A photograph of a data center aisle with rows of server racks on both sides. The racks have glass doors and are filled with server hardware. The floor is light-colored and reflective. The lighting is blue and comes from recessed ceiling lights.

UTU
Low-voltage
Data-center solutions

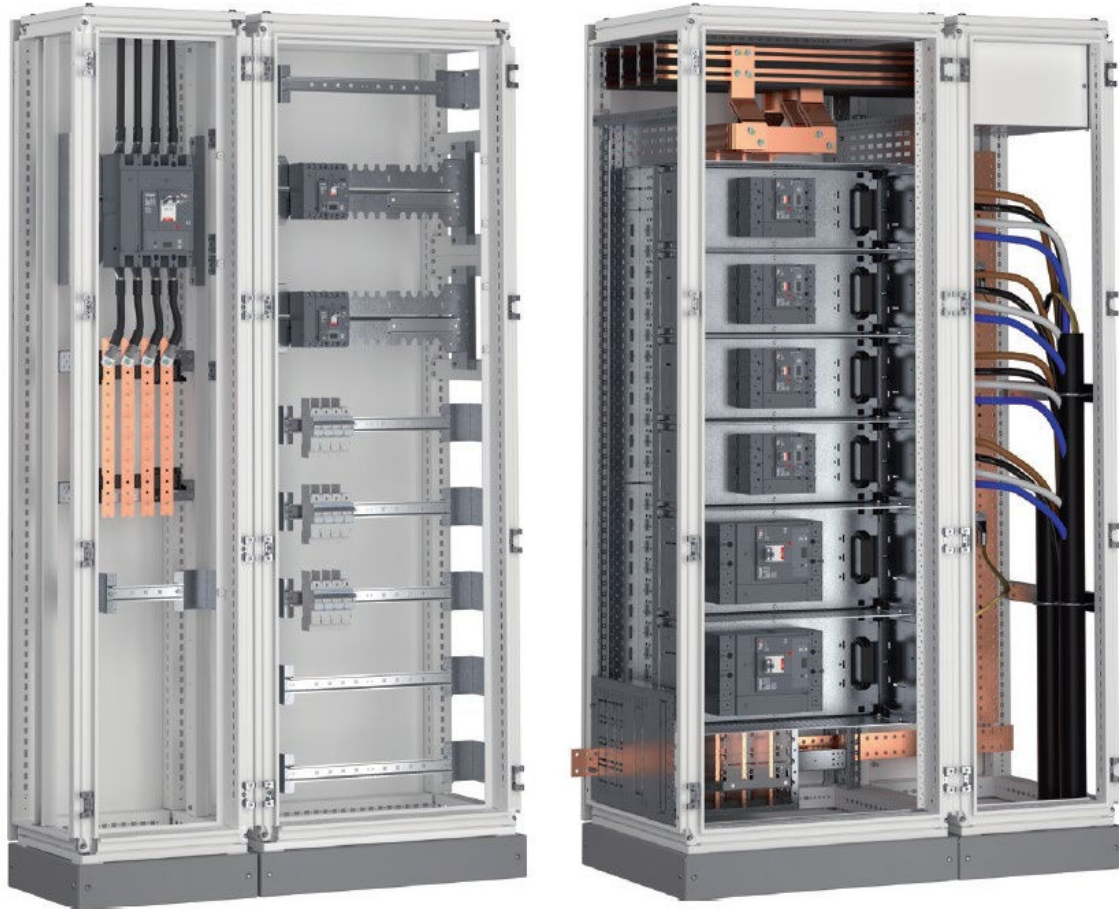


:hager quadro evo Main Distribution System

Electrical Specification

Compliant with standards	IEC/EN 61439
Rated insulation level (main busbars)	1000 V
Rated current (InA)	4000 A
Rated peak withstand current (Ipk)	187 kA
Rated short-time withstand current (Icw)	85 kA rms / 1 s
Frequency	50/60 Hz
Rated operating voltage (Ue)	415 V
Mechanical impact protection	IK08 without door / IK10 full door

LV-Distribution Panels



:hager

Mechanical performance

Material	Sheet metal (steel) Cataphoresis-painted surface and hot-polymerized polyester (epoxy powder coating) Non-painted parts, such as mounting plates: galvanized sheets
Colour	RAL 9010 (white) RAL 7035 (light grey)
Application	Enclosures for indoor use
Degree of protection	IP30 with corresponding cover panel IP31 with front door and ventilation IP43 with modular doors IP55 with corresponding cover panel, including a door
Impact resistance rating	IK08 with covering frame IK10 with IP55 door
Framework widths (internal / external)	300 mm (cable compartment) 350 mm / 450 mm 600 mm / 700 mm 800 mm / 900 mm 600 mm + 300 mm / 1000
Framework heights (internal / external)	2000 mm / 2100 mm 1800 mm / 1900 mm
Framework depths (internal / external)	350 / 400 mm 550 / 600 mm 750 / 800 mm
Cabinet	Flatpack delivery
Possible configurations	Side by side, back to back, corner



Otso evo E

Power and reliability for electrical distribution

Otso evo E, based on Finelcomp's E-series switchboard structure, is a compartmentalized switchboard that combines a durable structure, flexible implementation and high operational reliability.

It is designed for demanding applications where a safe, clear and long-lasting solution is needed for main and distribution switchboard implementations.

The type-tested withdrawable feeder units are designed for easy maintenance and replacement. The compact cassette structure is well ventilated and protected with locking. Cables and connections are located in their own dedicated section.

For data center power distribution, Otso evo E is the right solution when exceptionally high current ratings and short-circuit withstand strength are required from the main distribution board.

Otso evo E construction is designed to meet the needs of the most demanding power supply systems.

Electrical and mechanical characteristics

Type approval	IEC/EN 61439 DNV-GL
Insulation voltage U	1000 V
Rated voltage	≤ 690 V
Rated current (I _n)	≤ 5000 A
Rated peak withstand current (I _{pk})	≤ 220 kA
Short-time withstand current (I _{cw})	≤ 100 kA
Internal arc fault withstand	50 kA/0,3s (725 V)
Frequency	50/60 Hz
Material	Hot-dip galvanized sheet steel Support insulators - PC Protection covers - Hot-dip galvanized sheet steel
Colours	RAL 7035 Plinth RAL 7039
Degree of protection	≤ IP55
Impact resistance (external / internal)	IK09 / IK07
Form of separation	2, 3, 4
Possible configurations	Side by side, back to back or corner configuration
Busbar system	Aluminium and copper
Feeder units	Fixed or withdrawable





A complete Hager ACB lineup integrated into Quadro Evo switchgear
-> a fully tested and certified package

HW1
From 400 to 1600 A



HW2
From 630 to 2500 A



HW4
From 1000 to 4000 A



HW6
6300 A



Moulded Case Circuit Breakers **h3+**

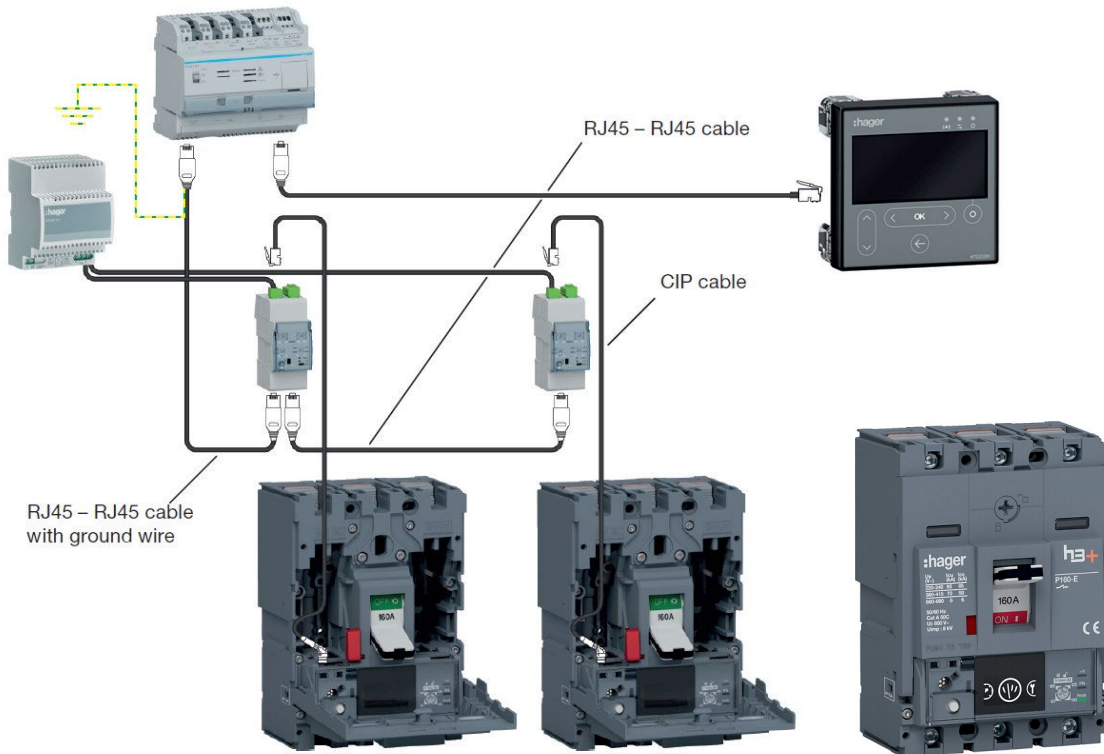


hager

The h3+ MCCB range delivers dependable circuit protection with optional energy metering and Modbus communication for load monitoring and reporting.



Plug-in adapter



Hager MCB "Quick-swap"



Quick-swap replacement of a Hager miniature circuit breaker.

Hager miniature circuit breakers can be replaced on the DIN rail without disconnecting the supply busbar.

There is a fully retractable spring clip underneath the circuit breaker, allowing the component to be removed from the DIN rail without detaching the supply busbar. Because of this, replacing a Hager component is significantly faster than with most other miniature circuit breakers available on the market.

This can be described as a "quick-swap" principle.

When **combined with a grouping switch**, it can be considered as "**hot-swappable**".



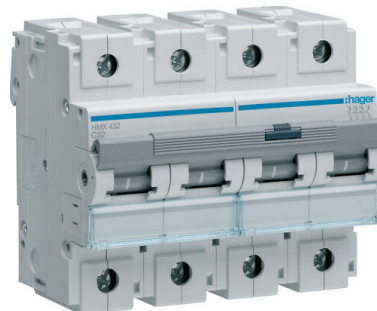
6kA



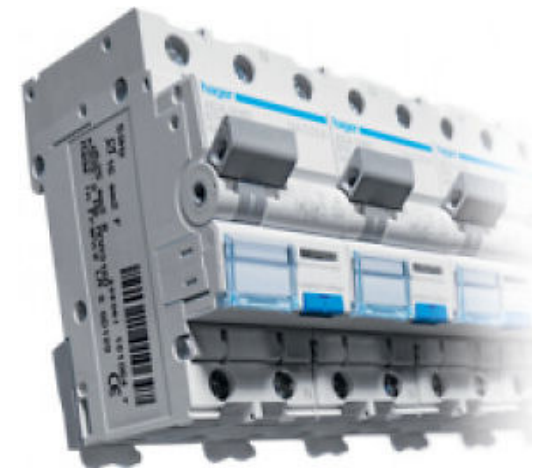
10kA



15-25kA



30-50kA





DELPHYS XL

- Cold-Swap modular high performance UPS-device

Power 1000-4800kW

GREEN POWER 2.0



MODULYS XM

- 300kW or 600kW frames high power Hot-Swap modular UPS.
- 50kW modules with N+1 or N+2 configuration.

GREEN POWER 2.0

NEW!



DELPHYS XM

- Cold-Swap modular high performance UPS-device
- Power packed into very small footprint

Power 300-800kW

GREEN POWER 2.0



MODULYS XL

- Adaptive system for high power systems.
- 200kW modulesize

Power 200 - 4800 kW

GREEN POWER 2.0

Redundant power feeds

Static Transfer Switches (STS) / Automatic Transfer Switches (ATS)



Socomec Statys Cabinet (200A-1600A)
(Catcher 1800A)



Socomec Statys Chassis
(200A-1800A)
Integrable STS (quadro evo / Otso evo E)



Socomec Atys
(125A-3200A)
Integrated ATS
- quadro evo / Otso evo E
- Standardized ATS-cabinets

"Typical" LV-UPS Power POD (Containerised or SKID, e-House)



DC / Batteries
IT Load & Mechanical
Systems UPS Units
(Outsourced)



UPS - IT Load & Mech Systems
UTU / Socomec



Battery Room Cooling,
FCU, DX / Split Units
(Overhead Door)
Mitsubishi Electric



POD / Container Cooling,
CRAHs **Mitsubishi Electric**

Battery Room Cooling
DX / Splits External
Condensers
Mitsubishi Electric



Fire Suppression
(Inert Gas) **OEM**
/ outsourced



Mech' LV Switchboard
Data Halls
Mechanical Systems
(Cooling)
UTU / Hager



Fire Detection
OEM / outsourced

Data Halls
IT Load LV
Switchboard
UTU / Hager



LV Switchboards for:-
- Power Factor Correction
- Small Power & Lighting
- Container Distribution
UTU / Hager



Distribution
Transformer
(Outsourced)



MV Switchgear
Mitsubishi Electric

