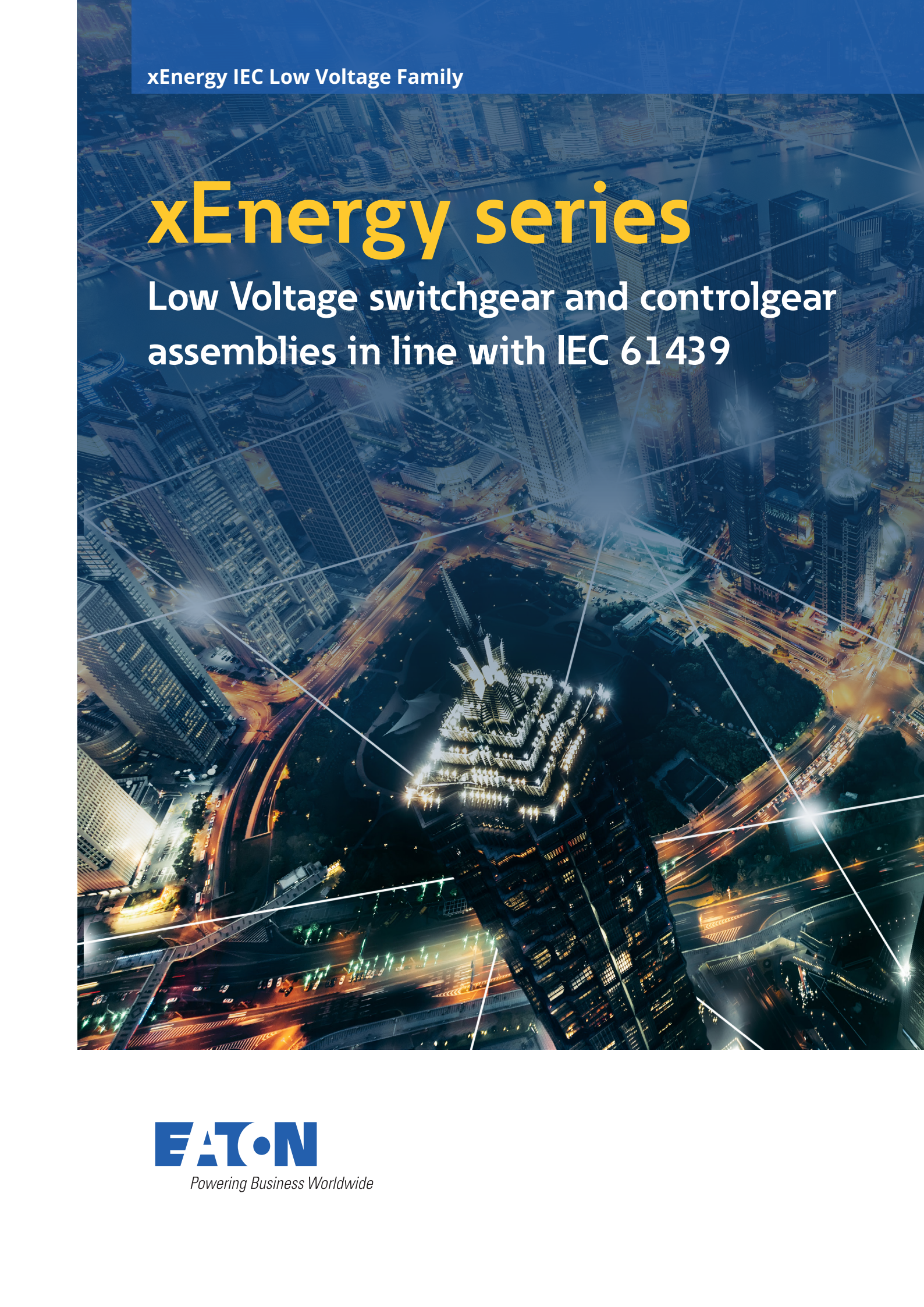


An aerial night view of a city skyline, featuring a prominent illuminated building in the center. A network of white lines is overlaid on the image, connecting various points across the city.

xEnergy IEC Low Voltage Family

xEnergy series

Low Voltage switchgear and controlgear
assemblies in line with IEC 61439



Powering Business Worldwide

We make what matters work.*



* At Eaton, we believe that power is a fundamental part of just about everything people do. That’s why we’re dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people’s lives, the communities where we live and work, and the planet our future generations depend upon. Because this is what really matters. And we’re here to make sure it works.

To learn more go to: [Eaton.com/whatmatters](https://www.eaton.com/whatmatters)



We make what matters work.

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xEnergy IEC Low Voltage Family

xEnergy Basic



Sub Distribution
MCCB Panelboard and MCB
Distribution board solutions up to 630 A

xEnergy Light



Sub-Main Distribution
Modular Power Distribution and
Control panel solutions up to 1600 A

xEnergy Main



Main Power Distribution
Switchboards and Motor Control
Center solutions up to 7100 A

xEnergy Elite



Critical Motor Control Center and
Power Distribution solutions up to 7500 A

xEnergy Safety Ci



Power Distribution solutions up to 1600 A

ARCON



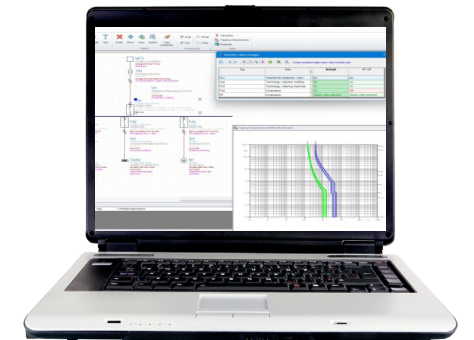
Arc-Fault Mitigation System
Low-voltage switchgear assemblies up to 690 V AC/50 Hz

Continues thermal monitoring



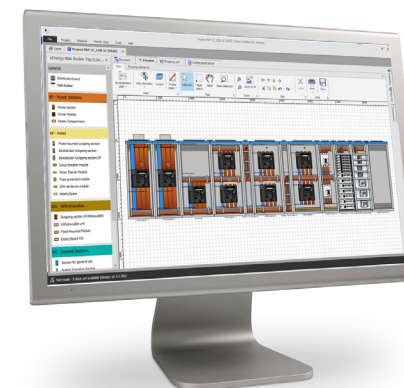
Maintenance-free
temperature monitoring systems

xSpider



Software for dimensioning low-voltage networks

xEnergy Configurator



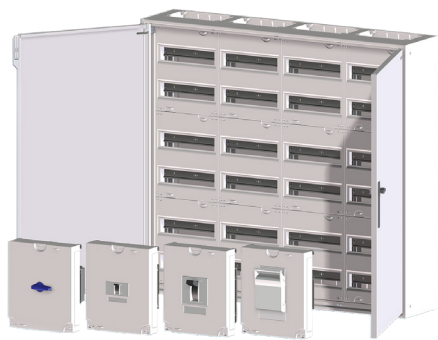
Pricing and configuration software

xEnergy Basic

Our xEnergy Basic ranges offer various certified distribution boards for all kinds of applications up to 630 A. Their robust and flexible design allows them to be used in residential and functional buildings as well as in harsh environments. In order to meet the needs of each individual customer, we have introduced different systems with their own features and benefits.

1

xEnergy Basic EWK



xEnergy Basic EWK is a surface-mounted distribution board with its own unique installation system as well as individual installation sections. Thanks to the new plug-in fasteners, all individual sections can be assembled internally outside the cabinet and then quickly and smoothly installed inside the cabinet. Large contact-protective plastic covers and insulated interior linings meet the requirements of protection class II, which makes the EWK especially suitable for use in public buildings.

BENEFITS

- Improved safety thanks to the large electric-shock protection cover
- The interior fitting has been moved forward to allow efficient wiring vertically as well as horizontally
- Extended cable entry possibilities and wiring space behind the components

CORE FEATURES:

- Protection class II
- Fully removable DIN rail sections for easy and fast pre-assembling outside of the cabinet
- Surface-mounted, for systems up to 250 A
- Enclosure depth of around 230 mm
- Degree of protection IP31, impact resistance IK08
- Distribution boards with a width of 1050 mm come with a 3-point lock (double-wing door design)

2

xEnergy Basic EMC2



xEnergy Basic EMC2 (EP Modular Class 2) combines the modularity of Eaton's established EP installation system with user-friendly features. The enclosure depth of 270 mm has been carefully chosen to match both the available flange openings and the EP assembly system to further simplify the wiring work. The EMC2 models are rated IP55 overall, and IP2XC with open doors and closed protection covers for enhanced personnel protection. Rugged by design, it makes it suitable for a wide variety of applications, including industrial power distribution.

BENEFITS

- A flexible enclosure to suit your every need
- Highly secure locking mechanism as standard
- Greater simplicity & ease of installation

CORE FEATURES:

- Wall-mounted and floor-standing versions
- For electrical systems up to 630 A
- Protection class II
- Door opening angle of 180 degrees
- Impact resistance: IK10
- Degree of protection: IP55

3

xEnergy Basic BP



xEnergy Basic BP is a wall- or floor-mounted enclosure for electrical distribution systems up to 630 A. It is not only the smallest distribution board in our xEnergy family, but also the most flexible and versatile of the entire range. The variety of different types and sizes allows it to be used in almost every possible application

****NEW**** From 2026 onwards a special range called BP-VF/DZ part of xEnergy Basic series is also available for harsh outdoor environments and salty coastal areas.

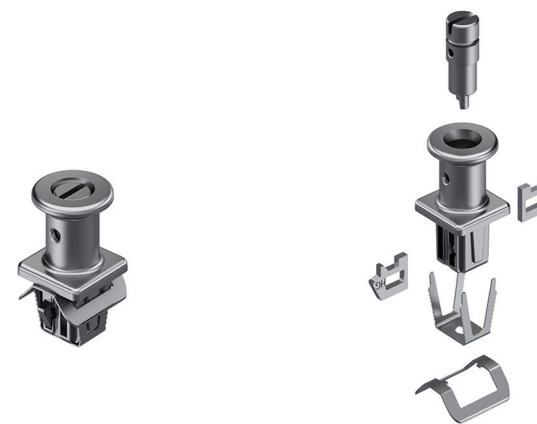
BENEFITS

- Tailor-made, pre-assembled and partially pre-wired solutions according to local market requirements are available off the shelf.
- Very robust enclosure platform that supports different installation preferences and enables a high degree of functionality and performance even in harsh environments.
- The integrated interior structure reduces the number of individual parts per assembly.

CORE FEATURES:

- Mechanical impact protection: IK08 / IK10
- Form of separation up to Form 4b according to IEC/EN 61439-2 (in combination with Profi+ installation system)
- Seismic characteristics: IEC/EN 60068-3-3: ground acceleration level AG2 and AG5
- Rated conditional short-circuit current [I_{cc}] up to 25/50 kA
- Material of enclosure: Standard sheet-metal (phosphatized and polyester powder-coated)
- Galvanized parts mainly for interior finish without powder-coating

New ProfiSNAP feature!



ProfiSNAP is a new installation system based on a new front cover locking mechanism, which replaces the previous Profi+ system. The locking mechanism of this new snap technology is already pre-assembled and ensures that the front cover always fits perfectly.

The small side wings of the locking mechanism provide a fast and error-free assembly. When slid through the openings, the side wings are squeezed in and, once fully pushed through the opening, are pressed back into the initial position by internal springs. The audible clicks during assembly indicate a firm connection of the front cover.

Advantages of new snap technology

- Up to 50% time saving during mounting
- Tool-less usage
- Customized design
- High-performance and friction-locked connection
- Vibration and earthquake-proof
- Corrosion resistance



xEnergy Light

The proven xEnergy Light cabinet system is suitable for a wide range of applications. Thanks to its incredible versatility, xEnergy Light can be used both as a power distribution board and as a control panel in industrial applications and in functional buildings.

xEnergy Light power distribution enclosures accommodate switchgear up to 1600 A. Housing made of sheet steel protects against both damaging influences and electric shocks caused by touching live parts. The side-by-side mountable xEnergy Light can be easily transformed into a control enclosure for industrial purposes or into an energy distributor for functional buildings according to your requirements. The xEnergy Light has easy mounting, is stable and quick to disassemble, and is available in more than 55 different dimensions.



BENEFITS

- Pre-assembled or flat pack
- Wide range of enclosure sizes to choose
- Easy to handle
- Robust frame construction
- Flexible and easy to mount
- Same screw head throughout the system
- Corrosion-resistant powder coating
- Straight-forward industrial design

CORE FEATURES:

- IEC 61439/1-3 and IEC/EN 62208
- Combination options with different installation systems such as EP and ProfiSNAP
- Degree of protection IP31, IP42, and IP55
- Stand-alone cabinet or add-on system
- Foam-shaped door sealings
- Consistent system up to 1600 A

The xEnergy Light Product Family



Main distribution board

- Incoming supplies, outgoers and couplings with circuit breakers
- Outgoers with SL fuse switch-disconnectors up to 630 A
- Incoming supply system for drill-free cable connection
- Internal separation up to form 4b type 2 and 6
- Cable connection from the top or bottom



Sub-distribution board

- Installation systems ProfiSNAP and EP
- Mounting modules for NZM, fuse switch-disconnectors and NH fuse strips for screw-type fuse holders, devices for modular installation and stand-alone devices



Control-distribution board

- Control technology with Sasy 60i
- Individual, fixed mounting units on a mounting plate
- Ventilation and air conditioning
- Automation technology

xEnergy Main

xEnergy Main is Eaton's IEC low voltage power assembly up to 7100 A, and it is verified by testing according to IEC 61439-2. The system provides reliable power distribution and motor control functionality for all commercial and industrial applications.



BENEFITS

- Reliable and safe in operation
- System flexibility
- Modular design and small footprint
- Distribution and motor control
- Easy to upgrade and extend the switchboard
- Suitable for universal use as the dimensions are in accordance with the main industrial standards

CORE FEATURES:

- The modular design allows for smart combinations and expansions
- Complies with IEC 60439-1 and IEC 61439-2
- Design-verified switchgear assembly for maximum uptime
- External degree of protection is third party tested for IP31, IP42 and IP55 according to the IEC 60529.
- Front- and Rear-Access possibility

1 XF Fixed



XF outgoing sections for fixed outgoing up to 630 A in Form 2b

- Outputs with circuit breakers PKZ, NZM, FAZ
- 3- or 4-pole and 3P+N
- IP31, IP42, IP55
- Distribution bars up to 2000 A



XF outgoing feeder panels for fixed outputs up to 630 A in Form 4b

- Each module has its own front panel
- 3- or 4-pole and 3P+N
- 4b form up to type 7
- IP31, IP42, IP55
- Distribution bars up to 2000 A



Box Solution

- Each module has its own door 3- or 4-pole and 3P+N
- 4b form up to type 7
- IP31, IP42, IP55
- Distribution bars up to 2000 A

2 XP Power Sections



XP outgoing sections for fixed outgoing up to 630 A in Form 2b

- Incoming supplies, outgoing and couplings with circuit breakers IZMX16/40 and Series NZM
- Fixed or withdrawable
- 3 or 4pole and 3p+N
- 630 – 6300 A
- Widths of 425 – 1350 mm

3 XG General



XG general purpose blank panels

- General purpose blank panels
- Rail mounting systems
- Individual fixed systems on installation panels
- Control technology – section-high or divided installation panels
- IP31, IP42, IP55

4 XR Removable



XR plugin module - fixed cable connection

- Plug-in Motor Starters
- Power outgoing with circuit breakers and strip type switch-disconnector-fuse, up to 630 A
- Internal separation up to form4 / type7
- Easy maintenance and reduced down times.
- Rated current of dropper bar In = 800-1600 A
- IP31 / IP42 / IP55

5 XW Withdrawable



XW plug&play outgoing feeder panels

- 3- or 4-pole
- Distribution bar rated current In = 1000-1600A
- IP31, IP42, IP55
- Available inserts:
 - Power outputs up to 400 A
 - Direct starter 0.06 – 132 kW
 - Reversing starter 0.06 – 132 kW
 - Star-delta starter 5.5 – 110 kW

xEnergy Elite

xEnergy Elite is Eaton's premium IEC low voltage power distribution and motor control center system, designed for demanding applications with busbar ratings up to 7500 A and peak withstand capability up to 120 kA.

xEnergy Elite provides high-performance power distribution, motor control and advanced arc fault protection, offering maximum safety, scalability, and reliability - tailored for critical infrastructure, heavy industry, and data-driven environments.



BENEFITS

- Adapt to changing needs and future-proof your system with a modular and scalable design
- Increase reliability and minimize downtime with non-sliding motor starters and feeders
- Benefit from a unique Elite contact system proven for over 1000 operations
- Enhance personnel safety with advanced arc flash risk mitigation technologies
- Ensure high availability with continuous switchgear health monitoring and easy maintenance procedures
- Monitor and analyze system performance to improve operational efficiency and energy optimization

CORE FEATURES:

- Fully IEC 61439-2 verified and tested
- System modifications possible without complete shutdown, ensuring continuous operation
- Built-in passive arc fault protection by design
- Integrated Eaton C445 motor management relays for secure and accurate process control
- Industry-leading arc flash protection, including unmatched "open door" mitigation capabilities
- Reduced hazard exposure during service with Arcflash Reduction Maintenance System (ARMS)
- Eaton Diagnose and Exertherm - 24/7 temperature monitoring systems

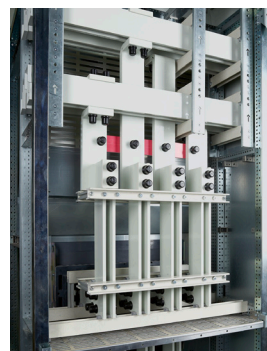
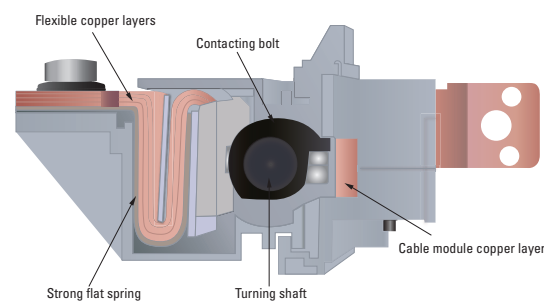
The pressure contact principle

The Elite contact system is a patented innovation that uses silver-plated contacts to connect the outgoing units to the distribution busbar. Unlike other systems, our contacts ensure a reliable and efficient electrical connection that gets stronger as the currents increase during operation. Plus, our innovative design protects your operations from any short circuit damage by eliminating the stress on the contacts and busbar, ensuring the safety and continuity of your operations.

The withdrawable units of xEnergy Elite can be safely inserted into the "live" panel without making any connections. After the door is shut and locked, connections can be safely established, protecting people and equipment during every step. The xEnergy Elite drawer operating mechanism is designed to offer a safe and easy way to switch between three positions with closed door: **disconnect**, **test**, and **connect**. No need to open the doors and risk your safety or compromise the protection level up to IP54.

Insulation of main busbar and incoming terminals of the ACB

The main busbars and droppers to incoming and outgoing feeders can be insulated with a powder coating layer to offer additional arc fault protection and reduce the risk of an arc occurring to the absolute minimum.



1 xEnergy Elite P section



- Incoming feeder, outgoing feeder and bus coupler up to 6300 A
- Operational voltage up to 690 V AC
- Fixed and withdrawable molded case or air circuit breakers
- Form 2b and 4b
- Top and bottom entry

2 xEnergy Elite W section



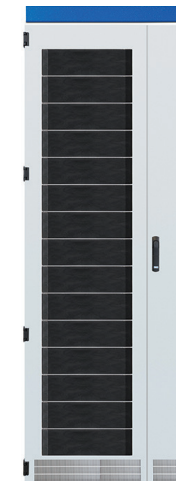
- Up to 32 withdrawable feeders and starters
- Motor starters up to 315 kW
- Feeders up to 630 A
- Operational voltage up to 690 V AC
- Conventional and intelligent motor protection
- Form 4b
- Top and bottom cable entry

3 xEnergy Elite RP section



- Up to 27 removable feeders
- PIFT fused switch disconnect up to 630 A
- Operational voltage up to 690 V AC
- Form 4b
- Top and bottom cable entry

4 xEnergy Elite RM section



- Up to 15 removable modules
- Motor starters up to 90 kW 500 V AC
- Feeders up to 630 A, 415 V AC
- Form 2b
- Top and bottom cable entry

5 xEnergy Elite G,C section



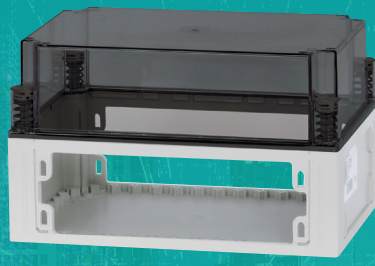
- Sections for general purpose
- 400 mm up to 1200 mm width
- Corner section for L- and U-shape line-up's

xEnergy Safety Ci

Eaton's all-insulated Ci power distribution enclosures have been designed to meet the most stringent requirements and offer a consistent system for up to 1600 A. They provide an IP65 degree of protection and are insensitive to almost any environmental impact such as dust, moisture, and water. Made of high-quality polycarbonate, it offers additional protection against mechanical impacts and caustic substances.



When time is what matters most. The bottom of the enclosures is open on two sides to allow for vertical cable insertion. This helps to save mounting time.



When flexibility is what matters most. Metrical pre-punched openings to be knocked out of the enclosure bottom provide for an integrated cable insertion option from all sides. In addition, there are extensive areas allowing to be knocked out on all side panels.



When smart appearance is what matters most. The smooth and even side areas of the enclosure bottom prevent the development of filthy corners.

All three types of enclosures are based on the same system components. This reduces the storage place required for the system and makes their handling significantly easier.

Eaton's xEnergy Safety Ci insulated enclosures have become the globally leading and established standard in particularly challenging environments.

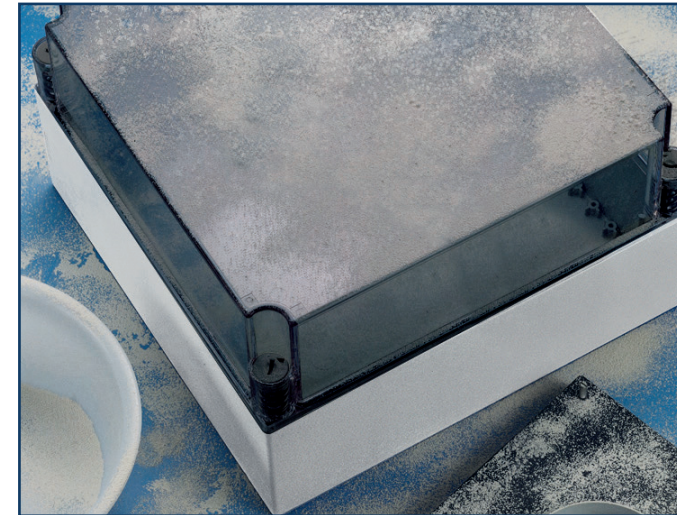
CORE FEATURES:

- Basic enclosures according to IEC/EN 62208
- Switchgear assemblies to IEC/EN 61439-2
- High IP65 degree of protection
- Insulating wedge-lock fastener for connecting the enclosures to each other
- Polycarbonate
- Distribution board system with increments of 25 mm
- Modular system
- Cover resting on 4 spring-loaded fittings

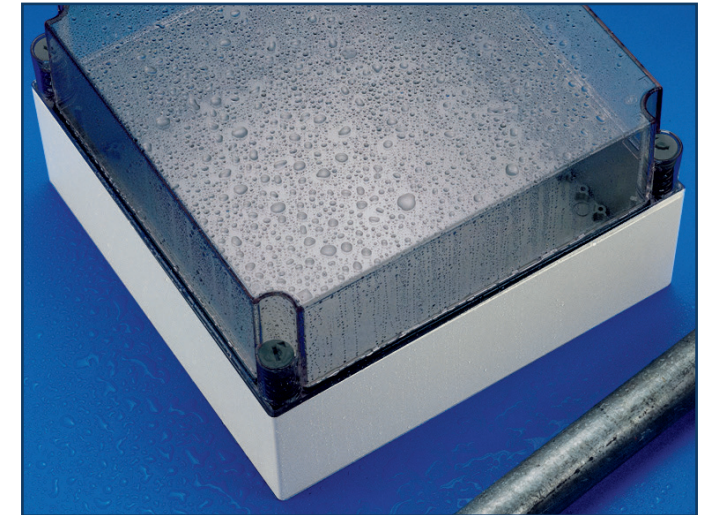
ADVANTAGES:

- Distribution system for a universal use
- Highest standard in terms of safety for people and operation
- Easy to expand when necessary
- Degree of protection is guaranteed regardless of an operator's level of care and attention
- Entirely encapsulating insulation-material for high protection against corrosion
- Easier maintenance and system control

Tried and tested in the most extreme environments



Suitable for environments particularly exposed to dust and pollution



High level of protection against moisture and water jets



Particularly shock-proof and resistant to mechanical impacts



Resistant to acrid smoke and caustic substances

ARCON®

Advanced safety for switchgear systems

Eaton offers a comprehensive range of solutions that greatly improve switchgear and staff safety solutions to help businesses reduce the risk of injury and costly damage caused by an arc flash.

Using ARCON® restricts the effects of the arc fault to a minimum.



PERSONNEL PROTECTION

Errors when working on live switchboard installations can be fatal. The statistics of the employers' liability insurance association shows that 2 out of every 3 accidents occur on the switchboard when open. For this reason, with a total arc mitigation time of less than 2 ms ARCON® therefore offers an unprecedented level of personnel protection.



ASSEMBLY PROTECTION

If a redundant power supply is not available, this also results in unwanted production downtimes. Only an effective assembly protection can provide a solution here, so that the effects of the arc fault can be minimized, and an immediate restoration of service is possible.

After the cause of the fault has been rectified and the quenching device has been exchanged, the ARCON® system can be made ready for operation in the shortest possible time in order to ensure the required availability.

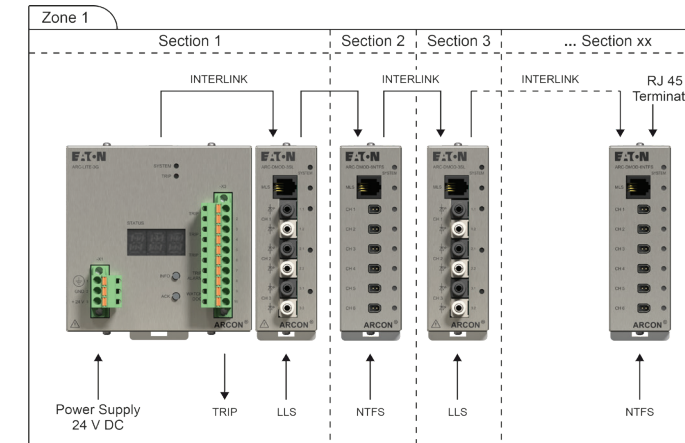


PREVENTING DAMAGE, ENSURING SERVICE CONTINUITY

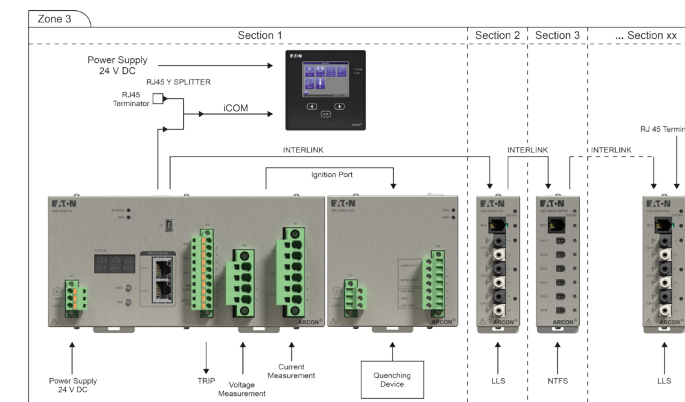
In today's competitive environment, availability is a very important factor for which suitable protective measures must be implemented. The main applications to date for ARCON® have been data centers, tunnel supply systems and power supply systems for continuous manufacturing processes.



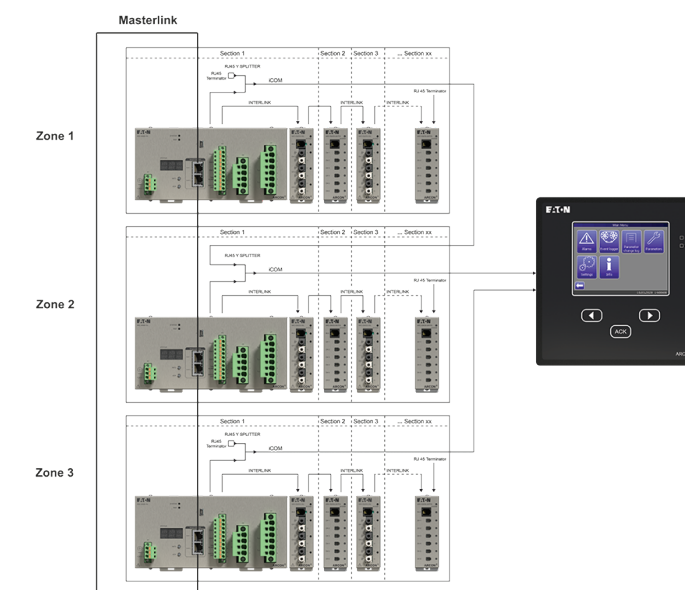
Three different levels of Arc Fault Protection



- 1) **ARCON® 3G simple arc protection system (ARCON® LITE)** - only light criteria for arc fault monitoring especially to fulfill extensive personnel protection



- 2) **ARCON® 3G extended arc protection system (ARCON® MAIN)** - light & current criteria for full personnel and assembly protection



- 3) **ARCON® 3G complex arc protection system (ARCON® MAIN)** - up to 8 extended systems communicating over Masterlink/iCOM

ARCON® MAIN FEATURES:

- Arc mitigation time ≤ 2 ms
- Remaining arc energy ~ 10 kJ (< 1.2 cal/cm²)
- Nuisance tripping free arc sensing
- Maintenance-proof technology
- In accordance with IEC/TS 61641:2026

Continues thermal monitoring

Predictive maintenance for switchgear systems

Eaton Diagnose and Exertherm are advanced temperature-monitoring solutions designed for predictive maintenance of busbar systems in low-voltage switchgear assemblies.

Both systems continuously record temperature data, enabling operators to detect issues at an early stage and schedule maintenance at the optimal time - helping reduce downtime, increase system availability, and eliminate recurring costs for thermal inspections.



CORE FEATURES:

- Detection at an early stage
- Warning messages
- Diagnostics
- Quick and easy installation
- No batteries in the sensors
- Permanent status transmission
- Integration into existing SCADA systems

Thanks to permanent monitoring of the distribution's boards, any potential errors can be detected at a very early stage and be prevented. Such errors can be identified by a rise in temperature over a longer period, which usually would not be detected during a thermo-scan. Another advantage is that sensors can be placed in areas of the system that are difficult or impossible to access for thermo-scans.

Eaton offers two complementary technologies to meet different customer needs:

- **Diagnose** – a wireless, maintenance-free temperature monitoring system, ideal when easy installation and minimal wiring are priorities.
- **Exertherm** – a wired temperature monitoring solution, preferred in applications where a hard-wired connection is required or the user has a policy favoring wired systems.

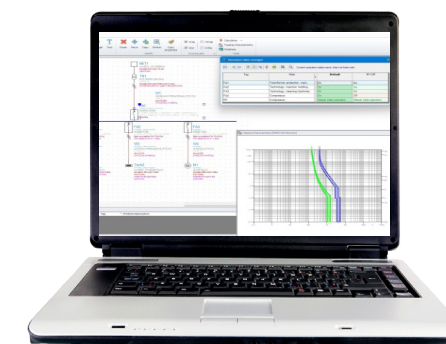
With both wireless and wired options available, customers can choose the solution that best fits their installation, technical requirements, and maintenance strategy.



xSpider

Creates your networks

The xSpider software is a graphically oriented design system for dimensioning of low-voltage networks fitted with Eaton brand circuit protection equipment. It calculates voltage drops, load distributions and short-circuit currents for radial as well as meshed networks.



FEATURES:

- Suitable for TN / IT / TT network systems of different voltage systems up to 1000 V.
- Design of networks supplied from one or more different power supplies.
- Option of simulating various operating states of the network by disconnecting power sources and loads.
- Coordination of protective devices
- Generation of documentation

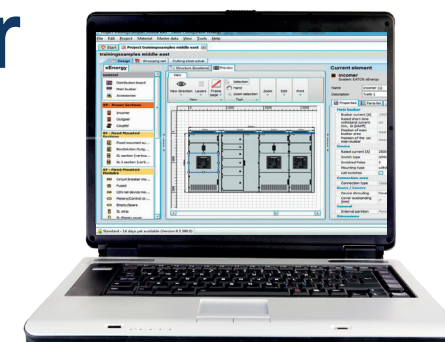
USER INTERFACE:

- User-friendly interface allowing quick and easy entry of simple cases while maintaining the maximum variability and open-end character.
- Parallel display of wiring diagram + properties of elements + list of errors
- Parallel processing of multiple projects (MDI interface)
- Software application is available in a variety of language mutations.

xEnergy Configurator

Creates your quotes

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 LV switchgear series and IZM and NZM circuit-breaker families.



ONE SOFTWARE FOR MULTIPLE EATON ENCLOSURE AND CIRCUIT BREAKER FAMILIES:

- xEnergy Elite, Main, Light, Basic, Safety
- ACB (IZM) air circuit breakers
- MCCB (NZM, PDE) moulded-case circuit breakers
- MCB miniature circuit breakers
- RCCB residual-current circuit breakers
- RCBO residual-current circuit breaker with overcurrent protection
- Accessories

FEATURES:

- Project management structure using a functional, user-friendly interface
- Makes providing offers easy by generating a front view
- Front view can be individually adjusted by drag and drop
- Detailed ordering and technical data section
- Includes instruction leaflets, set-up instructions and technical manuals

Eaton is an intelligent power management company dedicated to protecting the environment and improving the quality of life for people everywhere. We make products for the data center, utility, industrial, commercial, machine building, residential, aerospace and mobility markets. 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 sources, helping to solve the world's most urgent power management challenges, and building a more sustainable society for people today and generations to come.

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