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## Compact circuit breakers, switch disconnectors

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# Thinking ahead. <br> Shaping the future. 

- switch
- protect
- control
- measure
- communicate


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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:- xEnergy Elite offers globally proven modular switchgears for a wide range of building and indust rial applications up to 7500 A
- With xEnergy Eaton is able to offer safety-tested switchgear systems for power distribution systems up to 5000 A
- Eaton's new digital NZM circuit breakers are universally suitable for rated currents from 20 A to $1,600 \mathrm{~A}$; they are now also equipped with the innovative PXR electronic release technology



## xEnergy Elite

Low Voltage Motor Control and Power Distribution solutions up to 7500A

The xEnergy Elite motor control and power distribution centers are offering great flexibility to design and configure according your specific needs helping to ensure it is built for your application. The complete design is based on a very robust galvanized frame. This base frame offers high stability and superior earthing capabilities and will last for a lifetime.

You can specify different sizes of copper or aluminum busbars; air insulation or epoxy coating; top or
bottom cable entry; internal degree of protection;
and fuse or breaker solutions. Plus, its optimized footprint helps improve your overall bottom line. Space inside buildings and industrial facilities is at a premium. We understand that you would rather use that valuable space for your process, so we looked at the best ways to design our electrical equipment to maximize your space savings.

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 1600 A
Best in class

Eaton's NZM series circuit breakers cover rated currents of 20 to 1600 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 $A C$ and DC networks - from cable protection to the protection of motors, generators and transformers. With switchdisconnectors up to 1600 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 1600 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 frac-tion 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 1000 V AC ), renewable energy (up to 1500 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 28


## 2. The NZM protects motors

as well as motor-starter combinations and input wiring against overloads and short circuits.
See page 29


## 3. The NZM offers full-range protection

and selective protection for many applications.
See page 30


## 4. The NZM offers earth-fault protection

with integrated alert and trip functions as well as Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ and ZSI.
See page 30


## 5. The NZM offers selectivity and backup protection

against excessive short-circuit currents.
See page 31

6. The NZM offers zone selectivity and protection against electric arcs
with the patented Arcflash Reduction
Maintenance System ${ }^{\text {TM }}$.
See page 32

7. The NZM offers protection against residual currents
for universal mounting, or for mounting directly on the circuit breaker.
See page 33


## 8. The NZM protects DC systems

either as a circuit breaker with thermo-magnetic release, or as a switch-disconnector.
See page 34


## 9. The NZM protects special applications

with high switching capacities at 690 V AC, at high frequencies, in IT networks, and at 1000 V AC. See page 35

10. The NZM offers protection and ISO 50001
energy metering with Class 1 accuracy in accordance with IEC 61557-12.
See page 38

Which release provides the right type of protection?

|  | TMTU |  |  |  | PXR10 | PXR20 |  |  | PXR25 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Release | -A | -AF | -M | -S | -AX | -MX | -VX | -VX..-T | -PX | $\begin{aligned} & \text {-PX...- } \\ & \text { TZ(TAZ) } \end{aligned}$ | -PMX |
| $\begin{aligned} & \mathrm{T}=\text { Thermomagnetic } \\ & \mathrm{E}=\text { Electronic } \end{aligned}$ | T | T | T | T | E | E | E | E | E | E | E |
| Protective features |  |  |  |  |  |  |  |  |  |  |  |
| Overload protection | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Short-time delayed short-circuit protection | - | - | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - |
| Non-delayed short-circuit protection | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Earth-fault protection | - | - | - | - | - | - | - | $\checkmark$ | - | $\checkmark$ | - |
| Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ maintenance mode | - | - | - | - | - | - | - | - | - | $\checkmark$ | - |
| ZSI zone-selective interlocking | - | - | - | - | - | - | - | - | - | $\checkmark$ | - |
| Additional functions |  |  |  |  |  |  |  |  |  |  |  |
| Suitable for DC protection | $\checkmark$ | - | - | - | - | - | - | - | - | - | - |
| USB interface | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Current measuring (data readout) | - | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Comprehensive data collection, including Class 1 energy metering | - | - | - | - | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Communications-enabled | - | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Total harmonic distortion (THD) | - | - | - | - | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Harmonic content | - | - | - | - | - | - | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |

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## Is a thermo-magnetic or an electronic release the better option? <br> The right protection for the task at hand




#### Abstract

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.



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.


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# What the PXR is capable of <br> 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 internal Modbus RTU module, with possible connections to numerous systems such as EtherNet/IPTM, EtherCAT®, Profinet and SmartWire-DT.

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 Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ maintenance mode.

## 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. The internal Modbus RTU module may also be used to connect to any external communication modules.


## Relay module

The relay module contains two programmable relays, in addition to established comp onents 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 $I_{\text {sd }}$

To ensure the selectivity of the mains connection, the circuit breaker will trip after the set delay time $\mathrm{t}_{\mathrm{sd}}$.

## Non-delayed short-circuit release $\mathrm{I}_{\mathbf{i}}$

The threshold value can be set between 2 and $18 \times I_{n}$. The $l_{i}$ value refers to the rated current $I_{n}$.

## Earth fault protection $\mathrm{I}_{\mathrm{g}}$

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


## Time $\operatorname{lag} \mathbf{t}_{\mathbf{r}}$

Stipulates the time lag after which an overload of $6 \times I_{r}$ causes the device to trip. Adjustable in increments of $\mathrm{t}_{\mathrm{r}}=2$ to 20 or $\infty$.

## Time delay $\mathrm{t}_{\text {sd }}$

(with reference to $\mathrm{I}_{\mathrm{sd}}$ )
Adjustable in 7 steps, from 0 ms to $1,000 \mathrm{~ms}$, 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 $\mathbf{t}_{\mathrm{g}}$

 (with reference to $\mathrm{I}_{\mathrm{g}}$ ) Thanks to the time delay $\mathrm{t}_{\mathrm{g}}=0 \mathrm{~ms}$ to $1,000 \mathrm{~ms}, \mathrm{a}$ selective shutdown is possible even in the event of an earth fault.

## Product overview - IEC / UL circuit breakers



[^0]


[^1]
## Product overview - switch-disconnectors

TYPE

## General information

| Number of poles |  |
| :--- | :--- |
| Degree of protection |  |
| of the device (operating elements) | IP20 |
| of enclosure and bezel |  |
| of enclosures with rotary handles | IP40 |
| Dimensions (WxHxD) | IP66 |
| Ambient temperature |  |
| Direction of current supply top or bottom | Storage at $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ <br> Operation at $-25^{\circ} \mathrm{C}$ to +70 <br> ${ }^{\circ} \mathrm{C}$ |
| Mounting positions | In general |
|  | with plug-in units |
| with withdrawable units |  |


|  | 3, 4 | 3, 4 | 3, 4 | 3, 4 |
| :---: | :---: | :---: | :---: | :---: |
|  | $\checkmark$ |  |  |  |
|  | $\checkmark$ |  |  |  |
|  | $\checkmark$ |  |  |  |
| mm | 3-pole: $90 \times 145 \times 84.5$ 4-pole: $120 \times 145 \times 84.5$ | 3-pole: $105 \times 184 \times 149$ <br> 4-pole: 140×184x149 | $\begin{aligned} & \text { 3-pole: } 140 \times 275 \times 166 \\ & \text { 4-pole: } 185 \times 275 \times 166 \end{aligned}$ | 3 -pole: $210 \times 401 \times 207$ 4-pole: 280×401×207 |
|  | $\checkmark$ |  |  |  |
|  | $\checkmark$ |  |  |  |
|  | $\checkmark$ |  |  |  |
|  | Vertical and $90^{\circ}$ in all directions |  |  |  |
|  | - | Vertical and $90^{\circ}$ left | Vertical and $90^{\circ}$ right/left | - |
|  | - | - | Vertical and $90^{\circ}$ left | Vertical |

## Electrical properties in accordance with IEC 60947-3

| Rated operational current $I_{n}$ at $40^{\circ} \mathrm{C}$ | AC-1 |
| :--- | :--- |
|  | AC-22A, (AC-23 for (P)N...) |
| Rated operational voltage $U_{e}$ | DC-22A (DC-21A for |
| N...S15-PV-NA) |  |


| A | max. 160 | max. 250 | max. 630 | max. 1,600 |
| :---: | :---: | :---: | :---: | :---: |
| A | max. 160 | max. 250 | max. 630 | max. 1,600 |
| A | - | - | - | - |
| V | 690 | 690 | 690 | 690 |
| V | - | - | - | - |
| V AC | 690 | 690 | 690 | 525 |
| V | 690 | 690 | 1000 | 1000 |
| kV | 6 | 8 | 8 | 8 |
| kV | 6 |  |  |  |
|  | III |  |  |  |
|  | 3 |  |  |  |
|  | $\checkmark$ |  |  |  |

Switching capacity in accordance with IEC 60947-3

| Rated short-circuit making capacity | $\mathrm{I}_{\mathrm{cm}}$ | kA | 2.8 | 5.5 | 25 | 53 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated short-time current | ${ }^{\text {cw }}$ | kA |  |  |  |  |
|  | $\mathrm{t}=0.3 \mathrm{~s}$ | kA | 2 | 3.5 | 12 | 25 |
|  | $\mathrm{t}=1 \mathrm{~s}$ | kA | 2 | 3.5 | 12 | 25 |
| Rated short-circuit current $\mathrm{I}_{\mathrm{q}}$ | With fuse upstream | A gG/gL A gR | $\begin{aligned} & \text { PN1(N1)-63...125: } 125 \\ & \text { PN1(N1)-160: } 160 \end{aligned}$ | $\begin{gathered} \text { PN2(N2)-160 ...250: } \\ 250 \end{gathered}$ | $\begin{gathered} \text { PN3(N3)-400 } \ldots 630 \text { : } \\ 630 \end{gathered}$ | PN4(N4)-630...1600: |
|  | With fuse upstream | kA | 100 | 100 | 100 | 100 |
|  | 400/415 V | kA | 80 | 80 | 80 | 80 |
|  | 1000 V | kA | - | - | - | - |
|  | With fuse downstream | A gG/gL A gG/gL | $\begin{aligned} & \text { PN1 (N1)-63...125: } 125 \\ & \text { PN1(N1)-160: } 160 \end{aligned}$ | $\begin{aligned} & \text { PN2(N2)-160 } \ldots 250 \text { : } \\ & 250 \end{aligned}$ | $\begin{gathered} \text { PN3(N3)-400 } \ldots 630 \text { : } \\ 630 \end{gathered}$ | $\begin{gathered} \text { PN4(N4)-630...1600: } \\ 2 \times 800 \end{gathered}$ |
|  | 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 $50 / 60 \mathrm{~Hz}$ |  |  |  |  |  |  |
| AC-1 | 415 V |  | 10000 | 10000 | 5000 | 3000 |
|  | 690 V |  | 7500 | 7500 | 5000 | 2000 |
|  | 1000 V |  | - |  |  |  |
| AC-3 (P)N1: 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 |
| $\checkmark$ |  |  |  |
| $\checkmark$ |  |  |  |
| $\checkmark$ |  |  |  |
| $140 \times 184 \times 149$ | $185 \times 275 \times 166$ | $280 \times 4$ | 1207 |
| $\checkmark$ |  |  |  |
| $\checkmark$ |  |  |  |
| $\checkmark$ |  |  |  |
| Vertical and $90^{\circ}$ in all directions |  |  |  |
| - |  |  |  |
| - |  |  |  |
|  |  |  |  |
| - |  |  |  |
| 250 | 550 | 1,600 | 1,200 |
| $\begin{gathered} \text { N...-S1-DC: } 1,000 \\ \text { N...-S15-DC: } 1,500 \end{gathered}$ | $\begin{aligned} & \text { N...-S1-DC: 1,000 } \\ & \text { N...-S15-DC: } 1,500 \end{aligned}$ | $\begin{aligned} & \text { N...-S1-DC: } 1,000 \\ & \text { N...-S15-DC: } 1,500 \end{aligned}$ | $\begin{aligned} & \text { N...-S1-DC: 1,000 } \\ & \text { N...-S15-DC: } 1,500 \end{aligned}$ |
| $\begin{gathered} \text { N...-S1-DC: 1,000 } \\ \text { N...-S15-DC: 1,500 } \end{gathered}$ | $\begin{aligned} & \text { N...-S1-DC: } 1,000 \\ & \text { N...-S15-DC: } 1,500 \end{aligned}$ | $\begin{aligned} & \text { N...-S1-DC: 1,000 } \\ & \text { N...-S15-DC: 1,500 } \end{aligned}$ | $\begin{aligned} & \text { N...-S1-DC: } 1,000 \\ & \text { N...-S15-DC: } 1,500 \end{aligned}$ |
| $\begin{gathered} \text { N...-S1-DC: } 1,250 \\ \text { N...-S15-DC: } 1,500 \end{gathered}$ | $\begin{aligned} & \text { N...-S1-DC: 1,250 } \\ & \text { N...-S15-DC: 1,500 } \end{aligned}$ | $\begin{gathered} \text { N...-S1-DC: } 1,250 \\ \text { N...-S15-DC: } 1,500 \end{gathered}$ | $\begin{aligned} & \text { N...-S1-DC: 1,250 } \\ & \text { N...-S15-DC: } 1,500 \end{aligned}$ |
| $\begin{gathered} \text { N...-S1-DC: } 8 \\ \text { N...-S15-DC: } 10 \end{gathered}$ | $\begin{gathered} \text { N...-S1-DC: } 8 \\ \text { N...-S15-DC: } 10 \end{gathered}$ | $\begin{gathered} \text { N...-S1-DC: } 8 \\ \text { N...-S15-DC: } 10 \end{gathered}$ | N...-S1-PV-NA: 8 <br> N...-S15-PVNA: 10 |
| 6 |  |  |  |
| III |  |  |  |
| N...-S1-DC: 3 <br> N...-S15-DC: 2 | N...-S1-DC: 3 <br> N...-S15-DC: 2 | 3 | 3 |
| $\checkmark$ |  |  |  |
| - |  |  |  |
| - |  |  |  |
| 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 |  | $U_{\text {imp }}$ |  |  |  |  |  |
| 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 |  | 1 n | A | 125 | 250 | 600 | 1200 |
| UL489/CSA 22.2 No. 5.1 |  | In | A | 125 | 250 | 600 | 1200 |
| Overvoltage category/degree of pollution |  |  |  | 111/3 | 111/3 | III/3 | 111/3 |
| 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 | $240 \mathrm{~V} \mathrm{50/60} \mathrm{~Hz}$ | $\mathrm{I}_{\mathrm{cm}}$ | kA | 187 | 330 | 330 | 187 |
|  | $400 / 415 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $\mathrm{I}_{\mathrm{cm}}$ |  | 105 | 330 | 330 | 154 |
|  | $440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $\mathrm{I}_{\mathrm{cm}}$ | kA | 74 | 286 | 286 | 143 |
|  | $525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $\mathrm{I}_{\mathrm{cm}}$ | kA | 53 | 105 | 143 | 84 |
|  | 690 V 50/60 Hz | $\mathrm{I}_{\mathrm{cm}}$ | kA | 17 | 53 | 74 | 74 |
| Rated short-circuit breaking capacity $I_{c C}=I_{\text {cu }}$ in accordance with IEC/EN 60947-2 Annex L |  |  |  |  |  |  |  |
| $\mathrm{I}_{\text {cu }}$ to IEC/EN 60947, switching sequence O-t-CO | $240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $I_{\text {cs }}$ | kA | 85 | 150 | 150 | 85 |
|  | $400 / 415 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $\mathrm{I}_{\text {cs }}$ | kA | 50 | 150 | 150 | 70 |
|  | $440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $I_{\text {cs }}$ | kA | 35 | 130 | 130 | 65 |
|  | $525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | ICS | kA | 20 | 50 | 85 | 40 |
|  | $690 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $I_{\text {cs }}$ | kA | 10 | 20 | 35 | 35 |
| I ${ }_{\text {cs }}$ to IEC/EN 60947, <br> switching sequence O-t-CO-t-CO | $240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | I CS | kA | 85 | 150 | 150 | 43 |
|  | $400 / 415 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $I_{\text {cs }}$ | kA | 50 | 150 | 150 | 35 |
|  | $440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $I_{\text {cs }}$ | kA | 35 | 130 | 130 | 33 |
|  | $525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | $\mathrm{I}_{\text {cs }}$ | kA | 10 | 37.5 | 33 | 20 |
|  | 690 V 50/60 Hz | $l_{\text {cs }}$ | 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 | $\begin{aligned} & 400 / 415 \mathrm{~V} \\ & 50 / 60 \mathrm{~Hz} \end{aligned}$ | Switching operations |  | 10000 | 10000 | 5000 | 3000 |
|  | $690 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | Switching operations |  | 7500 | 7500 | 3000 | 2000 |
| Total downtime in the event of a short circuit |  | ms |  | < 10 | < 10 | < 10 | $\begin{aligned} & <25 \leqq 415 \mathrm{~V} \\ & <35>415 \mathrm{~V} \end{aligned}$ |

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

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

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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.

##  <br> 




## System and cable protection <br> 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 1400 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.
n 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.


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 $\mathbf{2 0} \%$ to $\mathbf{1 0 0} \%$ of the rated operational current. It is possible to delay the tripping by up to one second.

## Selectivity and backup protection

## Selective overload and short-circuit protection

A combination of two or more shortcircuit 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



Upstream protective device

## Backup protection against excessive

 short-circuit currentsBackup 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 $I_{c u}$ of the downstream circuit breaker, the up-stream 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 $I_{\mathrm{cu}}$ of the down-stream circuit breaker. This ensures backup protection against all potential short-circuit currents.

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## Zone selectivity and Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ maintenance mode <br> 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
$\left(I^{2} \times t\right)$ - 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.


## Arcflash Reduction

Maintenance System ${ }^{\text {TM }}$
Our circuit breakers can be optionally equipped with our new, patented Arcflash Reduction Maintenance System ${ }^{\text {TM }}$. 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 nondelayed 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.


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 1800 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 <br> 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.

## Switch-disconnectors for DC applications

Our powerful range of switchdisconnectors for DC use comprises three frame sizes, from 160 A to 1600 A, for applications with 1000 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 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.


The tested combination of switchdisconnector 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 $70{ }^{\circ} \mathrm{C}$. 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.

Main fields of application:

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

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 $A C$. 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.

> 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 $\mathbf{1 0 0 0}$ V AC
With the tailor-made models for rated operational voltages up to 1000 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 highpower drives and general power supply systems for industrial applications with long supply lines.

## Using the NZM circuit breakers in IT networks



3. Earth fault (double fault)


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 $\sqrt{ } \mathbf{3}$ 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 V / 1.73).

## 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.

## 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. $\mathrm{B} 10_{\mathrm{d}}$ or $\mathrm{MTTF}_{\mathrm{d}}$ ). Detailed information can be found here:

Technical safety parameters
www.eaton.com/safety

Powering Business Worldwide

# Energy metering with the digital NZM <br> Measurement data for ISO 50001 <br> 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 $\mathrm{CO}_{2}$ 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 <br> 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 ECAM module simplifies the integration of existing communications systems, such as EtherNet/IPTM, EtherCAT®, Profinet and SmartWire-DT. 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Interface module | - | optional | $\checkmark$ |
| 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Average | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Asymmetry in \% | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Min/max | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Voltage |  |  |  |
| In real time, phase-phase / phase-neutral | - | - | $\checkmark$ |
| Asymmetry in \% | - | - | $\checkmark$ |
| Min/max | - | - | $\checkmark$ |
| Frequency |  |  |  |
| In real time | - | - | $\checkmark$ |
| Min/max | - | - | $\checkmark$ |
| Real/apparent/reactive energy Class 1 |  |  |  |
| Total | - | - | $\checkmark$ |
| Forward | - | - | $\checkmark$ |
| Backward | - | - | $\checkmark$ |
| Net | - | - | $\checkmark$ |
| Real/apparent/reactive energy Class 1 |  |  |  |
| In real time | - | - | $\checkmark$ |
| Min/max | - | - | $\checkmark$ |
| Total harmonic distortion (THD) | - | - | $\checkmark$ |
| Harmonic content | - | - | $\checkmark$ |
| Power factor | - | - | $\checkmark$ |
| Maintenance information and notifications |  |  |  |
| Service life indicator | - | - | $\checkmark$ |
| LED display | status, alert | status, alert, trip reason | status |
| LCD display | - | - | settings, alert, trip reason |
| Safety-related functions |  |  |  |
| Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ maintenance mode | - | - | optional |
| ZSI zone-selective interlocking | - | - | optional |

# The universal PXPM software <br> 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 lowvoltage 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 <br> 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 undervoltage 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
2 IP2X protection against finger-contact
3 Terminal cover, knockout
4 Terminal cover
5 Tunnel terminals
6 Boxterminals
7 Control circuit terminal
8 Connection width extension
9 Link kit
10 Plug-in and withdrawable unit
11 Adapter plate
12 Busbar adapter

13 Spacer
14 Connection on rear
15 Standard auxiliary contacts, trip-indicating auxiliary switches
16 BSM interface module
17 Interface communication module for Modbus RTU
18 Residual-current protection device
19 Rear operator
20 Main switch rotary handle for side panel mounting
21 Door coupling rotary handle
22 Extension shaft
23 Rotary handle

24 External warning plate/marking plate
25 Insulating surround
26 Remote operator
27 Toggle lever interlock device
28 Side operator handle
29 Mechanical interlock
30 Communication module for SmartWire-DT
31 Communication module Ethercat, Ethernet/IP and Profinet
32 Voltage release/early-make auxiliary contact
33 Delay unit for undervoltage releases

## 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 $6 \mathrm{~mm}^{2}$ to $300 \mathrm{~mm}^{2}$ 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 $300 \mathrm{~mm}^{2}$.


## 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

 conductorsThis 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 controlcircuit 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 $160 \mathrm{~A}, 250 \mathrm{~A}$ and 550 A .


## 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 RMO-Titan ${ }^{\circledR}$ contact elements

Like all standard auxiliary contacts in the 22-mm range, the trip-indicating switches use contact elements from the RMO-Titan ${ }^{\circledR}$ 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.

## 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 <br> 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 $20^{\circ}$ 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 1600 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 switchdisconnectors 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.


## Paralleling mechanism

The sophisticated paralleling 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 <br> 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 <br> 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.


Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole NZM...A

| Switching capacity | Rated current $=$ | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. |
|  |  |  |  |  |  |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted | Overload releases | Short-circuit releases |  |  |
|  | current |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | A | A |  |  |  |
|  |  | $4$ | $\xrightarrow{1}>$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | Basic switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG66921_L Symbolphoto | 25 | 20 | 15-20 | 350 A fixed | Screw terminals |  |
| $\cdots$ |  | 25 | 20-25 | 350 A fixed | as accessories |  |
|  |  | 32 | 25-32 | 350 A fixed |  |  |
| $1{ }^{1}$ |  | 40 | 32-40 | 8-10 |  |  |
| - |  | 50 | 40-50 | 6-10 |  |  |
|  |  | 63 | 50-63 | 6-10 |  |  |
| $\theta$ |  | 80 | 63-80 | 6-10 |  |  |
|  |  | 100 | 80-100 | 6-10 |  |  |
|  |  | 125 | 100-125 | 6-10 |  |  |
|  |  | 160 | 125-160 | 1280 A fixed |  |  |
| SG08021_L 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 |




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

# Compact circuit breakers, switch disconnectors 

Circuit breakers, thermomagnetic releases, 3 pole

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| NZMB1-A20 | 280987 |  | NZMB1-A20-SVE | 112733 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMB1-A25 | 280988 | . 6.7 | 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 | + $\cdot$, | 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 |  | - |  |  |




Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole NZM...A

| Switching capacity | Rated current $=$ | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. |
| 400/415V | Rated | Overload | Short-circuit |  |  |
| $50 / 60 \mathrm{~Hz}$ | uninterrupted | releases | releases |  |  |
|  | current |  | Non-delayed |  |  |
| ${ }_{\text {cu }}$ | $I_{n}=I_{u}$ | $I_{t}=I_{n} \times \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | A | A |  |  |  |
|  |  | $\square$ | $\stackrel{1}{1>}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 | 20 | 15-20 | 350 A fixed | Screw terminals |  |
| $\ldots$ \% |  | 25 | 20-25 | 350 A fixed | as accessories |  |
|  |  | 32 | 25-32 | 350 A fixed |  |  |
| - 8 |  | 40 | 32-40 | 8-10 |  |  |
|  |  | 50 | 40-50 | 6-10 |  |  |
| - 1 |  | 63 | 50-63 | 6-10 |  |  |
| $\ldots$ |  | 80 | 63-80 | 6-10 |  |  |
|  |  | 100 | 80-100 | 6-10 |  |  |
|  |  | 125 | 100-125 | 6-10 |  |  |
|  |  | 160 | 125-160 | 1280 A fixed |  |  |
| SG08021-L Symbolphoto |  | 125 | 100-125 | 6-10 | NZMN2-A125 | 259091 |
| i* ${ }^{\text {a }}$ |  | 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 |



# Compact circuit breakers, switch disconnectors 

Circuit breakers, thermomagnetic releases, 3 pole

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| NZMN1-A20 | 281231 | $\stackrel{1.7 .}{l}$ | 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 |  |


| 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 |  | $\sqrt{1, i v}$ | - |  |
| :---: | :---: | :---: | :---: | :---: |
| 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 |

Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

| Switching <br> capacity <br> 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. |
|  |  | Overload releases | Short-circuit releases <br> Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{\mathrm{n}}=I_{u} \\ & A \end{aligned}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{r}}=\mathrm{I}_{\mathrm{A}} \mathrm{X} \end{aligned}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. |  |  |
|  |  | $\square$ | $\stackrel{1}{\text { I }}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | Strong switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG06921 - Symbolphoto | 70 | 20 | 15-20 | 350 A fixed | Screw terminals |  |
|  |  | 25 | 20-25 | 350 A fixed | as accessories |  |
| 1 * |  | 32 | 25-32 | 350 A fixed |  |  |
|  |  | 40 | 32-40 | 8-10 |  |  |
| 2-1 |  | 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 |  |  |
| SG08021_LSymbolphoto |  | 20 | 15-20 | 350 A fixed | NZMS2-A20 | 192020 |
| *iti* |  | 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 |
| $\cdots$, |  | 80 | 63-80 | 6-10 | NZMS2-A80 | 109961 |
| *3. |  | 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 | 240-300 | 5-8.3 | NZMS2-A300 | 109967 |



# Compact circuit breakers, switch disconnectors 

Circuit breakers, thermomagnetic releases, 3 pole

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack
Order base separately

| 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 | $\because+1$ | 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

Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole
NZM...A

| Switching capacity | Rated current $=$ | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. |
| 400/415V | Rated | Overload | Short-circuit |  |  |
| $50 / 60 \mathrm{~Hz}$ | uninterrupted | releases | releases |  |  |
|  | current |  | Non-delayed |  |  |
| ${ }_{\text {cu }}$ | $I_{n}=I_{u}$ | $I_{r}=I_{n} \mathrm{X} \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X} \ldots$ |  |  |
| kA | A | A |  |  |  |
|  |  | $4$ | $\xrightarrow{1}>$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG06921_L Symbolphoto | 100 | 20 | 15-20 | 350 A fixed | Screw terminals |  |
|  |  | 25 | 20-25 | 350 A fixed | as accessories |  |
| 5 |  | 32 | 25-32 | 350 A fixed |  |  |
|  |  | 40 | 32-40 | 8-10 |  |  |
|  |  | 50 | 40-50 | 6-10 |  |  |
| $\cdots$ |  | 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 |  |  |
| S608021 L Symbolphoto | 150 | 20 | 15-20 | 350 A fixed | NZMH2-A20 | 281281 |
| i* ${ }^{\circ}$ |  | 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 |
| SG09521_L Symbolphoto |  | 250 | 200-250 | 6-10 | NZMH3-A250 | 109672 |
| $\ldots$ |  | 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

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| NZMH1-A20 | 284376 |  | NZMH1-A20-SVE | 112795 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMH1-A25 | 284377 |  | NZMH1-A25-SVE | 112796 |  |
| NZMH1-A32 | 284378 |  | NZMH1-A32-SVE | 112797 |  |
| NZMH1-A40 | 284379 |  | NZMH1-A40-SVE | 112798 |  |
| NZMH1-A50 | 284410 |  | NZMH1-A50-SVE | 112799 |  |
| NZMH1-A63 | 284411 |  | NZMH1-A63-SVE | 112800 |  |
| NZMH1-A80 | 284412 |  | NZMH1-A80-SVE | 112801 |  |
| NZMH1-A100 | 284413 |  | NZMH1-A100-SVE | 112802 |  |
| NZMH1-A125 | 284414 |  | NZMH1-A125-SVE | 112803 |  |
| NZMH1-A160 | 284415 |  | - |  |  |
| NZMH2-A20-BT | 110296 |  | NZMH2-A2O-SVE | 113351 |  |
| NZMH2-A25-BT | 110297 | , | NZMH2-A25-SVE | 113352 |  |
| NZMH2-A32-BT | 110298 |  | NZMH2-A32-SVE | 113353 |  |
| NZMH2-A40-BT | 110287 |  | NZMH2-A40-SVE | 113328 |  |
| NZMH2-A50-BT | 110288 |  | NZMH2-A50-SVE | 113329 |  |
| NZMH2-A63-BT | 110289 |  | NZMH2-A63-SVE | 113330 |  |
| NZMH2-A80-BT | 110290 |  | NZMH2-A80-SVE | 113331 |  |
| NZMH2-A100-BT | 110291 |  | NZMH2-A100-SVE | 113332 |  |
| NZMH2-A125-BT | 110292 |  | NZMH2-A125-SVE | 113333 |  |
| NZMH2-A160-BT | 110293 |  | NZMH2-A160-SVE | 113334 |  |
| NZMH2-A200-BT | 110294 |  | NZMH2-A200-SVE | 113335 |  |
| NZMH2-A250-BT | 110295 |  | NZMH2-A250-SVE | 113336 |  |
| NZMH2-A300-BT | 110286 |  | - |  |  |
| Terminals as accessory |  |  | - |  |  |
| NZMH3-A320-BT | 110305 | .1.6* | NZMH3-A320-SVE | 168913 |  |
| - |  |  | NZMH3-A320-AVE | 110861 |  |
| NZMH3-A400-BT | 110306 |  | NZMH3-A400-SVE | 168914 |  |
| - |  |  | NZMH3-A400-AVE | 110862 |  |
| NZMH3-A500-BT | 110307 |  | NZMH3-A500-SVE | 168915 |  |
| - |  | 1.1.:. | NZMH3-A500-AVE | 110863 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole
NZM...M

|  |  |  |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range |  | Rated op power | Rated operational Part no. current | Article no. |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted current | $\overline{\text { Overload }}$ releases | Short-circuit releases Non-delayed | AC-3 <br> $50 / 60 \mathrm{~Hz}$ |  |  |
|  |  |  |  | 400 V | 400 V |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{u}$ | $\mathrm{I}_{\mathrm{t}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$.. | $\mathrm{I}_{\mathrm{i}}=\mathrm{In}_{\mathrm{n}} \mathrm{X} .$. | P | ${ }_{8}$ |  |
| kA | A | A |  | kW | A |  |
|  |  | $\boxed{4}$ | $\stackrel{1}{\square}{ }_{1}$ |  |  |  |

## Motor protection

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


Basic switching capacity
25

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



| 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


| 40 | $32-40$ | $8-14$ | 18.5 | 36 | Screw terminals |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 50 | $40-50$ | $8-14$ | 22 | 41 | as accessories |$\quad$| - |
| :--- |
| 63 |
| $80-63$ |
| 80 |

$\qquad$ 36


| 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 

Circuit breakers, thermomagnetic releases, 3 pole
1.1

NZM...M

## Fixed mounting with box terminals

Part no.

Plug-in units
Part no.
Article no.
Std. pack

Order base separately

| NZMB1-M40 | 265710 |  | NZMB1-M40-SVE | 112709 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMB1-M50 | 265711 | $\cdots \cdot \ldots$ | NZMB1-M50-SVE | 112720 |  |
| NZMB1-M63 | 265712 |  | NZMB1-M63-SVE | 112721 |  |
| NZMB1-M80 | 265713 | - | NZMB1-M80-SVE | 112722 |  |
| NZMB1-M100 | 265714 |  | NZMB1-M100-SVE | 112723 |  |
| NZMB2-M125-BT | 115260 |  | NZMB2-M125-SVE | 113196 |  |
| Terminals as accessory |  |  | NZMB2-M160-SVE | 113197 |  |
|  |  |  | NZMB2-M200-SVE | 113198 |  |


| NZMC1-M40 | 271398 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| NZMC1-M50 | 271399 |  |  | 112743 |
| NZMC1-M63 | 271400 |  | 112744 |  |
| NZMC1-M80 | 271401 |  | 112745 |  |
| NZMC1-M100 NZMC1-M50-SVE | 112746 |  |  |  |
| NZMC1-M63-SVE | 112747 |  |  |  |
| NZMC1-M100-SVE |  |  |  |  |

Terminals as accessory


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

Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole
NZM...M

|  |  |  |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range |  | Rated op power | Rated operational Part no. current | Article no. |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted current | $\overline{\text { Overload }}$ releases | Short-circuit releases Non-delayed | AC-3 <br> $50 / 60 \mathrm{~Hz}$ |  |  |
|  |  |  |  | 400 V | 400 V |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{u}$ | $\mathrm{I}_{\mathrm{t}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$.. | $\mathrm{I}_{\mathrm{i}}=\mathrm{In}_{\mathrm{n}} \mathrm{X} .$. | P | ${ }_{8}$ |  |
| kA | A | A |  | kW | A |  |
|  |  | $\boxed{4}$ | $\stackrel{1}{\square}{ }_{1}$ |  |  |  |

## Motor protection

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



## Normal switching capacity

50

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



| 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

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 | $80-100$ | $8-14$ | 45 | 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 

Circuit breakers, thermomagnetic releases, 3 pole

## Fixed mounting with box terminals

Part no.

Plug-in units
Part no.
Order base separately

| NZMN1-M40 | 265718 |  | NZMN1-M40-SVE | 112763 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMN1-M50 | 265719 |  | NZMN1-M50-SVE | 112764 |  |
| NZMN1-M63 | 265720 |  | NZMN1-M63-SVE | 112765 |  |
| NZMN1-M80 | 265721 |  | NZMN1-M80-SVE | 112766 |  |
| NZMN1-M100 | 265722 |  | NZMN1-M100-SVE | 112767 |  |
| Terminals as accessory |  |  | NZMN2-M125-SVE | 113250 |  |
|  |  |  | NZMN2-M160-SVE | 113251 |  |
|  |  |  | NZMN2-M200-SVE | 113252 |  |



| NZMS2-M20-SVE | 113293 | $10 f f$ |
| :--- | :--- | :--- |
| 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 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers, thermomagnetic releases, 3 pole
NZM...M

|  |  |  |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range |  | Rated op power | Rated operational Part no. current | Article no. |
| 400/415V | Rated uninterrupted current | Overload releases | Short-circuit | AC-3 |  |  |
| 50/60 Hz |  |  | $\frac{\text { releases }}{\text { Non-delayed }}$ | $50 / 60 \mathrm{~Hz}$ |  |  |
|  |  |  |  | 400 V | 400 V |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. | P | $\mathrm{I}_{\text {e }}$ |  |
|  |  | A |  | kW | A |  |
|  |  | $\zeta$ | $\stackrel{1}{1>}$ |  |  |  |

Motor protection

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


| SG08021_LS Symbolphoto | 25 | 20-25 | 350 A fixed | 11 | 21.7 | NZMH2-M25 | 281300 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| i* i* | 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 | 81 | 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 

Circuit breakers, thermomagnetic releases, 3 pole
1.1

NZM...M

Fixed mounting with box terminals
Part no.

Plug-in units
Part no.
Order base separately



## 1.2 <br> Compact circuit breakers, switch disconnectors

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

|  |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range | Rated operational power | Rated operational current | Part no. | Article no. |
| 400/415V | Rated | Short-circuit | AC-3 | AC-3 |  |  |
| 50/60 Hz | uninterrupted current | $\frac{\text { releases }}{\text { Non-delayed }}$ | $50 / 60 \mathrm{~Hz}$ | $50 / 60 \mathrm{~Hz}$ |  |  |
|  |  |  | 400 V | 400 V |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $\mathrm{l}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | P | $\mathrm{I}_{\text {e }}$ |  |  |
| kA | A |  | kW | A |  |  |
|  |  | $\stackrel{1}{\square}>$ |  |  |  |  |

## Short-circuit protection

Motor protection in conjunction with overload relay

- With short-circuit releases
- Without overload releases $I_{r=\ln x}$.
- IEC/EN 60947-2

Basic switching capacity


25

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


| 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


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



| 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 |



| 250 | $8-14$ | 132 | 231 | NZMC3-S250 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 320 | $8-14$ | 160 | 279 |  | 109676 |
| 400 | $7-12.5$ | 200 | 349 |  |  |
| 500 | $6-10$ | 250 | 437 |  | 109677 |

# Compact circuit breakers, switch disconnectors 

Circuit breakers, magnetic short-circuit releases, 3 pole

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| NZMB1-S40 | 265726 |  | NZMB1-S40-SVE | 112724 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMB1-S50 | 265727 | \%.7. | 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 <br> Compact circuit breakers, switch disconnectors

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

|  |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range | Rated operational power | Rated operational current | Part no. | Article no. |
| 400/415V | Rated | Short-circuit | AC-3 | AC-3 |  |  |
| $50 / 60 \mathrm{~Hz}$ | uninterrupted current | $\frac{\text { releases }}{\text { Non-delayed }}$ | $50 / 60 \mathrm{~Hz}$ | 50/60 Hz |  |  |
|  |  |  | 400 V | 400 V |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} \ldots$. | P | $\mathrm{I}_{\text {e }}$ |  |  |
| kA | A |  | kW | A |  |  |
|  |  | $I>$ |  |  |  |  |

Short-circuit protection
Motor protection in conjunction with overload relay

- With short-circuit releases
- Without overload releases $I_{r=\operatorname{lnx}}$
- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | 50 | 40 | 8-14 | 18.5 | 36 | Screw terminals as accessories |  |
|  |  | 50 | 8-14 | 22 | 41 |  |  |
| * |  | 63 | 8-14 | 30 | 55 |  |  |
| $\mathrm{F}^{*}$ |  | 80 | 8-14 | 37 | 68 |  |  |
|  |  | 100 | 8-12.5 | 45 | 81 |  |  |



| 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 |



| 250 | $8-14$ | 132 | 231 | NZMN3-S250 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 320 | $8-14$ | 160 | 279 |  | 109680 |
| 400 | $7-12.5$ | 200 | 349 |  |  |
| 500 | $6-10$ | 250 | 437 |  | 109681 |


|  | Strong switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 70 | 40 | 8-14 | 18.5 | 36 | Screw terminals |
| $\cdots 3$ |  | 50 | 8-14 | 22 | 41 | as accessories |
|  |  | 63 | 8-14 | 30 | 55 |  |
| * |  | 80 | 8-14 | 37 | 68 |  |
|  |  | 100 | 8-12.5 | 45 | 81 |  |



| 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 

Circuit breakers, magnetic short-circuit releases, 3 pole

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.

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 |  |  | 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 |  |



## 1.2 <br> Compact circuit breakers, switch disconnectors

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

|  |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range | Rated operational power | Rated operational current | Part no. | Article no. |
| 400/415V | Rated | Short-circuit | AC-3 | AC-3 |  |  |
| 50/60 Hz | uninterrupted current | releases <br> Non-delayed | $50 / 60 \mathrm{~Hz}$ | $50 / 60 \mathrm{~Hz}$ |  |  |
|  |  |  | 400 V | 400 V |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} \ldots$. | P | $I_{\text {e }}$ |  |  |
| kA | A |  | kW | A |  |  |
|  |  | $I>$ |  |  |  |  |

Short-circuit protection
Motor protection in conjunction with overload relay

- With short-circuit releases
- Without overload releases $I_{r=\ln x}$.
- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG06821_L Symbolphoto | 100 | 40 | 8-14 | 18.5 | 36 | Screw terminals |
| $\cdots \cdot 6$ |  | 50 | 8-14 | 22 | 41 | as accessories |
|  |  | 63 | 8-14 | 30 | 55 |  |
| , |  | 80 | 8-14 | 37 | 68 |  |
|  |  | 100 | 8-12.5 | 45 | 81 |  |


| S607921_L Symbolphoto | 150 | 40 | 8-14 | 18.5 | 36 | NZMH2-S40 | 265742 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| i* it |  | 50 | 8-14 | 22 | 41 | NZMH2-S50 | 265743 |
| \|荋? |  | 63 | 8-14 | 30 | 55 | NZMH2-S63 | 265744 |
|  |  | 80 | 8-14 | 37 | 68 | NZMH2-S80 | 265745 |
|  |  | 100 | 8-14 | 45 | 81 | NZMH2-S100 | 265746 |
|  |  | 125 | 8-14 | 45 | 99 | NZMH2-S125 | 265747 |
| \% |  | 160 | 8-12.5 | 75 | 134 | NZMH2-S160 | 265748 |
|  |  | 200 | 8-12.5 | 110 | 196 | NZMH2-S200 | 265749 |
| SG09221_L 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 |
|  |  |  |  |  |  | - |  |
| +3.7. |  | 500 | 6-10 | 250 | 437 | NZMH3-S500 | 109687 |

# Compact circuit breakers, switch disconnectors 

Circuit breakers, magnetic short-circuit releases, 3 pole

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no. Article no. Std. pack
Order base separately


Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 3 pole NZM...AX

| Switching capacity | Rated current $=$ | Setting range |  | Fixed mounting with screw terminals Part no. <br> Article no. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted current | Overload releases | Short-circuit releases Non-delayed |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{r}}=\mathrm{I}_{\mathrm{n}} \mathrm{x}$ <br> A | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. |  |
|  |  | $\boxed{4}$ | $\stackrel{1}{I>}$ |  |

System and cable protection

- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 | 40 | 20-40 | 2-12 | NZMN2-AX40 | 192001 |
| \%osol |  | 63 | 25-63 | 2-12 | NZMN2-AX63 | 192002 |
| P** |  | 100 | 40-100 | 2-12 | NZMN2-AX100 | 192003 |
| 7 |  | 160 | 64-160 | 2-12 | NZMN2-AX160 | 192004 |
|  |  | 350 | 100-250 | 2-12 | NZMN2-AX250 | 192005 |


| WA_SG0022_LSymbolphoto | 250 | 100-250 | 2-11 | NZMN3-AX250 | 191599 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 400 | 160-400 | 2-11 | NZMN3-AX400 | 191600 |
| $1-$ | 630 | 252-630 | 2-8 | NZMN3-AX630 | 191601 |


| 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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 70 | 40 | 20-40 | 2-12 | NZMS2-AX40 | 192028 |
| -ionol |  | 63 | 25-63 | 2-12 | NZMS2-AX63 | 192029 |
| \|iin m |  | 100 | 40-100 | 2-12 | NZMS2-AX100 | 192030 |
|  |  | 160 | 64-160 | 2-12 | NZMS2-AX160 | 192031 |
|  |  | 250 | 100-250 | 2-12 | NZMS2-AX250 | 192032 |



| 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 <br> Circuit breakers IEC, electronic releases, 3 pole <br> NZM...AX 

1.3

Fixed mounting with box terminals
Part no.

Withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| NZMN3-AX400-BT | 191586 |
| :--- | :--- |
| NZMN3-AX630-BT | 191587 |



| - |  |  | NZMN4-AX630-AVE |
| :--- | :--- | :--- | :--- |
|  |  | NZMN4-AX800-AVE |  |
|  |  | 500893 |  |

Terminals as accessory $\qquad$

| NZMN3-AX250-AVE | 191574 |
| :--- | :--- |
| NZMN3-AX400-AVE | 191575 |
| NZMN3-AX630-AVE | 191576 |

NZMN4-AX1600-AVE
500897
$\qquad$
$\qquad$
10
1 Off
$\qquad$
$\qquad$
$\qquad$
Terminals as accessory _L_C

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 3 pole
NZM...AX

| Switching capacity | Rated current $=$ | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. |
| $\begin{aligned} & 400 / 415 \mathrm{~V} \\ & 50 / 60 \mathrm{~Hz} \end{aligned}$ | Rated uninterrupted current | Overload releases | Short-circuit releases Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{\mathrm{n}}=I_{u} \\ & A \end{aligned}$ | $\begin{aligned} & I_{\mathrm{r}}=I_{n} \mathrm{x} \\ & \mathrm{~A} \end{aligned}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X} .$. |  |  |
|  |  | $\boxed{4}$ | $\frac{1}{I>}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wa_ren_00418_ Symbolphoto | 150 | 40 | 20-40 | 2-12 | NZMH2-AX40 | 192007 |
| \% is. |  | 63 | 25-63 | 2-12 | NZMH2-AX63 | 192008 |
| in ${ }^{\text {coin}}$ |  | 100 | 40-100 | 2-12 | NZMH2-AX100 | 192009 |
|  |  | 160 | 64-160 | 2-12 | NZMH2-AX160 | 192010 |
|  |  | 250 | 100-250 | 2-12 | NZMH2-AX250 | 192011 |



|  | Limiter switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wa_ren_01418_r Symbolphoto | 100 | 630 | 252-630 | 2-12 | NZML4-AX630 | 191363 |
| $\stackrel{.}{ }$ |  | 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 <br> Circuit breakers IEC, electronic releases, 3 pole <br> NZM...AX 

1.3

Fixed mounting with box terminals
Part no.

Withdrawable units
Part no.

Order base separately

For further terminal types see accessories

| Terminals as accessory |  | NZMH3-AX2500-AVE | 191545 |
| :---: | :---: | :---: | :---: |
|  |  | NZMH3-AX400-AVE | 191546 |
|  |  | NZMH3-AX630-AVE | 191547 |
| - |  | NZMH4-AX630-AVE | 500906 |
|  |  | NZMH4-AX800-AVE | 500907 |
|  |  | NZMH4-AX1000-AVE | 500908 |
|  |  | NZMH4-AX1250-AVE | 500909 |
|  |  | NZMH4-AX1600-AVE | 500910 |


| NZML4-AX630-AVE | 500889 | $10 f f$ |
| :--- | :--- | :--- |
| NZML4-AX800-AVE | 500890 |  |
| NZML4-AX1000-AVE | 500891 |  |
| NZML4-AX1250-AVE | 500892 |  |
| NZML4-AX1600-AVE | 500878 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 3 pole
NZM...MX

|  |  |  |  |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ | Setting range |  | Rated operational power |  | Rated operational current |  | Part no. | Article no. |
| 400/415V | Rated uninterrupted current | Overload releases | Short-circuit | AC-3 |  | AC-3 |  |  |  |
| $50 / 60 \mathrm{~Hz}$ |  |  | releases <br> Non-delayed | $50 / 60 \mathrm{~Hz}$ |  | 50/60 Hz |  |  |  |
|  |  |  |  | 400 V | 690 V | 400 V | 690 V |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$. | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$ | P | P |  | $\mathrm{I}_{\text {e }}$ |  |  |
| kA | A | A |  | kW | kW |  | A |  |  |
|  |  | $4$ | $\frac{1}{I>}$ |  |  |  |  |  |  |

Motor protection

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


Normal switching capacity

| 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 |



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



| 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_ Symbolphoto | 70 | 90 | 36-90 | 2-18 | 45 | 75 | 81 | 78 | NZMS2-MX90 | 191650 |
| 0 is is |  | 140 | 56-140 | 2-18 | 75 | 132 | 134 | 134 | NZMS2-MX140 | 191651 |
| \%r |  | 220 | 88-220 | 2-14 | 110 | 200 | 196 | 202 | NZMS2-MX220 | 191652 |



| 220 | $88-220$ | $2-18$ | 110 | 200 | 196 | 202 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

# Compact circuit breakers, switch disconnectors 

1.3

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

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| Terminals as accessory |  | 191622 |
| :--- | :--- | :--- | :--- |


| 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 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 3 pole
NZM...MX

| Switching capacity | Rated current = | Setting range |  | Rated operational power |  | Rated operational current |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. |  |  |
| 400/415V | Rated | Overload | Short-circuit |  |  | AC-3 |  | AC-3 |  |  |  |
| $50 / 60 \mathrm{~Hz}$ | uninterrupted current | releases | releases <br> Non-delayed | $50 / 60 \mathrm{~Hz}$ |  | 50/60 |  |  |  |
|  |  |  |  | 400 V | 690 V | 400 V | 690 V |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{t}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$. | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$ | P | P |  | $\mathrm{I}_{\text {e }}$ |  |  |
| kA | A | A |  | kW | kW | A | A |  |  |
|  |  | $4$ | $\frac{1}{I>}$ |  |  |  |  |  |  |

## Motor protection

- IEC/EN 60947-2
- With phase-failure sensitivity
High switching capacity

| 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 |  |



| 220 | $88-220$ | $2-18$ | 110 | 200 | 196 | 202 |  | 191352 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 350 | $140-350$ | $2-15$ | 200 | 315 | 349 | 316 |  |  |


| 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

| 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 

Circuit breakers IEC, electronic releases, 3 pole
1.3

NZM...MX

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units

Order base separately

For further terminal types see accessories


| Terminals as accessory |  |  |
| :--- | :--- | :--- |
|  |  |  |
| NZML4-MX550-AVE | 500976 |  |
| NZML4-MX145-AVE | 500977 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 3 pole
NZM...VX

| Switching capacity <br> 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  |  | Fixed mounting with screw terminals Part no. _Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $I_{r}=I_{n} x \times \ldots$ | $\mathrm{I}_{\text {sd }}=1 \mathrm{l}_{\mathrm{t}} \mathrm{X}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X} \ldots$ |  |
|  |  | $\square$ | $\bigotimes^{\prime \prime}$ | $\stackrel{1}{1>}$ |  |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WA_SG168921_L Symbolphoto | 50 | 40 | 20-40 | 2-10 | 2-18 | NZMN2-VX40* | 192013 |
| \% ${ }^{\circ}$ |  | 63 | 25-63 | 2-10 | 2-18 | NZMN2-VX63* | 192014 |
| 161 |  | 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 |
|  | *This assortment will be available in 01/2023 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| $\cdot i \cdot i$ |  |  |  | 2-10 | 2-18 | - |  |
|  |  | 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 |  |  |  |  |  |  |
|  | 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 |  | NZMS2-VX100 | 191647 |
|  |  | $\frac{160}{250}$ | 64-160 | 2-10 | 2-18 | NZMS2-VX160 | 191648 |
|  |  |  | 100-250 | 2-10 | 2-12 | NZMS2-VX250 | 191649 |
| 83 |  | *This assortment will be available in 01/2023 |  |  |  |  |  |
| WA_SG00422_L Symbolphoto |  | 250 | 125-250 | 2-10 | 2-18 | NZMS3-VX250 | 192037 |
| - i \% i |  | 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
1.3

NZM...VX

## Fixed mounting with box terminals

Part no.

Article no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| Terminals as accessory |  | - |  | 10 ff |
| :---: | :---: | :---: | :---: | :---: |
| NZMN2-VX100-BT | 191625 | NZMN2-VX100-SVE | 191619 |  |
| NZMN2-VX160-BT | 191626 | NZMN2-VX160-SVE | 191620 |  |
| NZMN2-VX250-BT | 191627 | NZMN2-VX250-SVE | 191621 |  |
| Terminals as accessory |  | NZMN3-VX250-SVE | 191593 |  |
|  |  | NZMN3-VX250-AVE | 191577 |  |
| NZMN3-VX400-BT | 191588 | NZMN3-VX400-SVE | 191594 |  |
| Terminals as accessory |  | NZMN3-VX400-AVE | 191578 |  |
| NZMN3-VX630-BT | 191589 | NZMN3-VX630-SVE | 191595 |  |
| Terminals as accessory |  | 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 |  | - |  |  |
|  | -12 | NZMS3-VX400-SVE | 191512 |  |
|  |  | NZMS3-VX400-AVE | 191505 |  |
|  |  | NZMS3-VX630-SVE | 191513 |  |
|  |  | NZMS3-VX630-AVE | 191506 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 3 pole
NZM...VX

| Switching capacity <br> 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Article no. |
|  |  | Overload releases | Short-circuit releases delayed | Short-circuit releases Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $\begin{aligned} & I_{r}=l_{n} x \ldots \\ & A \end{aligned}$ | $1_{\text {sd }}=1.1$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$. |  |  |
|  |  | $\leftrightarrows$ | $\bigotimes_{1}^{\prime}>$ | $\frac{1}{I>}$ |  |  |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

|  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


|  | 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 |
| $\cdots$ |  | 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
1.3

NZM...VX

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| Terminals as accessory | $030$ | - |  | 1 Off |
| :---: | :---: | :---: | :---: | :---: |
|  |  | NZMH2-VX100-SVE | 191672 |  |
|  |  | NZMH2-VX160-SVE | 191673 |  |
|  |  | NZMH2-VX250-SVE | 191674 |  |


| Terminals as accessory |  |  | NZMH3-VX250-SVE | 191369 |
| :---: | :---: | :---: | :---: | :---: |
| - |  |  | NZMH3-VX250-AVE | 191548 |
| NZMH3-VX400-BT | 191557 | F | NZMH3-VX400-SVE | 191370 |
| - |  |  | NZMH3-VX400-AVE | 191549 |
| NZMH3-VX630-BT | 191558 |  | 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 |


| NZML4-VX630-AVE | 500922 | $10 f f$ |
| :--- | :--- | :--- |
| NZML4-VX800-AVE | 500923 |  |
| NZML4-VX1000-AVE | 500919 |  |
| NZML4-VX1250-AVE | 500920 |  |
| NZML4-VX1600-AVE | 500921 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers, electronic releases, 3 pole
NZM...VX...-T

Fixed mounting with screw terminals

| Switching | Rated | Setting ran |  |  |  | Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted | Overload releases | Short-circuit releases | Short-circuit releases | Earth-fault release |  |  |
|  | current |  | delayed | Non-delayed | Alarm or trip |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $\begin{aligned} & I_{\mathrm{r}}=I_{\mathrm{n}} \mathrm{x} \\ & \mathrm{~A} \end{aligned}$ | $1_{\text {sd }}=1 \times$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{G}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$. |  |  |
|  |  | $4$ | $\frac{\Delta I>}{1}$ | $\frac{1}{I>}$ |  |  |  |

System and cable protection, selectivity, generator and earth fault protection - IEC/EN 60947-2
Normal switching capacity

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 |

*This assortment will be available in 01/2023


| 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 |


| 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 

Circuit breakers, electronic releases, 3 pole
1.3

NZM...VX...-T

Fixed mounting with box terminals
Part no.

Withdrawable units
Part no.
Article no.
Std. pack

Order base separately


Compact circuit breakers, switch disconnectors
Circuit breakers, electronic releases, 3 pole
NZM...VX...-T

| Switching <br> capacity <br> 400/415V <br> 50/60 Hz | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Article no. |
|  |  | Overload releases | Short-circuit releases | Short-circuit releases | Earth-fault release |  |  |
|  |  |  | delayed | Non-delayed | Alarm or trip |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $I_{r}=I_{n} \times \ldots$ | $1_{\text {sd }}=1.1 \times$ | $I_{i}=I_{n} \mathrm{X} \ldots$ | $I_{6}=I_{n} \times \ldots$ |  |  |
| kA | A | A |  |  |  |  |  |
|  |  | $\leftrightarrows$ | \I ${ }^{\prime}$ | $\frac{1}{I>}$ |  |  |  |

System and cable protection, selectivity, generator and earth fault protection - IEC/EN 60947-2


|  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

*This assortment will be available in $01 / 2023$


Limiter switching capacity


| 630 | $252-630$ | $2-10$ | $2-18$ | $125-630$ | NZML4-VX630-T 500937 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 800 | $320-800$ | $2-10$ | $2-18$ | $160-800$ | NZML4-VX800-T 500938 |
| 1000 | $400-1000$ | $2-10$ | $2-18$ | $200-1000$ | NZML4-VX1000-T 500934 |
| 1250 | $500-1250$ | $2-10$ | $2-15$ | $250-1250$ | NZML4-VX1250-T 500935 |

# Compact circuit breakers, switch disconnectors 

Circuit breakers, electronic releases, 3 pole
1.3

NZM...VX...-T

## Fixed mounting with box terminals

Part no.

Withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| Terminals as accessory |  | NZMS3-VX400-T-AVE |
| :--- | :--- | :--- |
|  | NZMS3-VX630-T-AVE | 191510 |

$\qquad$
Terminals as accessory $\qquad$ 1 Off

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


| - | NZMH4-VX630-T-AVE | 500953 | 1 Off |
| :---: | :---: | :---: | :---: |
|  | NZMH4-VX800-T-AVE | 500954 |  |
|  | NZMH4-VX1000-T-AVE | 500950 |  |
|  | NZMH4-VX1250-T-AVE | 500951 |  |
|  | NZMH4-VX1600-T-AVE | 500952 |  |
|  | NZML4-VX630-T-AVE | 500944 |  |
|  | NZML4-VX800-T-AVE | 500945 |  |
|  | NZML4-VX1000-T-AVE | 500941 | 1 Off |
|  | NZML4-VX1250-T-AVE | 500942 |  |
|  | NZML4-VX1600-T-AVE | 500943 |  |

## Compact circuit breakers, switch disconnectors

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


Motor protection

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

|  | Normal switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG07621_LSymbolphoto | 50 | 40 | 20-40 | 2-18 | NZMN2-PMX40* | 192104 |
| * ${ }^{\circ}$ i |  | 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 |
|  | *This assortment will be available in 01/2023 |  |  |  |  |  |




| 250 | $100-250$ | $2-18$ | NZMN3-PMX250 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | $2-15$ | NZMN3-PMX350 |  |
| 350 | $140-350$ |  | - | 192323 |
| 450 | $180-450$ | $2-12$ | $n$ | 192324 |


| 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

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

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately



Motor protection

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

|  | High switching capacity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG07621_L Symbolphoto | 150 | 40 | 20-40 | 2-18 | NZMH2-PMX40* | 192110 |
| $3^{\circ}$ |  | 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 |
|  |  | *This | Il be availabl | 2023 |  |  |
| SG08921_L 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 |
| - |  |  |  |  | - |  |
| SG10321_L Symbolphoto | 85 | 550 | 220-550 | 2-18 | NZMH4-PMX550 | 189684 |
| $\cdots \cdot 1$ |  | 875 | 350-875 | 2-18 | NZMH4-PMX875 | 189685 |
| ** |  | 1400 | 560-1400 | 2-14 | NZMH4-PMX1400 | 189686 |

## Limiter switching capacity

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

# Compact circuit breakers, switch disconnectors 

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

Fixed mounting with box terminals
Part no.

Article no.

Plug-in/withdrawable units
Part no.

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 |  |
| - | $\cdots$ | NZMH4-PMX550-AVE | 189690 |  |
|  |  | NZMH4-PMX875-AVE | 189691 |  |
|  |  | NZMH4-PMX1400-AVE | 189692 |  |


| - | NZML4-PMX550-AVE | 500997 | 1 Off |
| :---: | :---: | :---: | :---: |
|  | NZML4-PMX875-AVE | 500998 |  |
|  | NZML4-PMX1400-AVE | 500996 |  |

## Compact circuit breakers, switch disconnectors

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

| Switching capacity | Rated current $=$ | Setting range |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part no. | Article no. |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted current | Overload releases | Short-circuit releases delayed | Short-circuit <br> releases <br> Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $\begin{aligned} & I_{\mathrm{r}}=I_{n} \mathrm{x} . . \\ & \mathrm{A} \end{aligned}$ | $\mathrm{I}_{\mathrm{sd}}=\mathrm{l}_{\mathrm{r}} \mathrm{X}$ | $\mathrm{l}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} \times .$. |  |  |
|  |  | $4$ | WI ${ }^{\prime}>$ | $\frac{1}{I>}$ |  |  |

System and cable protection, selectivity and generator protection

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

|  | Normal switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG07621_L Symbolphoto | 50 | 40 | 20-40 | 2-10 | 2-18 | NZMN2-PX40* | 192237 |
| i ${ }^{\text {i }}$ |  | 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 |
|  | *This assortment will be available in 01/2023 |  |  |  |  |  |  |
| $\begin{gathered} \text { SG08921_L Symbolphoto } \\ \text { : ! : } \end{gathered}$ |  | 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 |


| 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 

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

Fixed mounting with box terminals
Part no.

Article no.

Plug-in/withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| NZMN2-PX40-BT* | 192046 |  | NZMN2-PX40-SVE* | 192162 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMN2-PX63-BT* | 192047 | $3^{\circ} 0^{\circ}$ | NZMN2-PX63-SVE* | 192163 |  |
| NZMN2-PX100-BT | 192048 |  | NZMN2-PX100-SVE | 192164 |  |
| NZMN2-PX160-BT | 192049 |  | NZMN2-PX160-SVE | 192165 |  |
| NZMN2-PX250-BT | 192050 | 4 | NZMN2-PX250-SVE | 192166 |  |


| NZMN3-PX250-BT | 192363 |  | NZMN3-PX250-SVE | 192264 |
| :---: | :---: | :---: | :---: | :---: |
| - |  |  | NZMN3-PX250-AVE | 192348 |
| NZMN3-PX400-BT | 192364 |  | NZMN3-PX400-SVE | 192340 |
| - |  |  | NZMN3-PX400-AVE | 192349 |
| NZMN3-PX630-BT | 192365 |  | NZMN3-PX630-SVE | 192341 |
| - |  | = | NZMN3-PX630-AVE | 192350 |


|  |  |  | 189621 |
| :--- | :--- | :--- | :--- |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX

| Switching capacity | Rated current $=$ | Setting range |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part no. | Article no. |
|  |  |  |  |  |  |  |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted | Overload releases | Short-circuit releases | Short-circuit releases |  |  |
|  | current |  | delayed | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\text {u }}$ | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{sd}}=\mathrm{l}_{\mathrm{t}} \mathrm{x} \ldots$ | $\mathrm{l}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | A |  |  |  |  |  |
|  |  | $\boxed{4}$ | QI ${ }^{\prime}$ | $\frac{1}{I>}$ |  |  |

System and cable protection, selectivity and generator protection

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


| High switching capacity |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 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 |  |

*This assortment will be available in 01/2023


| 250 | $100-250$ | $2-10$ | $2-18$ | NZMH3-PX250 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |



| 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

## Fixed mounting with box terminals

 Part no.Article no.

Plug-in/withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| NZMS2-PX40-BT* | 192127 |  | NZMS2-PX40-SVE* | 192169 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZMS2-PX63-BT* | 192128 |  | NZMS2-PX63-SVE* | 192170 |  |
| NZMS2-PX100-BT | 192129 |  | NZMS2-PX100-SVE | 192171 |  |
| NZMS2-PX160-BT | 192130 |  | NZMS2-PX160-SVE | 192172 |  |
| NZMS2-PX250-BT | 192131 |  | NZMS2-PX250-SVE | 192173 |  |


| NZMS3-PX250-BT | 192366 |  | NZMS3-PX250-SVE | 192342 |
| :---: | :---: | :---: | :---: | :---: |
| - |  |  | NZMS3-PX250-AVE | 192351 |
| NZMS3-PX400-BT | 192367 | cr | NZMS3-PX400-SVE | 192343 |
| - |  |  | NZMS3-PX400-AVE | 192352 |
| NZMS3-PX630-BT | 192251 |  | NZMS3-PX630-SVE | 192344 |
| - |  |  | NZMS3-PX630-AVE | 192353 |




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


| - | +2an | NZMH4-PX630-AVE | 189626 |
| :---: | :---: | :---: | :---: |
|  | -1 | NZMH4-PX800-AVE | 189627 |
|  | . . 1 | NZMH4-PX1000-AVE | 189628 |
|  |  | NZMH4-PX1250-AVE | 189629 |
|  |  | NZMH4-PX1600-AVE | 189630 |

## Compact circuit breakers, switch disconnectors

Circuit breakers IEC, electronic releases with energy meter function, 3 pole NZM...PX
Fixed mounting with screw terminals
Article no. Std. pack
Part no.

System and cable protection, selectivity and generator protection

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

|  | Limiter switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\overline{\text { SG10321 L Symbolphoto }}$ | 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 |  |

# Compact circuit breakers, switch disconnectors 

Circuit breakers IEC, electronic releases with energy meter function, 3 pole
1.4

NZM...PX

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units

| NZML4-PX630-AVE |  | 500989 |
| :--- | :--- | :--- |
| NZML4-PX800-AVE | 500990 |  |
| NZML4-PX1000-AVE | 500986 |  |
| NZML4-PX1250-AVE | 500987 |  |
| NZML4-PX1600-AVE | 500988 |  |

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


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 (Arcflash Reduction Maintenance System ${ }^{\text {™ }}$ ) and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

Normal switching capacity


| 50 | $20-40$ |  | $2-10$ | $2-18$ | $20-40$ | NZMN2-PX40-TZ* | 192141 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 63 | $25-63$ | $2-10$ | $2-18$ | $20-63$ | NZMN2-PX40-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 |  |

*This assortment will be available in $01 / 2023$


| 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 |


| 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 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S607621_L Symbolphoto | 70 | 40 | 20-40 | 2-10 | 2-18 | 20-40 | NZMS2-PX40-TZ* | 192148 |
| $\mathrm{i}^{\circ} \mathrm{i}^{\circ}$ |  | 63 | 25-63 | 2-10 | 2-18 | 20-63 | NZMS2-PX40-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 |
|  | *This assortment will be available in 01/2023 |  |  |  |  |  |  |  |



| 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 

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

## Fixed mounting with box terminals

 Part no.Article no.

Plug-in/withdrawable units
Part no.

Order base separately

For further terminal types see accessories

| Terminals as accessory | $=$ |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | 192183 |


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


| - |  |  | 189631 |
| :--- | :--- | :--- | :--- |


| 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 |  |

## Compact circuit breakers, switch disconnectors

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

| Switching capacity | Rated current $=$ | Setting range |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Part no. | Article no. |
|  |  |  |  |  |  |  |  |
| 400/415V $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted current | Overload releases | Short-circuit releases | Short-circuit releases | Earth-fault release |  |  |
|  |  |  | delayed | Non-delayed |  |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$ | $\mathrm{I}_{\text {sd }}=\mathrm{I}_{\mathrm{t}} \mathrm{X} \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} . .$. | $I_{G}=I_{n} \times \ldots$ |  |  |
|  |  |  |  |  |  |  |  |
|  |  | $\zeta$ | $\stackrel{1}{\square}$ | \I> |  |  |  |

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 (Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ ) and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

| SG08921_L 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 |
|  |  |  |  |  |  |  |  |  |
| SG10321_L 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 |
| $1-1$ |  | 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 |


|  | Limiter switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG10321 L S Symbolphoto | 100 | 630 | 252-630 | 2-10 | 2-18 | 126-630 | NZML4-PX630-TAZ | 500984 |
| $\cdots \cdot 1$ |  | 800 | 320-800 | 2-10 | 2-18 | 160-800 | NZML4-PX800-TAZ | 500985 |
| * * |  | 1000 | 400-1000 | 2-10 | 2-18 | 200-1000 | NZML4-PX1000-TAZ | 500981 |
| $1-1$ |  | 1250 | 500-1250 | 2-10 | 2-15 | 250-1250 | NZML4-PX1250-TAZ | 500982 |
|  |  | 1600 | 640-1600 | 2-10 | 2-12 | 320-1600 | NZML4-PX1600-TAZ | 500983 |

# Compact circuit breakers, switch disconnectors 

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

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.

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 |  |
| - | + | NZML4-PX630-TAZ-AVE | 500994 |  |
|  |  | NZML4-PX800-TAZ-AVE | 500995 |  |
|  |  | NZML4-PX1000-TAZ-AVE | 500991 |  |
|  |  | NZML4-PX1250-TAZ-AVE | 500992 |  |
|  |  | NZML4-PX1600-TAZ-AVE | 500993 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity | Rated |  | Setting range |  | Fixed mounting with screw terminals Part no. Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | current $=$ |  |  |  |  |
| 400/415V | Rated |  | Overload | Short-circuit |  |
| 50/60 Hz | uninterrupted |  | releases | releases |  |
|  | current |  |  | Non-delayed |  |
|  | Phase conductor | Neutral conductor |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{u}$ | $I_{r}=I_{n} \times \ldots \times \%$ of phase conductor | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |
| kA | A | \% | A |  |  |
|  |  |  | $\leftrightarrows$ | $\underline{I}>$ |  |

System and cable protection

- IEC/EN 60947-2

|  | Basic switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG07021_L Symbolphoto | 25 | 20 | 100 | 15-20 | 350 A fixed | Screw terminals |  |
| $\cdots \ldots$ |  | 25 | 100 | 20-25 | 350 A fixed | as accessories |  |
|  |  | 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 |  |  |
| SG08421_L Symbolphoto |  | 125 | 100 | 100-125 | 6-10 | NZMB2-4-A125 | 265847 |
| *i*** |  | 160 | 100 | 125-160 | 6-10 | NZMB2-4-A160 | 265849 |
| 4 |  |  | 60 | 125-160 | 6-10 | NZMB2-4-A160/100 | 265850 |
|  |  | 200 | 100 | 160-200 | 6-10 | NZMB2-4-A200 | 265852 |
|  |  |  | 60 | 160-200 | 6-10 | NZMB2-4-A200/125 | 265853 |
|  |  | 250 | 100 | 200-250 | 6-10 | NZMB2-4-A250 | 265855 |
| *3, + * |  |  | 60 | 200-250 | 6-10 | NZMB2-4-A250/160 | 265856 |
|  |  | 300 | 100 | 240-300 | 5-8.3 | NZMB2-4-A300 | 107582 |
|  |  |  | 60 | 240-300 | 5-8.3 | NZMB2-4-A300/200 | 107583 |

# Compact circuit breakers, switch disconnectors 

Circuit breakers IEC, thermomagnetic releases, 4 pole
1.5

NZM...-4-A

Fixed mounting with box terminals
Part no.

Plug-in units
Part no.
Article no.
Std. pack

Order base separately

| 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 |  |
|  |  | - |  |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

|  |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Rated current $=$ |  | Setting range |  | Part no. | Article no. |
| 400/415V | Rated uninterrupted current |  | Overload | Short-circuit |  |  |
| 50/60 Hz |  |  | releases | releases |  |  |
|  |  |  |  | Non-delayed |  |  |
|  | Phase conductor | Neutral conductor |  |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{U}}$ | $I_{r}=I_{n} \times \ldots \times \%$ of phase conductor | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} \ldots$ |  |  |
| kA | A | \% | A |  |  |  |
|  |  |  | $\boxed{4}$ | $\stackrel{1}{I>}$ |  |  |

System and cable protection

- IEC/EN 60947-2


## 



Comfort switching capacity


36

| 20 | 100 | $15-20$ | 350 A fixed | Screw terminals |
| :--- | :--- | :--- | :--- | :--- |
| 25 | 100 | $20-25$ | 350 A fixed | as accessories |
| 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 |  |


| 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 |
| 250 | 60 | $160-200$ | $6-10$ | NZMC2-4-A200/125 | 271436 |
| 300 | 100 | $200-250$ | $6-10$ | NZMC2-4-A250 | 271438 |
|  | 60 | $200-250$ | $6-10$ | NZMC2-4-A250/160 | 271439 |
|  | 100 | $240-300$ | $5-8.3$ | NZMC2-4-A300 | 107584 |


| 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 |
|  | 60 | 320-400 | 6-10 | NZMC3-4-A400/250 | 109691 |
| 500 | 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 

Circuit breakers IEC, thermomagnetic releases, 4 pole
1.5

NZM...-4-A

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| 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 |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity <br> 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current |  | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part no. | Article no. |
|  |  |  | Overload releases | Short-circuit releases Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | Phase conductor $I_{n}=I_{u}$ | Neutral conductor $I_{r}=I_{n} x . . . x \%$ of phase conductor | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} \ldots$. |  |  |
| kA | A | \% | A | $\stackrel{1}{1>}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG07021_LSymbolphoto | 50 | 20 | 100 | 15-20 | 350 A fixed |  |  |
| $\cdots \ldots$ |  | 25 | 100 | 20-25 | 350 A fixed | as accessories |  |
|  |  | 32 | 100 | 25-32 | 350 A fixed |  |  |
|  |  | 40 | 100 | 32-40 | 8-10 |  |  |
| 17 |  | 50 | 100 | 40-50 | 6-10 |  |  |
|  |  | 63 | 100 | 50-63 | 6-10 |  |  |
| $\cdots 3, \ldots$ |  | 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 |  |  |
| S608421_LSymbolphoto |  | 125 | 100 | 100-125 | 6-10 | NZMN2-4-A125 | 265858 |
| *i* * |  | 160 | 100 | 125-160 | 6-10 | NZMN2-4-A160 | 265860 |
| 191 |  |  | 60 | 125-160 | 6-10 | NZMN2-4-A160/100 | 265861 |
|  |  | 200 | 100 | 160-200 | 6-10 | NZMN2-4-A200 | 265863 |
|  |  |  | 60 | 160-200 | 6-10 | NZMN2-4-A200/125 | 265864 |
|  |  | 250 | 100 | 200-250 | 6-10 | NZMN2-4-A250 | 265866 |
|  |  |  | 60 | 200-250 | 6-10 | NZMN2-4-A250/160 | 265867 |
|  |  | 300 | 100 | 240-300 | 5-8.3 | NZMN2-4-A300 | 107586 |
|  |  |  | 60 | 240-300 | 5-8.3 | NZMN2-4-A300/200 | 107587 |
| SG09621_L Symbolphoto <br> -i * * © ; |  | 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 | - |  |
| +1. ... |  |  | 100 | 320-400 | 6-10 | NZMN3-4-A400 | 109696 |
|  |  |  | 60 | 320-400 | 6-10 | NZMN3-4-A400/250 | 109697 |
|  |  | 500 | 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 

Circuit breakers IEC, thermomagnetic releases, 4 pole
1.5

NZM...-4-A

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| NZMN1-4-A20 | 281245 | - | 10 ff |
| :---: | :---: | :---: | :---: |
| 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-A125-SVE | 113264 |
| :---: | :---: | :---: | :---: |
| NZMN2-4-A160-BT | 147393 | NZMN2-4-A160-SVE | 113266 |
| Terminals as accessory | - | NZMN2-4-A160/100-SVE | 113267 |
| NZMN2-4-A200-BT | 147394 | NZMN2-4-A200-SVE | 113269 |
| Terminals as accessory | - | NZMN2-4-A200/125-SVE | 113270 |
| NZMN2-4-A250-BT | 147395 | NZMN2-4-A250-SVE | 113272 |
| Terminals as accessory | - | NZMN2-4-A250/160-SVE | 113273 |
| Terminals as accessory | - | - |  |


| 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 |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity <br> 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current |  | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part no. | Article no. |
|  |  |  | Overload releases | Short-circuit releases Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | Phase conductor $I_{n}=I_{u}$ | Neutral conductor $\mathrm{I}_{\mathrm{r}}=\mathrm{I}_{\mathrm{n}} \mathrm{x}$... $\mathrm{x} \%$ of phase conductor | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | A | \% | A | $\stackrel{1}{I>}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | Strong switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG607221_LSymbolphoto | 70 | 20 | 100 | 16-20 | 350 A fixed | Screw terminals |  |
| . . \% |  | 25 | 100 | 20-25 | 350 A fixed | as accessories |  |
|  |  | 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 |  |  |
| $\cdots 3$, |  | 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 |  |  |
| SGo8421_L 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 |
| $3 \times, *$, |  | 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 

Circuit breakers IEC, thermomagnetic releases, 4 pole
1.5

NZM...-4-A

Fixed mounting with box terminals
Part no.

Plug-in units
Part no.
Article no.
Std. pack

Order base separately

| 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 |  |
|  |  | - |  |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, thermomagnetic releases, 4 pole
NZM...-4-A

| Switching capacity | Rated current $=$ |  | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part no. | Article no. |
|  |  |  |  |  |  |  |
| 400/415V | Rated |  | Overload | Short-circuit |  |  |
| $50 / 60 \mathrm{~Hz}$ | uninterrupted current |  | releases | releases <br> Non-delayed |  |  |
|  | Phase conductor | Neutral conductor |  |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{U}}$ | $I_{r}={ }_{n} \mathrm{l}$... $\mathrm{x} \%$ of phase conductor | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. |  |  |
| kA | A | \% | A |  |  |  |
|  |  |  | $\square$ | $\stackrel{I}{I>}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\overline{\text { SG07021_L Symbolphoto }}$ | 100 | 20 | 100 | 15-20 | 350 A fixed | Screw terminals |  |
| $\cdots . .1$ |  | 25 | 100 | 20-25 | 350 A fixed | as accessories |  |
|  |  | 32 | 100 | 25-32 | 350 A fixed |  |  |
| $\mathrm{F}^{*}$ |  | 40 | 100 | 32-40 | 8-10 |  |  |
| 11 |  | 50 | 100 | 40-50 | 6-10 |  |  |
|  |  | 63 | 100 | 50-63 | 6-10 |  |  |
| $\cdots 3+3$. |  | 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 |  |  |
| SG08421 - L Symbolphoto | 150 | 20 | 100 | 15-20 | 350 A fixed | NZMH2-4-A20 | 281287 |
| ¢i** |  | 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 |
| $0$ |  | 63 | 100 | 50-63 | 6-10 | NZMH2-4-A63 | 265827 |
| - |  | 80 | 100 | 63-80 | 6-10 | NZMH2-4-A80 | 265829 |
| 30,3 |  | 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 |
| SG09621_L Symbolphoto <br> -6* . . . * |  | 320 | 100 | 250-320 | 6-10 | NZMH3-4-A320 | 109700 |
|  |  |  | 60 | 250-320 | 6-10 | NZMH3-4-A320/200 | 109701 |
| $818$ |  |  | 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 | - |  |
| $\cdots 3$, |  |  | 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 | - |  |

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| 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 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-AX


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 |
| \% \% 0 |  | 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_SG00322_L Symbolphoto <br> *is. + is |  | 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 |
| $1$ |  | 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_ Symbolphoto | 70 | 40 | 100 | 20-40 | 2-12 | NZMS2-4-AX40 | 193371 |
| \% \% 0 |  | 63 | 100 | 25-63 | 2-12 | NZMS2-4-AX63 | 193372 |
| \%rroi. |  | 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 |



| 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.

Withdrawable units
Part no.
Order base separately

For further terminal types see accessories


| NZMN3-4-AX400-BT | 191612 |  | NZMN3-4-AX400-AVE | 191608 |
| :---: | :---: | :---: | :---: | :---: |
| Terminals as accessory |  |  | NZMN3-4-AX400/VAR-AVE | 191614 |
| NZMN3-4-AX630-BT | 191613 |  | NZMN3-4-AX630-AVE | 191609 |
| Terminals as accessory |  |  | NZMN3-4-AX630/VAR-AVE | 191615 |


| Terminals as accessory | NZMN4-4-AX800-AVE | 500898 |
| :---: | :---: | :---: |
|  | NZMN4-4-AX800/VAR-AVE | 500899 |
|  | NZMN4-4-AX1000-AVE | 500900 |
|  | NZMN4-4-AX1000/VAR-AVE | 500901 |
|  | NZMN4-4-AX1250-AVE | 500902 |
|  | NZMN4-4-AX1250/VAR-AVE | 500903 |
|  | NZMN4-4-AX1600-AVE | 500904 |
|  | NZMN4-4-AX1600/VAR-AVE | 500905 |

Terminals as accessory $\qquad$ 1 Off
$\qquad$
$\qquad$
$\qquad$ 1
$\qquad$
$\qquad$
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 |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-AX

| Switching capacity | Rated current $=$ | Neutral conductor | Setting range |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part no. | Article no. |
|  |  |  |  |  |  |  |
| 400/415V |  | of phase | Overload | Short-circuit |  |  |
| $50 / 60 \mathrm{~Hz}$ | uninterrupted | conductor | releases | releases |  |  |
|  | current |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ |  | $\mathrm{I}_{\mathrm{r}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | A |  | A |  |  |  |
|  |  |  | $\square$ | $\stackrel{1}{\square>}$ |  |  |

System and cable protection

- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 150 | 40 | 100 | 20-40 | 2-12 | NZMH2-4-AX40 | 193364 |
| \% io 1 |  | 63 | 100 | 25-63 | 2-12 | NZMH2-4-AX63 | 193365 |
| 㣠 |  | 100 | 100 | 40-100 | 2-12 | NZMH2-4-AX100 | 193366 |
| 7, |  | 160 | 100 | 64-160 | 2-12 | NZMH2-4-AX160 | 193367 |
|  |  | 250 | 100 | 100-250 | 2-12 | NZMH2-4-AX250 | 193368 |


| 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 |



| 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 |


|  | Limiter switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wa_ren_01418_ Symbolphoto | 100 | 800 | 100 | 320-800 | 2-12 | NZML4-4-AX800 | 191331 |
| $\cdots$ |  |  | 0-60-100 | 320-800 | 2-12 | NZML4-4-AX800/VAR | 191332 |
| . . 1 |  | 1000 | 100 | 400-1000 | 2-12 | NZML4-4-AX1000 | 191333 |
| $\square$ |  |  | 0-60-100 | 400-1000 | 2-12 | NZML4-4-AX1000/VAR | 191334 |
|  |  | 1250 | 100 | 500-1250 | 2-12 | NZML4-4-AX1250 | 191335 |
| $\pm$, |  |  | 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 

# Circuit breakers IEC, electronic releases, 4 pole 

NZM...-4-AX

Fixed mounting with box terminals
Part no.

Withdrawable units
Part no.

Order base separately

For further terminal types see accessories
Terminals as accessory - 10


| NZMH3-4-AX400-AVE | 191375 |
| :--- | :--- |
| NZMH3-4-AX400/VAR-AVE | 191379 |
| NZMH3-4-AX630-AVE | 191376 |
| NZMH3-4-AX630/VAR-AVE | 191380 |


| NZMH4-4-AX800-AVE | 500911 |
| :--- | :--- |
| NZMH4-4-AX800/VAR-AVE | 500912 |
| NZMH4-4-AX1000-AVE | 500913 |
| NZMH4-4-AX1000/VAR-AVE | 500914 |
| NZMH4-4-AX1250-AVE | 500915 |
| NZMH4-4-AX1250/VAR-AVE | 500916 |
| NZMH4-4-AX1600-AVE | 500887 |
| NZMH4-4-AX1600/VAR-AVE | 500888 |


| NZML4-4-AX800-AVE | 500879 |
| :--- | :--- |
| NZML4-4-AX800/VAR-AVE | 500880 |
| NZML4-4-AX1000-AVE | 500881 |
| NZML4-4-AX1000/VAR-AVE | 500882 |
| NZML4-4-AX1250-AVE | 500883 |
| NZML4-4-AX1250/VAR-AVE | 500884 |
| NZML4-4-AX1600-AVE | 500885 |
| NZML4-4-AX1600/VAR-AVE | 500886 | Compact circuit breakers, switch disconnectors

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

Fixed mounting with screw terminals

| Switching capacity <br> 400/415V <br> 50/60 Hz | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Neutral conductor Ix $\times$ of phase conductor \% | Setting range |  |  | Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  | Overload releases | Short-circuit releases | Short-circuit releases |  |  |
|  |  |  |  | delayed | Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ |  | $\begin{aligned} & I_{\mathrm{r}}=\mathrm{I}_{n} \mathrm{x} \\ & \mathrm{~A} \end{aligned}$ | $1_{\text {sd }}=\mathrm{I}_{\mathrm{t}} \mathrm{x} \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$. |  |  |
|  |  |  | $\square$ | $\stackrel{1}{\square}$ |  |  |  |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wa_ren_00618_ Symbolphoto | 50 | 100 | 100 | 40-100 | 2-10 | 2-18 | NZMN2-4-VX100 | 191642 |
| is is |  | 160 | 100 | 64-160 | 2-10 | 2-18 | NZMN2-4-VX160 | 191643 |
| \#1+ |  |  | 0-60-100 | 64-160 | 2-10 | 2-18 | NZMN2-4-VX160/VAR | 191644 |
|  |  | 250 | 100 | 100-250 | 2-10 | 2-12 | NZMN2-4-VX250 | 191645 |
|  |  |  | 0-60-100 | 100-250 | 2-10 | 2-12 | NZMN2-4-VX250/VAR | 191646 |



| 400 | 100 | 160-400 | 2-10 | 2-12 | NZMN3-4-VX400 | 191490 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 | 160-400 | 2-10 | 2-12 | - |  |
|  | 0-60-100 | 160-400 | 2-10 | 2-12 | NZMN3-4-VX400/VAR | 191491 |
|  | 0-60-100 | 160-400 | 2-10 | 2-12 | - |  |
| 630 | 100 | 252-630 | 1.5-7 | 2-8 | NZMN3-4-VX630 | 191492 |
|  | 100 | 252-630 | 1.5-7 | 2-8 | - |  |
|  | 0-60-100 | 252-630 | 1.5-7 | 2-8 | NZMN3-4-VX630/VAR | 191493 |
|  | 0-60-100 | 252-630 | 1.5-7 | 2-8 | - |  |
| 800 | 100 | 320-800 | 2-10 | 2-18 | NZMN4-4-VX800 | 191439 |
|  | 0-60-100 | 320-800 | 2-10 | 2-18 | NZMN4-4-VX800/VAR | 191440 |
| 1000 | 100 | 400-1000 | 2-10 | 2-18 | NZMN4-4-VX1000 | 191441 |
|  | 0-60-100 | 400-1000 | 2-10 | 2-18 | NZMN4-4-VX1000/VAR | 191442 |
| 1250 | 100 | 500-1250 | 2-10 | 2-15 | NZMN4-4-VX1250 | 191443 |
|  | 0-60-100 | 500-1250 | 2-10 | 2-15 | NZMN4-4-VX1250/VAR | 191444 |
| 1600 | 100 | 640-1600 | 2-10 | 2-12 | NZMN4-4-VX1600 | 191445 |
|  | 0-60-100 | 640-1600 | 2-10 | 2-12 | NZMN4-4-VX1600/VAR | 191446 |

## Fixed mounting with box terminals

Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately


| Terminals as accessory |  | NZMN3-4-VX400-SVE | 191482 |
| :---: | :---: | :---: | :---: |
|  |  | NZMN3-4-VX400-AVE | 191610 |
|  | F | 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 |
| - | $\pm$ - | NZMN4-4-VX800-AVE | 193333 |
|  |  | NZMN4-4-VX800/VAR-AVE | 500931 |
|  |  | NZMN4-4-VX1000-AVE | 193334 |
|  | $\square$ | NZMN4-4-VX1000/VAR-AVE | 500928 |
|  |  | NZMN4-4-VX1250-AVE | 193335 |
|  |  | NZMN4-4-VX1250/VAR-AVE | 500929 |
|  |  | NZMN4-4-VX1600-AVE | 193336 |
|  |  | NZMN4-4-VX1600/VAR-AVE | 500930 |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX

Fixed mounting with screw terminals

| Switching capacity 400/415V $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted current | Neutral conductor <br> $\mathrm{I}_{\mathrm{x}} \times \mathrm{\%}$ of phase <br> conductor <br> \% | Setting range |  |  | Part no. Article no. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  | Overload releases | Short-circuit releases | Short-circuit releases |  |  |
|  |  |  |  | delayed | Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{\mathrm{n}}=I_{u} \\ & A \end{aligned}$ |  | $\begin{aligned} & I_{r}=I_{n} x \ldots \\ & A \end{aligned}$ | $\mathrm{I}_{\mathrm{sd}}=1 \mathrm{l}_{\mathrm{r}} \times \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
|  |  |  | $\square$ | $\stackrel{1}{I>}$ | Xİ> |  |  |

System and cable protection, selectivity and generator protection - IEC/EN 60947-2

|  | Strong switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 70 | 100 | 100 | 40-100 | 2-10 | 2-18 | NZMS2-4-VX100 | 191659 |
| \% \% ${ }^{\text {a }}$ |  | 160 | 100 | 64-160 | 2-10 | 2-18 | NZMS2-4-VX160 | 191660 |
| [ixpiol |  |  | 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 |



| 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.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack
Order base separately

| 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 |  |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases, 4 pole
NZM...-4-VX

Fixed mounting with screw terminals

| Switching capacity | Rated current $=$ | Neutral conductor$\mathrm{I}_{\mathrm{x}} \times \%$ | Setting range |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Part no. | Article no. |
|  |  |  |  |  |  |  |  |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted | of phase | Overload releases | Short-circuit releases | Short-circuit releases |  |  |
|  | current |  |  | delayed | Non-delayed |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $I_{n}=I_{u}$ |  | $\begin{aligned} & I_{r}=I_{n} x \ldots \\ & A \end{aligned}$ | $1_{\text {sd }}=1_{\mathrm{t}} \mathrm{x} \times \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$. |  |  |
|  |  |  | $\square$ | $\stackrel{1}{\square}{ }_{1}$ | $\underbrace{\square 1}$ |  |  |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 150 | 100 | 100 | 40-100 | 2-10 | 2-18 | NZMH2-4-VX100 | 191689 |
| 0 is ${ }^{\text {a }}$ |  | 160 | 100 | 64-160 | 2-10 | 2-18 | NZMH2-4-VX160 | 191690 |
| Pr |  |  | 0-60-100 | 64-160 | 2-10 | 2-18 | NZMH2-4-VX160/VAR | 191691 |
| 3 |  | 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 |


| 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square-2$ |  |  | 0-60-100 | 320-800 | 2-10 | 2-18 | NZMH4-4-VX800/VAR | 191356 |
| . . 1 |  | 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 |

# Circuit breakers IEC, electronic releases, 4 pole 

NZM...-4-VX

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack
Order base separately

| 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 |
|  | - | NZMH4-4-VX800/VAR-AVE | 500927 |
|  |  | NZMH4-4-VX1000-AVE | 193338 |
|  |  | NZMH4-4-VX1000/VAR-AVE | 500924 |
|  |  | NZMH4-4-VX1250-AVE | 193339 |
|  |  | NZMH4-4-VX1250/VAR-AVE | 500925 |
|  |  | NZMH4-4-VX1600-AVE | 193340 |
|  |  | NZMH4-4-VX1600/VAR-AVE | 500926 | Compact circuit breakers, switch disconnectors

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

| Switching capacity <br> 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated current $=$ <br> Rated uninterrupted current | Neutral conductor Setting range |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Part no. | Article no. |
|  |  | $\mathrm{I}_{\mathrm{x}} \times$ \% |  |  |  |  |  |  |
|  |  | of phase conductor | Overload releases | Short-circuit releases | Short-circuit releases | Earth-fault release |  |  |
|  |  |  |  | delayed | Non-delayed |  |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{\mathrm{n}}=I_{u} \\ & A \end{aligned}$ |  | $\begin{aligned} & I_{t}=I_{n} \times \ldots \\ & A \end{aligned}$ | $\mathrm{I}_{\mathrm{sd}}=\mathrm{l}_{\mathrm{r}} \mathrm{x} \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\mathrm{G}}=\mathrm{I}_{n} \mathrm{X} .$. |  |  |
|  |  |  | $\leftrightarrows$ |  | $\stackrel{1}{I>}$ |  |  |  |

System and cable protection, selectivity, generator and earth fault protection - IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 | 40 | 100 | 20-40 | 2-10 | 2-18 | 20-40 | NZMN2-4-VX40-T* | 193299 |
| 0 \% ${ }^{\text {\% }}$ |  | 63 | 100 | 25-63 | 2-10 | 2-18 | 20-63 | NZMN2-4-VX40-T* | 193300 |
| $\therefore 1$ |  | 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 |
|  | *This assortment will be available in 01/2023 |  |  |  |  |  |  |  |  |


| SG09821_L 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 |
| SG10621_L 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 |
| $1 \times$ | 1600 | 100 | 640-1600 | 2-10 | 2-12 | 320-1600 | NZMN4-4-VX1600-T | 193323 |


|  | Strong switching capacity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG09821_L 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 |
| $1{ }^{\circ}$ |  | 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 

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

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately


| 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 |  |

## Compact circuit breakers, switch disconnectors

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

| Switching capacity | Rated current $=$ | Neutral conductor Setting range |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Part no. | Article no. |
|  |  | $\mathrm{I}_{\mathrm{x}} \times \mathrm{\%}$ |  |  |  |  |  |  |
| 400/415V <br> $50 / 60 \mathrm{~Hz}$ | Rated uninterrupted | of phase conductor | Overload releases | Short-circuit releases | Short-circuit releases | Earth-fault release |  |  |
|  | current |  |  | delayed | Non-delayed |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ |  | $\mathrm{I}_{\mathrm{t}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$... | $\mathrm{I}_{\text {sd }}=1 \mathrm{l}_{\mathrm{t}} \times \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. | $I_{G}=I_{n} \mathrm{X} \ldots$ |  |  |
| kA | A |  | A |  |  |  |  |  |
|  |  |  | $\zeta$ | XI> | $\stackrel{1}{I>}$ |  |  |  |

System and cable protection, selectivity, generator and earth fault protection - IEC/EN 60947-2


# Compact circuit breakers, switch disconnectors 

Circuit breakers IEC, electronic releases, 4 pole
1.6

NZM...-4-VX...-T

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Order base separately

For further terminal types see accessories

| Terminals as accessory |  | $\frac{\text { NZMH3-4-VX400-T-AVE }}{\text { NZMH3-4-VX630-T-AVE }} 191383$ |
| :--- | :--- | :--- | :--- |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC, electronic releases with energy meter function, 4 pole NZM...PX

Fixed mounting with screw terminals

| Switching capacity 400/415V $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Neutral conductor <br> ${ }_{1 \times} \times \%$ <br> of phase <br> conductor <br> \% | Setting range |  |  | Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  | Overload releases | Short-circuit releases | Short-circuit releases |  |  |
|  |  |  |  | delayed | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ |  | $\mathrm{I}_{\mathrm{f}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$. | $\mathrm{I}_{\mathrm{sd}}=1 \mathrm{l}_{\mathrm{r}} \times \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{I}_{\mathrm{n}} \mathrm{X}$. |  |  |
| kA | A |  | A |  |  |  |  |
|  |  |  | $\square$ | $\stackrel{1}{I>}$ | $\\|_{1}^{\prime}$ |  |  |

System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

|  | Normal switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG08321_L Symbolphoto | 50 | 40 | 0-60-100 | 20-40 | 2-10 | 2-18 | NZMN2-4-PX40/VAR* | 192204 |
| -嵒* |  | 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 |
| *)*, ** |  |  | nt will be av | ailable in 01 |  |  |  |  |



| 250 | $0-60-100$ | $100-250$ | $2-10$ | $2-18$ |  | NZMN3-4-PX250/VAR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 192277 |  |  |  |  |  |  |
| 400 | $0-60-100$ | $100-250$ | $2-10$ | $2-18$ | - |  |
| 630 | $0-60-100$ | $160-400$ | $2-10$ | $2-12$ | NZMN3-4-PX400/VAR | 192278 |
| $0-60-100$ | $160-400$ | $2-10$ | $2-12$ | - |  |  |
|  | $0-60-100$ | $252-630$ | $1.5-7$ | $2-8$ | NZMN3-4-PX630/VAR | 192279 |
| $0-60-100$ | $252-630$ | $1.5-7$ | $2-8$ | - |  |  |



| 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/NAR | 189645 |


Strong switching capacity

| 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/NAR | 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/NAR | 192215 |

*This assortment will be available in $01 / 2023$


| 250 | $0-60-100$ | $100-250$ | $2-10$ | $2-18$ | NZMS3-4-PX250/VAR | 192280 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $400-60-100$ | $100-250$ | $2-10$ | $2-18$ | - |  |  |
| 630 | $0-60-100$ | $160-400$ | $2-10$ | $2-12$ | NZMS3-4-PX400/VAR | 192281 |
| $0-60-100$ | $160-400$ | $2-10$ | $2-12$ | - |  |  |
|  | $0-60-100$ | $252-630$ | $1.5-7$ | $2-8$ | 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

Fixed mounting with box terminals
Part no.

Article no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| 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 |  |

## Compact circuit breakers, switch disconnectors

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

Fixed mounting with screw terminals


System and cable protection, selectivity and generator protection

- IEC/EN 60947-2

|  | High switching capacity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG08321_L 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 |
| $3 *,+7 .$ | *This assortment will be available in 01/2023 |  |  |  |  |  |  |  |



| 250 | $0-60-100$ | $100-250$ | $2-10$ | $2-18$ |  | NZMH3-4-PX250/VAR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 192283 |  |  |  |  |  |  |
| $00-60-100$ | $100-250$ | $2-10$ | $2-18$ | - |  |  |
| 400 | $0-60-100$ | $160-400$ | $2-10$ | $2-12$ | NZMH3-4-PX400/VAR | 192284 |
| 630 | $0-60-100$ | $160-400$ | $2-10$ | $2-12$ | - |  |
|  | $0-60-100$ | $252-630$ | $1.5-7$ | $2-8$ | NZMH3-4-PX630/VAR | 192285 |
| $0-60-100$ | $252-630$ | $1.5-7$ | $2-8$ | - |  |  |



$85 \quad$| 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 

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

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| 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 | $3.3$ | 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 |  |

## Compact circuit breakers, switch disconnectors

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

| Switching <br> capacity <br> 400/415V <br> 50/60 Hz | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Neutral conductor Setting range |  |  |  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Part no. | Article no. |
|  |  | ${ }_{1} \times$ \% of phase conductor \% | Overload releases |  |  |  |  |  |
|  |  |  |  | Short-circuit releases | Short-circuit releases | Earth-fault release |  |  |
|  |  |  |  | delayed | Non-delayed |  |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ |  | $\begin{aligned} & I_{r}=I_{n} x \ldots \\ & A \end{aligned}$ | $\mathrm{I}_{\mathrm{sd}}=\mathrm{I}_{\mathrm{t}} \mathrm{x} \ldots$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} .$. | $I_{G}=I_{n} \times \ldots$ |  |  |
|  |  |  | $4$ | $\frac{\Delta I}{}{ }^{\prime}$ | $\stackrel{1}{\square>}$ |  |  |  |

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 (Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ ) and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

Normal switching capacity


$50 \quad$| 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 |

*This assortment will be available in $01 / 2023$


| 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 |



| 630 | $0-60-100$ | $252-630$ | $2-10$ | $2-18$ | $126-630$ | NZMN4-4-PX630/NAR-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/NAR-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/NAR-TAZ | 189655 |



Strong switching capacity

70 | 40 | $0-60-100$ | $20-40$ | $2-10$ | $2-18$ | $20-40$ | NZMS2-4-PX40/NAR-TZ* | 192232 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 63 | $0-60-100$ | $25-63$ | $2-10$ | $2-18$ | $20-63$ | NZMS2-4-PX63/NAR-TZ* | 192233 |
| 100 | $0-60-100$ | $40-100$ | $2-10$ | $2-18$ | $20-100$ | NZMS2-4-PX100/NAR-TZ | 192234 |
| 160 | $0-60-100$ | $64-160$ | $2-10$ | $2-18$ | $32-160$ | NZMS2-4-PX160/NAR-TZ | 192235 |
| 250 | $0-60-100$ | $100-250$ | $2-10$ | $2-12$ | $50-250$ | NZMS2-4-PX250/VAR-TZ | 192236 |

*This assortment will be available in $01 / 2023$


| 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/NAR-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 

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

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.
Article no.
Std. pack

Order base separately

| 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 |


| - | $\cdots$ | 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 |  |

## Compact circuit breakers, switch disconnectors

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

Fixed mounting with screw terminals

| Switching | Rated | Neutral cond | Setting ra |  |  |  | Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| capacity | current = | $\mathrm{I}_{\mathrm{x}} \times$ \% |  |  |  |  |  |  |
| 400/415V | Rated | of phase | Overload | Short-circuit | Short-circuit | Earth-fault |  |  |
| 50/60 Hz | uninterrupted | conductor | releases | releases | releases | release |  |  |
|  | current |  |  | delayed | Non-delayed |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ |  | $I_{r}=I_{n} x \ldots$ | $I_{\text {sd }}=l_{\text {r }} \times \ldots$ | $I_{i}=I_{n} x \ldots$ | $I_{G}=I_{n} \times \ldots$ |  |  |
| kA | A |  | A |  |  |  |  |  |
|  |  |  | $5$ | $\bigotimes_{1}^{\prime}>$ | $\frac{1}{I>}$ |  |  |  |

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 (Arcflash Reduction Maintenance System ${ }^{\text {TM }}$ ) and zone-selective interlocking ZSI
- NZM2: with zone-selective interlocking ZSI

Normal switching capacity


$85 \quad$| 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 |

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.

Order base separately

| 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 | $. \widehat{i .3}$ | 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 |  |

## Compact circuit breakers, switch disconnectors

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

| Switching capacity 230 V <br> $50 / 60 \mathrm{~Hz}$ | Rated current $=$ Rated uninterrupted current | Setting range |  | Fixed mounting with box terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. | Std. pack |
|  |  | Overload releases | Short-circuit releases Non-delayed |  |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | $\begin{aligned} & I_{r}=I_{n} x \ldots \\ & A \end{aligned}$ | $\mathrm{I}_{\mathrm{i}}$ |  |  |  |
|  |  | $\square$ | $\frac{1}{I>}$ |  |  |  |

System and cable protection

- IEC/EN 60947-2

|  | Economy switching capacity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG06621_LSymbolphoto | 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 |  |



| Rated current = | Short-circuit protection max. fuse gLcharacteristic | Fixed mounting with screw terminals |  | Fixed mounting with box terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Part no. | Article no. | Part no. | Article no. | Std. pack |
| Rated uninterrupted current |  |  |  |  |  |  |
| $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | AgL |  |  |  |  |  |

Switch disconnectors $\quad$ For further terminal types

- IEC/EN 60947-2

|  | 2 switch positions I, 0 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WA_SG168321_L Symbolphoto | 63 | 125 | - |  | PN1-63 | 259140 | 1 Off |
| * - . | 100 | 125 |  |  | PN1-100 | 259141 |  |
|  | 125 | 125 |  |  | PN1-125 | 259142 |  |
|  | 160 | 160 |  |  | PN1-160 | 281235 |  |
| WA_SG168721_L 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 |  |
| WA_SG170521_L Symbolphoto <br> $\cdot i \cdot i$, | 400 | 630 | PN3-400 | 266017 | PN3-400-BT | 110314 |  |
|  | 630 | 630 | PN3-630 | 266018 | PN3-630-BT | 110315 |  |

Compact circuit breakers, switch disconnectors
Switch disconnectors IEC, 3 pole
PN..., N...

Fixed mounting with screw terminals
Part no.
Article no.

Rated current =
Rated uninterrupted current
$I_{n}=I_{U}$
A

Shor-circuit protection max. fuse gl-characteristic

A gL

Switch disconnectors

- IEC/EN 60947-3

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...


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


| SG07821_L Symbolphoto | 160 | 250 | N2-160 | 266008 |
| :---: | :---: | :---: | :---: | :---: |
| \% \% | 200 | 250 | N2-200 | 266009 |
|  | 250 | 250 | N2-250 | 266010 |


| SG09321_L Symbolphoto | 400 | 630 | N3-400 | 266019 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | - |  |  |
|  | 630 | 630 | N3-630 | 266020 |



| 800 | 1600 | $N 4-800$ | 266025 |
| :--- | :--- | :--- | :--- |
| 1000 | 1600 | $N 4-1000$ | 266026 |
| 1250 | 1600 | $N 4-1250$ | 266027 |
| 1600 | 1600 | $N 4-1600$ | 266028 |

# Switch disconnectors IEC, 3 pole 

Fixed mounting with box terminals
Part no.

Plug-in/withdrawable units
Part no.

Std. pack

| N1-63 | 259143 |  | N1-63-SVE | 113729 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N1-100 | 259144 | 7. | N1-100-SVE | 113730 |  |
| N1-125 | 259145 |  | N1-125-SVE | 113731 |  |
| N1-160 | 281236 |  | - |  |  |
| N2-160-BT | 110311 |  | N2-160-SVE | 113733 |  |
| N2-200-BT | 110312 |  | N2-200-SVE | 113734 |  |
| N2-250-BT | 110313 |  | N2-250-SVE | 113735 |  |


| $\mathrm{N} 3-400-\mathrm{BT}$ | 110316 |  |  |
| :--- | :--- | :--- | :--- |
| - | 110317 | $\frac{N 3-400-S V E}{N 3-400-A V E}$ | 168544 |
| $\overline{N 3-630-B T}$ | $\frac{N 3-630-S V E}{N 3-630-A V E}$ | 168545 |  |
|  |  | 110769 |  |



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Fixed mounting with screw terminals
Part no.
Short-circuit protection
Rated current $=$

Rated uninter- max. fuse gLrupted current characteristic
$I_{n}=I_{U}$
A AgL

Fixed mounting with box terminals
Part no.
Article no. Std. pack

Switch disconnectors
For further terminal types

- IEC/EN 60947-3 see accessories


Compact circuit breakers, switch disconnectors
Switch disconnectors IEC, 4 pole
PN...-4, N...-4

|  |  | Fixed mounting with screw terminals |
| :--- | :--- | :--- | :--- |
| Rated current = | Short-circuit protection | Part no. |
| Rated uninterrupted current | max. fuse gl-characteristic |  |
| $I_{n}=I_{u}$ |  |  |
| A | AgL |  |

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...

| 160 | 250 | $N 2-4-160$ | 266014 |
| :--- | :--- | :--- | :--- |
| 200 | 250 | $N 2-4-200$ | 266015 |
| 250 | 250 | $N 2-4-250$ | 266016 |



| SG09921_L Symbolphoto | 400 | 630 | N3-4-400 | 266023 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 630 | - |  |
|  | 630 | 630 | N3-4-630 | 266024 |
|  |  | 630 | - |  |
| +3..... |  |  |  |  |
| SG10521_L Symbolphoto | 800 | 1600 | N4-4-800 | 266029 |
| $\cdots$ | 1000 | 1600 | N4-4-1000 | 266030 |
| * * * | 1250 | 1600 | N4-4-1250 | 266031 |
|  | 1600 | 1600 | N4-4-1600 | 266032 |

Fixed mounting with box terminals
Part no.
Plug-in/withdrawable units
Part no.
Article no.
Std. pack

| $\mathrm{N} 1-4-63$ | 266002 | - |
| :--- | :--- | :--- |
| $\mathrm{N} 1-4-100$ | 266003 | - |
| $\mathrm{N} 1-4-125$ | 266004 | $-\quad$ Off |
| $\mathrm{N} 1-4-160$ | 281254 | - |


| 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 |

Compact circuit breakers, switch disconnectors
Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...A...NA


System and cable protection

Fixed overload releases $I_{r}$
Basic switching capacity

|  | 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 |  |  |
|  | 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 |



| NZMB1－A20－NA | 281559 |  | 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． | DIV0 |
| NZMB1－A40－NA | 272253 |  | CSA File No． | 022086 |
| NZMB1－A50－NA | 272254 |  | CSA Class No． | 1432－01 |
| NZMB1－A63－NA | 272255 |  | Specially designed for NA | Yes |
| NZMB1－A80－NA | 272256 |  | Suitable for | Feeder circuits，branch circuits |
| NZMB1－A100－NA | 272258 |  | Current Limiting Circuit breaker | Yes |
| NZMB1－A125－NA | 281562 |  | Max．Voltage Rating | 480Y／277 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMB2－A20－BT－NA | 107773 | $1 \text { Off }$ | Product Standards <br> UL File No <br> UL Category Control No． <br> CSA File No． <br> CSA Class No． <br> North America Certification <br> Specially designed for NA <br> Suitable for <br> Current Limiting Circuit breaker <br> Max．Voltage Rating <br> Degree of Protection | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking E31593 <br> DIVQ <br> 022086 <br> 1432－01 <br> UL listed，CSA certified <br> Yes <br> Feeder circuits，branch circuits <br> Yes <br> $600 \mathrm{Y} / 347 \mathrm{~V}, 480 \mathrm{~V}$ <br> IEC：IP20；UL／CSA Type：－ |
| NZMB2－A25－BT－NA | 107774 |  |  |  |
| NZMB2－A32－BT－NA | 107775 |  |  |  |
| NZMB2－A40－BT－NA | 107776 |  |  |  |
| NZMB2－A50－BT－NA | 107777 |  |  |  |
| NZMB2－A63－BT－NA | 107778 |  |  |  |
| NZMB2－A80－BT－NA | 107779 |  |  |  |
| NZMB2－A100－BT－NA | 107780 |  |  |  |
| NZMB2－A125－BT－NA | 107781 |  |  |  |
| NZMB2－A160－BT－NA | 107782 |  |  |  |


| 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 | 沯雨 | UL File No． | E31593 |
| NZMN1－A32－NA | 281572 |  | UL Category Control No． | DIV0 |
| NZMN1－A40－NA | 274237 |  | CSA File No． | 022086 |
| NZMN1－A50－NA | 274239 |  | CSA Class No． <br> North America Certification | 1432-01 <br> Ul listed CSA certified |
| NZMN1－A63－NA | 274240 |  | Specially designed for NA | Yes |
| NZMN1－A80－NA | 274241 |  | Suitable for | Feeder circuits，branch circuits |
| NZMN1－A100－NA | 274242 |  | Current Limiting Circuit breaker | Yes |
| NZMN1－A125－NA | 281573 |  | Max．Voltage Rating | 480Y／277 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMN2－A2O－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 | 帮湅 | UL File No． | E31593 |
| NZMN2－A32－BT－NA | 107787 |  | UL Category Control No． | DIV0 |
| 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 Suitable for | Yes Feeder circuits，branch circuits |
| NZMN2－A100－BT－NA | 107792 |  | Current Limiting Circuit breaker | Yes |
| NZMN2－A125－BT－NA | 107793 |  | Max．Voltage Rating | 600Y／347 V， 480 V |
| NZMN2－A160－BT－NA | 107794 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |

Compact circuit breakers, switch disconnectors
Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...A...NA

| Switching capacity |  |  |  | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  | Fixed mounting Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | ${ }_{\text {cua }}$ | $I_{n}=I_{u}$ | $\mathrm{I}_{\text {t }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | $\square$ | $\stackrel{1}{1>}$ |  |  |

System and cable protection

Fixed overload releases $I_{\text {r }}$
High switching capacity

|  | High switching capacity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1230 P 1 C-802 ~ S y m b o l p h o t o ~}$ | 150 | 150 | 65 | - | 20 | 15-20 | 350 A fixed | NZMH2-A20-NA | 269228 |
| $\cdots \cdot \cdots$ |  |  |  |  | 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 |
| 3.5 |  |  |  |  | 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 |

## Fixed mounting with box terminals

Part no．
Article no．Std．pack
Information relevant for export to North America
輩 ${ }^{*}$

| NZMH2－A20－BT－NA | 107797 | 1 Off | Product Standards | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking |
| :---: | :---: | :---: | :---: | :---: |
| NZMH2－A25－BT－NA | 107798 | 䭗咢 | UL File No． | E31593 |
| NZMH2－A32－BT－NA | 107799 |  | UL Category Control No． | DIV0 |
| NZMH2－A40－BT－NA | 107800 |  | CSA File No． | 022086 |
| NZMH2－A50－BT－NA | 107801 |  | CSA Class No． <br> North America Certification | 1432-01 |
| NZMH2－A63－BT－NA | 107802 |  | Specially designed for NA | Yes |
| NZMH2－A80－BT－NA | 107803 |  | Suitable for | Feeder circuits，branch circuits |
| NZMH2－A100－BT－NA | 107804 |  | Current Limiting Circuit breaker | Yes |
| NZMH2－A125－BT－NA | 107805 |  | Max．Voltage Rating | 600Y／347 V， 480 V |
| NZMH2－A160－BT－NA | 107806 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMH2－A200－BT－NA | 107807 |  |  |  |
| NZMH2－A250－BT－NA | 107808 |  |  |  |

Compact circuit breakers, switch disconnectors
Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

| Switching capacity |  |  |  | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  | Fixed mounting Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| $480 \mathrm{Y} / 277 \mathrm{~V}$ | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | 5 | $\stackrel{1}{1>}$ |  |  |

System and cable protection

Fixed overload releases $I_{r}$
Basic switching capacity


|  | 25 | 25 | 18 | - | 15 | 15 A fixed | 350 A fixed | NZMB2-AF15-NA | 269142 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yis |  |  |  |  | 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 |
| 2 |  |  |  |  | 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 |


| 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 | 塈 | UL File No. | E31593 |
| NZMB1-AF30-NA | 281556 |  | UL Category Control No. | DIV0 |
| NZMB1-AF35-NA | 272204 |  | CSA File No. | 022086 |
| NZMB1-AF40-NA | 272205 |  | CSA Class No. <br> North America Certification | 1432-01 <br> UL listed, CSA certified |
| NZMB1-AF45-NA | 272206 |  | Specially designed for NA | Yes |
| NZMB1-AF50-NA | 272207 |  | Suitable for | Feeder circuits, branch circuits |
| NZMB1-AF60-NA | 272208 |  | Current Limiting Circuit breaker | Yes |
| NZMB1-AF70-NA | 272209 |  | Max. Voltage Rating | 480Y/277 V |
| NZMB1-AF80-NA | 272250 |  | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| NZMB1-AF90-NA | 272251 |  |  |  |
| 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. | DIV0 |
| NZMB2-AF30-BT-NA | 107614 |  | CSA File No. | 022086 |
| NZMB2-AF35-BT-NA | 107615 |  | CSA Class No. <br> North America Certification | 1432-01 <br> UL listed, CSA certified |
| NZMB2-AF40-BT-NA | 107616 |  | Specially designed for NA | Yes |
| NZMB2-AF45-BT-NA | 107617 |  | Suitable for | Feeder circuits, branch circuits |
| NZMB2-AF50-BT-NA | 107618 |  | Current Limiting Circuit breaker | Yes |
| NZMB2-AF60-BT-NA | 107619 |  | Max. Voltage Rating | 600Y/347 V, 480 V |
| NZMB2-AF70-BT-NA | 107620 |  | Degree of Protection | IEC: IP20; UL/CSA Type: - |

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 | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| $480 \mathrm{Y} / 277 \mathrm{~V}$ | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | ${ }_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | $\zeta$ | $I>$ |  |  |

System and cable protection

Fixed overload releases $I_{r}$
Normal switching capacity

| SG07321 Symbolphoto | 35 | - | - | - | 20 | 20 A fixed | 350 A fixed | Screw terminals as accessories |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ |  |  |  |  | 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 |  |  |
| 4 |  |  |  |  | 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 |  |  |
|  | 35 | 35 | 25 | - | 15 | 15 A fixed | 350 A fixed | NZMN2-AF15-NA | 269170 |
| i*is |  |  |  |  | 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 |
| 23 |  |  |  |  | 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 |


| 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 | 沯雨 | UL File No． | E31593 |
| NZMN1－AF30－NA | 281567 |  | UL Category Control No． | DIV0 |
| NZMN1－AF35－NA | 274220 |  | CSA File No． | 022086 |
| NZMN1－AF40－NA | 274223 |  | CSA Class No． <br> North America Certification | 1432-01 <br> UL listed，CSA certified |
| NZMN1－AF45－NA | 274230 |  | Specially designed for NA | Yes |
| NZMN1－AF50－NA | 274231 |  | Suitable for | Feeder circuits，branch circuits |
| NZMN1－AF60－NA | 274232 |  | Current Limiting Circuit breaker | Yes |
| NZMN1－AF70－NA | 274233 |  | Max．Voltage Rating | 480Y／277 V |
| NZMN1－AF80－NA | 274234 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMN1－AF90－NA | 274235 |  |  |  |
| 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 | 沯雨 | UL File No． | E31593 |
| NZMN2－AF25－BT－NA | 107633 |  | UL Category Control No． | DIV0 |
| NZMN2－AF30－BT－NA | 107634 |  | CSA File No． | 022086 |
| NZMN2－AF35－BT－NA | 107635 |  | CSA Class No． North America | 1432－01 |
| NZMN2－AF40－BT－NA | 107636 |  | Specially designed for NA | Yes |
| NZMN2－AF45－BT－NA | 107637 |  | Suitable for | Feeder circuits，branch circuits |
| NZMN2－AF50－BT－NA | 107638 |  | Current Limiting Circuit breaker | Yes |
| NZMN2－AF60－BT－NA | 107639 |  | Max．Voltage Rating | 600Y／347 V， 480 V |
| NZMN2－AF70－BT－NA | 107640 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |

Compact circuit breakers, switch disconnectors
Circuit breakers UL/CSA, IEC, thermomagnetic releases, 3 pole
NZM...AF...NA

| Switching capacity |  |  |  | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  | Fixed mounting Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| 480Y/277 V | 480 V | $600 \mathrm{Y} / 347 \mathrm{~V}$ | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $I_{n}=I_{u}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X} \times \ldots$ |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | $\square$ | $\stackrel{1}{I>}$ |  |  |

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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *is ${ }^{\text {c }}$ |  |  |  |  | 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 |


| NZMH2－AF15－BT－NA | 107809 | 1 Off | Product Standards | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking |
| :---: | :---: | :---: | :---: | :---: |
| NZMH2－AF20－BT－NA | 107810 | 良侸 | UL File No． | E31593 |
| NZMH2－AF25－BT－NA | 107811 |  | UL Category Control No． | DIV0 |
| NZMH2－AF30－BT－NA | 107812 |  | CSA File No． | 022086 |
| NZMH2－AF35－BT－NA | 107813 |  | CSA Class No． <br> North America Certification | 1432-01 |
| NZMH2－AF40－BT－NA | 107814 |  | Specially designed for NA | Yes |
| NZMH2－AF45－BT－NA | 107815 |  | Suitable for | Feeder circuits，branch circuits |
| NZMH2－AF50－BT－NA | 107816 |  | Current Limiting Circuit breaker | Yes |
| NZMH2－AF60－BT－NA | 107817 |  | Max．Voltage Rating | 600Y／347 V， 480 V |
| NZMH2－AF70－BT－NA | 107818 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMH2－AF80－BT－NA | 107819 |  |  |  |
| NZMH2－AF90－BT－NA | 107820 |  |  |  |
| NZMH2－AF100－BT－NA | 107821 |  |  |  |
| NZMH2－AF110－BT－NA | 107822 |  |  |  |
| NZMH2－AF125－BT－NA | 107823 |  |  |  |
| NZMH2－AF150－BT－NA | 107824 |  |  |  |
| NZMH2－AF175－BT－NA | 107825 |  |  |  |
| NZMH2－AF200－BT－NA | 107826 |  |  |  |
| NZMH2－AF225－BT－NA | 107827 |  |  |  |
| NZMH2－AF250－BT－NA | 107828 |  |  |  |

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

|  |  | Fixed mounting with screw terminals |  |
| :---: | :---: | :---: | :---: |
| Rated current = | Setting range short-circuit release | Part no. | Article no. |
| Rated uninterrupted current | Non-delayed |  |  |
| $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| A | $\stackrel{1}{\square>}$ |  |  |

## Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- with short-circuit release
- without overload release I

Basic switching capacity


| 1,2 | $7-12$ | Screw terminals |
| :--- | :--- | :--- |
| 2 | $6-11$ |  |
| 3 | $6-11$ |  |
| 5 | $6-11$ |  |
| 8 | $6-11$ | $7-12$ |
| 12 | $7-12$ |  |
| 18 | $8-13$ | $8-14$ |
| 26 | $8-14$ |  |
| 33 | $8-14$ | $8-14$ |
| 40 | $8-14$ | $8-13$ |


| 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-S160-CNA | 269248 |
| 160 | $8-14$ | NZMB2-S200-CNA | 269249 |
| 200 | $8-13$ | NZMB2-S250-CNA | 269250 |
| 250 | $8-10$ |  | 102478 |


| NZMB1－S1，2－CNA | 102906 | 1 Off | Product Standards | UL 489；CSA－C22．2 No．5－09 |
| :---: | :---: | :---: | :---: | :---: |
| NZMB1－S2－CNA | 102907 | 辟哣 | 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 |  | Conditions of Acceptability | Only used in motor circuits in conjunction with suitable |
| NZMB1－S18－CNA | 103022 |  |  | contactor and overload relay．SCCR value applies for |
| NZMB1－S26－CNA | 103023 |  |  | complete combination starter only，consisting of |
| NZMB1－S33－CNA | 103024 |  |  | instantaneous trip circuit breaker，contactor and overload |
| NZMB1－S40－CNA | 281263 |  |  | relay． |
| NZMB1－S50－CNA | 281264 |  | Specially designed for NA | Yes |
| NZMB1－S63－CNA | 281265 |  | Suitable for | Branch circuits，feeder circuits |
| NZMB1－S80－CNA | 281266 |  | Max．Voltage Rating | 480Y／277 V |
| NZMB1－S100－CNA | 281267 |  | Degree of Protection | UL／CSA Type：－ |
| NZMB2－S1，6－BT－CNA | 107651 | 1 Off | Product Standards | UL 489；CSA－C22．2 No．5－09 |
| NZMB2－S2，4－BT－CNA | 107652 | 韭䊉 | 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． <br> North America Certification | UL recognized，CSA certified |
| NZMB2－S18－BT－CNA | 107656 |  | Conditions of Acceptability | Only used in motor circuits in conjunction with suitable |
| NZMB2－S26－BT－CNA | 107657 |  |  | contactor and overload relay．SCCR value applies for |
| NZMB2－S33－BT－CNA | 107658 |  |  | complete combination starter only，consisting of |
| NZMB2－S40－BT－CNA | 107659 |  |  | instantaneous trip circuit breaker，contactor and overload |
| NZMB2－S50－BT－CNA | 107660 |  |  | relay． |
| NZMB2－S63－BT－CNA | 107661 |  | Specially designed for NA | Yes |
| NZMB2－S80－BT－CNA | 107662 |  | Suitable for <br> Current Limiting Circuit breaker | Branch circuits，feeder circuits No |
| NZMB2－S100－BT－CNA | 107663 |  | Max．Voltage Rating | $600 \mathrm{Y} / 347 \mathrm{~V}, 480 \mathrm{~V}$ |
| NZMB2－S125－BT－CNA | 107664 |  | Degree of Protection | UL／CSA Type：－ |

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

| Rated current = <br> Rated uninterrupted current |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Setting range | Part no. | Article no. | Std. pack |
|  | Short-circuit releases Non-delayed |  |  |  |
| $I_{n}=I_{u}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |  |
| A | $\stackrel{1}{\square>}$ |  |  |  |

## Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- With short-circuit releases
- Without overload releases I $I_{\text {r }}$

|  | Normal switching capacity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| WA_SG168221_L Symbolphoto | 1,2 | 7-12 | NZMN1-S1,2-CNA | 103025 | 10 ff |
|  | 2 | 6-11 | NZMN1-S2-CNA | 103026 |  |
|  | 3 | 6-11 | NZMN1-S3-CNA | 103027 |  |
| 1 | 5 | 6-11 | NZMN1-S5-CNA | 103028 |  |
| - | 8 | 6-11 | NZMN1-S8-CNA | 103029 |  |
| -44 | 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 |  |
|  | 1,6 | 8-14 | NZMN2-S1,6-CNA | 269478 | 1 Off |
|  | 2,4 | 8-14 | NZMN2-S2,4-CNA | 269479 | * |
|  | 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 |  |



| 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 | $480 \mathrm{O} / 277$ 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 | $600 \mathrm{Y} / 347 \mathrm{~V}, 480 \mathrm{~V}$ |
| Degree of Protection | UL/CSA Type: - |

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

| Switching capacity |  |  |  | Rated current $=$ <br> Rated uninterrupted current | Setting range |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Std. pack |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ |  | $I_{n}=I_{u}$ | 1 | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |  |
| kA | kA | kA | kA | A | A |  |  |  |  |
|  |  |  |  |  | $\zeta$ | $\underline{ }$ |  |  |  |

System and cable protection
Adjustable overload release $I_{r}$
R.m.s. value measurement and "thermal memory"

Normal switching capacity

|  |  | ( |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 35 | 35 | 25 | - | 40 | 20-40 | 2-12 | NZMN2-AX40-NA | 195224 | 1 Off |
| \%os. |  |  |  |  | 100 | 40-100 | 2-12 | NZMN2-AX100-NA | 195225 | * |
| [ F |  |  |  |  | 160 | 64-160 | 2-12 | NZMN2-AX160-NA | 195226 |  |
|  |  |  |  |  | 250 | 100-250 | 2-12 | NZMN2-AX250-NA | 195227 |  |



| 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 | Yes |
| Max. Voltage Rating | $600 \mathrm{Y} / 347$ 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. | 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 | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

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

| Switching capacity |  |  |  | Rated <br> current $=$ <br> Rated <br> uninter- <br> rupted <br> current | Setting range |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |  |
| $480 \mathrm{Y} / 277 \mathrm{~V}$ | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |  |
| kA | kA | kA | kA | A | A |  |  |  |  |
|  |  |  |  |  | $\zeta$ | $\stackrel{1}{1>}$ |  |  |  |

System and cable protection
Adjustable overload release $I_{r}$
R.m.s. value measurement and "thermal memory"

|  | High switching capacity |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 | 100 | 50 | - | 40 | 20-40 | 2-12 | NZMH2-AX40-NA | 195229 | 1 Off |
| , \%o |  |  |  |  | 100 | 40-100 | 2-12 | NZMH2-AX100-NA | 195228 | 憵 |
| P- |  |  |  |  | 160 | 64-160 | 2-12 | NZMH2-AX160-NA | 195230 |  |
|  |  |  |  |  | 250 | 100-250 | 2-12 | NZMH2-AX250-NA | 195231 |  |



| 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 | Yes |
| Max. Voltage Rating | $600 \mathrm{Y} / 347$ 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. | 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 | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

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 | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $I_{n}=l_{u}$ | It | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$ |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | 5 | $\stackrel{1}{\square}{ }_{1}$ |  |  |

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 | 2-18 | NZMN2-MX90-NA | 192523 |
| $\cdots \cdot$ |  |  |  |  | 140 | 56-140 | 2-18 | NZMN2-MX140-NA | 192524 |
|  |  |  |  |  | 200 | 80-200 | 2-15 | NZMN2-MX200-NA | 192439 |



| NZMN2－MX90－BT－NA | 192440 | 1 Off | Product Standards | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking |
| :---: | :---: | :---: | :---: | :---: |
| NZMN2－MX140－BT－NA | 192441 | 餢洓 | UL File No． | E31593 |
| NZMN2－MX200－BT－NA | 192442 |  | UL CCN | DIV0 |
|  |  |  | CSA File No． | 022086 |
|  |  |  | CSA Class No． | 1432－01 |
|  |  |  | NA Certification | UL Listed，CSA certified |
|  |  |  | Specially designed for NA | Yes，additionally calibrated according to UL 508 |
|  |  |  | Suitable for | Feeder circuits，branch circuits |
|  |  |  | Current Limiting CB | Yes |
|  |  |  | Max．Voltage Rating | 480 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |


| NZMH2－MX90－BT－NA | 192465 | 10 ff | Product Standards | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking |
| :---: | :---: | :---: | :---: | :---: |
| NZMH2－MX140－BT－NA | 192466 |  | UL File No． | E31593 |
| NZMH2－MX200－BT－NA | 192467 |  | UL CCN | DIVO |
|  | ， |  | CSA File No． | 022086 |
|  |  |  | CSA Class No． | 1432－01 |
|  |  |  | NA Certification | UL Listed，CSA certified |
|  |  |  | Specially designed for NA | Yes，additionally calibrated according to UL 508 |
|  |  |  | Suitable for | Feeder circuits，branch circuits |
|  |  |  | Current Limiting CB | Yes |
|  |  |  | Max．Voltage Rating | 480 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| Terminals as accessory |  |  |  |  |
|  |  | 茛 | UL File No． | E31593 |
|  |  |  | UL CCN | DIVO |
|  |  |  | CSA File No． | 022086 |
|  |  |  | CSA Class No． | 1432－01 |
|  |  |  | NA Certification | UL Listed，CSA certified |
|  |  |  | Specially designed for NA | Yes，additionally calibrated according to UL 508 |
|  |  |  | Suitable for | Feeder circuits，branch circuits |
|  |  |  | Current Limiting CB | Yes |
|  |  |  | Max．Voltage Rating | 600 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |

Compact circuit breakers, switch disconnectors
Circuit breakers UL/CSA, IEC, electronic releases, 3 pole
NZM...VX...NA

| Switching capacity |  |  |  | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  | Fixed mounting Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | It | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | $\square$ | $\stackrel{1}{\square}>$ |  |  |

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 |
| $\cdots$ |  |  |  |  | 160 | 64-160 | 2-18 | NZMN2-VX160-NA | 192449 |
| $\square$ |  |  |  |  | 250 | 100-250 | 2-12 | NZMN2-VX250-NA | 192450 |


| SG09021 L Symbolphoto $7 \pi$ | 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 |


| $\overline{1230 P 1 \mathrm{C}-715 \text { Symbolphoto }}$ | 42 | 42 | 35 | 35 | 800 | 320-800 | 2-18 | NZMN4-VX800-NA | 192551 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * |  |  |  |  | 1000 | 400-1000 | 2-18 | NZMN4-VX1000-NA | 192552 |
| -1 4 |  |  |  |  | 1200 | 480-1200 | 2-15 | NZMN4-VX1200-NA | 192553 |

## Fixed mounting with box terminals

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


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 | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | It | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$. |  |  |
| kA | kA | kA | kA | A | A |  |  |  |
|  |  |  |  |  | $\square$ | $\stackrel{I}{I>}$ |  |  |

System and cable protection, selectivity and generator protection
Adjustable overload release Ir
R.m.s. value measurement and "thermal memory"

|  | High switching capacity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| g04315 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 |


| SG09021_L 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 |

## Fixed mounting with box terminals

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

| NZMH2－VX100－BT－NA | 192459 | 10 ff | Product Standards | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking |
| :---: | :---: | :---: | :---: | :---: |
| NZMH2－VX160－BT－NA | 192460 | 憵 ${ }^{\text {＋}}$ | UL File No． | E31593 |
| NZMH2－VX250－BT－NA | 192461 |  | UL Category Control No． | DIVO |
|  |  |  | 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 | $600 \mathrm{Y} / 347 \mathrm{~V}, 480 \mathrm{~V}$ |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| Terminals as accessory |  |  | Product Standards UL File No． | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking 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 | Yes |
|  |  |  | Max．Voltage Rating | 600 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| － |  | $\begin{aligned} & 10 \mathrm{ff} \\ & \hline \text { 憵 } \end{aligned}$ | Product Standards UL File No． | UL 489；CSA－C22．2 No．5－09；IEC 60947－2；CE marking 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 |  |
|  |  |  | Max．Voltage Rating | 600 V |
|  |  |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |

## 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 $=$ <br> Rated uninterrupted current | Setting range |  | Fixed mounting with screw terminals |  | Std. pack |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |  |
| $480 \mathrm{Y} / 277 \mathrm{~V}$ | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |  |
| $\mathrm{I}_{\mathrm{cu}}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | ${ }_{\text {cua }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \times \ldots$ |  |  |  |
| kA | kA | kA | kA | A | A |  |  |  |  |
|  |  |  |  |  | $\square$ | $\stackrel{1}{\square}>$ |  |  |  |

## 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.



|  | High switching capacity |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wa_ren_00318_r Symbolphoto | 100 | 100 | 50 | - | 90 | 36-90 | 2-18 | NZMH2-PMX90-NA | 192583 | 1 Off |  |
| \% \% ${ }^{\text {a }}$ |  |  |  |  | 140 | 56-140 | 2-18 | NZMH2-PMX140-NA | 192584 |  | * |
|  |  |  |  |  | 200 | 80-200 | 2-15 | NZMH2-PMX200-NA | 192585 |  |  |


|  | 100 | 100 | 50 | 50 | 250 | 100-250-2-18 | NZMH3-PMX250-NA | 193353 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 350 | 140-350-2-15 | NZMH3-PMX350-NA | 193354 | * |
|  |  |  |  |  | 450 | 180-450 2-12 | NZMH3-PMX450-NA | 193355 |  |

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. | DIV0 |
| 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. | DIV0 |
| 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. | DIV0 |
| 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. | DIV0 |
| 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: - |

## 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 |  | Overload | Short-circuit |  |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V | uninterrup | dreleases | releases |  |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz | current |  | Non-delayed |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | ${ }_{\text {cui }}$ | $I_{n}=I_{u}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |  |
| kA | kA | kA | kA | A | A |  |  |  |  |
|  |  |  |  |  | $\zeta$ | $\stackrel{1}{\square}>$ |  |  |  |

System and cable protection, selectivity and generator protection For further terminal types see accessories

Fixed overload releases $I_{\text {r }}$
Normal switching capacity

|  | Normal switching capacity |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wa_ren_00318_r Symbolphoto | 35 | 35 | 25 | - | 40 | 20-40 | 2-18 | NZMN2-PX40-NA* | 192572 | 10 ff |
| 3, \%i* |  |  |  |  | 100 | 40-100 | 2-18 | NZMN2-PX100-NA | 192573 | ", \# |
| 4 |  |  |  |  | 160 | 64-160 | 2-18 | NZMN2-PX160-NA | 192574 |  |
| 54 |  |  |  |  | 250 | 100-250 | 2-12 | NZMN2-PX250-NA | 192575 |  |
|  |  |  |  |  | *Thi | rtment will | be avai | e in $01 / 2023$ |  |  |



| wa_ren_01818_r Symbolphoto | 42 | 42 | 35 | 35 | 800 | 320-800 2-18 | NZMN4-PX800-NA | 192592 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ |  |  |  |  | 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: - |


| Switching capacity |  |  |  | Rated current $=$ <br> Rated <br> uninter- <br> rupted <br> current | Setting range |  | Fixed mounting with screw terminals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. |  |  | Article no. | Std. pack |
| SCCR | SCCR | SCCR | SCCR |  | Overload | Short-circuit |  |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  | releases | releases |  |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  | Non-delayed |  |  |  |
| $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ |  | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{\mathrm{u}}$ | $I_{\text {r }}$ | $\mathrm{I}_{\mathrm{i}}=\mathrm{l}_{\mathrm{n}} \mathrm{X}$... |  |  |  |
| kA | kA | kA | kA | A | A |  |  |  |  |
|  |  |  |  |  | $\square$ | $\stackrel{1}{\square}>$ |  |  |  |

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 |
| *ivi* |  |  |  |  | 100 | 40-100 | 2-18 | NZMH2-PX100-NA | 192577 | " |
| 8 |  |  |  |  | 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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 400 | 160-400 2-12 | NZMH3-PX400-NA | 192590 |  |
|  |  |  |  |  | 600 | 240-600-2-8 | NZMH3-PX600-NA | 192591 |  |
| Frow |  |  |  |  |  |  |  |  |  |
| wa_ren_01818_r Symbolphoto | 85 | 85 | 50 | 50 | 800 | 320-800 2-18 | NZMH4-PX800-NA | 192595 | 1 Off |
|  |  |  |  |  | 1000 | 400-10002-18 | NZMH4-PX1000-NA | 192596 | * |
|  |  |  |  |  | 1200 | 480-12002-15 | 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: - |

Compact circuit breakers, switch disconnectors
Circuit breakers UL/CSA, IEC, thermomagnetic releases, 4 pole
NZM...-4-AF...NA


System and cable protection

Fixed overload releases $I_{r}$
Basic switching capacity


2525

| 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 | 35 | 35 | - | - | 60 | 100 | 60 A fixed | 6-10 | NZMN2-4-AF60-NA | 190347 |
| $\cdots$ |  |  |  |  | 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 | - |  |
| *se.ets |  |  |  |  | 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 |


| 1230PIC-801 Symbolphoto | High switching capacity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 150 | 150 | - | - | 60 | 100 | 60 A fixed 6-10 | - |  |
| $\because \cdots$ |  |  |  |  | 70 | 100 | 70 A fixed 6-10 | - |  |
|  |  |  |  |  | 80 | 100 | 80 A fixed 6-10 | - |  |
|  |  |  |  |  | 90 | 100 | 90 A fixed 6-10 | - |  |
| * - ,oti |  |  |  |  | 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 |


| 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． | DIV0 |
| NZMB2－4－AF90－BT－NA | 153383 |  | CSA File No． | － |
| NZMB2－4－AF100－BT－NA | 153384 |  | CSA Class No． | Ul listed |
| NZMB2－4－AF110－BT－NA | 153385 |  | Specially designed for NA | Yes |
| NZMB2－4－AF125－BT－NA | 113011 |  | Suitable for | Feeder circuits，branch circuits |
| NZMB2－4－AF150－BT－NA | 113012 |  | Current Limiting Circuit breaker | Yes |
| NZMB2－4－AF175－BT－NA | 113013 |  | Max．Voltage Rating | 480 V |
| NZMB2－4－AF200－BT－NA | 113014 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMB2－4－AF225－BT－NA | 113015 |  |  |  |
| NZMB2－4－AF250－BT－NA | 113016 |  |  |  |


| 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． | DIVO |
| NZMN2－4－AF90－BT－NA | 153389 |  | CSA File No． | － |
| NZMN2－4－AF100－BT－NA | 153390 |  | CSA Class No． <br> North America Certification | Ul listed |
| NZMN2－4－AF110－BT－NA | 153391 |  | Specially designed for NA | Yes |
| NZMN2－4－AF125－BT－NA | 113005 |  | Suitable for | Feeder circuits，branch circuits |
| NZMN2－4－AF150－BT－NA | 113006 |  | Current Limiting Circuit breaker | Yes |
| NZMN2－4－AF175－BT－NA | 113007 |  | Max．Voltage Rating | 480 V |
| NZMN2－4－AF200－BT－NA | 113008 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMN2－4－AF225－BT－NA | 113009 |  |  |  |
| NZMN2－4－AF250－BT－NA | 113010 |  |  |  |


| 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 | 翌湅 | UL File No． | E31593 |
| NZMH2－4－AF80－BT－NA | 153394 |  | UL Category Control No． | DIVO |
| NZMH2－4－AF90－BT－NA | 153395 |  | CSA File No． | － |
| NZMH2－4－AF100－BT－NA | 153396 |  | CSA Class No． <br> North America Certification | UL listed |
| NZMH2－4－AF110－BT－NA | 153397 |  | Specially designed for NA | Yes |
| NZMH2－4－AF125－BT－NA | 113017 |  | Suitable for | Feeder circuits，branch circuits |
| NZMH2－4－AF150－BT－NA | 113018 |  | Current Limiting Circuit breaker | Yes |
| NZMH2－4－AF175－BT－NA | 113019 |  | Max．Voltage Rating | 480 V |
| NZMH2－4－AF200－BT－NA | 113020 |  | Degree of Protection | IEC：IP20；UL／CSA Type：－ |
| NZMH2－4－AF225－BT－NA | 113021 |  |  |  |

Compact circuit breakers, switch disconnectors
Molded case switches for North America
NS...NA

| Switching capacity |  |  |  | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range | Fixed mounting Part no. | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| SCCR | SCCR | SCCR | SCCR |  | Short-circuit release |  |  |
| 480Y/277 V | 480 V | 600Y/347 V | 600 V |  |  |  |  |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz |  |  |  |  |
| ${ }_{\text {cu }}$ | ${ }_{\text {cu }}$ | $\mathrm{I}_{\text {cu }}$ | ${ }_{\text {cu }}$ | $I_{n}=I_{u}$ | $i_{i}$ |  |  |
| kA | kA | kA | kA | A | 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...


| SG08721_L 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 |


| SG09421_L Symbolphoto -7ー・ | 100 | 100 | 50 | 50 | 400 | 6600 A fixed | NS3-400-NA | 102687 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 600 | 6600 A fixed | NS3-600-NA | 102688 |


| $\overline{1230 P 1 \mathrm{P} \text {-674 Symbolphoto }}$ | 65 | 65 | 42 | 42 | 800 | 25000 A fixed | NS4-800-NA | 102689 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ |  |  |  |  | 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

| For further terminal types see accessories |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NS1-63-NA | 102681 | $10 \mathrm{ff}$ | Product Standards UL File No. | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E148671 |
| NS1-100-NA | 102682 |  |  |  |
| NS1-125-NA | 102683 |  | UL Category Control No. CSA File No. | WJAZ |
|  |  |  |  | 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 |  |
|  |  |  | Max. Voltage Rating | 480Y/277 V |
|  |  |  | Degree of Protection | IEC: IP20; UL/CSA Type: - |
| NS2-160-BT-NA | 107578 |  | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E148671 |
| NS2-200-BT-NA | 107579 |  | UL File No. |  |
| NS2-250-BT-NA | 107610 |  | UL Category Control No. CSA File No | WJAZ <br> 02286 |
|  |  |  | CSA file No. <br> 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 |  |  | Product Standards UL File No. | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking 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 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 Degree of Protection | 600 V |
|  |  |  | Degree of Protection | IEC: IP2O; UL/CSA Type: - |

Compact circuit breakers, switch disconnectors
Circuit breakers IEC for 1000 V AC, 3 pole
NZM... Releases

| Switching <br> capacity <br> 1000 V <br> $50 / 60 \mathrm{~Hz}$ | Rated <br> current $=$ <br> Rated <br> uninterrupted <br> current | Setting range |  | Fixed mounting |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. | Std. pack |
|  |  | releases | releases <br> Non-delayed |  |  |  |
| $\begin{aligned} & \mathrm{I}_{\mathrm{cu}} \\ & \mathrm{kA} \end{aligned}$ | $\begin{aligned} & I_{n}=I_{u} \\ & A \end{aligned}$ | A | $1_{\text {sd }}=1 \times$ |  |  |  |
|  |  | $4$ | $\stackrel{1}{1>}$ |  |  |  |

System and cable protection

|  | Thermomagnetic releases |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG08021_L Symbolphoto | 10 | 20 | 15-20 | 350 A fixed | NZMH2-A20-S1 | 290355 | 1 Off |
| ${ }^{\prime \prime}{ }^{\text {i }}$ " |  | 25 | 20-25 | 350 A fixed | NZMH2-A25-S1 | 290356 |  |
| $\\|^{\square}$ |  | 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 |  |
| 3:3. |  | 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 | 240-300 | 5-8.3 | NZMH2-A300-S1 | 107577 |  |

Compact circuit breakers, switch disconnectors
Switch disconnectors UL/CSA, IEC for 1000 V DC, $1 / 2$ pole

| Rated current = | Fixed mounting |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Short-circuit protection | Part no. | Article no. | Std. pack |
| Rated uninterrupted current | Rated operating voltage | Rated short-time withstand current | max. fuse gR characteristic |  |  |  |
| $I_{n}$ | $U_{\text {e }}$ | $\begin{aligned} & I_{\text {cw }}(\mathrm{N} 2 / \mathrm{N} 3: \mathrm{t}=1 \mathrm{~s}, \\ & \mathrm{N} 4: \mathrm{t}=0.1 \mathrm{~s}) \end{aligned}$ |  |  |  |  |
| A | V | kA | A |  |  |  |

Switch disconnectors for 1000 V DC

| 1230PIC-672 Symbolphoto | 320 | 1000 | 6.6 | 2x250 | N3-4-320-S1-DC | 127734 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -1.\%! | 400 | 1000 | 6.6 | 2x250 | N3-4-400-S1-DC | 142267 |  |
|  | 500 | 1000 | 6.6 | $2 \times 250$ | N3-4-500-S1-DC | 142268 |  |
|  | 550 | 1000 | 6.6 | 2x250 | N3-4-550-S1-DC | 168567 |  |


| $\overline{1230 \mathrm{PlC} \text {-673 Symbolphoto }}$ | 800 | 1000 | 34 | - | N4-4-800-S1-DC | 119890 | 10 ff |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . . . | 1000 | 1000 | 34 | - | N4-4-1000-S1-DC | 119891 |  |
|  | 1250 | 1000 | 34 | - | N4-4-1250-S1-DC | 119886 |  |
| 0 | 1400 | 1000 | 34 | - | N4-4-1400-S1-DC | 119887 |  |
| $\ldots$ | 1600 | 1000 | 34 | - | N4-4-1600-S1-DC | 152552 |  |


| 1230 PIC-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 |  |
| 0 | 1200 | 1000 | 34 | - | N4-4-1200-S1-PV-NA | 179327 |  |

Switch disconnectors UL/CSA, IEC for 1500 V DC, $1 / 2$ pole N...DC

| Rated current = | Fixed mounting |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Short-circuit protection | Part no. | Article no. | Std. pack |
| Rated uninterrupted current | Rated operating voltage | Rated short-time withstand current | max. fuse gR characteristic |  |  |  |
| $I_{n}$ | $U_{\text {e }}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{cw}}(\mathrm{~N} 2 / \mathrm{N} 3: \mathrm{t}=1 \mathrm{~s}, \\ & \mathrm{N} 4: \mathrm{t}=0.1 \mathrm{~s}) \end{aligned}$ |  |  |  |  |
| A | V | kA | A |  |  |  |

Switch disconnectors for 1500 V DC

| ${ }^{123081 C-797 \text { Symbolphoto }}$ | 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 |  |


| $\overline{1230 P 1 C-672 ~ S y m b o l p h o t o ~}$ | 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 |  |


| $\overline{1230 \text { PIC-673 Symbolphoto }}$ | 800 | 1500 | 34 | - | N4-4-800-S15-DC | 166413 | 10 ff |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ | 1000 | 1500 | 34 | - | N4-4-1000-S15-DC | 166414 |  |
|  | 1250 | 1500 | 34 | - | N4-4-1250-S15-DC | 166415 |  |
| 0 | 1400 | 1500 | 34 | - | N4-4-1400-S15-DC | 166416 |  |
| $\ldots$ | 1600 | 1500 | 34 | - | N4-4-1600-S15-DC | 166417 |  |


| ${ }^{1230 \mathrm{PlC} \text { C-673 Symbolphoto }}$ | 800 | 1500 | 34 | - | N4-4-800-S15-PV-NA | 179328 | 10 ff |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . | 1000 | 1500 | 34 | - | N4-4-1000-S15-PV-NA | 179329 |  |
|  | 1100 | 1500 | 34 | - | N4-4-1100-S15-PV-NA | 179592 |  |
| 0 | 1200 | 1500 | 34 | - | N4-4-1200-S15-PV-NA | 179330 |  |

# Compact circuit breakers, switch disconnectors <br> Circuit breakers EC for 500/750 V DC, $1 / 2$ pole 

| Switching capacity 1000 V | Rated current $=$ | Setting range |  | Fixed mounting |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Part no. | Article no. | Std. pack |
|  |  |  |  |  |  |  |
| 1000 V <br> 50/60 Hz | Rated uninterrupted | Overload releases | Short-circuit releases |  |  |  |
| ${ }_{\text {cu }}$ | $\mathrm{I}_{\mathrm{n}}=\mathrm{I}_{u}$ | $\mathrm{I}_{\mathrm{r}}$ | $1_{\text {sd }}=1, x$ |  |  |  |
|  |  | $\xrightarrow{-1}$ | $\stackrel{1}{1>}$ |  |  |  |

System and cable protection




## Compact circuit breakers, switch disconnectors

Photovoltaic - Switch disconnectors up to 1500 V


## 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-... $\geq 1250 \mathrm{~A}$ at $65^{\circ} \mathrm{C}$ 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).



| $238\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N2-4-...-S1(-S15)-DC |  | NZM2-4-XKVI2P | 168586 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $180\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| 250 (40 $\left.{ }^{\circ} \mathrm{C}\right)$ |  | IPOO | N2-4-...-S1(-S15)-DC |  | NZM2-4-XKVI2P-K | 168587 |  |
| 213 (65 $\left.{ }^{\circ} \mathrm{C}\right)$ | cooling unit |  |  |  |  |  |
| $400\left(40^{\circ} \mathrm{C}\right.$, $)$ | IP2X | N3-4-...-S1(-S15)-DC |  | NZM3-4-XKV2POU | 168589 |  |
| $338\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| $550\left(40^{\circ} \mathrm{C}\right)$ | IP00 | N3-4-...-S1(-S15)-DC | Incl. | NZM3-4-XKVI2P-K | 142270 |  |
| $501\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |
| $1400 \mathrm{~A}\left(40^{\circ} \mathrm{C}\right)$ | IP00 | N4-4-800(1000)(1250)(1400)-S1(S15)-DC |  | NZM4-4-XKVI2P | 180020 |  |
| 1260A ( $65^{\circ} \mathrm{C}$ ) |  | N4-4-...-S1(S15)-PV-NA |  |  |  |  |
| $1600\left(40^{\circ} \mathrm{C}\right)$ | IP00 | N4-4-...-S1(-S15)-DC | Incl. | NZM4-4-XKV2P-K | 152553 |  |
| 1500 (65 ${ }^{\circ}$ ) |  | N4-4-...-S1(-S15)-PV-NA | cooling unit |  |  |  |

Photovoltaic - Switch disconnectors up to 1500 V
Bridge kits

| Rated <br> current $=$ | Protecton For use with <br> class | Notes | Part no. | Article no. |
| :--- | :--- | :--- | :--- | :--- |
| 2 pole |  |  |  |  |
| l+and -1 |  |  |  |  |

## 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

| 1230plc--1138, 1230PIC-1311 Symbolphoto | Incl. cover |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $200\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N2-4-...-S1(-S15)-DC |  | NZM2-4-XKV2POU | 144070 | 1 Off |
|  | $160\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
|  | $225\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N2-4-...-S1(-S15)-DC | Incl. | NZM2-4-XKV2POU-K | 168588 |  |
|  | 170 (65 $\left.{ }^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |
|  | $400\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N3-4-...S1(S15)-DC |  | NZM3-4-XKV2POU | 168589 |  |
|  | $388\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
|  | 517 (40 $\left.{ }^{\circ} \mathrm{C}\right)$ | IP2X | N3-4-...-S1(-S15)-DC | Incl. | NZM3-4-XKV2POU-K | 168590 |  |
|  | $435\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooli |  |  |  |



| $213\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N2-4-...-S1(-S15)-DC |  | NZM2-4-XKVI2POU | 170118 | 1 Off |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $160\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| $238\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N2-4-...-S1(-S15)-DC | Incl. | NZM2-4-XKVI2POU-K | 170119 |  |
| $180\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |
| $501\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N3-4-...-S1(-S15)-DC |  | NZM3-4-XKVI2POU | 170120 |  |
| $418\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| $534\left(40^{\circ} \mathrm{C}\right)$ | IP00 | N3-4-...-S1(-S15)-DC | Incl. | NZM3-4-XKVI2POU-K | 170121 |  |
| $451\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |

Compact circuit breakers, switch disconnectors
Photovoltaic - Switch disconnectors up to 1500 V
Bridge kits

| Rated | Protection For use with | Notex | Part no. |
| :--- | :--- | :--- | :--- | Article no. Std. pack

current $=$
Protection For use with
lass

1 pole
(+ or -)
on one side
$I_{n}$
A

Notex
Part no
Article no.
Std. pack

## 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 outgoer at bottom or top, according to the switching diagrams

| $\overline{12301 P C-1313,1230 P I C-1310 ~ S y m b o l p h o t o ~}$ | Incl. cover |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ * | $200\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N2-4-160(200)-S1 (-S15)-DC |  | NZM2-4-XKV1P | 168591 | 1 Off |
|  | $160\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| 72 | $225\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N2-4-...-S1(-S15)-DC |  | NZM2-4-XKV1P-K | 168592 |  |
|  | $170\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |
| $0 * *$ | $400\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N3-4-320(400)-S1(-S15)-DC |  | NZM3-4-XKV1P | 168593 |  |
|  | $338\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| $\square-2$ | $517\left(40^{\circ} \mathrm{C}\right)$ | IP2X | N3-4-400(500)-S1(-S15)-DC | Incl. | NZM3-4-XKV1P-K | 168594 |  |
|  | $435\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |
|  | 1274 (40 $\left.{ }^{\circ} \mathrm{C}\right)$ | IP2X | N4-4-...-S1(-S15)-DC |  | NZM4-4-XKV1P | 119889 |  |
|  | $1138\left(65^{\circ} \mathrm{C}\right)$ |  | N4-4-800(1000)(1100)-S1-S |  |  |  |  |



| Incl. insulation plates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 213 (400) | IPOO | N2-4-...-S1(-S15)-DC |  | NZM2-4-XKVI1P | 168595 | 1 Off |
| $160\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| $238\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N2-4-200(250)-S1(-S15)-DC | Incl | NZM2-4-XKVI1P-K | 168596 |  |
| $180\left(65^{\circ} \mathrm{C}\right)$ |  |  | cooling unit |  |  |  |
| $501\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N3-4-...-S1(S15)-DC |  | NZM3-4-XKVI1P | 168597 |  |
| $418\left(65^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |
| $534\left(40^{\circ} \mathrm{C}\right)$ | IPOO | N3-4-...-S1(S15)-DC | Incl. | NZM3-4-XKVI1P-K | 168598 |  |
| $451\left(65^{\circ} \mathrm{C}\right) \quad$ cooling unit |  |  |  |  |  |  |
| 1260 (40 ${ }^{\circ} \mathrm{C}$ ) | IPOO | N4-4-(800)(1000)(1250)(1400)-S1(-S15)-DC |  | NZM4-4-XKVIIP | 180019 |  |
| $1138\left(65^{\circ} \mathrm{C}\right)$ |  | N4-4-...-S1(-S15)-PV-NA |  |  |  |  |
| 1552 (40 ${ }^{\circ} \mathrm{C}$ ) | IPOO | N4-4-...-S1(-S15)-DC | Incl. | NZM4-4-XKV1P-K | 179331 |  |
| $1448\left(65^{\circ} \mathrm{C}\right)$ |  | N4-4-...-S1(-S15)-PV-NA | cooling unit |  |  |  |

Compact circuit breakers, switch disconnectors

## Terminals

NZM1

|  | Max. cable connection area | Number of poles | For use <br> with | Terminal capacity <br> Cable <br> Cable lugs | Terminal capacity $\mathrm{mm}^{2}$ | AWG/kcmil | Terminal capacity <br> Copper strip No. of discs x width $\times$ disc thickness mm | Copper bar <br> Width x <br> thickness <br> mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Box terminal <br> Standard equipment |  |  |  |  |  |  |  |
|  |  | 3 pole | NZM1, <br> PN1, <br> N(S)1 | Copper cable | $\begin{aligned} & 1 \times 10-70 \\ & 2 \times 6-25 \\ & \text { 1) } \end{aligned}$ | $1 \times 12-2 / 0$ | $\geqq 2 \times 9 \times 0.8$ | - |
|  |  | 4 pole | NZM1-4, PN1-4, N1-4 | Copper cable | $\begin{aligned} & 1 \times 10-70 \\ & 2 \times 6-25 \\ & \text { 1) } \end{aligned}$ | $1 \times 12-2 / 0$ | $\geqq 2 \times 9 \times 0.8$ | - |




| NZM1-1-XKS | 152620 | $1 \text { set }$ | 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 | $1 \text { set }$ | 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 <br> UL File No. <br> UL CCN <br> CSA File No. <br> CSA Class No. <br> NA Certification <br> Suitable for | ```UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking E31593 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main component information``` |

Compact circuit breakers, switch disconnectors
Terminals
NZM1
Max. cable

| Number of | For use |
| :--- | :--- |
| poles | with |

Terminal capacity

| Cable <br> Cable lugs | Terminal capacity | AWG/kcmil | Copper strip No. of | Copper bar |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | discs x width | Width x |
|  |  |  | $\times$ disc thickness | thickness |
|  | $\mathrm{mm}^{2}$ |  | mm |  |



|  | Rear terminal bolts Not UL/CSA approved |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | 3 pole | $\begin{aligned} & \text { NZM1, } \\ & \text { PN1, } \\ & \text { N1 } \end{aligned}$ | Copper cable lugs | e | $\begin{aligned} & 1 \times 10-70 \\ & 2 \times 6-25 \end{aligned}$ | - | min. $12 \times 5$ max. $16 \times 5$ |
|  |  |  |  | Aluminium cable lugs |  | $\begin{aligned} & 1 \times 10-35 \\ & 2 \times 10-35 \\ & \text { 1) } \end{aligned}$ |  |  |
|  | - | 4 pole | NZM1-4, PN1-4, | Copper cable lugs |  | $\begin{aligned} & 1 \times 10-70 \\ & 2 \times 6-25 \end{aligned}$ | - | min. $12 \times 5$ <br> max. $16 \times 5$ |
|  |  |  | N1-4 | Aluminium cable lugs |  | $\begin{aligned} & 1 \times 10-35 \\ & 2 \times 10-35 \\ & \text { 1) } \end{aligned}$ |  |  |


|  | Control cable terminals |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{2309 P C .-729 ~ S y m b o l p h o r o ~}$ | 3 and | NZM1(-4), | Screw | $1 \times 0.75-2.5$ | 1×18-14 | - | - |
| (2) | 4 pole | PN1(-4), | terminals | $2 \times 0.75-1.5$ | 2×18-16 |  |  |
| - ${ }^{\text {a }}$ |  |  |  |  |  |  |  |


| c.774 Smmolp | 3 and | NZM1-4), | Box | $1 \times 0.75-2.5$ | 1 $\times 18$-14 | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 pole | PN1(-4), N(S)1 $1-$ | terminals | $2 \times 0.75-1.5$ | $2 \times 18$-16 |  |  |
| 123 |  |  |  |  |  |  |  |


| Part no. | Article no. | Std. pack | Notes |  | Information relevant for export to North America |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Article no. |  |  |  |  |  |
| when ordered separately |  |  |  |  |  |


| NZM1-4-XKAM $144114 \quad 1$ set |
| :--- | :--- | :--- |

NZM1-XKR $266734 \quad 1$ set Contains parts for a terminal located at top or

| NZM1-XSTS | 260150 | $1 \text { set }$ | Contains for two terminal locations located at top or bottom for 3 or 4 pole circuit breakers. | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Included as standard with tunnel terminal. | UL File No. | E140305 |
|  |  |  | Degree of protection IP1X | UL CCN | DIHS |
|  |  |  | NZM-XSTK cannot be combined with NZM1(-4)-XIPK | CSA File No. | 022086 |
|  |  |  | IP2X protection against contact with a finger. | CSA Class No. | 1437-01 |
|  |  |  | Height or thickness of connections: | NA Certification | UL Listed, CSA certified |
| NZM-XSTK | 266739 |  | NZM-XSTK $=2 \mathrm{~mm}$ | Suitable for | Refer to main component information |
|  |  |  | NZM-XSTS $=2 \mathrm{~mm}$ |  |  |

Compact circuit breakers, switch disconnectors
Terminals NZM1

Max. cable
connection area

## Number of

poles

## For use

 withConnection

> Terminal capacity

AWG/kcmil
$\mathrm{mm}^{2}$

Terminal covers knockout
Not UL/CSA approved. For box terminal


Not UL/CSA approved
3 pole NZM1,

PN1,
N1


| 4 pole | NZM1-4, | - | - | - |
| :--- | :--- | :--- | :--- | :--- |
|  | PN1-4, |  |  |  |
|  | N1-4 |  |  |  |


|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | 1 pole | NZM1-1 | - | - | - |
| $\overline{12301 \mathrm{P} \text {-686 Symbolphoto }}$ | - | 3 pole | NZM1, | - | - | - |
|  |  |  | PN1, <br> N1 |  |  |  |
| $\overline{1230 P 1 \mathrm{P} \text {-686 Symbolphoto }}$ | - | 4 pole | NZM1-4, | - | - | - |
| 5 |  |  | PN1-4, <br> N1-4 |  |  |  |


|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Shase isolators |  |  |  |



| NZM1-XKSFA | 100780 | 1 Off | Contains parts for a terminal located at top or <br> nZttom for 3 or 4 pole circuit breakers. <br> Enhanced contact protection (simplified finger <br> protection). <br> Cannot be combined with NZM-XSTK control <br> circuit terminal. |  |
| :--- | :--- | :--- | :--- | :--- |
| NZM1-4-XKSFA | 112632 | 50 Off |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NZM1-1-XKSA | 152549 | 1 Off | Contains parts for a terminal located at top or <br> bottom for 1 pole switches. <br> Contact protection against direct contact where cable <br> lugs, bars or tunnel terminals are used. <br> When using insulated conductor material to <br> degree of protection IP1X. |  |


| NZM1-XKP | 119862 | 1 set | Contains parts, including insulating plate for | UL/CSA certification not required |
| :---: | :---: | :---: | :---: | :---: |
|  |  | * | 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 $\mathrm{U}_{\mathrm{e}}$ von 415V AC when |  |
|  |  |  | minimum distances are not maintained. |  |

NZM1-4-XKP 119863 1 set

Compact circuit breakers, switch disconnectors
Terminals
NZM1

| Max. cable | Number of | For use |  |  |
| :--- | :--- | :--- | :--- | :--- |
| connection area | poles | with | Connection | Terminal <br> capacity |

$\qquad$
IP2X Protection against contact with finger
For box terminal




| $\overline{1230 P \mathrm{Pl} \text { - }-20 \text { Symbolphoto }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 4 pole | PN1-4, <br> N1-4 | - | - | - |


| NZM1-1-XIPK | 152551 | 1 set | Contains parts for a terminal located at top or bottom for 1 pole switches. <br> Enhanced contact protection to IP2X. <br> 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 |  | - |

$\left.\begin{array}{llllll}\hline \text { NZM1-1-XIPA } & 152550 & 1 \text { set } & \begin{array}{l}\text { Contains parts for a terminal located at top or } \\ \text { bottom for } 1 \text { pole switches. Enhanced contact } \\ \text { protection to IP2X. }\end{array} & \text { UL/CSA certification not required }\end{array}\right]$
$\overline{\text { NZM1-4-XIPA }} 266749 \quad 1$ set

## 4.2 <br> Compact circuit breakers, switch disconnectors

Terminals

## NZM2



| 4 pole | NZM2-4, | Copper cable | $1 \times 10-185$ | $1 \times 12-350$ | $\geqq 2 \times 16 \times 0.8$ | $\geqq 16 \times 5$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | PN2-4, | lugs | $2 \times 4-70$ |  |  |  |
|  | N2-4 | Aluminium cable $1 \times 10-50$ |  |  |  |  |
|  |  | lugs | $2 \times 10-50$ |  |  |  |
|  |  |  |  |  |  |  |

Article no. for
ordering with basic device

Article no. when
ordering separately

憵


| +NZM2-4-250-XKCO | 266752 | NZM2-4-250-XKC | 266756 |
| :--- | :--- | :--- | :--- |
| +NZM2-4-250-XKCU | 266754 | - |  |


| - | NZM2-XKS | 260030 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. <br> Standard connection with all NZM2, PN2 and N2 circuit breakers. <br> Conversion kit for circuit breaker with box terminal. <br> Use special cable lugs narrow version $\rightarrow 059775$ <br> Fitted within the switch housing. | Product Standards <br> UL File No. <br> UL CCN <br> CSA File No. <br> CSA Class No. <br> NA Certification <br> Suitable for | UL 489; CSA-C22. 2 <br> No. 5-09; IEC 60947; <br> CE marking <br> E31593 <br> DIHS <br> 022086 <br> 1432-01 <br> UL Listed, CSA certified <br> 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. $\mathrm{U}_{\mathrm{e}} \geqq 525 \mathrm{~V} \text { AC: }$ <br> With all other connection materials, e.g. cables and strips, use cover NZM2(-4)-XKSA. | - |  |

## 4.2 <br> Compact circuit breakers, switch disconnectors

Terminals

## NZM2

Max. cable

| Number of | For use |
| :--- | :--- |
| poles | with |

Terminal capacity
Cable

Terminal capacity

| Terminal | AWG/kcmil | Copper strip No. of |
| :--- | :--- | :--- | | Copper bar |
| :--- |
| capacity |
|  |
|  |
| $\mathrm{mm}^{2}$ |$\quad$| discs x width |
| :--- |
| $\times$ disc thickness |$\quad$| Width x |
| :--- |
| thickness |
| mm |



|  | Rear terminal bolts <br> Not UL/CSA approved <br> When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1230PIC-1378 Symbolphoto | - | 3 pole | NZM2, <br> PN2, <br> N(S)2 | Copper cable lugs <br> Aluminium cable lugs | $\begin{aligned} & 1 \times 10-185 \\ & 2 \times 4-70 \\ & 1 \times 10-50 \\ & 2 \times 10-50 \end{aligned}$ | - | $\begin{aligned} & \geqq 2 \times 16 \times 0.8 \\ & \leqq 6 \times 24 \times 0.5 \end{aligned}$ | $\begin{aligned} & \geqq 16 \times 5 \\ & \leqq 20 \times 5 \end{aligned}$ |
| 1230PIC-1376 Symbolphoto |  | 4 pole |  | Copper cable lugs <br> Aluminium cable lugs | $\begin{aligned} & 1 \times 10-185 \\ & 2 \times 4-70 \\ & 1 \times 10-50 \\ & 2 \times 10-50 \end{aligned}$ | - | $\begin{aligned} & \geqq 2 \times 16 \times 0.8 \\ & \leqq 6 \times 24 \times 0.5 \end{aligned}$ | $\begin{aligned} & \geqq 16 \times 5 \\ & \leqq 20 \times 5 \end{aligned}$ |
|  | Control cable terminals |  |  |  |  |  |  |  |
| 1230PIC-729 Symbolphoto | 3 and <br> 4 pole | $\begin{aligned} & \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | Screw terminals | $\begin{aligned} & 1 \times 0.75-2.5 \\ & 2 \times 0.75-1.5 \end{aligned}$ | $\begin{aligned} & 1 \times 18-14 \\ & 2 \times 18-16 \end{aligned}$ | - |  |  |



# Compact circuit breakers, switch disconnectors 

Terminals
4.2

| Part no. | Article no. | Std. pack | Notes |  | Information relevant for export to North America |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Article no. |  |  |  |  |  |
| when ordered separately |  |  |  |  |  |


| NZM2-4-XKAM 144115 | 1 set |
| :--- | :--- | :--- |

NZM2-4-XKA 271458

| +NZM2-XKRO | 266763 | NZM2-XKR | 266765 | 1 set | Part no. suffix and part no.contain parts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +NZM2-XKRU | 266764 | - |  |  | for a circuit breaker side at top or bottom for 3 or 4 pole switches. |  |  |
|  |  |  |  |  | $0=$ for fitting at the top |  |  |
|  |  |  |  |  | $\mathrm{U}=$ for fitting at the bottom |  |  |


| + +NZM2-4-XKRO | 266766 | NZM2-4-XKR | 266768 |
| :--- | :--- | :--- | :--- |
| + NZM2-4-XKRU | 266767 | - |  |


| NZM2-XSTS | 260156 | $1 \text { set }$ | Contains parts for two terminal locations located at top or bottom for 3 or 4 pole switches. | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Included as standard with tunnel terminal | UL File No. | E140305 |
|  |  |  | Degree of protection IP1X | UL CCN | DIHS |
|  |  |  | NZM-XSTK cannot be combined with IP2X protection | CSA File No. | 022086 |
|  |  |  | against contact with a finger and NZM11-4)-XIPK. | CSA Class No. | 1437-01 |
|  |  |  | Height or thickness of connections: | NA Certification | UL Listed, CSA certified |
| NZM-XSTK | 266739 | 1 set | NZM-XSTK $=2 \mathrm{~mm}$ | Suitable for | Refer to main component information |
|  |  |  | NZM-XSTS $=2 \mathrm{~mm}$ |  |  |

Compact circuit breakers, switch disconnectors
Terminals
NZM2

|  | Number of poles | $\begin{aligned} & \text { For use } \\ & \text { with } \end{aligned}$ | Terminal capacit <br> Connection | Terminal capacity <br> $\mathrm{mm}^{2}$ | AWG/kmil | Part no. suffix <br> Article no. for ordering with basic device | Article no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cable lug cover |  |  |  |  |  |  |
|  | 3 pole | $\begin{aligned} & \hline \text { NZM2, } \\ & \text { PN2, } \\ & \text { N(S\|2 } \end{aligned}$ | Copper cable lugs <br> Aluminium c lugs | $\begin{aligned} & 1 \times 10-185 \\ & 2 \times 4-70 \\ &-1 \times 10-50 \\ & 2 \times 10-50 \end{aligned}$ | - | - |  |
|  | 4 pole | $\begin{aligned} & \text { NZM2-4, } \\ & \text { PN2-4, } \\ & \text { N2-4 } \end{aligned}$ | Copper cable lugs <br> Aluminium c lugs | $\begin{aligned} 1 & \times 10-185 \\ 2 & \times 4-70 \\ e 1 & \times 10-50 \\ 2 & \times 10-50 \end{aligned}$ | - | - |  |
|  | Cover |  |  |  |  |  |  |
|  | 3 pole | $\begin{aligned} & \text { NZM2, } \\ & \text { PN2, } \\ & \text { N(S\|2 } \end{aligned}$ | - | - | - | - |  |
| sovor18 Smmbophoto | 4 pole | NZM2-4, PN2-4, N2-4 | - | - | - | - |  |
|  | Phase isolators |  |  |  |  |  |  |
|  | 3 pole | $\begin{aligned} & \hline \text { NZM2, } \\ & \text { PN2, } \\ & \text { N(S\|2 } \end{aligned}$ | - | - | - | - |  |
|  | 4 pole | NZM2-4, PN2-4, N2-4 | - | - | - | - |  |
|  | Terminal covers, knockout |  |  |  |  |  |  |
|  | 3 pole | $\begin{aligned} & \text { NZM2, } \\ & \text { PN2, } \\ & \text { N(S\|2 } \end{aligned}$ | - | - | - | $\frac{+ \text { +NZM2-XKSFAO }}{+ \text { NZM2-XKSFAU }}$ | $\begin{array}{\|l\|} \hline 108269 \\ \hline 108270 \end{array}$ |
|  | 4 pole | $\begin{aligned} & \text { NZM2-4, } \\ & \text { PN2-4, } \\ & \text { N2-4 } \end{aligned}$ | - | - | - | $\frac{+ \text { +NZM2-4-XKSFAO }}{\text { +NZM2-4-XKSFAU }}$ | $\begin{array}{\|l\|} \hline 108271 \\ \hline 108272 \\ \hline \end{array}$ |


| NZM2-XKSAE | 119868 | 1 set | Contains parts for a terminal located at top or <br> bottom for 3 or 4 pole switches. <br> Contact protection where cable lugs are used on <br> screw terminals. <br> When using insulated conductor material, degree <br> of protection IP2X. |  |
| :--- | :--- | :--- | :--- | :--- |

NZM2-4-XKSAE $119870 \quad 1$ set

| NZM2-XKSA | 260038 | 1 Off | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches <br> Contact protection where cable lugs, bars or tunnel terminals are used. <br> Included in set with tunnel terminals. <br> When using insulated conductor material, degree of protection IP1X | Product Standards <br> UL File No. <br> UL CCN <br> CSA File No. CSA Class No. NA Certification Suitable for | UL 489; CSA-C22. 2 No. 5-09; IEC 60947; <br> CE marking <br> E140305 <br> DIHS <br> 022086 <br> 1432-01 <br> UL Listed, CSA certified <br> Refer to main component information |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZM2-4-XKSA | 266770 | 1 Off |  | - |  |



|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| NZM2-XKSFA 104640 | 1 set | Contains parts for a terminal located at top or | UL/CSA certification not required |
|  |  |  |  |
|  |  |  |  |
|  |  | Entom for 3 pole switches. |  |
| (simplified finger protection). |  |  |  |


| NZM2-4-XKSFA | $104641 \quad 10 f f$ |
| :--- | :--- |

## 4.2 <br> Compact circuit breakers, switch disconnectors

Terminals NZM2

| Number of <br> poles | For use <br> with | Terminal capacity |  | Part no. suffix |
| :--- | :--- | :--- | :--- | :--- |$\quad$ Article no.

IP2X Protection against contact with finger
For box terminal
3 pole NZM2

PN2,
N(S)2

N2-4

For covers NZM2(-4)-XKSA or NZM2(-4) or NZM2 ...(C)NA and N(S)2 ..NA
3 pole NZM2.
PN2,
$\mathrm{N}(\mathrm{S}) 2$


4 pole NZM2-4,
PN2-4,
N2-4


|  | Mounting adapter plate |  |
| :---: | :---: | :---: |
| ${ }^{1230 \mathrm{Pl} \text { C-316 Symbolphoto }}$ | 3 pole | NZM2 |
|  |  | PN2 |
| $9 \quad \rightarrow$ |  | N2 |
| 0 P |  |  |
| . |  |  |


| NZM2-XIPK | 266773 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 switches. <br> Enhanced contact protection to IP2X. <br> Protection on grasping terminal chamber when connecting cables in box terminals. <br> With two conductors maximum cross-section $25 \mathrm{~mm}^{2}$ 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. <br> Enhanced contact protection to IP2X. <br> When fitting to NZM2-...-(C)NA or NZM...-NA: <br> With 2 conductors maximum cross-section $25 \mathrm{~mm}^{2}$ or AWG4. | UL/CSA certification not required |
| :---: | :---: | :---: | :---: | :---: |


| KS150-NZM7 | 059777 | 30 ff | In order to crimp cable lugs when using stranded conductors, e.g., VDE 0295 Class 2 and rounded stranded |  |
| :---: | :---: | :---: | :---: | :---: |
| KS120-NZM7 | 059776 |  |  |  |
| KS95-NZM7 | 059775 |  | sector-shaped conductors, you will need a Klauke K22, HK60/22, or EK22 crimping tool with the following crimping dies: |  |
| NZM2-XKS185 | 260032 |  |  |  |
|  |  |  | R22/95 for $95 \mathrm{~mm}^{2}$ | R22/120 for $120 \mathrm{~mm}^{2}$ |
|  |  |  | R22/150 for $150 \mathrm{~mm}^{2}$ | R22/185 for $185 \mathrm{~mm}^{2}$ |
|  |  |  | R22/240 for $240 \mathrm{~mm}^{2}$ | R22/300 for $300 \mathrm{~mm}^{2}$ |
|  |  |  | Flexible conductors ar must be indent-crimpe crimping die. | quate to a limited extent. They th a Klauke series 13 or series 25 |


| NZM2-XAP7 | $119381 \quad 1$ set $\quad$The replacement device can be positioned identically UL/CSA certification not required <br> either with the connection side or the actuation shaft. <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> UZM7 door coupling rotary handle can continue to be there is a minimum dimension of 213 mm <br> between the mounting plate and the inside of the <br> door. Otherwise, use new handle NZM2-XTVD...-0 <br> with the new shaft. |
| :--- | :--- | :--- |

Compact circuit breakers, switch disconnectors
Terminals

## NZM3

| Max. cable <br> connection area | Number of <br> poles | For use <br> with | Rated <br> current | Terminal capacity |  |  | Terminal capacity |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Screw connection
Standard



| 4 pole | NZM3-4, | 630 | Copper cable | $1 \times 16-300$ | $1 \times 4-350$ | $10 \times 32 \times 1.0$ | $30 \times 10$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | PN3-4, |  | lugs | $2 \times 16-240$ | $2 \times 350$ | $+5 \times 32 \times 1.0$ | $+30 \times 5$ |
|  | N(S) $3-4$ | $\max .400$ | Aluminium cable | $1 \times 10-120$ | $1 \times 4-350$ |  |  |
|  |  |  | lugs | $2 \times 10-120$ | $2 \times 350$ |  |  |

Part no. suffix

Article no. for ordering with basic device

Article no. Part no.
Article no. when
ordering separately

Article no. Std. pack Notes

Information relevant for export to North America
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| +NZM3-XKCO | 262246 | - |  | $1 \text { set }$ | Part no. suffix and part no.contain parts | Product Standards | UL 489; CSA-C22.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +NZM3-XKCU | 262245 | - |  |  | for a circuit breaker side at top or bottom for 3 or 4 pole switches. |  | No. 5-09; IEC 60947; CE marking |
|  |  |  |  |  | Conversion kit for circuit breaker with | UL File No. | E31593 |
| - |  | NZM3-XKC | 260042 |  | screw terminal. | UL CCN | DIHS |
|  |  |  | 260042 |  | Fitted within the switch housing | CSA File No. | 022086 |
|  |  |  |  |  | $0=$ for fitting at the top | CSA Class No. | 1437-01 |
|  |  |  |  |  | $U=$ for fitting at the bottom | NA Certification | UL Listed, CSA certified |
|  |  |  |  |  | $\mathrm{U}_{\mathrm{e}} \geqq 525 \mathrm{~V} \text { AC: }$ <br> Use NZM3(-4)-XKSA cover. | Suitable for | Refer to main component information |
| +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 |
| :--- | :--- | :--- | :--- |

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, $\rightarrow 059775$
Fitted within the switch housing. If a bar is used, insulation ( 400 mm )

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| - | NZM3-4-XKS | 266780 | 1 set |

-heat-shrink tubing and a cover
NZM3(-4)-XKSA are required.
$\mathrm{U}_{\mathrm{e}} \geqq 525 \mathrm{~V}$ AC:
For all other connection types use cover
NZM3(-4)-XKSA.

Compact circuit breakers, switch disconnectors
Terminals
NZM3

|  | Max. cable connection area | Number of poles | For use with | Rated <br> current $I_{n}$ <br> A | Terminal capacity <br> Cable <br> Cable lugs | Terminal <br> capacity <br> $\mathrm{mm}^{2}$ | AWG/kcmil | Terminal capacity <br> Copper strip No. of discs $x$ width $\times$ disc thickness mm | Copper bar <br> Width x <br> thickness <br> mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Connection width extension One hole, for screws or terminals |  |  |  |  |  |  |  |  |
| 1230PIC-773 Symbolphoto |  | 3 pole | $\begin{aligned} & \text { NZM3, } \\ & \text { PN3, } \\ & \text { N(S)3 } \end{aligned}$ | 630 | Copper cable lugs | $2 \times 300$ | $2 \times 500$ | $2 \times 10 \times 50 \times 1.0$ | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \end{aligned}$ |
| 1230PIC-772 Symbolphoto |  | 4 pole | NZM3-4, PN3-4, N3-4 | 630 | Copper cable lugs | $2 \times 300$ | $2 \times 500$ | $2 \times 10 \times 50 \times 1.0$ | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \end{aligned}$ |
| 1230PIC-774 Symbolphoto |  | 3 pole | $\begin{aligned} & \text { NZM3, } \\ & \text { PN3, } \\ & \text { N(S)3 } \end{aligned}$ | 630 | Copper cable lugs | NZM3- <br> XKV70-2: <br> 4×35-185 <br> NZM3- <br> XKV70-2 + <br> NZM4-XKA: <br> $4 \times 50-240$ | NZM3- <br> XKV70-2: <br> $2 \times 350$ <br> NZM3- <br> XKV70-2 + <br> NZM4-XKA <br> $4 \times 500$ | $\begin{aligned} & \text { NZM3-XKV70-2 } \\ & \text { + NZM4-XKB: } \\ & \geqq 6 \times 16-0.8 \\ & \leqq(2 \times) 10 \times 32 \times 1 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \end{aligned}$ |




Article no. when
ordering separately

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| NZM3-XKV70 | 100514 | $1 \text { set }$ | 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. <br> For fitting to switches with screw terminal. <br> Phase isolator and insulation plate are included as standard. <br> Distance between pole centres with | Product Standards <br> UL File No. <br> UL CCN <br> CSA File No. <br> CSA Class No. <br> NA Certification | UL 489; CSA-C22. 2 <br> No. 5-09; IEC 60947; <br> CE marking <br> E140305 <br> DIHS <br> 022086 <br> 1432-01 <br> UL Listed, CSA certified |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZM3-4-XKV70 | 100515 | 1 set | NZM3(-4)-XKV70: 70 mm . <br> Hole for control wire exists. <br> Connection terminals NZM3(-4)-XK300 <br> and NZM3(-4)-XK22X21 can be installed | - |  |


| NZM3-XKV70-2 | 119860 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Double hole fitting for up to four $185 \mathrm{~mm}^{2}$ cable lugs, 50 mm bar or large flat cable terminal NZM4-XKB or large tunnel terminal NZM4-XKA. <br> For fitting to switches with screw terminal. <br> Phase isolator, insulation plate and 2 control circuit terminals supplied. | Product Standards <br> NA Certification <br> Suitable for | UL 489; CSA-C22.2 <br> No. 5-09; IEC 60947; <br> CE marking <br> Request filed for <br> UL and CSA <br> Refer to main component information |
| :---: | :---: | :---: | :---: | :---: | :---: |


| NZM3-4-XKV70-2 | 132673 | 1 set | Contains parts for a terminal located at top or bottom for 3 pole circuit breakers. Double hole fitting for up to four $185 \mathrm{~mm}^{2}$ cable lugs, 50 mm bar or large flat cable terminal NZM4-XKB or large tunnel terminal NZM4-XKA. <br> For fitting to switches with screw terminal. <br> Phase isolator, insulation plate and 2 control circuit terminals supplied. |
| :---: | :---: | :---: | :---: |

Contains parts for a terminal located at
top or bottom for 3 pole circuit breakers.
Threaded stud for cable lugs up to $2 \times 300 \mathrm{~mm}^{2}$.
For fitting to switches with screw terminal.
Phase isolator, insulation plate and
2 control circuit terminals supplied

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

## Compact circuit breakers, switch disconnectors

Terminals
NZM3

| Max. cable <br> connection area | Number of <br> poles | For use <br> with | Rated <br> current | Terminal capacity |  |  | Terminal capacity |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Terminals for connection width extension


3 pole NZM3, max. 500 Copper cable $1 \times 120-300-$
PN3,
N(S) 3




| 4 pole | NZM3-4, max. 630 | Copper cable | $1 \times 50-240$ | $1 \times 0-500-$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | PN3-4, |  | $2 \times 50-240$ | $2 \times 0-500$ |
|  | N3-4 |  | Aluminium cable |  |

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Article no. Std. pack Notes

Article no. when
ordering separately

Information relevant for export to North America
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Article no. for ordering with basic device

Contains parts for a terminal located at Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking
UL File No. UL CCN
CSA File No. 022086
CSA Class No. 1432-01
NA Certification
Suitable for Refer to main Refer to main component information
$\left.\begin{array}{lllllll}\hline- & \text { NZM3-XK22X21 } & 100784 & 1 \text { set } & \begin{array}{l}\text { Contains parts for a terminal located at } \\ \text { top or bottom for } 3 \text { or } 4 \text { pole switches. } \\ \text { Only in combination with connection }\end{array} & & \text { Not UL/CSA approved } \\ \text { width extension NZM3(-4)-XKV70. }\end{array}\right]$

| - | NZM3-XKA1 | 271459 | 1 set | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. <br> With control cable terminal for $1 \times 0.75-2.5 \mathrm{~mm}^{2}(18-14 \mathrm{AWG})$ or $2 \times 0.75-1.5 \mathrm{~mm}^{2}$ (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 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. <br> With control cable terminal for $1 \times 0.75-2.5 \mathrm{~mm}^{2}$ (18-14 AWG) or $2 \times 0.75-1.5 \mathrm{~mm}^{2}$ (18-16 AWG) copper conductor. <br> Fitting outside switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section | Product Standards <br> UL File No. <br> UL CCN CSA File No. CSA Class No. NA Certification Suitable for | UL 489; CSA-C22. 2 <br> No. 5-09; IEC 60947; <br> CE marking <br> E31593 <br> DIHS <br> 022086 <br> 1432-01 <br> UL Listed, CSA certified Refer to main component information |
| - | NZM3-4-XKA2 | 271462 | 1 set | -shown can only be connected when flexible and without ferrules. <br> Cover NZM3(-4)-XKSA must be fitted (included as standard). | - |  |

Compact circuit breakers, switch disconnectors
Terminals
NZM3




Article no. when
ordering separately

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Compact circuit breakers, switch disconnectors
Terminals
NZM3

| Max. cable <br> connection area | Number of <br> poles | For use <br> with | Part no. | Article no. |
| :--- | :--- | :--- | :--- | :--- |


|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



|  |  |  |
| :--- | :--- | :--- |
| 1 set | Contains parts for a terminal located at top or bottom for | UL/CSA certification not required |
| 3 or 4 pole switches. |  |  |
| Contact protection where cable lugs are used on screw terminals. |  |  |
| When using insulated conductor material, degree of protection IP2X. |  |  |

## 1 set

| 10 ff | Contains parts for a terminal located at top or bottom for 3 pole | Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking |
| :---: | :---: | :---: | :---: |
|  | switches. | UL File No. | E31593 |
|  | Insulation/protection against direct contact where cable lugs, | UL CCN | DIHS |
|  | bars or tunnel terminals are used. | CSA File No. | 022086 |
|  | Included in set with tunnel terminals. | CSA Class No. | 1437-01 |
|  | When using insulated conductor material to degree of protection IP1X. | NA Certification | UL Listed, CSA certified |
|  |  | Suitable for | Refer to main component information |

## $10 f f$

Product Standards UL 489; CSA-C22.2 No. 5-09; IEC 60947; CE marking
1 set
壁相
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.

1 set

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

Compact circuit breakers, switch disconnectors
Terminals
NZM3


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| +NZM3-XKSFAO | 108273 | 1 Off | Contains parts for a terminal located at top | UL/CSA certification not required |
| +NZM3-XKSFAU | 108274 |  |  |  |
|  |  |  | or bottom for 3 or 4 pole switches. |  |
|  |  | Enhanced contact protection |  |  |
| (simplified finger protection). |  |  |  |  |


| + 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. <br> Can also be used for connection width extension NZM3-XKV70 or NZM3-XKV70-2 with | - |
| :---: | :---: | :---: | :---: |
| - | 1 Off | terminals NZM3-XK300 or NZM3-XK22x21 or NZM4-XKA. <br> Cannot be combined with connection width NZM3-XKV70KB. <br> When using insulated conductor material, degree of protection IP2X. | - |


| - | $1 \text { set }$ | 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. <br> With 2 conductors max. cross section $70 \mathrm{~mm}^{2}$. | UL/CSA certification not required |
| :---: | :---: | :---: | :---: |
|  | 1 set | Cannot be combined with NZM-XSTK control |  | Cannot be combined with NZM-XSTK control circuit terminal.

## 1 set

Contains parts for a terminal located at top
UL/CSA certification not required
韭
Enhanced contact protection to IP2X.
When fitting to NZM3...-(C)NA or N3...-NA:
with 2 conductors max. cross section $70 \mathrm{~mm}^{2}$.

Compact circuit breakers, switch disconnectors
Terminals
NZM3

| Max. cable <br> connection area | Number of <br> poles | For use <br> with | Part no. | 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 | $\begin{aligned} & \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N3(-4) } \end{aligned}$ | NZM3-XKS185 | 260040 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| r | 240 mm ${ }^{2}$ |  |  |  | NZM3-XKS240 | 260041 |
|  | $300 \mathrm{~mm}^{2}$ |  |  | $\begin{aligned} & \hline \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N3(-4) } \\ & \text { NZM4(-4), } \\ & \text { N(-4) } \end{aligned}$ | NZM3-XKS300 | 153186 |


|  | Mounting adapter plate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\overline{1230 P 1 /-317 ~ S y m b o l p h o t o ~}$ |  | - | 3 pole | NZM3 | NZM3-XAP10 | 119382 |
|  |  |  |  | PN3 |  |  |
| \% 8 |  |  |  | N3 |  |  |
| \%. |  |  |  |  |  |  |

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 $95 \mathrm{~mm}^{2} \quad$ - R22/120 for $120 \mathrm{~mm}^{2}$
- R22/150 for $150 \mathrm{~mm}^{2}$
- R22/185 for $185 \mathrm{~mm}^{2}$
- R22/240 for $240 \mathrm{~mm}^{2}$
- R22/300 for $300 \mathrm{~mm}^{2}$

Flexible conductors are adequate to a limited extent. They must be indent-crimped with a Klauke series 13 or series 25 crimping die.

| set | The replacement device can be positioned identically either with the |
| :--- | :--- |
| connection side or the actuation shaft. |  |
| 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. |  |

Compact circuit breakers, switch disconnectors
Terminals
NZM4

|  | Space requirement N | Number of poles | For use with | Rated <br> current ${ }^{11}$ <br> $I_{n}$ <br> A | Terminal capacity <br> Cable <br> Cable lugs | Terminal capacity $\mathrm{mm}^{2}$ | AWG/kcmil | Terminal capacity <br> Copper strip No. of discs $x$ width $\times$ disc thickness mm | Copper bar Width x thickness mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Screw terminals <br> Threaded stud standard equipment |  |  |  |  |  |  |  |  |
| 1230PIC-731 Symbolphoto <br> me |  |  | NZM4, N(S)4 | $\text { max. } 1600$ | Copper cablelugs | $\begin{aligned} & 1 \times 120-185 \\ & 4 \times 50-185 \end{aligned}$ | $\begin{aligned} & 1 \times 250-350 \\ & 4 \times 0-350 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \times 1.0 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 50 \times 10 \end{aligned}$ |
|  |  | - | $\begin{aligned} & \text { NZM4-4, } \\ & \text { N4-4 } \end{aligned}$ | $\text { max. } 1600$ | Copper cablelugs | $\begin{aligned} & 1 \times 120-185 \\ & 4 \times 50-185 \end{aligned}$ | $\begin{aligned} & 1 \times 250-350 \\ & 4 \times 0-350 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \times 1.0 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 50 \times 10 \end{aligned}$ |

[^2]Article no. when
ordering separately

## 르률

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$\qquad$

| NZM4-XKS 127736 | 1 set | Double hole fitting with M10 threaded stud at | UL/CSA certification not required |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Use special cable lug narrow version. |  |  |
|  | M10x50 socket cap screw + M10x40 socket cap |  |  |
|  | screw + self locking nut. |  |  |

Compact circuit breakers, switch disconnectors

## Terminals

NZM4


|  | Module plate |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1230 \mathrm{PlC}-744 \text { Symbolphoto }}$ | 1-hole | 3 pole | NZM4, | max. 1250 | Copper cable- 1 | $1 \times 120-300$ | 1×250-600 | (2x) | ( 2 x ) |
| A |  |  | N(S)4 |  | lugs $2 x$ | $2 \times 95-300$ | $2 \times 000-600$ | $10 \times 40 \times 1.0$ | $40 \times 10$ |
|  |  |  |  |  |  |  |  | (2x) | ( 2 x ) |
| - 1) 0. |  |  |  |  |  |  |  | $10 \times 50 \times 1.0$ | $50 \times 10$ |


| 1230PIC-742 Symbolphoto | 1-hole | 4 pole | NZM4-4,N4-4 | max. 1250 | Copper cable- $1 \times 120-300$ <br> lugs $2 \times 95-300$ | $\begin{aligned} & 1 \times 250-600 \\ & 2 \times 000-600 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 10 \times 40 \times 1.0 \\ & (2 \times) \\ & 10 \times 50 \times 1.0 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 40 \times 10 \\ & (2 \times) \\ & 50 \times 10 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| $\overline{1230 P 1 C-1407 ~ S y m b o l p h o t o ~}$ | 2-hole | 3 pole | $\begin{aligned} & \text { NZM4, } \\ & \mathrm{N}(\mathrm{~S}) 4 \end{aligned}$ | max. 1400 | Copper cable- $2 \times 95$ - 185 lugs $\quad 4 \times 35-185$ | $\begin{aligned} & 2 \times 000-350 \\ & 4 \times 2-350 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \times 1.0 \end{aligned}$ | (2x) |
|  |  |  |  |  |  |  |  | $10 \times 50$ |
|  |  |  |  |  |  |  |  | $\times 1.0$ |


| $\overline{1230 \mathrm{PlC} \text { - } 870 \text { Symbolphoto }}$ | 2-hole | 4 pole | NZM4-4, <br> N4-4 | max. 1400 | Copper cable- $2 \times 95-185$ |  | $2 \times 000-350$ | (2x) | (2x) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ |  |  |  |  | lugs | $4 \times 35-185$ | $4 \times 2-350$ | $10 \times 50 \times 1.0$ | $10 \times 50$ |
|  |  |  |  |  |  |  |  |  | $\times 1.0$ |


| $\overline{123 P P 1 C-1408 ~ S y m b o l p h o t o ~}$ | 2-hole | 3 pole | NZM4, N(S)4 | max. 1250 | Copper cable- $2 \times 95$ - 300 lugs | $2 \times 000-600$ | (2x) | ( 2 x ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $10 \times 40 \times 1.0$ | $40 \times 10$ |
|  |  |  |  |  |  |  | (2x) | (2x) |
|  |  |  |  |  |  |  | $10 \times 50 \times 1.0$ | $50 \times 10$ |



| $\overline{1230 \mathrm{PIC} \text {-871 Symbolphoto }}$ | 2-hole | 4 pole | NZM4-4, | max. 1600 | Copper cable- $2 \times$ 95-300 | $2 \times 000-600$ | (2x) | (2x) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | N4-4 |  | lugs |  | $10 \times 40 \times 1.0$ | $40 \times 10$ |
|  |  |  |  |  |  |  | (2x) | (2x) |
|  |  |  |  |  |  |  | $10 \times 50 \times 1.0$ | $50 \times 10$ |

Part no. Article no. Std. pack Notes
Article no. when
ordering separately

| NZM4-XKM1 | 266814 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. <br> For M10 screws. Can be enlarged for M12 screws. Use special cable lug narrow version. <br> Can be fitted to circuit breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. | Product Standards <br> UL File No. <br> UL CCN <br> CSA File No. <br> CSA Class No. <br> NA Certification <br> Suitable for | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking <br> E31593 <br> DIHS <br> 22086 <br> 1432-01 <br> UL listed, CSA certified <br> Refer to main component information |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZM4-4-XKM1 | 266815 | 1 set |  | - |  |


| NZM4-XKM2 | 266820 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. <br> For M10 screws. Can be enlarged for M12 screws. Use special cable lug narrow version. <br> Can be fitted to circuit breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. | Product Standards <br> UL File No. <br> UL CCN <br> CSA File No. <br> CSA Class No. <br> NA Certification <br> Suitable for | UL489; CSA-C22.2 No. 5-09; IEC60947, <br> CE marking <br> E31593 <br> DIHS <br> 22086 <br> 1432-01 <br> UL listed, CSA certified <br> Refer to main component information |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZM4-4-XKM2 | 266821 | 1 set |  | - |  |



| 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 |

Compact circuit breakers, switch disconnectors

## Terminals

NZM4

|  | Number of poles | For use with | Rated <br> current1) <br> $I_{n}$ <br> A | Terminal ca <br> Cable <br> Cable lugs | Terminal capacity $\mathrm{mm}^{2}$ | AWG/kcmil | Terminal capacity <br> Copper strip No. of discs $x$ width $\times$ disc thickness mm | Copper bar Width x thickness mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Flat cable terminal |  |  |  |  |  |  |  |
|  | 3 pole | NZM4, N(S)4 | max. 1100 | - | - | - | $\begin{aligned} & \min . \\ & 6 \times 16 \times 0.8 \\ & \operatorname{max.}(2 \times x) \\ & 10 \times 32 \times 1.0 \end{aligned}$ | - |
|  | 4 pole | $\begin{aligned} & \text { NZM4-4, } \\ & \text { N4-4 } \end{aligned}$ | max. 1100 | - | - | - | min. <br> $6 \times 16 \times 0.8$ <br> max. (2 x) $10 \times 32 \times 1.0$ | - |


| ${ }^{1230911}$-776 Symbolphoto | 4 pole | NZM4-4, <br> N4-4 | max. 1400 | Copper cable | $1 \times 50-240$ | $1 \times 0-500$ | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots=$ |  |  |  |  | $4 \times 50-240$ | $4 \times 0-500$ |  |  |
|  |  |  |  | Aluminium cable $\odot \bigcirc$ |  |  |  |  |


|  | Rear terminal bolts |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 pole | NZM4, N4 | max. 1250 | Copper cablelugs Aluminium cable lugs | $\begin{aligned} & 1 \times 120-185 \\ & 2 \times 95-185 \\ & 4 \times 35-185 \\ & 1 \times 185 \\ & 2 \times 70-185 \\ & 4 \times 50-185 \end{aligned}$ |  | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \times 1.0 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 50 \times 10 \end{aligned}$ |
|  | 4 pole | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N4(-4) } \end{aligned}$ | max. 1250 | Copper cablelugs Aluminium cable lugs | $\begin{aligned} & 1 \times 120-185 \\ & 2 \times 95-185 \\ & 4 \times 35-185 \\ & 1 \times 185 \\ & 2 \times 70-185 \\ & 4 \times 50-185 \end{aligned}$ |  | $\begin{aligned} & (2 \times) \\ & 10 \times 50 \times 1.0 \end{aligned}$ | $\begin{aligned} & (2 \times) \\ & 50 \times 10 \end{aligned}$ |


| Part no. <br> Article no. when <br> ordering separately | Article no. | Std. pack | Notes |  |
| :--- | :--- | :--- | :--- | :--- |


| NZM4-XKA | 266836 | $1 \text { set }$ | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. <br> With control circuit terminal for $1 \times 0.75-2.5 \mathrm{~mm}^{2}$ ( $18-14$ AWG) or $2 \times 0.75-1.5 \mathrm{~mm}^{2}$ ( $18-16$ AWG) copper cable as standard. <br> 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 <br> UL File No. <br> UL CCN <br> CSA File No. CSA Class No. NA Certification Suitable for | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking <br> E31593 <br> DIHS <br> 22086 <br> 1432-01 <br> UL listed, CSA certified <br> 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. <br> Can also be retrofitted: <br> Module plate NZM4...-XKM... or connection width extension NZM4-...-XKV... | Not UL/CSA approved |
| :---: | :---: | :---: | :---: | :---: |


| NZM4-4-XKR $266843 \quad 1$ set |
| :--- | :--- |

[^3]
## Compact circuit breakers, switch disconnectors

## Terminals

NZM4


Article no. when
ordering separately

| NZM4-XKV95 | 281591 | 1 set$\square$ | Contains parts for a terminal located at top or bottom for 3 or 4 pole switches | Product Standards | 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. | UL File No. UL CCN | $\begin{aligned} & \text { E31593 } \\ & \text { DIHS } \end{aligned}$ |
|  |  |  | Can be fitted to circuit breaker with screw terminal. | CSA File No. | 022086 |
|  |  |  | Phase isolator included as standard. | CSA Class No. | 1432-01 |
|  |  |  | Distance between pole centers: 95 mm | NA Certification | UL listed, CSA certified |
|  |  |  | Installation conditions for current transformer up to 130 mm width with 80 mm busbar width. | Suitable for | Refer to main component information |
| NZM4-4-XKV95 | 281592 |  | 4 mm holes predrilled for control circuit terminal. |  |  |

4 mm holes predrilled for control circuit terminal. Contains hole for large cover NZM4(-4)-XKSAV

NZM4-4-XKV120 281594

| NZM4-XKV95-2KB | 119861 | $1 \text { set }$ | Type contains parts for 3 to 4-pole switches on top or bottom of switch. <br> Double stud bolts M12 for e. g. up to 4 cable lugs $300 \mathrm{~mm}^{2}$ per phase. <br> For fitting to switches with screw connection. <br> Distance between pole centers if 95 mm <br> Can be fitted to current transformers up to 130 mm in width and with a bar width of 80 mm . <br> 4 mm drilling dimensions for control circuit terminal available. | Product Standards <br> UL File No. <br> UL CCN <br> CSA File No. <br> CSA Class No. <br> NA Certification <br> Suitable for | UL489; CSA-C22.2 No. 5-09; IEC60947, <br> CE marking <br> E31593 <br> DIHS <br> 022086 <br> 1432-01 <br> UL listed, CSA certified <br> Refer to main component information |
| :---: | :---: | :---: | :---: | :---: | :---: |

Compact circuit breakers, switch disconnectors
Terminals
NZM4

|  | Number of poles | For use with | Terminal capacity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Connection | Terminal | AWG/kmil |
|  |  |  |  | capacity |  |
|  |  |  |  | mm² |  |
|  | Cover |  |  |  |  |
| $\overline{1230 P \mathrm{Pl} \text { - } 1354 \text { Symbolphoto }}$ | 3 pole | $\begin{aligned} & \text { NZM4, } \\ & \text { N(S) } \end{aligned}$ | - | - | - |
| $\overline{1230 P \mathrm{Pl} \text { - } 13555 \mathrm{Symbolph} \text { ato }}$ | 4 pole | NZM4-4 <br> N4-4 | - |  |  |
|  |  |  |  |  |  |


|  | Cover size |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | For connection width extension |  |  |  |  |
| ${ }^{12309 P C G: G 99 ~ S m m b l p h a t o ~}$ | 3 pole | $\begin{aligned} & \text { NZM4, } \\ & \text { N(SS44 } \\ & + \text { NZM4-XKV95(KB) } \end{aligned}$ |  | - | - |
| $10$ |  |  |  |  |  |
| ${ }^{12309 P C-6865 ~ S m m o l p h o t o ~}$ | 4 pole | NZM4-4, N(S)4-4 + NZM4-4-XKV95(KB) | - | - | - |


|  | Insulation plate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 pole | NZM4, - <br> N(S)4 <br> + NZM4-XKV... | - | - | - |
|  | 4 pole | NZM4-4 <br> N4-4 <br> + NZM4-4-XKV | $\checkmark$ | - | ${ }^{-}$ |


| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Article no. when ordering separately |  |  |  | 輩 ${ }^{*}$ |  |
| NZM4-XKSA | 266846 | $1 \text { set }$ | 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. <br> 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 $266847 \quad 1$ set |
| :--- | :--- |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| NZM4-XKSAV | 119876 |  |  |  |
|  |  |  | Type contains parts for a terminal located at top <br> or bottom for 3 pole circuit breakers. <br> Insulation protection/busbar tag shroud for connection of <br> cable lugs or busbars to connection width extension. <br> When using insulated conductor material to IP2X. <br> Cannot be combined with connection width extension <br> NZM4-XKV110. |  |


| NZM4-XISP | 119866 | $1 \text { set }$ | Type contains parts for a terminal located at top or bottom for 3 or 4 pole circuit breakers. <br> Insulation protection to mounting plate when minimum clearances are not maintained. Included with the connection width extension. | Product Standards <br> NA Certification Suitable for | UL 489; CSA-C22. 2 <br> No. 5-09; IEC 60947; <br> CE marking <br> Request filed for UL and CSA <br> Refer to main component information |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZM4-4-XISP | 119867 | 1 set |  | - |  |

Compact circuit breakers, switch disconnectors
Terminals
NZM4


| Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
| :---: | :---: | :---: | :---: | :---: |
| Article no. when ordering separately |  |  |  |  |
| NZM4-XKSFA | 292193 | 1 set $\square$ | Part no. includes parts for a top or bottom terminal for 3 pole circuit breakers, including in combination with NZM4-XKSA cover. <br> Increased busbar tag shroud with connection of insulated bars or flat band. | UL/CSA certification not required |

NZM4-4-XKSFA $292194 \quad 1$ set


Compact circuit breakers, switch disconnectors

## Terminals

## NZM4

| For use <br> with | Rated <br> current <br> $I_{n}$ | Number of <br> poles | Part no. |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$| Article no. |
| :--- |$\quad$ Std. pack | Notes |
| :--- |

## Adapter set N(ZM)4/N(ZM)12

Not UL/CSA approved


| N4 $\quad$ 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.

4 pole basic devices, withdrawable units and basic devices with remote operator can not be replaced.
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 $\mathrm{N}(\mathrm{ZM}) 12 \ldots$, which correspond to production status 02/97 to the present.


Compact circuit breakers, switch disconnectors
Plug-in units, withdrawable units

| For use <br> with | Number of <br> poles |
| :--- | :--- |$\quad$ Part no.

Article no. Std. pack Notes

Plug-in units
For circuit breakers NZM and switch disconnectors N
Not UL/CSA approved
Not for $\mathrm{U}_{\mathrm{e}}>690 \mathrm{~V}$

|  | Plug-in socket |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Completion through switches with plug-in insert NZM...-SVE. | NZM1 <br> N1 | 3 pole | NZM1-XSVS | 109777 | 1 Off | Mounting position: vertical, $90^{\circ}$ right, $90^{\circ}$ left Order control circuit plug unit separately! |
| 1230PIC-818 Symbolphoto <br> 0.0 |  | $\begin{aligned} & \text { NZM2 } \\ & \text { N2 } \end{aligned}$ | 3 pole | NZM2-XSVS | 266699 | 1 Off |  |
|  |  | $\begin{aligned} & \hline \text { NZM2-4 } \\ & \text { N2-4 } \end{aligned}$ | 4 pole | NZM2-4-XSVS | 266700 | 1 Off |  |
|  |  | $\begin{aligned} & \text { NZM3 } \\ & \text { N3 } \end{aligned}$ | 3 pole | NZM3-XSVS | 168472 |  | Mounting position: vertical, $90^{\circ}$ right, $90^{\circ}$ left Order control circuit plug unit separately! Lockable base |
|  |  | $\begin{aligned} & \hline \text { NZM3-4 } \\ & \text { N3-4 } \end{aligned}$ | 4 pole | NZM3-4-XSVS | 168473 |  |  |

## Control circuit plug unit



NZM1, N1 For auxiliary NZM2-XSVHI 2667051 Off 10 terminals
NZM2(-4) contact, shunt/
N2(-4) overvoltage release

NZM2(-4) For remote NZM2-XSVR 2667061 Off Compact circuit breakers, switch disconnectors

Plug-in units, withdrawable units NZM1, NZM2, NZM3, NZM4

| For use <br> with | Number of <br> poles | Part no. <br> Article no. when <br> ordering separately | Article no. |
| :--- | :--- | :--- | :--- | :--- | Std. pack $\quad$ Notes

Withdrawable unit
For circuit breakers NZM and switch disconnectors N
Not UL/CSA approved
Not for $U_{0}>690 \mathrm{~V}$

Socket base
For switches with withdrawable carrier. Also for reserved compartments.


|  | Withdrawable carrier |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Suitable for socket base Only in combination with switch |  |  |  |
|  | $\begin{array}{ll} \hline \text { NZM4 } & 3 \text { pole } \\ \text { N4 } & \end{array}$ | +NZM4-XAVE | 266717 | 1 Off |
| $3$ | NZM4-4 4 pole N4-4 | +NZM4-4-XAVE | 266718 | 1 Off |

Compact circuit breakers, switch disconnectors
Auxiliary contacts with screw terminals/spring-cage terminals
M22-...

| For use | Contact configuration: | Contact | Part no. | Article no. |
| :--- | :--- | :--- | :--- | :--- | Std. pack

Auxiliary contacts
Standard auxiliary contacts (HIN)
Switches with the main contacts. Used for indicating and interlocking tasks.


Compact circuit breakers, switch disconnectors
Auxiliary contacts with screw terminals/spring-cage terminals

## M22-...

| For use <br> with | Contact configuration: | Contact | Part no. | Article no. Std. pack |
| :--- | :--- | :--- | :--- | :--- |
|  | $\Theta=$ safety function by positive <br> opening according to <br> IEC/EN 60947-5-1 | sequences |  | Article no. when |

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.


Auxiliary contacts with screw terminals/spring-cage terminal
NZM1, NZM2/3..., NZM4

| For use | Contact configuration: | Contact | Part no. | Article no. | Std. pack |
| :---: | :---: | :---: | :---: | :---: | :---: |
| with | $\Theta=$ safety function by positive opening according to IEC/EN 60947-5-1 | sequences | Article no. when ordering separately |  |  |
|  | $\mathrm{N} / 0=$ normally $\mathrm{NC}=$ normally open contact 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-764 Symbolphoto | With 3 m connection cable instead of screw connection. | 2 N/O | - | $\begin{aligned} & 3.113 .23 \\ & 5-1.15 \\ & 5.14 .24 \\ & 3.15 \end{aligned}$ | NZM1-XHIVL | 259432 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Notes |  |  | Information relevant for export to North America |  |  |
|  |  |  |  |  |  |  |

Not in conjunction with undervoltage release NZM...-XU... or shunt
Product Standards UL489; CSA-C22.2 No. 5-09; release NZM...-XA. .

IEC60947, CE marking
Early make with switch on and switch off (manual actuation):
UL File No. E140305 approx. 20 ms

UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified


| - | $\begin{aligned} & \text { NZM2(-4), 3(-4) } \\ & \text { PN2(-4), 3(-4) } \\ & \text { N(S)2(-4), 3(-4) } \end{aligned}$ | $2 \mathrm{~N} / 0$ | - |  | NZM2/3-XHIV | 2594301) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1 \mathrm{~N} / 0$ |  | $\int_{3.14}^{3.13}$ | NZM2/3-XHIV-PI | 1897481) |
| - | $\begin{aligned} & \text { NZM4(-4) } \\ & \text { N(S)4(-4) } \end{aligned}$ | 2 N/0 | - | $\begin{aligned} & 3.13 .23 \\ & 5_{3.12}^{1-1} \\ & 3.2 .24 \end{aligned}$ | NZM4-XHIV | 2661722) |
|  |  | 1 N/0 |  | $\int_{3.14}^{3.13}$ | NZM4-XHIV-PI | 1897492) |


| Notes | Information relevant for export to North America 트룰 |
| :---: | :---: |
| 1) Not in conjunction with undervoltage release NZM...-XU..., shunt releases NZM...-XA... | Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| Early make with switch on and switch off (manual actuation): approx. 20 ms | UL File No. E140305 <br> UL CCN DIHS |
| 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 | CSA File No. 022086 <br> CSA Class No. $1437-01$ <br> NA Certification UL Listed, CSA certified |

Compact circuit breakers, switch disconnectors
Undervoltage releases
NZM1

| For use <br> with | Rated control voltage | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | :--- | Notes

Undervoltage releases

## Without auxiliary contacts

Non-delayed disconnection of circuit breaker NZM or switch disconnector N when control voltage drops below $35-70 \% \mathrm{U}_{\mathrm{S}}$. For use with emergency switching off devices in conjunction with emergency switching off button.

|  | With clamp terminal on left switch side. | NZM1(-4), | $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU24AC | 259434 | $1 \text { Off }$ | 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 earlymake auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathrm{N}(\mathrm{S}) 1(-4)$ | $48 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU48AC | 259436 |  |  |
|  |  |  | $60 \mathrm{~V} \mathrm{50/60} \mathrm{~Hz}$ | NZM1-XU60AC | 259438 |  |  |
|  |  |  | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU110-130AC | 259440 |  |  |
|  |  |  | $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU208-240AC | 259442 |  |  |
|  |  |  | $380 \mathrm{~V}-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU380-440AC | 259444 |  |  |
|  |  |  | $480 \mathrm{~V}-525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU480-525AC | 259446 |  |  |
|  |  |  | $600 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XU600AC | 259448 |  |  |
|  |  |  | 12 VDC | NZM1-XU12DC | 259450 |  |  |
|  |  |  | 18 VDC | NZM1-XU18DC | 171798 |  |  |
|  |  |  | 24 V DC | NZM1-XU24DC | 259452 |  |  |
|  |  |  | 48 V DC | NZM1-XU48DC | 262631 |  |  |
|  |  |  | 60 V DC | NZM1-XU60DC | 259454 |  |  |
|  |  |  | $110 \mathrm{~V}-130 \mathrm{~V}$ DC | NZM1-XU110-130DC | 259458 |  |  |
|  |  |  | $220 \mathrm{~V}-250 \mathrm{~V}$ DC | NZM1-XU220-250DC | 259460 |  |  |
|  | With 3 m connection cable instead of screw terminal. | NZM1(-4), | , $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUL24AC | 259462 | $10 \mathrm{ff}$ |  |
|  |  | $N(S) 1(-4)$ | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUL110-130AC | 259468 |  |  |
|  |  |  | $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUL208-240AC | 259471 |  |  |
|  |  |  | $380 \mathrm{~V}-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUL380-440AC | 259473 |  |  |
|  |  |  | $480 \mathrm{~V}-525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUL480-525AC | 259475 |  |  |
|  |  |  | $600 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUL600AC | 259477 |  |  |
|  |  |  | 12 V DC | NZM1-XUL12DC | 259479 |  |  |
|  |  |  | 18 VDC | NZM1-XUL18DC | 171799 |  |  |
|  |  |  | 24 V DC | NZM1-XUL24DC | 259481 |  |  |
|  |  |  | $110 \mathrm{~V}-130 \mathrm{~V}$ DC | NZM1-XUL110-130DC | 259487 |  |  |
|  |  |  | $220 \mathrm{~V}-250 \mathrm{~V}$ DC | NZM1-XUL220-250DC | 259489 |  |  |

Information relevant for export to North America

## 憵

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 <br> with | Rated control voltage | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | :--- | Notes

Undervoltage releases

## Without auxiliary contacts

Non-delayed disconnection of circuit breaker NZM or switch disconnector N when control voltage drops below $35-70 \% \mathrm{U}_{\mathrm{S}}$. For use with emergency switching off devices in conjunction with emergency switching off button


Information relevant for export to North America

## 䭗

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 <br> NZM1, NZM2/3

| For use <br> with | Rated control voltage | Part no. | Article no. Std. pack | Notes |
| :--- | :--- | :--- | :--- | :--- |

## Undervoltage releases <br> With two early-make auxiliary contacts <br> For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications. <br> For use with emergency switching off devices in conjunction with emergency switching off button.



With
clamp
terminal
on left
switch
side.
With
clamp
terminal
on left
switch
side.

| NZM1(-4), $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV24AC | 259531 | 1 Off | When |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{N}(\mathrm{S}) 1(-4) 48 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV48AC | 259533 |  | rele |
| $60 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV60AC | 259535 |  | accide |
| $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV110-130AC | 259537 |  |  |
| $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV208-240AC | 259539 |  | to swit |

When the undervoltage e-energized, 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 earlymake auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...


| With 3 m <br> connection <br> cable | $\mathrm{NZM} 1(\mathrm{~S}) 1(-4), 4)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |



| $220 \mathrm{~V}-250 \mathrm{VDC}$ | NZM1-XUHIVL220-250DC | 259581 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $-\quad$ NZM2(-4), $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV24AC | 259583 | 10 ff | When the undervoltage |


| ZM2(-4) | 50/60 Hz | NZM2/3-XUHIV24AC | 25958 | 0 | When the undervoltage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N(S)2(-4) | $48 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV48AC | 259585 |  | release is de-energized, |
| NZM3(-4), | $60 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV60AC | 259587 |  | accidental contact with |
| N(S)3(-4) | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV110-130AC | 259589 |  | ne |
|  | $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV208-240AC | 259591 |  | ch during attempts |
|  | $380 \mathrm{~V}-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV380-440AC | 259594 |  | prevented. Early-make of |
|  | $480 \mathrm{~V}-525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV480-525AC | 259598 |  | auxiliary contacts on swit- |
|  | 12 V DC | NZM2/3-XUHIV12DC | 259600 |  | ching on and off (manual |
|  | 18 V DC | NZM2/3-XUHIV18DC | 171803 |  | operation): approx. 20 ms |
|  | 24 V DC | NZM2/3-XUHIV24DC | 259602 |  | Cannot be used in conjunc- |
|  | 48 V DC | NZM2/3-XUHIV48DC | 259604 |  | tion with remote operator |
|  | 60 V DC | NZM2/3-XUHIV60DC | 259606 |  | NZM...-XR |
|  | $110 \mathrm{~V}-130 \mathrm{~V}$ DC | NZM2/3-XUHIV110-130DC | 259608 |  | cannot be installed |
|  | $220 \mathrm{~V}-250 \mathrm{~V}$ DC | NZM2/3-XUHIV22O-250DC | 259610 |  | simultaneously with earlymake auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... |

Information relevant for export to North America

## 壁

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 <br> with | Rated control voltage | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | :--- |$\quad$ Notes

## 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.

| $\overline{1230 P \mathrm{PC}-1149 \text { Symbolphoto }}$ | NZM4(-4), | $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV24AC | 266217 | $1 \text { Off }$ | 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... |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\therefore \quad \int^{\text {D1 }} \int^{3.13}$ | $N(S) 4(-4)$ | $48 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV48AC | 266218 |  |  |
|  |  | $60 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV60AC | 266219 |  |  |
| $11<$ |  | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV110-130AC | 266220 |  |  |
|  |  | 208 V - $240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV208-240AC | 266221 |  |  |
|  |  | $380 \mathrm{~V}-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV380-440AC | 266222 |  |  |
|  |  | $480 \mathrm{~V}-525 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | 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 |  |  |
|  |  | $110 \mathrm{~V}-130 \mathrm{~V}$ DC | NZM4-XUHIV110-1300C | 266235 |  |  |
|  |  | $220 \mathrm{~V}-250 \mathrm{~V}$ DC | NZM4-XUHIV220-2500C | 266236 |  |  |
|  |  |  |  |  |  |  |

## With 2 separate early-make auxiliary contacts



With 3 m connection cable instead of screw terminal.



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
NZM2(-4), $24 \mathrm{~V} 50 / 60 \mathrm{~Hz} \quad$ NZM2/3-XUHIV2024AC $259640 \quad 10 \mathrm{ff} \quad$ (manual operation):
$\mathrm{N}(\mathrm{S}) 2(-4) \quad$ NZM2/3-XUHVV2048AC 259643 approx. 20 ms

NZM3(-4), Cannot be used in
$N(S) 3(-4) \quad$ conjunction with remote
$208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz} \quad$ NZM2/3-XUHIV20208-240AC $259651 \quad$ operator NZM...-XR....
380 V - $440 \mathrm{~V} 50 / 60 \mathrm{~Hz} \quad$ NZM2/3-XUHIV20380-440AC $259653 \quad$ Undervoltage release
$420-480 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ NZM2/3-XUHIV20420-480VAC 105947 cannot be installed
24 V DC NZM2/3-XUHIV2024DC 259659 together with early-make

18 V DC NZM2/3-XUHIV2018DC 171808 auxiliary contact
NZM...-XHIV... or shunt release NZM...-XA...

## Information relevant for export to North America <br> 韭

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 |

## Compact circuit breakers, switch disconnectors

Undervoltage releases
NZM1, NZM2/3..., NZM4

| For use <br> with | Rated control voltage | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | :--- | Notes

## 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. |
| :--- |
| NZM1 (-4), $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ |
| NZM1-XUHIV20KL24AC |

(1230PIC-1181 Symbolphoto

| -4), | $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV20KL24AC | 284388 | 1 Off | When the undervoltage release is deenergized, accidental contact with the |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N(S)1(-4) | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV20KL110-130AC | 284389 |  |  |
|  | $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV2OKL208-240AC | 284400 |  | main contacts of the switch durin |
|  | 24 V DC | NZM1-XUHIV2OKL24DC | 284387 |  | attempts to switch on is reliably prevented. |
|  |  |  |  |  | Early make of auxiliary contacts on switching on and off (manual |
| Coil connections with 3 m loose connection cables, auxiliary contact connections wired to clamp terminals |  |  |  |  | operation): approx. 20 ms |
|  |  |  |  |  | Cannot be used in conjunction with |
| $\begin{aligned} & \text { NZM1 (-4), } \\ & \text { N(S)1 } 1-4) \end{aligned}$ | $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV2OLK24AC | 284402 | 10 ff | remote operator NZM...-XR... |
|  | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV20LK110-130AC | 284403 |  | Undervoltage release cannot be |
|  | $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM1-XUHIV2OLK208-240AC | 284404 |  | installed simultaneously with early- |
|  | 24 V DC | NZM1-XUHIV2OLK24DC | 284401 |  | or shunt release NZM...-XA... |


| Contacts 3.23 and 3.24 with separate 3 m connection cables |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NZM4(-4), | $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV2024AC | 266244 | 1 Off |
| N(S)4(-4) | $110 \mathrm{~V}-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV20110-130AC | 266247 | * |
|  | $208 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV20208-240AC | 266248 |  |
|  | $380 \mathrm{~V}-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XUHIV20380-440AC | 266249 |  |
|  | 18 V DC | NZM4-XUHIV2018DC | 171809 |  |
|  | 24 V DC | NZM4-XUHIV2024DC | 266258 |  |

## Information relevant for export to North America

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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 

| For use <br> with | Rated control voltage | Part no. | Article no. |
| :--- | :--- | :--- | :--- | Std. pack | Notes |
| :--- |
|  |
|  |
|  |
|  |
|  |
|  |

Undervoltage releases
Without auxiliary contact - with push in terminal
Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below $35-70 \% \mathrm{U}_{S}$.
For use with emergency-stop devices in connection with an emergency-stop button.

| wa_sg07618 Symbolphoto | $\begin{aligned} & \hline \text { NZM2(-4), } \\ & \text { N(S)2(-4) } \\ & \text { NZM3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | 24 V AC 50/60 Hz | NZM2/3-XU24AC-PI | 189750 | $10 f$ | 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 relais modules NZM...-X2A... |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\mathrm{D} 1}$ |  | 48 V AC 50/60 Hz | NZM2/3-XU48AC-PI | 189751 |  |  |
| $\mathrm{U}<$ |  | 60 V AC $50 / 60 \mathrm{~Hz}$ | NZM2/3-XU60AC-PI | 189752 |  |  |
| ( $2 \rightarrow$ 2 |  | 110-130 V AC 50/60 Hz | NZM2/3-XU110-130AC-PI | 189753 |  |  |
| 1 |  | 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_s908018 Symbolphoto | NZM4(-4), | 24 V AC $50 / 60 \mathrm{~Hz}$ | NZM4-XU24AC-PI | 189762 | 10 ff |  |
|  | 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

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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

## Compact circuit breakers, switch disconnectors

## Undervoltage releases <br> NZM2/3, NZM4

| For use <br> with | Rated control voltage | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | :--- | Notes

## Undervoltage releases

## With one early-make auxiliary contact - 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.


| NZM2(-4), | $24 \mathrm{~V} \mathrm{AC} \mathrm{50/60} \mathrm{~Hz}$ | NZM2/3-XUHIV24AC-PI | 189774 | 10 ff | When the undervoltage release is |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N(S)2(-4) | $48 \mathrm{~V} \mathrm{AC} \mathrm{50/60} \mathrm{~Hz}$ | NZM2/3-XUHIV48AC-PI | 189775 | F | de-energized, accidental contact with |
| NZM3(-4), | $60 \mathrm{~V} \mathrm{AC} 50 / 60 \mathrm{~Hz}$ | NZM2/3-XUHIV60AC-PI | 189776 |  | the main contacts of the switch during |
| N(S)3(-4) | 110-130 V AC 50/60 Hz | NZM2/3-XUHIV110-130AC-PI | 189777 |  | mpts to switch on is reliably |
|  | 208-240 V AC 50/60 Hz | NZM2/3-XUHIV208-240AC-PI | 189778 |  | Early-make of auxiliary contacts on |
|  | 12 V DC | NZM2/3-XUHIV12DC-PI | 189779 |  | switching on and off (manual |
|  | 18 V DC | NZM2/3-XUHIV18DC-PI | 189780 |  | operation): approx. 20 ms |
|  | 24 V DC | NZM2/3-XUHIV24DC-PI | 189781 |  | Undervoltage releases cannot be |
|  | 48 V DC | NZM2/3-XUHIV48DC--PI | 189782 |  | installed simultaneously with early- |
|  | 60 V DC | NZM2/3-XUHIV60DC-PI | 189783 |  | or shunt release NZM...-XA |
|  | 110-130 V DC | NZM2/3-XUHIV110-130DC-PI | 189784 |  |  |
|  | 220-250 V DC | NZM2/3-XUHIV220-250DC-PI | 189785 |  |  |
| NZM1(-4), | $24 \mathrm{~V} \mathrm{AC} \mathrm{50/60} \mathrm{~Hz}$ | NZM4-XUHIV24AC-PI | 189786 | 1 Off |  |
| N(S)1(-4) | $48 \mathrm{~V} \mathrm{AC} \mathrm{50/60} \mathrm{~Hz}$ | 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

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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 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) | UVU-NZM | 260154 | 1 Off | Delay time can be set from $70 \mathrm{~ms}-4 \mathrm{~s}$. |
| :---: | :---: | :---: | :---: | :---: |
| $N(S) 1(-4), 2(-4), 3(-4), 4(-4)$ |  |  |  | With additional external capacitor: <br> - $30.000 \mu \mathrm{~F} \geqq 35 \mathrm{~V}$ up to 8 s |
| $50 / 60 \mathrm{~Hz}$ |  |  |  | - $90.000 \mu \mathrm{~F} \geqq 35 \mathrm{~V}$ up to 16 s |
| $220 \mathrm{~V}-240 \mathrm{~V}$ |  |  |  | Cannot be installed simultaneously with |
| $380 \mathrm{~V}-440 \mathrm{~V}$ |  |  |  | early-make auxiliary contact |
| $480 \mathrm{~V}-550 \mathrm{~V}$ |  |  |  | NZM...-XHIV... or shunt release NZM...-XA.... |
| DC/AC |  |  |  | Delay unit for separate installation |
| 24 V |  |  |  | (mounting: top-hat rail or screws). <br> For other operating voltages use a control |

## Special trip block

FFor 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. |
| :---: | :---: | :---: | :---: | :---: |
| NZM2(-4), N(S)2(-4) | NZM2/3-XUV | 259527 |  | Cannot be installed simultaneously with |
| NZM3(-4), N(S)3(-4) |  |  |  | separate early-make auxiliary contact |
| NZM4(-4) | NZM4-XUV | 266588 |  | ZM...-XHIV... or shunt release |
| N(S)4(-4) |  |  |  | ...-ХА.... |



With two early-make auxiliary contacts

| NZM11(-4) | NZM1-XUVHIVL | 271608 | 1 Off |
| :--- | :--- | :---: | :---: |
| N(S)1(-4) |  |  |  |
| NZM2(-4), N(S)2(-4) | NZM2/3-XUVHIV | 259684 |  |
| NZM3(-4), N(S)3(-4) |  |  |  |
| NZM4(-4) | NZM4-XUVHIV | 266596 |  |
| N(S)4(-4) |  |  |  |

## 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 $1-4)$ | NZM1-XUVHIV20L | 271609 | 1 Off |
| :--- | :--- | :---: | :---: |
| N(S)1(-4) |  |  |  |
| NZM2(-4), N(S)2(-4) | NZM2/3-XUVHIV20 | 259688 |  |
| NZM3(-4), N(S)3(-4) |  |  |  |
| NZM4(-4) | NZM4-XUVHIV20 | 266604 |  |
| N(S)4(-4) |  |  |  |

## Compact circuit breakers, switch disconnectors

Shunt releases
NZM1, NZM2/3, NZM4

| For use <br> with | Rated control voltage | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | :--- | Notes

Shunt releases
Without auxiliary contacts
Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.


Information relevant for export to North America

## 辈目

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 Part no. Article no. Std. pack Notes

Mit Screw terminals

Shunt releases
Capacitor unit $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ in conjunction with shunt release NZM...-XA208-250 AC/DC
Enclosure: degree of protection IP20
Not UL/CSA approved



[^4]| For use <br> with | Rated control voltage | Part no. | Article no. | Std. pack | Notes |
| :--- | :--- | :--- | :--- | :--- | :--- |

Shunt releases
With early-make auxiliary contact
Not in combination with remote operator.


Information relevant for export to North America

## 檗

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
$\left.\begin{array}{lllll}\begin{array}{l}\text { For use } \\ \text { with }\end{array} & \text { Rated control voltage } & \text { Part no. } & \text { Article no. } & \text { Std. pack }\end{array} \quad \begin{array}{l}\text { Article no. when } \\ \text { ordering separately }\end{array}\right]$

## Shunt releases

## Without auxiliary contacts - with push in terminal

Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below $35-70 \% \mathrm{U}_{S}$.
For use with emergency-stop devices in connection with an emergency-stop button.

| SG06121_L Symbolphoto |  | NZM2(-4), | 12 V AC/DC | NZM2/3-XA12AC/DC-PI | 189798 | $1 \text { Off }$ |  | When the shunt release is live, contact with the circuit breaker's main contacts on switching on is reliably prevented. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\text {C1 }}$ | N(S)2(-4) | $24 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XA24AC/DC-PI | 189799 |  |  |  |
|  |  | NZM3(-4), | 48 V AC/DC | NZM2/3-XA48AC/DC-PI | 189800 |  |  |  |
| F | c2 | N(S)3(-4) | $60 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XA60AC/DC-PI | 189801 |  |  |  |
|  |  |  | 110 V - $130 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XA110-130AC/DC-PI | 189802 |  |  |  |
|  |  |  | 208 V - 250 V AC/DC | NZM2/3-XA208-250AC/DC--PI | 189803 |  |  | cannot be installed simultaneously with early- |
| Sco6321_L Symbolphoto |  | NZM4(-4), | $12 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XA12AC/DC-PI | 189804 |  |  | make contact |
|  | ${ }^{C 1} \quad 3.13$ | $N(S) 4(-4)$ | 24 V AC/DC | NZM4-XA24AC/DC-PI | 189805 |  |  | NZM...-XHIV, untervoltage release NZM...-XU |
| 8 | $\text { ] }{ }^{1}$ |  | 48 V AC/DC | NZM4-XA48AC/DC-PI | 189806 |  |  | or relais modules |
|  | \|c2 ${ }_{3.14}$ |  | $60 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XA60AC/DC-PI | 189807 |  |  | NZM...-X2A... |
|  |  |  | 110 V - $130 \mathrm{~V} \mathrm{AC/DC}$ | 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 $35-70 \% \mathrm{U}_{\mathrm{S}}$. For use with emergency-stop devices in connection with an emergency-stop button.


| NZM2(-4), | $12 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XAHIV12AC/DC-PI | 189810 | 1 Off | When the shunt release |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NZM3(-4), | 24 V AC/DC | NZM2/3-XAHIV24AC/DC-PI | 189811 |  | is live, contact with the |
| N(S)2(-4), | $48 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XAHIV48AC/DC-PI | 189812 |  | circuit breaker's main |
| N3(-4) | $60 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XAHIV60AC/DC-PI | 189813 |  | contacts on switching on is reliably prevented |
|  | $110 \mathrm{~V}-130 \mathrm{~V} \mathrm{AC/DC}$ | NZM2/3-XAHV110-130AC/DC-PI | 189814 |  | Early-make of auxiliary |
|  | $208 \mathrm{~V}-250 \mathrm{~V}$ AC/DC | NZM2/3-XAHV208-250AC/DC-PI | 189815 |  | contacts on switching on and off (manual operation): |
| NZM4(-4), | $12 \mathrm{~V} \mathrm{AC} / \mathrm{DC}$ | NZM4-XAHIV12AC/DC-PI | 189816 |  | approx. 20 ms (NZM2/3) |
| N(S)4(-4) | $24 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XAHIV24AC/DC-PI | 189817 |  | and 90 ms (NZM4). |
|  | $48 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XAHIV48AC/DC-PI | 189818 |  | cannot be installed simul- |
|  | $60 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XAHIV60AC/DC-PI | 189819 |  | taneously with early-make |
|  | $110 \mathrm{~V}-130 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XAHIV110-130AC/DC--PI | 189820 |  | contact NZM...-XHIV, |
|  | $208 \mathrm{~V}-250 \mathrm{~V} \mathrm{AC/DC}$ | NZM4-XAHIV208-250AC/DC-PI | 189821 |  | untervoltage release NZM...-XU..., relais modules NZM...-X2A..., or remote operator NZM...-XR... |

Information relevant for export to North America

## 퓰

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

## Relay modules

NZM2/3, NZM4

| For use <br> with | Part no. | Article no. | Std. pack | Notes |
| :--- | :--- | :--- | :--- | :--- |
|  | Article no. when |  |  |  |
|  | ordering separately |  |  |  |
|  |  |  |  |  |


|  |  |  |
| :--- | :--- | :--- | :--- | :--- |


| so05318 Symbolphoto | Undervoltage releases and 1 early-make auxiliary contact and 2 Relais |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | PXR20(25) | NZM2/3-XUHIV2A24AC | 189732 | 10 |
|  | NZM2(-4)-...X ... | NZM2/3-XUHIV2A24DC | 189733 |  |
| F | PXR20(25) | NZM2/3-XUHIV2A110-130AC | 189734 |  |
|  | NZM3(-4)-... ${ }^{\text {. }}$ | NZM2/3-XUHIV2A208-240AC | 189735 |  |
| $\overline{\text { sc05018 Symbolphoto }}$ | PXR20(25) | NZM4-XUHIV2A24AC | 189736 |  |
| 1 | NZM4(-4)-...X ... | NZM4-XUHIV2A24DC | 189737 |  |
| E |  | NZM4-XUHIV2A110-130AC | 189738 |  |
|  |  | NZM4-XUHIV2A208-240AC | 189739 |  |

For interlock circuits and load-shedding circuits as well as make-before-break interruption of the shunt trip for primary breaker use.
Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below $35-70 \% \mathrm{U}_{\mathrm{S}}$.
For use with emergency-stop devices in connection with an emergency-stop button.
For signalizing 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. When the undervoltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Make-beforebreak 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. Undervoltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, undervoltage 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.
UL File No. E140305

UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified

| For use <br> with | Part no. | Article no. | Std. pack | Notes |
| :--- | :--- | :--- | :--- | :--- |
|  | Article no. when <br> ordering separately |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Relay modules
Shunt release with two relays

|  | Shunt release with two relays |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { PXR20(25) } \\ & \text { NZM2(-4)-...X... } \end{aligned}$ | NZM2/3-XA2A24AC | 189740 | 1 Off | The breakers are actuated by a voltage pulse or by applying a no-break current. |
|  |  | NZM2/3-XA2A24DC | 189741 |  |  |
|  | PXR20(25) | NZM2/3-XA2A110-130AC | 189742 |  | For signalizing commands or different states of the circuit breaker. |
|  | NZM3(-4)-...X... | NZM2/3-XA2A208-240AC | 189743 |  | 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 |
| Sto6221_L Symbolphoto | PXR20(25) | NZM4-XA2A24AC | 189744 |  |  |
| 5 | NZM4(-4)-...X... | NZM4-XA2A24DC | 189745 |  | Protection Manager. <br> If the shunt trip is live, contact with the circuit breaker's |
|  |  | NZM4-XA2A110-130AC | 189746 |  | If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on. |
| 1 |  | NZM4-XA2A208-240AC | 189747 |  | 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 |
|  |  |  |  |  | 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. |
|  | Relay module |  |  |  |  |
| wa_sg07318 Symbolphoto | $\begin{aligned} & \text { PXR2O(25) } \\ & \text { NZM2(-4)-...X... } \\ & \text { PXR20(25) } \\ & \text { NZM3(-4)-...X... } \end{aligned}$ | NZM2/3-X2A | 189722 | 1 Off | For signalizing commands or different states of the circuit breaker. Two relays per unit. The activation criteria can be configured in the trip unit. <br> Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager. 24 V DC, $24-240$ V $50 / 60 \mathrm{~Hz}$. <br> Only for use in combination with circuit breakers with electronic trips. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| wa_sg07418 Symbolphoto | $\begin{aligned} & \text { PXR20(25) } \\ & \text { NZM4(-4)-...X... } \end{aligned}$ | NZM4-X2A | 189723 |  | Relay components cannot be installed simultaneously with make-before-break auxiliary breaker NZM...-XHIV, the undervoltage trip NZM...-XU.... or the shunt trip NZM...-XA.... <br> Relay contacts for control wiring. <br> Control wiring on push-in clamps. <br> Cannot be used with the PXR10 NZM-AX electronic trip |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Information relevant for export to North America

## 䭗

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. 1437-0
NA Certification UL Listed, CSA certified

Compact circuit breakers, switch disconnectors
Door coupling rotary handles
NZM1, NZM2, NZM3, NZM4

|  | Standard |  |
| :--- | :--- | :--- | :--- |
| Product view | For use <br> with | Part no. |
|  | Article no. when <br> ordering separately | Std. pack |$\quad$ Notes

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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lockable in 0 position on handle with up to 3 padlocks. | $\begin{aligned} & \text { NZM1(-4), } \\ & \text { PN1(-4), } \\ & \text { N(S)1 (-4) } \end{aligned}$ | NZM1-XTVD | 260166 | $1 \text { Off }$ | Circuit breaker can also be installed in a horizontal position $90^{\circ}$ left/right, with the handle |
| - | With door interlock | $\begin{aligned} & \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XTVD | 260168 |  | still in the same position. |
|  |  | $\begin{aligned} & \hline \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XTVD | 260170 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XTVD | 266614 |  |  |
| 1230PIC-681, sg06115, 1230PIC-1419 Symbolphoto | Lockable on handle and switch with up to 3 padlocks. <br> Can be locked in 0 position, with adequate modification also in I position. <br> With door interlock. <br> Lockable on switch in 0 position. | $\begin{aligned} & \text { NZM1 } 1(-4), \\ & \text { PN1(-4), } \\ & \text { N(S)1 (-4) } \end{aligned}$ | NZM1-XTVDV | 260172 |  |  |
|  |  | $\begin{aligned} & \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XTVDV | 260174 |  |  |
|  |  | $\begin{aligned} & \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XTVDV | 260176 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XTVDV | 266616 |  |  |
|  | Red-yellow for emergency switching off |  |  |  |  |  |
| $\overline{12301 P C .682, ~ 1230 P I C-698, ~ s g 05315 ~ S y m b o l p h o t o ~}$ | ALockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. <br> With door interlock. Lockable on switch in 0 position. | $\begin{aligned} & \text { NZM1(-4), } \\ & \text { PN1(-4), } \\ & \mathrm{N}(\mathrm{~S}) 1(-4) \end{aligned}$ | NZM1-XTVDVR | 260178 | $1 \text { Off }$ | Circuit breaker can also be installed in a horizontal position $90^{\circ}$ left/right, with the handle |
|  |  | $\begin{aligned} & \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XTVDVR | 260180 |  | n. |
|  |  | $\begin{aligned} & \hline \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XTVDVR | 260182 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XTVDVR | 266618 |  |  |

Information relevant for export to North America

## 屋

| 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 |

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


Compact circuit breakers, switch disconnectors
Door coupling rotary handles
NZM1, NZM2, NZM3, NZM4

|  | Standard |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| For use <br> with | Part no. | Article no. | Std. pack | Notes |



| $600 \text { mm }$ <br> max. mounting depth | $\begin{aligned} & \text { NZM1(-4), PN1(-4), NZM1/2-XV6 } \\ & \text { N(S)1(-4) } \\ & \text { NZM2(-4), PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | 260191 | Length 425 mm , can be cut to required length. |
| :---: | :---: | :---: | :---: |
|  | NZM3(-4), PN3(-4), NZM3/4-XV6 N(S)3(-4) <br> NZM4(-4), N(S)4(-4) | 260193 |  |

Door coupling rotary handle with key lock

| For use <br> with | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | Notes

Door coupling rotary handle with key lock
Door coupling rotary handle for operating the switch through a closed control panel door.
Standard, black/grey


| Lockable in position 0 using cylinder | NZM1(-4), | NZM1-XTVDKL | 172528 | 1 Off | Circuit breaker can also be |
| :---: | :---: | :---: | :---: | :---: | :---: |
| lock and key withdrawable | PN1(-4), | NZM1-XTVDKLR | 172529 |  | installed in a lying position |
| Also possible: lockable on the | N(S)1(-4) |  |  |  | $90^{\circ}$ left/right, with the |
| 0 position on the handle using up to |  |  |  |  | handle still in the same |
| 3 padlocks |  |  |  |  | position. |
| With door interlock |  |  |  |  |  |
| Not defeatable in the locked OFF |  |  |  |  | Cannot be combined with: |
| and ON positions with padlock | NZM2(-4), | NZM2-XTVDKL | 172530 | 1 Off | - Remote operator |
| on the handle. | PN2(-4), | NZM2-XTVDKLR | 172531 |  | - Side panel mounting |
| Can be modified in the unlocked | N(S)2(-4) |  |  |  | - Mechan. interlock <br> - Insulating surround |

Can be modified such that it can be defeated from the outside
using a screwdriver.
Door to be opened in the
OFF position when not locked.

| NZM3(-4), | NZM3-XTVDKL | 172532 | 1 Off |
| :--- | :--- | :--- | :--- |
| PN3(-4), | NZM3-XTVDKLR | 172533 |  |

External warning plate/designation N(S)3(-4)
label can be clipped on.
Complete including rotary drive
and coupling parts.
Extension shaft additionally required.
obtainable in two lengths.

| NZM4(-4), | NZM4-XTVDKL | 172534 | 1 Off |
| :--- | :--- | :--- | :--- |
| N(S)4(-4) | NZM4-XTVDKLR | 172535 |  |

Information relevant for export to North America
壁
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 <br> Compact circuit breakers, switch disconnectors <br> Door coupling rotary handles for North America 

NZM1, NZM2, NZM3, NZM4

|  | Standard |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| For use <br> with | Part no. | Article no. | Std. pack | Notes |




| Lockable on handle | NZM1, N(S | NZM1-XTVDVR-NA | 271449 | 1 Off |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| and switch with up to 3 padlocks. |  |  |  |  | - Can not be defeated in the locked OFF position. |
| Lockable in 0 position on handle. | NZM2, N(S)2 | NZM2-XTVDVR-NA | 271450 |  | - Door opening with active rotation beyond the 0 position. |
| With door interlock. Lockable on switch in |  |  |  |  | - Cannot be combined with mechanical interlock |
| 0 position | NZM3, N(S)3 | NZM3-XTVDVR-NA | 271451 |  | - External warning plate/ designation label can be clipped on. |

[^5]For maximum shaft length 60 mm
Part no. Article no. Std. pack Notes

Article no. when
ordering separately
Extremely narrow fittings
Part no. Article no. Std. pack Notes

Article no. when ordering separately

Article no. Std. pack Notes
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$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

| NZM1-XTVDV-60-NA | 100667 | $\begin{aligned} & 10 \mathrm{ff} \\ & \text { 辟 } \end{aligned}$ | Door interlock <br> - Can not be defeated in the locked OFF position | NZM1-XTVDV-0-NA | 100675 | Door interlock <br> - Can not be defeated in the locked OFF position |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NZM2-XTVDV-60-NA | 100668 |  | - Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. | NZM2-XTVDV-0-NA | 100676 | - Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. |
| NZM3-XTVDV-60-NA | 100669 |  | - Cannot be combined with mechanical interlock NZM...-XTVDV-60-NA | NZM3-XTVDV-0-NA | 100677 | - Cannot be combined with mechanical interlock NZM...-XTVDV-0-NA |
| NZM4-XTVDV-60-NA | 100670 |  | - For a maximum shaft length of 60 mm <br> - Without shaft support <br> - Cannot be combined with additional handle NZM...-XDZ <br> - External warning plate/ designation label can be clipped on. | NZM4-XTVDV-0-NA | 100678 | For extremely narrow fittings <br> - With special short extension shaft <br> - Cannot be combined with additional handle NZM...-XDZ <br> - AExternal warning plate/ designation label can be clipped on. |


| NZM1-XTVDVR-60-NA | 100671 | 1 Off | Door interlock | NZM1-XTVDVR-0-NA | 100679 | $1 \text { Off }$ | Door interlock |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 塈 ${ }^{\text {\% }}$ | - Can not be defeated in the locked OFF position |  |  |  | - Can not be defeated in the locked OFF position |
| NZM2-XTVDVR-60-NA | 100672 |  | - Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. | NZM2-XTVDVR-0-NA | 100680 |  | - Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. |
| NZM3-XTVDVR-60-NA | 100673 |  | - Door can be opened in OFF NZM...-XTVDVR-60 <br> - For a maximum shaft length of 60 mm | NZM3-XTVDVR-0-NA | 100681 |  | - Door can be opened in OFF NZM...-XTVDVR-0 <br> - For extremely narrow fittings <br> - With special short extension shaft |
| NZM4-XTVDVR-60-NA | 100674 |  | - Without shaft support <br> - Cannot be combined with additional handle NZM...-XDZ <br> - External warning plate/ designation label can be clipped on. | NZM4-XTVDVR-0-NA | 100682 |  | - Cannot be combined with additional handle NZM...-XDZ <br> - External warning plate/ designation label can be clipped on. |

Rotary handles
NZM...-XDV

| For use <br> with | Part no. | Article no. | Std. pack | Notes |
| :--- | :--- | :--- | :--- | :--- |
|  | Article no. when <br> ordering separately |  |  |  |
|  |  |  |  |  |


|  | Rotary handle on circuit breaker Complete with rotary drive |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard, black/grey |  |  |  |  |  |
| 1230PIC-759, 1230PIC-819, sg07015 Symbolphoto | Lockable in 0 position on switch with up to 3 padlocks. | $\begin{aligned} & \text { NZM1(-4), } \\ & \text { PN1(-4), } \\ & \text { N(S)1(-4) } \end{aligned}$ | NZM1-XDV | 260125 | 1 Off | Circuit breaker can also be installed in a lying position $90^{\circ}$ left/right, with the handle still in the same position. |
|  |  | $\begin{aligned} & \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XDV | 260127 |  |  |
|  |  | $\begin{aligned} & \hline \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XDV | 260129 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XDV | 266608 |  |  |
| 1230PIC-760, sg07215, sg07015 Symbolphoto <br> 6 | Lockable in 0 position on handle with up to 3 padlocks. | $\begin{aligned} & \text { NZM1(-4), } \\ & \text { PN1(-4), } \\ & \text { N(S)1 }(-4) \end{aligned}$ | NZM1-XDVG | 285247 | $1 \text { Off }$ | Circuit breaker can also be installed in a lying position $90^{\circ}$ left/right, with the handle still in the same position. |
|  |  | $\begin{aligned} & \hline \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XDVG | 285248 |  |  |
|  |  | $\begin{aligned} & \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XDVG | 165716 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XDVG | 165718 |  |  |
|  | Red-yellow for emergency switch off |  |  |  |  |  |
| $\overline{1230 P I C-762, ~ 1230 P I C-820, ~ s g 07115 ~ S y m b o l p h o t o ~}$ | Lockable in O position on switch with up to 3 padlocks. | $\begin{aligned} & \text { NZM1(-4), } \\ & \text { PN1(-4), } \\ & \text { N(S)1(-4) } \end{aligned}$ | NZM1-XDVR | 260135 | $1 \text { Off }$ | Circuit breaker can also be installed in a lying position $90^{\circ}$ left/right, with the handle still in the same position. |
|  |  | $\begin{aligned} & \hline \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XDVR | 260137 |  |  |
|  |  | $\begin{aligned} & \hline \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XDVR | 260140 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XDVR | 266610 |  |  |
| 1230PIC-761, sg07315, sg07115 Symbolphoto | Lockable in 0 position on switch with up to 3 padlocks. | $\begin{aligned} & \text { NZM1(-4), } \\ & \text { PN1(-4), } \\ & \text { N(S)11(-4) } \end{aligned}$ | NZM1-XDVGR | 285249 | 1 Off | Circuit breaker can also be installed in a lying position $90^{\circ}$ left/right, with the handle still in the same position. |
| $\cdots$ |  | $\begin{aligned} & \text { NZM2(-4), } \\ & \text { PN2(-4), } \\ & \text { N(S)2(-4) } \end{aligned}$ | NZM2-XDVGR | 285280 |  |  |
|  |  | $\begin{aligned} & \text { NZM3(-4), } \\ & \text { PN3(-4), } \\ & \text { N(S)3(-4) } \end{aligned}$ | NZM3-XDVGR | 165717 |  |  |
|  |  | $\begin{aligned} & \text { NZM4(-4), } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XDVGR | 165719 |  |  |

Information relevant for export to North America
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Product Standards UL489; CSA-C22.2, No. 5-09; IEC60947, CE marking
UL File No. E140305
ULCCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified

Compact circuit breakers, switch disconnectors
Rotary handles with key lock
4.14 NZM...XDKL

| For use <br> 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
Lockable in position 0 NZM1(-4), NZM1-XDKL $172536 \quad 1$ Off $\quad$ Circuit breaker can also be installed in a lying
using cylinder PN1(-4), 卷 position $90^{\circ}$ left/right, with the handle still in
lock and key $\quad N(S) 1(-4)$
withdrawable the same position.
Cannot be combined with:

- Remote operator
- Side panel mounting
- Mechan. interlock
$\qquad$
NZM2(-4), NZM2-XDKL 1725371 Off • Insulating surround
PN2(-4),
N(S)2(-4)

| NZM3(-4), | NZM3-XDKL | 172538 |
| :--- | :--- | :--- |
| PN3(-4), |  | Off |
| PN |  |  |

N(S)3(-4)

NZM4(-4), NZM4-XDKL 172539
N(S)4(-4)

## Information relevant for export to North America

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IP66
UL/CSA Type 4X, Type 12 Compact circuit breakers, switch disconnectors

Rotary handles with door interlock
NZM...XDTV

| For use <br> with | Part no. | Article no. | Std. pack |
| :--- | :--- | :--- | :--- | Notes


| Rotary handles on switch with door interlock Complete with rotary drive and insulating surround |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Standard, black/grey |  |  |  |  |  |
| Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. <br> Also available with door interlock e.g. for MCC service distribution. | NZM1(-4) <br> PN1(-4), <br> N(S)1 (-4) <br> NZM2(-4), <br> PN2(-4), <br> N(S)2(-4) | NZM1-XDTV <br> NZM2-XDTV | 260131 | $1 \text { Off }$ | Circuit breaker can also be installed in a lying position $90^{\circ}$ left/right, with the handle still in the same position. |
| Red-yellow for emergency switching off |  |  |  |  |  |
| Lockable in 0 position on handle with up $t$ 3 padlocks. <br> Also available with door interlock e.g. for MCC service distribution. | NZM1(-4) <br> PN1(-4), <br> N(S)1(-4) <br> NZM2(-4), <br> PN2(-4), <br> $\mathrm{N}(\mathrm{S}) 2(-4)$ | NZM1-XDTVR <br> NZM2-XDTVR | 260142 | $1 \text { Off }$ |  |

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


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 |

Main switch assembly kit
NZM...XHB..

| For use <br> with | Part no. |
| :--- | :--- |
|  | Article no. when |

Main switch assembly kit
Equipment supplied:

- Door coupling rotary handle
- Extension shaft NZM...-XV4
- External warning plate/designation label in German/English
- 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 to IEC/EN 60204-1


Lockable in 0 position on
handle with up to
3 padlocks.

|  | NZM1(-4) | NZM1-XHBR | 266632 |
| :--- | :--- | :--- | :---: |
|  | PN1(-4), |  |  |
|  | N(S)1(-4) |  | 266633 |
| - | NZM2(-4) | NZM2-XHBR |  |
|  | PN2(-4), |  | 266634 |
|  | N(S)2(-4) |  |  |
| - | NZM3(-4) | NZM3-XHBR | 271842 |
|  | PN3(-4), |  |  |
|  | N(S)3(-4) |  |  |

Information relevant for export to North America
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| 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 |

Compact circuit breakers, switch disconnectors
Main switch assembly kit
NZM...-XS...

| ModelFor use <br> with | Part no. | Article no. Std. pack |
| :--- | :--- | :--- |
|  | Article no. when <br> ordering separately |  |

Main switch assembly kit
Equipment supplied:

- Door coupling rotary handle
- Extension shaft NZM...-XV4
- External warning plate/designation label in German/English
- 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.

| $\overline{\text { NZM4 }}$. ${ }^{\text {Stypes }}$ | For side wall installation <br> Actuation of the switch on the control panel side wall Switch mounting on mounting plate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard, black/grey |  |  |  |  |  |
|  | Lockable in 0 position on handle with up to 3 padlocks, with adequate modification also in I position. | For operation on the left | $\begin{aligned} & \text { NZM11-4) } \\ & \text { PN1(-4), N(S)1(-4) } \end{aligned}$ | NZM1-XS-L | 266641 | $\begin{aligned} & 10 \mathrm{ff} \\ & \text { 恝 } \end{aligned}$ |
|  |  |  | $\begin{aligned} & \text { NZM2(-4) } \\ & \text { PN2(-4), N(S)2(-4) } \end{aligned}$ | NZM2-XS-L | 266642 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM3(-4) } \\ & \text { PN3(-4), N(S)3(-4) } \end{aligned}$ | NZM3-XS-L | 266643 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM4(-4) } \\ & N(S) 4(-4) \end{aligned}$ | NZM4-XS-L | 289806 |  |
| $\stackrel{1230 \mathrm{PlC-736} \text { Symbolphoto }}{ }$ |  | For operation on the right | $\begin{aligned} & \text { NZM1 (-4) } \\ & \text { PN1(-4), N(S)1(-4) } \end{aligned}$ | NZM1-XS-R | 266644 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM2(-4) } \\ & \text { PN2(-4), N(S)2(-4) } \end{aligned}$ | NZM2-XS-R | 266645 |  |
|  |  |  | $\begin{aligned} & \text { NZM3(-4) } \\ & \text { PN3(-4), N(S)3(-4) } \end{aligned}$ | NZM3-XS-R | 266646 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM4(-4) } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XS-R | 289807 |  |
|  | Red-yellow for emergency switching off |  |  |  |  |  |
|  | Lockable in 0 position on handle with up to | For operation on the left | $\begin{aligned} & \text { NZM1(-4) } \\ & \text { PN1(-4), N(S)1(-4) } \end{aligned}$ | NZM1-XSR-L | 266653 | $1 \text { Off }$ |
|  |  |  | $\begin{aligned} & \hline \text { NZM2(-4) } \\ & \text { PN2(-4), N(S)2(-4) } \end{aligned}$ | NZM2-XSR-L | 266654 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM3(-4) } \\ & \text { PN3(-4), N(S)3(-4) } \end{aligned}$ | NZM3-XSR-L | 266655 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM4(-4) } \\ & \text { N(S)4(-4) } \end{aligned}$ | NZM4-XSR-L | 289808 |  |
| 1230PIC-737 Symbolphoto <br> $+1$ |  | For operation on the right | $\begin{aligned} & \text { NZM1(-4) } \\ & \text { PN1(-4), N(S)1 (-4 } \end{aligned}$ | NZM1-XSR-R | 266656 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM2(-4) } \\ & \text { PN2(-4), N(S)2(-4) } \end{aligned}$ | NZM2-XSR-R | 266657 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM3(-4) } \\ & \text { PN3(-4), N(S)3(-4) } \end{aligned}$ | NZM3-XSR-R | 266658 |  |
|  |  |  | $\begin{aligned} & \hline \text { NZM4(-4) } \\ & N(S) 4(-4) \end{aligned}$ | NZM4-XSR-R | 289809 |  |

Information relevant for export to North America
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| 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

| Model | For use <br> with | Part no. | Article no. Std. pack | Information relevant for export to <br> North America |
| :--- | :--- | :--- | :--- | :--- |
|  | Article no. when <br> 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 - Mounting bracket
- Special short extension shaft - Black and yellow flash
- External warning plate/designation label in German/English

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.



Degree of Protection
IEC: IP66,
UL/CSA
Type 4X, 12


Compact circuit breakers, switch disconnectors
Main switch assembly kit
NZM...-XHB...

| Model | For use <br> with | Part no. | Article no. Std. pack | Information relevant for export to <br> North America |
| :--- | :--- | :--- | :--- | :--- |
|  | Article no. when <br> 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
- Extension shaft NZM...-XV6 for mounting depth 600 mm ,
"Deliberate Action" operation NZM1/2-XV4 with NZM1 for mounting depth 400 mm
- External warning plate/designation label in German/English • 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


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.

| 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 |


| Model | For use <br> with | Part no． | Article no．Std．pack | Information relevant for export to <br> North America |
| :--- | :--- | :--- | :--- | :--- |
|  | Article no．when <br> 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
－Extension shaft NZM．．．－XV6 for mounting depth 600 mm ，
＂Deliberate Action＂operation NZM1／2－XV4 with NZM1 for mounting depth 400 mm
－External warning plate／designation label in German／English • 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


| Lockable in 0 position on handle with up to ， 3 padlocks． <br> With door interlock and lockable on switch in 0 position． | IEC | NZM1（－4） | NZM1－XHB－DAR | 125957 | 1 Off | Product Standards |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { PN1 (-4), } \\ & \text { N1(-4) } \end{aligned}$ |  |  | ＊ | UL489； |
|  |  |  |  |  |  | CSA－C22．2 |
|  | UL／CSA | NZM1（－4） | NZM1－XHB－DAR－NA | 125959 |  | No．5－09； IEC60947 |
|  |  | PN1（－4）， |  |  |  | CE marking |
|  |  |  |  |  |  | UL File No． UL CCN |
|  | IEC | NZM2（－4） | NZM2－XHB－DAR | 116896 |  |  |
|  |  | PN2（－4）， |  |  |  | CSA File No． 022086 |
|  |  | N（S）2（－4） |  |  |  | CSA Class No．1437－01 |
|  | UL／CSA | NZM2（－4） | NZM2－XHB－DAR－NA | 116898 |  | NA Certification UL Listed， |
|  |  | PN2（－4）， |  |  |  | CSA certified |
|  |  | N（S）2（－4） |  |  |  | Degree of Protection |
|  | IEC | NZM3（－4） | NZM3－XHB－DAR | 118989 |  | IEC：IP66， |
|  |  | PN3（－4）， |  |  |  | UL／CSA |
|  |  | N（S）3（－4） |  |  |  | Type 4X， 12 |
|  | UL／CSA | NZM3（－4） | NZM3－XHB－DAR－NA | 119001 |  |  |
|  |  | PN3（－4）， |  |  |  |  |
|  |  | N（S）3（－4） |  |  |  |  |
|  | IEC | NZM4（－4） | NZM4－XHB－DAR | 119003 |  |  |
|  |  | PN4（－4）， |  |  |  |  |
|  |  | N（S）4（－4） |  |  |  |  |
|  | UL／CSA | NZM4（－4） | NZM4－XHB－DAR－NA | 119005 |  |  |
|  |  | PN4（－4）， |  |  |  |  |
|  |  | N（S）4（－4） |  |  |  |  |

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.


Handle black＋additional handle black，shaft 600 mm

| NZM1（－4） | NZM1－XHB－DA－V6 1 | 144905 | 1 Off | Product Standards |
| :---: | :---: | :---: | :---: | :---: |
| PN1（－4）， N（S） $1(-4)$ | NZM1－XHB－DA－V6－NA 1 | 144906 | 良湅 | UL489； CSA－C22．2 |
|  |  |  |  | No．5－09； IEC60947， CE marking |
| Handle red＋additional handle red，shaft 600 mm |  |  |  | UL File No．E140305 |
| NZM1（－4） | NZM1－XHB－DAR－V6 1 | 144907 | 1 Off | UL CCN DIHS |
| PN1（－4）， | NZM1－XHB－DAR－V6－NA 1 | 144908 | 沯至 | CSA File No． 022086 |
| N（S）1（－4） |  |  |  | CSA Class No．1437－01 NA Certification |
|  |  |  |  | UL Listed， CSA certified |

Compact circuit breakers, switch disconnectors
Main switch assembly kit, Rear-mounted drives
NZM...-XS..., NZM...-XRAV...

| For use <br> with | Part no. Article no. Std. pack Notes | Information relevant for export to |
| :--- | :--- | :--- | :--- |
|  |  |  |

## 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.


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.



| For use <br> with | Part no. | Article no. Std. pack Notes | Information relevant for export to |
| :--- | :--- | :--- | :--- |
|  |  |  | North America |

Side mounted handle
Complete kit, includes handle, mechanical system, and Bowden cable (Length: 48, 72, 84 and 120 Inch).


## Compact circuit breakers, switch disconnectors

## Remote operators

## NZM1, NZM2/3, NZM4

| For use <br> with | Rated control voltage | Part no. | Article no. |
| :--- | :--- | :--- | :--- | Std. pack | Notes |
| :--- |

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: $4-8 \mathrm{~mm}$ ).
When mounting the remote drive NZM2(3)-XR(D)... on 4 pole switch an additional cover NZM...- XAVPR is required.


| NZM2(-4) | $110-130 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2-XRD110-130AC | 115390 | 1 Off |
| :---: | :---: | :---: | :---: | :---: |
| N(S)2(-4) | $208-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2-XRD208-240AC | 115391 | 韭 |
|  | $380-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}{ }^{11}$ | 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 |  |

Sliding switch for „Auto" or „Manual"
Max. number auxiliary contacts:
2 standard auxiliary contacts,
1 trip-indicating auxiliary switches Cannot be combined with switchdisconnector 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.

1) Not UL/CSA approved

Closing delay $60-100 \mathrm{~ms}$, opening delay $\mathbf{3 0 0} \mathbf{- 3 0 0 0} \mathrm{ms}$


| Can be synchronized |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NZM2(-4) | 110-130 V 50/60 Hz | NZM2-XR110-130AC | 259830 | Cannot be combined with switch disconnector PN... <br> 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 |  |
|  | $380-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM2-XR380-440AC | 259834 |  |
|  | $24-30 \mathrm{~V}$ DC | NZM2-XR24-30DC | 259836 |  |
|  | 48-60 V DC | NZM2-XR48-60DC | 259838 |  |
|  | 110-130 V DC110-130 V DC | NZM2-XR110-130DC | 259840 |  |
|  | 220-250 V DC | NZM2-XR220-250DC | 259842 |  |
| $\begin{aligned} & \text { NZM3(-4) } \\ & \text { N(S)3(-4) } \end{aligned}$ | 110-130 V 50/60 Hz | NZM3-XR110-130AC | 259848 |  |
|  | 208-240 V 50/60 Hz | NZM3-XR208-240AC | 259850 |  |
|  | $380-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM3-XR380-440AC | 259852 |  |
|  | 24-30 V DC | NZM3-XR24-30DC | 259854 |  |
|  | 48-60 V DC | NZM3-XR48-60DC | 259856 |  |
|  | 110-130 V DC110-130 V D | NZM3-XR110-130DC | 259858 |  |
|  | 220-250 V DC | NZM3-XR220-250DC | 259860 |  |
| $\begin{aligned} & \text { NZM4(-4) } \\ & \text { N(S)4(-4) } \end{aligned}$ | 110-130 V 50/60 Hz | NZM4-XR110-130AC | 266684 |  |
|  | 208-240 V 50/60 Hz | NZM4-XR208-240AC | 266685 |  |
|  | $380-440 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ | NZM4-XR380-440AC | 266686 |  |
|  | 24-30 V DC | NZM4-XR24-30DC | 266691 |  |
|  | 48-60 V DC | NZM4-XR48-60DC | 266692 |  |
|  | 110-130 V DC110-130 V D | NZM4-XR110-130DC | 266693 |  |
|  | $220-250$ V DC | NZM4-XR220-250DC | 266694 |  |

Information relevant for export to North America

## 莀

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 Part no. Article no. Std. pack Notes

Plug with screw terminals for remote operator.

NZM...-XR... NZM-XRS $180429 \quad 10 \mathrm{ff}$

|  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## 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

| CI44... | NZM-RTR | 194557 | 1 Off |
| :--- | :--- | :--- | :--- |
| CI45... |  |  | Width: 265 mm |
| CI48... |  |  |  |

Compact circuit breakers, switch disconnectors

## Accessories

ZFS...., BPF...

| For use <br> with | Part no. |
| :--- | :--- |
|  | Article no. when |

ordering separately

|  | External warning plate/designation label |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 115 A023 Symbolphoto | Main switch - | german/english | NZM1(-4), | ZFS61/62-NZM7 | 272525 | 10 Off | A bilingual external warning plate/ |
|  | open in | german | PN1(-4), | ZFS61-NZM7 | 051089 |  | designation label in German/ |
|  | 0 position | english | N(S)1(-4) | ZFS62-NZM7 | 065957 |  | English is already included in the |
|  |  | french | -NZM2(-4), | ZFS63-NZM7 | 065958 |  | main switch assembly kit. |
|  |  | chinese/ english | PN2(-4), <br> N(S)2(-4) <br> NZM3(-4), | ZFS82-NZM | 104910 | 1 Off |  |
|  |  | chinese | PN3(-4), | ZFS83-NZM | 105945 |  |  |
|  | Symbol | Circuit breaker symbol | N(S)3(-4) <br> NZM4(-4), | ZFS-LS-NZM | 104829 |  |  |
|  |  | Switch disconnecto 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 |  |




| For use with | Part no. | Article no. | Std. pack | Notes | Information relevant for export to North America |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Article no. when |  |  |  |  |
|  | ordering separately |  |  |  |  |



Compact circuit breakers, switch disconnectors

## Accessories

NZM...-XDZ, NZM...-XBR, NZM...-X...


Spacers
Enables fast and attractively priced offsetting of varying construction sizes with/without rotary handle or remote operator to the same front depth.

|  |  |  |
| :--- | :--- | :--- | :--- | :--- |


| NZM3(-4) | NZM3-XAB | 260211 | 1 Off | Grid depth 17.5 mm , |
| :---: | :---: | :---: | :---: | :---: |
| PN3(-4), |  |  |  | M5 thread |
| N(S)3(-4) |  |  |  | One set contains 4 spacers |
| NZM4(-4) |  |  |  | NZM3, NZM4: 1 off per |
| N(S)4(-4) |  |  |  | fixing screw |
|  |  |  |  | 4 fixing screws per switch included |

Clips


Mechanical interlock
NZM...XMV(R)(L), NZM-XBZ...

| For use <br> with | Part no. | Article no. Std. pack Notes | Information relevant for export to |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | North America |
|  |  |  |  |



# 4.20/21 Compact circuit breakers, switch disconnectors 

Mechanical interlock / Paralleling mechanism NZM...XMV(R)(L), NZM-XBZ...

| For use <br> with | Part no. Article no. Std. pack Notes |
| :--- | :--- | :--- | :--- |$\quad$| 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.



| NZM4(-4), N(S)4(-4) NZM4-XMVR | 104547 |
| :--- | :--- | :--- |

+NZM4(-4), N(S)4(-4)

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.

| $\begin{aligned} & \text { NZM2(-4), N(S)2(-4) } \\ & + \text { NZM2(-4), N(S)2(-4) } \end{aligned}$ | NZM2-XMVRL | 104548 | 1 Off | Contains parts for both switch sides. Extension shaft additionally required. |
| :---: | :---: | :---: | :---: | :---: |
| NZM2(-4), N(S)2(-4) <br> +NZM3(-4), N(S)3(-4) | NZM2/3-XMVRL | 104549 |  | Maximum switch spacing Can not be combined with rotary handles, door |
| NZM3(-4), N(S)3(-4) <br> +NZM3(-4), N(S)3(-4) | NZM3-XMVRL | 104550 |  | auxiliary contacts, and direct- <br> switching remote operator |
| NZM3(-4), N(S)3(-4) | NZM3/4-XMVRL | 104551 |  | NZM2-XRD. |


| + NZM4(-4), N(S)4(-4) |
| :--- |
| NZM4(-4), N(S)4(-4) NZM4-XMVRL 104552 | +NZM4(-4), N(S)4(-4)

Paralleling mechanism
Simultaneous actuation of 2 PN switch disconnectors of the same type mounted side-by-side.


| PN1(-4) | PN1-XPA | 283471 |
| :--- | :---: | :---: |
| + PN1(-4) |  |  |
| PN2(-4) | PN2-XPA | 283472 |
| + PN2(-4) |  |  |
|  |  |  |
| PN3(-4) | PN3-XPA | 283473 |

- 1 x rotary handle on circuit
(-XD) supplied.
- 1 x door coupling rotary handle (-XTVD) supplied.


## PN3

- $1 \times$ rotary handle on switch (not lockable) supplied.
- $1 \times$ door coupling rotary handle (not lockable) supplied.
- Not suitable for use as a main switch.

Number of Rated
poles current =
Rated
uninterrupted current
$I_{n}=I_{u}$
$A$

Setting range
Part no.

| Overload <br> releases | Short-circuit <br> releases | Short-circuit <br> releases |
| :--- | :--- | :--- |
|  |  | Nolayed |

$I_{r}=I_{n} x \ldots \quad I_{s d}=I_{r} x \ldots \quad I_{i}=I_{n} x \ldots$


Article no. Std. pack

Circuit breakers with earth-fault release, 3 pole For apparatus with power electronics,
-
$\overline{A C / D C ~ s e n s i t i v e ~ a c c o r d i n g ~ t o ~ c o r e-b a l a n c e ~ p r i n c i p l e ~ i n ~ r a n g e ~ o f ~} 0-100 \mathrm{kHz}$ residual-current frequency. Not UL/CSA approved.
Suitable for use in three-phase systems.
Rated operating voltage: $400 \mathrm{~V}(50 / 60 \mathrm{~Hz})$
Rated fault current $\mathrm{l} \Delta \mathrm{n}=0.03 \mathrm{~A}$
Internal power supply $\mathrm{U}_{\mathrm{e}}=50-400 \mathrm{~V}$
Turnkey combination of current-limiting circuit breaker and residual-current device.
Adjusting buttons can be sealed.
Depending on the cable manufacturer up to $240 \mathrm{~mm}^{2}$ can be connected.
High switching capacity 150 kA ; $415 \mathrm{~V} 50 / 60 \mathrm{~Hz}$

|  | High switching capacity 150 kA ; $415 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WA_SG168521_L Symbolphoto | 3 pole | 100 | 80-100 | 600-1000 | 6-10 | NZMH2-A100-FIA30 | 158530 | 1 Off |
| $\cdots \cdot 1$ |  | 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 |  |
| 4. |  | 250 | 200-250 | 1500... 2500 | 6-10 | NZMH2-A250-FIA30 | 112629 |  |
|  |  | 100 | 80-100 | 600-1000 | 6-10 | NZMH2-A100-FIA30-BT | 158531 |  |
| ! 1 , |  | 125 | 100-125 | 750... 1250 | 6-10 | NZMH2-A125-FIA30-BT | 129711 |  |
| *3...s. |  | 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 |  |

Compact circuit breakers, switch disconnectors
Earth-fault release
NZM...XFI...

| For use <br> with | Number of <br> conductors | Part no. | Article no. Std. pack | Notes |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Article no. when |  |  |
|  |  |  |  |  |
|  |  | ordering separately |  |  |

## 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 $\sim$
For 3 and 4 pole NZM1(-4) circuit breakers and N1(-4)
Switch disconnectors, dependant on mains power $U_{e}=200 \ldots 415 \mathrm{~V} 50 / 60 \mathrm{~Hz}$


## Mounting below up to 250A

$\approx$ Pulse-current sensitive according to core-balance principle
For 4 pole circuit breakers NZM2-4 and Switch disconnectors N2-4
independant of mains voltage $\mathrm{U}_{\mathrm{e}}=280 \ldots 690 \mathrm{~V} 50 / 60 \mathrm{~Hz}$


| Rated fault current <br> $I_{\Delta n}=0.03 \mathrm{~A}$ | NZM2-4 <br> N2-4 | 4 pole | NZM2-4-XFI30 | 292343 | 1 Off |
| :--- | :--- | :--- | :--- | :--- | :--- | | Auxiliary contacts (1 N/0, 1 NC built-in) are |
| :--- |
| reset with the reset button. |


$\triangle$ Core-balance principle with AC/DC current sensitivity (in range $0 . . .100 \mathrm{kHz}$ )
For 4 pole circuit breakers NZM2-4 and Switch disconnectors N2-4,
Internal voltage supply $\mathrm{Ue}=50 \ldots 400 \mathrm{~V}$

| Rated fault current <br> $I_{\Delta n}=0.03 \mathrm{~A}$ | NZM2-4 | 4 pole | NZM2-4-XFIA3O | 292345 | 1 Off | Observe response threshold dependence on <br> frequency! |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rated fault current | NZM2-4 | 4 pole | NZM2-4-XFIA | 292346 | 1 Off | See Frequency response characteristic curve. <br> Adjusting Buttons can be sealed. |
| $\mathrm{I}_{\Delta \mathrm{n}} 0.3-0.5-1$ A Delay time | N2-4 |  |  |  |  |  |
| $\mathrm{t}_{\mathrm{v}}=60-150-300-450 \mathrm{~ms}$ |  |  |  |  |  |  |

# Compact circuit breakers, switch disconnectors 

Power supply module / Interface module
For use $\quad$ Part no. $\quad$ Article no. Std. pack Notes

Article no. when
ordering separately

Power supply module, 24 VDC


| 24 V DC supply to the electronic trip. |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| NZM2(-4)-VX(MX) ... | NZM2-XPS24DC | 189822 | 1 Off | Mechanical pass-through of the <br> NZM3 (-4)-VX(MX) ... |

Interface module, PXR20/25, 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 $(\mathrm{I},+, 0)$ for the electronic trip unit. The switch's status can be communicated. 24 V DC auxiliary power connection. Optional ECAM available for various Fieldbus communication systems (SmartWire-DT, Ethernet-based Fieldbus). Connection to optional, internal Modbus RTU module. The interface module is included in the standard delivery of PXR25 trip units, following items to be ordered separately as replacements.


| NZM2(-4)-VX(MX)(PX)(PMX) .. | NZM2-XBSM | 189825 |
| :--- | :--- | :--- |
| NZM3(-4)-VX(MX)(PX)(PMX) 1 Off |  |  |
| NZM4(-4)-VX(MX) $\ldots$, NZM4-4-PX(PMX) $\ldots$ | NZM3-XBSM | 189826 |
| NZM4-PX(PMX) $\ldots$ | NZM4-XBSM | 189827 |

Mechanical pass-through of the
switch's status (I, O) for use by the
remote operator. remote operator.

Connection to neutral voltage Vn. Mechanical pass-through of the switch's status (I, O) for use by the remote operator

Interface module, PXR25, connection for communication, zone selectivity, Arcflash Reduction Maintenance System ${ }^{\mathrm{TM}}$
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 $(\mathrm{I},+, 0)$ for the electronic trip unit. The switch's status can be communicated. 24 V DC auxiliary power connection. Optional ECAM available for various Fieldbus communication systems (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, following items to be ordered separately as replacements.


| NZM2(-4)-PX $\ldots-T Z$ | NZM2-XBSM-TZ | 189832 | $10 f f$ |
| :--- | :--- | :--- | :--- |
| NZM3(-4)-PX ..-TAZ | NZM3-XBSM-TAZ | 189833 |  |
| NZM4-4-PX ..-TAZ | NZM4-XBSM-TAZ | 189835 |  |

Connection for maintenance mode (Arcflash Reduction Maintenance System™).

Connection to neutral voltage Vn. Connection for maintenance mode (Arcflash Reduction Maintenance System™).

Compact circuit breakers, switch disconnectors
Communication module
NZM...

| For use <br> with | Part no. | Article no. Std. pack | Notes |
| :--- | :--- | :--- | :--- |
|  | Article no. when <br> 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.

| $\overline{s g 05218}$ | 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. |  |  |  |  |


*Attention: PXR-RCAM-SWD must only be used with the following firmware versions (or later versions)

| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) | V1.1.XX |
| :--- | :--- |
| NZM2(3)(4)(-4)-VX(MX)(PX)(PMX) ..-NA | V2.1.XX |
| NZM2(3)(4)--XBSM(-TZ)(-TAZ)(-N) | V1.1.XX |


|  | Max. Rated Operational Current $I_{e}(A)$ | Rated <br> Operational <br> Voltage <br> $U_{e}(V)$ | Adapter <br> Width <br> (mm) | Adapter <br> Length <br> (mm) | Special <br> Features | For use with | Notes | Part no. | Article no. | Std. pack <br> (Stk.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NZM Busbar Adapter, 3-pole |  |  |  |  |  |  |  |  |  |
|  | Busbar Adapter NZM <br> - For use on flat copper bars $12-30 \times 5 / 10$, Double-T-Profiles and Triple-T-Profiles. <br> - Self-extinguishing according to UL 94. <br> - Track resistance CTI 200. <br> - Temperature-resistant up to $120^{\circ} \mathrm{C}$. |  |  |  |  |  |  |  |  |  |
|  | 160 | 690 | 92 | 200 | For connecting to the system a the top or bottom through fixed connection bars included in the scope of delivery. ${ }^{112)}$ | NZM1 <br> tPN1 <br> N1 <br> NS1 | For switches with standard connection frame-type terminals. To be snapped onto the busbar by means of a combi-base. | NZM1-XAD160 | 104554 | 1 |
|  | 250 | 690 | 106 | 190 | For connecting to the system a the top/bottom through a tubetype of connection at the rear. Tube included in the scope of delivery. ${ }^{3}$ | NZM2 <br> t PN2 <br> N2 <br> NS2 | Use only in com bination with auxiliary type (+)NZM2-XKR4. To be screwed tonto the busba by means of a clawtype of clamp. | - NZM2-XAD250 | 104555 | 1 |
|  | 630 | 690 | 140 | 300 | For connecting to the system at the top/ bottom through a tubetype of connection at the rear. Tube included in the scope of delivery. ${ }^{3)}$ | NZM3 <br> PN3 <br> N3 | Use only in com bination with auxiliary type (+)NZM3-XKR13 To be screwed tonto the busba by means of a claw-type of clamp. | - NZM3-XAD630 | 107206 | 1 |
|  | Terminal for Device Adadpter NZM |  |  |  |  |  |  |  |  |  |
|  | 250 | 690 | - | - | To cover the connection to the system at the top/bottom. | $\begin{aligned} & \text { NZM2 } \\ & \text { PN2 } \\ & \text { N2 } \\ & \text { NS2 } \end{aligned}$ | ```For device com- NZM2-XKR4 bination NZM2 use with auxiliary type +NZM2-XKR40 or +NZM2- XKR4U.``` |  | 281666 | 1 |
|  | 630 | 690 | - | - | To cover the connection to the system at the top/bottom. | $\begin{aligned} & \text { NZM3 } \\ & \text { PN3 } \\ & \text { N3 } \end{aligned}$ | For device combination NZM3 use with auxiliary type +NZM3- XKR13 or +NZM3-XKR13 | NZM3-XKR13 | 281668 | 1 |

[^6]SASY 60i Busbar System
NZM Busbar Adapter, 4-pole


NZM2-4-XKR4


NZM2-4-XKR4
H

| Max. Rated | Rated | Adapter | Adapter | Special | For use | Notes | Part no. | Article no. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | | Std. pack |
| :--- |
| (Stk.) |

## NZM Busbar Adapter, 4-pole

## Busbar Adapter NZM

- For use on fl at copper bars $12-30 \times 5 / 10$, Double-T-Profiles and Triple-T-Profiles.
- Self-extinguishing according to UL 94.
- Track resistance CTI 200.
- Temperature-resistant up to $120^{\circ} \mathrm{C}$.

| 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 deliverys. ${ }^{3)}$ | $\begin{aligned} & \text { NZM2(-4) } \\ & \text { PN2(-4) } \\ & \text { N2(-4) } \\ & \text { NS2(-4) } \end{aligned}$ | Use only in com- NZM2-4-XAD250 bination with auxiliary type (+)NZM2-4-XKR4. <br> To be screwed tonto the busbar by means of a claw-type of clamp. | 138388 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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. ${ }^{3)}$ | $\begin{aligned} & \text { NZM3(-4) } \\ & \text { PN3(-4) } \\ & \text { N3(-4) } \\ & \text { NS3(-4) } \end{aligned}$ | Use only in NZM3-4-XAD630 combination with auxiliary type (+)NZM3-4-XKR13. To be screwed tonto the busbar by means of a clawtype of clamp. | 138389 | 1 |

Terminal for Device Adadpter NZM

| 250 | 690 | - | - | To cover the connection to the system at the top. | NZM2-4 <br> PN2-4 <br> N2-4 <br> NS2-4 | For device combi-NZM2-4-XKR4 nation NZM2 <br> use with auxiliary type +NZM2-4-XKR40. | 118907 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 630 | 690 | - | - | To cover the connection to the system at the top. | $\begin{aligned} & \text { NZM3-4 } \\ & \text { PN3-4 } \\ & \text { N3-4 } \\ & \text { NS3-4 } \end{aligned}$ | For device combi-NZM3-4-XKR13 nation NZM3 use with auxiliary type +NZM3-4-XKR130. | 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 $6 \times 9 \times 0.8$.
${ }^{3)}$ To be screwed onto the voltage-free busbar.

## Busbar Adapter NZM



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 $50^{\circ} \mathrm{C}$.

Question:
What is the maximum rated operating current le allowed $I_{e}$ ? =>

Solution:
At an ambient temperature of $50^{\circ} \mathrm{C}$, the de-rating cor.m.sicient is 0.88 . This means that $\mathrm{I}_{\mathrm{e}}=630 \mathrm{~A} \times 0.88=544 \mathrm{~A}$.
At an ambient temperature of $50^{\circ} \mathrm{C}$, the device can therefore be operated at a maximum of $\mathrm{I}_{\mathrm{e}}=544 \mathrm{~A}$.

Compact circuit breakers, switch disconnectors
Construction size l: Basic devices
NZM1, PNl, N1, NS1

Dimensions (mm)
3 pole
NZMB1
NZMC1
NZMN1
NZMH1
PN1
N1
NS1

(1) Blow-out area, minimum distance to other parts $\geqq 60 \mathrm{~mm}$

## 4 pole

NZMB1-4
NZMC1-4
NZMN1-4
NZMH1-4
PN1-4
N1-4

(1) Blow-out area, minimum distance to other parts $\geqq 60 \mathrm{~mm}$

Dimensions (mm)
3 pole
NZMB2
NZMC2
NZMN2
NZMH2
PN2
N2
NS2

(1) Blow-out area, minimum distance to other parts $\geqq 35 \mathrm{~mm}$
(2) Minimum distance to adjacent parts $\geqq 5 \mathrm{~mm}$

## 4 pole

NZMB2-4
NZMC2-4
NZMN2-4
NZMH2-4
PN2-4
N2-4

(1) Blow-out area, minimum distance to other parts $\geqq 35 \mathrm{~mm}$
(2) Minimum distance to adjacent parts $\geqq 5 \mathrm{~mm}$

Compact circuit breakers, switch disconnectors
Construction size 3: Basic devices
NZM3, PN3, N3, NS3

(1) Blow-out area, minimum distance to other parts $\geqq 60 \mathrm{~mm}$
(2) Minimum distance to adjacent parts $\geqq 5 \mathrm{~mm}$

## 4 pole

NZMC3-4
NZMN3-4
NZMH3-4
PN3-4
N3-4


[^7]
(1) Blow-out area, minimum distance to other parts $\geqq 100 \mathrm{~mm}$ up to 690 V ; $\geqq 200 \mathrm{~mm}$ up to 1000 V (2) Minimum distance to adjacent parts $\geqq 15 \mathrm{~mm}$

## 4 pole

## NZMN4-4

NZMH4-4
N4-4

(1) Blow-out area, minimum distance to other parts $\geqq 100 \mathrm{~mm}$
(2) Minimum distance to adjacent parts $\geqq 15 \mathrm{~mm}$


## xSpider creates your networks

The $x$ Spider 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 $1,000 \mathrm{~V}$.
- 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.


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## Working with tripping characteristics



Tripping Chars Collection 1


IAR $10 \times$ Iu ( 16000.0 A$)$
Setting of parameters for selected circuit breaker tripping characteristic


Tripping characteristic of NZM breakers


[^8]- 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 NZM4 with activated Arcflash Reduction Maintenance System ${ }^{\text {TM }}$


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 $x$ Spider 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.

## 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

## 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! 

## III <br> PPLAN

- 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.

## Build it in.



## M Galieo



CODESYS


## 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 $3.5^{\prime \prime}$ to $15^{\prime \prime}$, 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 vie 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 $2 \times$ Ethernet, $1 \times$ CAN, $1 \times$ RS232, $1 \times$ RS485
- Optional: $1 \times$ 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 $2 \times$ Ethernet, $1 \times$ CAN, $1 \times$ RS232, $1 \times$ RS485
- Optional: $1 \times$ Profibus-DP, SmartWire-DT


## XV-363

- Infrared touch panel for front mounting
- Display sizes: 5.7", $10.4^{\prime \prime}$ and $12.1^{\prime \prime}$ in $4: 3$ format
- Laminated safety glass, non-reflective
- Metal housing with aluminum bezel
- The dimensions are identical to those of the $\mathrm{XV}(\mathrm{S}) 400$ series
- PLC function can be added later by means of Y7-181585 (LIC-PLC-A)
- Communication options: $2 \times$ Ethernet, $1 \times$ CAN, $1 \times$ RS232, 1 x RS485
- Optional: $1 \times$ 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 ${ }^{\text {ww }}$ (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.


* 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, XV300, 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, Replace by: EtherNet/IPTM
- SAE J1939 protocol



# Functional safety to protect people, machines and the environment 

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 extemal risk-reduction devices.

## Risk reduction through the use of safety-related parts in control systems

In international standards, the safety components of machine controls are referred as to "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 safetyrelated contents of this manual have been certified by TUV 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.com/shb to download our Safety Manual free of charge.
The safety-relevant variables for our products are available at www.eaton.com/safety


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



```
Maclarm mommmom
Ma|lar! momsmmows
```








```
    ACB Esmancranteremeruce
```




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 components 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


## 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.

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## Features

|  | Setpoint Configuration <br> - |
| :--- | :--- | :--- |



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

We make what matters work.

Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to help our customers manage power today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy, helping to solve the world's most urgent power management challenges, and doing what's best for our stakeholders and all of society.
Founded in 1911, Eaton has been listed on the NYSE for nearly a century. We reported revenues of $\$ 19.6$ billion in 2021 and serve customers in more than 170 countries.

For more information, visit www.eaton.com.
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of their respective owners.
latest product and support information.



[^0]:    * The DC values are only valid for thermo-magnetic releases (-A). Additional technical information can be found in the product datasheet on our website.

[^1]:    *Icu/lcs values valid only until Q1/2023

[^2]:    Information relevant for export to North America

[^3]:    Not UL/CSA approved

[^4]:    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

    | Without auxiliary contacts | NZM3-XA-230AC-MNS | 274097 | 1 Off | Rated control voltage 230 V AC |
    | :--- | :--- | :--- | :--- | :--- |
    | With early-make | NZM3-XAHIV-230AC-MNS | 274141 |  | For use with |
    | auxiliary contact |  |  | NZM3(-4), N3(-4) and NZM4(-4), N4(-4) |  |
    |  |  |  | Cannot be installed simultaneously with early- |  |
    |  |  |  | make auxiliary contact NZM...-XHIV... or |  |

    Intermittent operation guaranteed by series
    With early-make NZM4-XAHIV-230AC-MNS 274143
    auxiliary contact for mesh network circuit breakers is 1 s .
    

    ## 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 .
    (1) Reverse power relay contact from mesh network relay
    -S11 Remote off
    Q Standard auxiliary contacts
    -Q1 Shuntreleases

[^5]:    Information relevant for export to North America

    ## 壁

    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

[^6]:    ${ }^{1)}$ 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.

[^7]:    (1) Blow-out area, minimum distance to other parts $\geqq 60 \mathrm{~mm}$
    (2) Minimum distance to adjacent parts $\geqq 5 \mathrm{~mm}$

[^8]:    Complex evaluation of selectivity and backup protection

