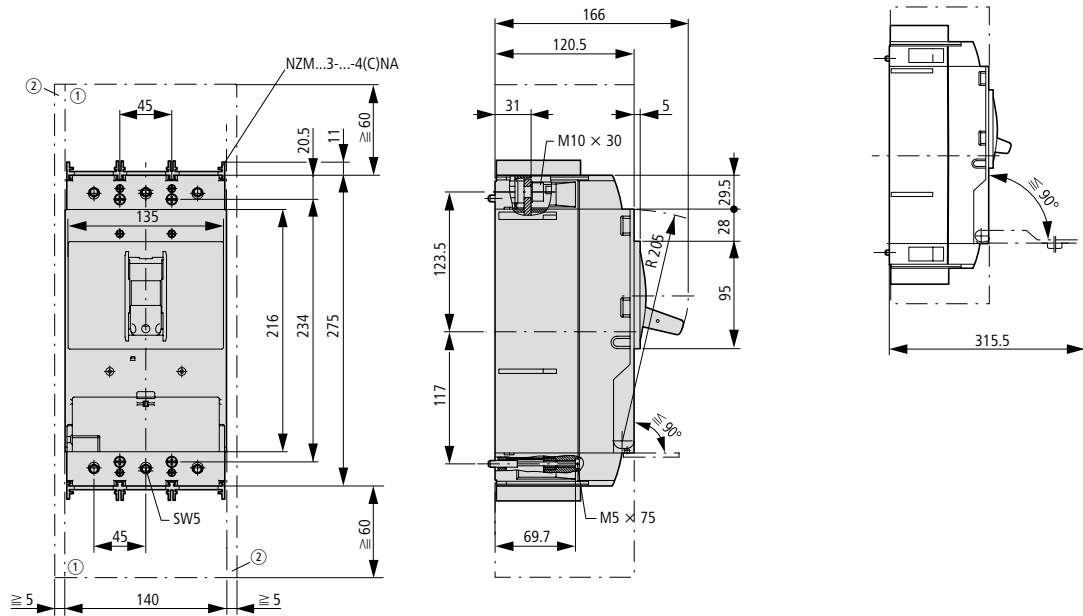
Compact circuit breakers, switch disconnectors

Construction size 3: Basic devices
 NZM3, PN3, N3, NS3

Dimensions (mm)

3 pole

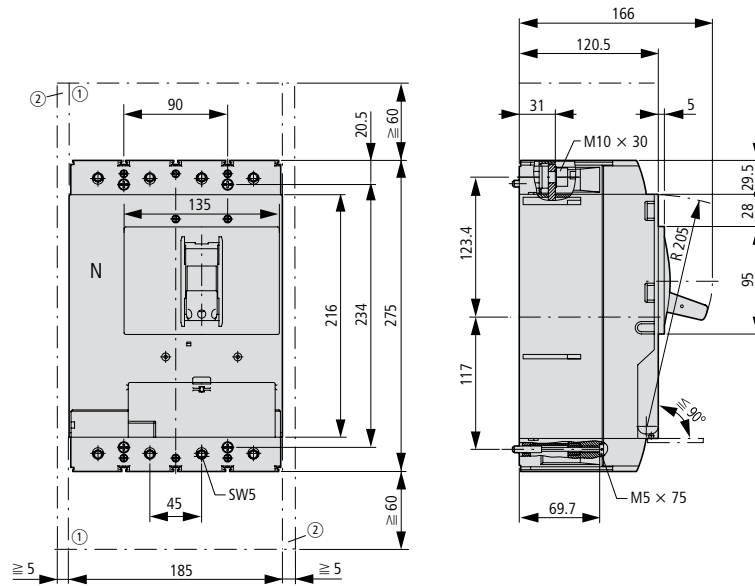
NZMC3
 PN3
 N3
 NS3



- ① Blow-out area, minimum distance to other parts ≥ 60 mm
- ② Minimum distance to adjacent parts ≥ 5 mm

4 pole

NZMC3-4
 NZMN3-4
 NZMH3-4
 PN3-4
 N3-4

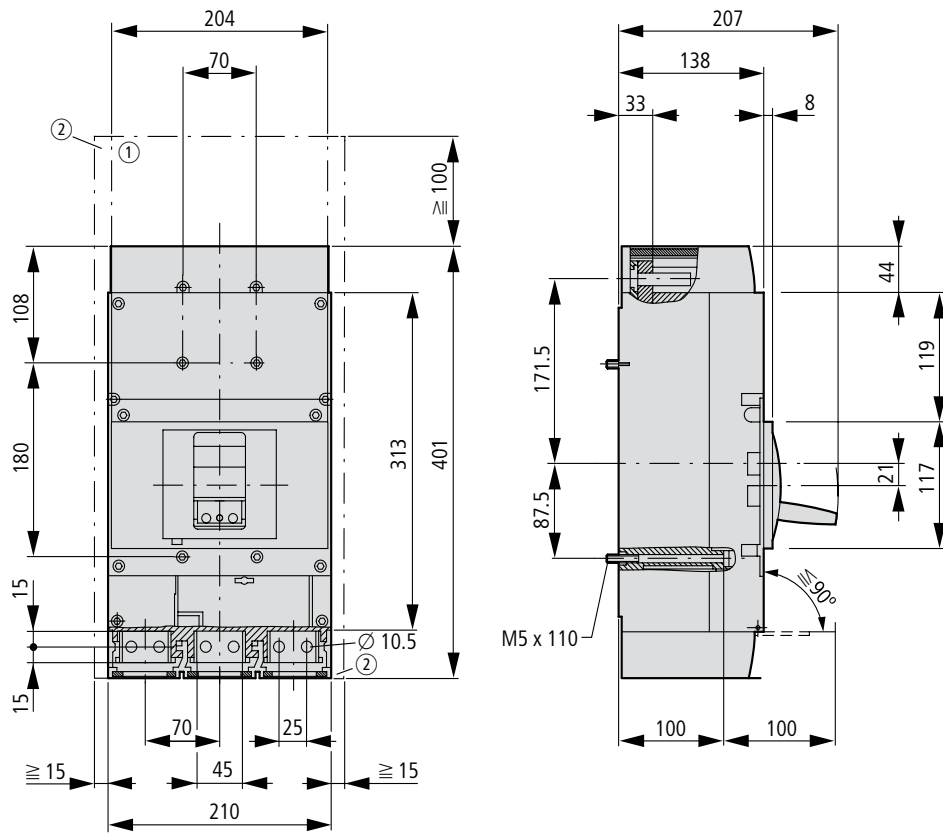


- ① Blow-out area, minimum distance to other parts ≥ 60 mm
- ② Minimum distance to adjacent parts ≥ 5 mm

Dimensions (mm)

3 pole

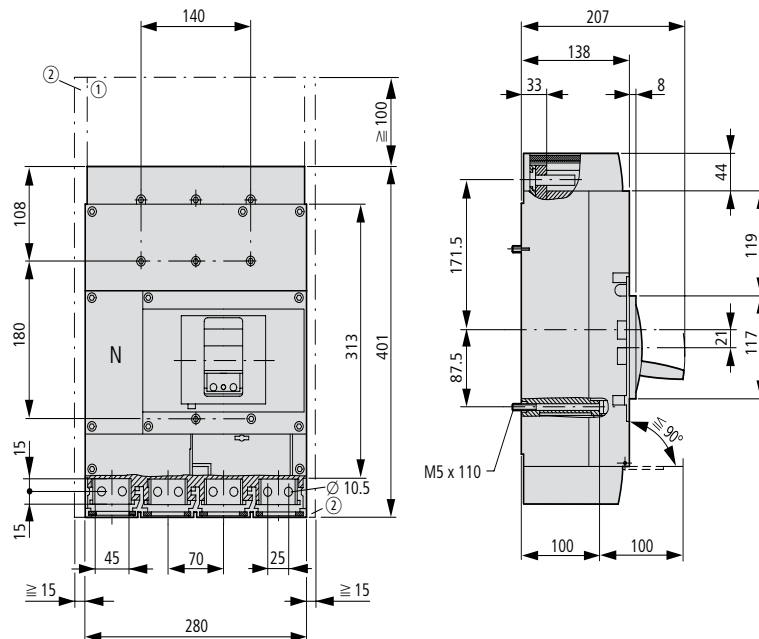
NZMN4
NZMH4
N4
NS4



- ① Blow-out area, minimum distance to other parts ≥ 100 mm up to 690 V; ≥ 200 mm up to 1000 V
- ② Minimum distance to adjacent parts ≥ 15 mm

4 pole

NZMN4-4
NZMH4-4
N4-4



- ① Blow-out area, minimum distance to other parts ≥ 100 mm
- ② Minimum distance to adjacent parts ≥ 15 mm

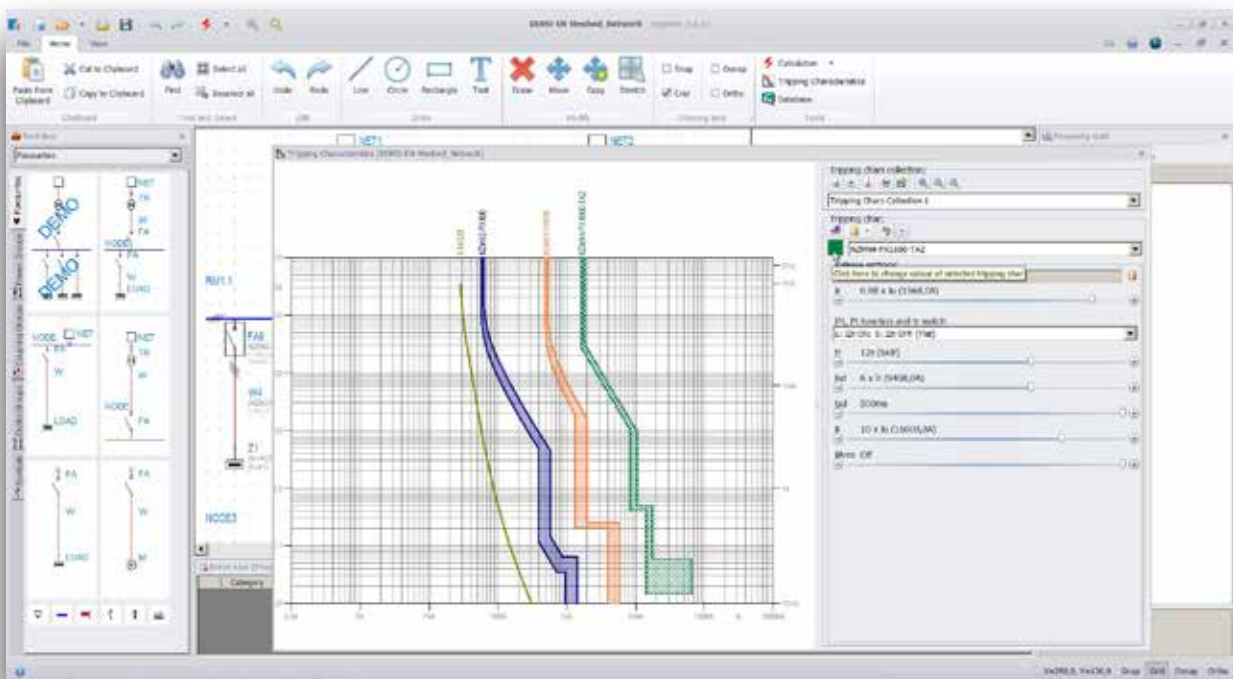


xSpider

xSpider creates your networks

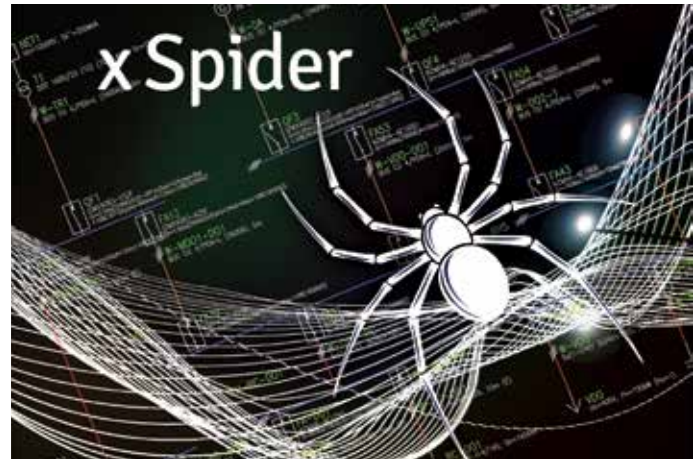
The xSpider software is a graphic-oriented design system for dimensioning of low-voltage networks fitted with Eaton brand circuit protection equipment.

The software is intended primarily for designers and computational engineers. It includes a new graphics and computing core as well as a new user interface.



General Features

- Suitable for TN / IT / TT network systems of different voltage systems up to 1,000 V.
- Design of radial as well as meshed networks.
- Operating status manager for simulating various operating states of the network (ON/OFF status of sources and loads).
- Database of components with transparent tree structure, allowing user-defined additions.
- All calculations are based on IEC standards.
- Coordination of protective devices (selectivity, backup protection).
- Tripping characteristics available for all protective devices.
- Generation of documentation (wiring diagram with calculation results, calculation report etc.).



Calculations

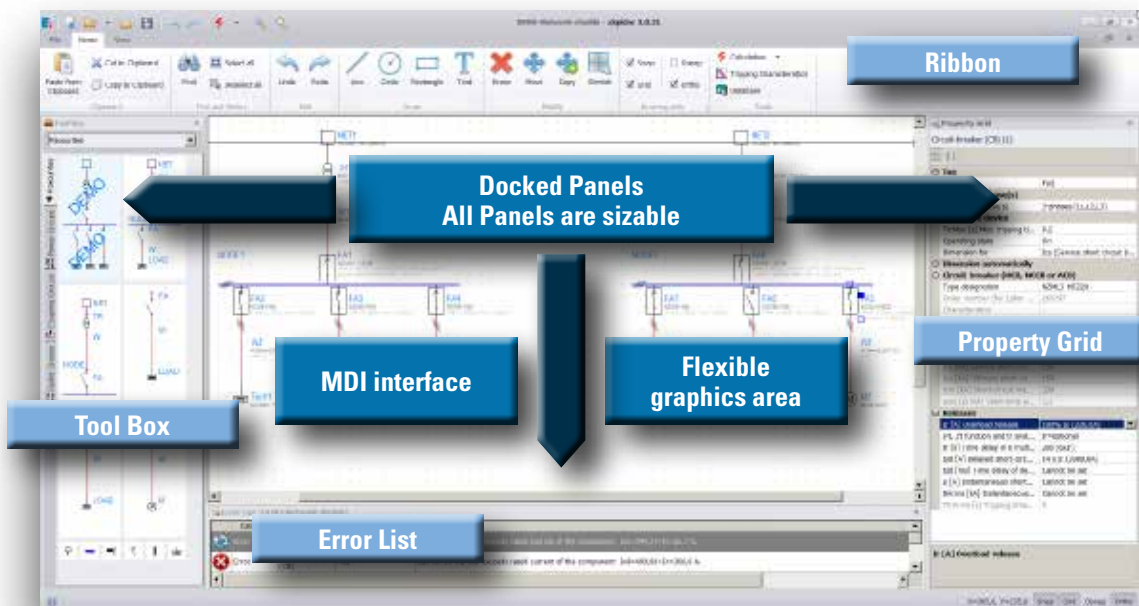
- **Voltage drops** in nodal points of the network.
- Load distribution in the network lines.
- Power factor calculation for meshed networks.
- **Three-phase symmetric short circuit** according to IEC 60909.
- Backup protection – checking the breaking capacities of the out-going protective components at the outgoers.

- Selectivity assessment of circuit breakers according to tripping characteristics and selectivity tables.
- **Single-phase asymmetrical short circuit current.**
- Calculation of the disconnection time and check on compliance with the requirements of IEC 60364-4-41.

Displaying of results

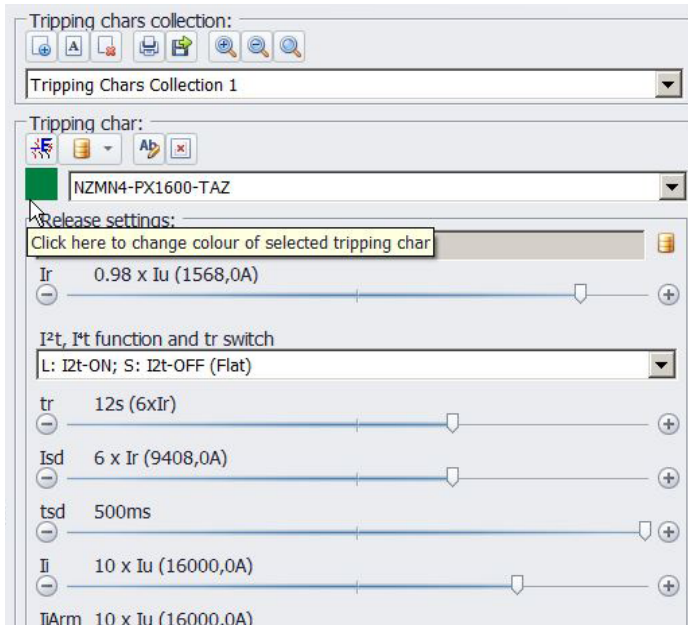
- Calculation is followed by a display of the list of non-compliant elements (in parallel with the wiring diagram).
- After the calculation has been performed, the calculated values will be displayed for the individual components in the network wiring diagram.

- The results diagram is printable. It can be printed on any output device, for which a driver is available in Windows (printer, plotter).
- After calculation, a comprehensive report on the calculation can be generated and printed.



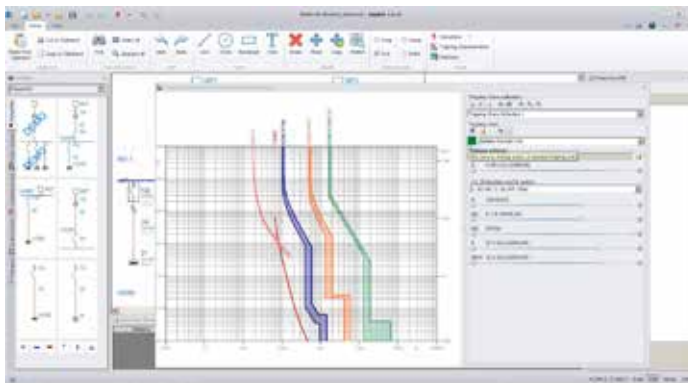
User operation similar to standard CAD systems (AutoCAD)

Working with tripping characteristics

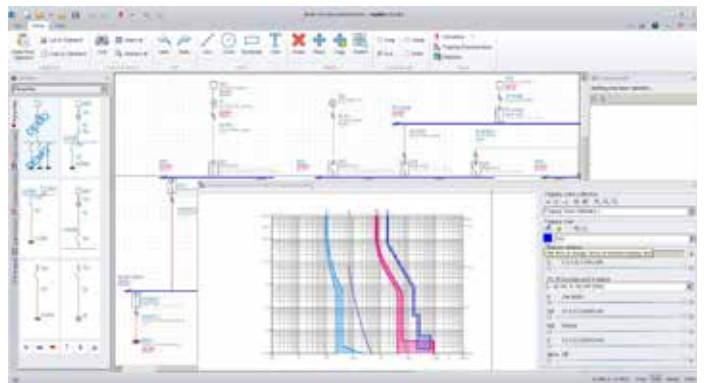


Setting of parameters for selected circuit breaker tripping characteristic

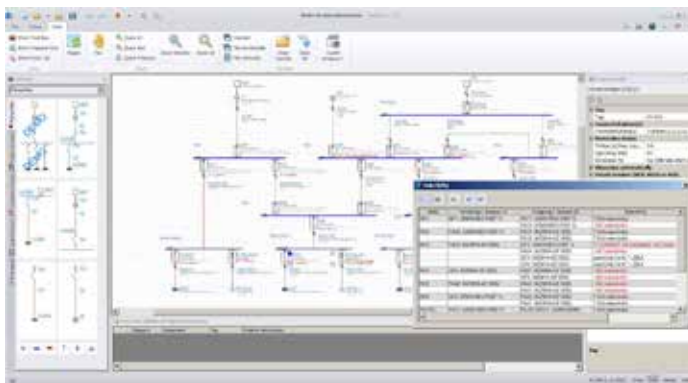
- The dialogue box with the tripping characteristics is shown in parallel with the wiring diagram.
- Selection of a protective device from the database and rendering of its tripping characteristic (including tolerance range if the necessary data is available).
- Selection of protective equipment from the network wiring diagram and drawing of its tripping characteristics – selectivity assessment possible.
- If a circuit protection device is equipped with adjustable releases, it is possible to modify all available parameters. If this was a device from the wiring diagram, the change of the release parameter setting is transferred back into the wiring diagram.
- It is also possible to work with the tripping characteristics independently, i.e. without drawing a wiring diagram.



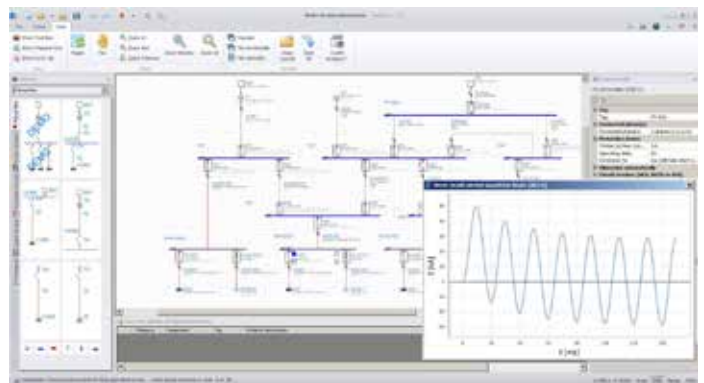
Tripping characteristic of NZM breakers



Tripping characteristic of NZM4 with activated Arc Reduction Maintenance System (ARMS)



Complex evaluation of selectivity and backup protection



Tripping characteristic of NZM breakers with complex evaluation of selectivity and backup protection in the project

How to obtain the xSpider software

Go to the xSpider homepage: 1) www.eaton.com/xspider
 2) Search with any explorer (Google) for terms such as: xSpider, or xSpider Eaton etc.

- Download the xSpider software *)
- Installation of xSpider to a computer
- xSpider icon is displayed on the screen – click on it
- Start

*) available also:

- PowerPoint presentations – quick overview of features
- User manual is part of installation or available separately as a PDF file
- Instruction videos help to quickly understand operation.



www.eaton.com/xspider

How to start the first job

The most effective way for quick learning is to start with the selected "DEMO Network" drawing, then look at Videos and follow the User manual, Part III.

1 DEMO drawing

Ready drawings with explanation of basic features. The DEMO drawing contains all basic components and allows immediate work with all xSpider features.

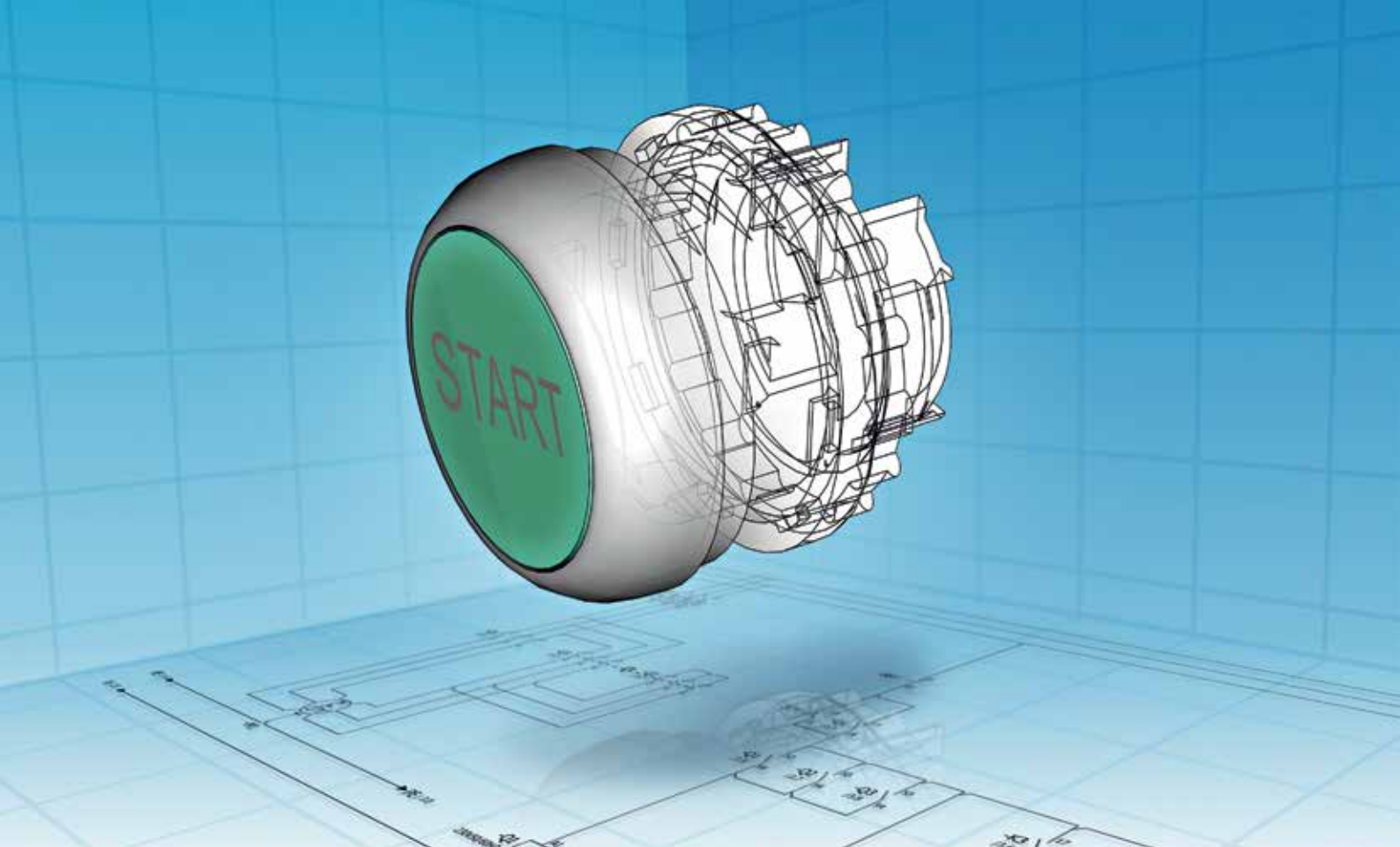
2 Videos

Typical situations in the everyday use of xSpider

3 User manual

Step-by-step explanation in Part III:
 Part I: Theoretical Introduction
 Part II: Program Operation
 Part III: Solved Examples





Planning safety and process optimization: eCAD & mCAD data at the click of a mouse!



- 22,000 article data items and macros
- Download from EPLAN Data Portal
- Available for version P8



- Models for approx. 20,000 products
- 80 different neutral & native formats

Eaton is providing its customers with CAD data to offer optimum support during planning. Both electrical and mechanical design data can be called up quickly and conveniently from the Internet at any time. This reduces processing times, minimizes errors and thus already reduces costs in the engineering phase of control panels, systems and machinery.

eCAD: Eaton has product data and macros for EPLAN Electric P8 available in the EPLAN Data Portal.

More than 22,000 products can be found and downloaded from there.

mCAD: Eaton makes 2D and 3D data available for more than 20,000 products. Over 80 different neutral and native formats guarantee compatibility with the project engineering systems of the customer. The models can either be integrated directly into the planning software from the Partcommunity Portal on the Internet or via the CADENAS Partsolution software.



www.eaton.eu/cad

Build it in.



XV HMI/PLC: Systematic visualization and control



All devices can also be used in portrait format

With the XV system of HMI-PLC touch panels, Eaton offers machine builders and system integrators a coordinated product range that can be precisely matched to various performance classes. In combination with powerful processors, the intelligent implementation of the PLC runtime as part of a lean and efficient embedded platform strategy leads to modern, scalable and cost-effective automation concepts. The use of CODESYS programming standard and the comprehensive interfaces illustrate the openness of the system. Display sizes from 3.5" to 15", plastic and metal versions, and the option of using capacitive, resistive, or infrared touch panels allow for an extremely wide range of applications. A unique technology: XV panel with integrated SmartWire-DT master interface. The control wiring has been replaced by a single cable, which makes it easy to connect the switching, signaling and operating devices as well as any sensors and actuators outside the control panel.

XV300 – The new face of modern industry

Intuitive user guidance, precise gesture control, multimedia integration - industrial applications that offer the same ease of use that we have come to expect from smartphones and tablets.

The new XV300 panels with capacitive multi-touch or infrared technology are not only easy to operate, but are also redefining the possibilities of human-machine interaction. Modern, high-resolution devices that meet your needs - even in harsh industrial environments.

General features

- Can be used either in portrait or landscape mode
- Removeable SD card
- Interface combinations: 1 or 2 Ethernet interfaces 10/100Mbps, CAN, PROFIBUS-DP/MPI
- SmartWire-DT, RS232, RS485
- Integrated web server
- HMI / HMI/PLC functionality
- High system performance and a powerful graphics processing unit
- PLC function programmable with CODESYS V2 and V3
- Visualization via GALILEO, CODESYS or Visual Designer
- UL approval
- Marine approval for the 7" and 10" XV-303/313 devices



XV-303

- Capacitive multi-touch panel for front mounting
- Display sizes 7", 10.1" and 15" in 16:9 format
- Flat front panel made from non-reflective tempered glass
- Plastic housing
- Interfaces: 1 or 2 x Ethernet, 1 x CAN, 1 x RS232, 1 x RS485
- Optional: 1 x Profibus-DP, SmartWire-DT



XV-313

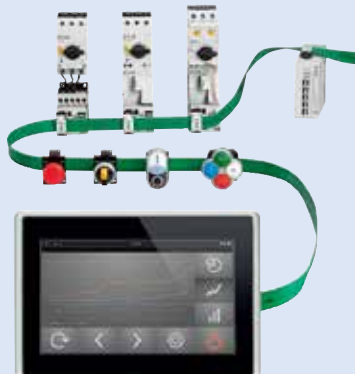
- Capacitive multi-touch panel for rear mounting
- Display sizes: 7" and 10.1" in 16:9 format
- Flat front panel made from non-reflective tempered glass
- Plastic housing with aluminum bezel
- Flush-mounted, resulting in a flat surface without any sharp edges
- Interfaces: 1 or 2 x Ethernet, 1 x CAN, 1 x RS232, 1 x RS485
- Optional: 1 x Profibus-DP, SmartWire-DT



XV-363

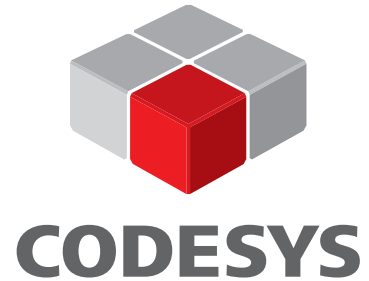
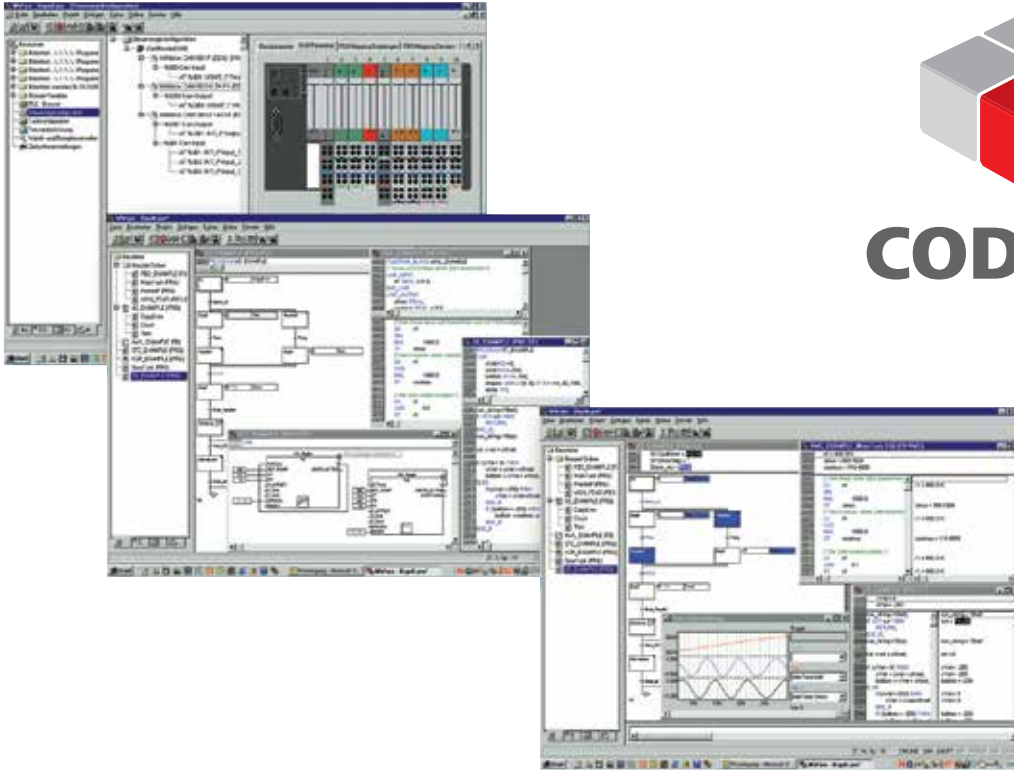
- Infrared touch panel for front mounting
- Display sizes: 5.7", 10.4" and 12.1" in 4:3 format
- Laminated safety glass, non-reflective
- Metal housing with aluminum bezel
- The dimensions are identical to those of the XV(S)400 series
- PLC function can be added later by means of Y7-181585 (LIC-PLC-A)
- Communication options: 2 x Ethernet, 1 x CAN, 1 x RS232, 1 x RS485
- Optional: 1 x Profibus-DP

SmartWire-DT on board

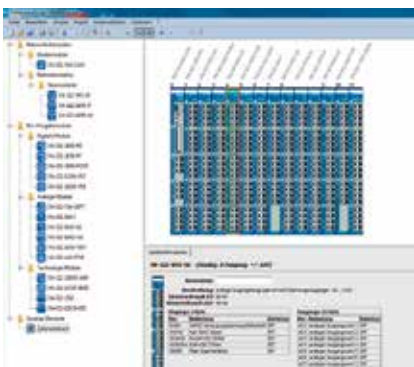


SmartWire-DT is an integral component of Eaton's automation concept, which is characterized by flexible solutions with fewer components and less engineering: SmartWire-DT supports the integration of the communication and I/O level directly into the control, display and switching devices. In addition to executing control commands, the PLC can thus directly access digital and analog data, from sensors all the way to circuit breakers. This eliminates the need for a separate gateway and I/O layer.

Build it in.



XSOFT-CODESYS – PLC programming to international standards



Software tools simplify both project execution and commissioning:

- XN300 Assist
- I/O-Assist
- SWD-Assist

Download free of charge at www.eaton.com/software

CODESYS is a programming system based on the 3S' CODESYS standard. And with its sophisticated technical features, ease of use, and popularity as a programming system for automation components from a wide variety of manufacturers, it is no surprise that it has become the system of choice for many a successful company. Eaton offers both **CODESYS Version 2** and **Version 3**, and most XV/XC controllers can be programmed with either version.

CODESYS is the ideal programming tool for applications in which a powerful PLC or HMI PLC with various field bus connections is required. The reason why is its integrated field bus configurators for PROFIBUS, CAN, SmartWire-DT, Modbus TCP/RTU (in Version 3), and EtherNet/IP (in Version 3), which make it possible to quickly, intuitively, and easily connect devices to the field bus of your choice. In short, the software is the ideal programming tool for all machine and process-relevant applications in mechanical and plant engineering environments.



www.eaton.com/codesys

| SMD-Assist | I/O-Assist | XN300 Assist | CODESYS-3-Webvisu | CODESYS-3 | CODESYS-2-Webvisu | CODESYS-2 | |
|----------------|------------|--------------|-------------------|-----------|-------------------|-----------|--------------------|
| • ³ | | | • | • | • | • | XV-102-B/-D/-E-... |
| | | | • | • | • | • | XV-112-... |
| • ³ | | | • | • | • | • | XV-152-... |
| • ³ | | | • | • | • | • | XV-3x3-... |
| | | | • | • | • | • | XV(S)-4-... |
| • ³ | | | • | • | • | • | XC-152-... |
| | | | • | • | | | XC-303 |
| | | | • | • | • | • | XC-CPU202-... |
| | | | | | • | • | XC-CPU201-...-XV |
| | | | | | • | • | XC-CPU201-/101-... |
| | | | | | • | • | XC-CPU121 |
| | | | | | • | • | EC4P-... |
| | • | | | | • | • | XN-PLC-CANOPEN |
| | | • | | | • | • | XN-312-GW-CAN |
| | • | | | | • | • | XNE-GWBR-... |
| | • | | | | • | • | XN-GWBR-... |

³ for devices with SmartWire-DT interface

Maximum flexibility

CODESYS is the programming tool for all Eaton XV/XC controllers. It enables users to program systems as per IEC-1131-3 with the following programming languages: instruction list (IL), ladder diagram (LD), function block diagram (FBD), sequential function chart (SFC), structured text (ST), continuous function chart (CFC).

Eaton offers targets for the XV100, XV400, XVS400, XC-152, and XC-CPU202 automation systems both for CODESYS V3 and CODESYS V2, meaning that the same hardware can be used in new (configured with CODESYS 3) and existing (programmed with CODESYS 2) machine generations.

Multitasking

The structuring of the application into several user-defined runtime programs (multitasking) optimizes your PLC's resources and simplifies the implementation of time-critical requirements. This gives high-speed processes priority and slower processes as much processing time as necessary.

Web visualization

XSOFT CODESYS can generate an XML description based on visualization information. In CODESYS V2, this description will be stored on the controller together with a Java applet. In CODESYS V3, HTML5-based pages (CODESYS V3) will be generated instead. These pages can then be displayed on a browser via TCP/IP.

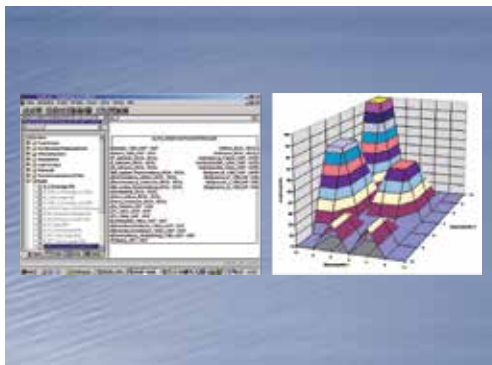
Application libraries

Eaton Automation offers several ready-to-use libraries for programming PLCs with XSOFT-CODESYS for a wide range of applications:

- Control technology toolbox
- Motion control toolbox
- FTP server
- FTP client
- UDP and TCP/IP
- Modbus RTU/TCP master/slave
- OS functions
- File handling

XSOFT CODESYS Version 3 features:

- A programming tool that can be expanded using plugins to handle customer-specific adaptations
- Expanded language options (object-oriented programming)
- Know-how protection for targets and the programming tool
- Multiple PLC programs in one project
- New and improved TargetVisu functions
- Improved IT safety functions
- Websites based on HTML5
- Field bus configurations: Modbus TCP/RTU, EtherNet/IP
- SAE J1939 protocol



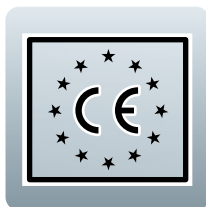


Functional safety to protect people, machines and the environment



Safety Technology

Control the unexpected



Throughout their entire life cycle, machines pose risks to people, other machinery and the environment. For this reason, it is vital to identify any hazards during the design phase of the machine and to reduce them by taking appropriate measures.

The Machinery Directive 2006/42/EC stipulates that machines should not pose any danger. However, as there is no such thing as 100 % safety in engineering, the objective is to minimize dangers and to achieve tolerable levels of residual risk. The overall safety of a machine defines the state in which it either poses no unacceptable risks to people or can be considered hazard-free. Functional safety refers to the part of the overall safety of a system which depends on the correct functioning of the safety-related systems and the external risk-reduction devices.

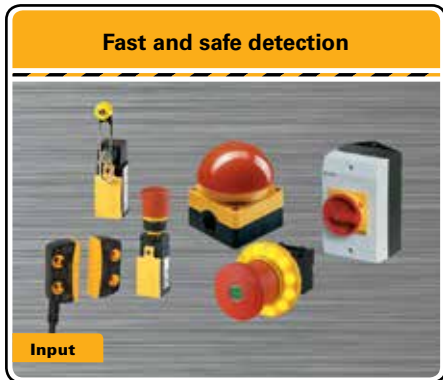


www.eaton.eu/fusi

Risk reduction through the use of safety-related parts in control systems

In international standards, the safety components of machine controls are referred to as “safety-related parts of control systems” (SPR/CS). Safety-related control components cover the entire functional chain of a safety function. In each case, they consist of the input level (sensor), the integrated logic (safe signal processing) and the output level (actuator).

The general objective is to design these components in such way that the control functions reduce the level or risk in line with the results of the risk analysis, even in the event that the control system malfunctions. The higher the level of risk reduction that the safety-related parts of a control system need to achieve, the higher the required safety level/technical safety performance level.

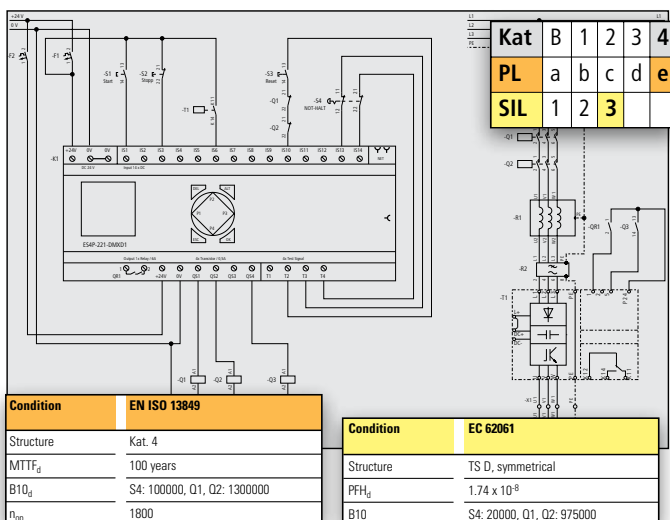


Safety Manual for machines and systems in accordance with EN ISO 13849-1 and IEC 62061

Information about machine safety can be found in Eaton’s “Safety Manual”, which is aimed at machine builders and system integrators, as well as at teachers and students and anyone else who is interested in the topic.

This manual provides an introduction to the comprehensive literature on safety technology. The Eaton Safety Manual provides an overview of the interplay between the relevant directives, standards and regulations that must be taken into account when designing safety equipment for machines. The safety-related contents of this manual have been certified by TÜV Rheinland Industrie Service GmbH.

Based on example circuits, the manual shows how functional safety can be implemented in safety applications by means of electrical, electronic and programmable components and systems.



In addition, the Safety Manual also describes the functioning of each example circuit and contains a clear overview of the possible evaluations.

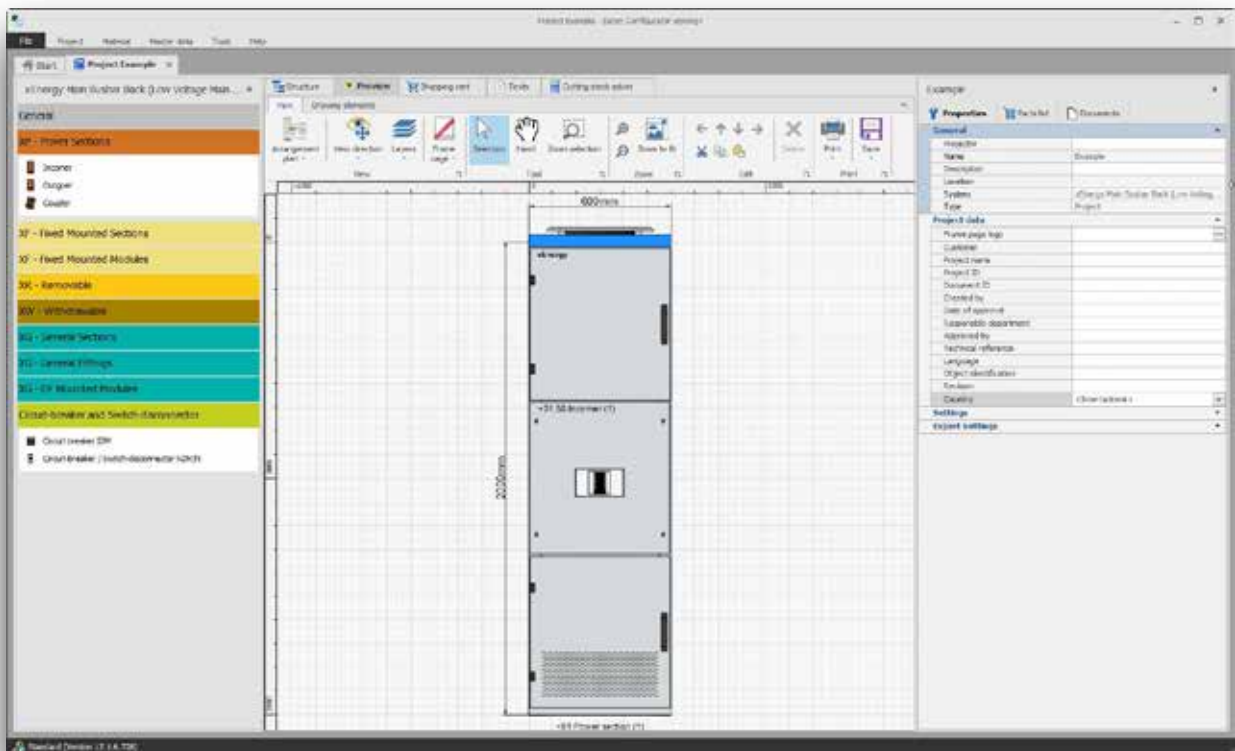
The calculated variables are based on standard assumptions about the safety applications and safety-related switchgear being used.

Register now at www.eaton.eu/shb to download our Safety Manual free of charge.

The safety-relevant variables for our products are available at www.eaton.eu/fusi



Eaton xEnergy configurator



Eaton's xEnergy configurator is a pricing and configuration software that enables panel builders to design and calculate the cost of low-voltage switchgear assemblies using Eaton's xEnergy enclosure families and IZM and NZM circuit breaker families.



Main features

Distribution board configuration

- Fast and reliable configuration of distribution boards systems and circuit protection devices.
- Define technical properties with continuous validation check.
- Function-oriented dimensioning of the distribution board by means of neutral properties.
- Optional transfer of the configured distribution board to ProPlan (detail engineering).

Preview

- View of the distribution board from different directions.
- View of sections, modules and busbars including dimensioning and drawing sheet.
- Move components via drag/drop.
- Export as DXF file.

Part lists

- Expandable with any user defined material (including material from "MatClass").

Documentation

- Access to xEnergy assembly manuals and installation instructions.

Shopping cart

- As structure and summary parts list.
- Includes the calculation of metal surcharges.
- Considers exchange rates.
- Export to Microsoft Excel.
- Includes recommendations for additionally required busbar material (copper lengths).

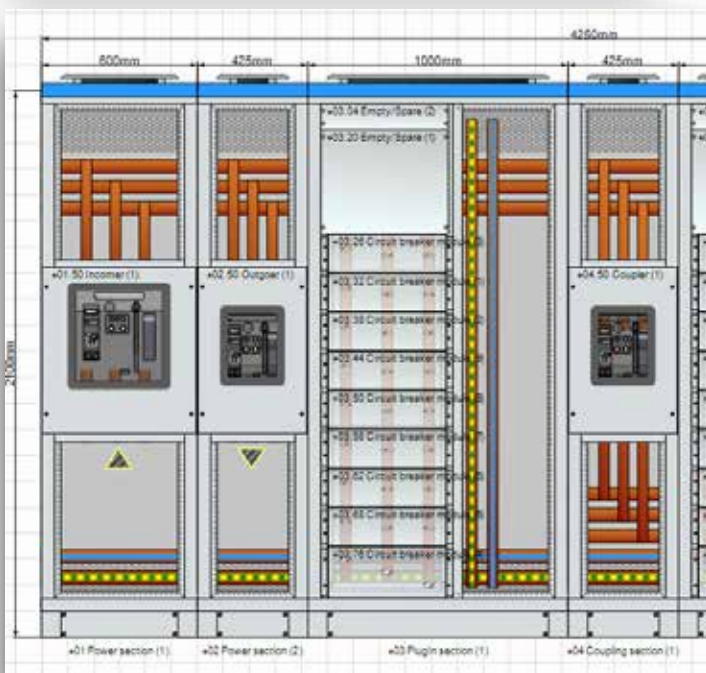
Configurator contents



The xEnergy configurator allows you to price and design Eaton switchgear for your project within minutes.

Use Eaton's xEnergy configurator to design the following types of circuit breakers and low-voltage switchgear systems and calculate their costs:

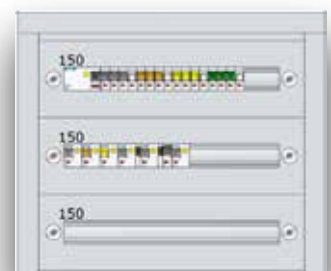
- xEnergy **Elite** and **Modan S**
- xEnergy **Main**
- xEnergy **Safety**
- xEnergy **Light**
- xEnergy **Basic**
- IZM air circuit breakers
- NZM and PDE molded-case circuit breakers



You can generate both a bill of materials (for steel work, device fitting kits and circuit breakers) as well as an individually adjustable front view for the creation of quotations. A suitable distributor is automatically recommended based on the chosen system function.

Within the low-switchgear assemblies, all types of switchgear can be placed and configured:

- Air circuit breakers
- Molded case circuit breakers
- Miniature circuit breakers
- Residual current circuit breakers
- Residual current circuit breakers with overcurrent protection
- Control and monitoring devices





Connect COM5 - NZM



Setpoint Configuration



Device Settings



Test Mode



Breaker Information



Real Time Data



Event Summaries



Reports



Application Settings

Power Xpert Protection Manager






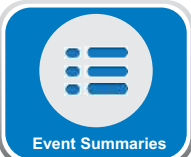
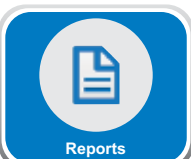



Power Xpert Protection Manager Main Menu

Eaton's Power Xpert Protection Manager (PXPM) provides a clean, intuitive user interface enabling unmatched control, testing, and troubleshooting. The software is free to download and can run on any PC. Settings and tests are communicated to trip units via USB or through connected networks, no special test equipment is required. Troubleshooting is greatly simplified through the use of historical event summaries and real-time data provided by the Power Xpert Release (PXR) trip units. This helps customers to save time and money.

- Eaton's software helps simplify testing, serviceability and customization – yielding significant time and labor savings.
- An enhanced user interface enables engineers to remotely view and adjust the trip unit settings.
- Real-time data: Provides status information and metered data directly from the trip unit.
- Event summaries: Stores up to 200 events, detailed information on most recent (10) trip and (10) alarm events, and time adjustments to the real-time clock.

Features

| | |
|---|---|
|  | <p>Setpoint Configuration</p> <ul style="list-style-type: none"> - Provides full breaker configuration - Online as well as offline - Offline parameter files |
|  | <p>Device Settings</p> <ul style="list-style-type: none"> - Parameter reset - Min/max values etc. - Set date and time - Change password of trip unit - Password is required to change sensitive settings - Required for change of protection settings |
|  | <p>Test Mode</p> <ul style="list-style-type: none"> - Perform test features - "Open breaker" – test |
|  | <p>Breaker Information</p> <ul style="list-style-type: none"> - Provides breaker information details - Trip unit serial number - Trip unit catalog number - Trip unit manufacturing date |
|  | <p>Real Time Data</p> <ul style="list-style-type: none"> - Provides "online" real-time data - Status, currents, voltages, power - Energy, power demand, min/max values - Diagnostic data |
|  | <p>Event Summaries</p> <ul style="list-style-type: none"> - Provides event summary and detailed information - Event summary - Trip events in detail - Alarm events in detail - Time adjustments |
|  | <p>Reports</p> <ul style="list-style-type: none"> - Provides reports as PDF of - Breaker information - Real-time data - Event summary - Setpoint |
|  | <p>License</p> <ul style="list-style-type: none"> - Some features may require a license - License will be connected to specific computer (Hardware identifier) - Provides future possibility to download further trip unit language packs - Standard languages - EN, DE, CN - Other languages FR, ES, IT etc |



We make what matters work.*



At Eaton, we believe that power is a fundamental part of just about everything people do. That's why we're dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because this is what really matters. And we're here to make sure it works.

To learn more go to: [Eaton.com/whatmatters](https://www.eaton.com/whatmatters)

We make what matters work.

Eaton's mission is to improve the quality of life and the environment through the use of power management technologies and services. We provide sustainable solutions that help our customers effectively manage electrical, hydraulic, and mechanical power – more safely, more efficiently, and more reliably. Eaton's 2020 revenues were \$17.9 billion, and we sell products to customers in more than 175 countries. We have approximately 92,000 employees.

For more information, visit [Eaton.com](https://www.eaton.com).



Eaton Industries (Austria) GmbH
Scheydgasse 42
1210 Vienna
Austria

Eaton
EMEA Headquarters
Route de la Longeraie 7
1110 Morges, Switzerland
[Eaton.com](https://www.eaton.com)

© 2021 Eaton
All Rights Reserved
Publication No.: CA013003EN
Article no. 195248-MK
July 2021

Changes to the products, to the information contained in this document, and to prices are reserved; as are errors and omissions. Only order confirmations and technical documentation by Eaton is binding. Photos and pictures also do not warrant a specific layout or functionality. Their use in whatever form is subject to prior approval by Eaton. The same applies to trademarks (especially Eaton, Moeller, and Cutler-Hammer). The Terms and Conditions of Eaton apply, as referenced on Eaton Internet pages and Eaton order confirmations.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

Follow us on social media to get the latest product and support information.

