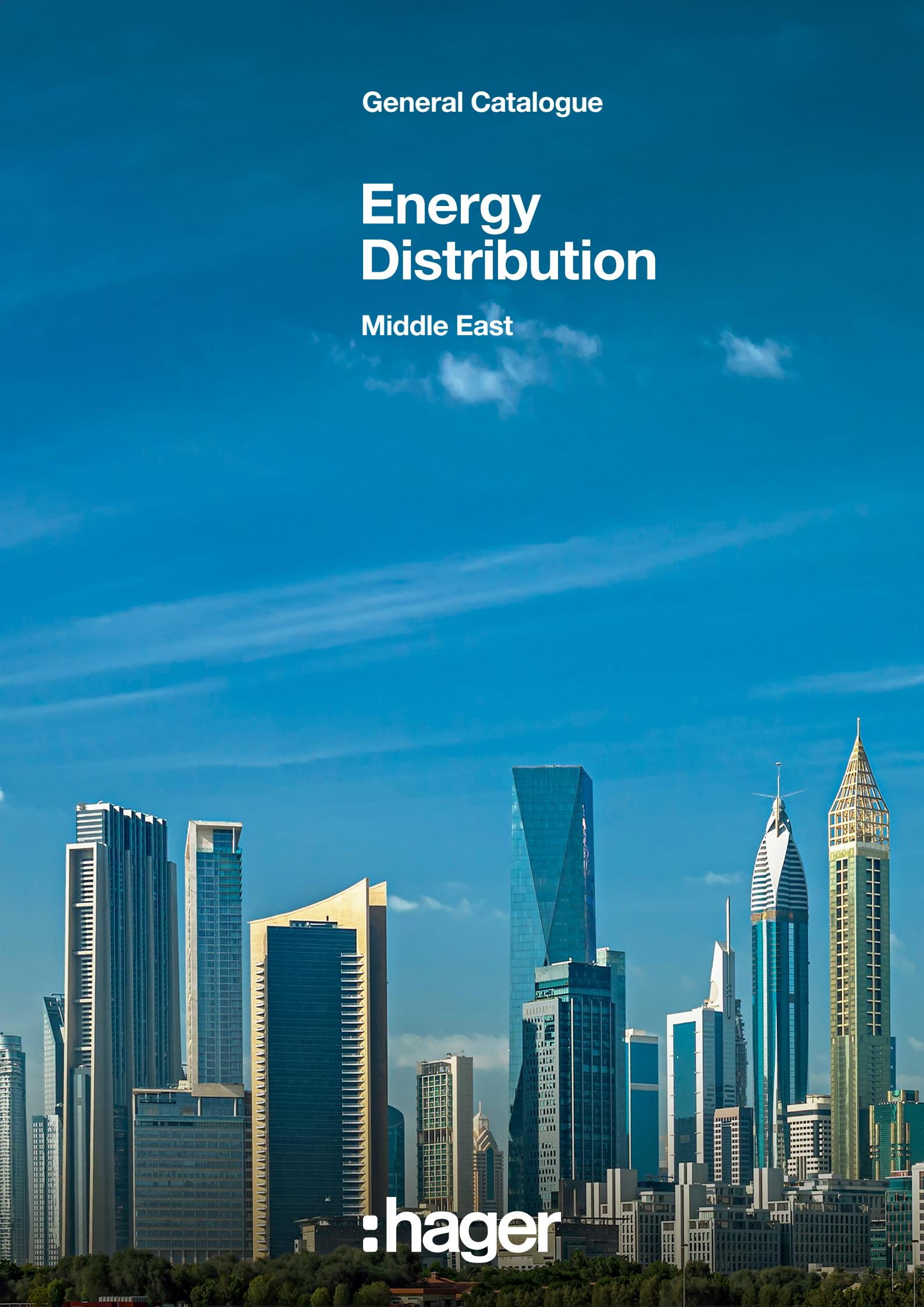
General Catalogue

Energy Distribution

Middle East



hager

Hager.
A partner you can plan with.

Building the electrical world of tomorrow together

“Our commitment is to provide you with future-proof, reliable and ingenious products, solutions and services.”

Sabine Busse
Hager Group CEO

Dear customers, partners and friends of Hager,

It is with great enthusiasm that I address you as the new CEO, taking over from Daniel Hager, who is now Chairman of the group's Supervisory Board. I am delighted to embark on a new chapter of the company alongside you, our customers, partners, and friends, as well our dedicated team of employees.

The world is electrifying at fast speed, and it is a privilege to be with you as your business develops. Our commitment is to provide you with future-proof, reliable and ingenious products, solutions and services. In the pages of this catalogue, you will discover them. I hope you enjoy discovering them as much as we enjoyed designing them.

As part of our continuing commitment to support you, we produce, invest and innovate to follow our guiding principle “safe & simple”. Over the past four years, we have invested over 500 million euros in our factories, logistics centres and in research & development. These investments ensure a level of quality, operational efficiency and continuous innovation in line with your evolving needs.

This is also reflected in our data strategy. We understand its crucial role in improving our processes and optimising your customer experience. We are investing more than ever in technological solutions to fully harness the potential of data and provide increasingly customer-tailored solutions.

And our customer-focus does not end there. We are an environmentally transparent and responsible company, we integrate sustainability into our business strategy and operations. We develop solutions that enable our customers to become more sustainable, together we contribute to a successful energy transition with both reduced energy consumption and CO2 emissions. We believe in creating a cleaner, safer and more enjoyable world for current and future generations; our strategic choices reflect this commitment.

Together, let's continue to build on our strong relationship and advance innovation while honouring our commitment to sustainability.

Thank you for your continued trust.

Best regards,
Sabine Busse, CEO, Hager Group

Our vision

Hager Group's vision is to make life on our planet safer, cleaner and more enjoyable through ingenious, sustainable and reliable electrical infrastructure solutions, for all kinds of buildings.

Our world today and tomorrow

We're constantly reimagining electricity in order to meet the world's rising energy demands with better performing and less consuming products and solutions. We're also moving at pace with technology as electricity usage becomes 'smarter' in homes and buildings and yet one thing endures in all this fast-moving change, we will always produce and supply for you safe and simple solutions and products. It's what we have been doing for over 65 years.

Generational approach

As a family-owned business that prides itself on being easy to work with, finding solutions in the spirit of collaboration, cooperation and co-creation is how we enjoy working on a daily basis, it's how we feel business is done best and how end results are best achieved together.
Because we're driven by an entrepreneurial flair in a world where people like you matter to us, so much so that we'll be by your side right through your projects and beyond. No matter what, Hager will go the extra mile for you to meet your requirements.

Big enough to matter, small enough to care

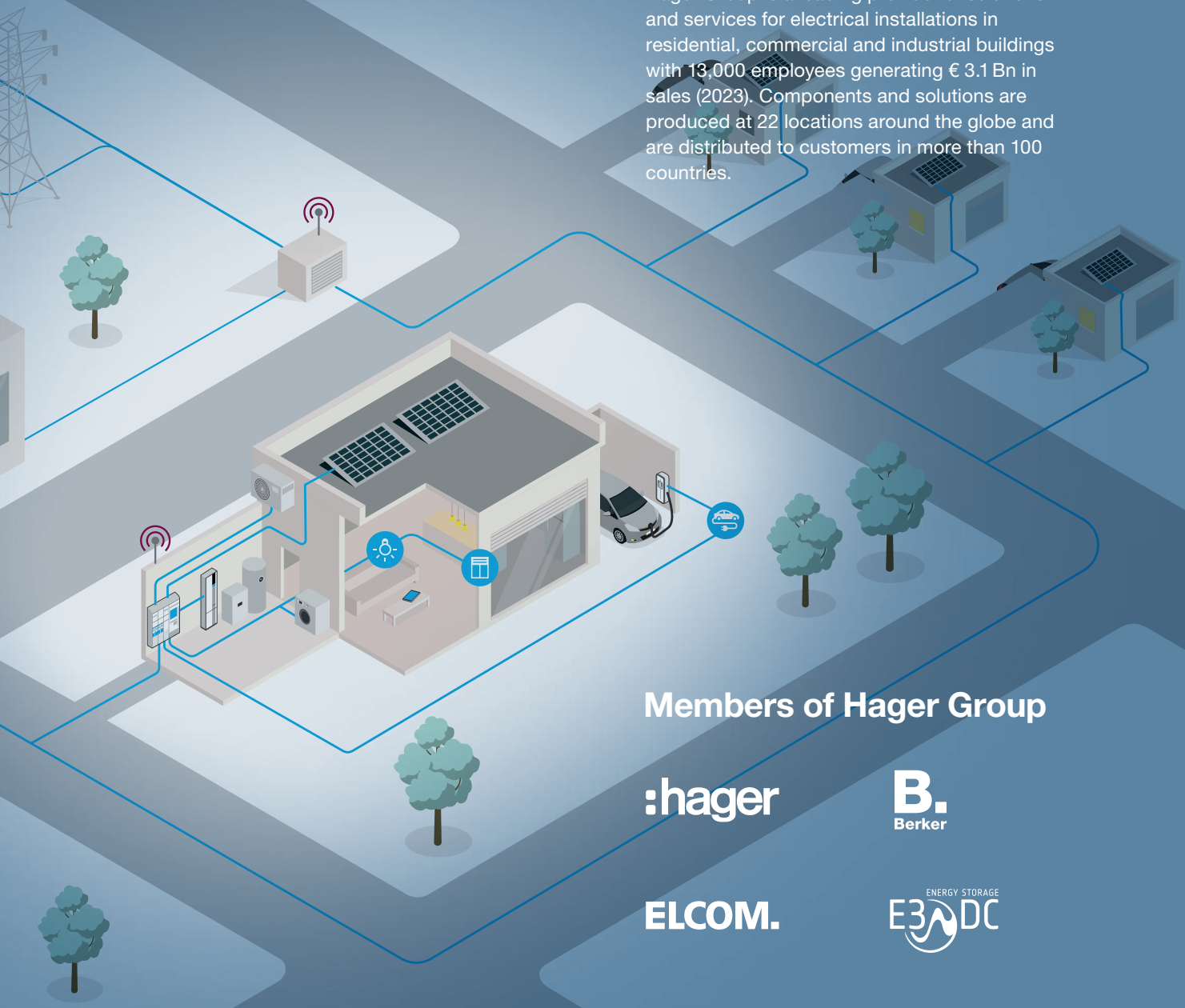
As a global player, we play in every domain of the electrical infrastructure world; energy distribution, energy management, e-mobility, cable management, wiring accessories, connected and automated homes. We have you covered and our products and solutions are almost always customisable should you desire.
We've built a reputation for high quality, scalable and dependable European-made products that are tested, trusted and ready for all types of buildings large and small, so you and your customers can rest assured your installations will endure over the long term.

Looking ahead

We are investing on a large scale to ensure you will always get the best from us with huge investments in production capacity and at distribution sites but also developing new and exciting products in our new research and development centres to meet the joint challenges of energy consumption and the environment. As much as the world changes we'll never change our approach to you, our customers, we'll always be with our customary support and learning platforms continuously available for you, with you.

hagergroup

Hager Group is a leading provider of solutions and services for electrical installations in residential, commercial and industrial buildings with 13,000 employees generating € 3.1 Bn in sales (2023). Components and solutions are produced at 22 locations around the globe and are distributed to customers in more than 100 countries.



Members of Hager Group

:hager

Berker

ELCOM.

ENERGY STORAGE E3/DC

eficia

Pmflex

BOCCHIOTTI

IBOCO

Hager Group prepares buildings and neighbourhoods for the energy transition with intelligent energy management systems, bidirectional charging functionalities, and charging stations for electromobility as well as the digitalisation of energy distribution.

On our journey to a sustainable future

At Hager Group, we shape the electric world of tomorrow, a world in which long-term success goes hand in hand with sustainability.

For us, sustainability encompasses Ethics, Employees and the Environment. We call our approach E3. This embraces an ethical approach to business, an inclusive and healthy work environment and reliable products and ingenious solutions which are future-proof. With a strong focus on the environment, we're on the way to making our company a low-carbon operation. We want to take our employees, partners and customers with us on this journey. Let's make better choices together. For our planet and for all generations.

Ethics

We put a strong emphasis on a responsible approach towards business. This approach considers our own employees as well as every person involved in our value chain: from suppliers and their employees, to partners and customers. As we produce electrical equipment and solutions, consumer safety is one of our main concerns, as well as business and data integrity. We are committed to complying with all national and international industry standards and in many instances go above and beyond what is required. Since 2007, we are signatories of the United Nations' Global Compact.

E3 Ethics Employees Environment

Employees

Recruiting and retaining talent is one of the great challenges of businesses today. For us, a sustainable business is only possible if we can attract the right people who feel welcome and able to fulfil their potential at Hager Group. We see our company as a cross-generational endeavour, much like a family. With life-long learning opportunities and opportunities to build a meaningful career we're offering our employees the ideal basis from which to fully engage in a long-term and fruitful mutual relationship with our company. It goes without saying that diversity and inclusion and equal opportunities are part and parcel of our recruitment policies.

Environment

We are committed to reducing waste and emissions considerately by investing in an environmentally friendly design, the longevity and quality of our products and more sustainable solutions in production and distribution. We perform full life cycle analysis of all our products in the form of a Product Environmental Profile (PEP). At production level, we are continuously looking for ways to reduce our resources consumption. Currently, 18 of our production facility locations and 4 of our distribution centres are certified to the international environmental management standard ISO 14001, which defines globally recognised requirements for environmental management.

Sustainability certifications for Hager Group:

Member of:

United Nations Global Compact

Care-fully designed

**We care for our customers.
Our design tells the story.**

High performance and premium solutions should incorporate great design. That is part of our mission at Hager, and we do take this to heart. The family of products you will find in this catalogue all fit together smoothly and therefore contribute to proud installations. This, in turn, contributes to loving the brand. We hope you love it as much as we do.

Let's see what that covers:
We want to be best-in-class in usability. That means that our devices and systems should be easy to understand and easy to use in any situation. And why not aim for more than pure ease of use? In our new products, we aim for pleasurable, enjoyable features that will positively surprise you. Clever ideas that will make the difference for you and for end-users.

It is also about overall coherence. Our total family of devices should make sense to you. It should allow you to install habits and speed. It should contribute to building up familiarity and trust. Working with our solutions should feel like coming home.

Nice design is, of course, also about style, form precision, and finishings. We feel that Hager's ingenious technical solutions deserve careful design to the smallest details. Attractive and recognizable design grants premium electrical installations that grace contemporary homes and buildings. We know how to fascinate your clients with contemporary yet timeless designs, but we also know how to elegantly disappear when needed.

Sustainability is part of our natural values and authentic attitudes. In a sense, eco-design is an expression of care. Care for the planet and, consequently, for all of us. We know we have an important role to play here. We always work to offer the best business solutions with a view to long-term sustainability.

Digital and physical design excellence:
The rapidly growing digital world offers us endless

The Design Studio team

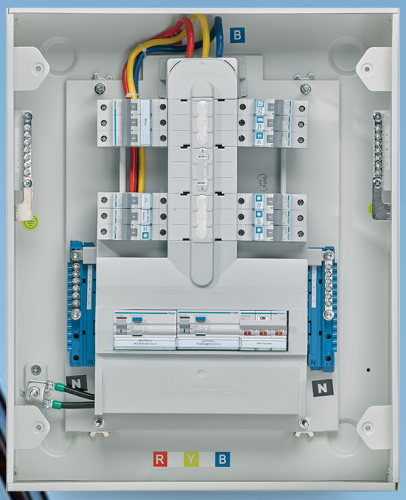
Erwin van Handenhoven, Hager Group Design Studio Director

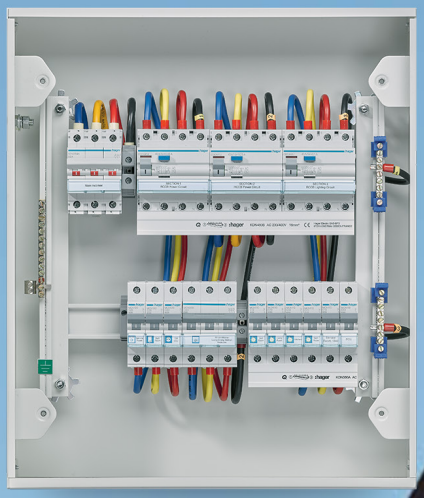
possibilities. It has been anchored for many years now in our design philosophy.
We design our digital tools with the utmost care. Totally in line with the physical offer, they must reflect the same usability and identity. We want them to be easy to understand and fascinating and captivating to use. At the same time, they should enrich and simplify our user experience. We recently designed a new and thrilling digital design system that we will implement over time and that will be part of your future daily activities. As Hager designers, we want your digital experience to be friendly and cool but also classy and strong on performance, enabling the extraordinary tasks and workflows of the ever-evolving electrical world.

Safe and simple:
This new electrical world that we shape together with you must, above all, be perfectly safe for you and the end user. Protecting you in every possible situation. You need robust and reliable solutions. You claim premium quality devices, and we try to exceed your expectations. We design them with safety in mind but also in order for you to feel comfortable. Furthermore, they need to be safe for the planet, too.

Amidst the unstoppable rise of technical performance, we must not forget to aim for the simplest of solutions. Making things difficult is quite easy. Making high performance easy and simple for you and your client is, on the other hand, a real challenge for our developers. This is clearly our focus and ambition.

We expect a careful and fully designed offer to be safe and simple. It is our everyday motto. We do not compromise here. We think about ingenious and innovative solutions based on the best technologies with only one purpose: satisfying our family of customers. You.





The partner

for your electrical installations.

Enclosures
Protection devices
Control devices
Weatherproof
Cable management

:hager

Index

Page

Enclosures and distribution boards

As a specialist in residential and commercial projects, we offer an extensive selection of enclosures and distribution boards. whether you're in need of final distribution boards, submain distribution boards, or main distribution boards, we provide solutions in both plastic and steel, suitable for flush or surface mounting to cater to your specific needs.

01

Page

Characteristics
Easy to install, compact in size and with ample wiring space, the consumer unit range is available as flush and surface mounting enclosures and dedicated for indoor use. The range includes boxes with capacities of 1 row with 6 to 18 modules.

Delivered with
- neutral and earth terminal
- plain door
- with & without busbar

Technical data
- class I
- IP 40
- colour: RAL 9002
- steel epoxy powder coated enclosure
- backbox and frame : 1.0mm, door 1.0mm
- 70mm depth
- DIN rail mounting
- nominal current (In): 100A for busbar version


VT12FM

Consumer unit with 100A 1P busbar flush mounting

Description	Nr. of outgoing ways	Cat. ref
1 row, 6 ▮	4	**VT04FM**
1 row, 8 ▮	6	**VT06FM**
1 row, 10 ▮	8	**VT08FM**
1 row, 12 ▮	10	**VT10FM**
1 row, 14 ▮	12	**VT12FM**
1 row, 18 ▮	16	**VT16FM**


VT16SM

Consumer unit with 100A 1P busbar surface mounting

Description	Nr. of outgoing ways	Cat. ref
1 row, 6 ▮	4	**VT04SM**
1 row, 8 ▮	6	**VT06SM**
1 row, 10 ▮	8	**VT08SM**
1 row, 12 ▮	10	**VT10SM**
1 row, 14 ▮	12	**VT12SM**
1 row, 18 ▮	16	**VT16SM**


VT08FD-T

Consumer unit without busbar flush mounting

Description	Nr. of modules	Cat. ref
1 row, 8 ▮	8	**VT08FD-T**
1 row, 12 ▮	12	**VT12FD-T**
1 row, 18 ▮	18	**VT18FD-T**


VT12SD-T

Consumer unit without busbar surface mounting

Description	Nr. of modules	Cat. ref
1 row, 8 ▮	8	**VT08SD-T**
1 row, 12 ▮	12	**VT12SD-T**
1 row, 18 ▮	18	**VT18SD-T**

▮ = 17.5 mm width module

Characteristics
The DIN rail boards are a safe and reliable solution for distributing and controlling power, compatible with various types of DIN rail modular components. The Invicta DR range is easy to install and available in flush and surface mounting enclosures, in 16 or 24 module width options. The range includes boxes with capacities ranging from 1 to 6 rows with 16 to 96 modules, as well as 4 to 6 rows with 96 to 144 modules.

Delivered with
- plain metallic door
- adjustable & removable DIN rail chassis

Technical data
- class I
- IP 40
- colour: RAL 9002
- steel epoxy powder coated enclosure
- backbox and frame : 1.2mm, door 1.0mm
- 110mm depth
- DIN rail mounting
- door earthing to ensure earth continuity
- reversible doors


DR32F

invicta DR 16 modules flush mounting

Description	Cat. ref
1 row, 16 ▮	**DR16F**
2 rows, 32 ▮	**DR32F**
3 rows, 48 ▮	**DR48F**
4 rows, 64 ▮	**DR64F**
5 rows, 80 ▮	**DR80F**
6 rows, 96 ▮	**DR96F**


DR48S

invicta DR 16 modules surface mounting

Description	Cat. ref
1 row, 16 ▮	**DR16S**
2 rows, 32 ▮	**DR32S**
3 rows, 48 ▮	**DR48S**
4 rows, 64 ▮	**DR64S**
5 rows, 80 ▮	**DR80S**
6 rows, 96 ▮	**DR96S**


DR424F

invicta DR 24 modules flush mounting

Description	Cat. ref
4 rows, 96 ▮	**DR424F**
5 rows, 120 ▮	**DR524F**
6 rows, 144 ▮	**DR624F**

invicta DR 24 modules surface mounting

Description	Cat. ref
4 rows, 96 ▮	**DR424S**
5 rows, 120 ▮	**DR524S**
6 rows, 144 ▮	**DR624S**

Accessories

Description	Cat. ref
joining kits for flush boards	**JK01FK**
joining kits for surface boards	**JK01SK**
1 ▮ blanking strip	**P032H**
keylock	**VZ303**
plastic handle lock	**VZ300**

Characteristics
Invicta 125A Type B distribution board range is a perfect solution for both residential and commercial installations. The range includes 125A boards with multiple incomer choices, available in flush and surface mounting enclosures. The range offers a variety of options, including boxes with capacities ranging from 4 to 24 TP ways, available in both fixed and split load types.

Complies with: IEC 61 439 – 1 & 3
ASTA certified & ADQCC approved

Delivered with
- 125A rated pan assembly
- height adjustable & removable busbar assembly
- neutral and earth brass terminal
- plain metallic door
- door earthing to ensure earth continuity
- removable pre punched top and bottom gland plates.
- I/C link kit suitable for 3 pole modular isolator (up to 125A) MCBs (up to 63A) or RCCBs (up to 125A)

Technical data
- class I
- IP41
- colour : RAL 9002
- steel epoxy powder coated enclosure
- backbox and frame : 1.2mm, door 1.0mm
- 120mm depth
- busbar current rating: 125A
- rated voltage (Un /Ue): 415V ac - 50Hz
- rated insulation voltage (Ui): 690V ac
- rated impulse withstand voltage (Uimp): 4kV
- rated short circuit withstand (Icw) : 17kA for 0.25 sec.
- suitable for modular incomers (125A) and modular outgoings (63A)
- incomer cutout width: 13 mod
- incomer DIN rail mounting
- reversible doors
- accessories like key lock, DIN rail extension boxes etc ...


JK1B08F2

invicta TPN125 type B distribution boards fixed load boards

Description	Cat. ref surface	flush
4 ways	**JK1B04S2**	**JK1B04F2**
6 ways	**JK1B06S2**	**JK1B06F2**
8 ways	**JK1B08S2**	**JK1B08F2**
10 ways	**JK1B10S2**	**JK1B10F2**
12 ways	**JK1B12S2**	**JK1B12F2**
14 ways	**JK1B14S2**	**JK1B14F2**
16 ways	**JK1B16S2**	**JK1B16F2**
18 ways	**JK1B18S2**	**JK1B18F2**
24 ways	**JK1B24S2**	**JK1B24F2**


JK1B044F2WA316

invicta TPN125 type B distribution boards split busbar with wire set
-to fit up to 125A isolator, 2 nos of 4P RCCB (section A and B) as incomers

No. of out going ways section A	section B	Cat. ref surface	flush
2	2	**JK1B022S2WA316**	**JK1B022F2WA316**
4	2	**JK1B042S2WA316**	**JK1B042F2WA316**
4	4	**JK1B044S2WA316**	**JK1B044F2WA316**
6	2	**JK1B062S2WA316**	**JK1B062F2WA316**
6	4	**JK1B064S2WA316**	**JK1B064F2WA316**
8	2	**JK1B082S2WA316**	**JK1B082F2WA316**


JK1B066F2

invicta TPN125 type B distribution boards split busbar without wire set
- to fit up to 125A isolator, 2 nos of 4P RCCB (sectionA and B) as incomers

No. of out going ways section A	section B	Cat. ref surface	flush
6	6	**JK1B066S2**	**JK1B066F2**
8	4	**JK1B084S2**	**JK1B084F2**
8	6	**JK1B086S2**	**JK1B086F2**
8	8	**JK1B088S2**	**JK1B088F2**
10	4	**JK1B104S2**	**JK1B104F2**

JK1L1253MM

Incoming link kits for JK1 TPN 125 Type B distribution board

Description	Cat. ref
3P 80A - 125A MCB incomer kit	**JK1L1253MM**
4P 80A - 125A MCB incomer kit	**JK1L1254MM**
3P 100A switch or RCCB incomer kit	**JK1L1003SR**
3P 63A MCB / switch disconnector / 63A - 100A RCCB, fixed & split load	**JK1L1003SMSL**
3P 125A switch disconnector kit	**JK1L1253SK**
4P 63A MCB / switch disconnector / 63A - 100A RCCB, fixed & split load	**JK1L1004SMSL**
125A direct connection kit	**JK2L2504D**
4P isolator + RCCB incomer kit	**JK1L1004SR**
3P cable spreader links and barrier for 125A	**JK1XCSP**

Cable spreader boxes

Description	Cat. ref for surface enclosures	for flush enclosures
cable spreader box	**JK2E01S**	**JK2E01F**

DIN rail extension boxes

Description	Cat. ref for surface enclosures	for flush enclosures
16 ▮	**JK2E16S**	**JK2E16F**
32 ▮	**JK2E32S**	**JK2E32F**
48 ▮	**JK2E48S**	**JK2E48F**

JK1XKLS

JK1XBSP

Accessories for JK1 Type B distribution board

Description	Cat. ref
top & bottom gland plate with screws	**JK1XGP**
1 ▮ blank	**P032H**
single phase blank for TPN boards	**JK1XBSP**
busbar protective boot	**P100H**
key lock	**JK1XKLS**
incomer shroud 13 ▮	**JK2XISS**
neutral terminal cover IP2X	**JK1XNC**

Characteristics
Invicta 250A Type B distribution board range is a perfect solution for commercial & industrial installations. The range includes both 250A boards with MCCB incomer or direct connection. The range is presented in surface or flush mounting enclosures and includes boxes with capacities of 4 to 24 TP ways in fixed load types.

Complies with: IEC 61 439 – 1 & 3
ASTA certified & ADQCC approved

Delivered with
- 250A rated pan assembly
- height adjustable & removable busbar assembly
- neutral and earth brass terminal
- plain metallic door
- door earthing to ensure earth continuity
- removable pre punched top and bottom gland plates

Technical data
- class I
- IP41
- colour : RAL 9002
- steel epoxy powder coated enclosure
- backbox and frame : 1.2mm, door 1.0mm
- 120mm depth
- busbar current rating: 250A / 200A (ADQCC)
- rated voltage (U n /U e): 415V ac - 50Hz
- rated insulation voltage (U i): 690V ac
- rated impulse withstand voltage (U imp): 4kV
- rated short circuit withstand (I cw) : 17kA for 0.25 sec.
- suitable for non-modular incomers and modular outgoings
- reversible doors
- accessories like key lock, DIN rail extension boxes etc ...
- 13 mod blank supplied with link kit to suit JK switch/MCCB incomers
- **link kits are not supplied as standard, please order i/c link kits separately**


JK2B12F2

invicta TPN250 Type B distribution boards fixed load boards

Description	Cat. ref surface	flush
4 ways	**JK2B04S2**	**JK2B04F2**
6 ways	**JK2B06S2**	**JK2B06F2**
8 ways	**JK2B08S2**	**JK2B08F2**
10 ways	**JK2B10S2**	**JK2B10F2**
12 ways	**JK2B12S2**	**JK2B12F2**
14 ways	**JK2B14S2**	**JK2B14F2**
16 ways	**JK2B16S2**	**JK2B16F2**
18 ways	**JK2B18S2**	**JK2B18F2**
24 ways	**JK2B24S2**	**JK2B24F2**


JK2L2503MH

Incoming link kits

Description	Cat. ref
3P 160A switch disconnector incomer kit (JK160S)	**JK2L1603SK**
3P 200/250A switch disconnector incomer kit (JK200S/JK250S)	**JK2L2503SK**
3P x160A frame MCCB (upto 160A)	**JK2L1603MH**
3P x250 frame MCCB (upto 250A)	**JK2L2503MH**
3P 200/250A direct connection kit	**JK2L2503D**
4P x160A frame MCCB (upto 160A)	**JK2L1604MH**
4P x250 frame MCCB (upto 250A)	**JK2L2504MH**
4P 200/250A direct connection kit	**JK2L2504D**

Extension boxes for JK2 TPN250 Type B

Description	Cat. ref surface	flush
16 modules DIN extension box (15 modules available)	**JK2E16S**	**JK2E16F**
32 modules DIN extension box	**JK2E32S**	**JK2E32F**
48 modules DIN extension box	**JK2E48S**	**JK2E48F**

Spreader boxes for JK2 TPN250 Type B

Description	Cat. ref surface	flush
JK2 cable spreader box	**JK2E01S**	**JK2E01F**

P032H


JK1XBSP


JK2XB

Accessories for JK2 TPN250 type B distribution boards

Description	Cat. ref.
top and bottom gland plate with screws	**JK2XGP**
1 ▮ blank	**P032H**
busbar protective boot	**P100H**
single phase blank for TPN boards	**JK1XBSP**
key lock	**JK1XKLS**
neutral terminal cover IP2X	**JK1XNC**
13 ▮ blank for 125/160A switch disconnector	**JK2XBSK1**
13 ▮ blank for 200/250A switch disconnector	**JK2XBSK2**
13 ▮ blank for x160 frame MCCB	**JK2XBMH1**
13 ▮ blank for x250 frame MCCB	**JK2XBMH2**

ECB enclosure

Characteristics
- surface mounting
- 1.2 mm thickness sheet steel
- epoxy Powder coated
- colour : RAL 9002

Technical data
- neutral and Earth terminal up to 125A. For higher ratings neutral bar with bolts and nuts as standard
- removable pre punched top and bottom gland plates
- Dual knockouts
- sufficient cabling space
- supplied without MCCB


MH1253S4

ECB enclosure

Description	Cat. ref.
ECB enclosure for x160 MCCB	**MH1253S4**
ECB enclosure for x250 MCCB	**MH2503S4**
ECB enclosure for h400 MCCB	**MH4003S2**
ECB enclosure for h630 MCCB	**MH6303S2**

▮ = 17.5 mm width module

Characteristics
- standard : IEC 61439 - 1 & 3 ASTA certified
- current rating: 125A/250A
- operating Voltage: 220 I 440 VAC, 3 PH 4 wire
- frequency: 50 / 60 Hz
- short circuit withstand: 17kA for 0.25 sec
- peak short time withstand: 34kA
- IP: IP41
- range: 4/24 TPN - 12/72 SPN way
- colour: RAL 9002
- lock: Push to open with key lock
- Backbox and frame : 1.2mm, door 1.0mm

Incoming Devices MCCB
- standard: IEC 947-2
- incomer rating up to 125A (F4) & 250A (F5)

Outgoing Devices MCB /RCBO
- standard: IEC 898 I IEC 947-2 I IEC 61009
- outgoing rating up to 63A

Advantages and Benefits
- best performance of short circuit withstand:17kA for 0.25sec
- compact and enough space for wiring
- reversible door
- push to open and key lock provision
- removable and height adjustable PAN assembly
- wrap around neutral to facilitate even distribution of neutral cables
- fully insulated busbar stalk with provison for circuit labelling
- top TAP-OFF provison for extension to other boards
- removable Gland plates
- dual knockouts to suit cable size
- side knockouts for cable routing to adjacent load centers

JK2B08F4

Invicta load center without MCCB incomer
125A load center (flush)

No. of ways TPN / SPN	Description	Cat. ref.
4 / 12	12 SPN way load center without incomer fitted	**JK2B04F4**
6 / 18	18 SPN way load center without incomer fitted	**JK2B06F4**
8 / 24	24 SPN way load center without incomer fitted	**JK2B08F4**
10 / 30	30 SPN way load center without incomer fitted	**JK2B10F4**
12 / 36	36 SPN way load center without incomer fitted	**JK2B12F4**
14 / 42	48 SPN way load center without incomer fitted	**JK2B14F4**
16 / 48	54 SPN way load center without incomer fitted	**JK2B16F4**
24 / 72	72 SPN way load center without incomer fitted	**JK2B24F4**

Nomenclature

JK2B	04	F	4

Product line:
invicta load center

Mounting:
F: flush

Number of ways:
12 :04 SPN ways
18 :06 SPN ways
24 :08 SPN ways
30 :10 SPN ways
36 :12 SPN ways
42 :14 SPN ways
48 :16 SPN ways
72 :24 SPN ways

Current rating:
4: Max.125Amps
5: Max. 250Amps

JK2B08F5

invicta load center without MCCB incomer
250A load center (flush)

No. of ways TPN / SPN	Description	Cat. ref.
4 / 12	12 SPN way load center fitted with 200A MCCB	**JK2B04F5**
6 / 18	18 SPN way load center fitted with 200A MCCB	**JK2B06F5**
8 / 24	24 SPN way load center fitted with 200A MCCB	**JK2B08F5**
10 / 30	30 SPN way load center fitted with 200A MCCB	**JK2B10F5**
12 / 36	36 SPN way load center fitted with 200A MCCB	**JK2B12F5**
14 / 42	48 SPN way load center fitted with 200A MCCB	**JK2B14F5**
16 / 48	54 SPN way load center fitted with 200A MCCB	**JK2B16F5**
24 / 72	72 SPN way load center fitted with 200A MCCB	**JK2B24F5**

Characteristics
- standards: IEC 61439 - 1 & 2
- suitable for non - modular (MCCBs & isolating switches) incomers and MCCB outgoings
- option for installing CTs in meterable versions
- ASTA certified
- busbar current rating: 250A
- rated short circuit withstand for busbars 25KA
- removable top and bottom gland plates
- steel with epoxy powder coating
- RAL 9002
- IP41
- accessories like key lock, DIN rail extension boxes etc ...
- Backbox and frame : 1.5mm, door 1.0mm

JN2B00008S2

invicta 250A panel board, incomer: x250 frame MCCB (up to 250A) / JK200S / JK250S switch disconnector outgoing: x160 frame MCCB (up to 125A)

- incomer link kits are not supplied as standard for non meterable boards. For link kits refer below references for accessories
- 3 pole incomer link kits are supplied with the meterable board

No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P switch disconnector (JK200S / JK250S) / x250 frame MCCB (up to 250A) incomer non-meterable	provision for 3P x250 frame MCCB (up to 250A) incomer meterable
2	**JN2B00002S2**	**JN2B00002S3**
4	**JN2B00004S2**	**JN2B00004S3**
6	**JN2B00006S2**	**JN2B00006S3**
8	**JN2B00008S2**	**JN2B00008S3**
10	**JN2B00010S2**	**JN2B00010S3**
12	**JN2B00012S2**	**JN2B00012S3**
16	**JN2B00016S2**	**JN2B00016S3**

Incoming kits

Description	Cat. ref.
250A 3P MCCB incomer kit	**JN2L2503MH**
3P h250 frame MCCB (for meterable boards only)	**JN2L2503MHH**
250A 3P isolator incomer kit	**JN2L2503SK**
250A direct incomer kit	**JN2L2503D**

Switch disconnector

Description	Cat. ref.
switch 3P 250A 400V	**JK250S**

Extension boxes

Description	Cat. ref.
cable spreader box I Meter box without cutout	**JN2E01S**
meter box with cutout (Provision for 96mm x 96mm for VM/AM, RYB indicating lamps, selector switches)	**JN2E02S**
DIN rail box - 20 modules	**JN2E20S**

Accessories / spares

Description	Cat. ref.
single pole blanking plate 125A frame	**JN2XBSP**
keylock for distribution board	**JK1XKLS**

Characteristics
- standards: IEC 61439 - 1 & 2
- suitable for MCCBs incomers and outgoings
- option for installing CTs in meterable versions
- ASTA certified
- busbar current rating: 400A
- rated short circuit withstand for busbars 35KA for 1 sec
- removable top and bottom gland plates
- incomer link kits not supplied as standard for non-meterable boards
- 3 pole incomer link kits supplied with the meterable board
- steel with epoxy powder coating RAL 9002
- IP41
- accessories like key lock, DIN rail extension boxes etc ...
- Backbox and frame : 1.5mm, door 1.0mm

JN4B00008S2

invicta 400A panel board, incomer: h400 frame MCCB (up to 400A) - outgoing: x160 frame MCCB (up to 125A)

No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h400 frame MCCB (up to 250A) incomer non-meterable	provision for 3P h400 frame MCCB (up to 250A) incomer meterable
4	**JN4B00004S2**	**JN4B00004S3**
6	**JN4B00006S2**	**JN4B00006S3**
8	**JN4B00008S2**	**JN4B00008S3**
10	**JN4B00010S2**	**JN4B00010S3**
12	**JN4B00012S2**	**JN4B00012S3**
16	**JN4B00016S2**	**JN4B00016S3**

invicta 400A panel board, incomer: h400 frame MCCB (up to 400A) - outgoing: x250 frame MCCB (up to 250A) + x160 frame MCCB (up to 125A)

No. of out going ways x250 frame MCCB (up to 250A)	No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h400 frame MCCB (up to 250A) incomer non-meterable	provision for 3P h400 frame MCCB (up to 250A) incomer meterable
2	2	**JN4B00202S2**	**JN4B00202S3**
2	4	**JN4B00204S2**	**JN4B00204S3**
2	6	**JN4B00206S2**	**JN4B00206S3**
2	8	**JN4B00208S2**	**JN4B00208S3**
2	10	**JN4B00210S2**	**JN4B00210S3**
2	14	**JN4B00214S2**	**JN4B00214S3**

Incoming kits

Description	Cat. ref.
400A 3P MCCB incomer kit	**JN4L4003MH**
400A 3P direct incomer kit	**JN4L4003D**

Extension boxes

Description	Cat. ref.
For x160 frame MCCB outgoing	
cable spreader box / meter box without cutout	**JN4E01S**
meter box with cutout	**JN4E02S**
DIN rail box - 24 modules	**JN4E24S**
For x250 + x160 frame MCCB outgoing	
cable spreader box / meter box without cutout	**JN8E01S**
meter box with cutout	**JN8E02S**
DIN rail box - 32 modules	**JN8E32S**

JN2XBSP

Accessories / spares

Description	Cat. ref.
single pole blanking plate 125A frame	**JN2XBSP**
three pole blanking plate 250A frame	**JN4XBTP**
keylock for distribution board	**JK1XKLS**

Characteristics
- standards: IEC 61439 - 1 & 2
- suitable for MCCBs incomers and outgoings
- option for installing CTs in meterable versions
- ASTA certified
- busbar current rating: 800A
- rated short circuit withstand for busbars 40kA for 1 sec
- removable top and bottom gland plates
- incomer link kits not supplied as standard for non meterable boards, for link kits please refer opposite page
- 3 pole h630 frame MCCB incomer link kits are supplied with the meterable boards
- incomer link kits not supplied as standard for non-meterable boards
- 3 pole incomer link kits supplied with the meterable board
- steel with epoxy powder coating RAL 9002
- IP41
- accessories like key lock, DIN rail extension boxes etc ...
- Backbox and frame : 1.5mm, door 1.0mm

JN8B00008S2

invicta 630/800A panel board, incomer: h630 frame MCCB (up to 630A) / h1000 frame MCCB (up to 800A) - outgoing: x160 frame MCCB (up to 125A)

No. of out going ways x250 frame MCCB (up to 250A)	No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h630/1000 frame MCCB incomer non-meterable	provision for 3P h630/1000 frame MCCB incomer meterable
-	4	**JN8B00004S2**	**-**
-	6	**JN8B00006S2**	**-**
-	8	**JN8B00008S2**	**-**
-	10	**JN8B00010S2**	**-**
-	12	**JN8B00012S2**	**-**
-	16	**JN8B00016S2**	**-**

invicta 630/800A panel board, incomer: h630 frame MCCB (up to 630A) / h800 frame MCCB (up to 800A) - outgoing: x250 frame MCCB (up to 250A)

No. of out going ways x250 frame MCCB (up to 250A)	No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h630/1000 frame MCCB incomer non-meterable	provision for 3P h630/1000 frame MCCB incomer meterable
4	-	**JN8B00400S2**	**-**
6	-	**JN8B00600S2**	**-**
8	-	**JN8B00800S2**	**-**
10	-	**JN8B01000S2**	**-**
12	-	**JN8B01200S2**	**-**
16	-	**JN8B01600S2**	**-**

invicta 630/800A panel board, incomer: h630 frame MCCB (up to 630A) / h800 frame MCCB (up to 800A) - outgoing: x250 frame MCCB (up to 250A) + x160 frame MCCB (up to 125A)

No. of out going ways x250 frame MCCB (up to 250A)	No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h630/1000 frame MCCB incomer non-meterable	provision for 3P h630/1000 frame MCCB incomer meterable
2	2	**JN8B00202S2**	**JN8B00202S3**
2	4	**JN8B00204S2**	**JN8B00204S3**
2	6	**JN8B00206S2**	**JN8B00206S3**
2	8	**JN8B00208S2**	**JN8B00208S3**
2	10	**JN8B00210S2**	**JN8B00210S3**
2	14	**JN8B00214S2**	**JN8B00214S3**

invicta 630/800A panel board, incomer: h630 frame MCCB (up to 630A) / h800 frame MCCB (up to 800A) - outgoing: x250 frame MCCB (up to 250A) + x160 frame MCCB (up to 125A)

No. of out going ways x250 frame MCCB (up to 250A)	No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h630/1000 frame MCCB incomer non-meterable	provision for 3P h630/1000 frame MCCB incomer meterable
4	2	**JN8B00402S2**	**-**
4	4	**JN8B00404S2**	**-**
4	6	**JN8B00406S2**	**-**
4	8	**JN8B00408S2**	**-**
4	10	**JN8B00410S2**	**-**

invicta 630/800A panel board, incomer: h630 frame MCCB (up to 630A) / h1000 frame MCCB (up to 800A) - outgoing: x160 frame MCCB (up to 125A)

No. of out going ways x400 frame MCCB (up to 400A)	No. of out going ways x250 frame MCCB (up to 250A)	No. of out going ways x160 frame MCCB (up to 125A)	Cat. ref. provision for 3P h630/1000 frame MCCB incomer non-meterable	provision for 3P h630/1000 frame MCCB incomer meterable
-	6	6	**JN8B00606S2**	**-**
-	6	8	**JN8B00608S2**	**-**

Incoming kits

Description	Cat. ref.
630A 3P MCCB incomer kit	**JN8L6303MH**
630A 3P direct incomer kit	**JN8L6303D**
800A 3P MCCB incomer kit	**JN8L8003MH**
800A 3P direct incomer kit	**JN8L8003D**

Extension boxes

Description	Cat. ref.
cable spreader box / meter box without cutout	**JN8E01S**
meter box with cutout	**JN8E02S**
DIN rail box - 32 modules	**JN8E32S**

Accessories / spares

Description	Cat. ref.
keylock for distribution board	**JK1XKLS**

unimes.ME main distribution boards provide comprehensive range of solutions that caters to versatile project requirements.

The distribution boards are optimized for different configurations and requirements and have the ability to expand if required in the future.

unimes.ME complies with the most stringent safety criteria set by IEC standards to provide maximum safety of equipment and personnel.

unimes.ME switchboards are among the most compact in the market. They are pre-assembled in accordance with panel builder requirements to save on assembly time.

Internal metallic and non metallic partitions up to form 4b provide maximum protection against direct contact with any live parts. The form 4b partition also limits contact with solid bodies (e.g. working tools)

With an IP54 rating, unimes.ME provides complete safety from foreign solid bodies or liquids.

Busbars are enclosed in fully partitioned compartments. They consist of one or more copper bars per phase held by functional busbar supports. The main busbars are mounted horizontally while the distrubution busbars are mounted vertically to enable front and rear access to the busbars.

The ample space in the main busbar chamber provides easy and safe coupling between the different enclosures. This reduces the assembly time and also increases the safety of operation.

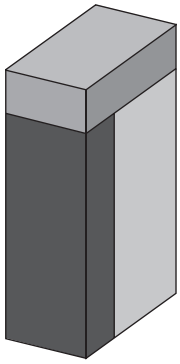
Technical Characteristics

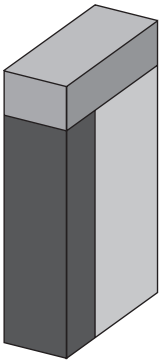
Mechanical characteristics		
Degree of protection	In accordance with IEC 60529	
	External	IP54
Forms of separation	as per IEC 61439-2	upto Form 4b
Dimensions	Height (mm)	2200 (with plinth)
	Width (mm)	600, 800, 900 (600+300)
	Depth (mm)	800
Surface treatment	Internal Components	Powder coated / Painted
	External Components	Powder coated /Painted
Resistance to corrosion IEC 61439-1 / 10.2.2.2	Damp heat cycling test	IEC 60068-2-30
	Salt mist test	IEC 60068-8-11
Resistance of insulating materials IEC 61439-1 / 10.2.3.2	Glow wire test	IEC 60695-2-11

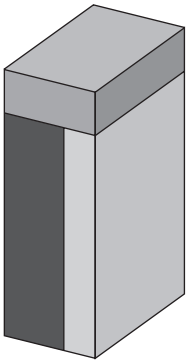
Electrical characteristics		
Standards		IEC 61439
Voltage ratings	Rated operational voltage (U_e)	415 VAC
	Rated insulation voltage (U_i)	1000 VAC
	Rated impulse withstand voltage (U_{imp})	8 KV
	Rated frequency (f_n)	50 / 60 Hz
Current ratings	Rated current (I_{na})	upto 2500 A
	Rated peak withstand current (I_{pk})	105 kA / 187 kA
	Rated short-time withstand current (I_{cw})	50 kA, 3 s & 85 kA, 1 s

Range of sizes

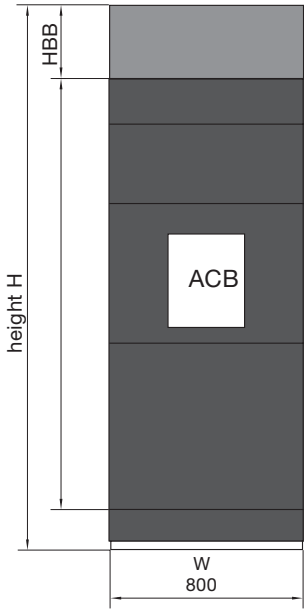
Functional units
Cable / Busbar
Main Busbar

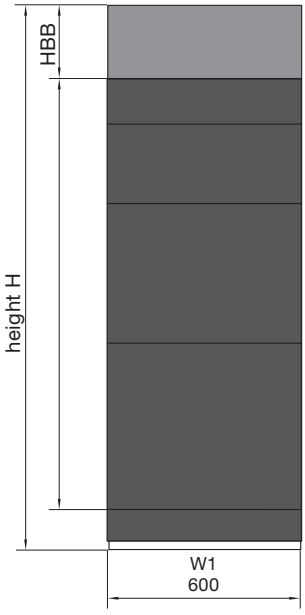


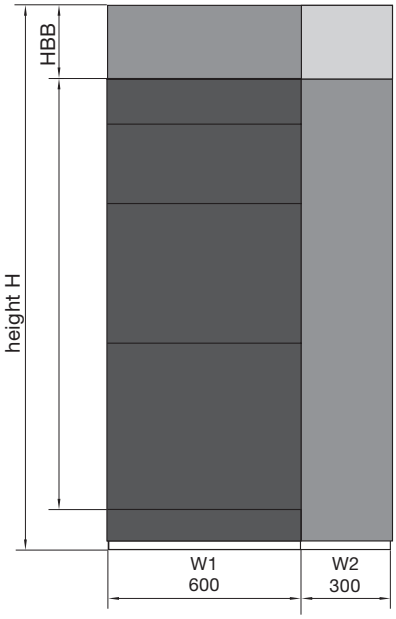




ACB Panel	MCCB Panel	MCCB Panel







Width	**800 mm**	**600 mm**	**900 mm**
Height (with plinth)	**2200 mm**	**2200 mm**	
Depth	**800 mm**	**800 mm**	
Horizotal busbar (HBB)	**350 mm**	**350 mm**	

Flexibly scalable installations

This system is flexible and allows perfectly smooth integration in all types of projects, including multimedia or automation devices. Using a wide choice of functional accessories, you can easily associate multiple enclosures or add rows of modules to optimize space. vega D distribution boards guarantee installation without unnecessary effort and constraints. And to save even more time, partially equipped enclosures can also be ordered.

Professional finishing

Clip-on label holder & above or below modular products for perfect alignment. Doors to choose from, solid or transparent. Timeless design and impeccable finish. Outside of the modular footprint.

Smart packaging

Easy unpacking
Storage of ingenious dismantled parts Reusable / Recyclable for a future shipment

Easy cabling

More accessibility on the sides and more spaces between the back of the cabinet and the DIN rail. Fixing without tools.

Characteristics
Vega D flush and surface mounting enclosures range is adapted to installations in residential and commercial premises. The vega D range includes enclosures from 2 up to 7 rows from 48 to 168 ▮ capacities.

Delivered with
- **quick**connect earth terminal block
- blanking clip
- marking strip
- pocket plan
- cable strain relief bar

Technical data
- IP30 and IK07 without door
- IP40 and IK08 with door (flush)
- IP41 and IK08 with door (surface)
- class II
- DIN rail mounting
- colour: RAL 9010
- material: metallic enclosure
- empty space for equipment unit for enclosure to be completed

Note: enclosures of this range are delivered without doors.


FU42DN

Full equipped flush enclosures

- without door, low depth (150mm)
- w. 550 x d. 150 mm
- frame height: 40 mm

Description	Height (mm)	quickconnect terminals	Cat. ref.
2 rows (48 ▮)	537	1 x KN26E	**FU22DN**
3 rows (72 ▮)	687	2 x KN22E+ 1 x KN99E	**FU32DN**
4 rows (96 ▮)	837	1 x KN22E + 1 x KN26E + 1 x KN99E	**FU42DN**
5 rows (120 ▮)	987	1 x KN22E + 1 x KN26E + 1 x KN99E	**FU52DN**
6 rows (144 ▮)	1137	3 x KN26E+ 2 x KN99E	**FU62DN**
7 rows (168 ▮)	1287	3 x KN26E+ 2 x KN99E	**FU72DN**


FD52DN

Full equipped surface enclosures

- without door
- w. 550 x d. 193 mm

Description	Height (mm)	quickconnect terminals	Cat. ref.
2 rows (48 ▮)	450	1 x KN26E	**FD22DN**
3 rows (72 ▮)	600	2 x KN22E+ 1 x KN99E	**FD32DN**
4 rows (96 ▮)	750	1 x KN22E + 1 x KN26E + 1 x KN99E	**FD42DN**
5 rows (120 ▮)	900	1 x KN22E + 1 x KN26E + 1 x KN99E	**FD52DN**
6 rows (144 ▮)	1050	3 x KN26E+ 2 x KN99E	**FD62DN**
7 rows (168 ▮)	1200	3 x KN26E+ 2 x KN99E	**FD72DN**

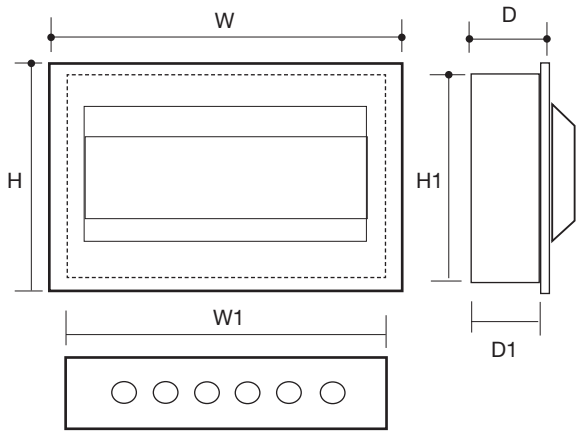

FD52TN

Transparent doors

- door opening angle 135°

Description	Height (mm)	Cat. ref.
for FD22DN, FU22DN	350	**FD22TN**
for FD32DN FU32DN	500	**FD32TN**
for FD42DN, FU42DN	650	**FD42TN**
for FD52DN, FU52DN	800	**FD52TN**
for FD62DN, FU62DN	950	**FD62TN**
for FD62DN, FU62DN	1100	**FD72TN**

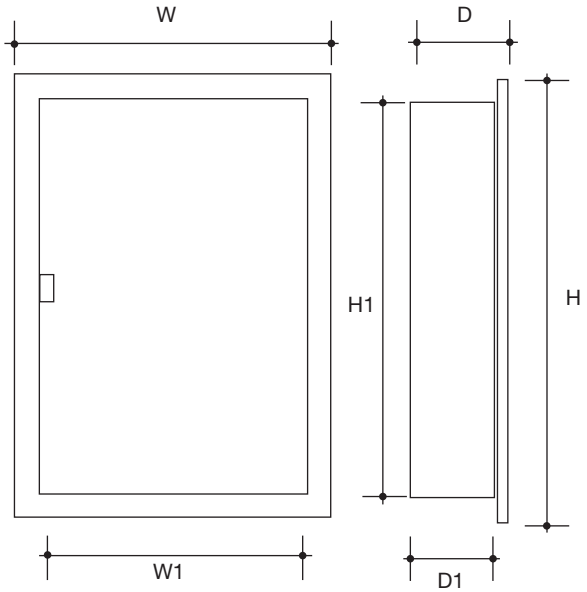
invicta VT consumer units



Dimensions (mm)

Reference	H	W	D	H1	W1	D1
VT04FM	251	234	92	226	208	70
VT06FM	251	270	92	226	244	70
VT08FM	251	306	92	226	280	70
VT10FM	251	342	92	226	316	70
VT12FM	251	378	92	226	352	70
VT16FM	251	450	92	226	424	70
VT04SM	231	214	92	226	208	70
VT06SM	231	250	92	226	244	70
VT08SM	231	286	92	226	280	70
VT10SM	231	322	92	226	316	70
VT12SM	231	358	92	226	352	70
VT16SM	231	430	92	226	424	70
VT08FD-T	251	270	92	226	244	70
VT12FD-T	251	270	92	226	244	70
VT18FD-T	251	450	92	226	424	70
VT08SD-T	231	250	92	226	244	70
VT12SD-T	231	322	92	226	316	70
VT18SD-T	231	430	92	226	424	70

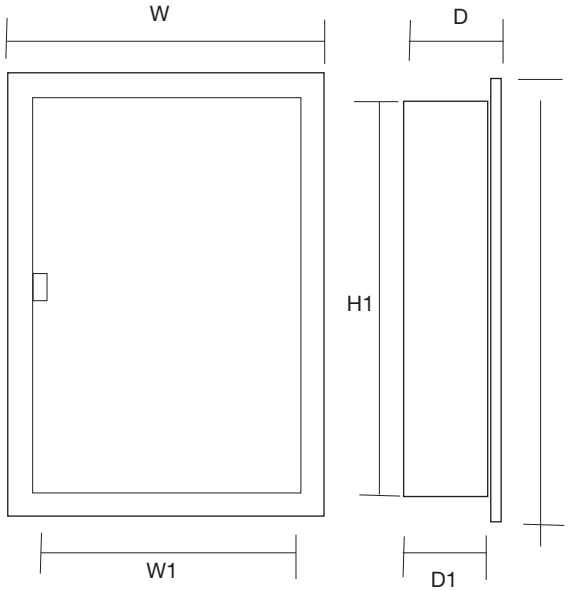
invicta DR DIN rail boards



Dimensions (mm)

References (flush)	H	W	D	H1	W1	D1
DR16F	350	430	110	320	400	110
DR32F	500	430	110	470	400	110
DR48F	650	430	110	620	400	110
DR64F	800	430	110	770	400	110
DR80F	950	430	110	920	400	110
DR96F	1100	430	110	1070	400	110
DR424F	800	572	115	770	542	110
DR524F	950	572	115	920	542	110
DR624F	1110	572	115	1070	542	110

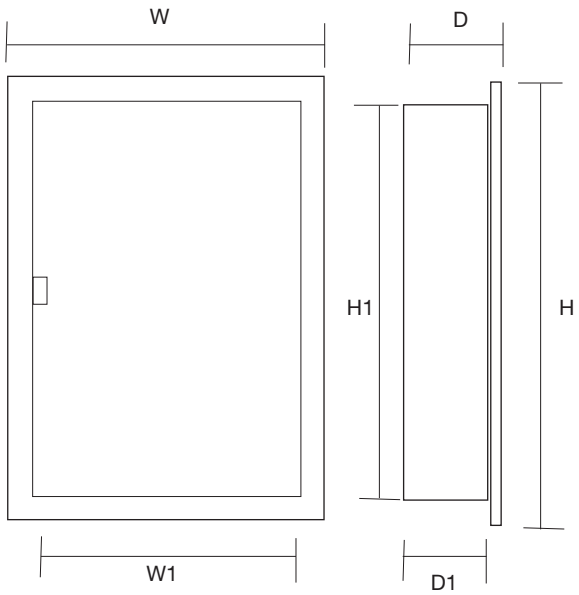
References (surface)	H	W	D	H1	W1	D1
DR16S	325	405	110	320	400	110
DR32S	475	405	110	470	400	110
DR48S	625	405	110	620	400	110
DR64S	775	405	110	770	400	110
DR80S	925	405	110	920	400	110
DR96S	1075	405	110	1070	400	110
DR424S	775	547	115	770	542	110
DR524S	925	547	115	920	542	110
DR624S	1075	547	115	1070	542	110



invicta 125A - TPN distribution boards - fixed busbar

Reference (surface)	H	W	D	H1	W1	D1
JK1B04S2	495	445	125	490	440	120
JK1B06S2	555	445	125	550	440	120
JK1B08S2	605	445	125	600	440	120
JK1B10S2	660	445	125	655	440	120
JK1B12S2	715	445	125	710	440	120
JK1B14S2	770	445	125	765	440	120
JK1B16S2	820	445	125	815	440	120
JK1B18S2	940	445	125	935	440	120
JK1B24S2	1105	445	125	1100	440	120

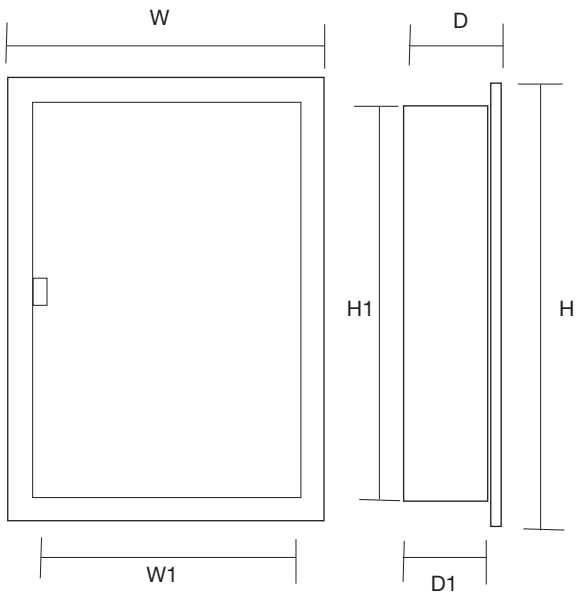
Reference (flush)	H	W	D	H1	W1	D1
JK1B04F2	520	470	125	490	440	120
JK1B06F2	580	470	125	550	440	120
JK1B08F2	630	470	125	600	440	120
JK1B10F2	685	470	125	655	440	120
JK1B12F2	740	470	125	710	440	120
JK1B14F2	795	470	125	765	440	120
JK1B16F2	845	470	125	815	440	120
JK1B18F2	965	470	125	935	440	120
JK1B24F2	1130	470	125	1100	440	120



invicta 125A - TPN distribution boards - split busbar

Reference (surface)	H	W	D	H1	W1	D1
JK1B022S2WA316	555	445	125	550	440	120
JK1B042S2WA316	610	445	125	605	440	120
JK1B044S2WA316	665	445	125	660	440	120
JK1B062S2WA316	665	445	125	660	440	120
JK1B064S2WA316	720	445	125	715	440	120
JK1B082S2WA316	720	445	125	715	440	120
JK1B066S2	775	445	125	770	440	120
JK1B084S2	775	445	125	770	440	120
JK1B086S2	830	445	125	825	440	120
JK1B088S2	885	445	125	880	440	120
JK1B104S2	935	445	125	930	440	120

Reference (flush)	H	W	D	H1	W1	D1
JK1B022F2WA316	580	470	125	550	440	120
JK1B042F2WA316	635	470	125	605	440	120
JK1B044F2WA316	690	470	125	660	440	120
JK1B062F2WA316	690	470	125	660	440	120
JK1B064F2WA316	745	470	125	715	440	120
JK1B082F2WA316	745	470	125	715	440	120
JK1B066F2	800	470	125	770	440	120
JK1B084F2	800	470	125	770	440	120
JK1B086F2	855	470	125	825	440	120
JK1B088F2	910	470	125	880	440	120
JK1B104F2	960	470	125	930	440	120



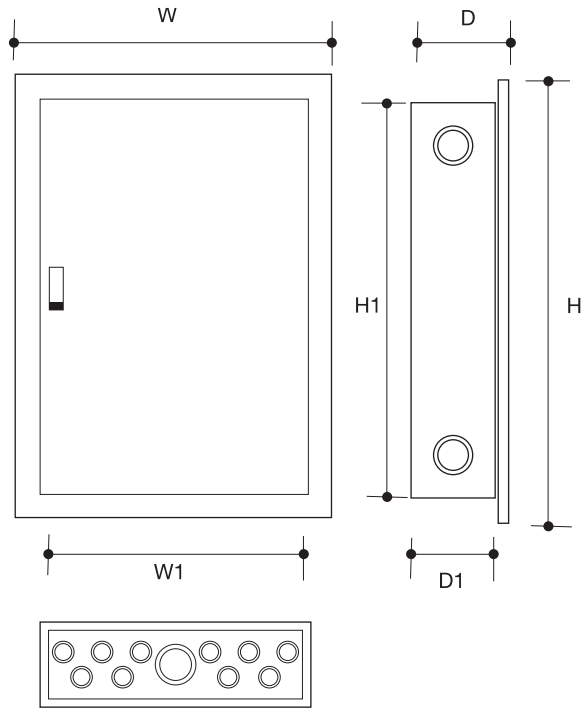
invicta 250A - TPN distribution boards

Reference (surface)	H	W	D	H1	W1	D1
JK2B04S2	665	445	125	650	440	120
JK2B06S2	705	445	125	700	440	120
JK2B08S2	760	445	125	755	440	120
JK2B10S2	815	445	125	810	440	120
JK2B12S2	865	445	125	860	440	120
JK2B14S2	920	445	125	915	440	120
JK2B16S2	975	445	125	970	440	120
JK2B18S2	1030	445	125	1025	440	120
JK2B24S2	1195	445	125	1190	440	120

Reference (flush)	H	W	D	H1	W1	D1
JK2B04F2	680	470	125	650	440	120
JK2B06F2	730	470	125	700	440	120
JK2B08F2	785	470	125	755	440	120
JK2B10F2	840	470	125	810	440	120
JK2B12F2	890	470	125	860	440	120
JK2B14F2	945	470	125	915	440	120
JK2B16F2	1000	470	125	970	440	120
JK2B18F2	1055	470	125	1025	440	120
JK2B24F2	1220	470	125	1190	440	120

invicta TPN board accessories

Reference	H	W	D	H1	W1	D1
JK2E01F	300	470	125	270	440	120
JK2E01S	275	445	125	270	440	120
JK2E16S	275	445	125	270	440	120
JK2E32S	425	445	125	420	440	120
JK2E48S	575	445	125	570	440	120
JK2E16F	300	470	125	270	440	120
JK2E32F	450	470	125	420	440	120
JK2E48F	600	470	125	570	440	120



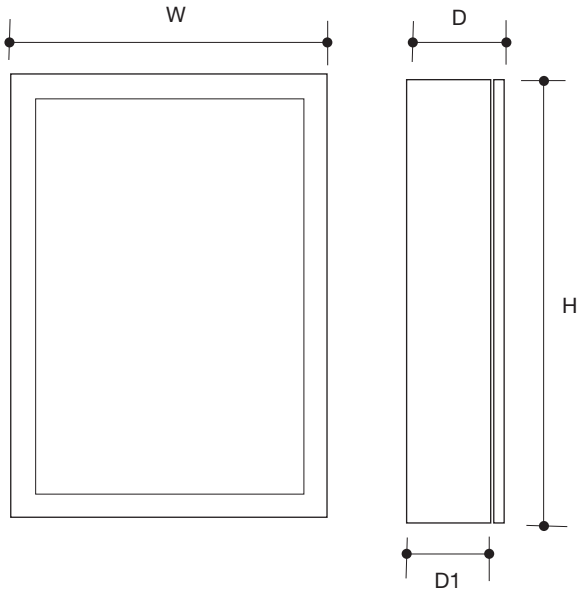
Gland plate knockouts
60x50mm - 1nos
32x20mm - 10 nos

Side Knockouts
60x50mm - 4nos

TPN load center

Reference (flush) 125A load center	H	W	D	H1	W1	D1
JK2B04F4	588	430	125	558	400	120
JK2B06F4	641	430	125	611	400	120
JK2B08F4	694	430	125	664	400	120
JK2B10F4	800	430	125	770	400	120
JK2B12F4	800	430	125	770	400	120
JK2B14F4	906	430	125	876	400	120
JK2B16F4	906	430	125	876	400	120
JK2B24F4	1118	430	125	1088	400	120

Reference (flush) 250A load center	H	W	D	H1	W1	D1
JK2B04F5	699	430	125	669	400	120
JK2B06F5	752	430	125	722	400	120
JK2B08F5	805	430	125	775	400	120
JK2B10F5	880	430	125	850	400	120
JK2B12F5	913	430	125	883	400	120
JK2B14F5	986	430	125	956	400	120
JK2B16F5	1060	430	125	1030	400	120
JK2B24F5	1233	430	125	1203	400	120



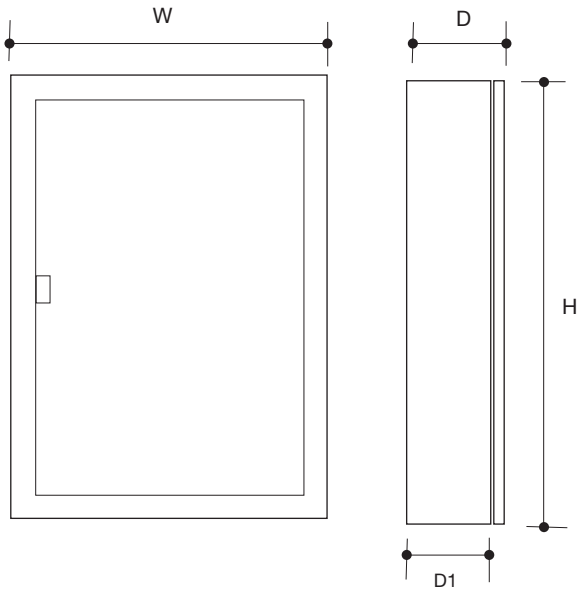
invicta - 250A panel board system
250A incoming, 125A outgoing

Reference (surface)	H	W	D1	D
JN2B00002S2	700	615	160	165
JN2B00004S2	775	615	160	165
JN2B00006S2	855	615	160	165
JN2B00008S2	925	615	160	165
JN2B00010S2	1000	615	160	165
JN2B00012S2	1115	615	160	165
JN2B00016S2	1375	615	160	165

Reference (surface)	H	W	D1	D
JN2B00002S3	860	615	160	165
JN2B00004S3	935	615	160	165
JN2B00006S3	1010	615	160	165
JN2B00008S3	1085	615	160	165
JN2B00010S3	1160	615	160	165
JN2B00012S3	1275	615	160	165
JN2B00016S3	1535	615	160	165

Dimensions of spreader box + din extension box

Reference	H	W	D
JN2E01S	303	615	160
JN2E02S	179	615	160
JN2E20S	303	615	160



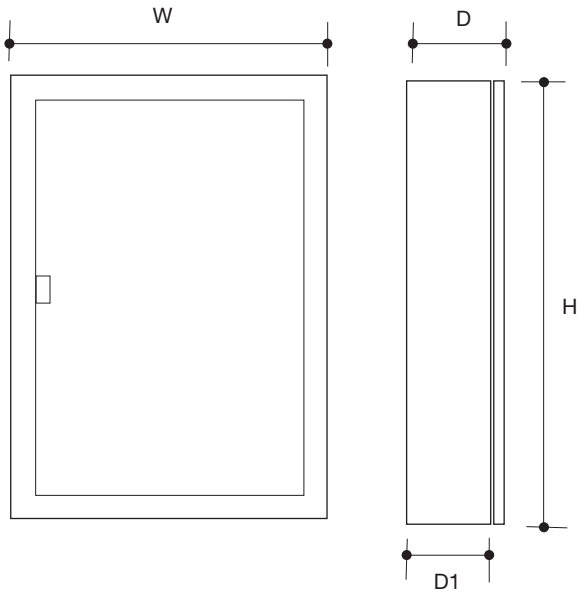
invicta - 400A panel board system
400A incoming, 125A / 250A outgoing

Reference (surface)	H	W	D1	D
JN4B00004S2	930	690	200	205
JN4B00006S2	1005	690	200	205
JN4B00008S2	1080	690	200	205
JN4B00010S2	1155	690	200	205
JN4B00012S2	1230	690	200	205
JN4B00016S2	1380	690	200	205
JN4B00202S2	960	846	200	205
JN4B00204S2	1035	846	200	205
JN4B00206S2	1110	846	200	205
JN4B00208S2	1185	846	200	205
JN4B00210S2	1260	846	200	205
JN4B00214S2	1410	846	200	205

Reference (surface)	H	W	D1	D
JN4B00004S3	1090	690	200	205
JN4B00006S3	1165	690	200	205
JN4B00008S3	1240	690	200	205
JN4B00010S3	1315	690	200	205
JN4B00012S3	1390	690	200	205
JN4B00016S3	1540	690	200	205
JN4B00202S3	1120	846	200	205
JN4B00204S3	1195	846	200	205
JN4B00206S3	1270	846	200	205
JN4B00208S3	1345	846	200	205
JN4B00210S3	1420	846	200	205
JN4B00214S3	1570	846	200	205

Dimensions of spreader box + din extension box

Reference	H	W	D
JN4E01S	303	690	200
JN4E02S	179	690	200
JN4E24S	303	690	200
JN8E32S	453	615	160



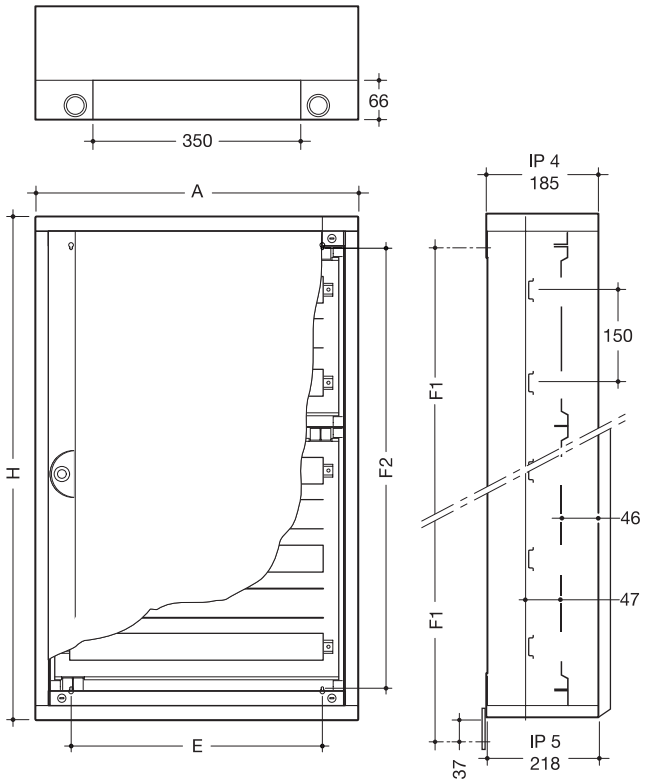
invicta - 800A panel board system
630A/ 800A incoming 125A/ 250A

Reference (surface)	H	W	D1	D
JN8B00004S2	1035	846	200	205
JN8B00006S2	1110	846	200	205
JN8B00008S2	1215	846	200	205
JN8B00010S2	1320	846	200	205
JN8B00012S2	1410	846	200	205
JN8B00016S2	1620	846	200	205
JN8B00400S2	1095	846	200	205
JN8B00600S2	1200	846	200	205
JN8B00800S2	1305	846	200	205
JN8B01000S2	1410	846	200	205
JN8B01200S2	1515	846	200	205
JN8B01600S2	1725	846	200	205
JN8B00202S2	1065	846	200	205
JN8B00204S2	1140	846	200	205
JN8B00206S2	1215	846	200	205
JN8B00208S2	1320	846	200	205
JN8B00210S2	1410	846	200	205
JN8B00214S2	1560	846	200	205
JN8B00402S2	1170	846	200	205
JN8B00404S2	1245	846	200	205
JN8B00406S2	1350	846	200	205
JN8B00408S2	1440	846	200	205
JN8B00410S2	1650	846	200	205
JN8B00606S2	1485	846	200	205
JN8B00608S2	1620	846	200	205

Dimensions of spreader box + dim. extension box

Reference	H	W	D
JN8E01S	303	846	200
JN8E02S	179	846	200
JN8E32S	453	846	200

	H	W	D1	D
JN8B00202S3	1225	846	200	205
JN8B00204S3	1300	846	200	205
JN8B00206S3	1375	846	200	205
JN8B00208S3	1480	846	200	205
JN8B00210S3	1570	846	200	205
JN8B00214S3	1720	846	200	205

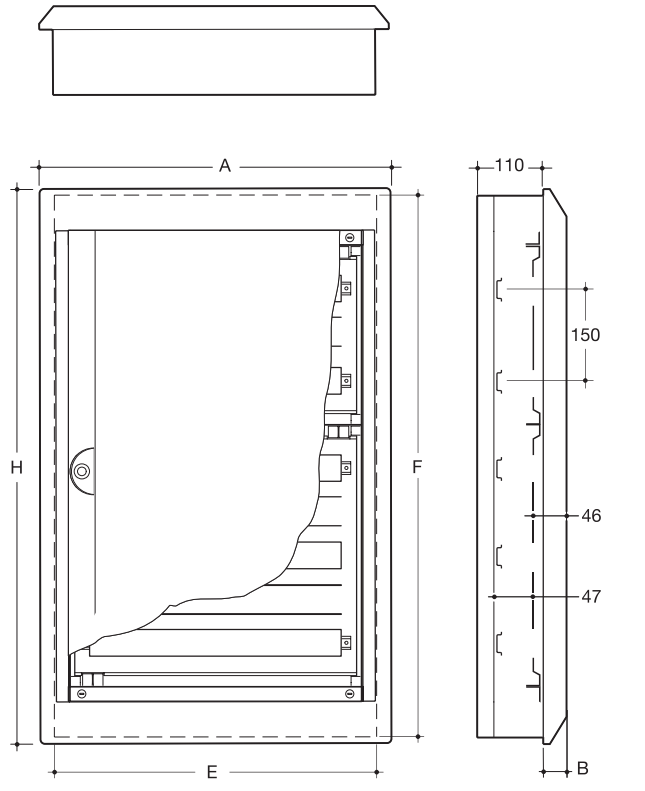


vega D Surface version

Dimensions (mm)

Surface version

References	Dimensions of box		Fixing		
	A	H	E	F1	F2
FD22DN	550	450	350	325	245
FD32DN	550	600	350	475	395
FD42DN	550	750	350	625	545
FD52DN	550	900	350	775	695
FD62DN	550	1050	350	925	845
FD72DN	550	1200	350	1075	995



vega D Flush version

Flush version

References	Dimensions external frame			Wall niche	
	A	H	B	E	F
FU22DN	600	537	40	550	506
FU32DN	600	687	40	550	656
FU42DN	600	837	40	550	806
FU52DN	600	987	40	550	956
FU62DN	600	1137	40	550	1106
FU72DN	600	1287	40	550	1256

* version FUx2AN only

For any questions scan here:

Main circuit breakers

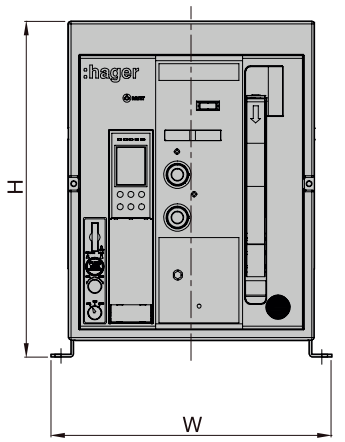
Our main circuit breakers allow the connection, protection, breaking and switching in the low voltage distribution boards.
The range includes air circuit breakers, moulded case circuit breakers and load break switches.

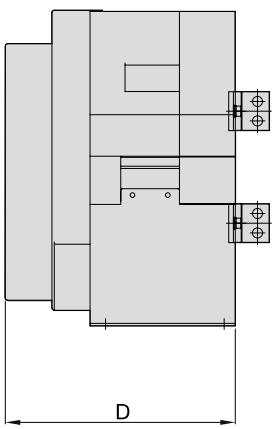
02

Page

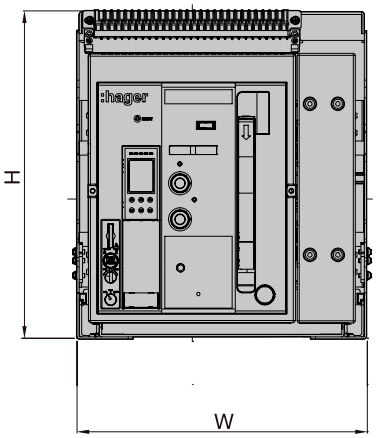
Frame				A		B			C
Type				H	N	N	S	P	P
Rated current			A	630-2000		630-4000			3200-5000
Rated operating voltage (Ue)			V	690					
Rated insulation voltage (Ui)			V	1000					
Rated impulse withstand voltage (Uimp)			KV	12					
Frequency			Hz	50/60					
Number of poles			poles	3-4					
Current setting range (…x In max)			Ir	0.4-1.0					
Rated current of neutral pole (…% x In)			%/In	100%					
Rated breaking capacity (Icu)	AC 690/600/550V		KA	36	50	50	65	85	85
	AC 415/380/220V			50	65	65	85	100	100
Rated service breaking capacity (Ics)	AC 690/600/550V		KA	100% Icu					
	AC 415/380/220V								
Rated short-time capacity (Icw)	1s		KA	50	65	65	85	85	85
	3s			36	36	50	55	65	65
Rated making capacity (kA peak) (Icm)	AC 690/600/550V		KA	76	105	105	143	187	187
	AC 415/380/220V			105	143	143	187	220	220
Utilization category (according to IEC 60947-2)				B					
Time									
Maximum total breaking time			ms	40					
Closing operating time	motor charging time		s	10					
	max. closing time		ms	40					
Operating cycle									
Mechanical life cycle	without maintenance		times	20000		15000			10000
	with maintenance			30000		20000			20000
Electrical life cycle	without maintenance			5000		06-20: 10000			2000
						25-40: 5000			
	with maintenance			10000		06-20: 15000			5000
						25-40: 10000			
Dimensions									
External dimension (W x H x D, except busbar)	fixed type	3 pole	mm	337x404x296		408x404x296			633x404x296
		4 pole		422x404x296		523x404x296			803x404x296
	draw-out type	3 pole		328x460x368		399x460x368			624x460x368
		4 pole		413x460x368		514x460x368			794x460x368
Weight	fixed type	3 pole	kg	34		06-32: 44			76
						40: 61			
		4 pole		44		06-32: 55			81
						40: 81			
	draw-out type	3 pole		63		06-32: 87			145
						40: 107			
		4 pole		80		06-32: 130			173
						40: 161			

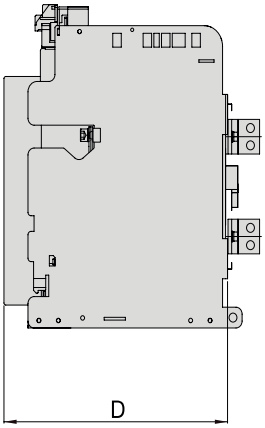
Fixed type



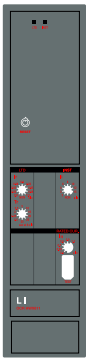
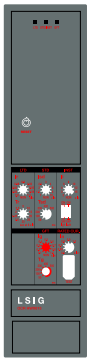


Draw-out type





Characteristics

Reference		HWX611	HWX612	HWX613	HWX621	HWX622	HWX623	HWX633
Type		LI	LSI	LSIG	LI Amp	LSI Amp	LSIG Amp	Energy
Frequency 50/60 Hz		•	•	•	•	•	•	•
OCR								
Power	externals	•	•	•	•	•	•	•
	self	•	•	•	•	•	•	•
Protection function	LTD	•	•	•	•	•	•	•
	STD	-	•	•	-	•	•	•
	INST	•	•	•	•	•	•	•
	PTA	-	-	-	•	•	•	•
	GFT	-	-	•	-	-	•	•
	neutral protection	•	•	•	•	•	•	•
	fail safe	•	•	•	•	•	•	•
	MCR	•	•	•	•	•	•	•
Indication	long time pick up LED	•	•	•	•	•	•	•
	fault LED	L, I	L, S/I	L, S/I, G	L, I PTA	L, S/I PTA	L, S/I, G PTA	L, S/I, G PTA
	LCD display, Amp and measurement	-	-	-	•	•	•	-
	LCD display, Amp, Energy, voltage, power, energy, demand and measurement	-	-	-	-	-	-	•
Digital output	separately continuous contact	• (2NO) L, I	• (2NO) L, S/I	• (3NO) L,S/I, G	• (3NO) L, I, PTA	• (3NO) L, S/I, PTA	• (4NO) L, S/I, G, PTA	• (4NO) L, S/I, G, PTA
ZSI		•	•	•	•	•	•	•
Reset button		•	•	•	•	•	•	•
Advanced functions	COM	-	-	-	•	•	•	•
	event / fault recording	-	-	-	•	•	•	•
	under/over voltage protection	-	-	-	-	-	-	•
	unbalanced current / voltage protection	-	-	-	-	-	-	•
	reverse power protection	-	-	-	-	-	-	•
	power P, Q, S, power factor, 3 phases voltage	-	-	-	-	-	-	•
	demand current / voltage	-	-	-	-	-	-	•

HWAN416

Air Circuit Breakers, frame A

Icu=Ics=50KA
Icu=Ics=Icw

Description	Rating (A)	Nr. of poles	Cat. ref.
ACB, frame A	630	3	**HWAH306_**
ACB, frame A	800	3	**HWAH308_**
ACB, frame A	1000	3	**HWAH310_**
ACB, frame A	1250	3	**HWAH312_**
ACB, frame A	1600	3	**HWAH316_**
ACB, frame A	2000	3	**HWAH320_**
ACB, frame A	630	4	**HWAH406_**
ACB, frame A	800	4	**HWAH408_**
ACB, frame A	1000	4	**HWAH410_**
ACB, frame A	1250	4	**HWAH412_**
ACB, frame A	1600	4	**HWAH416_**
ACB, frame A	2000	4	**HWAH420_***

Air Circuit Breakers, frame A

Icu=Ics=65KA
Icu=Ics=Icw

Description	Rating (A)	Nr. of poles	Cat. ref.
ACB, frame A	630	3	**HWAN306_**
ACB, frame A	800	3	**HWAN308_**
ACB, frame A	1000	3	**HWAN310_**
ACB, frame A	1250	3	**HWAN312_**
ACB, frame A	1600	3	**HWAN316_**
ACB, frame A	2000	3	**HWAN320_**
ACB, frame A	630	4	**HWAN406_**
ACB, frame A	800	4	**HWAN408_**
ACB, frame A	1000	4	**HWAN410_**
ACB, frame A	1250	4	**HWAN412_**
ACB, frame A	1600	4	**HWAN416_**
ACB, frame A	2000	4	**HWAN420_***

HWBN416

Air Circuit Breakers, frame B

Icu=Ics=65KA
Icu=Ics=Icw

Description	Rating (A)	Nr. of poles	Cat. ref.
ACB, frame B	630	3	**HWBN306_**
ACB, frame B	800	3	**HWBN308_**
ACB, frame B	1000	3	**HWBN310_**
ACB, frame B	1250	3	**HWBN312_**
ACB, frame B	1600	3	**HWBN316_**
ACB, frame B	2000	3	**HWBN320_**
ACB, frame B	2500	3	**HWBN325_**
ACB, frame B	2500	3	**HWBN326_**
ACB, frame B	3200	3	**HWBN332_**
ACB, frame B	4000	3	**HWBN340_**
ACB, frame B	630	4	**HWBN406_**
ACB, frame B	800	4	**HWBN408_**
ACB, frame B	1000	4	**HWBN410_**
ACB, frame B	1250	4	**HWBN412_**
ACB, frame B	1600	4	**HWBN416_**
ACB, frame B	2000	4	**HWBN420_**
ACB, frame B	2500	4	**HWBN425_**
ACB, frame B	2500	4	**HWBN426_**
ACB, frame B	3200	4	**HWBN432_**
ACB, frame B	4000	4	**HWBN440_**

HWBS416

Air Circuit Breakers, frame B

Icu=Ics=85KA
Icu=Ics=Icw

Description	Rating (A)	Nr. of poles	Cat. ref.
ACB, frame B	630	3	**HWBS306_**
ACB, frame B	800	3	**HWBS308_**
ACB, frame B	1000	3	**HWBS310_**
ACB, frame B	1250	3	**HWBS312_**
ACB, frame B	1600	3	**HWBS316_**
ACB, frame B	2000	3	**HWBS320_**
ACB, frame B	2500	3	**HWBS325_**
ACB, frame B	3200	3	**HWBS332_**
ACB, frame B	4000	3	**HWBS340_**
ACB, frame B	630	4	**HWBS406_**
ACB, frame B	800	4	**HWBS408_**
ACB, frame B	1000	4	**HWBS410_**
ACB, frame B	1250	4	**HWBS412_**
ACB, frame B	1600	4	**HWBS416_**
ACB, frame B	2000	4	**HWBS420_**
ACB, frame B	2500	4	**HWBS425_**
ACB, frame B	3200	4	**HWBS432_**
ACB, frame B	4000	4	**HWBS440_**

Air Circuit Breakers, frame B

Icu=Ics=100KA
Icw=85KA

Description	Rating (A)	Nr. of poles	Cat. ref
ACB, frame B	630	3	**HWBP306_**
ACB, frame B	800	3	**HWBP308_**
ACB, frame B	1000	3	**HWBP310_**
ACB, frame B	1250	3	**HWBP312_**
ACB, frame B	1600	3	**HWBP316_**
ACB, frame B	2000	3	**HWBP320_**
ACB, frame B	2500	3	**HWBP325_**
ACB, frame B	3200	3	**HWBP332_**
ACB, frame B	4000	3	**HWBP340_**
ACB, frame B	630	4	**HWBP406_**
ACB, frame B	800	4	**HWBP408_**
ACB, frame B	1000	4	**HWBP410_**
ACB, frame B	1250	4	**HWBP412_**
ACB, frame B	1600	4	**HWBP416_**
ACB, frame B	2000	4	**HWBP420_**
ACB, frame B	2500	4	**HWBP425_**
ACB, frame B	3200	4	**HWBP432_**
ACB, frame B	4000	4	**HWBP440_**

Air Circuit Breakers, frame C

HWCP432

Icu=Ics=100KA
Icw=85KA

Description	Rating (A)	Nr. of poles	Cat. ref
ACB, frame C	3200	3	**HWCP332_**
ACB, frame C	4000	3	**HWCP340_**
ACB, frame C	5000	3	**HWCP350_**
ACB, frame C	3200	4	**HWCP432_**
ACB, frame C	4000	4	**HWCP440_**
ACB, frame C	5000	4	**HWCP450_**

HWAH416

Switch disconnectors, frame A

Icw=50KA

Description	Rating (A)	Nr. of poles	Cat. ref
switch disconnector, frame A	630	3	**HWAH306_ _A_**
switch disconnector, frame A	800	3	**HWAH308_ _A_**
switch disconnector, frame A	1000	3	**HWAH310_ _A_**
switch disconnector, frame A	1250	3	**HWAH312_ _A_**
switch disconnector, frame A	1600	3	**HWAH316_ _A_**
switch disconnector, frame A	2000	3	**HWAH320_ _A_**
switch disconnector, frame A	630	4	**HWAH406_ _A_**
switch disconnector, frame A	800	4	**HWAH408_ _A_**
switch disconnector, frame A	1000	4	**HWAH410_ _A_**
switch disconnector, frame A	1250	4	**HWAH412_ _A_**
switch disconnector, frame A	1600	4	**HWAH416_ _A_**
switch disconnector, frame A	2000	4	**HWAH420_ _A_**

Switch disconnectors, frame A

Icw=65KA

Description	Rating (A)	Nr. of poles	Cat. ref
switch disconnector, frame A	630	3	**HWAN306_ _A_**
switch disconnector, frame A	800	3	**HWAN308_ _A_**
switch disconnector, frame A	1000	3	**HWAN310_ _A_**
switch disconnector, frame A	1250	3	**HWAN312_ _A_**
switch disconnector, frame A	1600	3	**HWAN316_ _A_**
switch disconnector, frame A	2000	3	**HWAN320_ _A_**
switch disconnector, frame A	630	4	**HWAN406_ _A_**
switch disconnector, frame A	800	4	**HWAN408_ _A_**
switch disconnector, frame A	1000	4	**HWAN410_ _A_**
switch disconnector, frame A	1250	4	**HWAN412_ _A_**
switch disconnector, frame A	1600	4	**HWAN416_ _A_**
switch disconnector, frame A	2000	4	**HWAN420_ _A_**

HWBN416

Switch disconnectors, frame B

Icw=65KA(1s)
Icw=50 kA (3s)

Description	Rating (A)	Nr. of poles	Cat. ref
switch disconnector, frame B	630	3	**HWBN306_ _A_**
switch disconnector, frame B	800	3	**HWBN308_ _A_**
switch disconnector, frame B	1000	3	**HWBN310_ _A_**
switch disconnector, frame B	1250	3	**HWBN312_ _A_**
switch disconnector, frame B	1600	3	**HWBN316_ _A_**
switch disconnector, frame B	2000	3	**HWBN320_ _A_**
switch disconnector, frame B	2500	3	**HWBN325_ _A_**
switch disconnector, frame B	3200	3	**HWBN332_ _A_**
switch disconnector, frame B	4000	3	**HWBN340_ _A_**
switch disconnector, frame B	630	4	**HWBN406_ _A_**
switch disconnector, frame B	800	4	**HWBN408_ _A_**
switch disconnector, frame B	1000	4	**HWBN410_ _A_**
switch disconnector, frame B	1250	4	**HWBN412_ _A_**
switch disconnector, frame B	1600	4	**HWBN416_ _A_**
switch disconnector, frame B	2000	4	**HWBN420_ _A_**
switch disconnector, frame B	2500	4	**HWBN425_ _A_**
switch disconnector, frame B	3200	4	**HWBN432_ _A_**
switch disconnector, frame B	4000	4	**HWBN440_ _A_**

HWBS416

Switch disconnectors, frame B

Icw=85kA (1s)
Icw=55 kA (3s)

Description	Rating (A)	Nr. of poles	Cat. ref
switch disconnector, frame B	630	3	**HWBS306_ _A_**
switch disconnector, frame B	800	3	**HWBS308_ _A_**
switch disconnector, frame B	1000	3	**HWBS310_ _A_**
switch disconnector, frame B	1250	3	**HWBS312_ _A_**
switch disconnector, frame B	1600	3	**HWBS316_ _A_**
switch disconnector, frame B	2000	3	**HWBS320_ _A_**
switch disconnector, frame B	2500	3	**HWBS325_ _A_**
switch disconnector, frame B	3200	3	**HWBS332_ _A_**
switch disconnector, frame B	4000	3	**HWBS340_ _A_**
switch disconnector, frame B	630	4	**HWBS406_ _A_**
switch disconnector, frame B	800	4	**HWBS408_ _A_**
switch disconnector, frame B	1000	4	**HWBS410_ _A_**
switch disconnector, frame B	1250	4	**HWBS412_ _A_**
switch disconnector, frame B	1600	4	**HWBS416_ _A_**
switch disconnector, frame B	2000	4	**HWBS420_ _A_**
switch disconnector, frame B	2500	4	**HWBS425_ _A_**
switch disconnector, frame B	3200	4	**HWBS432_ _A_**
switch disconnector, frame B	4000	4	**HWBS440_ _A_**

Switch disconnectors, frame B

Icw=85kA (1s)
Icw=65 kA (3s)

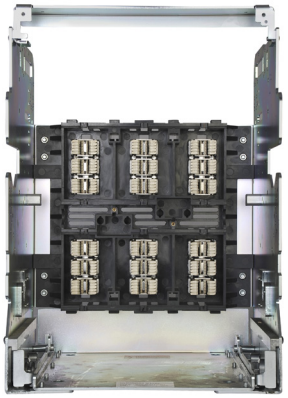
Description	Rating (A)	Nr. of poles	Cat. ref
switch disconnector, frame B	630	3	**HWBP306_ _A_**
switch disconnector, frame B	800	3	**HWBP308_ _A_**
switch disconnector, frame B	1000	3	**HWBP310_ _A_**
switch disconnector, frame B	1250	3	**HWBP312_ _A_**
switch disconnector, frame B	1600	3	**HWBP316_ _A_**
switch disconnector, frame B	2000	3	**HWBP320_ _A_**
switch disconnector, frame B	2500	3	**HWBP325_ _A_**
switch disconnector, frame B	3200	3	**HWBP332_ _A_**
switch disconnector, frame B	4000	3	**HWBP340_ _A_**
switch disconnector, frame B	630	4	**HWBP406_ _A_**
switch disconnector, frame B	800	4	**HWBP408_ _A_**
switch disconnector, frame B	1000	4	**HWBP410_ _A_**
switch disconnector, frame B	1250	4	**HWBP412_ _A_**
switch disconnector, frame B	1600	4	**HWBP416_ _A_**
switch disconnector, frame B	2000	4	**HWBP420_ _A_**
switch disconnector, frame B	2500	4	**HWBP425_ _A_**
switch disconnector, frame B	3200	4	**HWBP432_ _A_**
switch disconnector, frame B	4000	4	**HWBP440_ _A_**

HWCP432

Switch disconnectors, frame C

Icw=85kA (1s)
Icw=65 kA (3s)

Description	Rating (A)	Nr. of poles	Cat. ref
switch disconnector, frame C	3200	3	**HWCP332_ _A_**
switch disconnector, frame C	4000	3	**HWCP340_ _A_**
switch disconnector, frame C	5000	3	**HWCP350_ _A_**
switch disconnector, frame C	3200	4	**HWCP432_ _A_**
switch disconnector, frame C	4000	4	**HWCP440_ _A_**
switch disconnector, frame C	5000	4	**HWCP450_ _A_**



HWY750

Chassis

Description	Pack qty.	Cat. ref.
frame A, 3 pole, 630 -1600A	1	**HWY750**
frame A, 4 pole, 630 -1600A	1	**HWY751**
frame A, 3 pole, 2000A	1	**HWY752**
frame A, 4 pole, 2000A	1	**HWY753**
frame B, 3 pole, 630 -2500A	1	**HWY754**
frame B, 4 pole, 630 -2500A	1	**HWY755**
frame B, 3 pole, 3200A	1	**HWY756**
frame B, 4 pole, 3200A	1	**HWY757**
frame B, 3 pole, 4000A vertical	1	**HWY758**
frame B, 4 pole, 4000A vertical	1	**HWY759**
frame B, 3 pole, 4000A horizontal	1	**HWY760**
frame B, 4 pole, 4000A horizontal	1	**HWY761**
frame C, 3 pole, 3200-5000A vertical	1	**HWY762**
frame C, 4 pole, 3200-5000A vertical	1	**HWY763**
frame C, 3 pole, 3200-5000A horizontal	1	**HWY764**
frame C, 4 pole, 3200-5000A horizontal	1	**HWY765**

HWX633

Protection trip units (OCR)

Description	Pack qty.	Cat. ref.
LI	1	**HWX611**
LSI	1	**HWX612**
LSIG	1	**HWX613**
Amp LI	1	**HWX621**
Amp LSI	1	**HWX622**
Amp LSIG	1	**HWX623**
Energy LSIG	1	**HWX633**

HWY650

Voltage module

Description	Pack qty.	Cat. ref.
voltage module	1	**HWY650**

HWY654

Remote control units

Description	Pack qty.	Cat. ref.
remote control unit	1	**HWY639**
remote control temperature unit	1	**HWY654**
remote control temperature unit + temperature sensor	1	**HWY655**

HWY640

Temperature sensor and supports

Description	Pack qty.	Cat. ref.
temperature sensor	1	**HWY640**
support for frame A, 3 pole	1	**HWY690**
support for frame A, 4 pole	1	**HWY691**
support for frame B, 3 pole	1	**HWY692**
support for frame B, 4 pole	1	**HWY693**
support for frame C, 3 pole	1	**HWY695**
support for frame C, 4 pole	1	**HWY696**

HWX573

Position switches

Description	Pack qty.	Cat. ref.
isolated 1C, test 1C, connected 2C	1	**HWX570**
inserted 1C, isolated 1C, test 1C, connected 1C	1	**HWX571**
inserted 1C, isolated 1C, test 3C, connected 3C	1	**HWX572**
inserted 2C, isolated 2C, test 2C, connected 2C	1	**HWX573**

HWX544

Motor operators (MO)

Description	Pack qty.	Cat. ref.
motor operator DC 24V	1	**HWX541**
motor operator DC 48V	1	**HWX542**
motor operator AC/DC 110V	1	**HWX543**
motor operator AC/DC 220V	1	**HWX544**

HWX554

Closing coils (CC)

Description	Pack qty.	Cat. ref.
closing coil DC 24V	1	**HWX551**
closing coil DC 48V	1	**HWX552**
closing coil AC/DC 110V	1	**HWX553**
closing coil AC/DC 220V	1	**HWX554**
closing coil AC 380/415V	1	**HWX555**
closing coil AC 440V	1	**HWX556**

HWX501

Shunt trip coils (SH)

Description	Pack qty.	Cat. ref.
shunt trip coil DC 24V	1	**HWX501**
shunt trip coil DC 48V	1	**HWX502**
shunt trip coil AC/DC 110V	1	**HWX503**
shunt trip coil AC/DC 220V	1	**HWX504**
shunt trip coil AC 380/415V	1	**HWX505**
shunt trip coil AC 440V	1	**HWX506**

Secondary trip coils (sSH)

Description	Pack qty.	Cat. ref.
secondary trip coil DC 24V	1	**HWX521**
secondary trip coil DC 48V	1	**HWX522**
secondary trip coil AC/DC 110V	1	**HWX523**
secondary trip coil AC/DC 220/250V	1	**HWX524**
secondary trip coil AC 380/415V	1	**HWX525**
secondary trip coil AC 440V	1	**HWX526**

HWX514

Under voltage trip coils - instantaneous (UVT)

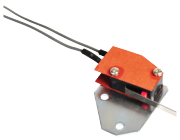
Description	Pack qty.	Cat. ref.
under voltage trip coil DC 24V	1	**HWX511**
under voltage trip coil DC 48V	1	**HWX512**
under voltage trip coil AC/DC 110V	1	**HWX513**
under voltage trip coil AC/DC 220/250V	1	**HWX514**
under voltage trip coil AC 380/415V	1	**HWX515**
under voltage trip coil AC 440V	1	**HWX516**

UVT time delay controllers

Description	Pack qty.	Cat. ref.
UVT time delay controller AC/DC 110V	1	**HWX533**
UVT time delay controller AC/DC 220/250V	1	**HWX534**
UVT time delay controller AC 380/415V	1	**HWX535**
UVT time delay controller AC 440V	1	**HWX536**

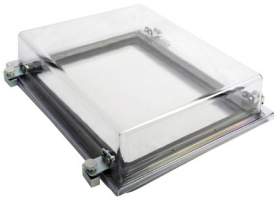
Mechanical operated cell switch (additional AX)

Description	Pack qty.	Cat. ref.
mechanical operated cell switch 5NO+5NC	1	**HWX565**


HWX547

Ready to close contact RTC

Description	Pack qty.	Cat. ref.
draw-out type 1NO	1	**HWX547**
fixed type 1NO	1	**HWX548**


HWY642

Accessories

Description	Pack qty.	Cat. ref.
counter	1	**HWY638**
lifting lug	1	**HWY648**
wrong insertion preventer for draw-out type	1	**HWY636**
door flange	1	**HWY641**
dust cover	1	**HWY642**
ON/OFF button cover	1	**HWY632**

HWY6xx

Key cylinder lock in open position

Description	Pack qty.	Cat. ref.
type 1	1	**HWY633**
type 2	1	**HWY634**
type 3	1	**HWY635**
type 4	1	**HWY646**
type 5	1	**HWY647**
type 6	1	**HWY656**
type 7	1	**HWY657**
type 8	1	**HWY658**
type 9	1	**HWY659**

HWY701

Key Ronis lock in open position

Description	Pack qty.	Cat. ref.
type 1 - K1L1/L4	1	**HWY701**
type 2 - K2L2/L4/L5	1	**HWY702**
type 3 - K3L3/L5	1	**HWY703**
type 4 - K4L4	1	**HWY704**
type 5 - K5L5	1	**HWY705**
adaptor kit for Ronis locks	1	**HWY697**

HWY706

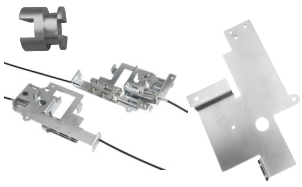
Key Castell lock in open position

Description	Pack qty.	Cat. ref.
type 1 - AA	1	**HWY706**
type 2 - AB	1	**HWY707**
type 3 - A_	1	**HWY708**
adaptor kit for Castell locks	1	**HWY698**

HWW268

Neutral CT

Description	Pack qty.	Cat. ref.
neutral CT 630A	1	**HWW260**
neutral CT 800A	1	**HWW261**
neutral CT 1000A	1	**HWW262**
neutral CT 1250A	1	**HWW263**
neutral CT 1600A	1	**HWW264**
neutral CT 2000A	1	**HWW265**
neutral CT 2500A	1	**HWW266**
neutral CT 3200A	1	**HWW267**
neutral CT 4000A	1	**HWW268**
neutral CT 5000A	1	**HWW269**



HWY502

Mechanical interlocks

with mechanism and cables

Description	Pack qty.	Cat. ref.
draw-out type, 2 way	1	**HWY500**
draw-out type, 3 way	1	**HWY501**
fixed type, 2 way (incl. plate)	1	**HWY502**
fixed type, 3 way (incl. plate)	1	**HWY503**

Cables for mechanical interlocks

Description	Pack qty.	Cat. ref.
cable 3m	1	**HWY508**
cable 5m	1	**HWY509**

HWY630

Phase insulation barrier

Description	Pack qty.	Cat. ref.
3 pole (2 units)	1	**HWY630**
4 pole (3 units)	1	**HWY631**

HWY637

Control terminal protection cover

Description	Pack qty.	Cat. ref.
for draw-out type	1	**HWY637**

HWY672

Arc shield (for draw-out type)

Description	Pack qty.	Cat. ref.
for frame A 3 pole, 630-2000A	1	**HWY670**
for frame A 4 pole, 630-2000A	1	**HWY671**
for frame B 3 pole, 630-4000A	1	**HWY672**
for frame B 4 pole, 630-4000A	1	**HWY673**
for frame C 3 pole, 3200-5000A	1	**HWY674**
for frame C 4 pole, 3200-5000A	1	**HWY675**

Fixed type connector plug

Description	Length	Pack qty.	Cat. ref.
pre-wired kit	3m	1	**HWW065**


HWY649

OCR portable checker

Description	Pack qty.	Cat. ref.
OCR portable checker	1	**HWY649**

OCR manual reset and alarm switch reset (MHT)

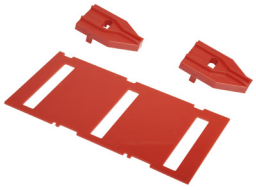
Description	Pack qty.	Cat. ref.
for draw-out type	1	**HWY651**
for fixed type	1	**HWY652**

Motor controller unit only

Description	Pack qty.	Cat. ref.
motor controller unit only	1	**HWW068**

Motor ON/OFF switch only

Description	Pack qty.	Cat. ref.
motor ON/OFF switch only	1	**HWW069**


HWY660

Safety shutters

Description	Pack qty.	Cat. ref.
frame A 3 pole, 630-2000A	1	**HWY660**
frame A 4 pole, 630-2000A	1	**HWY661**
frame B 3 pole, 630-4000A	1	**HWY662**
frame B 4 pole, 630-4000A	1	**HWY663**
frame C 3 pole, 3200-5000A	1	**HWY664**
frame C 4 pole, 3200-5000A	1	**HWY665**

Horizontal / vertical terminals

Description	Pack qty.	Cat. ref.
for frame A 3 pole, 630-1600A	1	**HWY610**
for frame A 4 pole, 630-1600A	1	**HWY611**
for frame B 3 pole, 630-3200A	1	**HWY612**
for frame B 4 pole, 630-3200A	1	**HWY613**


HWY644

Rotary handle

Description	Pack qty.	Cat. ref.
for draw-out type	1	**HWY644**

Codification

H	W	A	H	3	16	E	F	A	0	A	A	0	A	0	A	0

ACB series name

Frame size
A = Frame size A
B = Frame size B
C = Frame size C

Product Family + Breaking capacity
H = breaker with breaking capacity of 50kA
N = breaker with breaking capacity of 65kA
S = breaker with breaking capacity of 85kA
P =breaker with breaking capacity of 100kA

Number of poles
3 = 3 poles
4 = 4 poles

Rated current (In)

06 = 630A	20 = 2000A
08 = 800A	25 = 2500A
10 = 1000A	32 = 3200A
12 = 1250A	40 = 4000A
16 = 1600A	50 = 5000A

Market
C/E = Market letter

Version
F = fixed
D = draw-out

Trip unit

A = no OCR switch disc.	E = OCR LCD display Amp LI
B = OCR STD LI	F = OCR LCD display Amp LSI
C = OCR STD LSI	G = OCR LCD display Amp LSIG
D = OCR STD LSIG	H = OCR LCD display Energy LSIG

Terminal connection

0 = without	5 = front terminal (FC/FC)
1 = horizontal terminal (HC/HC)	6 = front terminal and horizontal terminal (FC/HC)
2 = vertical terminal (VC/VC)	7 = front terminal and vertical terminal (FC/VC)
3 = horizontal and vertical (HC/VC)	8 = horizontal terminal and front terminal (HC/FC)
4 = vertical and horizontal (VC/HC)	9 = vertical terminal and front terminal (VC/FC)

Position switch (only DO ACB)
0 = without
1 = isolated 1C, test 1C, connected 2C
2 = inserted 1C, isolated 1C, test 1C, connected 1C
3 = inserted 1C, isolated 1C, test 3C, connected 3C
4 = inserted 2C, isolated 2C, test 2C, connected 2C

OFF lock (key lock device)
A = without
B = type 1 (key lock device)
C = type 2 (key lock device)
D = type 3 (key lock device)
E = type 4 (key lock device)
F = type 5 (key lock device)
G = Ronis type 1 - K1-L1/L4
H = Ronis type 2 - K2-L2/4/5
I = Ronis type 3 - K3-L3/5
J = Ronis type 4 - K4-L4
K = Ronis type 5 - K5-L5
L = Castell type 1 - AA
M = Castell type 2 - AB
N = Castell type 3 - A_

MOC 2nd Auxiliary Switch & Counter & Arc Shield (only DO ACB)
0 = without Counter & without MOC & without Arc Shield
1 = with Counter & without MOC & without Arc Shield
2 = without Counter & with MOC & without Arc Shield
3 = with Counter & with MOC & without Arc Shield
4 = without Counter & without MOC & with Arc Shield
5 = with Counter without MOC & with Arc Shield
6 = without Counter & with MOC & with Arc Shield
7 = with Counter & with MOC & with Arc Shield

Under voltage release or 2nd SH coil
A = without
B = AC/DC 110V
C = AC/DC 220V
D = AC 380V
E = AC 440V
F = DC 24V
G = DC 48V
H = AC/DC 110V with time delay
I = AC/DC 220V with time delay
J = AC 380V with time delay
K = AC 440V with time delay
L = DC 24V with time delay
M = DC 48V with time delay
N = AC/DC 110V double shunt release
O = AC/DC 220V double shunt release
P = AC 380V double shunt release
Q = AC 440V double shunt release
R = DC 24V double shunt release
S = DC 48V double shunt release

Closing release
0 = without
1 = AC/DC 110V
2 = AC/DC 220V
3 = AC 380V
4 = AC 440V
5 = DC 24V
6 = DC 48V

Motor operator & ready to close switch
A = without
B = AC/DC 110V motor only
C = AC/DC 220V motor only
D = AC 380V motor only
E = AC 440V motor only
F = DC 24V motor only
G = DC 48V motor only
N = AC/DC 110V motor with RTC
O = AC/DC 220V motor with RTC
P = AC 380V motor with RTC
Q = AC 440V motor with RTC
R = DC 24V motor with RTC
S = DC 48V motor with RTC
U = without motor with RTC

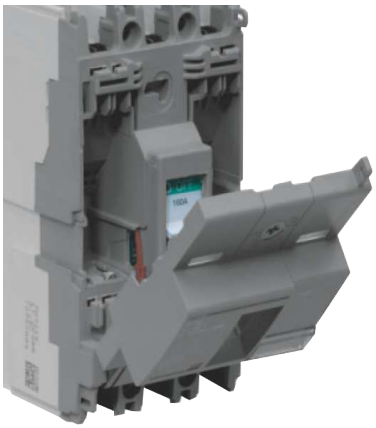
Shunt release
A = without
B = AC/DC 110V
C = AC/DC 220V
D = AC380V
E = AC 440V
F = DC 24V
G = DC 48V

Guaranteed protection

h3 MCCB
Moulded case circuit breaker

h3 range of MCCBs - the reliable solution for protecting low voltage distribution systems against overloads and short circuits.

With a compact size and available in 1,2,3,4 pole configurations, these state of the art circuit breakers offer installers and panel builders a wide range of features and benefits, including a breaking capacity ranging from 18kA to 70kA and options for built-in thermal-magnetic or electronic trip units, ensuring high protection performance.



01
Easy mounting of auxiliaries

Easy opening of secondary cover, clip-on type auxiliaries.

02
Visibility of auxiliaries fitted

Indicates type of auxiliary mounted in the circuit breaker.

03
Integrated padlocking facility

A very good solution for maintenance.

04
Complete range of accessories

Rotary handles, padlocks, motors, terminal covers, a wide range of terminals & connections.

05
Breaking capacity

18 to 70kA, Icu 415V AC, covers all applications.

Technical characteristics

Frame			x160				x250			x630 TM MCCB
Product			Switch	MCCB			Switch	MCCB		MCCB
Reference			HCA	HDA	HHA	HNA	HCB	HHB	HNB	HHJ
Number of poles		[No.]	3-4	1-2-3-4	1-2-3-4	3-4	3-4			3-4
Electrical characteristics										
Rated current	In	[A]	160				250			630
Current rated range		[A]	125-160	16-125 (1P), 16-160 (2,3,4P)			250	100-250		250-630
Rated service voltage, (AC)	Ue	[V]	220-690				220-690			220-415
Frequency	f	[Hz]	50/60				50/60			50/60
Rated insulation voltage	Ui	[V]	690				800			800
Rated impulse withstand voltage	Uimp	[kV]	8				8			8
Rated ultimate short-circuit breaking capacity	(Icu)									
(AC) 50-60 Hz 220/230 V	Icu	[kA]	-	25	35	85	-	35	85	35
(AC) 50-60 Hz 380/415 V	Icu	**[kA]**	**-**	**18**	**25**	**40**	**-**	**25**	**40**	**25**
(AC) 50-60 Hz 480/500/525 V	Icu	[kA]	-	6	7.5	12.5	-	-	10	-
(AC) 50-60 Hz 660/690 V	Icu	[kA]	-	-	-	-	-	-	4	-
(DC) 250 V - 2 poles in series	Icu	[kA]	-	12.5	20	25	-	25	25	-
Rated service short-circuit breaking capacity,	(Ics)									
(AC) 50-60 Hz 220/230 V	Ics	[kA]	-	25	25	40	-	25	40	35
(AC) 50-60 Hz 380/415 V	**Ics**	**[kA]**	**-**	**18**	**20**	**20**	**-**	**20**	**20**	**25**
(AC) 50-60 Hz 480/500/525 V	Ics	[kA]	-	3	4	7.5	-	-	7,5	-
(AC) 50-60 Hz 660/690 V	Ics	[kA]	-	-	-	3	-	-	2	-
(DC) 250 V - 2 poles in series	Ics	[kA]	-	7	10	13	-	13	13	-
Rated short-circuit making capacity	Icm	[kA]	2,8	-	-	-	6	-	-	-
Rated short-time withstand current for 1s	Icw	[kA]	2	-	-	-	3	-	-	-
Category of use (EN 60947-2)			-	A			-	A		A
Calibration temperature			-	50°C			-	50°C		50°C (250A-400A), 3
Derating	40°C		-	100%			-	100%		-
	50°C		-	100%			-	100%		100% (250A - 400A),
	55°C		-	95%			-	94%		97% (250A - 400A), 8
	60°C		-	93%			-	91%		94.5% (250A - 400A)
	65°C		-	90%			-	88%		92% (250A - 400A), 8
Suitability for insulation			ok				ok			ok
Electric endurance in number of cycles			10000				10000			6000<=400A 4000 fo
Mechanical endurance in number of operations			20000				20000			15000
Operating temperature			-25 to +70°C				-25 to +70°C			-25 to +70 °C
Storage temperature			-35 to +70°C				-35 to +70°C			-35 to +70°C
Power loss (at In for 3P)		[W]	39				60			250A - 71.4W, 320A 400A - 116W, 630A -
Reference standard			IEC 60947-3	IEC 60947-2			IEC 60947-3	IEC 60947-2		IEC 60947-2
Releases: switch			ok	-			ok	-		-
Releases: TM (thermomagnetic)			-	ok			-	ok		-
T fixed, M fixed			-	ok			-	ok		-
T adjustable, M fixed			-	ok			-	-		-
T adjustable, M adjustable			-	-			-	ok		ok
Thermal adjustment value			-	0,63 to 1 x In			-	0,63 to 1 x In		0.63 to 0.8 to 1 x In
Magnetic adjustment value			-	-			-	6-8-10-13 x In (200A) 5-7-9-11 In (250A)		5 to 10 x In (Up to 400A) 4 to 8 x In (630A)
Releases: LSI (electronic)			-	-			-	-		-
Long delay			-	-			-	-		-
Short delay			-	-			-	-		-
Time delay			-	-			-	-		-
Connection										
Standard terminal type			cage				lugs			lugs
Maximum terminal capacity			95 mm²				185 mm² (cage)			-
Terminal width		mm	-				25			32
Terminal shields			ok				ok			ok
Cage terminal			integrated				ok			-
Extended connections			ok				ok			ok
Rear connections			no				ok			-
Dimensions										
Height		mm	130				165			260
Width	1P	mm	-	25		-	-			-
	2P	mm	-	50		-	-			-
	3P	mm	75				105			140
	4P	mm	100				140			-
Depth		mm	68				68			150
Weight	1P	kg	-	0,29		-	-			-
	2P	kg	-	0,48		-	-			-
	3P	kg	0,715				1,3			5.8
	4P	kg	0,95				1,6			-

			h400 TM*		h630 LSI*			h1000 LSI			h1600 LSI		
			MCCB		Switch	MCCB		Switch	MCCB		Switch	MCCB	
	HNJ	HMJ	HHD	HND	HCD	HND	HED	HCE	HNE	HEE	HCF	HNF	HEF
			3-4		3-4			3-4			3-4		
			400		630			1000			1600		
			250-400		400-630	250-400-630		630-800-1000			1250-1600		
			220-690		220-690			220-690			220-690		
			50/60		50/60			50/60			50/60		
			800		800			800			800		
			8		8			8			8		
	70	85	35	85	-	85	100	-	85 (800A) 75 (1000A)	100	-	100	100
	40	**50**	**25**	**50**	**-**	**50**	**70**	**-**	**50**	**70**	**-**	**50**	**70**
	-	-	10	30	-	30	30	-	30	30	-	45	65
	-	-	7,5	20	-	20	20	-	20	20	-	25	45
	-	-	25	40	-			-	-	-	-	-	-
	70	85	35	85	-	85	85	-	85 (800A) 75 (1000A)	100 (800A) 75 (1000A)	-	75	75
	40	**50**	**25**	**50**	**-**	**50**	**50**	**-**	**50**	**50**	**-**	**50**	**50**
	-	-	10	30	-	30	30	-	30	30	-	45	50
	-	-	7,5	15	-	15	15	-	20	20	-	25	34
	-	-	25	40	-			-	-	-	-	-	-
	-	-	-	-	9	-	-	20	-	-	45	-	-
	-	-	-	-	5 (0,3s)	-	-	10 (0,3s)	-	-	20 (0,3s)	-	-
			A		-	B(250-400A) - A(630A)		-	B(800A) - A(1000A)		-	B	
°C (630A)			50°C		-	40/50°C		-	40/50°C		-	40/50°C	
			100%		-	100%		-	100%		-	100%	
90% (630A)			100%		-	95%		-	95%		-	95%	
7% (630A)			95%		-	90%		-	90%		-	90%	
84.5% (630A)			92%		-	80%		-	80%		-	80%	
1.6% (630A)			89%		-	80%		-	80%		-	80%	
			ok		ok			ok			ok		
r 630A (Above 400A)			4500		4500			4500			4500		
			15000		15000			15000			15000		
			-25 to +70°C		-25 to +70°C			-25 to +70°C			-25 to +70°C		
			-35 to +70°C		-35 to +70°C			-35 to +70°C			-35 to +70°C		
- 75W 176.3W			75		150			150			170		
			IEC 60947-2		IEC 60947-3	IEC 60947-2		IEC 60947-3	IEC 60947-2		IEC 60947-3	IEC 60947-2	
	-	-	-		ok	-		ok	-		ok	-	
	-	-	ok		-			-			-		
	-	-	-		-			-			-		
	-	-	-		-			-			-		
			ok		-			-			-		
			0,63 to 1 x In		-			-			-		
)			6-8-10-12 x In		-			-			-		
	-	-	-		-	ok		-	ok		-	ok	
	-	-	-		-	0,4 to 1 x Ir		-	0,4 to 1 x Ir		-	0,4 to 1 x In	
	-	-	-		-	2,5 to 10 x Ir (250-400A) 2,5 to 8 x Ir (630A)		-	2,5 to 10 x Ir (800A) 2,5 to 8 x Ir (1000A)		-	2,5 to 10 x Ir	
	-	-	-		-	0,1 - 0,2s		-	0,1 - 0,2s		-	0,1 - 0,2s	
			lugs		lugs			lugs			lugs		
			240 mm² (cage)		-			-			-		
			30		30			45			45		
			ok		ok			ok			ok		
			ok		-			-			-		
			ok		integrated			integrated			integrated		
			ok		ok			ok			ok		
			260		260			273/433			370/570		
			-		-			-			-		
			-		-			-			-		
			140		140			210			210		
			185		185			280			280		
			97		97			99,5			140		
			-		-			-			-		
			-		-			-			-		
			4,2		4,3			11			27		
			5,6		5,7			14,8			31		

*Will be discontinued soon

Characteristics
- Thermal magnetic trip unit
- Two versions:
  Z version: fixed thermal and fixed magnetic
  U version: adjustable thermal and fixed magnetic
- Adjustable thermal: 0.63 - 0.8 - 1 x In
- Access to mechanical test button on cover
- Lockable cover protects MCCB settings
- Integrated padlocking handle: Ø 4mm
- Cage terminals
- Connection capacity: 95mm² rigid cables, 70mm² flexible cables
- Fixed thermal: 1x In

Complies to the standard IEC 60 947-2

Trip-free switches :
- Allows tripping at distance using a voltmetrical trip unit (optional)
- AC 22/23A
- Complies to the standard IEC 60 947-3

HDA125Z

MCCBs x160 18kA

Breaking capacity Icu:18kA (400/415 V AC) Ics: 18kA

Description	In (A)	Cat. ref. 1P	2P	3P	4P
fixed thermal 1 x In fixed magnetic > 10 x In	16	**HDA014Z**	**HDA015Z**	**HDA016Z**	**HDA017Z**
	20	**HDA018Z**	**HDA019Z**	**HDA020Z**	**HDA021Z**
	25	**HDA023Z**	**HDA024Z**	**HDA025Z**	**HDA026Z**
	32	**HDA030Z**	**HDA031Z**	**HDA032Z**	**HDA033Z**
	40	**HDA038Z**	**HDA039Z**	**HDA040Z**	**HDA041Z**
	50	**HDA048Z**	**HDA049Z**	**HDA050Z**	**HDA051Z**
	63	**HDA061Z**	**HDA062Z**	**HDA063Z**	**HDA064Z**
	80	**HDA078Z**	**HDA079Z**	**HDA080Z**	**HDA081Z**
	100	**HDA098Z**	**HDA099Z**	**HDA100Z**	**HDA101Z**
	125	**HDA123Z**	**HDA124Z**	**HDA125Z**	**HDA126Z**
	160	-	**HDA159Z**	**HDA160Z**	**HDA161Z**
adjustable thermal 0.63 - 0.8 - 1 x In fixed magnetic > 10 x In	25	-	-	**HDA025U**	**HDA026U**
	40	-	-	**HDA040U**	**HDA041U**
	63	-	-	**HDA063U**	**HDA064U**
	80	-	-	**HDA080U**	**HDA081U**
	100	-	-	**HDA100U**	**HDA101U**
	125	-	-	**HDA125U**	**HDA126U**
	160	-	-	**HDA160U**	**HDA161U**

HHA161U

MCCBs x160 25kA

Breaking capacity Icu: 25kA (400/415 V AC) Ics: 20kA

Description	In (A)	Cat. ref. 1P	2P	3P	4P
fixed thermal 1 x In fixed magnetic > 10 x In	16	**HHA014Z**	**HHA015Z**	**HHA016Z**	**HHA017Z**
	20	**HHA018Z**	**HHA019Z**	**HHA020Z**	**HHA021Z**
	25	**HHA023Z**	**HHA024Z**	**HHA025Z**	**HHA026Z**
	32	**HHA030Z**	**HHA031Z**	**HHA032Z**	**HHA033Z**
	40	**HHA038Z**	**HHA039Z**	**HHA040Z**	**HHA041Z**
	50	**HHA048Z**	**HHA049Z**	**HHA050Z**	**HHA051Z**
	63	**HHA061Z**	**HHA062Z**	**HHA063Z**	**HHA064Z**
	80	**HHA078Z**	**HHA079Z**	**HHA080Z**	**HHA081Z**
	100	**HHA098Z**	**HHA099Z**	**HHA100Z**	**HHA101Z**
	125	**HHA123Z**	**HHA124Z**	**HHA125Z**	**HHA126Z**
	160	-	**HHA159Z**	**HHA160Z**	**HHA161Z**
adjustable thermal 0.63 - 0.8 - 1 x In fixed magnetic > 10 x In	25	-	-	**HHA025U**	**HHA026U**
	40	-	-	**HHA040U**	**HHA041U**
	63	-	-	**HHA063U**	**HHA064U**
	80	-	-	**HHA080U**	**HHA081U**
	100	-	-	**HHA100U**	**HHA101U**
	125	-	-	**HHA125U**	**HHA126U**
	160	-	-	**HHA160U**	**HHA161U**

HNA125Z

HNA161U

MCCBs x160 40kA

Breaking capacity Icu: 40kA (400/415 V AC) Ics: 20kA

Description	In (A)	Cat. ref. 3P	4P
fixed thermal 1 x In fixed magnetic > 10 x In	16	**HNA016Z**	**HNA017Z**
	20	**HNA020Z**	**HNA021Z**
	25	**HNA025Z**	**HNA026Z**
	32	**HNA032Z**	**HNA033Z**
	40	**HNA040Z**	**HNA041Z**
	50	**HNA050Z**	**HNA051Z**
	63	**HNA063Z**	**HNA064Z**
	80	**HNA080Z**	**HNA081Z**
	100	**HNA100Z**	**HNA101Z**
	125	**HNA125Z**	**HNA126Z**
	160	**HNA160Z**	**HNA161Z**
adjustable thermal 0.63 - 0.8 - 1 x In fixed magnetic > 10 x In	25	**HNA025U**	**HNA026U**
	40	**HNA040U**	**HNA041U**
	63	**HNA063U**	**HNA064U**
	80	**HNA080U**	**HNA081U**
	100	**HNA100U**	**HNA101U**
	125	**HNA125U**	**HNA126U**
	160	**HNA160U**	**HNA161U**

HCA160Z

Trip-free switches x160

suitable for AC22A / AC 23A
Ue: 415 V AC
Icw (1s): 2 kA

Description	In (A)	Cat. ref. 3P	4P
trip-free switches x160	125	**HCA125Z**	**HCA126Z**
	160	**HCA160Z**	**HCA161Z**

Characteristics
- Thermal magnetic trip unit
- Two versions:
  Z version: fixed thermal and fixed magnetic
  U version: adjustable thermal & magnetic
- Access to mechanical test button on cover
- Lockable cover protects MCCB settings
- Integrated padlocking handle: Ø 4mm
- Direct connection with palm lug max. width: 25mm
- Connection capacity: 185mm^2 rigid cables, 150mm^2 flexible cables
- Z version
  Fixed thermal: 1x In
  Fixed magnetic: ≥10 x In
- U version
  Adjustable thermal: 0.63, 0.8, 1 x In
  Adjustable magnetic:
  6 - 8 - 10 - 13 x In (100 - 200A)
  5 - 7 - 9 - 11 x In (250A)

Complies to the standard IEC 60 947-2

Trip-free switches :
- Allows tripping at distance using a voltmetrical trip unit (optional)
- AC 22/23A
- Complies to the standard IEC 60 947-3


HHB100Z

MCCBs x250 25kA

Breaking capacity Icu: 25kA (400/415 V AC) Ics: 20kA

Description	In (A)	Cat. ref. 3P	4P
fixed thermal 1 x In fixed magnetic ≥10 x In	100	**HHB100Z**	**HHB101Z**
	125	**HHB125Z**	**HHB126Z**
	160	**HHB160Z**	**HHB161Z**
	200	**HHB200Z**	**HHB201Z**
	250	**HHB250Z**	**HHB251Z**
adjustable thermal 0.63 - 0.8 - 1x In adjustable magnetic 6 - 8 - 10 - 13 x In (100 - 200A) 5 - 7 - 9 - 11 x In (250A)	100	**HHB100U**	
	125	**HHB125U**	
	160	**HHB160U**	
	200	**HHB200U**	
	250	**HHB250U**	


HNB100U

MCCBs x250 40kA

Breaking capacity Icu: 40kA (400/415 V AC) Ics: 20kA

Description	In (A)	Cat. ref. 3P	4P
fixed thermal 1 x In fixed magnetic ≥ 10 x In	100	**HNB100Z**	**HNB101Z**
	125	**HNB125Z**	**HNB126Z**
	160	**HNB160Z**	**HNB161Z**
	200	**HNB200Z**	**HNB201Z**
	250	**HNB250Z**	**HNB251Z**
adjustable thermal 0.63 - 0.8 - 1x In adjustable magnetic 6 - 8 - 10 - 13 x In (100 - 200A) 5 - 7 - 9 - 11 x In (250A)	100	**HNB100U**	**HNB101U**
	125	**HNB125U**	**HNB126U**
	160	**HNB160U**	**HNB161U**
	200	**HNB200U**	**HNB201U**
	250	**HNB250U**	**HNB251U**


HCB250Z

Trip-free switches x250

suitable for AC 22A/23A
Ue: 415VAC
Icw (1s): 3 kA

Description	In (A)	Cat. ref. 3P	4P
trip-free switches x250	250	**HCB250Z**	**HCB251Z**

Characteristics

- Adjustable thermal and magnetic trip unit
- 3P & 4P
- Mechanical test button
- Lockable settings
- Compliant with IEC60947-2.

Connection:

- Directly on copper cable terminal with end lug
- Max. width: 32mm

HHJ250ER

MCCB x630 25kA TM Fixed

Description	In (A)	Cat. ref. 3P	4P
fixed thermal 1 x In fixed magnetic 10 x In (250A-400A) 8 x In (630A)	250	**HHJ250ER**	**HHJ251ER**
	320	**HHJ320ER**	**HHJ321ER**
	400	**HHJ400ER**	**HHJ401ER**
	630	**HHJ630EE**	**HHJ631EE**

HHJ250DR

MCCB x630 25kA TM Adjustable

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal 0.63 - 0.8 - 1x In adjustable magnetic 5 - 6 - 7 - 8 - 9 - 10 x In (250 - 400A) 4 - 5 - 6 - 7 - 8 x In (630A)	250	**HHJ250DR**	**HHJ251DR**
	320	**HHJ320DR**	**HHJ321DR**
	400	**HHJ400DR**	**HHJ401DR**
	630	**HHJ630DE**	**HHJ631DE**

HNJ250ER

MCCB x630, 40kA, TM Fixed

Description	In (A)	Cat. ref. 3P	4P
fixed thermal 1 x In fixed magnetic 10 x In (250A-400A) 8 x In (630A)	250	**HNJ250ER**	**HNJ251ER**
	320	**HNJ320ER**	**HNJ321ER**
	400	**HNJ400ER**	**HNJ401ER**
	630	**HNJ630DE**	**HNJ631DE**

HNJ250DR

MCCB x630, 40kA, TM Adjustable

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal 0.63 - 0.8 - 1x In adjustable magnetic 5 - 6 - 7 - 8 - 9 - 10 x In (250 - 400A) 4 - 5 - 6 - 7 - 8 x In (630A)	250	**HNJ250DR**	**HNJ251DR**
	320	**HNJ320DR**	**HNJ321DR**
	400	**HNJ400DR**	**HNJ401DR**
	630	**HNJ630EE**	**HNJ631EE**

HMJ250ER

MCCB x630, 50kA, TM Fixed

Description	In (A)	Cat. ref. 3P	4P
fixed thermal 1 x In fixed magnetic 10 x In (250A-400A) 8 x In (630A)	250	**HMJ250ER**	**HMJ251ER**
	320	**HMJ320ER**	**HMJ321ER**
	400	**HMJ400ER**	**HMJ401ER**
	630 A	**HMJ630DE**	**HMJ631DE**

HMJ250DR

MCCB x630, 50kA, TM Adjustable

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal 0.63 - 0.8 - 1x In adjustable magnetic 5 - 6 - 7 - 8 - 9 - 10 x In (250 - 400A) 4 - 5 - 6 - 7 - 8 x In (630A)	250	**HMJ250DR**	**HMJ251DR**
	320	**HMJ320DR**	**HMJ321DR**
	400	**HMJ400DR**	**HMJ401DR**
	630	**HMJ630DE**	**HMJ631DE**

HNJ500HR

MCCB x630, 40kA, LSnI Fixed

Description	In (A)	Cat. ref. 3P	4P
220 / 415 V	320	**HNJ320HR**	**HNJ321HR**
	500	**HNJ500HR**	**HNJ501HR**

HNJ400GR

MCCB x630, 40kA, LSnI Adjustable

Description	In (A)	Cat. ref. 3P	4P
220 / 415 V	400	**HNJ400GR**	**HNJ401GR**
	630	**HNJ630GR**	**HNJ631GR**

HMJ320HR

MCCB x630, 50kA, LSnI Fixed

Description	In (A)	Cat. ref. 3P	4P
220 / 415 V	320	**HMJ320HR**	**HMJ321HR**
	500	**HMJ500HR**	**HMJ501HR**

HMJ400GR

MCCB x630, 50kA, LSnI Adjustable

Description	In (A)	Cat. ref. 3P	4P
220 / 415 V	400	**HMJ400GR**	**HMJ401GR**
	630	**HMJ630GR**	**HMJ631GR**

Characteristics
- Access to mechanical test button on cover
- Lockable cover protects MCCB settings
- Direct connection with palm lug max. width: 30 mm
- Connection capacity: 240mm² rigid cables, 240mm² flexible cables
- Thermal magnetic trip unit TM:
  thermal adjustment: from 0.63 to 1 x In
  magnetic adjustment: from 6 to 12 x In
- Electronic trip unit LSI
  long delay (thermal equivalent) adjustable: Ir = 0.4 to 1 x In
  short delay (magnetic equivalent) adjustable: 2.5 to 10 x Ir (400A)
  2.5 to 8 x Ir (630A)
  time delay: 0.1 – 0.2 s
  3P & 4P (adjustable neutral 0 - 50% - 100%)

Complies to the standard IEC 60 947-2

Trip-free switches :
- Allows tripping at distance using a voltmetrical trip unit (optional)
- AC 22/23A
- Complies to the standard IEC 60 947-3

HHD400U

MCCBs h400 25kA TM*

Breaking capacity Icu: 25kA (400/415 V AC) Ics: 25kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal: 0.63 to 1 x In adjustable magnetic: 6 to 12 x In	250	**HHD250U**	-
	400	**HHD400U**	-

MCCBs h400 50kA TM*

Breaking capacity Icu: 50 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal: 0.63 to 1 x In adjustable magnetic: 6 to 12 x In	250	**HND250U**	**HND251U**
	400	**HND400U**	**HND401U**

HND631H

MCCBs h630 50kA LSI*

Breaking capacity Icu: 50kA (400/415 V AC) Ics: 50kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal: Ir = 0.4 to 1 x In adjustable magnetic: 2.5 to 10 x Ir (250-400A) 2.5 to 8 x Ir (630A) time delay: 0.1 - 0.2 s	400	**HND400H**	**HND401H**
	630	**HND630H**	**HND631H**

HED401H

MCCBs h630 70kA LSI*

Breaking capacity Icu: 70 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal: Ir = 0.4 to 1 x In adjustable magnetic: 2.5 to 10 x Ir (250-400A) 2.5 to 8 x Ir (630A) time delay: 0.1 - 0.2 s	400	**HED400H**	**HED401H**
	630	**HED630H**	**HED631H**

Trip-free switches*

suitable for AC 22A / AC 23A
Ue: 415 V AC Icw (0.3s) = 5kA

Description	In (A)	Cat. ref. 3P	4P
trip-free switches	400	**HCD400H**	**HCD401H**
	630	**HCD630H**	**HCD631H**

*Will be discontinued soon

Characteristics
- Electronic trip unit LSI:
  long delay (thermal equivalent) adjustable:
  Ir= 0.4 to 1 x In
  short delay (magnetic equivalent) adjustable:
  2.5 to 10 x Ir (630-800A) and
  2.5 to 8 x Ir(1000A)
  time delay: 0.1-0.2 s
- 3P & 4P (adjustable neutral 0 - 50% - 100%)
- Mechanical test button, lockable settings
- Connection capacity : Directly on copper cable terminal, with end lug max. width: 50 mm

Complies to the standard IEC 60 947-2

Trip-free switches :
- Allows tripping at distance using a voltmetrical trip unit (optional)
- AC 22/23A
- Complies to the standard IEC 60 947-3

HNE970H

MCCBs h1000 50kA LSI

Breaking capacity Icu: 50 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal Ir = 0.4 to 1 x In adjustable magnetic 2.5 to 10 x Ir (630 - 800A) 2.5 to 8 x Ir (1000A) time delay: 0.1-0.2 s neutral setting from 0-50 to 100%	800	**HNE800H**	**HNE801H**
	1000	**HNE970H**	**HNE971H**

MCCBs h1000 70kA LSI

Breaking capacity Icu: 70 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal Ir = 0,4 to 1 x In adjustable magnetic 2,5 to 10 x Ir (800A) 2,5 to 8 x Ir (1000A) time delay: 0,1-0,2 s neutral setting from 0-50 to 100%	800	**HEE800H**	**HEE801H**
	1000	**HEE970H**	**HEE971H**

MCCBs h1000 70kA LSI plug in

Breaking capacity Icu: 70 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
MCCBs h1000 70kA LSI plug in	630	**HEE630G**	**HEE631G**
MCCBs h1000 70kA LSI plug in	800	**HEE800G**	**HEE801G**
base plate for h1000 MCCBs plug in		**HYE200H**	**HYE201H**

Trip-free switches

suitable for AC 22A / AC 23A
Ue: 415V AC
Icw (0.3 s) = 10 kA

Description	In (A)	Cat. ref. 3P	4P
trip-free switches	800	**HCE800U**	**HCE801U**
	1000	**HCE970H**	**HCE971H**

Characteristics
- Electronic trip unit LSI
  long delay (thermal equivalent) adjustable:
  Ir = 0.4 to 1 x In
  short delay (magnetic equivalent) adjustable:
  2.5 to 10 x Ir
  time delay: 0.1-0.2 s
- 3P & 4P (adjustable neutral 0 - 50% - 100%)
- Mechanical test button, lockable settings.
- Connection capacity : Directly on copper cable terminal, with end lug max. width: 60 mm

Complies to the standard IEC 60 947-2

Trip-free switches :
- Allows tripping at distance using a voltmetrical trip unit (optional)
- AC 22/23A
- Complies to the standard IEC 60 947-3

HNF990H

MCCBs h1600 50kA LSI

Breaking capacity Icu: 50 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal Ir = 0.4 to 1 x In adjustable magnetic 2.5 to 10 x Ir time delay: 0.1-0.2 s neutral setting 0, 50, 100%	1250	**HNF980H**	**HNF981H**
	1600	**HNF990H**	**HNF991H**

MCCBs h1600 70kA LSI

Breaking capacity Icu: 70 kA (400/415 V AC) Ics: 50 kA

Description	In (A)	Cat. ref. 3P	4P
adjustable thermal Ir = 0.4 to 1 x In adjustable magnetic 2.5 to 10 x Ir time delay: 0.1-0.2 s neutral setting from 0, 50, 100%	1250	**HEF980H**	**HEF981H**
	1600	**HEF990H**	**HEF991H**

Trip-free switches

suitable for AC 22A / AC 23A
Icw (0.3 s) = 20 kA
Ue: 415 V AC

Description	In (A)	Cat. ref. 3P	4P
trip-free switches	1250	**HCF980U**	**HCF981U**
	1600	**HCF990U**	**HCF991U**

HXA004H

HXA014H

HXA021H

HXA031H

HXB042H

HYB012H

Product Description	In A / Ue V	Pole	x160	x250	x630
Shunt Trip Release SH	24V DC	3P/4P	**HXA001H**	**HXA001H**	**HXA001H**
	48V DC		**HXA002H**	**HXA002H**	**HXA002H**
	100-120V AC		**HXA003H**	**HXA003H**	**HXA003H**
	200-240V AC		**HXA004H**	**HXA004H**	**HXA004H**
	380-450V AC		**HXA005H**	**HXA005H**	**HXA005H**
Undervoltage Release UVR	24V DC	3P/4P	**HXA011H**	**HXA011H**	**HXA011H**
	100-120V AC		**HXA013H**	**HXA013H**	**HXA013H**
	200-240V AC		**HXA014H**	**HXA014H**	**HXA013H**
	380-450V AC		**HXA015H**	**HXA015H**	**HXA014H**
Delayed Undervoltage Release DUVR	24V DC	3P/4P	**HXA051H**	**HXA051H**	**HXA011H**
	100-120 V AC		**HXA053H**	**HXA053H**	**HXA053H**
	220-240V AC		**HXA054H**	**HXA054H**	**HXA054H**
	380-450V AC		**HXA055H**	**HXA055H**	**HXA055H**
Auxiliary contact AX	1NO+1NC 250V AC/3A 125V DC/0.4A	3P/4P	**HXA021H**	**HXA021H**	**HXA021H**
Alarm contact AL	1NO+1NC 250V AC/3A 125V DC/0.4A	3P/4P	**HXA024H**	**HXA024H**	**HXA024H HXA027H**
Auxiliary contact - Low level	1NO+1NC 125V AC/0.1A 30V DC/0.1A	3P/4P	**HXA025H**	**HXA025H**	**HXS122H**
Alarm contact - Low level	1NO+1NC 125V AC/0.1A 30V DC/0.1A	3P/4P	**HXA026H**	**HXA026H**	**HXA028H**
Rotary handle, direct		3P/4P	**HXA030H**	**HXB030H**	**HXW030H**
Rotary handle, on door		3P/4P	**HXA031H**	**HXB031H**	**HXW031H**
Padlock removable			**HXA039H**	**HXA039H**	**HXA039H**
Padlock permanent			**integrated**	**integrated**	**integrated**
Motor operator	24V DC	3P/4P	/	**HXB040H**	**HXW040H**
	230 - 240VAC	3P/4P	/	**HXB042H**	**HXW042H**
Interlocking kit wire type (full kit for 2 MCCBs)			/	**HXB065H**	**HXD068H**
Interlock front cover unit			/	**HXB066H**	**HXW066H**
Interlocking mechanical cable	1 M		/	**HXB070H**	
	1.5 M		/	**HXB071H**	
Electrical interlock between motors			/	**HXB068H**	
Collar terminals		3P	**integrated**	**HYB001H**	**HYW001H (1x35-300mm²)** **HYW007H (2x35-300mm²)**
		4P	**integrated**	**HYB002H**	**HYW002H (1x35-300mm²)** **HYW008H (2x35-300mm²)**
Extended connections - straight (set of 4 pieces)		3P/4P	**HYA013H**	**HYB010H**	**HYW010H (4P up to 400A)** **HYW013H (4P up to 630A)**
Extended connections - spreader		3P	**HYA014H**	**HYB011H**	**HYW011H (3P up to 400A)** **HYW014H (3P up to 630A)**
		4P	**HYA015H**	**HYB012H**	**HYW012H (4P up to 400A)** **HYW015H (4P up to 630A)**
Rear connection		3P	/	**HYB031H**	/
		4P	/	**HYB032H**	/
Interphase barrier (set of 4 pieces)		3P/4P	**HYA019H**	**HYB019H**	**HYW019H**
Terminal cover for straight connections		3P	**HYA021H**	**HYB021H**	**HYW021H**
		4P	**HYA022H**	**HYB022H**	**HYW022H**
Terminal cover for spreader connections		3P	**HYA023H**	**HYB023H**	**HYW023H**
		4P	**HYA024H**	**HYB024H**	**HYW024H**
Terminal cover short for rear connection		3P	**HYA025H**	**HYB025H**	**HYW025H**
		4P	**HYA026H**	**HYB026H**	**HYW026H**
Terminal cover for collar terminal		3P	**HYA027H**	**HYB027H**	/
		4P	**HYA028H**	**HYB028H**	/
Din Rail adaptor		3P/4P	**HYA033H**	**HYB033H**	/
Connecting kit (0.75 mm 2 , set of 3 x 2 wires, length: 1.30m)		3P/4P	**HYA035H**	**HYA035H**	**HYA035H**
Din Rail raiser		3P/4P	**HYA036H**	**HYA036H**	/

HXC004H

HXC014H

HXC021H

HXD031H

HXD042H

HXD039H

Product Description	In A / Ue V	Pole	h400	h630	h1000	h1600
Shunt Trip Release SH	24V DC	3P/4P	**HXC001H**	**HXC001H**	**HXC001H**	**HXF001H**
	48V DC		**HXC002H**	**HXC002H**	**HXC002H**	**HXF002H**
	100-120V AC		**HXC003H**	**HXC003H**	**HXC003H**	**HXF003H**
	200-240V AC		**HXC004H**	**HXC004H**	**HXC004H**	**HXF004H**
	380-450V AC		**HXC005H**	**HXC005H**	**HXC005H**	**HXF005H**
Undervoltage Release UVR	24V DC	3P/4P	**HXC011H**	**HXC011H**	**HXE011H**	**HXE011H**
	100-120V AC		**HXC013H**	**HXC013H**	**HXE013H**	**HXE013H**
	200-240V AC		**HXC014H**	**HXC014H**	**HXE014H**	**HXE014H**
	380-450V AC		**HXC015H**	**HXC015H**	**HXE015H**	**HXE015H**
Delayed Undervoltage Release DUVR	24V DC	3P/4P	**HXD051H**	**HXD051H**	**HXE051H**	**HXE051H**
	100-120V AC		**HXD053H**	**HXD053H**	**HXE053H**	**HXE053H**
	220-240V AC		**HXD054H**	**HXD054H**	**HXE054H**	**HXE054H**
	380-450V AC		**HXD055H**	**HXD055H**	**HXE055H**	**HXE055H**
Auxiliary contact AX	1NO+1NC 250V AC/3A 125V DC/0.4A	3P/4P	**HXC021H**	**HXC021H**	**HXC021H**	**HXC021H**
Alarm contact AL	1NO+1NC 250V AC/3A 125V DC/0.4A	3P/4P	**HXC024H**	**HXC024H**	**HXC024H**	**HXC024H**
Auxiliary contact - Low level	1NO+1NC 125V AC/0.1A 30V DC/0.1A	3P/4P	**HXC025H**	**HXC025H**	**HXC025H**	**HXC025H**
Alarm contact - Low level	1NO+1NC 125V AC/0.1A 30V DC/0.1A	3P/4P	**HXC026H**	**HXC026H**	**HXC026H**	**HXC026H**
Rotary handle, direct		3P/4P	**HXD030H**	**HXD030H**	**HXE030H**	**HXF030H**
Rotary handle, on door		3P/4P	**HXD031H**	**HXD031H**	**HXE031H**	**HXF031H**
Padlock removable			**HXD039H**	**HXD039H**	**HXD039H**	**HXF039H**
Padlock permanent			**/**	**/**	**/**	**/**
Motor operator	24V DC	3P/4P	**HXD040H**	**HXD040H**	**HXE040H**	**HXF040H**
	230 - 240VAC	3P/4P	**HXD042H**	**HXD042H**	**HXE042H**	**HXF042H**
Interlocking kit wire type (full kit for 2 MCCBs)			**HXD065H**	**HXD065H**	**HXE065H**	**/**
Interlock front cover unit			**HXD066H**	**HXD066H**	**HXE066H**	**/**
Interlocking mechanical cable	1 M		**HXB070H**	**HXB070H**	**HXB070H**	**/**
	1.5 M		**HXB071H**	**HXB071H**	**HXB071H**	**/**
Electrical interlock between motors			**HXD068H**	**HXD068H**	**HXD068H**	**/**
Collar terminals		3P	**HYD007H**	**HYD007H**	**HYE007H**	**/**
		4P	**HYD008H**	**HYF008H**	**HYE008H**	**/**
Extended connections - straight (set of 4 pieces)		3P/4P	**HYD010H**	**HYD013H**	**included**	**included**
Extended connections - spreader		3P	**HYD011H**	**HYD014H**	**/**	**/**
		4P	**HYD012H**	**HYD015H**	**/**	**/**
Rear connection		3P	**HYD031H**	**HYD033H**	**HYE031H / 33H**	**/**
		4P	**HYD032H**	**HYD034H**	**HYE032H / 34H**	**/**
Interphase barrier (set of 4 pieces)		3P/4P	**HYD019H**	**HYD019H**	**HYD019H**	**HYD019H**
Terminal cover for straight connections		3P	**HYD021H**	**HYD021H**	**HYE021H**	**/**
		4P	**HYD022H**	**HYD022H**	**HYE022H**	**/**
Terminal cover for spreader connections		3P	**HYD023H**	**HYD023H**	**/**	**/**
		4P	**HYD024H**	**HYD024H**	**/**	**/**
Terminal cover short for rear connection / plug-in		3P	**HYD025H**	**HYD025H**	**HYE025H**	**/**
		4P	**HYD026H**	**HYD026H**	**HYE026H**	**/**
Terminal cover for collar terminal		3P	**HYD027H**	**HYD027H**	**/**	**/**
		4P	**HYD028H**	**HYD028H**	**/**	**/**
Din Rail adaptor		3P/4P	**/**	**/**	**/**	**/**
Connecting kit (0.75 mm 2 , set of 3 x 2 wires, length: 1.30m)		3P/4P	**HYA035H**	**HYA035H**	**HYA035H**	**HYA035H**

h3+ MCCB
Moulded case circuit breaker

The new generation of Hager Moulded Case Circuit Breakers h3+ ensures reliable protection against overloads and short circuits, combined with accurate integrated energy monitoring for all low voltage distribution systems. With a compact frame size, available from 25 to 630A in 3 and 4 poles, h3+ offers high protection performance with a breaking capacity up to 50kA.
h3+ MCCBs, available with either a built-in thermal-magnetic trip unit or electronic trip unit, offer flexible protection settings to ease discrimination in all electrical distribution installations.

Users will benefit from a class 1 energy monitoring and communication system compatible with Modbus RTU protocol, that will allow them to configure protections parameters, monitor energy consumptions and manage alarms.

Special attention has been given to ergonomics in order to facilitate the integration of h3+ MCCB in electrical panel boards. Different methods of mounting are proposed along with different types of connections to increase the flexibility of installation.

h3+ P160 3P Energy

h3+ P250 3P Energy

h3+ P630 3P Energy

h3+ Moulded Case Circuit Breaker at a glance
The h3+ range of MCCB can be briefly described as follows:
- 3 frame sizes: P160 and P250, 3P630
- Rated current from 25A to 630A
- Icu up to 50kA, Ics up to 50kA (415 V~)
- Available in 3 and 4 poles
- Rated nominal voltage Ue up to 690 V~
- Thermal-Magnetic, Magnetic and Electronic Trip Units
- Wide range of accessories

h3+ Switch-disconnectors
- P160 ratings: 125A, 160A
- P250 ratings: 200A, 250A
- P630 ratings: 400A, 630A

Energy electronic trip unit with:
- Embedded display
- Measurement features (I, U, P, E, PF, THD…)
- Class 1 accuracy on energy measurements according to IEC 61557-12
- Alarm management and event histories
- Output contacts (PTA, OAC)
- Modbus RTU communication for remote monitoring and control
- Maintenance Interface Port (MIP)
- Communication accessories (Panel display, COM module…)

Circuit breakers			P160			P250			P630	
Number of poles			3, 4			3, 4			3, 4	
General characteristics										
Rated current at 50 °C	In	(A)	160			250			630	
Current rated range		(A)	25 - 160 (Thermal Magnetic), 40 - 160 (Electronic)			50 - 250 (Thermal Magnetic), 40 - 250 (Electronic)			250 - 630	
Operational voltage, (AC)	Ue	(V)	220 - 690			220 - 690			220 - 690	
Frequency	f	(Hz)	50/60			50/60			50/60	
Rated insulation voltage	Ui	(V)	800			800			800	
Rated impulse withstand voltage	Uimp	(kV)	8			8			8	
Suitability for isolation			yes			yes			yes	
Utilisation category (IEC60947-2)			A			A			B ≤400A A > 400A	
Pollution degree			3			3			3	
Breaking capacity level			H	N	M	H	N	M	N	M
Rated ultimate short-circuit breaking capacity, (Icu)										
(AC) 50/60 Hz 220/240 V	Icu	(kA)	35	50	65	35	50	65	70	85
(AC) 50/60 Hz 380/415 V	Icu	(kA)	25	40	50	25	40	50	40	50
(AC) 50/60 Hz 660/690 V	Icu	(kA)	6	6	6	6	6	6	7	12
Rated service short-circuit breaking capacity, (Ics)										
(AC) 50/60 Hz 220/240 V	Ics	(kA)	35	50	65	35	50	65	70	85
(AC) 50/60 Hz 380/415 V	Ics	(kA)	25	40	50	25	40	50	40	50
(AC) 50/60 Hz 660/690 V	Ics	(kA)	6	6	6	6	6	6	7	12
Mechanical endurance in number of operations (IEC 60947-2)			40 000			40 000			30 000	
Electrical endurance in number of cycles at 440 V~ (IEC 60947-2)			10 000			10 000			6 000 ≤400A 4 000 > 400A	
Environment										
Operating temperature			-25 °C to +70 °C			-25 °C to +70 °C			-25 °C to +70 °C	
Storage temperature			-35 °C to +70 °C			-35 °C to +70 °C			-35 °C to +70 °C	
Tropicalisation			95 % HR at 55 °C			95 % HR at 55 °C			95 % HR at 55 °C	
Altitude		(m)	≤ 2000			≤ 2000			≤ 2000	
Terminations										
Pitch		(mm)	30			35			45	
Maximal terminal torque		(Nm)	6			12			18	
Terminal width		(mm)	21			25			32	
Dimensions										
Height		(mm)	130			165			260	
Width	3P	(mm)	90			105			140	
	4P	(mm)	120			140			185	
Depth		(mm)	97			97			150	
Weight	3P	(kg)	1.1			1.5			5.8	
	4P	(kg)	1.4			1.9			7.6	

Moulded case circuit breakers P160
Mechanical test button, lockable setting, integrated padlocking handle Ø 4 mm

HHS160DC

MCCBs h3+ P160 - TM adjustable

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

Description	In (A)	Cat. ref 3P	4P
adjustable thermal 0.63 - 0.8 - 1 x In adjustable magnetic 6 - 8 - 10 - 12 x In (25 - 125A) 6 - 7 - 8 - 9 - 10 x In (160A)	25	**HHS025DC**	**HHS026DC**
	40	**HHS040DC**	**HHS041DC**
	63	**HHS063DC**	**HHS064DC**
	80	**HHS080DC**	**HHS081DC**
	100	**HHS100DC**	**HHS101DC**
	125	**HHS125DC**	**HHS126DC**
	160	**HHS160DC**	**HHS161DC**

HNS160DC

MCCBs h3+ P160 - TM adjustable

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

Description	In (A)	Cat. ref 3P	4P
adjustable thermal 0.63 - 0.8 - 1 x In adjustable magnetic 6 - 8 - 10 - 12 x In (25 - 125A) 6 - 7 - 8 - 9 - 10 x In (160A)	25	**HNS025DC**	**HNS026DC**
	40	**HNS040DC**	**HNS041DC**
	63	**HNS063DC**	**HNS064DC**
	80	**HNS080DC**	**HNS081DC**
	100	**HNS100DC**	**HNS101DC**
	125	**HNS125DC**	**HNS126DC**
	160	**HNS160DC**	**HNS161DC**

HMS100DC

MCCBs h3+ P160 - TM adjustable

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

Description	In (A)	Cat. ref 3P	4P
adjustable thermal 0.63 - 0.8 - 1 x In adjustable magnetic 6 - 8 - 10 - 12 x In (25 - 125A) 6 - 7 - 8 - 9 - 10 x In (160A)	25	**HMS025DC**	**HMS026DC**
	40	**HMS040DC**	**HMS041DC**
	63	**HMS063DC**	**HMS064DC**
	80	**HMS080DC**	**HMS081DC**
	100	**HMS100DC**	**HMS101DC**
	125	**HMS125DC**	**HMS126DC**
	160	**HMS160DC**	**HMS161DC**

Moulded case circuit breakers P160
Mechanical test button, lockable setting, integrated padlocking handle Ø 4 mm

HHS160JC

MCCBs h3+ P160 - LSI

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

In (A)	Cat. ref 3P	4P
40	**HHS040JC**	**HHS041JC**
100	**HHS100JC**	**HHS101JC**
160	**HHS160JC**	**HHS161JC**

HNS040JC

MCCBs h3+ P160 - LSI

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

In (A)	Cat. ref 3P	4P
40	**HNS040JC**	**HNS041JC**
100	**HNS100JC**	**HNS101JC**
160	**HNS160JC**	**HNS161JC**

HMS040JC

MCCBs h3+ P160 - LSI

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

In (A)	Cat. ref 3P	4P
40	**HMS040JC**	**HMS041JC**
100	**HMS100JC**	**HMS101JC**
160	**HMS160JC**	**HMS161JC**

Moulded case circuit breakers P160
Mechanical test button, lockable setting, integrated padlocking handle Ø 4 mm

HHS040NC

MCCBs h3+ P160 - Energy

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

In (A)	Cat. ref 3P	4P
40	**HHS040NC**	**HHS041NC**
100	**HHS100NC**	**HHS101NC**
160	**HHS160NC**	**HHS161NC**

HNS160NC

MCCBs h3+ P160 - Energy

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

In (A)	Cat. ref 3P	4P
40	**HNS040NC**	**HNS041NC**
100	**HNS100NC**	**HNS101NC**
160	**HNS160NC**	**HNS161NC**

HMS100NC

MCCBs h3+ P160 - Energy

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

In (A)	Cat. ref 3P	4P
40	**HMS040NC**	**HMS041NC**
100	**HMS100NC**	**HMS101NC**
160	**HMS160NC**	**HMS161NC**

Moulded case circuit breakers P250
Mechanical test button, lockable setting, integrated padlocking handle Ø 4 mm

HHT250DR

MCCBs h3+ P250 - TM adjustable

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

Description	In (A)	Cat. ref 3P	4P
adjustable thermal 0.63 - 0.8 - 1 x In adjustable magnetic 6 - 8 - 10 - 13 x In (50 - 125A) 6 - 8 - 10 - 12 x In (200A) 6 - 7 - 8 - 9 - 10 x In (250A)	50	**HHT050DR**	**HHT051DR**
	63	**HHT063DR**	**HHT064DR**
	100	**HHT100DR**	**HHT101DR**
	125	**HHT125DR**	**HHT126DR**
	160	**HHT160DR**	**HHT161DR**
	200	**HHT200DR**	**HHT201DR**
	250	**HHT250DR**	**HHT251DR**

HNT050DR

MCCBs h3+ P250 - TM adjustable

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

Description	In (A)	Cat. ref 3P	4P
adjustable thermal 0.63 - 0.8 - 1 x In adjustable magnetic 6 - 8 - 10 - 13 x In (50 - 125A) 6 - 8 - 10 - 12 x In (200A) 6 - 7 - 8 - 9 - 10 x In (250A)	50	**HNT050DR**	**HNT051DR**
	63	**HNT063DR**	**HNT064DR**
	100	**HNT100DR**	**HNT101DR**
	125	**HNT125DR**	**HNT126DR**
	160	**HNT160DR**	**HNT161DR**
	200	**HNT200DR**	**HNT201DR**
	250	**HNT250DR**	**HNT251DR**

HMT200DR

MCCBs h3+ P250 - TM adjustable

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

Description	In (A)	Cat. ref 3P	4P
adjustable thermal 0.63 - 0.8 - 1 x In adjustable magnetic 6 - 8 - 10 - 13 x In (50 - 125A) 6 - 8 - 10 - 12 x In (200A) 6 - 7 - 8 - 9 - 10 x In (250A)	50	**HMT050DR**	**HMT051DR**
	63	**HMT063DR**	**HMT064DR**
	100	**HMT100DR**	**HMT101DR**
	125	**HMT125DR**	**HMT126DR**
	160	**HMT160DR**	**HMT161DR**
	200	**HMT200DR**	**HMT201DR**
	250	**HMT250DR**	**HMT251DR**

Moulded case circuit breakers P250
Mechanical test button, lockable setting, integrated padlocking
handle Ø 4 mm

HHT250JR

MCCBs h3+ P250 - LSI

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

In (A)	Cat. ref 3P	4P
40	**HHT040JR**	**HHT041JR**
100	**HHT100JR**	**HHT101JR**
160	**HHT160JR**	**HHT161JR**
250	**HHT250JR**	**HHT251JR**

HNT250JR

MCCBs h3+ P250 - LSI

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

In (A)	Cat. ref 3P	4P
40	**HNT040JR**	**HNT041JR**
100	**HNT100JR**	**HNT101JR**
160	**HNT160JR**	**HNT161JR**
250	**HNT250JR**	**HNT251JR**

HMT160JR

MCCBs h3+ P250 - LSI

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

In (A)	Cat. ref 3P	4P
40	**HMT040JR**	**HMT041JR**
100	**HMT100JR**	**HMT101JR**
160	**HMT160JR**	**HMT161JR**
250	**HMT250JR**	**HMT251JR**

Moulded case circuit breakers P250
Mechanical test button, lockable setting, integrated padlocking handle Ø 4 mm

HHT040LR

MCCBs h3+ P250 - LSIG

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

In (A)	Cat. ref 3P	4P
40	**HHT040LR**	**HHT041LR**
100	**HHT100LR**	**HHT101LR**
160	**HHT160LR**	**HHT161LR**
250	**HHT250LR**	**HHT251LR**

HNT040LR

MCCBs h3+ P250 - LSIG

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

In (A)	Cat. ref 3P	4P
40	**HNT040LR**	**HNT041LR**
100	**HNT100LR**	**HNT101LR**
160	**HNT160LR**	**HNT161LR**
250	**HNT250LR**	**HNT251LR**

HMT250LR

MCCBs h3+ P250 - LSIG

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

In (A)	Cat. ref 3P	4P
40	**HMT040LR**	**HMT041LR**
100	**HMT100LR**	**HMT101LR**
160	**HMT160LR**	**HMT161LR**
250	**HMT250LR**	**HMT251LR**

Moulded case circuit breakers P250
Mechanical test button, lockable setting, integrated padlocking
handle Ø 4 mm

HHT250NR

MCCBs h3+ P250 - Energy

Breaking capacity Icu: 25kA (400/415 V AC)
Ics: 25kA

In (A)	Cat. ref 3P	4P
40	**HHT040NR**	**HHT041NR**
100	**HHT100NR**	**HHT101NR**
160	**HHT160NR**	**HHT161NR**
250	**HHT250NR**	**HHT251NR**

HNT250NR

MCCBs h3+ P250 - Energy

Breaking capacity Icu: 40kA (400/415 V AC)
Ics: 40kA

In (A)	Cat. ref 3P	4P
40	**HNT040NR**	**HNT041NR**
100	**HNT100NR**	**HNT101NR**
160	**HNT160NR**	**HNT161NR**
250	**HNT250NR**	**HNT251NR**

HMT250NR

MCCBs h3+ P250 - Energy

Breaking capacity Icu: 50kA (400/415 V AC)
Ics: 50kA

In (A)	Cat. ref 3P	4P
40	**HMT040NR**	**HMT041NR**
100	**HMT100NR**	**HMT101NR**
160	**HMT160NR**	**HMT161NR**
250	**HMT250NR**	**HMT251NR**

HMW400JR

MCCBs h3+ P630 - LSI

Icu / Ics 400 - 415 V~	In (A)	Cat. ref 3P	4P
40 kA / 40 kA	250	**HNW250JR**	**HNW251JR**
	400	**HNW400JR**	**HNW401JR**
	630	**HNW630JR**	**HNW631JR**
50 kA / 50 kA	250	**HMW250JR**	**HMW251JR**
	400	**HMW400JR**	**HMW401JR**
	630	**HMW630JR**	**HMW631JR**

HNW630LR

MCCBs h3+ P630 - LSIG

Icu / Ics 400 - 415 V~	In (A)	Cat. ref 3P	4P
40 kA / 40 kA	250	**HNW250LR**	**HNW251LR**
	400	**HNW400LR**	**HNW401LR**
	630	**HNW630LR**	**HNW631LR**
50 kA / 50 kA	250	**HNW250LR**	**HMW251LR**
	400	**HNW400LR**	**HMW401LR**
	630	**HNW630LR**	**HMW631LR**

HNW400NR

MCCBs h3+ P630 - LSI Energy

Icu / Ics 400 - 415 V~	In (A)	Cat. ref 3P	4P
40 kA / 40 kA	250	**HNW250NR**	**HNW251NR**
	400	**HNW400NR**	**HNW401NR**
	630	**HNW630NR**	**HNW631NR**
50 kA / 50 kA	250	**HMW250NR**	**HMW251NR**
	400	**HMW400NR**	**HMW401NR**
	630	**HMW630NR**	**HMW631NR**

h3+ P160 - Switch disconnectors

HCS160AC

In (A)	3P	4P
125	**HCS125AC**	**HCS126AC**
160	**HCS160AC**	**HCS161AC**

h3+ P250 - Switch disconnectors

HCT200AR

In (A)	3P	4P
200	**HCT200AR**	**HCT201AR**
250	**HCT250AR**	**HCT251AR**

h3+ P630 - Switch disconnectors

HCW400AR

In (A)	3P	4P
400	**HCW400AR**	**HCW401AR**
630	**HCW630AR**	**HCW631AR**

RCD add-on block for P250

HBT160F

	In (A)	P 250
Fixed RCD	100 A	**HBT100F**
	160 A	**HBT160F**
	250 A	-

HBT250H

	In (A)	
Adjustable RCD	100 A	**HBT100H**
	160 A	**HBT160H**
	250 A	**HBT250H**

HBT250L

	In (A)	
Alarm only	100 A	**HBT100L**
	160 A	**HBT160L**
	250 A	**HBT250L**

RCD add-on block for P630

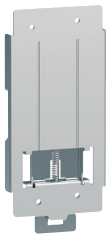
HBW630H

	In (A)	P 630
Adjustable RCD	400 A	**HBW400H**
	630 A	**HBW630H**

HBW630L

	In (A)	P 630
Alarm only	400 A	**HBW400L**
	630 A	**HBW630L**

DIN rail mounting



HYT033H

	Poles	P160	P250	P630
DIN rail adaptor	3P / 4P	**HYS033H**	**HYT033H**	-

Cable terminals

HYT002H

HYT006H

HYT066H

		Poles	P160 Front connection	P160 Cable terminal	P250	P630
Integrated	1 wire Cu/Al	3P	-	**HYS001H**	**HYT001H**	**HYW001H**
		4P	-	**HYS002H**	**HYT002H**	**HYW002H**
External	1 wire Cu/Al	3P	HYS105H	**HYS005H**	**HYT005H**	-
		4P	HYS106H	**HYS006H**	**HYT006H**	-
	2 wires Cu/Al	3P	-		**HYT007H**	**HYW007H**
		4P	-		**HYT008H**	**HYW008H**
	6 wires Cu/Al	3P	HYS155H	HYS055H	**HYT065H**	-
		4P	HYS156H	HYS056H	**HYT066H**	-

Terminal extensions

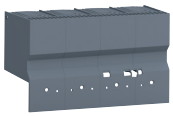
HYB010H

HYB012H

HYB032H

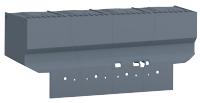
	Poles	P160 Front connection	P160 Cable terminal	P250	P630
Straight terminal extension	3P/4P	HYS010H	**HYS013H**	**HYB010H**	**HYW010H (250-400A) HYW013H (630A)**
Spreader terminal extension	3P	HYS011H	HYS014H	HYB011H	**HYW011H (250-400A) HYW014H (630A)**
	4P	HYS012H	HYS015H	HYB012H	**HYW012H (250-400A) HYW015H (630A)**
Rear connection	3P	HYS031H (16-50 A) HYS131H (63-160 A)		HYB031H	**HYD031H (250-400A) HYD033H (630A)**
	4P	HYS032H (16-50 A) HYS132H (63-160 A)		HYB032H	**HYD032H (250-400A) HYD034H (630A)**

Terminal covers and protections



HYT022H

	Poles	P160	P250	P630
Terminal cover for straight extensions	3P	**HYS021H**	**HYT021H**	**HYW021H**
	4P	**HYS022H**	**HYT022H**	**HYW022H**



HYT024H

Terminal cover for spread extensions	3 P	**HYS023H**	**HYT023H**	**HYW023H**
	4 P	**HYS024H**	**HYT024H**	**HYW024H**

HYT026H

Terminal cover for rear & plug-in connections	3P	**HYS025H**	**HYT025H**	**HYW025H**
	4P	**HYS026H**	**HYT026H**	**HYW026H**

HYT051H

Isolating earth plate for Straight terminal cover	3P	**HYS050H**	**HYT050H**	**HYW050H**
	4P	**HYS051H**	**HYT051H**	**HYW051H**

HYT053H

Isolating Earth plate for Spread terminal cover	3P	**HYS052H**	**HYT052H**	**HYW052H**
	4P	**HYS053H**	**HYT053H**	**HYW053H**

HYT019H

Interphase barrier	50 mm	3/4P	**HYS019H**	-	-
	100 mm	3/4P	**HYT019H**		**HYW019H**

Electronic devices and accessories

HXS121H

HTC320H

HTD210H

HTP610H

HTP020H

HTP030H

HTP050H

HTG911H

		Poles	P160	P250	P630	Energy
AX/AL Energy		For communication only	-	-	-	**HXS120H**
		COM + 250 V AC contact wires	-	-	-	**HXS121H**
		COM +125 V AC low level contact wires	-	-	-	**HXS122H**
COM Module		Without I/O	-	-	-	**HTC310H**
		With I/O	-	-	-	**HTC320H**
		Side support for wire	-	-	-	**HTC100H**
Panel display			-	-	-	**HTD210H**
Configuration tool			**HTP610H**			
Spare parts	h3+ Configurator		**HTP010H**			
	MIP adaptor for h3+		**HTP020H**			
	VGA cable 1m for HTP610H		**HTP030H**			
	Power supply for HTP610H		**HTP040H**			
	Battery for HTP610H		**HTP050H**			
24 V DC Power supply			-	-	-	**HTG911H**

Electronic devices and accessories


HTC330H

			P160	P250	P630	Energy
CIP - Adaptor		0.5 m	-	-	-	**HTC330H**
		1.5 m	-	-	-	**HTC340H**
		3 m	-	-	-	**HTC350H**
		5 m	-	-	-	**HTC360H**
		10 m	-	-	-	**HTC370H**


HTC140H

CIP - 24 V Adaptor		1.2 m	-	-	-	**HTC140H**


HTC130H

OAC/PTA adaptor		1.2 m	-	**HTC130H**		


HTC150H

ZSI adaptor		1.2 m	-	-	-	**HTC150H**


HTC160H

NSP cable adaptor	RJ45 - RJ45	0.2 m	-	-	-	**HTG480H**
		1 m	-	-	-	**HTG481H**
		2 m	-	-	-	**HTG482H**
		5 m	-	-	-	**HTG484H**


HTG481H

Modbus cable RJ45 - RJ45		0.2 m	-	-	-	**HTG480H**
		1 m	-	-	-	**HTG481H**
		2 m	-	-	-	**HTG482H**
		5 m	-	-	-	**HTG484H**


HTG471H

	RJ45 - RJ45 with earth	1 m	-	-	-	**HTG472H**
		2 m	-	-	-	**HTG472H**
		5 m	-	-	-	**HTG474H**


HTG465H

	RJ45 with earth	3 m	-	-	-	**HTG465H**


HTG485H

		25 m	-	-	-	**HTG485H**

Auxiliaries

HXA021H

HXA024H

HXA005H

HXA015H

HXA051H

HYA035H

			P160 / P250 / P630
AX position auxiliary contact			**HXA021H**
		Low level	**HXA025H**
AL triping auxiliary contact	Left side		**HXA024H**
		Low level	**HXA026H**
	Right side		**HXA027H**
		Low level	**HXA028H**
Shunt trip release		24 V DC	**HXA001H**
		48 V DC	**HXA002H**
		100 - 120 V~	**HXA003H**
		200 - 240 V~	**HXA004H**
		380 - 450 V~	**HXA005H**
Undervoltage release		24 V DC	**HXA011H**
		100 - 120 V~	**HXA013H**
		200 - 240 V~	**HXA014H**
		380 - 450 V~	**HXA015H**
Delayed UVR		24 V DC	**HXA051H**
		110 V~	**HXA053H**
		240 V~	**HXA054H**
		440 V~	**HXA055H**
Cable kit		0.75 mm^2 - 6 wires	**HYA035H**

Handles

HXT030H

		P160	P250	P630
Direct rotary handle		**HXS030H**	**HXT030H**	**HXW030H**
	with interlocking	**HXS032H**	**HXT032H**	**HXW032H**
Key kit for rotary handle		**HXS888H**		**HXW888H**
	key lock only HXS999H	**HXS999H**		
On door rotary handle	kit with black IP55 handle and 200 mm shaft	**HXS031H**	**HXT031H**	**HXW031H**

HXS888H

HXT031H

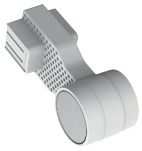
HXS913H

HXS901H

	black & grey IP55	**HXS901H**		**HXW901H**
Shaft extension	200 mm	**HXS912H**		**HXW912H**
	320 mm	**HXS913H**		**HXW913H**
	500 mm	**HXS915H**		**HXW915H**

HXS920H

Shaft guide for door rotary handle				-



HXW033H

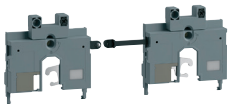
Extended toggle		-		**HXW033H**

Locking kits

HXA039H

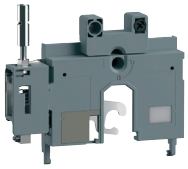
	P160
Padlocking kit	**HXA039H**
Locking kit for on door rotary handle	**HZC019**

Mechanical interlocking



HXT166H

		P160	P250	P630
Link interlock kit	3P	**HXS165H**	**HXT165H**	**HXW165H**
	4P	**HXS166H**	**HXT166H**	**HXW166H**



HXT066H

Mechanical interlock (1 front cover)	3P / 4P	**HXS066H**	**HXT066H**	**HXW066H**

HXB070H

Cable for mechanical interlock	1 m	**HXB070H**		
	1.5 m	**HXB071H**		

Motor operators

HXT040H

HXT040HK

HXT043H

HXT043HK

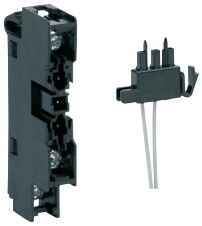
HXB068H

		P250	P630
Motor operator with auto-reset	24 V DC	**HXT040H**	-
	24 - 48 V DC	-	**HXW040H**
	48 V DC	**HXT048H**	-
	100 - 110 V AC/DC	**HXT041H**	-
	100 - 110 V DC	-	**HXW041H**
	110 - 240 V AC	-	**HXW042H**
	200 - 220 V AC/DC	**HXT045H**	-
	230 - 240 V AC	**HXT042H**	-
Motor operator with auto-reset and Ronis key lock	24 V DC	**HXT040HK**	-
	24 - 48 V DC	-	**HXW040HK**
	48 V DC	**HXT048HK**	-
	100 - 110 V AC/DC	**HXT041HK**	-
	100 - 110 V DC	-	**HXW041HK**
	110 - 240 V AC	-	**HXW042HK**
	200 - 220 V AC/DC	**HXT045HK**	-
	230 - 240 V AC	**HXT042HK**	-
Motor operator without auto-reset	24 V DC	**HXT043H**	-
	24 - 48 V DC	-	**HXW043H**
	48 V DC	**HXT049H**	-
	100 - 110 V AC/DC	**HXT046H**	-
	100 - 110 V DC	-	**HXW046H**
	110 - 240 V AC	-	**HXW044H**
	200 - 220 V AC/DC	**HXT047H**	-
	230 - 240 V AC	**HXT044H**	-
Motor operator without auto-reset and Ronis key lock	24 V DC	**HXT043HK**	-
	24 - 48 V DC	-	**HXW043HK**
	48 V DC	**HXT049HK**	-
	100 - 110 V AC/DC	**HXT046HK**	-
	100 - 110 V DC	-	**HXW046HK**
	110 - 240 V AC	-	**HXW044HK**
	200 - 220 V AC/DC	**HXT047HK**	-
	230 - 240 V AC	**HXT044HK**	-
Electrical interlock for Motor operator	For 2 same motors	**HXB068H**	**HXD068H**
	For P250 to P630 motors	**HXB069H**	

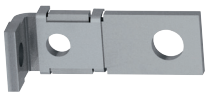
Plug-in system

HYT201H

HYT301H

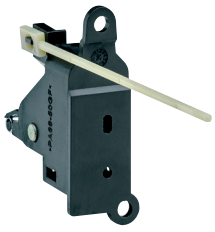


HYC250H HYC352H



HYT328H

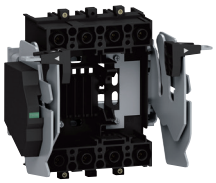
HYC321H



HYS256H

		P160	P250	P630
Plug-in base	3P	**HYS200H**	**HYT200H**	**HYW200H**
	4P	**HYS201H**	**HYT201H**	**HYW201H**
Plug-in circuit breaker conversion kit	3P	**HYS300H HYS310H (≤50 A)**	**HYT300H**	**HYW300H**
	4P	**HYS301H HYS311H (≤50 A)**	**HYT301H**	**HYW301H**
Auxiliary circuit terminal	Base side	**HYC250H**		
	MCCB side 2 wires	**HYC352H**		
	MCCB side 3 wires	**HYC353H**		
L connection	1P	**HYS328H**	**HYT328H**	**HYW328H**
Terminal cover for plug-in base	3P	**HYS321H**	**HYC321H**	**HYD321H**
	4P	**HYS322H**	**HYC322H**	**HYD322H**
Safety trip		**HYS256H**		**HYW256H**
	Kit for Quadro SX and Unimes H enclosures	**HYS257H**	**HYT257H**	**HYW257H**

Withdrawable system



HYT331H

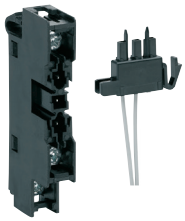
		P250	P630
Base for withdrawable circuit breaker	3P	**HYT330H**	**HYW330H**
	4P	**HYT331H**	**HYW331H**

HYT333H

Withdrawable circuit breaker adaptor with safety trip	3P	**HYT332H**	**HYW332H**
	4P	**HYT333H**	**HYW333H**

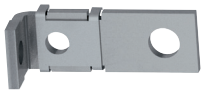
HXT890H

Locking key kit		**HXT890H**	**HXW890H**



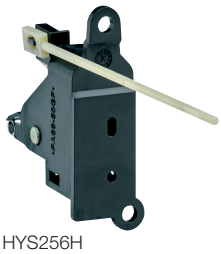
HYC250H HYC352H

Auxiliary circuit terminal	Base side	**HYC250H**
	MCCB side 2 wires	**HYC352H**
	MCCB side 3 wires	**HYC353H**



HYT328H

L connection	1P	**HYT328H**	**HYW328H**



HYS256H

Position switch		**HYC255H**	
Spare safety trip (safety trip included as standard)		**HYS256H**	**HYW256H**
	Kit for Quadro SX and Unimes H enclosures	**HYT257H**	**HYW257H**

Load break switches 20 to 125A
- modular design,
- to mount directly on DIN rail,
- lockable in OFF position.

Comply with NF EN 60 947-3.

Connection
- with collar terminals copper conductors compatible.
- connection capacity:

HAB 20 to 63A: 16 mm² flexible or rigid cables
HAC 60 to 100A: 35 mm² flexible or rigid cables
HAD 100 and 125A: 70 mm² flexible or rigid cables

HAC410

Load break switches visual breaking

- disconnector modular design
- IP20
- In=Ith, AC23

In/A	Width in modules 3P	4P	Cat. ref. 3P	4P
20A	2.6	3.5	**HAB302**	**HAB402**
32A	2.6	3.5	**HAB303**	**HAB403**
40A	2.6	3.5	**HAB304**	**HAB404**
63A	2.6	3.5	**HAB306**	**HAB406**
63A	3	4.5	**HAC306**	**HAC406**
80A	3	4.5	**HAC308**	**HAC408**
100A	3	4.5	**HAC310**	**HAC410**
100A	4.5	6	**HAD310**	**HAD410**
125A	4.5	6	**HAD312**	**HAD412**

HZC011

External handles

- IP55
- lockable with 3 padlocks

Description	Cat. ref.
for LBS 20 to 100A (HAB, HAC)	**HZC010**
for LBS 100 to 125A (HAD)	**HZC011**

HZC113

Shaft extensions

Description	Cat. ref.
20 to 125A, 150mm	**HZC111**
20 to 125A, 200mm	**HZC112**
20 to 125A, 320mm	**HZC113**

HZC212

Terminal shrouds

- 2 pieces / packaging: top and bottom

Description	Cat. ref. 3P	4P
20 to 63A (HAB)	**HZC211**	**HZC212**
63 to 100A (HAC)	**HZC213**	**HZC214**
100 to 125A (HAD)	**HZC215**	**HZC216**

HZC311

Auxiliaries contacts

- In = 10A
- 250V AC

Description	Width in modules	Cat. ref.
1NO + 1NC	0.5	**HZC311**
2NO	0.5	**HZC312**

Load break switches with handle
- for main and/or modular breaking, to use in commercial premises.
- Ith (40°): 125 to 1600A
- Un 400 / 690V AC

- 3P and 4P switches with visible breaking, with sudden double breaking , positive action opening, breaking or engagement visualisation.
- selfcleaning silver plated copper contacts.

Comply with EN 60 947-3.

Options
- extended handle;
- auxiliary contact.

HA358

Load break switches with handle

Insulating voltage Ui: from 160 to 400A: 800V AC
630A: 1000V AC

Connection: In 160A: 95 mm^2 max.
In 250A: 150 mm^2 max.
In 400A: 240 mm^2 max. or
2 x 150 mm^2 max.

Delivered with:
- 1 lockable handle
- fixing screws and nuts
- tightening programming segments

In/A	Cat. ref. 3P	4P
125A	**HA351**	**HA451**
160A	**HA352**	**HA452**
200A	**HA353**	**HA453**
250A	**HA354**	**HA454**
400A	**HA357**	**HA457**
630A	**HA358**	**HA458**
800A	**HA360**	**HA460**
1250A	**HA362**	**HA462**
1600A	**HA364**	**HA464**

HZ023

Auxiliaries contact

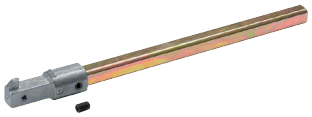
- for HA load break switches 125 to 1600A
- AC1, 5A, 250V

Description	Cat. ref.
1NO + 1NC	**HZ023**

HZC002

Rotary handles

Description	Cat. ref.
for extended shaft, 125 to 630A	**HZC002**
for extended shaft, 800 to 1600A	**HZA001**



HZC101

Shaft extensions

Description	Cat. ref.
63 to 630A, 200mm	**HZC101**
63 to 630A, 320mm	**HZC102**
800 to 1600A, 200mm	**HZC105**
800 to 1600A, 320mm	**HZC106**

Characteristics
The range of enclosed LBS has been designed to match the TP&N range of distribution boards. The number of enclosure sizes has been optimized, to ensure an easy installation.
The LBS products are designed to isolate individual circuits. The range is presented in surface mounting enclosures and includes 2 versions of boxes :
- TPN 20-1600A (14 ratings)
- TPSN 20-1600A (14 ratings)

Delivered with
- load break switch
- plain door
- extended rotary handle

Technical data
- nominal current (In): 20A up to 1600A
- rated voltage (Ue): 415V AC
- utilisation category: AC23A / AC23B / AC22B
- colour: epoxy powder coating RAL 9002
- metallic enclosure
- 1.2mm thickness
- extra cabling space

Comply with
IEC 60947-3, EN 60947-3
Sequence 1, 2 and 3

JAB306

Enclosed load break switches triple pole and neutral

Description	Utilisation category	Cat. ref IP40.	IP55
20A	**AC23A**	**JAB302**	**JAB302S-IP55**
32A	**AC23A**	**JAB303**	**JAB303S-IP55**
63A	**AC23A**	**JAB306**	**JAB306S-IP55**
100A	**AC23A**	**JAB310**	**JAB310S-IP55**
125A	**AC23A**	**JAC312**	**JAC312S-IP55**
160A	**AC23A**	**JAC316**	**JAC316S-IP55**
200A	**AC23A**	**JAE320**	**JAE320S-IP55**
250A	**AC23A**	**JAE325**	**JAE325S-IP55**
315A	**AC23A**	**JAG331**	**JAG331S-IP55**
400A	**AC23A**	**JAG340**	**JAG340S-IP55**
630A	**AC23A**	**JAH363**	**JAH363S-IP55**
800A	**AC23B**	**JAH380**	**JAH380S-IP55**
1250A	**AC23B**	**JAH390**	**JAH390S-IP55**
1600A	**AC22B**	**JAH392**	**JAH392S-IP55**

Enclosed load break switches triple pole switched neutral

Description	Utilisation category	Cat. ref IP40.	IP55
20A	**AC23A**	**JAB402**	**JAB402S-IP55**
32A	**AC23A**	**JAB403**	**JAB403S-IP55**
63A	**AC23A**	**JAB406**	**JAB406S-IP55**
100A	**AC23A**	**JAB410**	**JAB410S-IP55**
125A	**AC23A**	**JAC412**	**JAC412S-IP55**
160A	**AC23A**	**JAC416**	**JAC416S-IP55**
200A	**AC23A**	**JAE420**	**JAE420S-IP55**
250A	**AC23A**	**JAE425**	**JAE425S-IP55**
315A	**AC23A**	**JAG431**	**JAG431S-IP55**
400A	**AC23A**	**JAG440**	**JAG440S-IP55**
630A	**AC23A**	**JAH463**	**JAH463S-IP55**
800A	**AC23B**	**JAH480**	**JAH480S-IP55**
1250A	**AC23B**	**JAH490**	**JAH490S-IP55**
1600A	**AC22B**	**JAH492**	**JAH492S-IP55**

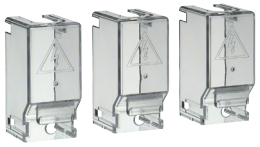
Cable extension boxes triple pole and triple pole switched neutral

Description	Cat. ref.
125A, 160A	**JZA700**
200A, 250A, 315A, 400A	**JZA701**
630A, 800A	**JZA702**

HZ023

Auxiliary contacts

Description	Cat. ref.
20A to 160A, 1NO+1NC	**HZC311**
20A to 160A, 2NO	**HZC312**
125A to 1600A, 2x(1NO+1NC)	**HZ023**



HZC201

Terminal shrouds

Description	Cat. ref. 3P	4P
20A to 40A	**HZC211**	**HZC212**
63A to 100A	**HZC213**	**HZC214**
125A to 160A	**HZC201**	**HZC202**
200A to 315A	**HZC203**	**HZC204**
400A to 630A	**HZC205**	**HZC206**

HZ046

Terminal protection screens

Description	Cat. ref. 3P	4P
800A	**HZ036**	**HZ046**
1250A to 1600A	**HZ037**	**HZ047**

For any questions scan here:

Modular protection devices

We offer a wide range of modular protection devices, such as MCBs, RCCBs, RCBOs, HRC fuse carriers and motor starters.

03

Page

Characteristics
Protection and control of circuits against overloads and short-circuits in electrical installations. Allows to isolate circuits.

Complies to the standard IEC 60898-1

Technical data
- breaking capacity: 3000A (as per IEC 60898-1)
- voltage: 230/400V AC
- current: 6A to 40A
- frequency: 50/60Hz
- tripping curve:
  B curve: 3 to 5 In
  C curve: 5 to 10 In

Technical features
- bi-connect (cable & busbar)
- supply feed either top or bottom
- will not accept auxiliaries
- poles: 1P, 2P, 3P, 4P (protected poles)
- climate sealed: T2
- trip free mechanism

Connection capacity
- flexible: up to 16 mm2
- rigid: up to 25 mm2


MW110


MW216


MW332


MW432

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve
Single pole miniature circuit breakers 3kA				
6 A	1	12	**MV106**	**MW106**
10 A	1	12	**MV110**	**MW110**
16 A	1	12	**MV116**	**MW116**
20 A	1	12	**MV120**	**MW120**
25 A	1	12	**MV125**	**MW125**
32 A	1	12	**MV132**	**MW132**
40 A	1	12	**MV140**	**MW140**
Double pole miniature circuit breakers 3kA				
6 A	2	6	**MV206**	**MW206**
10 A	2	6	**MV210**	**MW210**
16 A	2	6	**MV216**	**MW216**
20 A	2	6	**MV220**	**MW220**
25 A	2	6	**MV225**	**MW225**
32 A	2	6	**MV232**	**MW232**
40 A	2	6	**MV240**	**MW240**
Three pole miniature circuit breakers 3kA				
6 A	3	4	**MV306**	**MW306**
10 A	3	4	**MV310**	**MW310**
16 A	3	4	**MV316**	**MW316**
20 A	3	4	**MV320**	**MW320**
25 A	3	4	**MV325**	**MW325**
32 A	3	4	**MV332**	**MW332**
40 A	3	4	**MV340**	**MW340**
Four pole miniature circuit breakers 3kA				
6 A	4	3	**MV406**	**MW406**
10 A	4	3	**MV410**	**MW410**
16 A	4	3	**MV416**	**MW416**
20 A	4	3	**MV420**	**MW420**
25 A	4	3	**MV425**	**MW425**
32 A	4	3	**MV432**	**MW432**
40 A	4	3	**MV440**	**MW440**

Range : Onekonekt

Characteristics
Protection and control of circuits against overloads and short-circuits in electrical installations. Allows to isolate circuits.

Complies to the standard IEC 60898-1

Technical data
- comply to the standard IEC 60898-1
- breaking capacity: 6000A (as per IEC 60898-1)
- voltage: 230/400V AC
- current: 0.5A to 63A
- frequency: 50/60Hz
- tripping curve:
  C curve: 5 to 10 In

Technical features
- label holder
- IP2X terminals
- bi-connect (cable & busbar)
- supply feed either top or bottom
- will accept auxiliaries
- poles: 1P, 2P, 3P, 4P (protected poles)
- climate sealed: T2
- trip free mechanism

Connection capacity
- flexible: up to 16 mm2
- rigid: up to 25 mm2


MCN110


MCN220

onekonekt Miniature circuit breakers 6 kA type C

In	Width in module 17.5 mm	Pack qty	Cat. ref. C curve
Single pole miniature circuit breakers 6 kA			
0.5 A	1	12	**MCN100**
1 A	1	12	**MCN101**
2 A	1	12	**MCN102**
3 A	1	12	**MCN103**
4 A	1	12	**MCN104**
6 A	1	12	**MCN106**
10 A	1	12	**MCN110**
16 A	1	12	**MCN116**
20 A	1	12	**MCN120**
25 A	1	12	**MCN125**
32 A	1	12	**MCN132**
40 A	1	12	**MCN140**
50 A	1	12	**MCN150**
63 A	1	12	**MCN163**
Double pole miniature circuit breakers 6 kA			
0.5 A	2	6	**MCN200**
1 A	2	6	**MCN201**
2 A	2	6	**MCN202**
3 A	2	6	**MCN203**
4 A	2	6	**MCN204**
6 A	2	6	**MCN206**
10 A	2	6	**MCN210**
16 A	2	6	**MCN216**
20 A	2	6	**MCN220**
25 A	2	6	**MCN225**
32 A	2	6	**MCN232**
40 A	2	6	**MCN240**
50 A	2	6	**MCN250**
63 A	2	6	**MCN263**

MCN332

MCN420

In	Width in module 17.5 mm	Pack qty	Cat. ref. C curve
Three pole miniature circuit breakers 6 kA			
0.5 A	3	4	**MCN300**
1 A	3	4	**MCN301**
2 A	3	4	**MCN302**
3 A	3	4	**MCN303**
4 A	3	4	**MCN304**
6 A	3	4	**MCN306**
10 A	3	4	**MCN310**
16 A	3	4	**MCN316**
20 A	3	4	**MCN320**
25 A	3	4	**MCN325**
32 A	3	4	**MCN332**
40 A	3	4	**MCN340**
50 A	3	4	**MCN350**
63 A	3	4	**MCN363**
Four pole miniature circuit breakers 6 kA			
0.5 A	4	3	**MCN400**
1 A	4	3	**MCN401**
2 A	4	3	**MCN402**
3 A	4	3	**MCN403**
4 A	4	3	**MCN404**
6 A	4	3	**MCN406**
10 A	4	3	**MCN410**
16 A	4	3	**MCN416**
20 A	4	3	**MCN420**
25 A	4	3	**MCN425**
32 A	4	3	**MCN432**
40 A	4	3	**MCN440**
50 A	4	3	**MCN450**
63 A	4	3	**MCN463**

Miniature circuit breakers 10kA, type B and C

- tripping curve:
  B curve: 3 to 5 In,
  C curve: 5 to 10 In
- poles: 1PP, 2PP, 3PP, 4PP (protected poles)
- voltage rating: 240/400V AC
- current rating: 6 to 63A
- frequency: 50/60Hz
- climate sealed: T2
- connecting capacity:
  16 mm² flexible conductor
  25 mm² rigid conductor
- comply to the standard IEC 60898-1
  breaking capacity: 6kA (IEC 60898-1)
- will not accept accessories

MU132A

MU220A

MU340A

MU463A

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve
Single pole miniature circuit breakers 6kA				
6 A	1	12	**MT106A**	**MU106A**
10 A	1	12	**MT110A**	**MU110A**
16 A	1	12	**MT116A**	**MU116A**
20 A	1	12	**MT120A**	**MU120A**
25 A	1	12	**MT125A**	**MU125A**
32 A	1	12	**MT132A**	**MU132A**
40 A	1	12	**MT140A**	**MU140A**
50 A	1	12	**MT150A**	**MU150A**
63 A	1	12	**MT163A**	**MU163A**
Double pole miniature circuit breakers 6kA				
6 A	2	6	**MT206A**	**MU206A**
10 A	2	6	**MT210A**	**MU210A**
16 A	2	6	**MT216A**	**MU216A**
20 A	2	6	**MT220A**	**MU220A**
25 A	2	6	**MT225A**	**MU225A**
32 A	2	6	**MT232A**	**MU232A**
40 A	2	6	**MT240A**	**MU240A**
50 A	2	6	**MT250A**	**MU250A**
60 A	2	6	**MT263A**	**MU263A**
Three pole miniature circuit breakers 6kA				
6 A	3	4	**MT306A**	**MU306A**
10 A	3	4	**MT310A**	**MU310A**
16 A	3	4	**MT316A**	**MU316A**
20 A	3	4	**MT320A**	**MU320A**
25 A	3	4	**MT325A**	**MU325A**
32 A	3	4	**MT332A**	**MU332A**
40 A	3	4	**MT340A**	**MU340A**
50 A	3	4	**MT350A**	**MU350A**
63 A	3	4	**MT363A**	**MU363A**
Four pole miniature circuit breakers 6kA				
6 A	4	3	-	**MU406A**
10 A	4	3	-	**MU410A**
16 A	4	3	-	**MU416A**
20 A	4	3	-	**MU420A**
25 A	4	3	-	**MU425A**
32 A	4	3	-	**MU432A**
40 A	4	3	-	**MU440A**
50 A	4	3	-	**MU450A**
63 A	4	3	-	**MU463A**

Miniature circuit breakers 10 kA, type B and C

- tripping curve:
  B curve: 3 to 5 In,
  C curve: 5 to 10 In
- poles: 1PP, 2PP, 3PP, 4PP (protected poles)
- voltage rating: 240/400V AC
- current rating: 0.5 to 63A
- frequency: 50/60Hz
- climate sealed: T2
- connecting capacity:
  16 mm2 flexible conductor
  25 mm2 rigid conductor
- comply to the standard IEC 60898-1
  breaking capacity: 6kA (IEC 60898-1)

MC100A

MC225A

MC303A

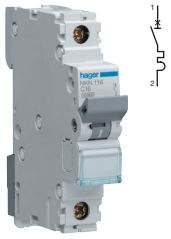
In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve
Single pole miniature circuit breakers 6 kA				
0.5 A	1	12	-	**MC100A**
1 A	1	12	-	**MC101A**
2 A	1	12	-	**MC102A**
3 A	1	12	-	**MC103A**
4 A	1	12	-	**MC104A**
6 A	1	12	**MB106A**	**MC106A**
10 A	1	12	**MB110A**	**MC110A**
16 A	1	12	**MB116A**	**MC116A**
20 A	1	12	**MB120A**	**MC120A**
25 A	1	12	**MB125A**	**MC125A**
32 A	1	12	**MB132A**	**MC132A**
40 A	1	12	**MB140A**	**MC140A**
50 A	1	12	**MB150A**	**MC150A**
63 A	1	12	**MB163A**	**MC163A**
Double pole miniature circuit breakers 6 kA				
0.5 A	2	6	-	**MC200A**
1 A	2	6	-	**MC201A**
2 A	2	6	-	**MC202A**
3 A	2	6	-	**MC203A**
4 A	2	6	-	**MC204A**
6 A	2	6	**MB206A**	**MC206A**
10 A	2	6	**MB210A**	**MC210A**
16 A	2	6	**MB216A**	**MC216A**
20 A	2	6	**MB220A**	**MC220A**
25 A	2	6	**MB225A**	**MC225A**
32 A	2	6	**MB232A**	**MC232A**
40 A	2	6	**MB240A**	**MC240A**
50 A	2	6	**MB250A**	**MC250A**
63 A	2	6	**MB263A**	**MC263A**
Three pole miniature circuit breakers 6 kA				
0.5 A	3	4	-	**MC300A**
1 A	3	4	-	**MC301A**
2 A	3	4	-	**MC302A**
3 A	3	4	-	**MC303A**
4 A	3	4	-	**MC304A**
6 A	3	4	**MB306A**	**MC306A**
10 A	3	4	**MB310A**	**MC310A**
16 A	3	4	**MB316A**	**MC316A**
20 A	3	4	**MB320A**	**MC320A**
25 A	3	4	**MB325A**	**MC325A**
32 A	3	4	**MB332A**	**MC332A**
40 A	3	4	**MB340A**	**MC340A**
50 A	3	4	**MB350A**	**MC350A**
63 A	3	4	**MB363A**	**MC363A**

MC463A

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve
Four pole miniature circuit breakers 6 kA				
0.5 A	4	3	-	**MC400A**
1 A	4	3	-	**MC401A**
2 A	4	3	-	**MC402A**
3 A	4	3	-	**MC403A**
4 A	4	3	-	**MC404A**
6 A	4	3	**MB406A**	**MC406A**
10 A	4	3	**MB410A**	**MC410A**
16 A	4	3	**MB416A**	**MC416A**
20 A	4	3	**MB420A**	**MC420A**
25 A	4	3	**MB425A**	**MC425A**
32 A	4	3	**MB432A**	**MC432A**
40 A	4	3	**MB440A**	**MC440A**
50 A	4	3	**MB450A**	**MC450A**
63 A	4	3	**MB463A**	**MC463A**

Miniature circuit breakers 6/10 kA, type D

- tripping curve: D curve: 10 to 20 In,
- poles: 1PP, 2PP, 3PP, 4PP (protected poles)
- voltage rating: 240/400V AC
- current rating: 0.5 to 63A
- frequency: 50/60Hz
- climate sealed: T2
- connecting capacity:
  25 mm2 flexible conductor
  35 mm2 rigid conductor
- comply to the standard IEC 60898-1
  breaking capacity: 6kA (IEC 60898-1)
  10 kA (IEC 60947-2)



NGN116

In	Width in module 17.5 mm	Pack qty	Cat. ref. D curve
Single pole miniature circuit breakers 6/10 kA			
0.5 A	1	1	**NGN100**
1 A	1	1	**NGN101**
2 A	1	1	**NGN102**
3 A	1	1	**NGN103**
4 A	1	1	**NGN104**
6 A	1	1	**NGN106**
10 A	1	1	**NGN110**
16 A	1	1	**NGN116**
20 A	1	1	**NGN120**
25 A	1	1	**NGN125**
32 A	1	1	**NGN132**
40 A	1	1	**NGN140**
50 A	1	1	**NGN150**
63 A	1	1	**NGN163**

NGN232

In	Width in module 17.5 mm	Pack qty	Cat. ref. D curve
Double pole miniature circuit breakers 6/10 kA			
0.5 A	2	1	**NGN200**
1 A	2	1	**NGN201**
2 A	2	1	**NGN202**
3 A	2	1	**NGN203**
4 A	2	1	**NGN204**
6 A	2	1	**NGN206**
10 A	2	1	**NGN210**
16 A	2	1	**NGN216**
20 A	2	1	**NGN220**
25 A	2	1	**NGN225**
32 A	2	1	**NGN232**
40 A	2	1	**NGN240**
50 A	2	1	**NGN250**
63 A	2	1	**NGN263**
Three pole miniature circuit breakers 6/10 kA			
0.5 A	3	1	**NGN300**
1 A	3	1	**NGN301**
2 A	3	1	**NGN302**
3 A	3	1	**NGN303**
4 A	3	1	**NGN304**
6 A	3	1	**NGN306**
10 A	3	1	**NGN310**
16 A	3	1	**NGN316**
20 A	3	1	**NGN320**
25 A	3	1	**NGN325**
32 A	3	1	**NGN332**
40 A	3	1	**NGN340**
50 A	3	1	**NGN350**
63 A	3	1	**NGN363**
Four pole miniature circuit breakers 6/10 kA			
0.5 A	4	1	**NGN400**
1 A	4	1	**NGN401**
2 A	4	1	**NGN402**
3 A	4	1	**NGN403**
4 A	4	1	**NGN404**
6 A	4	1	**NGN406**
10 A	4	1	**NGN410**
16 A	4	1	**NGN416**
20 A	4	1	**NGN420**
25 A	4	1	**NGN425**
32 A	4	1	**NGN432**
40 A	4	1	**NGN440**
50 A	4	1	**NGN450**
63 A	4	1	**NGN463**

NGN320

NGN440

Characteristics
Protection and control of circuits against overloads and short-circuits in electrical installations. Allows to isolate circuits.

Complies to the standard IEC 60898-1

Technical data
- breaking capacity:10kA (as per IEC 60898-1)
- voltage: 230/400V AC
- current: 6A to 63A
- frequency: 50/60Hz
- tripping curve:
  B curve: 3 to 5 In
  C curve: 5 to 10 In

Technical features
- bi-connect (cable & busbar)
- supply feed either top or bottom
- will accept auxiliaries
- poles: 1P, 2P, 3P, 4P (protected poles)
- climate sealed: T2
- trip free mechanism

Connection capacity
- flexible: up to 16 mm2
- rigid: up to 25 mm2


NC110A


NC236A


NC363A

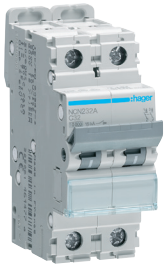

NC432A

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	Cat. ref. C curve
Single pole miniature circuit breakers 10 kA				
6 A	1	12	**NB106A**	**NC106A**
10 A	1	12	**NB110A**	**NC110A**
16 A	1	12	**NB116A**	**NC116A**
20 A	1	12	**NB120A**	**NC120A**
25 A	1	12	**NB125A**	**NC125A**
32 A	1	12	**NB132A**	**NC132A**
40 A	1	12	**NB140A**	**NC140A**
50 A	1	12	**NB150A**	**NC150A**
63 A	1	12	**NB163A**	**NC163A**
Double pole miniature circuit breakers 10 kA				
6 A	2	6	**NB206A**	**NC206A**
10 A	2	6	**NB210A**	**NC210A**
16 A	2	6	**NB216A**	**NC216A**
20 A	2	6	**NB220A**	**NC220A**
25 A	2	6	**NB225A**	**NC225A**
32 A	2	6	**NB232A**	**NC232A**
40 A	2	6	**NB240A**	**NC240A**
50 A	2	6	**NB250A**	**NC250A**
63 A	2	6	**NB263A**	**NC263A**
Three pole miniature circuit breakers 10 kA				
6 A	3	4	**NB306A**	**NC306A**
10 A	3	4	**NB310A**	**NC310A**
16 A	3	4	**NB316A**	**NC316A**
20 A	3	4	**NB320A**	**NC320A**
25 A	3	4	**NB325A**	**NC325A**
32 A	3	4	**NB332A**	**NC332A**
40 A	3	4	**NB340A**	**NC340A**
50 A	3	4	**NB350A**	**NC350A**
63 A	3	4	**NB363A**	**NC363A**
Four pole miniature circuit breakers 10 kA				
6 A	4	3	**NB406A**	**NC406A**
10 A	4	3	**NB410A**	**NC410A**
16 A	4	3	**NB416A**	**NC416A**
20 A	4	3	**NB420A**	**NC420A**
25 A	4	3	**NB425A**	**NC425A**
32 A	4	3	**NB432A**	**NC432A**
40 A	4	3	**NB440A**	**NC440A**
50 A	4	3	**NB450A**	**NC450A**
63 A	4	3	**NB463A**	**NC463A**

Miniature circuit breakers 10/15 kA, type B, C and D

- tripping curve:
  - B curve: 3 to 5 In
  - C curve: 5 to 10 In
  - D curve: 10 to 20 In
- poles: 1PP, 2PP, 3PP, 4PP (protected poles)
- voltage rating: 240/400V AC
- current rating: 0.5 to 63A
- frequency: 50/60Hz
- climate sealed: T2
- connecting capacity:
  - 25 mm2 flexible conductor
  - 35 mm2 rigid conductor
- comply to the standard IEC 60898-1
  breaking capacity: 10kA (IEC 60898-1)
  15 kA (IEC 60947-2)

NCN116A



NCN232A

NCN320A

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve	D curve
Single pole miniature circuit breakers 10/15 kA					
0.5 A	1	12	-	**NCN100A**	**NDN100A**
1 A	1	12	-	**NCN101A**	**NDN101A**
2 A	1	12	-	**NCN102A**	**NDN102A**
3 A	1	12	-	**NCN103A**	**NDN103A**
4 A	1	12	-	**NCN104A**	**NDN104A**
6 A	1	12	**NBN106A**	**NCN106A**	**NDN106A**
10 A	1	12	**NBN110A**	**NCN110A**	**NDN110A**
16 A	1	12	**NBN116A**	**NCN116A**	**NDN116A**
20 A	1	12	**NBN120A**	**NCN120A**	**NDN120A**
25 A	1	12	**NBN125A**	**NCN125A**	**NDN125A**
32 A	1	12	**NBN132A**	**NCN132A**	**NDN132A**
40 A	1	12	**NBN140A**	**NCN140A**	**NDN140A**
50 A	1	12	**NBN150A**	**NCN150A**	**NDN150A**
63 A	1	12	**NBN163A**	**NCN163A**	**NDN163A**
Double pole miniature circuit breakers 10/15 kA					
0.5 A	2	6	-	**NCN200A**	**NDN200A**
1 A	2	6	-	**NCN201A**	**NDN201A**
2 A	2	6	-	**NCN202A**	**NDN202A**
3 A	2	6	-	**NCN203A**	**NDN203A**
4 A	2	6	-	**NCN204A**	**NDN204A**
6 A	2	6	**NBN206A**	**NCN206A**	**NDN206A**
10 A	2	6	**NBN210A**	**NCN210A**	**NDN210A**
16 A	2	6	**NBN216A**	**NCN216A**	**NDN216A**
20 A	2	6	**NBN220A**	**NCN220A**	**NDN220A**
25 A	2	6	**NBN225A**	**NCN225A**	**NDN225A**
32 A	2	6	**NBN232A**	**NCN232A**	**NDN232A**
40 A	2	6	**NBN240A**	**NCN240A**	**NDN240A**
50 A	2	6	**NBN250A**	**NCN250A**	**NDN250A**
63 A	2	6	**NBN263A**	**NCN263A**	**NDN263A**
Three pole miniature circuit breakers 10/15 kA					
0.5 A	3	4	-	**NCN300A**	**NDN300A**
1 A	3	4	-	**NCN301A**	**NDN301A**
2 A	3	4	-	**NCN302A**	**NDN302A**
3 A	3	4	-	**NCN303A**	**NDN303A**
4 A	3	4	-	**NCN304A**	**NDN304A**
6 A	3	4	**NBN306A**	**NCN306A**	**NDN306A**
10 A	3	4	**NBN310A**	**NCN310A**	**NDN310A**
16 A	3	4	**NBN316A**	**NCN316A**	**NDN316A**
20 A	3	4	**NBN320A**	**NCN320A**	**NDN320A**
25 A	3	4	**NBN325A**	**NCN325A**	**NDN325A**
32 A	3	4	**NBN332A**	**NCN332A**	**NDN332A**
40 A	3	4	**NBN340A**	**NCN340A**	**NDN340A**
50 A	3	4	**NBN350A**	**NCN350A**	**NDN350A**
63 A	3	4	**NBN363A**	**NCN363A**	**NDN363A**

NCN440A

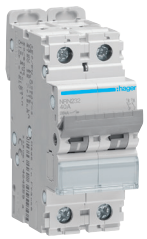
In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve	D curve
Four pole miniature circuit breakers 10/15 kA					
0.5 A	4	3	-	**NCN400A**	**NDN400A**
1 A	4	3	-	**NCN401A**	**NDN401A**
2 A	4	3	-	**NCN402A**	**NDN402A**
3 A	4	3	-	**NCN403A**	**NDN403A**
4 A	4	3	-	**NCN404A**	**NDN404A**
6 A	4	3	**NBN406A**	**NCN406A**	**NDN406A**
10 A	4	3	**NBN410A**	**NCN410A**	**NDN410A**
16 A	4	3	**NBN416A**	**NCN416A**	**NDN416A**
20 A	4	3	**NBN420A**	**NCN420A**	**NDN420A**
25 A	4	3	**NBN425A**	**NCN425A**	**NDN425A**
32 A	4	3	**NBN432A**	**NCN432A**	**NDN432A**
40 A	4	3	**NBN440A**	**NCN440A**	**NDN440A**
50 A	4	3	**NBN450A**	**NCN450A**	**NDN450A**
63 A	4	3	**NBN463A**	**NCN463A**	**NDN463A**

Miniature circuit breakers 15 to 25 kA, type B, C and D

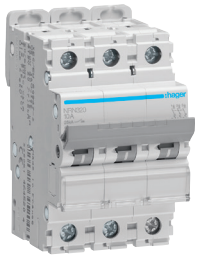
- tripping curve:
  - B curve: 3 to 5 In
  - C curve: 5 to 10 In
  - D curve: 10 to 20 In
- poles: 1PP, 2PP, 3PP, 4PP (protected poles)
- voltage rating: 240/400V AC
- current rating: 0.5 to 63A
- frequency: 50/60Hz
- climate sealed: T2
- connecting capacity:
  - 25 mm2 flexible conductor
  - 35 mm2 rigid conductor
- comply to the standard IEC 60898-1, breaking capacity:
  - 25kA for 0.5 to 25A (IEC 60 947-2)
  - 20kA for 32 to 40A (IEC 60 947-2)
  - 15kA for 50 to 63A (IEC 60 947-2)

NRN116

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve	D curve
Single pole miniature circuit breakers 15 to 25 kA					
0.5 A	1	1	-	**NRN100**	**NSN100**
1 A	1	1	-	**NRN101**	**NSN101**
2 A	1	1	-	**NRN102**	**NSN102**
3 A	1	1	-	**NRN103**	**NSN103**
4 A	1	1	-	**NRN104**	**NSN104**
6 A	1	1	**NQN106**	**NRN106**	**NSN106**
10 A	1	1	**NQN110**	**NRN110**	**NSN110**
16 A	1	1	**NQN116**	**NRN116**	**NSN116**
20 A	1	1	**NQN120**	**NRN120**	**NSN120**
25 A	1	1	**NQN125**	**NRN125**	**NSN125**
32 A	1	1	**NQN132**	**NRN132**	**NSN132**
40 A	1	1	**NQN140**	**NRN140**	**NSN140**
50 A	1	1	**NQN150**	**NRN150**	**NSN150**
63 A	1	1	**NQN163**	**NRN163**	**NSN163**



NRN232



NRN320

NRN440

In	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve	D curve
Double pole miniature circuit breakers 15 to 25 kA					
0.5 A	2	1	-	**NRN200**	**NSN200**
1 A	2	1	-	**NRN201**	**NSN201**
2 A	2	1	-	**NRN202**	**NSN202**
3 A	2	1	-	**NRN203**	**NSN203**
4 A	2	1	-	**NRN204**	**NSN204**
6 A	2	1	**NQN206**	**NRN206**	**NSN206**
10 A	2	1	**NQN210**	**NRN210**	**NSN210**
16 A	2	1	**NQN216**	**NRN216**	**NSN216**
20 A	2	1	**NQN220**	**NRN220**	**NSN220**
25 A	2	1	**NQN225**	**NRN225**	**NSN225**
32 A	2	1	**NQN232**	**NRN232**	**NSN232**
40 A	2	1	**NQN240**	**NRN240**	**NSN240**
50 A	2	1	**NQN250**	**NRN250**	**NSN250**
63 A	2	1	**NQN263**	**NRN263**	**NSN263**
Three pole miniature circuit breakers 15 to 25 kA					
0.5 A	3	1	-	**NRN300**	**NSN300**
1 A	3	1	-	**NRN301**	**NSN301**
2 A	3	1	-	**NRN302**	**NSN302**
3 A	3	1	-	**NRN303**	**NSN303**
4 A	3	1	-	**NRN304**	**NSN304**
6 A	3	1	**NQN306**	**NRN306**	**NSN306**
10 A	3	1	**NQN310**	**NRN310**	**NSN310**
16 A	3	1	**NQN316**	**NRN316**	**NSN316**
20 A	3	1	**NQN320**	**NRN320**	**NSN320**
25 A	3	1	**NQN325**	**NRN325**	**NSN325**
32 A	3	1	**NQN332**	**NRN332**	**NSN332**
40 A	3	1	**NQN340**	**NRN340**	**NSN340**
50 A	3	1	**NQN350**	**NRN350**	**NSN350**
63 A	3	1	**NQN363**	**NRN363**	**NSN363**
Four pole miniature circuit breakers 15 to 25 kA					
0.5 A	4	1	-	**NRN400**	**NSN400**
1 A	4	1	-	**NRN401**	**NSN401**
2 A	4	1	-	**NRN402**	**NSN402**
3 A	4	1	-	**NRN403**	**NSN403**
4 A	4	1	-	**NRN404**	**NSN404**
6 A	4	1	**NQN406**	**NRN406**	**NSN406**
10 A	4	1	**NQN410**	**NRN410**	**NSN410**
16 A	4	1	**NQN416**	**NRN416**	**NSN416**
20 A	4	1	**NQN420**	**NRN420**	**NSN420**
25 A	4	1	**NQN425**	**NRN425**	**NSN425**
32 A	4	1	**NQN432**	**NRN432**	**NSN432**
40 A	4	1	**NQN440**	**NRN440**	**NSN440**
50 A	4	1	**NQN450**	**NRN450**	**NSN450**
63 A	4	1	**NQN463**	**NRN463**	**NSN463**

Characteristics
Protection and control of circuits against overloads and short circuits in electrical installations. Allows to isolate circuits. They can be used for installation in commercial building and industrial premises.

Complies to the standard IEC 60898-1, IEC 60947-2

Technical data
- breaking capacity
  10 kA (IEC 60 898-1)
  10 kA (IEC 60 947-2)
- voltage: 230/400V AC
- current: 80A to 125 A
- frequency: 50/60Hz
- tripping curve:
  B curve: 3 to 5 In,
  C curve: 5 to 10 In

Technical features
- supply feed either top or bottom
- will accept auxiliaries
- poles: 1P, 2P, 3P, 4P (protected poles)
- climate sealed: T2
- trip free mechanism

Connection capacity
- flexible: up to 50 mm2
- rigid: up to 70 mm2

HLF199S

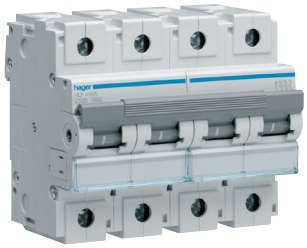
In/A	Width in module 17.5 mm	Pack qty	Cat. ref. B curve	C curve
Single pole miniature circuit breakers 10 kA				
80	1.5	1	**HLE180S**	**HLF180S**
100	1.5	1	**HLE190S**	**HLF190S**
125	1.5	1	**HLE199S**	**HLF199S**

HLF299S

Double pole miniature circuit breakers 10 kA				
80	3	1	**HLE280S**	**HLF280S**
100	3	1	**HLE290S**	**HLF290S**
125	3	1	**HLE299S**	**HLF299S**

HLF399S

Three pole miniature circuit breakers 10 kA				
80	4.5	1	**HLE380S**	**HLF380S**
100	4.5	1	**HLE390S**	**HLF390S**
125	4.5	1	**HLE399S**	**HLF399S**



HLF499S

Four pole miniature circuit breakers 10 kA				
80	6	1	**HLE480S**	**HLF480S**
100	6	1	**HLE490S**	**HLF490S**
125	6	1	**HLE499S**	**HLF499S**

Characteristics
Compact protection devices which combine the overcurrent functions of an MCB with the earth fault functions of an RCCB in a single unit. These devices are single pole & solid neutral.

Complies to the standard IEC 61009-1

Technical data
- tripping curve:
  C curve: 5 to 10 In
- sensitivity:
  high sensitivity: 10mA, 30mA
  medium sensitivity: 100mA, 300mA
- voltage: 230V AC
- current: 6A to 40A
- frequency: 50Hz / 60Hz
- type: AC type (Ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising)

Technical features
- bi-connect (cable & busbar)
- flying neutral lead length: 700mm
- will not accept auxiliaries
- poles: SP & passing N
- climate sealed: T2
- trip free mechanism
- fixed instantaneous tripping

Connection capacity
- flexible: up to 16 mm2
- rigid: up to 25 mm2


ADC232Z


ADC290Y

In / A	Width in module 17.5 mm	Pack qty	Cat. ref. C curve	Cat. ref. C curve
RCBOs AC type - 30 mA			**6 kA**	**10 kA**
6	1	1	**ADC206Z**	**ADC284Y**
10	1	1	**ADC210Z**	**ADC285Y**
16	1	1	**ADC216Z**	**ADC287Y**
20	1	1	**ADC220Z**	**ADC288Y**
25	1	1	**ADC225Z**	**ADC289Y**
32	1	1	**ADC232Z**	**ADC290Y**
40	1	1	**ADC240Z**	**ADC291Y**
RCBOs AC type - 100 mA				
6	1	1	**AEC206Z**	**AEC207Y**
10	1	1	**AEC210Z**	**AEC211Y**
16	1	1	**AEC216Z**	**AEC217Y**
20	1	1	**AEC220Z**	**AEC221Y**
25	1	1	**AEC225Z**	**AEC226Y**
32	1	1	**AEC232Z**	**AEC233Y**
40	1	1	**AEC240Z**	**AEC241Y**
RCBOs AC type - 300 mA				
10	1	1	**AFC210Z**	-
16	1	1	**AFC216Z**	-
20	1	1	**AFC220Z**	-
25	1	1	**AFC225Z**	-
32	1	1	**AFC232Z**	-
40	1	1	**AFC240Z**	-
RCBOs AC type - 10 mA				
6	1	1	-	**ACC206Y**
10	1	1	-	**ACC210Y**
16	1	1	-	**ACC216Y**
20	1	1	-	**ACC220Y**
25	1	1	-	**ACC225Y**
32	1	1	-	**ACC232Y**

Characteristics
Protection and control of circuits against earth leakage currents, between line and earth, and/or neutral and earth. Protects against electrical shocks.

Complies to the standard IEC 61008-1

Technical data
- sensitivity: 10mA, 30mA, 100mA, 300mA, 500mA
- voltage: 240V (2P) and 240/415V (4P)
- current rating: 16A to 125A
- frequency: 50Hz
- type: AC type (Ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising)

Technical features
- label holder (up to 63A)
- IP2X terminals (up to 63A)
- bi-connect (up to 63A)
- earth fault indication (yellow = tripped)
- ON/OFF indication
- will accept auxiliaries
- climate sealed: T2
- trip free mechanism
- fixed instantaneous tripping

Connection capacity
- flexible: up to 16 mm2
- rigid: up to 25 mm2


CEC241J


CFC464J

Residual Current Circuit Breakers (RCCB) onekonekt

In	Pack qty	Cat. ref. 2P	Cat. ref. 4P
RCCBs AC type - 10mA			
16 A	1	**CCC217J**	**-**
RCCBs AC type - 30mA			
25 A	1	**CDC226J**	**CDC426J**
40 A	1	**CDC241J**	**CDC441J**
63 A	1	**CDC264J**	**CDC464J**
80 A	1	**CD281Z**	**CD480Z**
100 A	1	**CD285Z**	**CD485Z**
RCCBs AC type - 100mA			
25 A	1	**CEC226J**	**CEC426J**
40 A	1	**CEC241J**	**CEC441J**
63 A	1	**CEC264J**	**CEC464J**
80 A	1	**CE281Z**	**CE481Z**
100 A	1	**CE285Z**	**CE485Z**
RCCBs AC type - 300mA			
25 A	1	**CFC226J**	**CFC426J**
40 A	1	**CFC241J**	**CFC441J**
63 A	1	**CFC264J**	**CFC464J**
80 A	1	**CF281Z**	**CF481Z**
100 A	1	**CF285Z**	**CF485Z**


CDC690


CFC690

Residual Current Circuit Breakers (RCCB)-125A

In	Pack qty	Cat. ref. 2P	Cat. ref. 4P
RCCB AC type - 30mA			
125 A	1	-	**CDC690**
RCCB A type - 100mA			
125 A	1	-	**CEA690**
RCCB AC type - 300mA			
125 A	1	-	**CFC690**
RCCB AC type - 500mA			
125 A	1	-	**CGC690**

Residual Current Circuit Breakers (RCCBs)
Compact devices which provide earth leakage protection (protect against electrical shocks by direct or indirect contacts).
To open automatically in the event of an earth fault between phase and earth and/or neutral and earth.

Technical information

- AC type
Ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising

- A and HI type (reinforced immunity)
In addition to the characteristics of AC type, it ensured for residual pulsating direct currents, whether suddenly applied or slowly rising.
They are used whenever fault currents are not sinusoidal.
HI types only: It reduces the unexpected tripping when they protect equipment generating disturbances like DC fault current (washing machines, speed drives, microprocessing, electronic ballast...).

Note: to fit auxiliaries contact, alarm contact, for all tripping auxiliaries we have to use the dedicated auxiliaries CZ001

RCCBs

- sensitivity:
  - high sensitivity: 10, 30mA instantaneous tripping (fixed)
  - medium sensitivity: 100mA, 300mA instantaneous or selective tripping (fixed)
- current rating: 16 to 100A
- voltage rating: 230V AC (2P) and 400V (4P)
- poles: 2P and 4P
- types: AC, A and HI types
- frequency: 50Hz
- connection capacity
  - 25 to 63A:
    rigid conductors: 25mm^2
    flexible conductors: 16mm^2
  - 80 and 100A:
    rigid conductors: 50mm^2
    flexible conductors: 35mm^2
- Comply with IEC 61008-1 and 61008-2-1

CD241J

CD441J

Current rating	Pack qty	Cat. ref. 2P	4P
RCCBs AC type - 10 mA			
16 A	1	**CC217J**	**-**
RCCBs AC type - 30 mA			
25 A	1	**CD226J**	**CD426J**
40 A	1	**CD241J**	**CD441J**
63 A	1	**CD264J**	**CD464J**
80 A	1	**CD281Z**	**CD481Z**
100 A	1	**CD285Z**	**CD485Z**
RCCBs A type - 30 mA			
25 A	1	**CD225J**	**CD425J**
40 A	1	**CD240J**	**CD440J**
63 A	1	**CD263J**	**CD463J**
RCCBs HI type - 30 mA			
25 A	1	**CH225J**	**CH425J**
40 A	1	**CH240J**	**CH440J**
63 A	1	**CH263J**	**CH463J**
RCCBs AC type - 100 mA			
25 A	1	**CE226J**	**CE426J**
40 A	1	**CE241J**	**CE441J**
63 A	1	**CE264J**	**CE464J**
80 A	1	**CE281Z**	**CE481Z**
100 A	1	**CE285Z**	**CE485Z**
RCCBs AC type - 300 mA			
25 A	1	**CF226J**	**CF426J**
40 A	1	**CF241J**	**CF441J**
63 A	1	**CF264J**	**CF464J**
80 A	1	**CF281Z**	**CF481Z**
100 A	1	**CF285Z**	**CF485Z**
RCCBs AC type selective r - 300 mA			
40 A	1	**-**	**CP441J**
63 A	1	**-**	**CP464J**

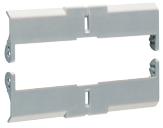
Current rating	Pack qty	Cat. ref. 2P	4P
RCCBs A type - 300 mA			
25 A	1	**CF225J**	**CF425J**
40 A	1	**CF240J**	**CF440J**
63 A	1	**CF263J**	**CF463J**
RCCBs A type selective r - 300 mA			
40 A	1	-	**CP440J**
63 A	1	-	**CP463J**
RCCBs HI type selective r - 300 mA			
40 A	1	-	**CQ440J**
63 A	1	-	**CQ463J**
RCCBs AC type - 500 mA			
80 A	1	-	**CQ481Z**
100 A	1	-	**CQ485Z**

CZ001

Auxiliaries and alarm contact

- 6 V - 230 V

Description	Width in module 17.5 mm	Pack qty	Cat. ref.
1NO+1NC for auxiliary or alarm contact	1	1	**CZ001**



CZN006

Sealable terminal covers

- 1 set is composed of 2 terminal covers

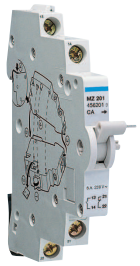
Description	Pack qty	Cat. ref.
for RCCB 2 modules, 25 to 63 A	10	**CZN005**
for RCCB 4 modules, 25 to 63 A	10	**CZN006**
for RCCB 2 modules, 80 A	10	**CZ007**
for RCCB 4 modules, 80 to 100 A	10	**CZ008**

Auxiliaries and accessories for MCBs, RCCBs and RCBOs

All auxiliaries are common to both single and multi-pole circuit breakers. These auxiliaries are fitted to the left hand side of devices.
Shunt trips, and under-voltage releases are fitted with a flag indicator that indicates the automatic/remote tripping of the device.

Connection capacity
6 mm² rigid cables
4 mm² flexible cables

Use of MZ203 - MZ212 on RCCBs requires the use of interface auxiliary CZ001.



MZ201

Auxiliary contacts

- indication of main contact status

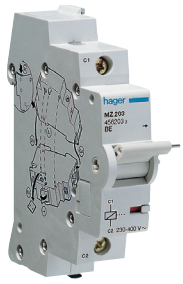
Description	Width in module 17.5 mm	Cat. ref.
1NO + 1NC auxiliary contact	0.5	**MZ201**

MZ202

Alarm contacts

- SD contact indicates a fault overcurrent (e.g. MCB tripped) on overload or short-circuit

Description	Width in module 17.5 mm	Cat. ref.
alarm contact	0.5	**MZ202**

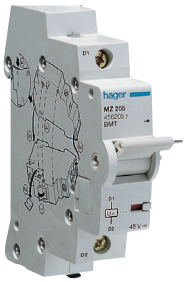


MZ203

Shunt trips

- allows remote tripping of the device

Description	Width in module 17.5 mm	Cat. ref.
24V - 415V AC / 12V - 130V DC	1	**MZ203**
24V - 48V AC / 12V - 48V DC	1	**MZ204**



MZ205

Undervoltage releases

- allows MCB to be closed only when voltage is above
70% of Un. MCB will automatically trip when voltage falls by 35% of Un

Description	Width in module 17.5 mm	Cat. ref.
48V DC	1	**MZ205**
230V AC	1	**MZ206**

Overvoltage releases

- monitors the voltage between phase and neutral in a network
- it opens the current circuit in case of over voltage by tripping the connected protection device (e.g. MCB or RCCB)

MZ212

Description	Width in module 17.5 mm	Cat. ref.
230V AC	1	**MZ212**

Over and undervoltage auxiliary

- trip when the voltage decrease or increase out of the correct scale working voltage
- mechanical indicator of faults on the front face

Description	Width in module 17.5 mm	Cat. ref.
over and undervoltage auxiliary	1	**MZ214**

MZN175

Locking kit

- allows locking of the device dolly in the on/off position
- will accept two padlocks with hasps of 4.75 mm diameter max.

Description	Cat. ref.
locking kit	**MZN175**

MZN177

Marking strip

Description	Cat. ref.
13 modules for modular devices	**MZN177**

To ensure localised control and protection of single and threephase motors. The rated motor current is set on the motor starter units by means of a current dial (in the front).

Technical data
- Adjustable thermal relay
- AC3 utilisation category
- Connection capacity: conductor cross-sections of the motor cables:
  - flexible 1 to 4 mm2
  - rigid 1 to 6 mm2

Options
Undervoltage release: MZ528N, MZ529N
Auxililary contacts: MZ520N, MZ522N
Alarm contact: MZ527N
Shunt trip: MZ523N

Comply with IEC/EN 60947 for low voltage switchgear.

The motor starter wiring should be implemented in compliance to IEC/EN 60947-1 table 9.

Breaking capacity

	Ic (kA) 230V AC	Ic (kA) 400V AC
0.16 to 10 A	100	100
16 to 25 A	16	16

MM512N

Motor starters

current range Ie	Standard power rating of 3 phase motors 50/60 Hz (AC3)		Width in module 17.5 mm	Pack qty.	Cat. ref.
	230 V (kW)	400 V (kW)			
0.1 to 0.16 A	-	-	2.5	1	**MM501N**
0.16 to 0.25 A	-	0.06	2.5	1	**MM502N**
0.25 to 0.4 A	0.06	0.09	2.5	1	**MM503N**
0.4 to 0.63 A	0.09	0.12	2.5	1	**MM504N**
0.63 to 1 A	0.09	0.12	2.5	1	**MM505N**
1 to 1.6 A	0.25	0.55	2.5	1	**MM506N**
1.6 to 2.5 A	0.55	0.8	2.5	1	**MM507N**
2.5 to 4 A	0.8	1.5	2.5	1	**MM508N**
4 to 6.3 A	1.5	2.5	2.5	1	**MM509N**
6.3 to 10 A	2.5	4	2.5	1	**MM510N**
10 to 16 A	4	7.5	2.5	1	**MM511N**
16 to 20 A	5.5	9	2.5	1	**MM512N**
20 to 25 A	7.5	12.5	2.5	1	**MM513N**
25 to 32 A	7.5	12.5	2.5	1	**MM514N**

MZ520N

Auxiliary contact

- indicates ON/OFF position

Description	Width in module 17.5 mm	Pack qty.	Cat. ref.
1NO + 1NC, 3.5 A - 230 V AC / 2 A - 400 V AC	0.5	1	**MZ520N**

Front auxiliary contact

- cannot be mounted behind a modular front plate

Description	Width in module 17.5 mm	Pack qty.	Cat. ref.
1NO, 1 A - 230 V AC / 400 V AC	0.5	1	**MZ522N**

Protection and control of circuits against overloads and short circuits.

Technical data
- sizes: L31, L38, L51, L58
- poles: 1P, 2P, 3P, 4P
- voltage rating: 500 V AC, 690V AC
- current rating: 25 to 125A
- frequency: 50/60Hz
- climate sealed: T2
- will accept accessories
- short circuit resistance with fuse link 8.5 x 31.5 mm: 280kA – 690V AC
- short circuit resistance with fuse link 10.3 x 38 mm:
  80kA – 690V AC / 120kA – 500 V AC
- short circuit resistance with fuse link 14 x 51 mm:
  100kA – 690V
- short circuit resistance with fuse link 22 x 58 mm:
  100kA – 690V

Connection capacity
- L31 (8.5x31.5):
  rigid conductors: 25mm^2
  flexible conductors: 16mm^2
- L38 (10x38):
  rigid conductors: 25mm^2
  flexible conductors: 16mm^2
- L51 (14x51):
  rigid conductors: 35mm^2
  flexible conductors: 25mm^2
- L58 (22x58):
  rigid conductors: 50mm^2
  flexible conductors: 35mm^2

Comply with IEC 60 269-2 and IEC 60 269-2-1.

LSN401

L31 fuse carriers 500V - 25A

- compatible with accessories

Description	Width in module 17.5 mm	Pack qty.	Cat. ref.
single pole	1	12	**LSN401**
two pole	2	6	**LSN402**
three pole	3	4	**LSN403**
3 phases + neutral link	4	3	**LSN404**
1 phase + neutral link	2	6	**LSN412**
single pole with signal light	1	12	**LSN431**

LSN504

L38 fuse carriers 690V - 32A

- compatible with accessories

Description	Width in module 17.5 mm	Pack qty.	Cat. ref.
single pole	1	12	**LSN501**
two pole	2	6	**LSN502**
three pole	3	4	**LSN503**
3 phases + neutral link	4	3	**LSN504**
1 neutral link	1	12	**LSN509**
1 phase + neutral link	2	6	**LSN512**
single pole with signal light	1	12	**LSN531**


LS601

L51 fuse carriers 690V - 50A

Description	Width in module 17.5 mm	Pack qty.	Cat. ref.
Fuse carriers compatible with accessories			
single pole	1.5	1	**LS601**
two pole	3	1	**LS602**
three pole	4.5	1	**LS603**
3 phases + neutral link	6	1	**LS604**
1 phase + neutral link	3	1	**LS612**
Fuse carriers accessory free			
single pole	1.5	10	**LR601**
two pole	3	5	**LR602**
three pole	4.5	3	**LR603**
3 phases + neutral link	6	2	**LR604**
1 phase + neutral link	3	5	**LR612**

Power, control and signaling interfaces

Power, control and signaling products are the complementary devices of a distribution board.
They allow to control and isolate circuits in residential and commercial installations.

04

Page

Characteristics
Contactors are power devices necessary for the remote switching and control of power circuits like heating circuits, lighting, ventilation, etc. It is recommended to associate them with command and energy management devices (time switches, thermostats, delay timers, etc.

Complies with IEC 61095

Technical data
- standard contactors range: 1, 2 and 3 module width
- power contacts rating: 230V AC or 400V AC, 50/60Hz
- without manual override control
- ratings: 25A, 40A, 63A
- utilisation categories: AC-7a / AC-1, AC-7b / AC-3

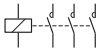
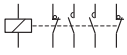
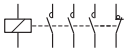
Recommendations
- the use of LZ060 (heat dissipation inserts) is strongly recommended every 2 contactors mounted in a row or between contactors and adjacent devices
- the use of the auxiliary contact ESC080 is not compatible with 1 module width low noise contactors

Connection capacities
- for 25A contactors:
  - 10mm² rigid conductor
  - 6mm² flexible conductor
- for 40A, 63A contactors:
  - 25mm² rigid conductor
  - 16mm² flexible conductor
- for coil connection:
  - 10mm² rigid conductor
  - 6mm² flexible conductor


ESC225


ESC425

230V AC - 50 Hz control coil voltage

Contact types	Symbol	Power contact rating	Width in module 17.5 mm	Pack qty	Cat. ref.
1NO		25A	1	12	**ESC125**
1NC		25A	1	12	**ESC126**
2NO		25A	1	12	**ESC225**
		40A	3	4	**ESC240**
		63A	3	4	**ESC263**
2NC		25A	1	12	**ESC226**
		40A	3	4	**ESC241**
		63A	3	4	**ESC264**
1NO + 1NC		25A	1	12	**ESC227**
3NO		25A	2	6	**ESC325**
		40A	3	4	**ESC340**
		63A	3	4	**ESC363**
4NO		25A	2	6	**ESC425**
		40A	3	4	**ESC440**
		63A	3	4	**ESC463**
4NC		25A	2	6	**ESC426**
		40A	3	4	**ESC441**
		63A	3	4	**ESC464**
2NO + 2NC		25A	2	6	**ESC427**
		40A	3	4	**ESC442**
		63A	3	4	**ESC465**
3NO + 1NC		25A	2	6	**ESC428**
		40A	3	4	**ESC443**
		63A	3	4	**ESC466**

Characteristics
Permits the remote control of a lighting circuits from several points using push-buttons in private buildings, small industry buildings and administration buildings. Latching relays operate when impulsed by a signal voltage. The impulse can be provided via a push button or switch. The first pulse operates the relay and latches it into its set (opposite) state, the next operation of the push button returns the relay into its reset (original) state.

Complies with IEC 60 669-1 and IEC 60 669-2-2

Technical data
- nominal voltage of the power circuit: Un = 250/400 V AC
- nominal voltage of the power circuit: 12V, 24V, 48V and 230 V AC
- nominal voltage of the control circuit: 12V, 24V, 110V DC
- conventional thermal current: 16A AC1
- control and power circuits
- nominal frequency: 50/60Hz
- contact types: 1NO, 2NO, 1NC+1NO, 4NO, 2NO+2NC, 3NO+1NC
- 4 types of auxiliaries

Connection capacity:
- rigid 10 mm²
- flexible 6 mm²

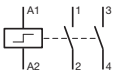
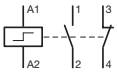
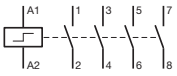
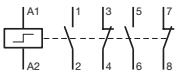
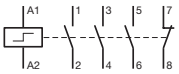

EPN510


EPN540


EPS410B


EPS450B

Latching relays

Contact types	Symbol	Coil V AC 50/60 Hz	Coil V DC	Power circuit AC1	Width in module 17.5 mm	Pack qty	Cat. ref.
1NO		230	110	16A-250V	1	12	**EPN510**
		48	24	16A-250V	1	1	**EPN501**
		24	12	16A-250V	1	1	**EPN513**
		12	-	16A-250V	1	1	**EPN511**
2NO		230	110	16A-250V	1	1	**EPN520**
		48	24	16A-250V	1	1	**EPN526**
		24	12	16A-250V	1	1	**EPN524**
		12	-	16A-250V	1	1	**EPN521**
1NC + 1NO		230	110	16A-250V	1	1	**EPN515**
		110	48	16A-250V	1	1	**EPN516**
		48	24	16A-250V	1	1	**EPN503**
		24	12	16A-250V	1	1	**EPN518**
		12	-	16A-250V	1	1	**EPN519**
4NO		230	110	16A-400V	2	1	**EPN540**
		48	24	16A-400V	2	1	**EPN548**
		24	12	16A-400V	2	1	**EPN541**
2NC + 2NO		230	110	16A-250V	2	1	**EPN525**
		24	12	16A-250V	2	1	**EPN528**
3NO + 1NC		230	110	16A-400V	2	1	**EPN546**

Electronic latching relay

Contact types	Symbol	Coil V AC 50/60 Hz	Power circuit AC1	Width in module 17.5 mm	Cat. ref.
1NO		230	16A-250V	1	**EPS410B**

Electronic latching relay with delay time

Contact types	Symbol	Coil V AC 50/60 Hz	Power circuit AC1	Width in module 17.5 mm	Cat. ref.
1NO		230	16A-250V	1	**EPS450B**

onekonekt

Characteristics
Modular switches are used as general switches in electrical low voltage distribution boards and for the isolation of loads during the interventions of maintenance.

Complies with IEC 60947-3

Technical data
- voltage: 240/415V
- frequency: 50/60Hz

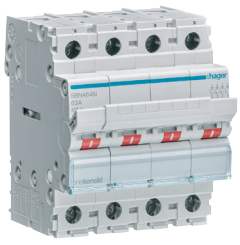
Technical features
- label holder
- IP2X terminals
- bi-connect
- all switches have a green/red indication on the toggle giving positive contact position

Connection capacity
- Size 1: In 16A, 25A
  16 mm^2 rigid conductor
  10 mm^2 flexible conductor
- Size 2: In 32A
  25 mm^2 rigid conductor
  16 mm^2 flexible conductor
- Size 3: In 40A, 63A, 80A, 100A,125A
  50 mm^2 rigid conductor
  35 mm^2 flexible conductor


SBN116N


SBN299N


SBN364N


SBN464N

onekonekt modular switches

Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
Single-pole			
16A	1	12	**SBN116N**
25A	1	12	**SBN125N**
32A	1	12	**SBN133N**
40A	1	12	**SBN141N**
63A	1	12	**SBN164N**
80A	1	12	**SBN180N**
100A	1	12	**SBN190N**
125A	1	12	**SBN199N**
Double-pole			
16A	1	12	**SBN216N**
25A	1	12	**SBN225N**
32A	2	6	**SBN233N**
40A	2	6	**SBN241N**
63A	2	6	**SBN264N**
80A	2	6	**SBN280N**
100A	2	6	**SBN290N**
125A	2	6	**SBN299N**
Three-pole			
16A	2	6	**SBN316N**
25A	2	6	**SBN325N**
32A	3	4	**SBN333N**
40A	3	4	**SBN341N**
63A	3	4	**SBN364N**
80A	3	4	**SBN380N**
100A	3	4	**SBN390N**
125A	3	4	**SBN399N**
Four-pole			
16A	2	6	**SBN416N**
25A	2	6	**SBN425N**
32A	4	3	**SBN433N**
40A	4	3	**SBN441N**
63A	4	3	**SBN464N**
80A	4	3	**SBN480N**
100A	4	3	**SBN490N**
125A	4	3	**SBN499N**

Characteristics
Modular switches are used as general switches in electrical low voltage distribution boards and for the isolation of loads during the interventions of maintenance.

Technical data
- 3 sizes are available:
  Size 1: In 16 A, 25 A, 32 A
  Size 2: In 32 A, 40 A, 63 A
  Size 3: In 63 A, 80 A, 100 A, 125 A
- 230/400V 50/60 Hz
- utilisation category AC22A from 16A to 125A for mixed alternative load (inductive and resistive)
- version with light indicator in 1 and 2 poles from 16 to 32A
- IP2X with terminal shrouds
- all switches have a green/red indication on the toggle giving positive contact position
- MZN175 padlocking kit allows to lock in the ON and OFF position

Connection capacity
- Size 1: In 16 A, 25 A, 32 A
  16 mm^2 rigid conductor
  10 mm^2 flexible conductor
- Size 2: In 32 A, 40 A, 63 A
  25 mm^2 rigid conductor
  16 mm^2 flexible conductor
- Size 3: In 63 A, 80 A, 100 A, 125 A
  50 mm^2 rigid conductor
  35 mm^2 flexible conductor

Complies with
- IEC 60 669-1, IEC 60 669-2-4, IEC 60 947-3 for the size 1
- IEC 60 669-2-4, IEC 60 947-3 for the size 2
- IEC 60 947-3 for the size 3

SBN163

Single pole

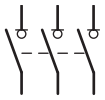
Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	16 A	1	12	**SBN116**
	25 A	1	12	**SBN125**
	32 A	1	12	**SBN132**
2	32 A	1	12	**SBN133**
	40 A	1	12	**SBN140**
	63 A	1	12	**SBN163**
3	63 A	1	12	**SBN164**
	80 A	1	12	**SBN180**
	100 A	1	12	**SBN190**
	125 A	1	12	**SBN199**

SBN263

Double pole

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	16 A	1	12	**SBN216**
	25 A	1	12	**SBN225**
	32 A	1	12	**SBN232**
2	32 A	2	6	**SBN233**
	40 A	2	6	**SBN240**
	63 A	2	6	**SBN263**
3	63 A	2	6	**SBN264**
	80 A	2	6	**SBN280**
	100 A	2	6	**SBN290**
	125 A	2	6	**SBN299**

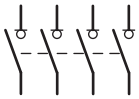
SBN363



Three pole

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	16 A	2	6	**SBN316**
	25 A	2	6	**SBN325**
	32 A	2	6	**SBN332**
2	32 A	3	4	**SBN333**
	40 A	3	4	**SBN340**
	63 A	3	4	**SBN363**
3	63 A	3	4	**SBN364**
	80 A	3	4	**SBN380**
	100 A	3	4	**SBN390**
	125 A	3	4	**SBN399**

SBN463



Four pole

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	16 A	2	6	**SBN416**
	25 A	2	6	**SBN425**
	32 A	2	6	**SBN432**
2	32 A	4	3	**SBN433**
	40 A	4	3	**SBN440**
	63 A	4	3	**SBN463**
3	63 A	4	3	**SBN464**
	80 A	4	3	**SBN480**
	100 A	4	3	**SBN490**
	125 A	4	3	**SBN499**

SBB116

Single pole with indicator light

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	16 A	1	1	**SBB116**
	25 A	1	1	**SBB125**
	32 A	1	1	**SBB132**

SBB225

Double pole with indicator light

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	16 A	1	1	**SBB216**
	25 A	1	1	**SBB225**
	32 A	1	1	**SBB232**

ESC080

Accessories

Description	Pack qty	Cat. ref.
auxiliary contact compatible with switch disconnectors from 16 to 125 A, 6 A, 230 V AC	1	**ESC080**
terminal shroud for switches 32 A to 125 A	4	**MZN120**
phase barrier shield	set of 3	**MZN121**
padlocking kit	1	**MZN175**

Characteristics
The changeover switch range is the solution to guarantee supply of load by controlling 2 power circuits.

Technical data
In from 25A to 63A
- use category AC22A from 25A to 40A for mixed alternative load, inductive and resistive (AC21A for 63A)
- IP2X with terminal shrouds
- frequency 50/60 Hz

Connection capacity
In 25 A and 40 A
16 mm^2 rigid conductor
10 mm^2 flexible conductor
In 63A
25 mm^2 rigid conductor
16 mm^2 flexible conductor

Complies with IEC 60 669-1, IEC 60947-3

MZN175 padlocking kit allows to lock in the ON and OFF position.

SFH125

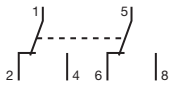
1-way changeover switch and common point on top (I-II)

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	25A	1	12	**SFH125**

SFM125

2-way changeover switch 1NO+1NC (I-II)

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	25A	1	12	**SFM125**



2-way changeover switch and common point on top (I-II)

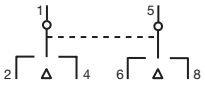
Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	25A	1	6	**SFH225**

SFT125

Single pole centre-off changeover switches and common point on top (I-O-II)

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	25A	1	12	**SFT125**
	40A	1	12	**SFT140**

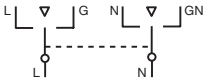
SFT440



Double pole centre-off changeover switches and common point on top (I-O-II)

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	25A	1	6	**SFT225**
	40A	1	6	**SFT240**
	40A	1	4	**SFT340**
	40A	1	3	**SFT440**

SF463



Changeover switches with centerpoint (I-O-II)

Size	Characteristics	Width in module 17.5 mm	Pack qty	Cat. ref.
1	63A	4	1	**SF263**
	63A	8	1	**SF463**

ESC080

Accessories

Description	Pack qty	Cat. ref.
Auxiliary contact		
compatible with switch disconnectors from 16 to 125 A, 6 A, 230 V AC	1	**ESC080**
Terminal shroud		
for switches 32 A to 125 A	4	**MZN120**
Phase barrier shield		
set of 3 pieces	3	**MZN121**
Padlocking kit		
padlocking kit	1	**MZN175**

Characteristics
These products are used for remote controlling signalisation of any event in any electrical installation (domestic, tertiary & industrial).
LED technology providing longer life, new design, integrated label holder.

Push buttons
- versions: impulse push buttons and latching push buttons,
- contact types: 1NO, 1NC, 2NO, 2NC, 1NC+1NO

Indicator lights
- light type: LED technology
- supply voltage: 12/48V AC/DC and 230/415V AC
- colors: green, red, orange, blue, clear
- range: 1,2 and 3 indicators light possibility in the same device
- power consumption: 0.8 watts
- burning hours: up to 100,000h
These versions with indicator lights are equipped with green or red diffuser. (led technology)

Connection capacity
- 10 mm^2 rigid,
- 6 mm^2 flexible

Comply with IEC 60947-5-1 and IEC 62094-1

SVN122

Single indicator light

- 230 V AC

Description	Width in module 17.5 mm	Pack qty	Cat. ref.
green LED light	1	12	**SVN121**
red LED light	1	12	**SVN122**
orange LED light	1	12	**SVN123**
blue LED light	1	12	**SVN124**
clear LED light	1	12	**SVN125**

SVN126

Double indicator light

- 230 V AC

Description	Width in module 17.5 mm	Pack qty	Cat. ref.
green and red LED light	1	12	**SVN126**
clear LED light	1	12	**SVN128**

SVN127

Triple indicator light

- 230 V AC

Description	Width in module 17.5 mm	Pack qty	Cat. ref.
red LED light	1	12	**SVN127**
red/orange/green LED light	1	12	**SVN129**
green LED light	1	12	**SVN221**
red/orange/blue LED light	1	12	**SVN222**

SVN134

Low voltage indicator lights

- 12 to 48 V AC/DC

Description	Width in module 17.5 mm	Pack qty	Cat. ref.
green LED light	1	12	**SVN131**
red LED light	1	12	**SVN132**
orange LED light	1	12	**SVN133**
blue LED light	1	12	**SVN134**
clear LED light	1	12	**SVN135**
green/red LED light	1	12	**SVN136**

Earth leakage relays
- Voltage range : 230V +/- 20%
- Network voltage: 50 to 700 V
- Frequency: 50 / 60 Hz
- Working temperature: -10 to +55°C
- Storage temperature: -25 to +70°C
- Max. cable lenght to torroids: 25m non-twisted cable 0.5 to 1.5mm² 50m twisted cable
- Standards: IEC 60755, IEC 947-2 annex B, IEC 61543, IEC 61008-1, IEC 61000-6, IEC 60755

Torroids
- Frequency: 50 / 60 Hz
- Working temperature: - 10 to +55°C
- Storage temperature: - 25 to +70°C
- IP rating: IP 41


HR510

Earth leakage relays

Description	Power absorbed	Positive safety contact	Cat. ref.
Earth leakage relays non adjustable			
fixed In: 0.03A instantaneous tripping	3VA		**HR500**
fixed In: 0.,3A instantaneous tripping	3VA		**HR502**
Earth leakage relays adjustable			
adjustable In: 0.03-0.1- 0.3-0.5-1-3-10A delay settings: inst. 0-0.1-0.3-0.4-0.5-1-3 s In/drop output: 0.3-10 A/0 to 3 s	5VA	1 C/O	**HR510**
with bargraph display adjustable In: 0.03-0.1-0.3-0.5-1-3-10A delay settings: inst. 0-0.1-0.3-0.4-0.5-1-3 s In/drop output: 0.3-10 A/0 to 5 s	5VA	1 C/O	**HR520**
adjustable In: 0.03-0.1-0.3-0.5-1-3-10A delay settings: inst. 0-0.1-0.2-0.25-0.3-0.4-0.5 s	5VA	1 C/O	**HR522**
adjustable In: 0.5-1- 3-5-10-20-30A delay settings: inst. 0-0.1-0.2-0.25-0.3-0.4-0.5 s	5VA	1 C/O	**HR523**
adjustable In: 0.03-0.1- 0.3-0.5-1-3-10A delay settings: inst./sel. 0.02-0.1-0.3-0.4-0.5 s / 0.75-1-3-5-10 s	6VA	1 C/O	**HR525**
adjustable In: 0.03-0.1-0.3-0.5-1-3-10-30A delay settings: inst./sel. 0.02-0.1-0.3-0.4-0.5 s / 0.75-1-3-5-10 s	6VA	1 C/O	**HR534**

Circular torroids

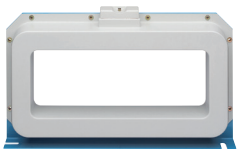

HR741

Description	Cat. ref.
internal 30 mm	**HR700**
internal 35 mm	**HR741**
internal 70 mm	**HR742**
internal 105 mm	**HR743**
internal 140 mm	**HR744**
internal 210 mm	**HR745**


HR822

Open rectangular torroids

Description	Cat. ref.
80 x 80 mm	**HR822**
80 x 120 mm	**HR823**
80 x 160 mm	**HR824**


HR831

Rectangular torroids

Description	Cat. ref.
75 x 175 mm	**HR830**
115 x 305 mm	**HR831**
150 x 350 mm	**HR832**
200 x 500 mm	**HR833**

Brass distribution terminals
- suitable for copper conductors
- for live, neutral or earth distribution
- In : 60A

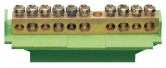
Brass distribution terminal without support
- mounting on support (KZ0xx)
- directly on the structure
- delivered with mounting screws

Brass distribution terminal on support
- neutral: blue support
- live: beige support

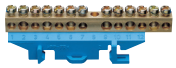

KM04L


KM08L


KM07N


KM10B


KM10E


KM13N


KM11B


K151


KM25N


K158

K159

Brass distribution terminals

- KM17N and K25N includes 2 supports

Connection capacity (mm2)	Number of connections	Length (mm)	.Cat. ref with support neutral	earth	live	without support
x 16 + 2 x 10 2	4	30	-	-	**KM04L**	**K140**
x 16 + 4 x 10 4	8	30	-	-	**KM08L**	-
x 16 + 4 x 10 3	7	49	**KM07N**	**KM07E**	**KM07L**	**K142**
x 16 + 5 x 10 5	10	67	**KM10A**	**KM10B**	**KM10C**	**K143**
x 16 + 6 x 10 5	11	73	**KM11N**	**KM11E**	**KM11L**	**K144**
x 16 double tightening + 8 x 10 2	10	69	**KM10N**	**KM10E**	**KM10L**	**K145**
x 16 + 7 x 10 6	13	85	**KM13N**	**KM13E**	-	**K148**
x 25 + 5 x 16 + 5 x 10 1	11	85	-	**KM11B**	-	**K151**
x 25 + 8 x 16 + 8 x 10 1	17	121	**KM17N**	**KM17E**	-	**K156**
x 25 + 11 x 16 + 13 x 10 1	25	169	**KM25N**	**KM25E**	-	**K158**
x 25 + 8 x 16 + 29 x 10 1		242	-	-	-	**K159**
x 25 + 16 x 16 + 61 x 10 1		482	-	-	-	**K160F**
x 25 + 33 x 16 + 129 x 10 1		992	-	-	-	**K162F**


KZ012


KZ013


KZ014

Support for brass distribution terminals

- for K140 to K162
- insulated support
- delivered with 8 x M4 screws

Description	Cat. ref.
blue support, for neutral	**KZ012**
green / yellow support, for earth	**KZ013**
beige support, for live	**KZ014**

Insulated universal supply busbars
- blue for neutral,
- brown for phase
- for MCB's and fuse carriers 1 module width

Single, double, three and four pole busbars
- for multipole MCB from 0,5 to 63A
- for multipole, fuse carriers and SB switches

Comply with IEC 60947-7 and IEC 60439-1.

KB163P

KB163N

KB190C

Single pole prong supply busbars

- 63 A are equipped with protection profiles

In	Section	Width in module	Pack qty.	Cat. ref.
63 A	10 mm²	13	50	**KB163P**
63 A	10 mm²	13	50	**KB163N**
100 A	20 mm²	24	10	**KB190C**
100 A	20 mm²	57 (1m)	10	**KB190B**

KB263A

Double pole prong supply busbars

In	Section	Width in module	Pack qty.	Cat. ref.
63 A	10 mm²	12	10	**KB263A**
63 A	10 mm²	24	10	**KB263C**
80 A	16 mm²	56 (1m)	10	**KB280B**

KB363A

Three pole prong supply busbars

In	Section	Width in module	Pack qty.	Cat. ref.
63 A	10 mm²	12	10	**KB363A**
63 A	10 mm²	24	10	**KB363C**
80 A	16 mm²	12	25	**KB380A**
80 A	16 mm²	57 (1m)	10	**KB380B**

KB463A

Four pole prong supply busbars

- equipped with end caps

In	Section	Width in module	Pack qty.	Cat. ref.
63 A	10 mm²	12	10	**KB463A**
63 A	10 mm²	24	10	**KB463C**
80 A	16 mm²	56 (1m)	10	**KB480B**

KZ021

End caps

- to insulate the ends of the busbars

Description	Pack qty.	Cat. ref.
for single busbars KB163P, KB163N	1	**KZ021**
for double busbars KB263A, KB263C	1	**KZ022**
for double / three pole busbars KB280B, KB363A, KDN263B, KB363C, KB380B, KDN363B	1	**KZ023A**
for four pole busbars KB463A, KB463C, KB480B, KDN463B	1	**KZ024**

KZ059

Protection profiles

- to insulate the spare prongs

Description	Pack qty.	Cat. ref.
5 modules width protection profile	10	**KZ059**

Fork insulated busbars
For modular devices equipped with biconnect terminals
- multipolar MCB's from 0.5 to 63A (except Ph+N) and RCCB's

KD190B

Single pole fork supply busbars

In	Section	Width in module	Cat. ref.
63 A	10 mm²	57	**KD163B**
80 A	16 mm²	57	**KD180B**
100 A	20 mm²	57	**KD190B**


KD263B

Double pole fork supply busbars

In	Section	Width in module	Cat. ref.
63 A	10 mm²	56	**KD263B**
80 A	16 mm²	56	**KDN280B**


KD363B

Three pole fork supply busbars

In	Section	Width in module	Cat. ref.
63 A	10 mm²	57	**KD363B**
80 A	16 mm²	57	**KD380B**


KD463B

Four pole fork supply busbars

In	Section	Width in module	Cat. ref.
63 A	10 mm²	56	**KD463B**
80 A	16 mm²	56	KDN480B


KZ023A

End caps

- to insulate the ends of the busbars

Description	Pack qty.	Cat. ref.
for single pole busbars KD163B, KD180B, KD190B	1	**KZN021**
for double pole busbars KD263B	1	**KZ022**
for double pole busbars KDN280B	1	**KZN023**
for three pole busbars KD363B, KD380B	1	**KZ023A**
for four pole busbars KD463B	1	**KZ024**
for four pole busbars KDN480B	1	**KZN024**


KZ059

Protection profiles

- to insulate the spare fork

Description	Pack qty.	Cat. ref.
5 modules width protection profile	10	**KZ059**

Energy monitoring and measurement

In the current market scenario, monitoring and measurement of energy consumption is unavoidable.
We offer solutions to monitor and control the energy consumption.

05

Page

Single Phase Direct Connect kWh Meters - MID Approved

Description:
- MID approved meter range (except EC...180T)
- A range of both direct connect and CT supplied din rail mounted meters

Characteristics:
- CT supplied meters compatible with 1 A / 5A CT's (not suitable for use with cables / ct's from page 38) - Choice of communication options – pulse output kWh, Modbus or Mbus

ECN140D

Description	Width	Cat ref.
40A kWh Meters		
1Ph kWh Meter Direct 40A Pulsed Output 1M	1 Mod	**ECN140D**
1Ph kWh Meter Direct 40A 1M Pulsed Output MID	1 Mod	**ECP140D**
1Ph kWh Meter Direct 40A 1M MBUS MID	1 Mod	**ECM140D**
1Ph kWh Meter Direct 40A 1M MODBUS MID	1 Mod	**ECR140D**

ECR180T

3 x 80A kWh Meters - Not MID Approved		
1Ph kWh Meter Direct 3x80A 4M Pulsed Output	4 Mod	**ECP180T**
1Ph kWh Meter Direct 3x80A 4M MBUS	4 Mod	**ECM180T**
1Ph kWh Meter Direct 3x80A 4M MODBUS	4 Mod	**ECR180T**
1Ph kWh Meter Direct 3x80A 4M AGARDIO	4Mode	**ECA180T**

ECP180D

80A kWh Meters		
1Ph kWh Meter Direct 80A 2M Pulsed Output MID	2 Mod	**ECP180D**
1Ph kWh Meter Direct 80A 2M MBUS MID	2 Mod	**ECM180D**
1Ph kWh Meter Direct 80A 2M MODBUS MID	2 Mod	**ECR180D**
1Ph kWh Meter Direct 80A 2M AGARDIO MID	2Mode	**ECA180D**

Three Phase Direct Connect kWh Meters - MID Approved

ECP380D

Description	Width (1 Mod=17.5mm)	Cat ref.
80A kWh Meters		
3Ph kWh Meter Direct 80A 4M MID	4 Mod	**ECP380D**
3Ph kWh Meter Direct 80A 4M MBUS MID	4 Mod	**ECM380D**
3Ph kWh Meter Direct 80A 4M MODBUS MID	4 Mod	**ECR380D**
3Ph kWh Meter Direct 80A 4M AGARDIO MID	4Mode	**ECA380D**

ECM310D

125A kWh Meters		
3Ph kWh Meter Direct 125A 6M S0 MID	6 Mod	**ECP310D**
3Ph kWh Meter Direct 125A 6M MBUS MID	6 Mod	**ECM310D**
3Ph kWh Meter Direct 125A 6M MODBUS MID	6 Mod	**ECR310D**
3Ph kWh Meter Direct 125A 6M AGARDIO MID	6Mode	**ECA310D**

Three Phase CT Fed kWh Meters

ECM300C

Description	Width (1 Mod=17.5mm)	Cat ref.
1-5A kWh Meters		
3Ph kWh Meter via CT 1-5A 4M Pulsed Output MID	4 Mod	**ECP300C**
3Ph kWh Meter via CT 1-5A 4M MBUS MID	4 Mod	**ECM300C**
3Ph kWh Meter via CT 1-5A 4M MODBUS MID	4 Mod	**ECR300C**
3Ph kWh Meter via CT 1-5A 4M AGARDIO MID	4 Mod	**ECA300C**

▮ = 17.5 mm width module

HTG471H

HTG472H

HTG480H

SMC120R

HTG467H

Accessories

Agardio RJ45 + Ground Modbus Cable Modbus connection	2 x RJ45 + earth / 1 m	**HTG471H**
	2 x RJ45 + earth / 2 m	**HTG472H**
	2 x RJ45 + earth / 3 m	**HTG474H**
Agardio RJ45 Groundless Modbus Cable Connection between products	2 x RJ45 / 0,2 m	**HTG480H**
	2 x RJ45 / 1 m	**HTG481H**
	2 x RJ45 / 2 m	**HTG482H**
	2 x RJ45 / 5 m	**HTG484H**
Resistance	End-of-line Resistance 120 Ω	**SMC120R**
	RJ45 end-of-line resistance 120 Ω	**HTG467H**

Functional characteristics of single-phase metering

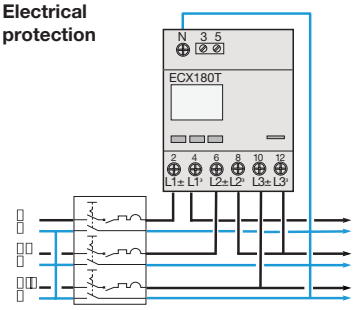
Ref	ECN140D	ECP140D	ECM140D	ECR140D	ECP180D	ECM180D	ECR180D	ECA180D	ECP180T	ECM180T	ECR180T ECA180T
	40 A - 230 V AC				80 A - 230 V AC				3 x 80 A - 230 V AC		
Current Intensity	-	•	•	•	•	•	•	•	•	•	•
Voltage	-	•	•	•	•	•	•	•	•	•	•
Power Factor	-	•	•	•	•	•	•	•	•	•	•
Freequency	-	•	•	•	•	•	•	•	•	•	•
Active Power	-	•	•	•	•	•	•	•	•	•	•
Apparent Power	-	-	via com	via com	•	•	•	•	•	•	•
Reactive Power	-	-	via com	via com	•	•	•	•	•	•	•
Active Energy	•	•	•	•	•	•	•	•	•	•	•
Apparent Energy	-	-	-	-	-	-	-	-	-	-	-
Reactive Energy	-	-	via com	via com	•	•	•	•	•	•	•
Partial Consumption Reset	-	-	-	-	•	•	•	•	•	•	•
Import / Export of Energy	-	•	•	•	•	•	•	•	•	•	•
Tariff Control	-	•	•	•	•	•	•	•	•	•	•
Number of Tariffs Managed (by physical entry / communication)	1/0	1/0	0/2	0/8	2/0	2/2	2/8	0/8	2/0	2/2	2/4
Instrumentation Value	-	•	•	•	•	•	•	•	•	•	•
Input/Output Function	-	•	-	-	•	-	-	-	-	-	-
Configurable I/O Function	-	-	-	-	•	-	-	-	-	-	-
Display of Previous Values	-	-	-	-	-	-	-	-	-	-	-
Programming of Maximum Demand Threshold	-	-	-	-	-	-	-	-	-	-	-
Load Profile	-	-	-	-	-	-	-	-	-	-	-
Harmonics Management	-	-	-	-	-	-	-	-	-	-	-
Alarm Function	-	-	-	-	-	-	-	-	-	-	-
Minimum / Maximum Demand	-	-	-	-	-	-	-	-	-	-	-
Tariff Control via Physical Input	-	-	-	-	•	-	•	-	•	-	•
Tariff Control via Communication System	-	-	•	•	-	•	•	•	-	•	•
Internal Memory Backup	•	•	•	•	•	•	•	•	•	•	•

Functional characteristics of three-phase metering

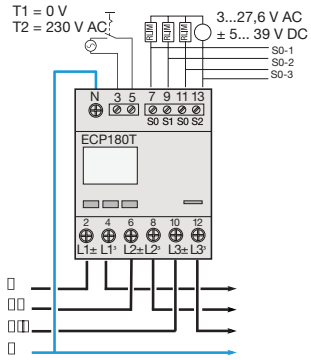
Ref	ECN140D	ECM380D	ECR380D ECA380D	ECP310D	ECM310D	ECR310D ECA310D	ECP300C	ECM300C	ECR300C ECA300C
Current Intensity	•	•	•	•	•	•	•	•	•
Voltage	•	•	•	•	•	•	•	•	•
Power Factor	•	•	•	•	•	•	•	•	•
Freequency	•	•	•	•	•	•	•	•	•
Active Power	•	•	•	•	•	•	•	•	•
Apparent Power	•	•	•	•	•	•	•	•	•
Reactive Power	•	•	•	•	•	•	•	•	•
Active Energy	•	•	•	•	•	•	•	•	•
Apparent Energy	•	•	•	•	•	•	•	•	•
Reactive Energy	-	-	-	-	-	-	-	-	-
Partial Consumption Reset	•	•	•	•	•	•	•	•	•
Import / Export of Energy	•	•	•	•	•	•	•	•	•
Tariff Control	•	•	•	•	•	•	•	•	•
Number of Tariffs Managed (by physical entry / communication)	1/10	1/0	0/2	0/8	2/0	2/2	2/8	0/8	2/0
Instrumentation Value	•	•	•	•	•	•	•	•	•
Input/Output Function	•	-	-	•	-	-	•	-	-
Configurable I/O Function	•	-	-	-	•	-	•	-	-
Display of Previous Values	-	-	-	-	-	-	-	-	-
Programming of Maximum Demand Threshold	-	-	-	-	-	-	-	-	-
Load Profile	-	-	-	-	-	-	-	-	-
Harmonics Management	-	-	-	-	-	-	-	-	-
Alarm Function	-	-	-	-	-	-	-	-	-
Minimum / Maximum Demand	-	-	-	-	-	-	-	-	-
Tariff Control via Physical Input	•	-	•	•	-	•	•	-	•
Tariff Control via Communication System	-	•	•	-	•	•	-	•	•
Internal Memory Backup	•	•	•	•	•	•	•	•	•

Wiring diagrams

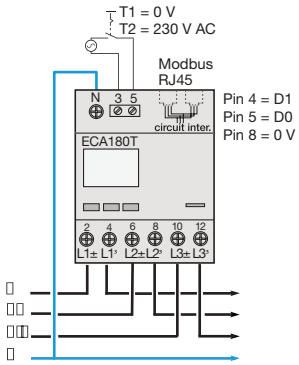
Electrical protection



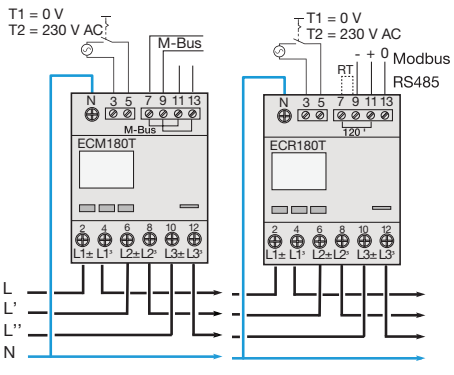
ECP180T



ECA180T



ECM180T **ECR180T**



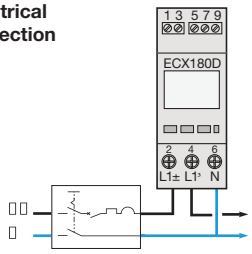
120 Ω Activated by shunt

Technical specifications

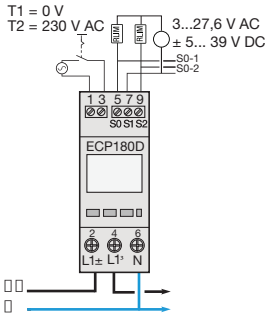
	Direct single-phase 3 x 80 A, common neutral			
Ref.	ECP180T	ECM180T	ECR180T	ECA180T
Voltage Nominal	1 x 230 V			
Voltage Range	184V - 276 V			
Frequency	45...65 Hz			
General Specifications:				
Product Certification	-			
Voltage Circuit Consumption	≤2 /≤1			
Current Circuit Consumption	≤1			
Base Current (Ib)	5 A			
Reference Current (Iref)	5 A			
Transition current	0.5 A			
Maximum Current (Imax)	80 A			
Minimum Current (Imin)	0.25 A			
Start-up Current	0.015 A			
Cable Sections : -rigid -flexible	2.5 - 33 mm² 2.5 - 33 mm²			
Neutral Section	Auxiliary power supply: 2.5 mm²			
Torque for Power Terminals	1 Nm			
Accuracy Class	Active Cl.1 / Reactive Cl.2			
Measurement accuracy in %	Active 1% / Reactive 2%			
Display Type	LCD (backlit)			
Material	Plastic			
Protection	Fuse protection 80A single phase (x3 meters)			
Input characteristics				
Number of Inputs	1			
Voltage	230 V AC			
OFF=T1	0 V			
ON=T2	230 V AC			
Cable Sections	0.8 - 2.5 mm² (both rigid and flexible)			
Torque	0.5 Nm			
Impulse Output Characteristics:				
Number of Outputs	3	-	-	-
Max Impulse Current: 39 VDC	90 mA	-	-	-
Voltage AC / DC	3-27.6/±5-39	-	-	-
Output frequency	1-1000 p/kWh	-	-	-
Pulse Duration	30-100 ms	-	-	-
Cable Sections : - rigid flexible	0.8 - 2.5 mm² 0.8 - 2.5 mm²	-	-	-
Torque	0.5 Nm	-	-	-
Communication Output Characteristics:				
Protocol	-	M-Bus	Modbus RTU	
Connector type	-	Terminal screws		RJ45
Cable Sections	-	0.8 - 2.5 mm²		-
Torque	-	0.5 Nm		-
Front Panel Impulse Indicator (LED)				
Impulse Frequency	1000 p/kWh			
EMC Compatibility:				
Voltage Shock Test	6 kV			
Overvoltage Test	4 kV			
Environmental Data:				
Operating Temperature	-25...+55 °C			
Storage Temperature	-25...+70 °C			
Humidity	≤ 95% at 20°C			
Fire/Heat Resistance	V0			
Water/Dust Resistance Installed / Not installed	IP51/IP20			
Mechanical Environment	M1			
Electromechanical Environment	E2			
Dimensions L x H x D	72 x 92 x 60			
Number of DIN Modules	4 ▮			
Standards	EN 50470-1/3, CEI 62053-21/23, CEI 61557-12, DIN 43880, EN 60715,			
	EI 62053-31	-	-	-

Wiring diagrams

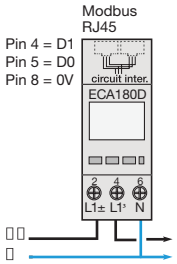
Electrical protection



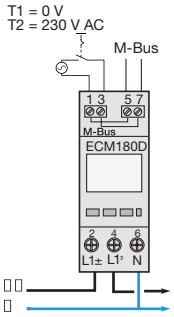
ECP180D



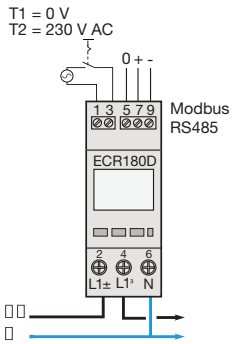
ECA180D



ECM180D



ECR180D



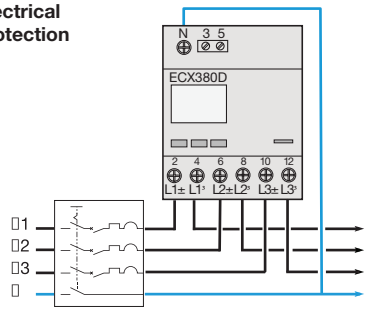
Technical specifications

	Direct single-phase 80 A			
Ref.	**ECP180D**	**ECM180D**	**ECR180D**	**ECA180D**
Voltage Nominal	1 x 230 V			
Voltage Range	92 V - 276 V			
Frequency	45...65 Hz			
General Specifications:				
Product Certification	MID, Classe B			
Voltage Circuit Consumption	≤2 / ≤1			
Current Circuit Consumption	≤1			
Base Current (Ib)	5 A			
Reference Current (Iref)	5 A			
Transition current	0.5 A			
Maximum Current (Imax)	80 A			
Minimum Current (Imin)	0.25 A			
Start-up Current	0.015 A			
Cable Sections : -rigid -flexible	2.5 - 33 mm² 2.5 - 33 mm²			
Torque for Power Terminals	2 Nm			
Accuracy Class	Active Cl.1 / Reactive Cl.2			
Measurement accuracy in %	Active 1% / Reactive 2%			
Display Type	LCD (backlit)			
Material	Plastic			
Protection	Fuse protection 80 A single phase (x1 meters)			
Input characteristics				
Number of Inputs	1			-
Voltage	230 V AC			-
OFF=T1	0 V			-
ON=T2	230 V AC			-
Cable Sections	1 - 4 mm² (both rigid and flexible)			-
Torque	1 Nm			-
Impulse Output Characteristics:				
Number of Outputs	2	-	-	-
Max Impulse Current: 39 VDC	90 mA	-	-	-
Voltage AC / DC	3-27.6/±5-39	-	-	-
Output frequency	1 - 1000 p/kWh	-	-	-
Pulse Duration	30 - 100 ms	-	-	-
Cable Sections : -rigid -flexible	0.8 - 2.5 mm² 0.8 - 2.5 mm²	-	-	-
Torque	0.5 Nm	-	-	-
Communication Output Characteristics:				
Protocol	-	M-Bus	Modbus RTU	
Connector type	-	Terminal screws		RJ45
Cable Sections	-	0.8 - 2.5 mm²		-
Torque	-	0.5 Nm		-
Front Panel Impulse Indicator (LED)				
Impulse Frequency	1000 p/kWh			
EMC Compatibility:				
Voltage Shock Test	6 kV			
Overvoltage Test	4 kV			
Environmental Data:				
Operating Temperature	-25...+55°C			
Storage Temperature	-25...+70°C			
Humidity	≤ 95% at 20°C			
Fire/Heat Resistance	V0			
Water/Dust Resistance Installed / Not installed	IP51/IP20			
Mechanical Environment	M1			
Electromechanical Environment	E2			
Dimensions L x H x D	36x92x60			
Number of DIN Modules	2 ▮			
Standards	EN 50470-1/3, CEI 62053-21/23, CEI 61557-12, DIN 43880,EN 60715, EI 62053-31	-	-	-

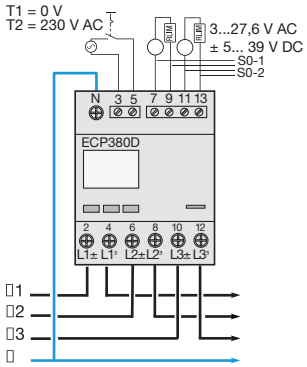
▮ = 17.5 mm width module

Wiring diagrams

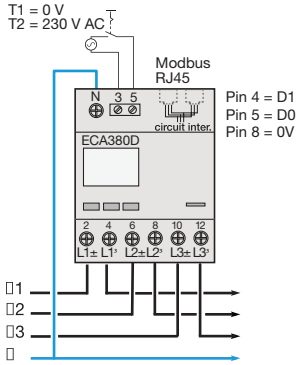
Electrical protection



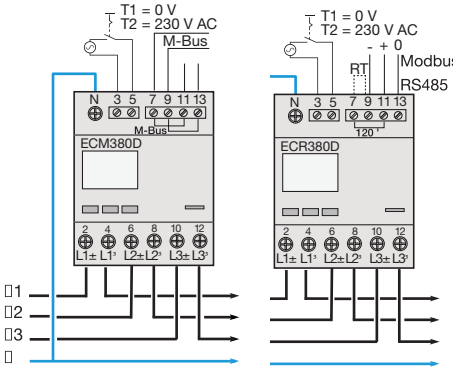
ECP380D



ECA380D



ECM180D **ECR180D**



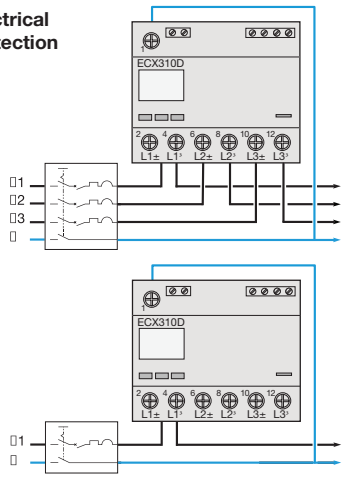
120 Ω Activated by shunt

Technical specifications

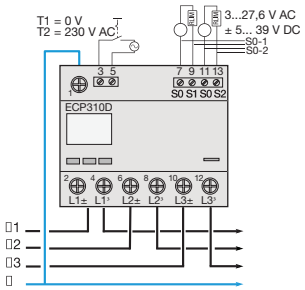
	Direct three-phase 80 A			
Ref.	ECP380D	ECM380D	ECR380D	ECA380D
Voltage Nominal	1 x 400 V			
Voltage Range	160 V - 480 V			
Frequency	45...65 Hz			
General Specifications:				
Product Certification	MID, Class B			
Voltage Circuit Consumption	≤2/ ≤0.6			
Current Circuit Consumption	≤0.7			
Base Current (Ib)	5 A			
Reference Current (Iref)	5 A			
Transition current	0.5 A			
Maximum Current (Imax)	80 A			
Minimum Current (Imin)	0.25 A			
Start-up Current	0.015 A			
Cable Sections	2.5 - 33 mm²			
Neutral Section	Auxiliary power supply: 2.5 mm²			
Torque for Power Terminals	2 Nm			
Accuracy Class	Active Cl.1 / Reactive Cl.2			
Measurement accuracy in %	Active 1% / Reactive 2%			
Display Type	LCD (backlit)			
Material	Plastic			
Protection	Fuse protection 80 A single phase (x1 meters)			
Input characteristics				
Number of Inputs	1			
Voltage	230 V AC			
OFF=T1	0 V			
ON=T2	230 V AC			
Cable Sections	0.8 - 2.5 mm² (both rigid and flexible)			
Torque	0.5 Nm			
Impulse Output Characteristics:				
Number of Outputs	2	-	-	-
Max Impulse Current: 39 VDC	90mA	-		-
Voltage AC / DC	3-27.6/±5-39	-		-
Output frequency	1-200 p/kWh	-		-
Pulse Duration	30 - 200 p/kWh	-		-
Cable Sections : - rigid flexible	0.8 - 2.5 mm² 0.8 - 2.5 mm²	-	-	-
Torque	0.5 Nm	-	-	-
Communication Output Characteristics:				
Protocol	-	M-Bus	Modbus RTU	
Connector type	-	Terminal screws		RJ45
Cable Sections	-	0.8 - 2.5 mm²		-
Torque	-	0.5 Nm		-
Front Panel Impulse Indicator (LED)				
Impulse Frequency	1000 pulses / kWh			
EMC Compatibility:				
Voltage Shock Test	6 kV			
Overvoltage Test	4 kV			
Environmental Data:				
Operating Temperature	-25…+55 °C			
Storage Temperature	-25...+70 °C			
Humidity	≤ 95% at 20°C			
Fire/Heat Resistance	V0			
Water/Dust Resistance Installed / Not installed	IP51/IP20			
Mechanical Environment	M1			
Electromechanical Environment	E2			
Dimensions L x H x D	72 x 92 x 60			
Number of DIN Modules	4 ▮			
Standards	EN 50470-1/3, CEI 62053-21 / 23, CEI 61557-12, DIN 43880, EN 60715,			
	CEI 62053-31	-	-	-

Wiring diagrams

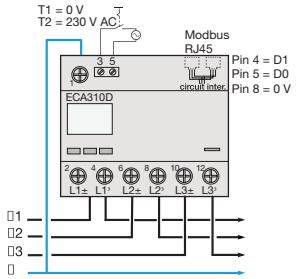
Electrical protection



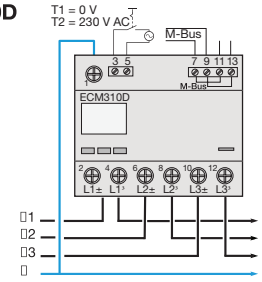
ECP310D



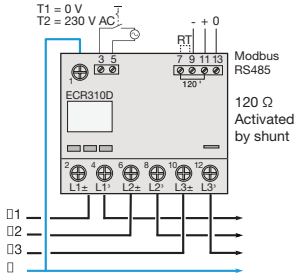
ECA310D



ECM310D



ECR310D



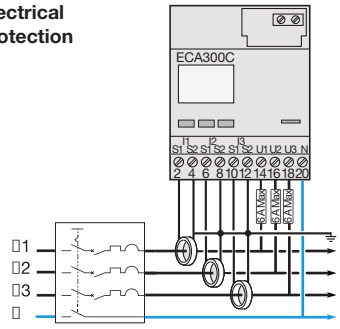
Technical specifications

	Direct three-phase 125 A			
Ref.	**ECP310D**	**ECM310D**	**ECR310D**	**ECA310D**
Voltage Nominal	1 x 400 V			
Voltage Range	160 V 480 V			
Frequency	45...65 Hz			
General Specifications:				
Product Certification	MID. Classe B			
Voltage Circuit Consumption	≤2/ ≤0.6			
Current Circuit Consumption	≤0.7			
Base Current (Ib)	5 A			
Reference Current (Iref)	5 A			
Transition current	0.5 A			
Maximum Current (Imax)	125A			
Minimum Current (Imin)	0.25 A			
Start-up Current	0.02 A			
Cable Sections : - rigid flexible	2.5 - 50 mm² 2.5 - 50 mm²			
Neutral Section	Auxiliary power supply: 2.5 mm²			
Torque for Power Terminals	5 Nm			
Accuracy Class	Active Cl.1 / Reactive Cl.2			
Measurement accuracy in %	Active 1% / Reactive 2%			
Display Type	LCD (backlit)			
Material	Plastic			
Protection	Fuse protection 125 A three phase (x1 meters)			
Input characteristics				
Number of Inputs	1			
Voltage	230 V AC			
OFF=T1	0 V			
ON=T2	230 V AC			
Cable Sections	0.8 - 2.5 mm² (both rigid and flexible)			
Torque	1 Nm			
Impulse Output Characteristics:				
Number of Outputs	2	-	-	-
Max Impulse Current: 39 VDC	90 mA	-	-	-
Voltage AC / DC	3-27.6/±5-39	-	-	-
Output frequency	1-200 p/kWh	-	-	-
Pulse Duration	30-100 ms	-	-	-
Cable Sections : - rigid flexible	0.8 - 2.5 mm² 0.8 - 2.5 mm²	-	-	-
Torque	0.5 Nm	-	-	-
Communication Output Characteristics:				
Protocol	-	M-Bus	Modbus RTU	
Connector type	-	Terminal secrews		RJ45
Cable Sections	-	0.8 - 2.5 mm²		-
Torque	-	0.5 Nm		-
Front Panel Impulse Indicator (LED)				
Impulse Frequency	1000 pulses / kWh			
EMC Compatibility:				
Voltage Shock Test	6 kV			
Overvoltage Test	4 kV			
Environmental Data:				
Operating Temperature	-25…+55°C			
Storage Temperature	-25…+70°C			
Humidity	≤ 95% at 20°C			
Fire/Heat Resistance	V0			
Water/Dust Resistance Installed / Not installed	IP51/IP20			
Mechanical Environment	M1			
Electromechanical Environment	E2			
Dimensions L x H x D	90 x 92 x 60			
Number of DIN Modules	6 ▮			
Standards	EN 50470-1/3, CEI 62053-21/23, CEI615557-12, DIN 43880, EN 60715			
	EI62053-31	-	-	-

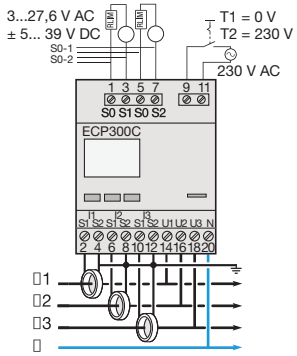
▮ = 17.5 mm width module

Wiring diagrams

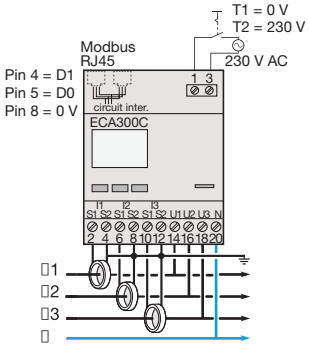
Electrical protection



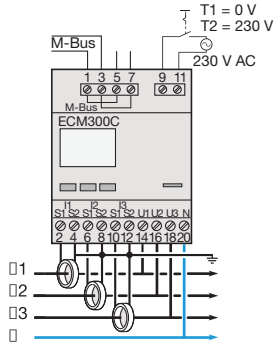
ECP300C



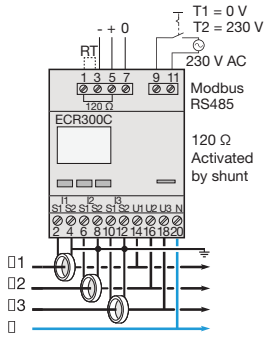
ECA300C



ECM300C



ECR300C

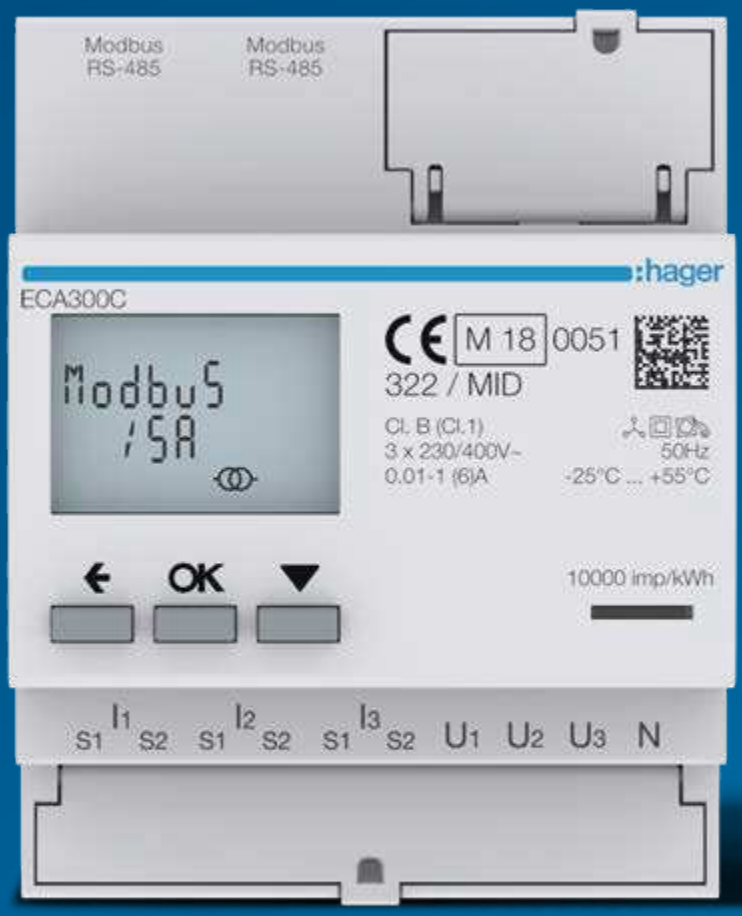


Technical specifications

	Indirect three-phase 1/5 A			
Ref.	**ECP300C**	**ECM300C**	**ECR300C**	**ECA300C**
Voltage Nominal	1 x 400 V			
Voltage Range	160 V - 480 V			
Frequency	45...65 Hz			
General Specifications:				
Mid certified product MID	MID			
Consumption of voltage circuits VA/W	≤2 / ≤0.6			
Consumption of voltage in VA	≤0.7			
Base Current (Ib)	1(6) A			
Reference Current (Iref)	1A			
Transition current	0.05 A			
Maximum Current (Imax)	6 A			
Minimum Current (Imin)	0.01 A			
Startup current	0.001 A			
Cable Sections : - rigid flexible	0.5 - 4 mm² 0.5 - 4 mm²			
Neutral section	Auxiliary power supply: 2.5 mm²			
Torque for Power Terminals	0.5 Nm			
Accuracy Class	Active Cl.1 / Reactive Cl.2			
Measurement accuracy in %	Active 1% / Reactive 2%			
Disply type	LCD (backlit)			
Material	Plastic			
Protection	fuse protection 6A single phase (x3 meters)			
Measurement input characteristics				
Number of inputs	Adjustable from 1 to 6000 (at 5 A, or 1200 at 1 A)			
Input characteristics				
Number of entries	1			
Voltage	230 V AC			
OFF=T1	0 V			
ON=T2	230 V AC			
Cable Sections	1.5 - 4 mm² (both rigid and flexible)			
Torque	1 Nm			
Impulse Output Characteristics:				
Number of out put	2	-	-	-
Max pulse current. 39 VDC	90 mA	-	-	-
Voltage AC / DC	3-27.6/±5-39	-	-	-
Output frequency	1 - 1000 p/kWh	-	-	-
Pulse Duration	30 - 100 ms	-	-	-
Cable Sections : - rigid flexible	0.8 - 2.5 mm² 0.8 - 2.5 mm²	-	-	-
Torque	0.5 Nm	-	-	-
Communication output Characteristics				
Protocol	-	M-Bus	Modbus RTU	
Connector type	-	Terminal screws		RJ45
Cable Section	-	0.8 - 2.5 mm²		-
Torque	-	0.5Nm		-
Front Panel Impulse Indicator (LED)				
Impulse Frequency	1000 pulses / kWh			
EMC Compatibility				
Voltage Shock Test	6 kV			
Overvoltage Test	4 kV			
Enviromental data				
Operating temperature	-25...+55°C			
Storage temperature	-25...+70°C			
Humidity	≤ 95% at 20°C			
Fire/Heat Resistance	V0			
Water/Dust Resistance Installed / Not installed	IP51/IP20			
Mechanical environment	M1			
Electromechanical	E2			
Dimensions L x H x D	72x92x60			
Number of DIN moduls	4			
Standards	EN 50470-1/3, CEI 62053-21/23, CEI 61557-12, DIN 43880, EN 60715,			
	EI 2053-31	-	-	-

▮ = 17.5 mm width module

Track, communicate, optimise



:hager

Energy and lighting control

Energy and lighting control product range, includes automatic management of lighting, timers, dimmers and time switches. They allow to optimise energy consumption while increasing comfort in residential and commercial premises.

06

Page

Smarter choice for lighting

Make the brighter choice

Motion detectors

are best for spaces where people pass through, such as hallways and car parks.

Presence detectors

are designed for areas such as offices and waiting rooms, where people sit still for long periods.

Lighting control plays an important role in modern homes & buildings. It is not only to produce ideal living and working conditions but also to achieve the best possible energy balance. On-demand lighting solutions from hager helps users to reduce energy costs for lighting.

For more info scan here:

Characteristics:
Our range of motion & presence detectors are the perfect solution for cost-effective lighting control and energy efficiency in buildings. These detectors switch On/Off lights according to human movement & ambient light levels. They provide a simple and effective solution for increasing comfort, safety, security and energy saving in commercial, residential & industrial buildings.

They are suitable for both indoor and outdoor environments making them ideal for diverse applications such as parking areas, lift lobbies, corridors, hotel rooms, conference rooms, offices, homes and public buildings. Matching with different detection applications and installation specifications, the detectors are available with a mounting set for wall, ceiling and corners.

EE840

Motion detectors IP55
- 230V AC (50/60 Hz)
- output: 10A AC1 relay
- IP55
- for indoor or outdoor use
- IP55 reinforced waterproofing
- 140/220/360° frontal detection zone
- can be mounted on walls, in corners or to ceilings utilizing the relevant mounting accessory
- response brightness adjustable
- delay time adjustable
- adjustment achieved locally via potentiometers
- Complies with EN 60669-1 & EN 60669-2-1

Description	Cat. ref.
140° white	**EE820**
200° white	**EE840**
360° white	**EE860**

EE804A

EE805A

Motion + presence detectors IP21
- 230V AC (50/60 Hz)
- output: 10A AC1 relay
- IP21
- combination of presence and motion detector with enhanced detection sensitivity in the central presence-detection area
- Available for surface(EE804A) and flush (EE805A)
- response brightness adjustable
- delay time adjustable
- adjustment achieved locally via potentiometers
- factory presets: Lux = 200, Time = 3 Minutes
- Coverage 360°, Diameter 6m @ 2.5m (motion), enhanced detection area 4m Diameter (presence) @ 2.5m
- Complies with EN 60669-1 & EN 60669-2-1

Description	Cat. ref.
360° surface mounting, white	**EE804A**
360° flush mounting, white, 75mm Φ	**EE805A**

EE883

HF motion detector (hyper frequency) IP54
- 230V AC (50/60 Hz)
- output: 10A AC1 relay
- IP54
- detection zone of 8m
- detection area 360°
- response brightness adjustable
- delay time adjustable
- adjustment achieved locally via potentiometers
- hyper frequency (HF) detection, independent of temperature detection
- Complies with EN 60669-1, EN 60669-2-1, EN 301489-1 & 3, EN 300440-1 & 2

Description	Cat. ref.
surface mounting, white	**EE883**

EE815

Presence detector flush mounting
- 230V AC
- output: 16A AC1 relay
- IP41
- programmable for absence or presence
- range 7m diameter for large

movements, 5m diameter for small movements
- lux level and ON delay setting via potentiometers or remote control
- factory presets, lux = 400, time = 20 min, presence detection
- complies with EN 60669-1 & EN 60669-2-1

Description	Cat. ref.
360° white	**EE815**

EE807

EE808

Infra-red remote control
- for EE81x

Description	Cat. ref.
for the installer (settings)	**EE807**
for the customer (lighting control)	**EE808**

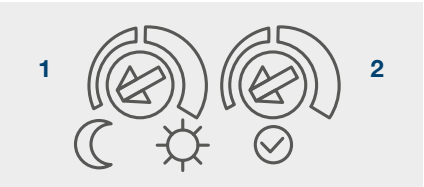
More capabilities
Less consumption

Reliable detection
The new motion and presence detectors are equipped with sensitive passive infrared (PIR) technology. They react to differences in temperature and motion and can detect body movements as well as smaller movements. The area of motion detection comprises 6 m in diameter, while the presence detection covers a diameter of 4 m at an installation height of 2.5 m. The recommended installation height is between 2.5 and 3.5 m, with 4 m as an absolute maximum.

Quick installation
The EE804A mounted device consists of a detachable lower section with screw-fit connection terminal. It can be attached to any standard socket or mounted directly on the ceiling. The upper section, in which the detection optics are located, is then plugged in and screwed into place. Once that's done, it's all ready to use!

The EE805A installed device is equipped with a rapid mounting system consisting of spring clamps – robust enough to keep the detector resistant to vibration on the suspended ceiling, yet flexible enough that it can be taken out to adjust the settings on the potentiometer. To link it up, simply connect the cables via a plug-in terminal. Strain relief with cable ties ensures long-term secure contact.

Easy to set up
The user can set up and adjust all major lighting parameters via two easily accessible potentiometers:
– Potentiometer 1 adjusts the response brightness (between 5 and 1000 lux), allowing the lighting to be optimally adapted to the daylight.
– Potentiometer 2 controls the duration of the luminescence (between 2 sec and 30 min).

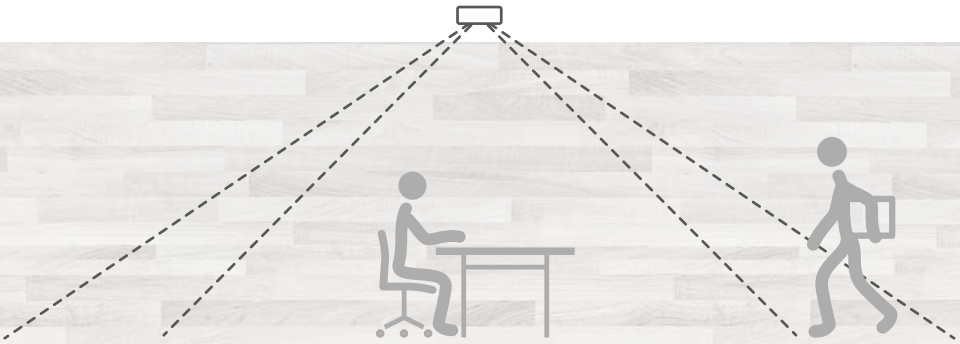


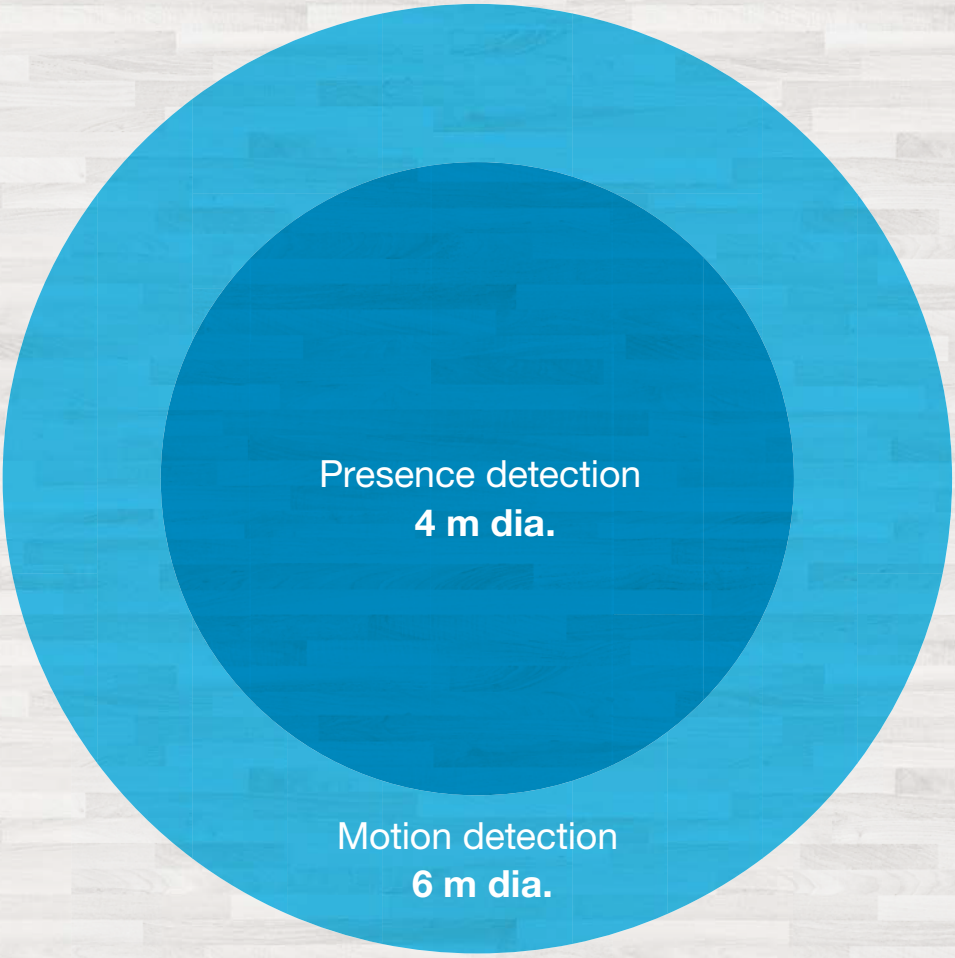
Long-term energy savings
Modern lighting fixtures such as LEDs and halogen lamps often have high inrush currents, sometimes up to 1000 times your nominal current. This puts a strain on the contacts of the connected motion and presence detectors and can lead to premature wear of the relay. To prevent this, the new detectors from Hager have been equipped with zero-cross switching for the first time. This calculates the zero-crossing of the AC voltage and keeps the inrush current to a minimum – thus sparing the relay contacts and extending durability, even in high switching occurrence.

Long-term savings
The electricity prices for private households have risen by 56% over the last ten years. It's therefore a good idea to install motion and presence detectors, as they save up to 90% of lighting energy by switching on lights strictly when they are needed. Not only that, but the new devices by Hager will win over your customers with an extremely low standby consumption of just 0.3 W. So now they have two good reasons to invest in a detector!

Energy savings of up to 90%
Standby consumption of only 0.3 W

EE805A installed device, rear view




Presence detection
4 m dia.
Motion detection
6 m dia.

Characteristics:
Time lag switches are designed to save energy and ensure safety. For example: for building stair-case or cellar lighting, ventilation, pumping, etc... these devices provide control of lighting circuits with automatic switch-off after a pre-set time (e.g. for staircase, corridors lighting). Compact design with a 2 position switch permanent/timed lighting implementation facility

Complies with EN 60 669

Technical data
- supply voltage: 230V 50/60Hz
- cut-off power: 16A - 250V AC1
- consumption: 1VA
- time delay: 30 s to 10 min
- protection degree: IP20
- current limiting: 100mA EMN001
- connection capacity:
  6mm2 flexible
  10mm2 rigid

EMN001

Standard stair case time lag switch

- press shortly a push button to switch ON the light
- after an adjustable time “T”, the light switch OFF automatically

Description	Width in modules	Pack qty.	Cat. ref.
standard stair case time lag switch	1	6	**EMN001**

EMN005

Multifunction stair case time lag switch

Description	Width in modules	Pack qty.	Cat. ref.
multifunction stair case time lag switch 4 functions: - basic mode - prewarning mode - double delay mode - double delay + prewarning mode	1	1	**EMN005**

Analogue time switches
Characteristics:
Time switches allows users to set programs for switching loads On and Off. These switches are ideal for both domestic and commercial applications and can be used to control various electrical devices such as lighting, household appliances, signboards, shop windows, and more. Not only do they provide convenience, but they also help save energy and improve overall comfort.

Complies with IEC 60730-2-7

Technical data
- supply voltage: 230V AC, 50Hz
- battery reserve: for 24h and 7 days versions
- output: 1 NO voltage free changeover contact 16A, 250V AC1
- programming by captive segments
- manual override on 1 module devices: automatic and permanent ON
- manual override on 3 module devices: automatic, permanent ON and permanent OFF

Connection capacity
- 1.5 mm^2 max, rigid

EHN010

EHN110

Description	Cycle	Width in modules	Cat. Ref.
Compact modular version			
24h cycle, without battery reserve,	24h	**1**	**EHN010**
24h cycle, with battery reserve	24h	**1**	**EHN011**
Standard modular version			
24h cycle, without battery reserve	24h	**3**	**EHN110**
24h cycle, with battery reserve	24h	**3**	**EHN111**
7 day cycle, with battery reserve	7d	**3**	**EHN171**

EHN010 & EHN110 – suitable for 50Hz operation only.

To provide all types of automatic control i.e. lighting, ventilation, watering, machine pre-heating, automatic door and visual audible indication, cycle control etc.
For timing and automation in domestic and commercial premises.
The input signal can be via various switching devices (pushbutton, latching switch, timeclock etc) and the timed output used to control the application.

Technical data
- voltage supply range:
  12 and 24 to 48V DC
  12 and 24 to 230V AC
- adjustable time delay: from 0.1s to 10hrs
- LED indicator frequency: 50/60 Hz
- 1 potential free changeover contact
- breaking capacity: 8A / 230V AC

Connection capacity

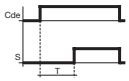
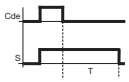
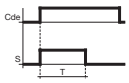
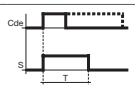
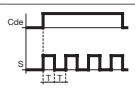
6mm² max rigid
1.5 - 10mm² flexible

Complies with - EN 60669-1, EN 60669-2-1

EZN001

EZN006

Modular delay timers

Description		Width in module 17.5 mm	Pack qty	Cat. ref.
delay on		1	1	**EZN001**
delay off		1	1	**EZN002**
adjustable time on		1	1	**EZN003**
timer		1	1	**EZN004**
symetrical flasher		1	1	**EZN005**
multifunction 6 individual functions including: delay on, delay off, timer,...		1	1	**EZN006**

Characteristics:
There are 3 solutions to control automatic lighting for night lighting such as neon signs, showcase, exterior surroundings, public lighting (streets, monuments):
- modular twilight switches,
- surface mounting compact twilight switches,
- astronomical time switches.

The twilight switches control light sytems according to natural illumination. A photoelectric cell measures the light level and in conjunction with the relay provides ON/OFF control of a circuit.
Astronomical time switches are electronic weekly programming clocks designed to control various loads automatically according to sunrise and sunset times to optimized the energy saving.

Technical data
- supply voltage: 230V AC ±15%
- frequency: 50/60Hz
- maximum load: 16A / 250V AC1,
- loads: incandescent, halogen, and fluorescent lamps,
- max length between 2 modular devices: max. 50 m.

Connection capacity:
rigid: 1.5 to 10mm^2
flexible: 1 to 6mm^2

Complies with IEC 60669-1, IEC 60669-2-1, IEC 60730-2-7

EEN100

Twilight switches 1 channel

- light sensitive switch with photoelectric cell with 2 ranges of sensitivity 5 to 100 lux and 50 to 2000 lux

Description	Width in modules	Pack qty.	Cat. ref.
with surface mounting photoelectric cell EEN003	1	1	**EEN100**
with flush mounting photoelectric cell EEN002	1	1	**EEN101**

EE702

Compact light switches

- IP55 integrated cell

Description	Pack qty.	Cat. ref.
basic 8A (without settings) - 1000W incandescent - fix lux: 10...30 lux - fix ON delay: 40s/OFF delay: 120s	1	**EE701**
enhanced 16A (with settings) - 2300W incandescent - adjustable lux: 2 to 1000 lux - time settings: from 1s to 120s	1	**EE702**

EE202

2 channels light sensitive switches for cascading

- like EE200, it integrates 2 inputs for 2 operating modes
- the selected mode always applies to both outputs

Description	Width in modules	Pack qty.	Cat. ref.
2 channels light sensitive switches for cascading	4	1	**EE202**
kit 2 channels light sensitive switch for cascading + surface cell EE003	4	1	**EE203**

EEN002

EEN003

Accessories

- max length between cell and modular device: 50 m

Description	Pack qty.	Cat. ref.
Flush cells IP54		
for EEN100 and EEN101	1	**EEN002**
Surface cells IP54		
for EEN100 and EEN101	1	**EEN003**
Programming key		
for EE180 and EE181	1	**EG005**

EGN103

Digital Weekly Time Switch

Description	Characteristics	Width	Cat. ref.
-1 channel 3M digital time switch -Weekly cycle	Daily, weekly Voltage rating: 230V AC 50/60Hz Output: 1 changeover and 1 NO contact No pulse function	2 mod	**EGN103**
	No Pulse function		

EG004

Description	Pack qty.	Cat. ref.
Locking key		
ForEGN103	1	**EG004**

EG005

Programming key		
For EGN103	1	**EG005**

EGN100

Description	Characteristics	width	Cat. ref.
1 channel - Integrated bluetooth - Capacity: 100 program steps	Daily, weekly, annual Voltage rating: 230V AC 50/60Hz Output: 1 changeover and 1 NO contact	1 mod	**EGN100**
	Daily, weekly, annual Voltage rating: 230V AC 50/60Hz Output: 2 changeover and 2 NO contacts	2 mod	**EGN200**

EGN200

2 channels
- Integrated bluetooth
- Capacity: 200 program steps

EGN400

4 channels - Integrated bluetooth - Capacity: 400 program steps	Daily, weekly, annual Voltage rating: 230V AC 50/60Hz Output: 4 changeover and 4 NO contacts	4 mod	**EGN400**
Programming Bluetooth key For EGN103		4 mod	**EGN003**

Weatherproof Range

Our range of weatherproof solutions are engineered to withstand the tough environmental conditions that Middle East weather can demand.

07

Page

Characteristics:
The IP55 range of switches and sockets are perfect for both indoor and outdoor use. They are specially designed for areas frequently exposed to dust and splashing water like gardens, balconies, car parking and swimming pool areas.

These switches and sockets provide some dust ingress protection and are safeguarded against low-pressure water jets from any direction, making them an ideal choice for all your electrical needs. The clear membrane cover allows visible indication of the switch status (on/off).

IP55 Wall switches

Technical features
- Available in 1, 2 and 3 gang
- Clear silicon gasket allows operation of switch without lifting cover
- Clear silicon gasket is replaceable
- Large switch rocker allows easy operation
- Mounting screw locations are segregated from the back box by gaskets for improved IP installations
- IP rated cable gland included

Complies to the standard :
IEC / BS EN 60529: IP 55
BS EN 60669-1: switches

Technical data
- protection category: IP55
- 250V 10AX rated switches
- 1 way and 2 way switches
- 20mm2 conduit entries available on all sides

Connection capacity
- Switch terminals capable of taking 3 x 1.5mm2 or 2 x 2.5mm2 cables
- Earth terminal mounted in back box

XPW5120 / 5110

Description	Cat. ref.
10AX 1 gang 1 way switch	**XPW5110**
10AX 1 gang 2 way switch	**XPW5120**
10AX 2 gang 1 way switch	**XPW5210**
10AX 2 gang 2 way switch	**XPW5220**
10AX 3 gang 1 way switch	**XPW5310**
10AX 3 gang 2 way switch	**XPW5320**
20AX 1 gang double pole switch	**XRW5200**
1 gang bell press	**XPW5910**

IP55 Socket Outlets

Technical features
- Available in 1 and 2 gang
- Clear silicon gasket allows operation of switch without lifting cover.
- Clear silicon gasket is replaceable.
- Large switch rocker allows easy operation.
- Mounting screw locations are segregated from the back box by gaskets for improved IP installations.
- IP rated cable gland included.

Complies to the standard :
IEC / BS EN 60529: IP 55
BS 1363 : sockets

Technical data
- protection category: IP55
- 250V 13A sockets
- 1 gang and 2 gang versions
- 20mm2 conduit entries available on all sides

Connection capacity
- Socket terminals capable of taking 3 x 2.5mm2 or 2 x 4mm 2cables
- Earth terminal mounted in back box.

XSW5213

XPW5114

Description	Cat. ref.
13A 1 gang unswitched socket	**XSW5113**
13A 2 gang unswitched socket	**XSW5213**
13A 1 gang DP switched socket	**XSW5114**
13A 2 gang DP switched socket	**XSW5214**

Characteristics:
The IP66 range of switches and sockets are suitable for use in both indoor and outdoor environments, and in areas where there is a potential risk of dust or water penetration. These IP66 rating provides complete protection against dust and high-pressure jets of water from all directions.

Constructed from a UV stabilized & chemically resistant polycarbonate material, they are designed to endure the most challenging outdoor conditions.

IP66 wall switches

Characteristics:
- Complies to IEC / BS EN 60529 for IP66 rating
- Switches comply to BS EN 60669-1, a.c.
- Robust and rugged enclosures designed to withstand harsh weather
- Box size: 90 x 90 mm
- Cable entries :
  side: 4 x 20 mm
  back: 1 x 20 mm and 1 x 25 mm


WXPPS12

Description	Pack qty.	Cat. ref.
10AX 1 gang 2 way switch	1	**WXPPS12**
10AX 2 gang 2 way switch	1	**WXPPS22**
20AX double pole 1gang 1 way switch	1	**WXPDP84**
20AX double pole 1 gang 1 way switch with neon	1	**WXPDP84N**
20AX double pole 2 gang 1 way switch	1	**WXPDP842**
10A 1 gang bell push switch	1	**WXPPS12B**

IP66 socket outlets

Characteristics:
- Complies to IEC / BS EN 60529 for IP66 rating
- 13A socket outlets comply to BS1363-2, a.c.
- 15A socket outlets comply to BS 546, a.c.
- Robust and rugged enclosures designed to withstand harsh weather
- Unique double hinge allows lid to open a full 180°
- Fixing point for padlock
- Box size :
- Single : 103 x 116.5
- Twin : 164 x 116.5
- Cable entries : Single
- side: 4 x 20 mm
- back: 1 x 20 mm and 1 x 25 mm
- Cable entries : Twin
  side: 6 x 20 mm
  back: 1 x 20 mm and 1 x 25 mm


WXPSS82

Description	Dimensions H x W (mm)	Pack qty.	Cat. ref.
13A 1 gang unswitched socket	103 x 116.5	1	**WXPS81**
13A 1 gang double pole switched socket	103 x 116.5	1	**WXPSS81**
13A 1 gang double pole switched socket with neon	103 x 116.5	1	**WXPSS81N**
13A 2 gang unswitched socket	164 x 116.5	1	**WXPS82**
13A 2 gang double pole switched socket	164 x 116.5	1	**WXPSS82**
13A 2 gang double pole switched socket with neon	164 x 116.5	1	**WXPSS82N**
15A 1 gang double pole switched socket	103 x 116.5	1	**WXPSS115**

IP66 fused connection units

Characteristics:
- Complies to IEC / BS EN 60529 for IP66 rating
- Complies to BS 1363-4
- Robust and rugged enclosures designed to withstand harsh weather
- Unique double hinge allows lid to open a full 180°
- Fixing point for padlock
- Box size: 103 x 116.5 mm
- Cable entries :
  side: 4 x 20 mm
  back: 1 x 20 mm and 1 x 25 mm


WXPSSU83FO

Description	Pack qty.	Cat. ref.
13A DP switched fused connection unit with flex outlet	1	**WXPSSU83FO**
13A unswitched fused connection unit with flex outlet	1	**WXPSU83FO**

Characteristics:
The range of IP66 isolators are designed to be used in outdoor applications with IP66 degree of protection. They are rated at AC23A and offer options of 2, 3 poles and 4 poles with switched neutral. They are compact and easy to install with 2 screw quick release top cover.

Complies with BS EN 60947-3, IEC 60947-3

Technical data
- Rated voltage:
  250 V AC
  440 V AC
- Material: polycarbonate – UV grade.
- Utilisation category: AC23A
- For switching of motor loads or other highly inductive loads
- Protection category: IP66
- Poles :

  2P : 20A - 63A
  3P & N : 20A - 40A
  4P (3P & SW N) : 20A - 63A

JG320IN

Description	Pack qty.	Cat. ref.
2 pole		
20A 2 pole IP66	1	**JG220IN**
32A 2 pole IP66	1	**JG232IN**
40A 2 pole IP66	1	**JG240IN**
63A 2 pole IP66	1	**JG263IN**
3 pole		
20A 3 pole IP66	1	**JG320IN**
32A 3 pole IP66	1	**JG332IN**
40A 3 pole IP66	1	**JG340IN**
4 pole + switched neutral		
20A 4 pole IP66	1	**JG420IN**
32A 4 pole IP66	1	**JG432IN**
40A 4 pole IP66	1	**JG440IN**
63A 4 pole IP66	1	**JG463IN**

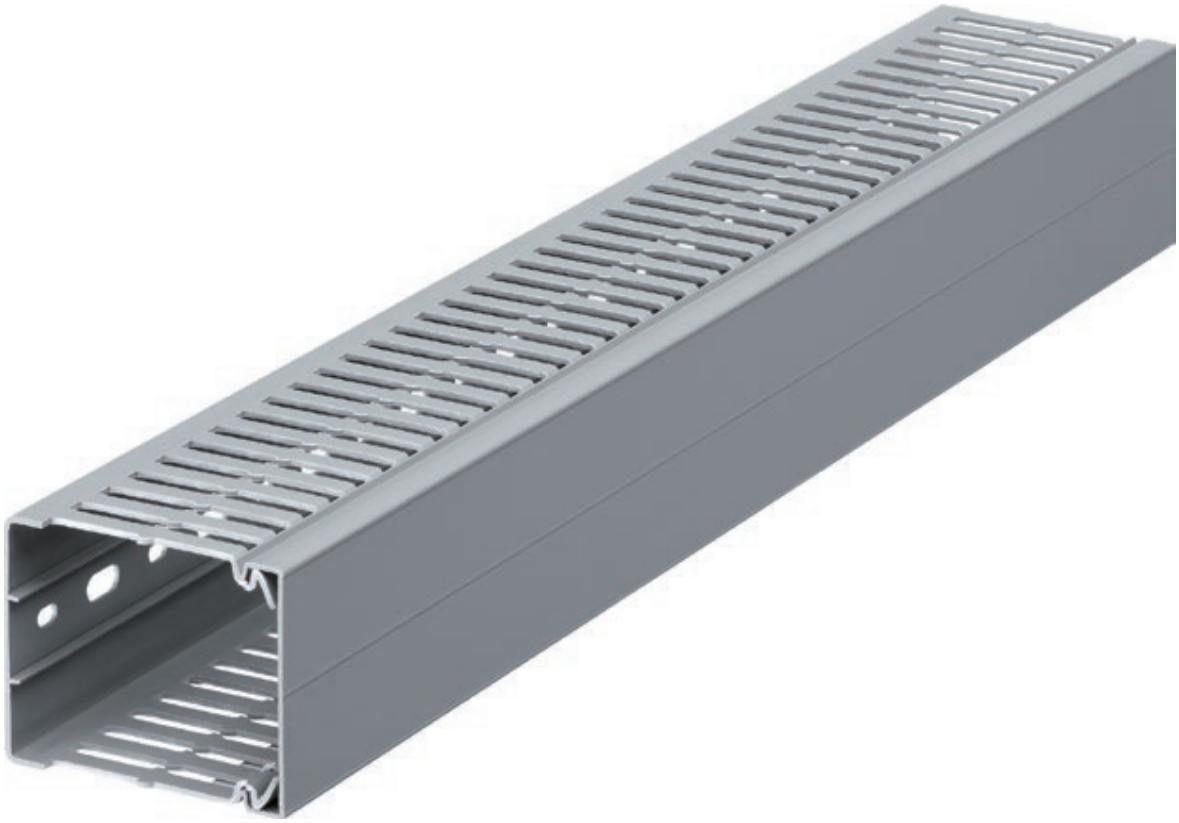
Robust & Safe

Manufactured from a tough, durable thermoplastic, the IP66 range is ideal for indoor and outdoor applications where wiring accessories may be vulnerable to the potentially harmful effects of dust or water ingress.

See more about IP66 on our website www.hager.com/middle-east

Cable management

For easy and safe cabling:
The slotted trunking products and under floor systems provide versatile solutions for various kinds of applications from electrical distribution to automation panels.



07

Page

- wide-slot/web design for a wide range of wire bundle sizes
- temperature range from -5 °C to +60 °C
- flame-retardant according to UL94-V0, UL-recognized and CSA-certified
- EN3-2-50085-approved, VDE and CE marking
- slot 6 mm, web 6.5 mm
- colours: grey RAL 7030
- material: PVC rigid
- wiring duct length: 2 meters

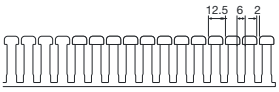
BA7A80060

Bases and covers BA7A

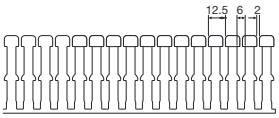
Base and cover Depth x width (mm)	Area (mm²)	1 mm² H05V-U/K 6.16 mm²	1.5 mm² H07V-U/R 8.55 mm²	2.5 mm² H07V-U/R 11.95 mm²	2.1 mm² No 14 AWG 11 mm²	3.3 mm² No 12 AWG 14 mm²	Pack qty.	Cat. ref.
25 x 25	220	14	10	7	8	6	50	**BA7A25025**
25 x 40	375	24	18	13	14	11	48	**BA7A25040**
25 x 80	642	42	30	21	23	18	24	**BA7A25080**
40 x 25	462	30	22	15	17	13	48	**BA7A40025**
40 x 30	535	35	25	18	19	15	40	**BA7A40030**
40 x 40	749	49	35	25	27	21	50	**BA7A40040**
40 x 60	1155	75	54	39	42	33	40	**BA7A40060**
40 x 80	1557	101	73	52	57	44	30	**BA7A40080**
40 x 100	1956	127	91	65	71	56	20	**BA7A40100**
60 x 25	836	54	39	28	30	24	60	**BA7A60025**
60 x 30	1060	69	50	35	39	30	48	**BA7A60030**
60 x 40	1404	91	66	47	51	40	40	**BA7A60040**
60 x 60	2184	142	102	73	79	62	24	**BA7A60060**
60 x 80	2970	193	139	99	108	85	20	**BA7A60080**
60 x 100	3746	243	175	125	136	107	16	**BA7A60100**
60 x 120	4519	294	211	151	164	129	12	**BA7A60120**
80 x 25	1202	78	56	40	44	34	20	**BA7A80025**
80 x 30	1533	100	72	51	56	44	24	**BA7A80030**
80 x 40	2071	135	97	69	75	59	20	**BA7A80040**
80 x 60	3243	211	152	109	118	93	20	**BA7A80060**
80 x 80	4412	287	206	148	160	126	12	**BA7A80080**
80 x 100	5577	362	261	187	203	159	12	**BA7A80100**
80 x 120	6737	438	315	226	245	192	16	**BA7A80120**
100 x 30	1875	122	88	63	68	54	24	**BA7A100030**
100 x 40	2663	173	125	89	97	76	20	**BA7A100040**
100 x 60	4239	275	198	142	154	121	16	**BA7A100060**
100 x 80	5815	378	272	195	211	166	16	**BA7A100080**
100 x 100	7391	480	346	247	269	211	12	**BA7A100100**

BA7A
lateral punched openings

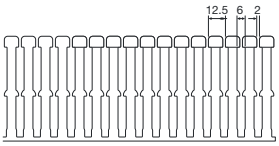
for duct height 25 mm



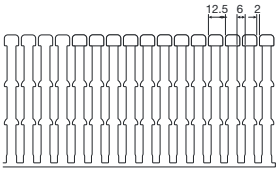
for duct height 40 mm



for duct height 60 mm

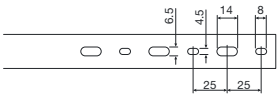


for duct height 80 mm

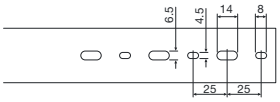


for duct height 100 mm

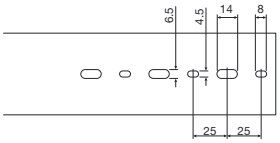
BA7A
bottom holes EN50085



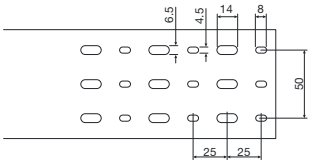
for duct width 25 mm



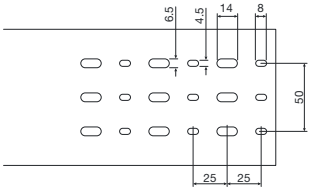
for duct width 40 mm



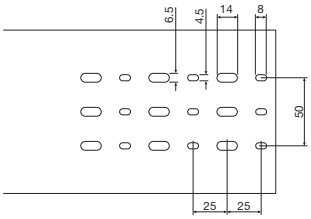
for duct width 60 mm



for duct width 80 mm

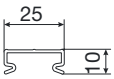


for duct width 100 mm

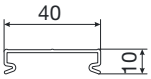


for duct width 120 mm

Cover BA7
for duct height 25 mm

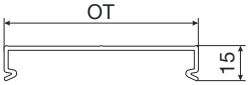


BA70252K for BA7 25 x 25 mm



BA70402K for BA7 25 x 40 mm

Cover BA7
from duct height 40 mm



BA70252 for duct BA7A, width 25 mm
BA70402 for duct BA7A, width 40 mm
BA70602 for duct BA7A, width 60 mm
BA70802 for duct BA7A, width 80 mm
BA71002 for duct BA7A, width 100 mm
BA71202 for duct BA7A, width 120 mm

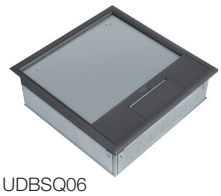
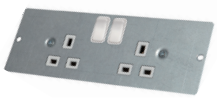
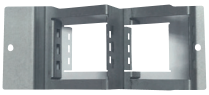
Characteristics:
Screed floor system offers you great functionnality, as it is the most frequently used technology for floor installation. The floor boxes are interconnected via conduits or trunkings, allowing an optimized supply of the building as well as a direct access from the floor to electrical power, data and telecommunication.

Technical data
- Galvanised steel
- Rust protection
- Adapted for conduits with a diameter of 25mm
- Special plate adapted for trunking installation (25 or 38 mm height)
- Supply unit made of polyamide according to EN 50085-2-2

Application
- 3 compartments
- Mounting in screed
- Height adjustable by lid and frame, 80 - 110 mm

Plates:
- Function as an outlet box to install power and data

Lid:
- For dry rooms with dry cleaned floors
- Carpet or tile flooring height of 8 mm

	Description	Characteristics	Cat. ref.
 UDBSQ06	Service outlet box (outlet and lid)	dimensions: 268 x 268 mm	**UDBSQ06**
 GTVPB00	Blank plate	sheet steel for service outlet box	**GTVPB00**
 GTVBS25	13A BS twin switched socket outlet	plate and module	**GTVBS25**
 GTVDP4M	Data outlet plate	2 x 2 gang (without data module) sheet plate 45x45 mm	**GTVDP4M**
 GTVSP452	Socket modules plate	2 x 2 gang (without data module) sheet plate 45x45 mm	**GTVSP452**
 WGMRJ456	RJ45 data module	keystone 8 pin cat6 data dimen- sions: 22.5 x 45 mm	**WGMRJ456**
 WGMRJ11	RJ11 data module	keystone 4 pin cat6 telephone dimensions: 22.5 x 45 mm	**WGMRJ11**
 WGMV1	Blank module	white plastic dimensions: 22.5 x 45 mm	**WGMV1**
 WGSM113	BS module	13A BS socket dimensions: 45 x 45 mm	**WGSM113**

For any questions scan here:

Hager Electro GmbH Co. KG
Zum Gunterstal
66440 Blieskastel
Germany

Hager Electro S.A.S.
132, Boulevard d'Europe BP 3
67215 Obernai Cedex
France

Hager Middle East FZE
Office 222-227, Building A4
Dubai Digital Park, Dubai Silicon Oasis
P.O. Box 61056
Dubai,
United Arab Emirates

Tel : (+971) 4 510 5300

Hager Qatar QFZ LLC
Wing 3, Level 2 office 2
Business innovation park, Gate 1
Ras bu Fontas, Doha, Qatar
FZA No : FZA 161
P.O. Box No 31830

Tel : (+974) 44418707

hager.com/middle-east

checkout our website here