Eaton - Safe power distribution able to meet the most stringent requirements. Eaton.com xEnergy Safety The all-insulated distribution board. **Product Catalog Ci** 



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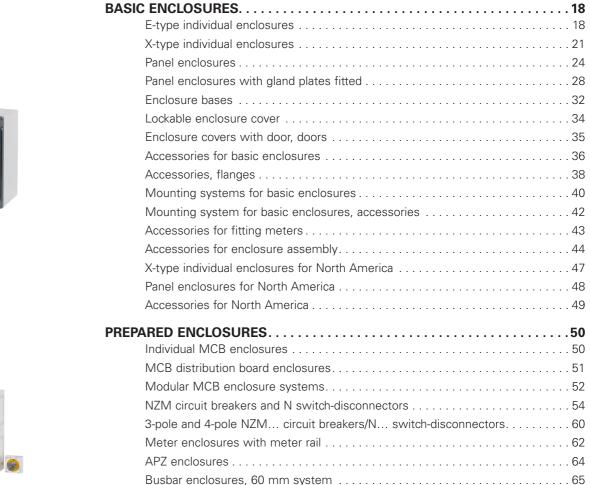
# Ci insulated enclosures DESCRIPTION......17



















We make what matters work.

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

To learn more go to: Eaton.com/whatmatters

FAT•N Powering Business Worldwide

We make what matters work.

Continued on next page

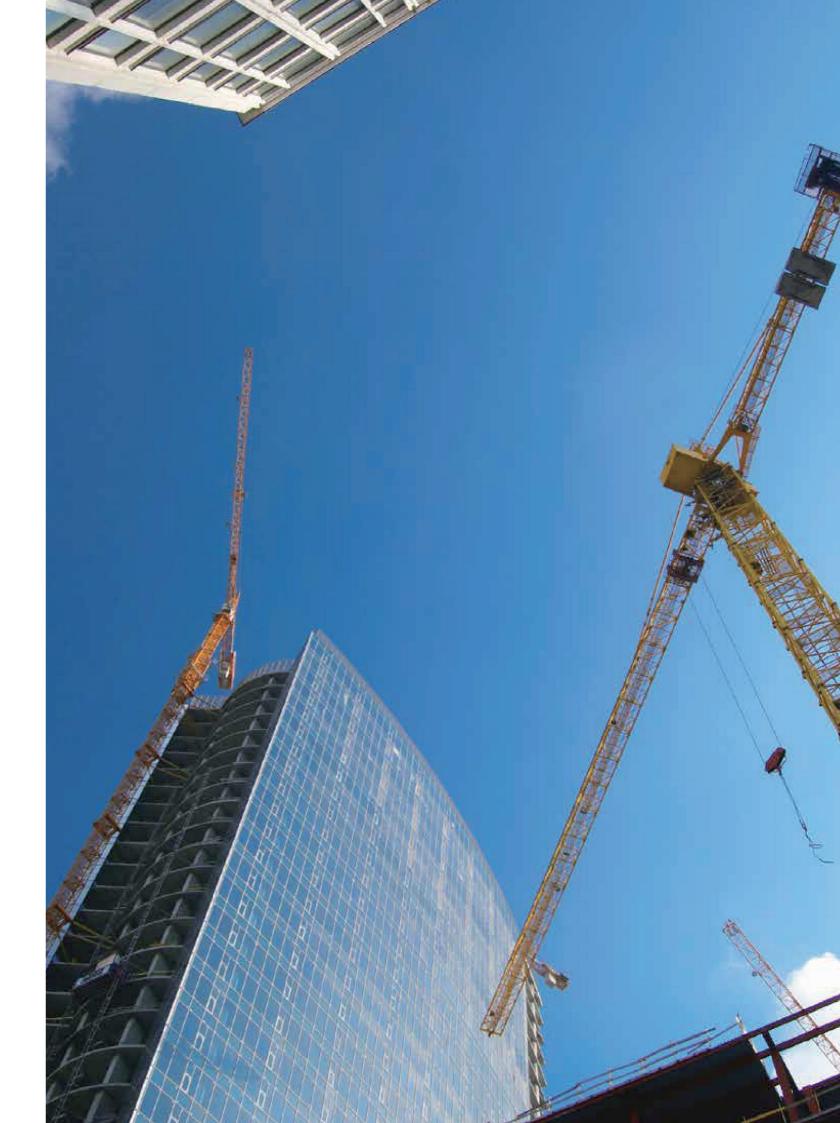
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# The all-insulated Ci distribution enclosure.

Requirements regarding electrical power distribution are constantly increasing. Eaton's products are not only the answer to these requirements, they also offer top reliability and flexibility for the customer.

#### A consistent system for up to 1600 A

Eaton's all-insulated Ci power distribution enclosures have been designed to meet the most stringent requirements and offer a consistent system for up to 1600 A. These allinsulated distribution enclosures provide an IP65 degree of protection and are insensitive to almost any environmental impact such as dust, moisture and water.

#### **Timeless optimized** protection

This type of enclosures made of high-quality polycarbonate offers additional protection against mechanical impacts and caustic substances. Thanks to their total insulation, Ci distribution enclosures provide for a timeless and optimized protection.

#### Cover equipped with 4 spring-loaded fittings

Thanks to a cover equipped with 4 spring-loaded fittings, the Ci system provides special protection against extreme switching-arc. Where necessary, it ensures pressurerelief by allowing the pressure to escape by lifting the cover a few millimetres and closing it again immediately.

#### An easy system

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

#### Safety comes first

Total insulation is the safety measure that outperforms various other safety precautions by far because there is no touch voltage possible. Carrying voltage over to other parts of the system is therefore impossible

#### High system availability

Reliable system availability is increased because short-circuits between live parts and protective conductors or mounting plates due to the slipping of a tool, for example, can be excluded.

# Economic efficiency for all parties involved

### For the system planner:

Any of the common applications can be covered through as few as five enclosure sizes and four different depth levels.

#### For the panel builder:

Sophisticated connecting technology allows grouping and arranging the enclosures using any special tools.
Four installation technologies are available to complete the Mounting plates, module

rails, carrier rails and bus-

For the system integrator:

Supply lines can be inserted can be interconnected in the

# A tough system

### For all seasons

Eaton has a global reputation as a specialist in high-quality switchgear systems and is technology leader in the field of power distribution. As a successful supplier of complete systems, Eaton not only offers distribution systems for universal use, but also solutions developed to meet the requirements in harshest conditions and stands out through tested safety, reliability and optimal protection against extreme impacts. Eaton's xEnergy Safety Ci insulated enclosures have become the globally leading and established standard in particularly challenging environments.

## Advantages

- System for up to 1600 A
- Switchgear and enclosures are designed to provide perfect compatibility
- Lifting of the cover in case of a switching-arc without losing the protective function



#### In extremely polluted and harsh environments such as:

- Steel works Foundries
- Mining
- Woodworking industry
- Metalworking industry



#### In places requiring a system insensitive to moisture and caustic substances:

- Food industry
- Automated washing lines Refineries
- Sewage plants
- Water works
- · Chemical industry



#### In places where safety requirements tolerate no compromise:

- Tradeshows and exhibition halls
- Hospitals
- Railway stations
- Airports
- etc.



# Convincing product features:

- High IP65 degree of protection
- Total insulation
- Polycarbonate
- Distribution system based on a 25 mm grid
- Modular system
- Cover resting on 4 spring-loaded fittings
- Stable carrier-frame profiles
- Captive, foamed sealings
- Wedge-type connectors made of insulating material to interconnect the enclosures
- Transparent covers
- Consistent system for up to 1600 A

# Advantages to get excited about:

- A distribution system for universal use
- Highest standard in terms of safety for people and operation
- Many combination options based on a reduced number of modules
- Easy to expand when necessary
- Degree of protection is guaranteed regardless of an operator's level of care and attention
- Entirely encapsulating insulation-material for high protection against corrosion
- No special tools required
- No carrying over of voltage to adjacent enclosures
- Easier maintenance and system control
- Complete solution for low-voltage distribution from a single supplier

# Tried and tested in the most extreme environments.

Enclosure made of high-quality polycarbonate – IP65 degree of protection

High-quality polycarbonate makes CI insulated enclosures especially shock-proof and resistant to acrid smoke.

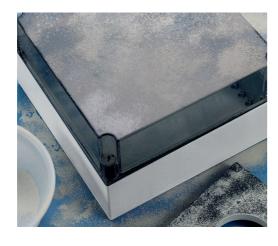
Total insulation offers a maximum of safety as it is a protective feature that is always "active" and does not wear out.

#### Top operational safety

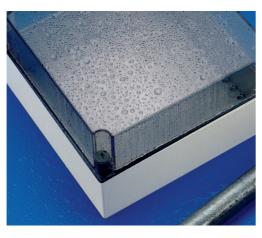
Thanks to transparent smoky covers a short glance will do to check the correct operating status of the incorporated switchgear. Of course there are non-transparent covers available as well, or even covers with an integrated cylinder lock.

# Protection against 6 detrimental factors or hazards

- Dust
- MoistureWater
- Caustic substances
- Mechanical impacts
- Extreme short-circuits



Suitable for environments particularly exposed to dust and



High level of protection against moisture and water jets



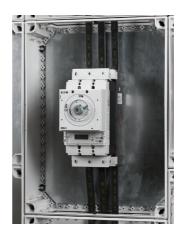
Particularly shock-proof and resistant to mechanical impacts

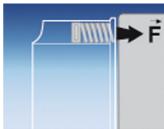


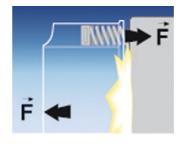
Resistant to acrid smoke and caustic substances

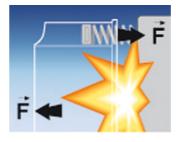
# Maximum safety thanks to pressure relief

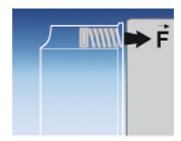
The cover resting on 4 springloaded fittings ensures pressure relief in case of a switching-arc.









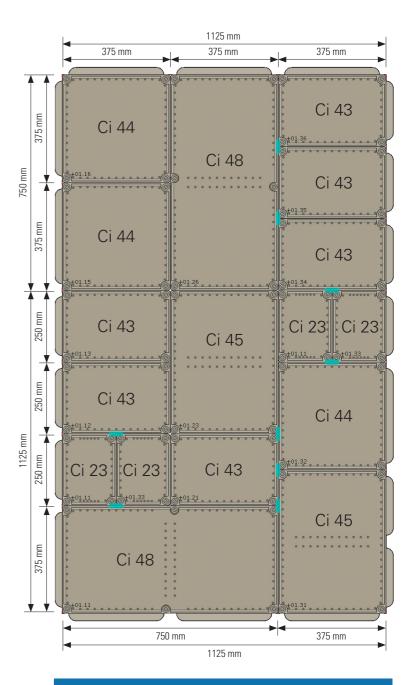


# Modular distribution system

Thanks to the uncomplicated possibilities of combining 5 different enclosure sizes, the modular design of the Ci insulated enclosure series offers a maximum of flexibility to optimally use the space available. A unique component is the flange spreader. It serves as an adapter and allows adding

smaller enclosures to larger ones without any problem.

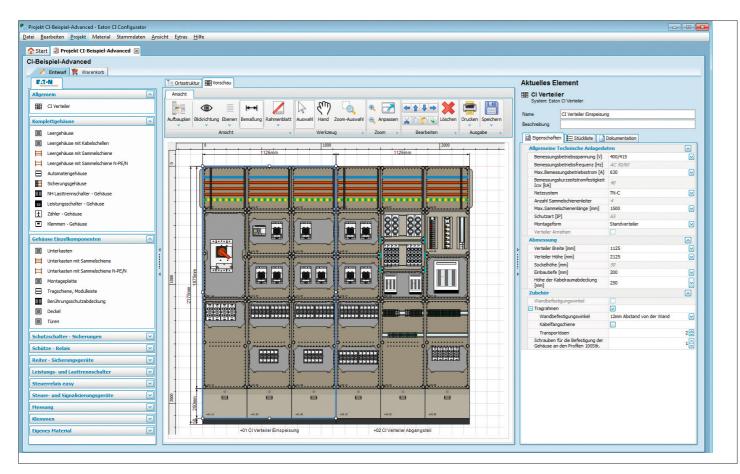
The Eaton xEnergy Safety Configurator makes it incredibly easy to configure a system because it automatically adds the correct number of flange spreaders to your project.



# Advantages

 Symmetrical and asymmetrical flanging of enclosures is possible either one next to the other or one below the other  This makes sure the space available in each individual project can be optimally used

# Easy configuration.



With the xEnergy Safety Configurator especially designed for the Ci distribution system you can successfully plan your system with just a few mouse clicks – it's quick an easy, correct and it won't forget any details. The Configurator is based on the know-how of experts and makes the configuration of your system as user-friendly as possible.

# xEnergy Safety Configurator

The Configurator is free for Eaton customers and is useful for a quick selection and arrangement of the different distribution system components.

#### Easy to use:

On the right side you can select the required distributor objects, the respective templates will offer you the correct distributor articles which you can then correctly combine with the preselected distributor frame in the graphic window at the centre thanks to a Drag & Drop function.

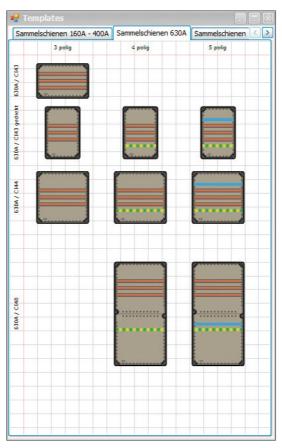
This programme is based on our system know-how and continuously checks the plausibility of your planning steps as you proceed.

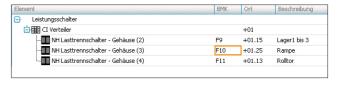
- Professional front view of all distribution boards and equipment installed
- Identification of operating supplies and locations
- Explorer with easy navigation and modification of equipment
- Clear overview of costs:
   The required components will be displayed in the basket.

   The Configurator will show the configurator will be configurated with the configurator will be configurator will be configurated with the configuration will be configura
- The Configurator will show you the weights, metal surcharges, prices, minimum quantities to be ordered.
- The Configurator enables you to provide informative details: Export of parts lists including the system-related accessories, set-up pictures in different views for offers to your customers, CAE systems or workshop assembly. The Single Line output supports simple documentation tasks.

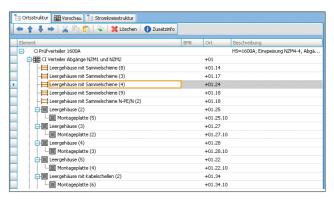
# Everything is displayed on the monitor

- Interfaces to Microsoft TM Excel,
  - soft M Excel,
     Project management
  - DXF vector graphics for importing data into CAE systems
  - Version check and update via Internet
  - Import of specific prices and discounts is possible
  - Export of parts lists and set-up pictures
  - Cross-project copying functions
  - Calculation of metal surcharges

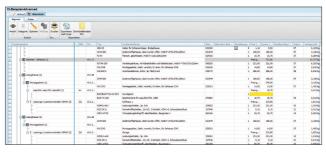




Identification of equipment



Easy navigation and modification of equipment thanks to the Explorer



Clear overview of costs: The required components, weights, metal surcharges, prices and minimum quantities to be ordered etc. are displayed in the basket.

Drag & Drop the right distributor articles

# Switchgear configuration included (free of charge)

The xEnergy Safety Configurator is free for Eaton customers and includes the extra function of switchgear configuration for equipment to be installed in the distribution enclosures. For this purpose you can first select the required Eaton switchgear and protective equipment, configure them according to your requirements and then drag & drop them conveniently at the required position in the distribution cabinet.

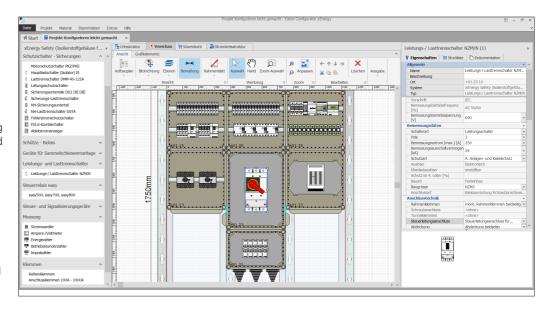
Configurable devices are, among others, digital RCDs, MCBs, load disconnectors, circuit breakers, fuse devices, motor protective devices, contactors, relays, transformers, measuring devices and connection terminals.

Of course all these devices will automatically be transferred to your shopping basket and you will be able to see them in detail in the front-view picture of the system.

It can be downloaded from www.eaton.eu Customer Support

# Made for use in practice

- Object-focused dimensioning
- Automatic function for dimensioning
- Automatic selection of system components and their arrangement
- Variable interior views: Frame, enclosure, components, casings and covers
- Basket with different sorting views and selectable data fields, e.g. weight, can be exported



# Perfection in every detail.



# 1. Total insulation 🗖

The benchmark for ultimate safety: Total insulation is not subject to wear and tear and is therefore absolutely maintenance-free. Also, insulating is safer than grounding.



# 2. Closure bolt of the cover

The closure bolt of the cover features an "Open/Closed" display and can generally be lead-sealed. An incorporated spring provides for venting the cover following short-circuit disconnections of circuit-breakers: The cover rises, allows the pressure to escape and closes again. So, this ensures maximum safety for both operators and systems.



# 3. New enclosure sizes

More flexibility for interior fittings regarding deep combinations with circuit breakers, thanks to new enclosure size Ci45 with max. installation depth of 279 mm or with new polycarbonate hood NZM-RTR, this allows an installation depth of 360 mm, e.g. for Circuit-breaker NZM4 with remote operator.



# 4. Busbar system SASY 60

The full integration of the 60 mm system allows the use of standardized identical parts from the assortment of Eaton. The system can be built of 3 or 4 or 5 poles up to 630 A.



# 5. Micro-perforated mounting plates

For quick device mounting: Mounting plates made of galvanized sheet steel with special microperforation enable a much faster assembly of small devices, since time-consuming processes such as measuring, marking, drilling and tapping are completely eliminated.



# 6. Plug-in terminal technology KSK

Faster contacting of cables up to 4 mm² thanks to modern plug-in technology.



# 7. Stable profiles of the carrier frame

CC-profiles in a stable and corrosion-resistant finish always ensure a safe fit of the system, whether it is a wall-mounted distribution enclosure, a floor-based or a floor-standing enclosure with a cable area casing and a base plinth.



## 8. Cross-strut kits

Barrier-free access makes it easy to arrange rigid copper bars or cables of large diameters in the distribution enclosure.

# The right enclosure for your specific application.



## Ci insulated distribution enclosures

#### When time is what matters most.

The bottom of the enclosures is open on two sides to allow for vertical cable insertion. This helps to save mounting time. For horizontal cable insertion the vertical side panels can be knocked out. Cable insertion into the distribution enclosure is done through flanges with metrical pre-punched openings or through cable fittings varying in number and size.



# Stand-alone enclosures Ci, E

#### When flexibility is what matters most.

Metrical pre-punched openings to be knocked out of the enclosure bottom provide for an integrated cable insertion option from all sides. In addition, there are extensive areas allowing to be knocked out on all side panels. This is how a stand-alone enclosure can be transformed into a distribution enclosure, which helps to reduce stock requirements.



# Stand-alone enclosures Ci, X

#### When smart appearance is what matters most.

The smooth and even side areas of the enclosure bottom prevent the development of filthy corners. Examples of application for this type of enclosure are the operators' level in the (serial) machine building industry, small-size control systems and photovoltaics.

# An example of application.

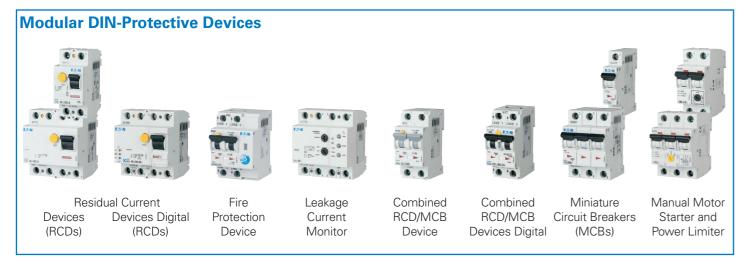


# Ci enclosures as a ready-to-connect network and system protection

# When safety is what matters most.

To guarantee the stability of public networks, the VDE-AR-N 4105 standard includes a set of rules for decentralized power supply out of renewable energy sources - which is no problem for Eaton's ready-to-connect Ci enclosures.

# From a single source: Ci insulated distribution boards, switchgear and know-how The ideal solution for a wide variety of applications

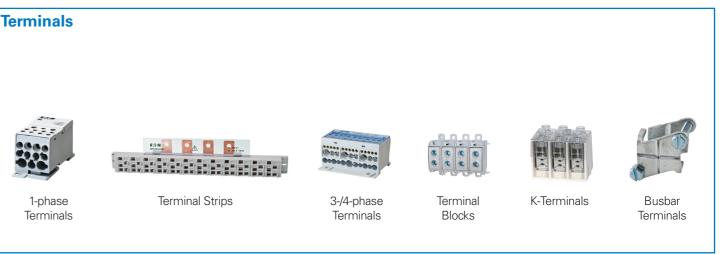










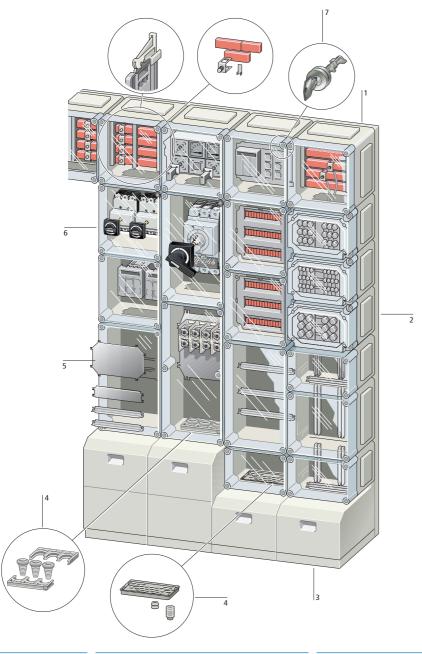


### Benefit:

- The entire distribution board solution is technically inter-coordinated.
- The ideal solution for any application.
- Expansions and adjustments at a later point in time are always possible.
- Perfect image at the end-customer's thanks to a single-source solution.

System overview total isoliert

2000020



-		
Ragin	enc	losures
Duoio	CITO	1000100

Five sizes that can be combined Width  $\geq$  187.5  $\leq$  375 mm Height  $\geq$ 250  $\leq$  750 mm Depth  $\geq$ 150  $\leq$  275 mm

Metric cable-entry knockouts in the sides
Sealable cover fastener with I/O position indicator and built-in springs for pressure relief in the event of a short-circuit

Transparent cover with/without

non-transparent door, RAL 7035

→ Page 1.33

## Busbar systems

3-/4-/5-conductor systems
Rated operational current up to 1600 A

Copper busbars
Busbar terminals

→ Page 1.65

#### Mounting elements

Support frames for wall-mounted and floormounted distribution boards

Wall-fixing brackets

Fixing straps

→ Page 1.45

## Cable compartment

Plinths

Cable compartment cladding

→ Page 1.90, → Page 1.91

#### Cabla antrias

Gland plates for large cross-sections

Metric cable glands/grommets

→ Page 1.44, → Page 1.38, → Page 1.93

18

# Mounting systems for basic enclosures

Mounting plates made from sheet steel and insulating material

Micro-perforated mounting plates for standard

mounting
Mounting rails and modular mounting rails to

IEC/EN 60715

Mounting depths of 125 mm to 250 mm Metering equipment

→ Page 1.40

# Pre-assembled enclosures/distribution board

MCB enclosures
Fuse enclosures

Enclosures with NH fuse switch-disconnectors
Circuit breaker enclosures

Meter enclosures → Page 1.50, → Page 1.54

## Cover fasteners

Latching or with cylinder lock

→ Page 1.36

### Features

- **total** isoliert
- Basic enclosures according to IEC/EN 62208
- Switchgear assemblies to IEC/EN 61439-2
- IP65 degree of protection
- Integrated pressure-relief mechanism for short-circuits
- Protection class 2
- Distribution board system with increments of 25 mm
- Modular system
- Captive, sponge-rubber gaskets
- Insulating wedge-lock fastener for connecting the enclosures to each other
- Enclosures made from self-extinguishing, halogen-free polycarbonate

#### **Enclosure types**

The enclosure cover is identical for all three types.

#### Cl...E-... individual enclosures

- Metric cable entry knockouts in all sides
- All enclosure sides can also be knocked out
- Also suitable for use in xEnergy Safety distribution systems

3200PIC-46



# Cl...-... panel enclosures

- Closed sides that can be fully knocked out
- The walls are open at the top and bottom
- Suitable for use in xEnergy Safety distribution systems

3200PIC-34



## Standards

- IEC/EN 61439-2
- IEC/EN 62208
- UL 508

#### Cl...X-... individual enclosures

• All four enclosure sides are smooth, without knockouts

3200PIC-52



**xEnergy** Safety

019570

194609

093133

194611

# xEnergy Safety

# Basic enclosures, E-type individual enclosures

- With metric cable-entry knockouts in all side walls, see diagram A F
- Sides can be fully knocked out
- Can be converted into a distribution panel enclosure
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Transparent or non-transparent cover (RAL 7035, light gray)
- Fixing straps for wall mounting included
- Sealable cover fasteners

Dimensions
mm

Enclosure depth (dimensions from top) 1. Mounting depth with mounting plate 2. Mounting depth with 7.5 mm high	Type name	Article no.	Units per
z. Mounting depth with 7.5 min high mounting rail			packag
Mounting depth with 15 mm high mounting rail			packag
4. Enclosure depth			

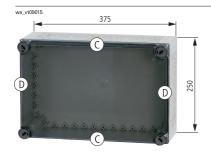




00027042_0				
l iii				
111	150			
	142.5			
◄	142.5	-		
	135			
		$\vdash$		
	175			
-		-		

Iransparent cover	UIZ3E-130	021943	ı
Non-transparent cover	CI23E-150-RAL7035	194610	1

CI43E-125



00005685_0	
117.5	<b>&gt;</b>
110	-
150	•

00005685_0	Non-transparent cover	CI43E-125-RAL7035
125		
117.5		
110		

150			
00027042_0	Transparent cover	CI43E-150	095506
150	Non-transparent cover	CI43E-150-RAL7035	194612

Transparent cover

		4
	200	
	192.5	
	185	
111		

Transparent cover	C143E-200	097879	1
Non-transparent cover	CI43E-200-RAL7035	194613	1

Dimensions mm

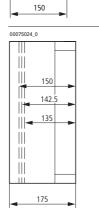
Enclosure depth (dimensions from top)
1. Mounting depth with mounting plate
2. Mounting depth with 7.5 mm high mounting rail
3. Mounting depth with 15 mm high mounting rail
4. Enclosure depth mm

110

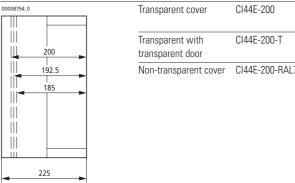
Type name Article no. Units per

package

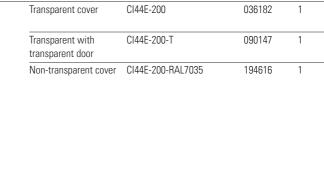
Transparent cover CI44E-125 031436 Non-transparent cover CI44E-125-RAL7035 194614 125 117.5

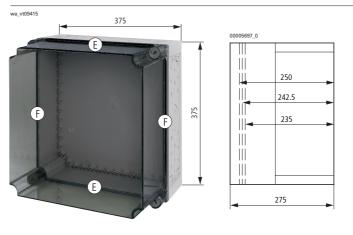


CI44E-150 033809 Transparent cover Non-transparent cover CI44E-150-RAL7035 194615



21





CI44E-250 038555 Transparent cover

**EATON CORPORATION CA015006EN** 

**EATON CORPORATION CA015006EN** 

Dimensions

mm

Units

per package

Article no.

010408

015154

019900

024646

029392

package

## X-type individual enclosures

CI43X-125

CI43X-150

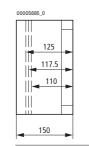
CI43X-200

# Basic enclosures, X-type individual enclosures

- Smooth sides without knockouts, 6.5 mm thick
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit

•	Transparent cover     Fixing straps for wall mounting included     Sealable cover fasteners	olicat
Dimensions mm	Enclosure depth (dimensions from top) 1. Mounting depth with mounting plate 2. Mounting depth with 7.5 mm high mounting rail 3. Mounting depth with 15 mm high mounting rail 4. Enclosure depth mm	Type name
wa_vr08815 187,5	00005685_0	CI23X-125
	00027042,0     150     142.5     135	Cl23X-150





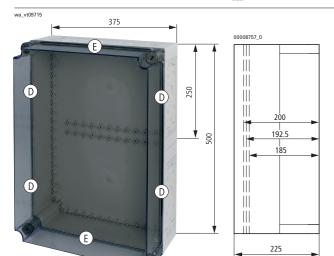
00005	691_0		
	150		
	142.5		
	135		
l ;;;			
نتنا			
_	175		
1 2		-	

200	<b>→</b>
225	_

00005691\_0

Enclosure depth (dimensions from top)	Туре	Article no.
Mounting depth with mounting plate     Mounting depth with 7.5 mm high	name	
mounting rail		

mounting rail
3. Mounting depth with 15 mm high mounting rail
4. Enclosure depth mm



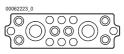
iransparent cover	0143L-200	001031	'	
Non-transparent cover	CI45F-200-RAI 7035	194617	1	

CIVEE 300

Transparent cover	CI45E-250	194552	
Non-transparent cover	CI45E-250-RAL7035	194553	

Notes A B C D 00062217\_0



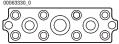


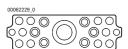
22



1 x M32/20 2 x M32/20 2 x M50/20 1 x M50/32 6 x M20 4 x M25/16 6 x M25/16 6 x M25/16 2 x M16 4 x M20 8 x M20

4 x M16





1 x M50/32 1 x M63/40 2 x M40/25 6 x M25/16 8 x M25/16 10 x M20 2 x M20 2 x M16

23

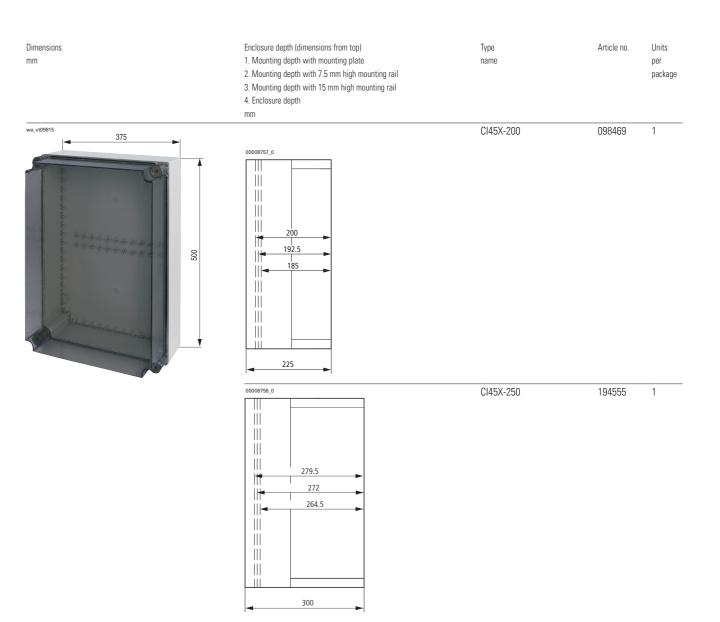
xEnergy Safety

xEnergy Safety

# Ci insulated enclosures

1.25

Dimensions mm	Enclosure depth (dimensions from top) 1. Mounting depth with mounting plate 2. Mounting depth with 7.5 mm high mounting rail 3. Mounting depth with 15 mm high mounting rail 4. Enclosure depth mm	Type name	Article no. Units per package
Wa_v109515 375	00005694_0	CI44X-125	031765 1
	00075024_0	CI44X-150	034138 1
	00008754_0	C144X-200	036511 1
	250 	C144X-250	038884 1



# xEnergy Safety

Units

package

098208

017527

# Panel enclosures

# Basic enclosures, panel enclosures

- Sides closed, with full area knockout, open at top and bottom
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Transparent cover, sealable cover fasteners

Dimensions	
mm	

Enclosure depth (dimensions from top)	Туре	Article no
1. Mounting depth with mounting plate	name	
2. Mounting depth with 7.5 mm high mounting rail		
3. Mounting depth with 15 mm high mounting rail		

4. Enclosure depth

192.5

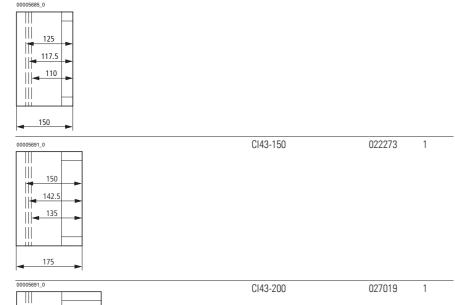
wa_vt08615	
0 10	1
	250

	0.20 .20	000200	
00005685_0 			
150			
00027042_0	C123-150	012781	1
175			

Cl23-125

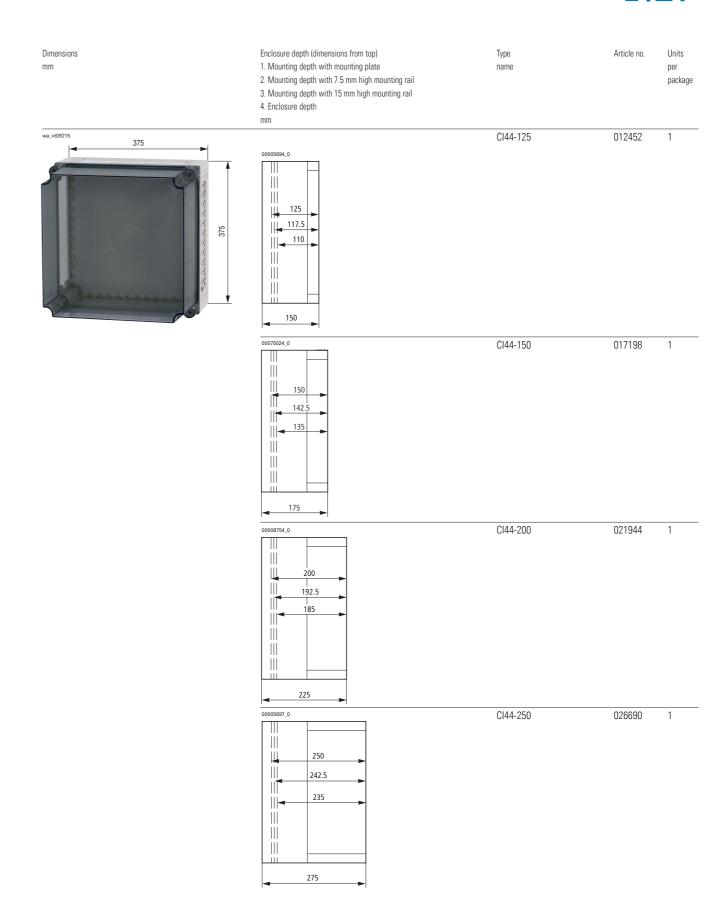
CI43-125





# xEnergy Safety

# Ci insulated enclosures



xEnergy Safety

xEnergy Safety

# Ci insulated enclosures

Dimensions mm

Enclosure depth (dimensions from top) 1. Mounting depth with mounting plate 2. Mounting depth with 7.5 mm high mounting rail 3. Mounting depth with 15 mm high mounting rail Article no. Units

per package

4. Enclosure depth

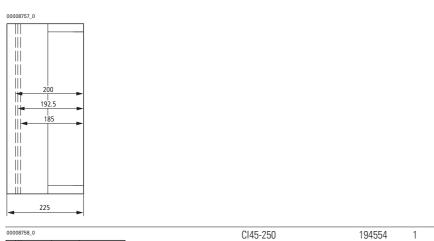
mm

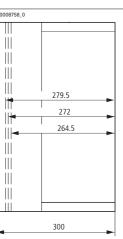
CI45-200 001896

Type

name







Dimensions mm

Enclosure depth (dimensions from top) 1. Mounting depth with mounting plate 2. Mounting depth with 7.5 mm high mounting rail

name

CI48-250

Article no. Units per

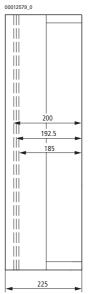
package

3. Mounting depth with 15 mm high mounting rail 4. Enclosure depth

mm

CI48-200 078896





00008760\_0 242.5 275

083642

Panel enclosures with gland plates fitted



# xEnergy Safety

# Ci insulated enclosures

131

# Basic enclosures, panel enclosures with gland plates fitted

- Sides closed, with full area knockout, open at the top
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Gland plate can be split, cables can be inserted from the front
- The cable supports in the distribution board are mounted using a wedge-lock fastener
- Transparent cover, sealable cover fasteners

va_vt10015	25	0		
6.4	000	00	7/	
		10	100	Ī
160				187.5
	2		1360	•

Dimensions

Enclosure depth (dimensions from top)  1. Mounting depth with mounting plate  2. Mounting depth with 7.5 mm high mounting rail  3. Mounting depth with 15 mm high mounting rail  4. Enclosure depth mm	Cable entry external diameter mm	Type name	Article no.	Units per package
00005685_0	2 x 14 - 54	KST32-125	069774	1

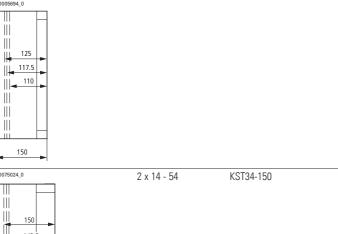
00027042_0	2 x 14 - 54	KST32-150	072147	1
150   142.5   135   135				
175				

KST34-125

076893

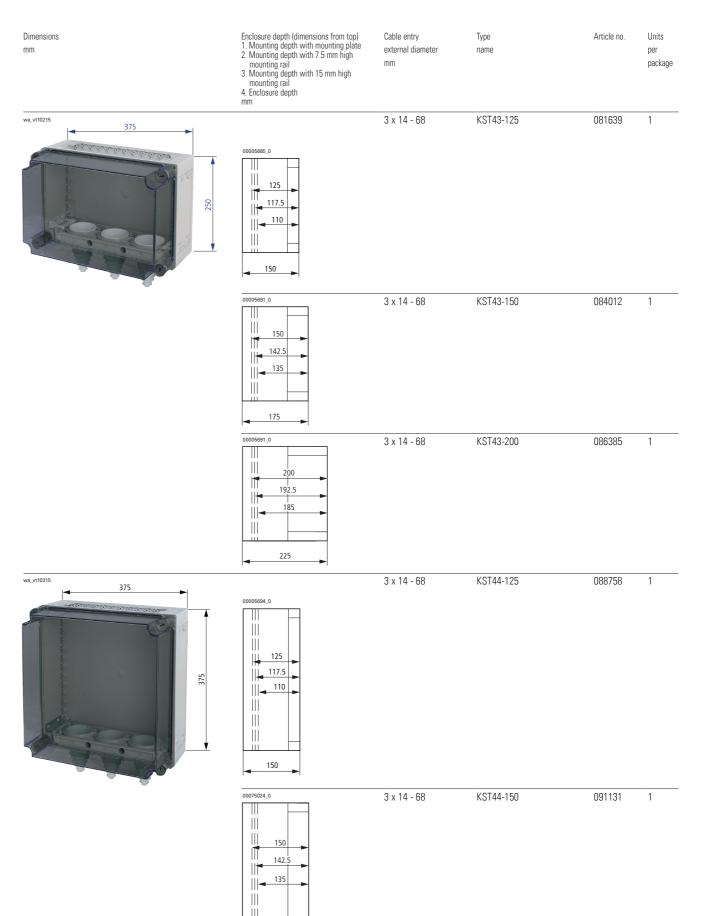
074520





2 x 14 - 54

135					
00008754_0		2 x 14 - 54	KST34-200	079266 1	
200     192.5     185					
225	30		EATON COR	RPORATION CA015006EN	





Ci insulated enclosures

name

KST48-200

KST48-250

Cable entry

3 x 14 - 68

3 x 14 - 68

external diameter

Article no.

098250

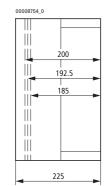
010450

Units

per

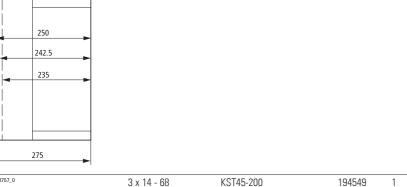
Dimensions mm	Enclosure depth (dimensions from top) 1. Mounting depth with mounting plate 2. Mounting depth with 7.5 mm high mounting rail 3. Mounting depth with 15 mm high mounting rail 4. Enclosure depth mm	Cable entry external diameter mm	Type name	Article no.	Units per pack
wa_vt10315		3 x 14 - 68	KST44-200	093504	1





	200	
	192.5	
	185	
Ш		
•	225	
	- 1	
00005697_0		

   <u> </u>	250	
	242.5	
[¯     <b>⊲</b> —	235	_
ii		

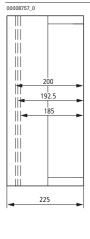


KST44-250

095877

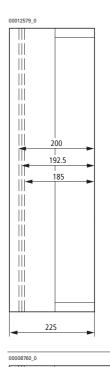
3 x 14 - 68







xEnergy Safety



Enclosure depth (dimensions from top)
1. Mounting depth with mounting plate
2. Mounting depth with 7.5 mm high mounting rail
3. Mounting depth with 15 mm high mounting rail
4. Enclosure depth mm

00008760_0		
l iii		
l iii		
	250	
	242.5	
<b> </b>	235	
l iii		
l iii		

275

package

# xEnergy Safety

# Enclosure bases

Dimensions		Cable entry		Туре	Article no.	Units
width	height	at top and bottom	sideways	name		per
mm	mm					package

# **Bases for E-type individual enclosures**

- Metric cable entry knockouts in all sides
- Sides can be fully knocked out

3200PIC-188	
1500 200 200	ì
9.40	
6	
6	
6	
6	
6	
40	
* 666666	
	P

	,				
187.5	250	1 x M32/20 6 x M20 2 x M16	2 x M32/20 4 x M25/16 4 x M20 4 x M16	U-Cl23E	038793 1
375	250	2 x M50/32 6 x M25/16 8 x M20	1 x M50/32 6 x M25/16	U-Cl43E	064896 1
	375	1 x M50/32 2 x M40/25 8 x M25/16 2 x M20	1 x M63/40 6 x M25/16 10 x M20 2 x M16	U-CI44E	069642 1
	500	1 x M50/32 2 x M40/25 8 x M25/16 2 x M20	2 each: 1 x M50/32 6 x M25/16	U-CI45E	001893 1

# Bases for X type individual enclosures

Smooth sides without knockouts, 6.5 mm thick



Onlood	i dided withou	it knookouto, o.o min tii	iok			
187.5	250	drill as required	drill as required	U-Cl23X	057909	1
375	250	drill as required	drill as required	U-CI43X	062655	1
	375	drill as required	drill as required	U-CI44X	067401	1
	500	drill as required	drill as required	U-CI45X	098470	1

# **Bases for panel enclosures**

- Sides closed, can be fully knocked out
- Walls open at top and bottom



187.5	250	via FL2 flange via FL3 flange	U-Cl23	060282 1
375	250	via FL4 flange via FL3 flange	U-CI43	065028 1
	375	via FL4 flange via FL4 flange	U-C144	067269 1
	500	via FL4 flange via FL3 flange	U-C145	001894 1
	750	via FL4 flange via FL4 flange	U-C148	083880 1

# xEnergy Safety

# Ci insulated enclosures

	Dimensions width mm	height mm	Mounting depth mm	For use with	Type name	Article no.	Units per package
	_	cover fasten					
1200PIC-112	187.5	250	125	U-Cl23	D125-Cl23	014830	10
			150	U-Cl23	D150-Cl23	024322	4
	375	250	125	U-CI43	D125-Cl43	017203	5
			150	U-CI43	D150-Cl43	038560	2
			200	U-CI43	D200-Cl43	074155	2
18318_r		375	125	U-CI44	D125-Cl44	019576	5
			150	U-CI44	D150-Cl44	040933	2
			200	U-CI44	D200-Cl44	076528	2
			250	U-CI44	D250-Cl44	081274	1
		500	200	U-CI45	D200-Cl45	001895	1
			279	U-CI45	D250-Cl45	194550	1
		750	200	U-CI48	D200-C148	078901	2
			250	U-C148	D250-C148	083647	1
			250/360	U-CI48	D250-CI48-NZM-RTR	194558	1

# **Non-transparent covers**

- RAL 7035, light graySealable cover fasteners



Gasket	ie covei iastei	liers				
187.5	250	125	U-Cl23	D125-CI23-RAL7035	194618	10
		150	U-Cl23	D150-Cl23-RAL7035	194619	4
375	250	125	U-Cl43	D125-CI43-RAL7035	194620	5
		150	U-Cl43	D150-CI43-RAL7035	194621	2
		200	U-Cl43	D200-CI43-RAL7035	194622	2
	375	125	150       U-Cl23       D150-Cl23-RAL7035       194619       4         125       U-Cl43       D125-Cl43-RAL7035       194620       8         150       U-Cl43       D150-Cl43-RAL7035       194621       2         200       U-Cl43       D200-Cl43-RAL7035       194622       2         125       U-Cl44       D125-Cl44-RAL7035       194623       8         150       U-Cl44       D150-Cl44-RAL7035       194624       2         200       U-Cl44       D200-Cl44-RAL7035       194625       2         250       U-Cl44       D250-Cl44-RAL7035       194626       2         200       U-Cl45       D200-Cl45-RAL7035       194627       2         279       U-Cl45       D250-Cl45-RAL7035       194551       2         200       U-Cl48       D200-Cl48-RAL7035       194528       2	5		
		150	U-Cl44	D150-CI44-RAL7035	194624	2
		200	U-Cl44	D200-CI44-RAL7035	194625	2
		150 U-Cl23  125 U-Cl43  150 U-Cl43  200 U-Cl43  5 125 U-Cl44  150 U-Cl44  200 U-Cl44  200 U-Cl44  270 U-Cl45  279 U-Cl45	D250-CI44-RAL7035	194626	1	
	500	200	U-CI45	D200-CI45-RAL7035	194627	1
	150 U-Cl23  250 125 U-Cl43  150 U-Cl43  200 U-Cl43  150 U-Cl44  150 U-Cl44  200 U-Cl44  200 U-Cl44  270 U-Cl44  279 U-Cl45  750 200 U-Cl48	U-CI45	D250-CI45-RAL7035	194551	1	
	750	200	U-CI48	D200-CI48-RAL7035	194628	2
		250	U-CI48	D250-CI48-RAL7035	194629	1



### Lockable enclosure cover

Dimensions	Mounting depth	For use with	Number of	Туре	Article no.	Units
width height	mm		cylindrical locks	name		per
mm mm						package

## Transparent covers

- 2 and 4 lockable diagonal cover fasteners, with cylinder lock
- Cylinder locks, common locking mechanism
- 2 sealable diagonal cover locks; no sealing option if all DV...-Cl are replaced with DVZ-...-Cl
- Scope of delivery: gasket, key

3200PIC-111	
	0
5	6

		-					
187.5	250	125	U-Cl23	2	D125-Cl23-DVZ	138354	4
		150	U-Cl23	2	D150-Cl23-DVZ	138355	4
375	250	125	U-CI43	2	D125-CI43-DVZ	138356	2
		150	U-CI43	2	D150-Cl43-DVZ	138357	2
		200	U-CI43	2	D200-CI43-DVZ	138358	2
	375	125	U-CI44	2	D125-CI44-DVZ	138359	2
		150	U-CI44	2	D150-CI44-DVZ	138520	2
		200	U-CI44	2	D200-CI44-DVZ	138521	2
		250	U-CI44	2	D250-CI44-DVZ	138522	2
	500	200	U-CI45	2	D200-CI45-DVZ	138523	1
	750	200	U-CI48	4	D200-CI48-DVZ	138524	2
		250	U-CI48	4	D250-CI48-DVZ	138525	2

#### Notes

If a non-transparent cover with cylinder lock is required, the cover type D...-Cl...-RAL7035 should be used, in combination with the cylinder locks DVZ-125-Cl or DVZ-150-250-Cl.

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# Ci insulated enclosures

1.37

### Enclosure covers with door, doors

	For use with	Mounting depth mm	Type name	Article no.	Units per package
3913	U-Cl23	125	D125-Cl23/T	072476	10
1		150	D150-Cl23/T	074849	4
	U-Cl43	125	D125-CI43/T	077222	2
		150	D150-Cl43/T	079595	2
Se de		200	D200-CI43/T	081968	2
	U-Cl44	125	D125-CI44/T	084341	2
		150	D150-CI44/T	086714	2
		200	D200-CI44/T	089087	2
		250	D250-C144/T	091460	1
	For use with		Type name	Article no.	Units per package
		180° depth by 13.5 mm and the exterior height ently be switched to left, right, top or botto			
PIC-407	Cl23, DCl23		T-Cl23	093833	2



Cl23, DCl23	T-Cl23	093833	2
Cl43, DCl43 Cl45, DCl45	T-Cl43	096206	1
CI44, DCI44 CI48, DCI48	T-C144	098579	1

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1.38

# Ci insulated enclosures



# Accessories for basic enclosures

	For use with	Type name	Article no.	Units per package
	Cover fasteners for Ci enclosures			
VT68513	Cl23: 4 pieces Cl43: 4 pieces Cl44: 4 pieces	DV125-CI	001923	10
	Cl23: 4 pieces Cl43: 4 pieces Cl44: 4 pieces Cl45: 4 pieces Cl48: 6 pieces	DV150-250-CI	001924	10
	Cover fasteners with cylinder loc  • Lockable diagonal cover fasteners with cylinde  • keys			

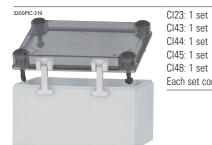
• At least one DV125-Cl or DV150-250-Cl standard cover fastener must be used for sealing



Cl23: max. 4 pieces	DVZ125-CI	133100	2
CI43: max. 4 pieces			
Cl44: max. 4 pieces			
Cl23: max. 4 pieces	DVZ150-250-CI	133101	2
Cl43: max. 4 pieces			
Cl44: max. 4 pieces			
CI45: max. 4 pieces			
Cl48: max. 4 pieces			

# Set of cover hinges

- For Cl...E and Cl...X individual enclosures
- For Cl... panel enclosure on the sides if no flange is installed



Cl23: 1 set	DSCH-CI	034224	5
CI43: 1 set			
Cl44: 1 set			

Cl48: 1 set Each set consists of 2 hinges.

#### Handla

- Quick-release fastener for manual opening of the enclosure
- For the D200 and D250 covers, the VHG50-Cl handle extension must be ordered separately



Cl23: 4 pieces	HG-CI	046382	20
CI43: 4 pieces			
CI44: 4 pieces			
Cl45: 4 pieces			

VHG50-CI

044880

# **Handle extension**

Cl48: 6 pieces

• For D200-... and D250-... covers

Cl43-200(250)/D200(250)-Cl43: 4 pieces Cl44-200(250)/D200(250)-Cl44: 4 pieces Cl45-200/D200-Cl45: 4 pieces

Cl48-200(250)/D200(250)-Cl48: 4 pieces



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# Ci insulated enclosures

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Sealing kit • For the upper edge of the D200 and D250 covers    Sealing kit   Sealing kit	PLV200-CI		
	PLV200-CI		
Use one set diagonally for each enclosure.  Each set consists of 2 sealable locks.		044881	5
Dimensions Height For use with width mm	Type name	Article no.	Units per package
<ul> <li>Enclosure shroud</li> <li>IP65 degree of protection</li> <li>To increase the mounting depth by 105 mm</li> <li>For switchgear that may only be operated by professionals</li> <li>Transparent</li> <li>For NZM remote operators, among others</li> </ul>			
V119318.r 265 253 C144 C145 C148	NZM-RTR	194557	1
Dimensions Width x height x depth mm	Type name	Article no.	Units per package
Spare part corner pieces (4 pcs.)  • Set of 4 corner pieces for CI base incl. fixing screws			
vi57215 26 x 26 x 36	ECK-SET-CI	179324	1

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Accessories, flanges

	Cable entry	Type name	Article no.	Units per package
	Flanges  • Foamed captive gasket  • Quick mounting using wedge-lock fasteners (included as standard)			
3200PIC-159	For 375 mm enclosures  Drill as required	FL4-X	024355	10
3200PIC-154	26 x M16, 14 x M20	FL4-2	014863	10
3200PIC-155	5 x M25, 6 x M25/16, 6 x M32/20	FL4-3	017236	10
3200PIC-156	4 x M16, 2 x M25/16, 8 x M40/25	FL4-4	019609	10
3200PIC-157	2 x M16, 4 x M20, 2 x M25/16, 2 x M40/25, 3 x M50/32	FL4-5	021982	10
	For 250 mm enclosures			
3200PIC-153	Drill as required	FL3-X	093171	10
3200PIC-150	18 x M16, 4 x M20	FL3-1	088425	10
3200PIC-151	6 x M20, 4 x M25, 4 x M25/16	FL3-2	090798	10
3200PIC-152	2 x M16, 5 x M40/25	FL3-3	022644	10
	For 187.5 mm enclosures			
3200PIC-149	Drill as required	FL2-X	086052	10
3200PIC-147	10 x M16, 3 x M20	FL2-2	017898	10
3200PIC-148	6 x M20, 2 x M25/16	FL2-3	020271	10
	For 125 mm enclosures			
3200PIC-146	Drill as required	FL1-X	078933	10

xEnergy Safety

# Ci insulated enclosures

	External cable diameter mm	For use with	Type name	Article no.	Units per package
	Sponge-rubber • IP54 degree of proter • To be fitted on the si				
220PIC-158	42 x 10 - 13 4 x 15 - 19 2 x 20 - 30	NYY, NYM 3 x 1.5 mm <sup>2</sup> - 5 x 2.5 mm <sup>2</sup> NYY, NYM 4 x 4 mm <sup>2</sup> - 5 x 10 mm <sup>2</sup> NYY, NYM 4 x 10 mm <sup>2</sup> - 4 x 50 mm <sup>2</sup>	FL4-D	044879	10

	• IP65 degree of p	ange plates IP65 rotection with special TPE-flange for push-through cable entry		
EP501530_L	3 x 3 - 6 9 x 3 - 7 8 x 6 - 9 4 x 6 - 12 1 x 10 - 20	250 mm enclosures	FL3-MH25-CI	EP-501530 1
EP501531_L	4 x 6 - 10 14 x 8 - 12 16 x 10 - 14 2 x 12 - 18 1 x 17 - 32	375 mm enclosures	FL4-MC37-CI	EP-501531 1

	For use with	Type name	Article no.	Units per package
	Spacers for flanges  • To extend the connection compartment by 25 mm			
00PIC-209	For fitting FL3 flanges on the side of 250 mm enclosures	ZRF3	067734	2
88	For fitting FL4 flanges on the side of 375 mm enclosures	ZRF4	070107	2

41

Article no.

# Mounting systems for basic enclosures

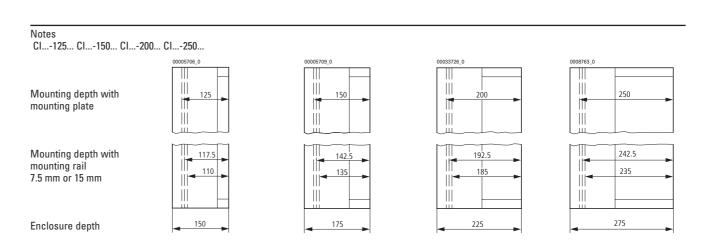
For use with

	Mounting plates • Includes 4 captive fixing screws						
	For use with	Thickness mm	Type name	Article no.	Units per package		
	Micro-perforated, sheet s	teel, galvanized					
vt05518	C123	1.5	MM-Cl23	193444	5		
2	CI43: 1 x CI45: 2 x	1.5	MM-CI43	193445	5		
R	Cl44	1.5	MM-CI44	193446	5		
	CI45	1.5	MM-CI45	193447	5		
	C148	1.5	MM-CI48	193448	2		
	For use with	Description	Type name	Article no.	Units per package		
	Pan-head screw						
VT11110	MM-Cl	Pan-head screw M4x8 thread-forming	EPLHS-M4X8	144028	100		

		mm	name		per package
	Galvanized steel, 1.5 - 2 n	nm thick			
VT17013	Cl23	1.5	M-Cl23	193438	5
	Cl43: 1 x Cl45: 2 x	1.5	M-CI43	193439	5
332	C144	2	M-CI44	193440	5
1	C145	2	M-CI45	193441	5
H	CI48	2	M-CI48	193442	2
	For use with	Description	Type name	Article no.	Units per package
	Thread-forming screw				
VT1110	M-Cl	Thread-forming pan-headed screw M4x8, TORX 20, DIN 7500 1 set = 100 pieces	GFS-CI	193443	1

Thickness

	For use with		Type name	Article no.	Units per package
	Galvanized sheet s	teel, 3 mm thick			
VT17013	C123		M3-Cl23	019709	5
	CI43: 1 x CI45: 2 x		M3-CI43	029201	5
	C144		M3-CI44	031574	5
	CI45		M3-Cl45	003036	5
H H	C148		M3-C148	036320	2
	Glass-fibor rainford	eed insulating material, 4 mm thic	sk		
	Devices are secured us		, n		
T17113	C123		IM4-Cl23	086081	5
7	Cl43: 1 x Cl45: 2 x		IM4-CI43	088454	5
	CI44		IM4-CI44	090827	5
	C148		IM4-CI48	093200	5
	For use with	Description	Type name	Article no.	Units per package
	Hank nuts for insulate	ed mounting plate			
/T69313	IM4	M4 thread	EM4-CI	002293	100
	IM4	M5 thread	EM5-CI	002294	100
	IM4	M6 thread	EM6-CI	002295	100



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# Ci insulated enclosures

# Accessories for fitting meters

	For use with	Type name	Article no.	Units per package
	Meter shrouds  • For 96 x 96 mm snap-on metering devices, max. 6 pieces  • The meter shroud is secured using the AH-GA support brackets.			
VT28413	Cl43E-200 and Cl43E-250 enclosures	GA-MS-I43	053502	1
	Cl44E-250 enclosures	GA-MS-I44	055875	1
	Set of support brackets			
VT28413	For meters and protective shrouds (the GA-MS-I43 meter shroud must be ordered separately). Each set consists of 4 brackets.	AH-GA	002305	10
9				
	Set of support brackets			
VT65513	To blank off unused spaces: also required as an adapter with snap-on 72 x 72 mm meters and when fitt the PKZM0 (voltmeter) or T0 (meter changeover switch) devices. (The GA-MS-I43 meter shroud must be ordered separately)	HBA-4344 ing	002316	10
	Fixing kits			
VT63213	For fitting the PKZMO, TO devices, max. 2 pieces. To be fitted in parallel wit the 250 mm wide enclosure side.  (The GA-MS-I43 meter shroud must be ordered separately)	h BFS-PT3	002317	5
	For fitting the PKZMO, TO devices, max. 3 pieces To be fitted in parallel with the 250 mm wide enclosure side.  (The GA-MS-I43 meter shroud must be ordered separately)	n BFS-PT4	002318	5

# Mounting system for basic enclosures, accessories

	Thickness mm	For use with	Type name	Article no.	Units per package		
	Module mounting rail  330 mm of usable length for 375 mm  and a mm galvanized steel, or 1.5 mm Includes fixing screws	mm enclosures galvanized micro-perforated 1.5 mm steel					
v106418	3	horizontal Cl43 Cl44 Cl45 Cl48 vertical Cl44	ML4-CI	193449	10		
	1.5	horizontal Cl43 Cl44 Cl45 Cl48 vertical Cl44	MML-4-CI	193450	10		
	Bar height mm	For use with	Type name	Article no.	Units per package		
	Mounting rail to IEC/EN  • Galvanized sheet steel  • Includes 2 captive fixing screws	60715					
3200PIC-229	7.5	145 mm of usable length For 187.5 mm enclosures	CL2	029064	20		
		207 mm of usable length For 250 mm enclosures	CL3	033810	20		
		332 mm of usable length For 375 mm enclosures	CL4	038556	20		
3200PIC-232	15	145 mm of usable length For 187.5 mm enclosures	CL2-15	031437	10		
		207 mm of usable length For 250 mm enclosures	CL3-15	036183	10		
		332 mm of usable length For 375 mm enclosures	CL4-15	040929	10		
	Raising piece		Type name	Article no.	Units per package		
	<ul> <li>Spacer</li> <li>For raising the mounting systems</li> <li>4 pieces are required for the mounting plate, and 2 for the mounting rail</li> </ul>						
3200PIC-224	By 10 mm		ADT200-190	002289	25		
	By 15 mm		ADT125-110	002290	25		
3200PIC-246	By 25 mm		HS25-CI	002291	10		
Y	By 50 mm		HS50-CI	002292	10		
	For use with		Type name	Article no.	Units per package		
	Captive fixing screw  • For fixing the mounting systems  • For replacement purposes						
3200PIC-273	Mounting plates, pre-drilled moun module mounting rails	nting plates, mounting rails,	UBS4.8	002288	25		

#### Accessories for enclosure assembly

	For use with enclosure size	Type name	Article no.	Units per package
	Connection kits			
	• For connecting the enclosures to each other, includes wedge-lock fastener			
3200PIC-235	187.5 mm	BS2-CI	090750	10
3200PIC-236	250 mm 500 mm (use 2 pieces)	BS3-CI	097869	10
3200PIC-238	375 mm 750 mm (use 2 pieces)	BS4-CI	014815	10
9				

Finger-protection covers	(Form 2) for add-on connection
--------------------------	--------------------------------

• For finger-protection between the enclosures when connecting them

	To linger protection between the enclosure.	When connecting them	
EP-501534	187.5 mm	F2P-2-CI	EP-501534 1
	7		
EP-501535	250 mm	F2P-3-CI	EP-501535 1
EP-501536	375 mm	F2P-4-CI	EP-501536 1

# Flange adapters

• For connecting enclosures with sides of different lengths



**Cable capture plates** 

	Enable cable strain-relief after inserting then	Enable cable strain-relief after inserting them				
EP-501537_C	250 mm	CCP-3-CI	EP-501537 1			
<u> </u>	_ \$					
EP-501538_C	375 mm	CCP-4-CI	EP-501538 1			
<u>a</u>						

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For use with enclosure size	Type name		Units per package
Cross-strut kits  • Enable the fitting of cables or busbars from the front			
250 mm	STB3-CI	219217	1
375 mm	STB4-CI	034223	1

# **Gland plates**

Enable the fitting of cables or busbars from the front

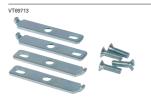


=			
250 mm	KS3-CI	057621	1
For 2 cables of 14 - 54 mm length			
375 mm	KS4-CI	062367	1
For 3 cables of 14 - 68 mm length			

Description	Туре	Article no.	Units
	name		per

# Fixing strap kits

- For fixing Ci enclosures directly to the wall
- Max. 4 Cl43... enclosures



Galvanized version.	BL-CI	036168	5
Each set contains 4 straps.			
V2A steel version.	BL-CI-VA	038541	5
Each set contains 4 straps.			

## **Wall-fixing brackets**

- Sheet steel, RAL 7035 powder coated
- For fixing Ci enclosures directly to the wall with a clearance of 50 mm
- One wall-fixing bracket must be fitted to every second enclosure, for transport purposes additional brackets should be added at the bottom



Section length 2125 mm, cut to fit	W16/32-CI	193455 1	l
Max. 2 x Cl43 one above the other	W4/8-CI	193451 1	
Max. 2 x Cl44 one above the other	W6/12-CI	193452 1	l
Max. 4 x Cl43 one above the other	W8/16-CI	193453 1	l
Max. 5 x Cl43 one above the other	W10/20-CI	193454 1	l

## Fixing screw



For fixing Ci enclosures directly to the W... wall-mounting brackets and the LT284-M6X20-C 050325 WS..., WW... sections.

FT-CI

002319

10

Enclosure size 375 mm

002312

20

## X-type individual enclosures for North America

	Description	Type name	Article no.	Units per package
	Coupling piece			
3200PIC-275	For enclosure assembly and flange mounting, K-Cl required	VS-CI	002315	100
	For installing gland plates, K-Cl required	VS-KS-CI	038460	25
	Wedge			
VT66813	For enclosure assembly and the installation of flanges and gland plates, in combination with VS-CI or VS-KS-CI	K-CI	002314	100
	Bracket			
3200PIC-257	For enclosure assembly, enclosure size 375 mm	KD4-CI	002313	25
	Gaskets			
200PIC-257	For enclosure assembly  Enclosure size 187.5 mm	D2-CI	002310	20
	Enclosure Size 167.5 min	DZ-GI	002310	20
3200PIC-284	Enclosure size 250 mm	D3-CI	002311	20

## **Individual enclosures with covers**

- Transparent cover, sealable cover fasteners
- Enclosure base RAL 7035 with smooth sides
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Fixing straps for wall mounting included
- UL 508 approved

	Dimensions			iviounting depth	туре	Article no.	Units
	width	height	depth	mm	name		per
	mm	mm	mm				package
DPIC-384	187.5	250	150	125	CI23X-125-NA	002209	1
			175	150	CI23X-150-NA	002212	1
	375	250	150	125	CI43X-125-NA	002213	1
The second of			175	150	CI43X-150-NA	002232	1
6			225	200	CI43X-200-NA	002217	1
		375	150	125	CI44X-125-NA	002218	1
			175	150	CI44X-150-NA	002219	1
			225	200	CI44X-200-NA	002220	1
			275	250	CI44X-250-NA	002224	1
		500	225	200	CI45X-200-NA	264023	1

Notes Information for export to North America:
Product standards UL 508A; IEC/EN 60529; CE marking
UL File No. E499317
UL CCN NITW NA Certification: UL listed
Specially designed for NA: Yes
Suitable for industrial control panels
Degree of protection IEC: IP65; UL Types 1, 12, 13, 4X, indoor only

Prepared enclosures Individual MCB enclosures

#### Panel enclosures for North America

## Panel enclosures with cover and flanges

- Transparent cover, sealable cover fasteners
- Base in RAL 7035, featuring removable smooth gland plate inserts on all 4 sides
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Fixing straps for wall mounting included
- UL 508 approved

3200PIC-386		
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Dimensions width mm	height mm	depth mm	Mounting depth mm	Type name	Article no.	Units per package
234	296	150	125	CI23-125-NA	002234	1
		175	150	CI23-150-NA	002237	1
	296	150	125	CI43-125-NA	002238	1
		175	150	CI43-150-NA	002241	1
		225	200	CI43-200-NA	002242	1
	421	150	125	CI44-125-NA	002245	1
		175	150	CI44-150-NA	002246	1
		225	200	CI44-200-NA	002249	1
		275	250	CI44-250-NA	002250	1
	546	225	200	CI45-200-NA	264024	1
	796	225	200	CI48-200-NA <sup>1)</sup>	002253	1
		275	250	CI48-250-NA <sup>1)</sup>	002254	1

Notes Information for export to North America: Product standards UL 508A; IEC/EN 60529; CE marking UL File No. E499317 UL CCN NITW NA Certification: UL listed Specially designed for NA: Yes Suitable for industrial control panels Degree of protection IEC: IP65; UL Types 1, 12, 13, 4X, indoor only 1) IEC: IP65; UL Types 1, 12, 13, indoor only Prepared enclosures, individual MCB enclosures

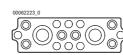
- Metric cable-entry knockouts in all side walls, see diagram A F
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Size 1 devices for front mounting in accordance with DIN 43880, e.g. for AFDD, FI, LS, etc.
- Transparent cover with quick-release fasteners, transparent door for operator access to the front-mounting devices
- Mounting rails for snap-fitting the devices
- 1 x blanking strip for unused locations, protective shroud with inscription label
- N/PE combination plug-in terminal
- Fixing straps for wall mounting, sealable cover fasteners

	• Enclosure depth 150		c cover rasterior.	3			
Dimensions mm	1-pol MCB Num	s (TE) Descrip	N terminals tion	Version	Type name	Article no.	Units per package
wa_vt07018 250	9		5-25 mm <sup>2</sup> x 0.5-4 mm <sup>2</sup>	Transparent cover	AE/I23E	029766	1
B A A B	187.5		5-25 mm <sup>2</sup> x 0.5-4 mm <sup>2</sup>	Transparent door	AE/I23E/T	032139	1
wa_vt07118	27		5-25 mm <sup>2</sup> 1 x 0.5-4 mm <sup>2</sup>	Transparent cover	AE/I43E	000239	1
125 125 O	375		5-25 mm <sup>2</sup> 1 x 0.5-4 mm <sup>2</sup>	Transparent door	AE/I43E/T	002612	1
wa_vt07218	45		5-25 mm <sup>2</sup> 1 x 0.5-4 mm <sup>2</sup>	Transparent cover	AE/I44E	004985	1
(E)	375		5-25 mm <sup>2</sup> 1 x 0.5-4 mm <sup>2</sup>	Transparent door	AE/I44E/T	061937	1

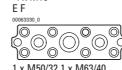


4 x M16





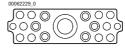




2 x M16 4 x M20 8 x M20

6 x M20 4 x M25/16 6 x M25/16 6 x M25/16

1 x M50/32 1 x M63/40 2 x M40/25 6 x M25/16 8 x M25/16 10 x M20 2 x M20 2 x M16



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1.52

# Ci insulated enclosures



### MCB distribution board enclosures

## Prepared enclosures, MCB distribution board enclosures

- Sides closed, with full area knockout, open at top and bottom
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Size 1 devices for front mounting in accordance with DIN 43880, e.g. for AFDD, FI, LS, etc.
- Transparent cover with quick-release fasteners
- Mounting rails for snap-fitting the devices
- 1 x blanking strip for unused locations, protective shroud with inscription label
- Sealable cover fasteners
- Without PE/N terminals

Dimensions mm		1-pole MCBs (TE) Number	Enclosure depth mm	Type name	Article no.	Units per package
wa_vt08315	<b></b>	9	150	AV/I23-125	036089	1
	250		175	AV/l23-150	043208	1
wa_vt08415	375 ►	27	150	AV/I43-125	047954	1
125	092		225	AV/143-200	045581	1
wa_vt07318	375	45	150	AV/I44-125	059819	1
125 125	375		225	AV/144-200	062192	1



# Ci insulated enclosures

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## Modular MCB enclosure systems

	For use with	Notes	Type name	Article no.	Units per package
	Mounting rail su	pports			
	1 row				
VT62813	C123	Busbar length 162 mm for 9 space units	TG23	044004	1
V					
	3 rows				
VT62613	C143	Busbar length 162 mm for 3 x 9 space units	TG43	046377	1
Cit.	C144	Busbar length 270 mm for 3 x 15 space units	TG44	048750	1



	Blanking strip				
	• For blanking off unused locations				
VIII3114	Cl	Thinly ribbed for 12 space units	BS-12MF-GY	178980	10/100
WIIIS414	Cl	Widely ribbed for 12 space units	BS-12MB-GY	178979	10/100



For use with	Type name	Article no.	Units per pack
		ed combination plug-in terminal	ed combination plug-in terminal

v(20819	1 x 2.5-25 mm <sup>2</sup> and 7 x 0.5-4 mm <sup>2</sup>	TG23	KSK-1PE-CI	194559	1
w21019	3 x 2.5-25 mm <sup>2</sup> and 21 x 0.5-4 mm <sup>2</sup>	TG43 TG44	KSK-3PE-CI	194561	1
	KSK N pro accomble	d combination plug in t	torminal		

	KSK N pre-assemble	d combination plug-in t	erminal		
vi20919	1 x 2.5-25 mm <sup>2</sup> and 7 x 0.5-4 mm <sup>2</sup>	TG23	KSK-1N-CI	194560	1
W21119	3 x 2.5-25 mm <sup>2</sup> and 21 x 0.5-4 mm <sup>2</sup>	TG43 TG44	KSK-3N-CI	194562	1

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# Ci insulated enclosures

## NZM circuit breakers and N switch-disconnectors

## Prepared individual enclosures for NZM circuit breakers and N switch-disconnectors

- With door coupling rotary handle
- Complete, includes all necessary functional parts
- Not UL approved
- Suitable for circuit breakers and switch-disconnectors, for separate mounting with top and bottom cable entry
- · Includes fixing straps for wall mounting
- Short-circuit proof up to 10 kA at 415 V 50/60 Hz with NZM circuit breakers
- Cannot be combined with the NZM...-XR remote operator, the NZM...XSV plug-in unit or the NZM...-XAV withdrawable unit
- Insulated additional terminals for the 4th or 5th pole must be ordered separately
- Only for switches with box terminals for direct connection of cables

# Standard, black/gray

• Lockable in the O position using up to 3 padlocks on the handle

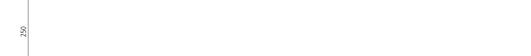
IP65 ≤ 63

	With additional cover interlock							
Dimensions mm	of pro-	Max. rated uninterrup- ted current I <sub>u</sub> A		Basic enclosures	Terminals that can be retrofitted <sup>1)</sup>	Type name	Article no.	Units per packa- ge
Wa_v100919 200	IP65	≤ 63	PN1, N(S)1	CI-K5-160-M	K50/1	NZM1-XCIK5-TVD	271521	1

NZM1, PN1, Cl23-150

N(S)1(-4)







IP65 ≤ 125 NZM1(-4), CI43-150 K50/1, K95/1N/BR NZM1-XCI43-TVD 271523 1 PN1(-4),

NZM1-XCI23-TVD

271522 1

Notes

1) For 3-pole switches: for the 4th and 5th conductor, as necessary (N or PE conductors)
For 4-pole switches: for the 5th conductor (PE conductor)



# xEnergy Safety

# Ci insulated enclosures

Dimensions mm	of pro-	Max. rated uninterrup- ted current I <sub>u</sub> A	with	Basic enclosures	Terminals that can be retrofitted <sup>1)</sup>	Type name	Article no.	Units per packa- ge
Wa_vi01219 250	IP65	≤ 160	NZM1(-4), PN1(-4), N(S)1(-4)	C143-200	K50/1, K95/1N/BR	NZM1-XCI43/2-TVD	104645	1
Wa_vt01319 250	IP65	≤ 200	NZM2(-4), PN2(-4), N(S)2(-4)	C143-200	K50/1, K95/1N/BR, K150/1/BR, K240/1BR	NZM2-XCI43-TVD	271524	1
wa_vt01419 375 085	IP65	≤ 250	NZM2(-4), PN2(-4), N(S)2(-4)	C145-200	K50/1, K95/1N/BR, K150/1/BR, K240/1BR	NZM2-XCI45-TVD	280418	1

Dimensions mm	of pro-	Max. rated uninterrup- ted current I <sub>u</sub> A	with	Basic enclosures	Terminals that can be retrofitted <sup>1)</sup>	Type name	Article no.	Units per packa- ge
wa_vi01519 375	IP65	≤ 400	NZM3(-4), PN3(-4), N(S)3(-4)	C148-250	K95/1N/BR, K150/1/BR, K240/1BR, K2X240/1/BR	NZM3-XCI48-TVD	271525	1

Notes

Notes

For 3-pole switches: for the 4th and 5th conductor, as necessary (N or PE conductors)

For 4-pole switches: for the 5th conductor (PE conductor)

Notes

Notes

For 3-pole switches: for the 4th and 5th conductor, as necessary (N or PE conductors)

For 4-pole switches: for the 5th conductor (PE conductor)

# Red-yellow for emergency power-off • Lockable on the handle and on the switch using up to 3 padlocks • Lockable in the 0 position on the handle Additional cover interlock, lockable on the circuit breaker in the 0 position Degree Max. rated For use Article no. Units of pro- uninterrup- with retrofitted1) tection ted current packa-IP65 ≤ 63 PN1, N(S)1 CI-K5-160-M K50/1 NZM1-XCIK5-TVDVR 271526 1 IP65 ≤ 63 NZM1-XCl23-TVDVR 271527 1 NZM1, PN1, Cl23-150 K50/1 NZM1-XCI43-TVDVR 271528 1 $IP65 \le 125 \quad NZM1(-4),$ CI43-150 K50/1, K95/1N/BR PN1(-4),

mm	of pro-	Max. rated uninterrupted current I <sub>u</sub> A	with	Basic enclosures	Terminals that can be retrofitted <sup>1)</sup>	Type name	Article no.	Units per packa- ge
wa_vt01919 250	IP65		NZM1(-4), PN1(-4), N(S)1(-4)	Cl43-200	K50/1, K95/1N/BR	NZM1-XCI43/2-TVDVR	104646	1



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NZM2-XCI43-TVDVR 271529 1 IP65 ≤ 200 NZM2(-4), CI43-200 K50/1, K95/1N/BR, PN2(-4), K150/1/BR, K240/1BR N(S)2(-4)



 $IP65 \le 250 \quad NZM2(-4), \quad CI45-200$ K50/1, K95/1N/BR, NZM2-XCI45-TVDVR 279356 1 PN2(-4), K150/1/BR, K240/1BR N(S)2(-4)

Notes

1) For 3-pole switches: for the 4th and 5th conductor, as necessary (N or PE conductors)
For 4-pole switches: for the 5th conductor (PE conductor)

<sup>&</sup>lt;sup>1)</sup> For 3-pole switches: for the 4th and 5th conductor, as necessary (N or PE conductors) For 4-pole switches: for the 5th conductor (PE conductor)

Degree Max. rated For use

IP65  $\leq$  400 NZM3(-4),

PN3(-4),

N(S)3(-4)

of pro- uninterrup- with

tection ted current

retrofitted1)

K95/1N/BR,

K2X240/1/BR

K150/1/BR, K240/1BR,

name

Article no. Units

NZM3-XCI48-TVDVR 271530 1

per

packa-

Dimensions

Article no.

3-pole and 4-pole NZM... circuit breakers/N... switch-disconnectors

# Prepared enclosures for 3-pole and 4-pole NZM... circuit breakers/N... switch-disconnectors

- For use as individual enclosures<sup>1)</sup> or in distribution boards
- The technical data of other equipment must be observed when connecting distribution boards
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
   Metric cable-entry knockouts in all side walls, see diagram A F, with the exception of Cl48...: side walls without knockouts, open at
- Side walls can be knocked out, can be grouped with other devices
- With NZM...-XTVD door-coupling rotary handle and shaft extension
   Transparent cover, pre-drilled
- Mounting plate is pre-drilled for the switch and for one PE and one N terminal each
- Mounting plate made from 3 mm thick sheet steel
- Sealable cover fasteners
- Fasteners for terminals
- Fixing straps for wall mounting included
- Cannot be combined with the NZM...-XR remote operator, the NZM...XSV plug-in unit or the NZM...-XAV withdrawable unit
- •\*\*NEW\*\* Special types incl. PN switch-disconnector as "breaker in the box" assembly (PNx-xx-Clxx-xxx) Rated unin- Can be used for base Can be used with Basic enclosures Type

terrupted current I <sub>u</sub> A	units	terminals <sup>2)</sup>	Basic enclosures	name	Article no.	per packa ge
63	NZM1(-4) N1(-4), PN1(-4) NS1 LZM1(-4) LN1(-4)	K95/1N	CI23E-150	MCCB1-63/I23E-150	138538	1
63	incl. PN1-63	K95/1N	CI23E-150	PN1-63-Cl23E-150	EP-501523	1
125	incl. PN1-125	K95/1N	CI23E-150	PN1-125-Cl23E-150	EP-501524	1
160	incl. PN1-160	K95/1N	CI23E-150	PN1-160-Cl23E-150	EP-501525	1
125	NZM1(-4) N1(-4), PN1(-4) NS1 LZM1(-4) LN1(-4)	K50/1 K95/1N	CI43E-150	MCCB1-125/I43E-150	138539	1
160	NZM1(-4) N1(-4), PN1(-4) NS1 LZM1(-4) LN1(-4)	K50/1 K95/1N	CI43E-200	MCCB1-160/I43E-200	138540	1
200	NZM2(-4) N2(-4), PN2(-4) NS2 LZM2(-4) LN2(-4)	K50/1 K95/1N K150/1N	CI43E-200	MCCB2-200/I43E-200	138541	1
200	incl. PN2-200	K50/1 K95/1N K150/1N	CI43E-200	PN2-200-Cl43E-200	EP-501526	1
250	incl. PN2-250	K50/1 K95/1N K150/1N	CI43E-200	PN2-250-Cl43E-200	EP-501527	1
250	NZM2(-4) N2(-4), PN2(-4) NS2 LZM2(-4) LN2(-4)	K50/1 K95/1N K150/1N	C145E-200	MCCB2-250/145E-200	138542	1
	Current I <sub>u</sub> A 63 125 160 125 200 250	terrupted current I <sub>u</sub> A  63 NZM1(-4), PN1(-4), PN1(-4), PN1(-4), PN1(-4) LN1(-4)  63 incl. PN1-63  125 incl. PN1-125  160 incl. PN1-160  125 NZM1(-4), N1(-4), PN1(-4), NS1 LZM1(-4) LN1(-4)  160 NZM1(-4), PN1(-4), NS1 LZM1(-4)  174 NS1 LZM1(-4)  175 NZM1(-4)  176 NZM1(-4)  177 NZM1(-4)  177 NZM1(-4)  177 NZM2(-4)  177 NZM2(-4)  178 NZM2(-4)	terrupted current I <sub>u</sub> A  63 NZM1(-4) K95/1N N1(-4), PN1(-4) NS1 LZM1(-4) LN1(-4) 63 incl. PN1-63 K95/1N 125 incl. PN1-125 K95/1N 160 incl. PN1-160 K95/1N 125 NZM1(-4) K50/1 N1(-4), PN1(-4) K95/1N NS1 LZM1(-4) LN1(-4) 160 NZM1(-4) K50/1 N1(-4), PN1(-4) K95/1N NS1 LZM1(-4) LN1(-4) 200 NZM2(-4) K50/1 N2(-4), PN2(-4) K95/1N NS2 LZM2(-4) LN2(-4) 200 incl. PN2-200 K50/1 K95/1N K150/1N X150/1N	terrupted current I, A  63	terrupted current Ly A  63	terrupted current l <sub>ij</sub> A  83

Dimensions

60

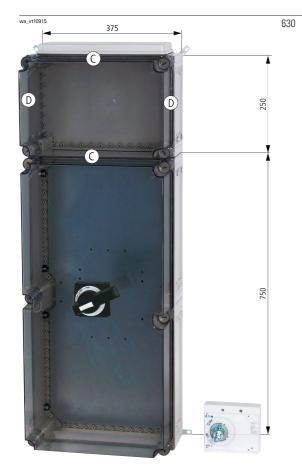
 $<sup>^{1)}</sup>$  For 3-pole switches: for the 4th and 5th conductor, as necessary (N or PE conductors)

For 4-pole switches: for the 5th conductor (PE conductor)

<sup>1)</sup> Insulated additional terminals for the 4th or 5th pole must be ordered separately.

<sup>&</sup>lt;sup>2)</sup> The short-circuit ratings of the individual enclosures must be observed.

Dimensions mm	Rated unin- terrupted current I <sub>u</sub> A	Can be used with base units	Can be used with terminals <sup>2)</sup>	Basic enclosures	Type name	Article no.	Units per package
wa_v10015 375 E	400	NZM3(-4) N3(-4), PN3(-4) NS3 LZM3(-4) LN3(-4)	K50/1 K95/1N K150/1N K240/1N	Cl45E-200	MCCB3-400/I45E-200	138543	1
005	400	incl. PN3-400	K50/1 K95/1N K150/1N	C145E-200	PN3-400-Cl45E-200	EP-501528	1
E	630	incl. PN3-630	K50/1 K95/1N K150/1N	CI45E-200	PN3-630-CI45E-200	EP-501529	1

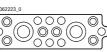


NZM3(-4)	K50/1	Ci combination	n MCCB3-630/I48/	138544	1
N3(-4), PN3(-4)	K95/1N	consisting of	143E-200		
NS3	K150/1N	CI48-200 +			
LZM3(-4)	K240/1N	CI43E-200 +			
LN3(-4)	K2X240/1N	STB4-CI			

Notes
2) The short-circuit ratings of the individual enclosures must be observed.

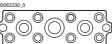






62





1 x M32/20 2 x M32/20 2 x M50/20 1 x M50/32 1 x M50/32 6 x M20 4 x M25/16 6 x M25/16 6 x M25/16 2 x M40/25 2 x M16 4 x M20 8 x M20 8 x M25/16 4 x M16 2 x M20







# Prepared enclosures, meter enclosures with meter rail • Metric cable entry knockouts in all sides, see diagram C - F (exception: ZG/I48-200) • IP65 degree of protection • Integrated pressure-relief mechanism in the event of a short-circuit Transparent cover • Meter rail includes the meter-fixing screws and nuts, for direct mounting in the base Fixing straps for wall mounting Sealable cover fasteners Enclosure depth (dimensions from top) Article no. 1. Meter rail name 2. Enclosure depth package mm ZG/I43E-G-150 013151 Transparent cover 175 Transparent cover ZG/I43E-G-200 015524 ZG/I44E-150 017897 Transparent cover 175 ZG/I44E-200 020270 Transparent cover

# xEnergy Safety

098479

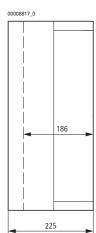
xEnergy Safety

# Ci insulated enclosures

APZ enclosures

Dimensions	Enclosure depth (dimensions from top)	Version	Туре	Article no.	Units
mm	1. Meter rail		name		per
	2. Enclosure depth				package
	mm				





Transparent cover ZG/I45E-200



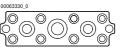


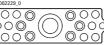
ZG/I48-200 022643 Transparent cover; top and bottom with full-area knockouts for FL4... flanges no knockouts in the sides

Notes CDEF

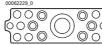








2 x M50/20 1 x M50/32 1 x M50/32 1 x M63/40 6 x M25/16 6 x M25/16 2 x M40/25 6 x M25/16 8 x M20 8 x M25/16 10 x M20 2 x M20 2 x M16



# **Prepared enclosures, APZ enclosures**

- Mounting depth 150 mm
- For integrating a router provided by the measuring point operator
- To be mounted between the termination point of the line network (APL) and the meter position
- Installation of the router on a 330 x 205 mm mounting plate
- Router not included
- 1 x pre-mounted mounting rail
- With transparent cover
- Cover fasteners for tool operation
- Sealable cover fasteners
- With metric cable entry knockouts in all sides
- IP65 degree of protection
- Fixing straps for wall mounting included

nensions	Enclosure depth (dimensions from top)  1. Mounting depth with mounting plate  2. Mounting depth with 7.5 mm high mounting rail  3. Mounting depth with 15 mm high mounting rail  4. Enclosure depth	Version	Type name	Article no.	Units per package
	4. Enclosure depth mm				
	00027042_0	Transparent cover	CI43E-150-APZ	194606	1



00027042_0		
150		
142.5		
-     <mark> </mark>	_	
l iii		
iii		
175		
-	_	1

Description	For use with	Type name	Article no.	Units per package
Meter rail				
Includes 3 meter-fixing screws and nuts to DIN 46300. For installation	CI43	ZK-43-CI	193459	1
directly in the enclosure base.	C144	ZK-44-CI	193460	1



Includes 3 meter-fixing screws and
nuts to DIN 46300. For installation
directly in the enclosure base.

Article no.

**EATON CORPORATION CA015006EN** 

## Busbar enclosures, 60 mm system

# Prepared enclosures, busbar enclosures, 60 mm system

- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short circuit
- Transparent cover
- Top and bottom with full-area knockouts
- Sides closed, with full area knockout
- Sealable cover fasteners
- Cl44-200 basic enclosure

Features

- Distance between busbar centers: 60 mm
- Untreated copper, with integrated grouping function
- 3-pole system, copper for N/PE can be retrofitted
- Includes busbar support for N/PE
- Short-circuit rating I<sub>cw</sub> up to 37 kA, at CU30x10, 630 A

Dimensions	Rated operational	Features	Туре	Article no.	Units
mm	current I <sub>e</sub> A		name		per package
wa_v102519	160	L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	Cl44-S60-160/3	EP-501508	1
375	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	Cl44-S60-250/3	194565	1
- Commission of the Commission	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	Cl44-S60-400/3	194566	1
	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	Cl44-S60-630/3	194567	1

	name		per package
Busbar links, 60 mm system • Includes fasteners			
CU12x5	BBT-S60-12x5-CI	194591	1
CU20x5	BBT-S60-20x5-CI	194593	1
CU30x5	BBT-S60-30x5-CI	194594	1
CU20x10	BBT-S60-20x10-Cl	194595	1
CLI30x10	RRT-S60-30x10-Cl	194596	1

	For use with	For copper busbars	Type name	Article no.	Units per package
	<ul> <li>3-pole busbar supports</li> <li>3 poles</li> <li>Short-circuit rating low in comb</li> <li>Distance between busbar cent</li> <li>Can be expanded to 4 or 5 pole</li> <li>Includes fasteners</li> </ul>	ination with xEnergy Safety up to 37 ers: 60 mm	kA, 1 s with CU30x10, 630 A		
709610	CI44 + SL630-ADP-CI	12x5 - 30x10	SL63031	148582	1
	CI44 + SL630-ADP-CI	20x5 - 30x10	SL63032	148583	1
	CI44 + SL630-ADP-CI	30x10	SL63033	148584	1
	1-pole busbar supports	s 60 mm system			

	<ul> <li>Short-circuit rating I<sub>cw</sub> in combi</li> <li>Includes fasteners</li> </ul>	ination with xEnergy Safety up to 37	7 kA, 1 s with CU30x10, 630 A		
09710	CI44 + SL630-ADP-CI	12x5 - 30x10	SLPEN63011	148585	1
	CI44 + SL630-ADP-CI	20x5 - 30x10	SLPEN63012	148586	1
	CI44 + SL630-ADP-CI	30x10	SLPEN63013	148587	1

usbar supports, 60 mm system	r bus	rackets fo	Mounting
------------------------------	-------	------------	----------

- For 3-, 4- and 5-pole systems
- Includes fasteners

1 pole for N/PE

3x UBS4, 8 per bracket	SL630-ADP-CI	184465	2



EATON CORPORATION CA015006EN 67

Article no. Units

## Busbar terminals; for connecting flat or round conductors, 60 mm system

ment

32 x 25 mm.

32x25

Max.	Conductor type <sup>1)</sup>	Special features	Usage	Notes	Туре	Article no.	Units
rated operation	nal				name		per package
current							
1 (A)							

# Terminals for 60 mm system

Clamp t	erminal						
• Termina	tion to busbars does no	ot require drilling					
480	35 - 150 mm², AWG2/0 - MCM300; directly termi- nated:	Termination to busbars does not require drilling	12x5/10 20x5/10	A cable block is used to connect the conductor to the busbar	AKS150	138374	6
500	95 - 185 mm², AWG3/0 - MCM350; directly termi- nated:	Termination to busbars does not require drilling.	20x5/10 25x5/10 30x5/10	A cable block is used to connect the conductor to the busbar	AKS185	107195	6
600	95 - 300 mm², MCM300 - MCM600. directly termi- nated:	Termination to busbars does not require drilling.	20x5/10 25x5/10 30x5/10	A cable block is used to connect the conductor to the busbar	AKS300	107196	6
800	3x20x1 to 2x(10x32x1)	Termination to busbars does not require drilling. Terminal compart-	20x5/10 25x5/10 30x5/10	A contact block is used to connect the conductor to the busbar	AKS copper strip	107197	3









rated operat current I <sub>e</sub> (A)	tional			name		per package
Univers	al conductor conn	ection terminal	(5 mm), 60-mm sys	tem		
180	1.5 - 16 mm², AWG14 - AWG6. directly terminated:	With integrated retaining spring, captive terminal screw, open terminal compartment 7.5 x 7.5 mm	All flat bus-— bars with a thickness of 5 mm	AKU16/5	107187	100
270	4 - 35 mm², AWG10 - AWG2. directly terminated: 3x9x0.8 or 6x9x0.8	With integrated retaining spring, captive terminal screw, open terminal compartment 10.5 x 11 mm	All flat bus— bars with a thickness of 5 mm	AKU35/5	107188	50
400	16 - 70 mm², AWG4 - AWG2/0. directly termi- nated:  2x(3x9x0.8) of 6x9x0.8	With integrated retaining spring, captive terminal screw, open terminal compartment or 14 x 14 mm	All flat bus— bars with a thickness of 5 mm	AKU70/5	107189	25
440	16 - 120 mm², AWG4 - MCM250. directly termi- nated: ⊕	With integrated retaining spring, captive terminal screw, open terminal compartment 17 x 15 mm	All flat — busbars with 5 mm thickness	AKU120/5	107190	25

Conductor type<sup>1)</sup>

Special features



<sup>1)</sup> O Solid round conductors

Flexible round conductors with correctly crimped ferrule

Copper bar

Stranded round conductors

Sector conductors, solid

Sector conductors, stranded
Copper strip

<sup>1)</sup> O Solid round conductors

Flexible round conductors with correctly crimped ferrule

Stranded round conductors

 $<sup>\</sup>bigcirc$  Sector conductors, solid

Sector conductors, stranded
Copper strip

Copper bar

I<sub>e</sub> (A)

Units per package

100

107191

107192 50

107193 25

107194 25

138362 20

138361 6

AKU16/10

AKU35/10

AKU70/10

AKU120/10

AKU-M8/10

AKU-M10/10

#### Accessories for busbar enclosures

				7.0005501.05.10			
	Rated operational current I <sub>e</sub>		Features		Type name	Article no.	Units per package
	Busbar links, 5	50 mm systei	m				
	<ul> <li>Includes fasteners</li> </ul>						
VT66113	250-630		L1, L2, L3, PE, N		SVS250630-5	002066	1
	1000		L1, L2, L3 for copper busbars 2 x 30 x 10 mm		AVS30L	093842	3
	500		PE, N, PEN for copper busbars 30 x 10 mm		AVS30PEN	096215	2
	1600		L1, L2, L3 for copper busbars 3 x 40 x 10 mm		AVS40	098588	3
	Can be used with busbars mm	s Terminal capacity of flat conductors mm		Terminal capacity of round conductors <sup>1)</sup> mm <sup>2</sup>	Type name	Article no.	Units per package
	Busbar termin	als; for conn	ecting flat or	round conduct	tors, 50 mm system	1	
VT68913	Cu 12 x 5	3 x 9 x 0.8	100	<ul><li>∴ 16-35</li><li>※ 16-25</li></ul>	K12X5-1	002281	10
	Cu 12 x 5	3 x 9 x 0.8 10 x 16 x 0.8	100 400	⊙ 25-120 ⊙ 25-95	K12X5-2	002282	10
	Cu 20 x 5	3 x 9 x 0.8 6 x 9 x 0.8	100 160	⊙ 35-70 ⊙ 35-50	K20X5	002286	10



Cu 12 x 5	3 x 9 x 0.8	100	<ul><li> 16-35</li><li> 16-25</li></ul>	K12X5-1	002281	1
Cu 12 x 5	3 x 9 x 0.8	100	<ul><li>○ 25-120</li></ul>	K12X5-2	002282	1
	10 x 16 x 0.8	400	<b>35-95</b>			
Cu 20 x 5	3 x 9 x 0.8	100	<ul><li>⊙ 35-70</li></ul>	K20X5	002286	1
	6 x 9 x 0.8	160	③ 35-50			
	4 x 16 x 0.8	200				
	6 x 16 x 0.8	250				
Cu 20 x 5	3 x 9 x 0.8	100	<ul><li>⊙ 35-240</li></ul>	K20X10	002283	1
	6 x 9 x 0.8	160	③ 35-185			
	4 x 16 x 0.8	200				
	6 x 16 x 0.8	250				
	10 x 16 x 0.8	400				
	11 x 21 x 1	630				
Cu 20 x 10	3 x 9 x 0.8	100	<ul><li>⊙ 35-185</li></ul>	K20X10	002283	1
	6 x 9 x 0.8	160	<ul><li>35-95</li></ul>			
	4 x 16 x 0.8	200				
	6 x 16 x 0.8	250				
	10 x 16 x 0.8	400				
	11 x 21 x 1	630				
Cu 20 x 15	3 x 9 x 0.8	100	<b>35-70</b>	K20X10	002283	1
	6 x 9 x 0.8	160	<b>35-50</b>			
	4 x 16 x 0.8	200				
	6 x 16 x 0.8	250				
	10 x 16 x 0.8	400				
	11 x 21 x 1	630				
Cu 20 x 10 - 15	3 x 9 x 0.8	100	<ul><li>⊙ 35-300</li></ul>	K20X15	002284	1
Cu 20 x 5 - 15	11 x 21 x 1	630	③ 35-240			

Max.	Conductor type <sup>1)</sup>	Special features	Usage	Notes	Туре	Article no.
rated operationa	I				name	
current						

With integrated All flat bus- -

With integrated All flat bus- retaining spring, bars with captive terminal a thickness screw, open termi- of 10 mm, nal compartment 'I' section

retaining spring, bars with

captive terminal a thickness

screw, open termi- of 10 mm

captive terminal a thickness

screw, open termi- of 10 mm

captive terminal a thickness

screw, open termi- of 10 mm

captive terminal a thickness screw, open termi- of 10 mm

Universal conductor connection terminal (10 mm), 60-mm system

AWG14 - AWG6. retaining spring, bars with

AWG4 - AWG2/0. retaining spring, bars with

AWG4 - AWG2/0. retaining spring, bars with

nal compartment

nal compartment 17 x 15 mm

M8x8 stud

nal compartment 10.5 x 11 mm

nal compartment 7.5 x 7.5 mm

directly termi-

**■**8x6x0.5

4 - 35 mm<sup>2</sup>,

directly termi-

nated:

or 6x9x0.8

directly termi-

MCM250.

directly termi-

or 6x16x0.8 or 10x16x0.8

Cable lugs

captive terminated: screw, open to nal compartm

2x(3x9x0.8) or 14 x 14 mm

VT13806	











E F					
1083458.0	630	Cable lugs M10	With integrated retaining spring, captive terminal screw, open terminal compartment M10x10 stud	of 10 mm,	_

490

- Solid round conductors

  Flexible round conductors with correctly crimped ferrule
- Stranded round conductors
- Sector conductors, solid
- Sector conductors, stranded
- Copper strip Copper bar

- 1) Flexible with correctly crimped ferrule
- Stranded

xEnergy Safety

Ci insulated enclosures

	Can be used with copper bars mm	Terminal capacity of flat conductors mm	Rated operational current of flat con- ductors I <sub>e</sub> A	Notes	Type name	Article no.	Units per package
	Terminal for fla	at conductors	and copper	bars, 50 mm sy	stem		
VT67313	Cu 2 x 30 x 10	2 x 50 x 12	-	for main cables L1, L2, L3	K30X10L	081977	3
0	Cu 1 x 30 x 10	50 x 12	-	ffor protective or neutral conductors PE, N, PEN	K30X10PEN	084350	2
	Cu 3 x 40 x 10	2 x 50 x 12	-	for main cables L1, L2, L3	K40X10	086723	3
VT67213	Cu 1 x 30 x 10	3 x 9 x 0.8 - 11 x 21 x 1	100 630	in conjunction with the K20X5, K20X10 and K20X15 busbar terminals	AW3040L-K20	089096	5
	Cu 2 x 30 x 10 Cu 2 x 40 x 10	3 x 9 x 0.8 - 11 x 21 x 1	100 630	in conjunction with the K20X5, K20X10 and K20X15 busbar terminals	AW30PEN-K20	091469	5
	Can be used with busbars mm	: Terminal capacity of flat conductors mm	Rated operational current of flat con- ductors I <sub>e</sub> A	Terminal capacity of round conductors <sup>(1)</sup> mm <sup>2</sup>	Type name	Article no.	Units per package
	Ultra-slim bus	bar terminals,	, for connect	ing flat conduc	tors		
3200PIC-254	Cu 12 x 5	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8	100 160 200 250	○1.5-10 ③1.5-6	K12X5/25	002324	10
	Cu 20 x 5	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8	100 160 200 250	○ 1.5-10 ③ 1.5-6	K20X5/25	002327	10
	Cu 20 x 5 Cu 20 x 10	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8	100 160 200 250 400	○ 1.5-10 ③ 1.5-6	K20X10/35	002325	10
	Cu 20 x 5 Cu 20 x 10	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8	100 160 200 250 400	○ 1.5-10 ③ 1.5-6	K20X15/40	002285	10
	Cu 20 x 10 Cu 20 x 15	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8	100 160 200 250 400	○ 1.5-10 ③ 1.5-6	K20X15/40	002285	10
	Cu 20 x 15	11 x 21 x 1 11 x 21 x 1 2 x (11 x 21 x 1)	630 630 800	① 1.5-10 ③ 1.5-6	K20X15/50	002326	10

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) USolid	round	conductors

Flexible round conductors with correctly crimped ferrule

	Can be used with busbars mm	Terminal capacity of round conductors <sup>1)</sup> mm <sup>2</sup>	Type name	Article no.	Units per package
	Terminal expansions	for ultra-flat busbar termin	als		
	<b>Expansion terminals for</b>	strap			
VTO7108	Cu 10 x 3	○	AK16	079336	50
VT07108	Cu 10 x 3	○ 6-16 ⊙ 6-25 ⓒ 4-25	AK35	079614	50
	Strap for taking AK e. • In conjunction with the K bu	=			
VTO7108	_	_	L-KL-R	079269	50
	Rated operational current I <sub>e</sub> A	For use with	Type name	Article no.	Units per package
	Busbar supports, 50 n For use between two enclosure Component mounting possibl Clearance between busbar su	s e on busbar			
	Interval between busba	r centers: 40 mm			
VT65613	160	L1, L2, L3, PE, N: 12 x 5	SH0165/2	010774	5
a ap	Interval between busba	r centers: 50 mm			
3200PIC-215	250 400 630	L1, L2, L3, PE, N: 20 x 5 L1, L2, L3: 20 x 10; PE, N, PE L1, L2, L3, PE, N: 20 x 15	SH0635/3 N: 20 x 5	058247	5
3200PIC-214	250 400 630	L1, L2, L3, PE, N, PEN: 20 x 5 L1, L2, L3: 20 x 10; PE, N, PE L1, L2, L3: 20 x 10 + 20 x 5; PE, N, PEN: 20x10		060620	10
3200PIC-404	1000	L1, L2, L3: 2 x 30 x 10; PE, N	: 30 x 10 SH1005/4	062993	5
3200PIC-405	1600	L1, L2, L3: 3 x 40 x 10	SH1603/4	065366	5
	-				

Solid round conductors
 Flexible round conductors with correctly crimped ferrule
 Stranded round conductors

### Ci insulated enclosures



#### Modular busbar systems

	Max. rated operational current I <sub>e</sub> A	Dimensions mm x mm	Length mm	Copper factor	Version	for use with	Type name	Article no.	Units per package
	Busbars	S							
a_v100408	160	12 x 5	1500	0.81	tinned	SH0165/2	CU12X5	034121	10
THE RESERVE TO SELECT			2250	1.21	tinned	SH0165/2	CU12X5-2250	005093	10
	250	20 x 5	1500	1.34	tinned	SH0635/3	CU20X5	044092	10
			2250	2.01	tinned	SH0635/4 SH0632	CU20X5-2250	007466	10
	400	20 x 10	1500	2.68	tinned	SH0635/3	CU20X10	041719	5
			2250	4.01	tinned	SH0635/4 SH0632	CU20X10-2250	009839	5
9_vt00308	_	30 x 10	1500	4.02	untreated	SH1005/4	CU30X10	051211	1
<b>新教教</b>		40 x 10	1500	5.34	untreated	SH1603/4	CU40X10	063076	3
	Max. rated op I <sub>e</sub> A	erational curren	t	Dimen: mm x			Type name	Article no.	Units per package
	PE/N bu	sbar sup	norts						

• For relocating PE/N bars from the busbar enclosure to the terminal compartment (for floor-mounted distribution boards)

	<u>,                                     </u>		•
250	20 x 5	SH0632	067739 5
400	20 x 10		
630	20 x 15		



For use with Article no. Units package

#### Support bracket for busbar supports, 50 mm system

• For securing the busbar supports in the first and last enclosures when using busbar links and transport splits

3200PIC-268	SH0635/3 SH0635/4 SH1005/4 SH1603/4	HSH-CI	002320	5
VT66513	SH0632	HSH0632	002321	5



### Ci insulated enclosures

For use with	Туре	Article no. Units
	name	per
		packag

#### Busbar bracing, 50 mm system

• For mounting between two SH0635/... busbar supports when fitting the RS...3-50 busbar mounting fuses on 20 x 5 copper



SVCU20X5	002323	10

#### Busbar assemblies, 50 mm system

- For surface mounting of busbar-mounting fuse bases
- 3 pole, for 250 A rated operational current
- Assembly kit, page 81



Cl23	SE-RS-I23	041632	1
Ci43	SE-RS-143	044005	1
Cl44	SE-RS-I44	001890	1

#### Connecting terminals, 50 mm system

- For use with fuse enclosures and busbar fuse enclosures as well as the SE-RS-I43 busbar assemblies
- Terminal capacity of the flat conductor: from 3 x 9 x 0.8 mm to 10 x 16 x 0.8 mm, Ø 4 -10 mm<sup>2</sup> (solid)



CU20X5	K20X15/40-A	012783	10
CU20X10			
CU20X15			

**EATON CORPORATION CA015006EN** 75 **EATON CORPORATION CA015006EN** 

## Ci insulated enclosures

stranded

Connection cross section

solid

# xEnergy Safety

Units

Article no.

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### Ci insulated enclosures

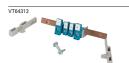
Pre-assembled enclosures

Panel enclosures for fuses, 60 mm system

Pre-assembled	enclosures	nanel	enclosures	for fuses	60 mm system
i io accombica	onorodaroo,	punoi	onorodaroo	ioi iuooo,	oo miii oyotom

- IP65 degree of protection
- Sides closed, with full area knockout, open at top and bottom
- Integrated pressure-relief mechanism in the event of a short-circuit
- Cl44-200 or Cl43-200 basic enclosures
- Transparent cover, optional quick-release fastener
- Sealable cover fasteners
- With 3-pole busbar-mounting fuse bases or switch-disconnectors
- Switchgear without adapter sleeves and fuse links
- Distance between busbar centers: 60 mm
- Untreated copper, with integrated add-on function
- 3-pole system, copper for N/PE can be retrofitted

<ul> <li>Includes busb</li> </ul>	ar supports for N	/PE				
Dimensions mm	Max. rated optional current of busbar I <sub>e</sub> A	Features	Number of circuits max. Fuse link A/V	Type name	Article no.	Units per package
wa_vt02619 375	160	L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	50 A / 400 V	CI44-S60-160/3-8D02	EP-501513	1
33.5	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	50 A / 400 V	C144-S60-250/3-8D02	194597	per package  2-501513 1  4597 1  4598 1  -501515 1  4600 1
	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	50 A / 400 V	CI44-S60-400/3-8D02	194598	1
	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	50 A / 400 V	CI44-S60-630/3-8D02	194599	1
wa_v102719 375	160	L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	50 A / 400 V	CI44-S60-160/3-8D02-LTS	EP-501515	1
375	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	8 x 3 pole 50 A / 400 V	C144-S60-250/3-8D02-LTS	194600	1
	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	8 x 3 pole 50 A / 400 V	C144-S60-400/3-8D02-LTS	194601	1
	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	8 x 3 pole 50 A / 400 V	C144-S60-630/3-8D02-LTS	194602	1



mm²	mm²				package
N bars					
2 x 2.5 - 35 6 x 1.5 - 16	2 x 2.5 - 25 6 x 1.5 - 16	SE-RS-I23 (RS18/I23)	N23RS18	055870	1
2 x 2.5 - 35 9 x 0.5 - 6	2 x 2.5 - 25 9 x 0.5 - 4	SE-RS-I23 (RS27/I23)	N23RS27	058243	1
2 x 2.5 - 35 2 x 1.5 - 16	2 x 2.5 - 25 2 x 1.5 - 16	SE-RS-I23 (RS33/I23)	N23RS33	060616	1
2 x 2.5 - 35 12 x 1.5 - 16	2 x 2.5 - 25 12 x 1.5 - 16	SE-RS-I43 (I44) RS18/I43 (I44)	N43RS18	067735	1
2 x 2.5 - 35 18 x 0.5 - 6	2 x 2.5 - 25 18 x 0.5 - 4	SE-RS-I43 (I44) RS27/I43 (I44)	N43RS27	065362	1
2 x 2.5 - 35 4 x 1.5 - 16	2 x 2.5 - 25 4 x 1.5 - 16	SE-RS-143 (144) RS33/143 (144)	N43RS33	062989	1

name

For use with



PE (PEN) bush	oars				
2 x 2.5 - 35 6 x 1.5 - 16	2 x 2.5 - 25 6 x 1.5 - 16	SE-RS-I23 (RS18/I23)	PEN23RS18	081973	1
2 x 2.5 - 35 9 x 0.5 - 6	2 x 2.5 - 25 9 x 0.5 - 4	SE-RS-I23 (RS27/I23)	PEN23RS27	079600	1
2 x 2.5 - 35 2 x 1.5 - 16	2 x 2.5 - 25 2 x 1.5 - 16	SE-RS-I23 (RS33/I23)	PEN23RS33	077227	1
2 x 2.5 - 35 12 x 1.5 - 16	2 x 2.5 - 25 12 x 1.5 - 16	SE-RS-I43 (I44) RS18/I43 (I44)	PEN43RS18	070108	1
2 x 2.5 - 35 18 x 0.5 - 6	2 x 2.5 - 25 18 x 0.5 - 4	SE-RS-I43 (I44) RS27/I43 (I44)	PEN43RS27	072481	1
2 x 2.5 - 35 4 x 1.5 - 16	2 x 2.5 - 25 4 x 1.5 - 16	SE-RS-143 (144) RS33/143 (144)	PEN43RS33	074854	1

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#### xEnergy Safety

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#### XNH panel enclosures, 60 mm system

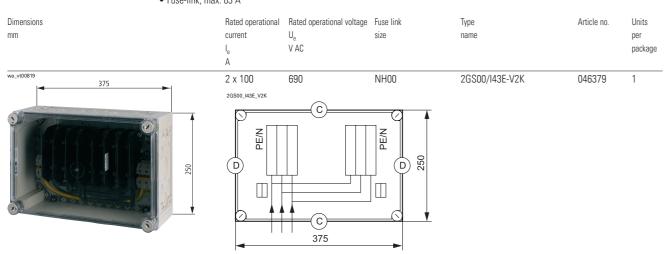
Ci insulated enclosures

#### Two-way fuse boxes

Dimensions mm	Max. rated optional current of busbar I <sub>e</sub> A	Features	Number of circuits max. Fuse link A/V	Type name	Article no.	Units per package
wa_v104019 250	160	L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	Screw base 4x 3 pole 50 A / 400 V E18 / D02	CI43-S60-160/3-4D02	EP-501514	1
375	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	Screw base 4x 3 pole 50 A / 400 V E18 / D02	CI43-S60-250/3-4D02	194603	1
	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	Screw base 4x 3 pole 50 A / 400 V E18 / D02	CI43-S60-400/3-4D02	194604	1
	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	Screw base 4x 3 pole 50 A / 400 V E18 / D02	Cl43-S60-630/3-4D02	194605	1

#### Pre-assembled enclosures, two-way fuse boxes

- With parallel link between the incoming sides
- Input wiring max. 35 mm<sup>2</sup>
- Fuse-link, max. 63 A



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#### Pre-assembled enclosures, XNH panel enclosures, 60 mm system

- IP65 degree of protection
- Sides closed, with full area knockout, open at top and bottom
- Integrated pressure-relief mechanism in the event of a short-circuit
- Cl44-200 or Cl43-200 basic enclosures
- Transparent cover

xEnergy Safety

- Sealable cover fasteners
- With 3-pole XNH fuse switch-disconnectors
- Switchgear without fuse links
- Distance between busbar centers: 60 mm
- Untreated copper, with integrated grouping function
- 3-pole system, copper for N/PE can be retrofitted
- Includes busbar supports for N/PE

Dimensions mm	Max. rated operational current of busbar I <sub>e</sub> A	io-Features copper/busbar supports	Number of circuits max. Fuse link A/V	Type name	Article no.	Units per package
EPS01511_L 375	160	L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	1 x 3 pole 125 A / 690 V NH00	CI44-S60-160/3-1XNH00	EP-501509	1
375		N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	2 x 3 pole 125 A / 690 V NH00	CI44-S60-160/3-2XNH00	EP-501510	1
The state of the s		L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	3 x 3 pole 125 A / 690 V NH00	CI44-S60-160/3-3XNH00	EP-501511	1
wa_vt02819	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	1 x 3 pole 125 A / 690 V NH00	CI44-S60-250/3-1XNH00	194568	1
375		N can be retrofitted with CU20x5 PE can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	2 x 3 pole 125 A / 690 V NH00	CI44-S60-250/3-2XNH00	194569	1
1		L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	3 x 3 pole 125 A / 690 V NH00	CI44-S60-250/3-3XNH00	194570	1
wa_vt02919	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	1 x 3 pole 125 A / 690 V NH00	Cl44-S60-400/3-1XNH00	194571	1
375		L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5		C144-S60-400/3-2XNH00	194572	1
Y		L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5		CI44-S60-400/3-3XNH00	194573	1

Max. rated Features

operational current copper/busbar supports max. Fuse link

Number of circuits

name

Dimensions

mm

Units

Article no.

#### Accessories for fuse enclosures, 60 mm system

	For use with	Max. number of permissible devices	Type name	Article no.	Units per package
		s, 60 mm system ting brackets must be ordered separately ng strip must be ordered separately			
vt21718	CI44	8 x D02-S0/63/3-R-27 8 x D02-LTS/63/3-S60 3 x XNH00-S160-BT1	GA-44-S60-XNH00/D02	194586	1
	C144	1x XNH1-S250-BT	GA-44-S60-XNH1	194587	1
-	CI44	1x XNH2-S400-BT	GA-44-S60-XNH2	194588	1
	CI43, rotated	4x D02-S0/63/3-R-27 4x D02-LTS/63/3-S60 1x XNH00-S160-BT1	GA-43-S60-XNH00/D02	194589	1
	For use with	Width mm	Type name	Article no.	Units per package
	Finger-protection of Includes spacers and fixin  Used as intermediate cov		res		
EP-501533	CI43	235	F2P-S50/60-I43	EP-501532	1
	C144	360	F2P-S50/60-144	EP-501533	1

#### Blanking strip, 60 mm system

- To blank off unused spaces 198 x 56 mm
- RAL 7035
- Detachable in increments of 9 mm



GA-44-S60	56	BS-S60-CI/EP	194590	10
GA-43-S60				

81

mm	of busbar I <sub>e</sub> A	copper/busbar supports	max. Fuse link A/V	name		per package
wa_v103019 375	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	125 A / 690 V NH00	CI44-S60-630/3-1XNH00	194574	1
375		L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	2 x 3 pole 125 A / 690 V NH00	CI44-S60-630/3-2XNH00	194575	1
		L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	3 x 3 pole 125 A / 690 V NH00	CI44-S60-630/3-3XNH00	194576	1
375	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	1 x 3 pole 250 A / 690 V NH1	CI44-S60-250/3-1XNH1	194577	1
375	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	1 x 3 pole 250 A / 690 V NH1	Cl44-S60-400/3-1XNH1	194578	1
Y	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	1 x 3 pole 250 A / 690 V NH1	CI44-S60-630/3-1XNH1	194579	1
375	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	1 x 3 pole 315 A / 690 V NH2	CI44-S60-400/3-1XNH2	194581	1
375	630	L1, L2, L3: CU30x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	1 x 3 pole 315 A / 690 V NH2	Cl44-S60-630/3-1XNH2	194582	1
EP501512_L	160	L1, L2, L3: CU12x5 N can be retrofitted with CU12x5 PE can be retrofitted with CU12x5	1 x 3 pole 125 A / 690 V NH00	CI43-S60-160/3-1XNH00	EP-501512	1
375	250	L1, L2, L3: CU20x5 N can be retrofitted with CU20x5 PE can be retrofitted with CU12x5	1 x 3 pole 125 A / 690 V NH00	CI43-S60-250/3-1XNH00	194583	1
	400	L1, L2, L3: CU20x10 N can be retrofitted with CU20x10 PE can be retrofitted with CU20x5	1 x 3 pole 125 A / 690 V NH00	CI43-S60-400/3-1XNH00	194584	1
	630	L1, L2, L3: CU30x10 N can be retrofitted with CU30x10 PE can be retrofitted with CU30x5	1 x 3 pole 125 A / 690 V NH00	CI43-S60-630/3-1XNH00	194585	1

XNH00-4-CI43E

XNH00-2X-CI43E

XNH00-CI43E-G

XNH00-4-CI43E-G

EP-501516 1

184456

184458

EP-501517 1

#### Accessories for fuse enclosures, 50 mm system

	For use with	Permissible devices	Type name	Article no.	Units per package
	Protective shrouds, 50 i				
	The AH-GA set of support brack	ets must be ordered separately → Page 43			
VT34413 VT34513 VT29613	Cl23	RS3-50 busbar mounting fuse base	GA-RS-I23	046378	1
	Cl43	RS3-50 busbar mounting fuse base fuse switch-disconnectors GSTA00(-160)-40-60-AOU	GA-RS-I43	048751	1
VT34513	C143	RS3-50 busbar mounting fuse base fuse switch-disconnectors GSTA00(-160)-40-60-AOU	GA-RS-I43-G	017907	1
	C144	RS3-50 busbar mounting fuse base fuse switch-disconnectors GSTA00(-160)-40-60-AOU	GA-RS-I44	022653	2
VT29613	CI43	RS3-50 busbar mounting fuse base GSTA1 fuse switch-disconnectors, with A-GSTA1 adapter plate	GA-1-I43-G	020280	4
	CI44	GSTA1 fuse switch-disconnector, with A-GSTA1/ adapter plate	GA-1-I44	025026	2
	C144	GSTA2 fuse switch-disconnector, with A-GSTA2/ adapter plate	GA-2-I44	027399	4
	For use with		Type name	Article no.	Units per package
	Blanking strip, 50 mm s	ystem			
	To blank off unused spaces				
VT64513	GA-RS-I43 GA-RS-I44		AS-RS-CI	002304	10
		r fuse switch disconnectors, 50 protective shroud and the device (for use wi		on board system)	
VT64513	GST00		B-GST00-40-60/CI/1	224553	5

#### Connection kit, 50 mm system

- For connecting the busbars of RS.../I23E, RS.../I43E, RS.../I44E, 250 A for L1, L2, L3
- Each set contains 3 links



RS/123E	VBS-RS	002307 5
RS/I43E		
RS/I44E		

#### Individual enclosures with NH fuse switch-disconnectors

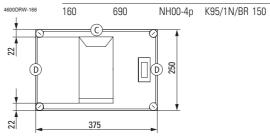
#### Pre-assembled enclosures, individual enclosures with NH fuse switch-disconnectors

- Metric cable entry knockouts in all sides
- IP65 degree of protection
- Integrated pressure-relief mechanism in the event of a short-circuit
- Transparent cover
- 4th conductor (PEN): either via terminal or fuse link depending on the type
- Fuse switch-disconnector fitted to sheet steel mounting plate
- Fixing straps for wall mounting
- Caalabla covar factonare

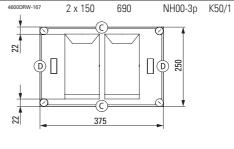
	<ul> <li>Sealable cover taste</li> </ul>	eners							
	Dimensions mm	Rated operational current I <sub>e</sub> A	Rated opera- tional voltage U <sub>e</sub> V AC		Terminal for the 5th conductor can be retrofitted (N conductor)	Enclosure depth mm	Type name	Article no.	Units per package
wa_vt06816	4600DRW-165	155	690	NH00-3p	K50/1	150	XNH00-Cl23E	184460	1
	22 (B)	A 187.5	<u> </u>						
wa_vt06916		160	690	NH00-3p	K95/1N/BR	150	XNH00-CI43E	184457	1



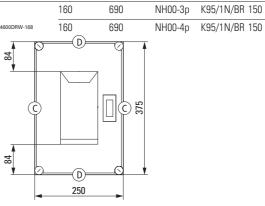
xEnergy Safety







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6		

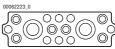


Notes

#### $\mathsf{A}\;\mathsf{B}\;\mathsf{C}\;\mathsf{D}$









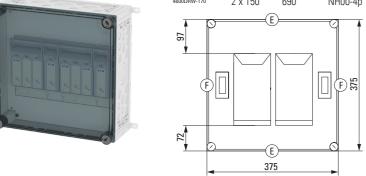
1 x M32/20 2 x M32/20 2 x M50/20 1 x M50/32 6 x M20 4 x M25/16 6 x M25/16 6 x M25/16 2 x M16 4 x M20, 4 x M16 8 x M20 XNH00-2X-CI44E

XNH00-4-2X-CI44E

EP-501519 1

	Dimensions mm	Rated operational current I <sub>e</sub> A	Rated opera- tional voltage U <sub>e</sub> V AC		Terminal for the 5th conductor can be retrofitted (N conductor)	Enclosure depth mm	Type name	Article no.	Units per package
wa_vt07116		160	690	NH00-3p	K95/1N/BR	150	XNH00-CI44E	184459	1
	4600DRW-169	160 E	690	NH00-4p	K95/1N/BR	150	XNH00-4-CI44E	EP-501518	1

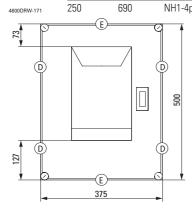
2 x 150 690 NH00-3p K95/1N/BR 150 4600DRW-170 2 x 150 690 NH00-4p K95/1N/BR 150



wa_vt07216		250	690	NH1-3p	K150/1	225	XNH1-CI45E	184461	1
	4600DRW-171	250	690	NH1-4p	K150/1	225	XNH1-4-CI45E	EP-501520	1



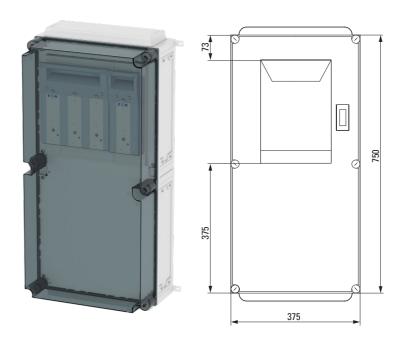
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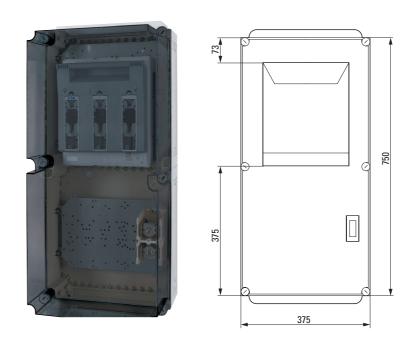
a_vt07316		390	690	NH2-3p	K240/1	225	XNH2-CI45E	184462	1
Marie Company of the second of	4600DRW-172	390	690	NH2-4p	K240/1	225	XNH2-4-CI45E	EP-501521	1
	<b>2</b> 0		E	9 1					
	\								
	0		/	<b>D</b>					
10 0 3 3 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1			-	$\neg \parallel \mid$					
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	127			(D)					
	7								
			375						

<ul> <li>Sides closed, with full area knockout, top and bottom closed with FL4-X gland plates</li> </ul>
--

		Rated operational current I <sub>e</sub> A	Rated operational voltage $\rm U_e$ V AC	Size	for the 5th	depth	Type name	Article no.	Units per package
		390	690	NH2-3p	K240/1	225	XNH2-CI48E	184463	1
17416	4600DDW 172	390	690	NH2-4n	K240/1	225	XNH2-4-CI48F	FP-501522	1

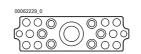


wa v407516	550	690	NH3-3n	K2X240/1 275	XNH3-CI48F	184464	1



N	0+00
IΝ	mes

00062226\_0 00062226\_0 00063230\_0



1 x M50/32 1 x M50/32, 2 x M40/25 1 x M63/40, 6 x M25/16 6 x M25/16 8 x M25/16, 2 x M20 10 x M20, 2 x M16 Distribution board assembly

Mounting frames

xEnergy Safety

### Ci insulated enclosures

Article no.

041643

044016

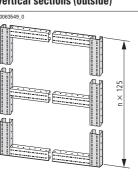
046389

058254

Units per package

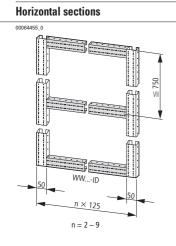
	For use with	125 mm increments number	Section le	ength Type name	Article no.	Units per pack
	Sections for mounting frames  • Galvanized 'C' sections  • Fixing screws must be ordered separately					
	For wall-mounted distribution boards					
	Vertical sections (outside)					
313	00063849_0	6 x 125	750	WS6-ID	098594	1





6 x 125	750	WS6-ID	098594	1	
7 x 125	875	WS7-ID	010794	1	
8 x 125	1000	WS8-ID	013167	1	
9 x 125	1125	WS9-ID	015540	1	
10 x 125	1250	WS10-ID	017913	1	
11 x 125	1375	WS11-ID	020286	1	
12 x 125	1500	WS12-ID	022659	5	
13 x 125	1625	WS13-ID	025032	1	
14 x 125	1750	WS14-ID	027405	1	
15 x 125	1875	WS15-ID	029778	1	

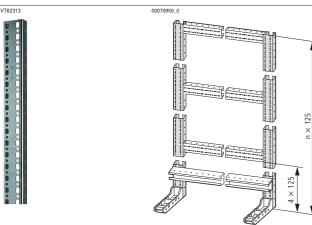




2 x 125	150	WW2-ID	041643	5
3 x 125	275	WW3-ID	044016	5
4 x 125	400	WW4-ID	046389	5
5 x 125	525	WW5-ID	048762	5
6 x 125	650	WW6-ID	051135	1
7 x 125	775	WW7-ID	053508	5
8 x 125	900	WW8-ID	055881	1
9 x 125	1025	WW9-ID	058254	1

#### For wall-mounted distribution boards supported on the floor

#### Vertical sections (outside)

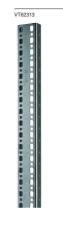


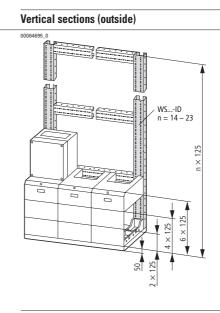
10 x 125	1250	WS10-ID	017913	1
11 x 125	1375	WS11-ID	020286	1
12 x 125	1500	WS12-ID	022659	5
13 x 125	1625	WS13-ID	025032	1
14 x 125	1750	WS14-ID	027405	1
15 x 125	1875	WS15-ID	029778	1
16 x 125	2000	WS16-ID	032151	1
17 x 125	2125	WS17-ID	034524	1
18 x 125	2250	WS18-ID	036897	1
19 x 125	2375	WS19-ID	039270	1

	Horizontal sections				
3200PIC-408	$n = 2 - 9$ $\sqrt{n \times 125}$	2 x 125	150	WW2-ID	
********	50	3 x 125	275	WW3-ID	
	WWID	4 x 125	400	WW4-ID	
		5 x 125	525	WW5-ID	
	Z 250	6 x 125	650	WW6-ID	
		7 x 125	775	WW7-ID	
		8 x 125	900	WW8-ID	
		9 x 125	1025	WW9-ID	

For wall-mounted distribution boards supported on the floor

#### For floor-mounted distribution boards with a width of 3 sections



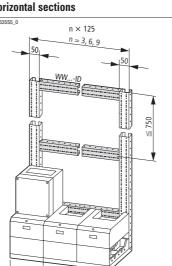


14 x 125	1750	WS14-ID	027405	1	
15 x 125	1875	WS15-ID	029778	1	
16 x 125	2000	WS16-ID	032151	1	
17 x 125	2125	WS17-ID	034524	1	
18 x 125	2250	WS18-ID	036897	1	
19 x 125	2375	WS19-ID	039270	1	
20 x 125	2500	WS20-ID	034525	1	
21 x 125	2625	WS21-ID	036898	5	
22 x 125	2750	WS22-ID	039271	5	
23 x 125	2875	WS23-ID	041644	1	

#### **Horizontal sections**

For use with





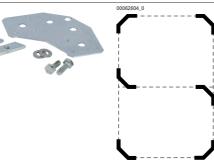
3 x 125	275	WW3-ID	044016	5
6 x 125	650	WW6-ID	051135	1
9 x 125	1025	WW9-ID	058254	1

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#### Accessories for distribution board assembly

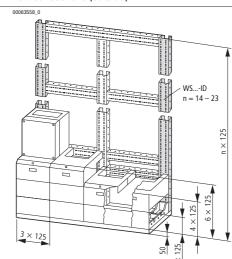
				,		
	For use with	125 mm increments number	Section le	ngth Type name	Article no.	Units per package
	Cable anchoring rails  • For T clips					
vt06218	00063564_0	3 x 125	375	KSV3-CI	193456	1
		6 x 125	750	KSV6-CI	193457	1
N. S.	KSVID	9 x 125	1025	KSV9-CI	193458	1
	n × 125					
	For use with		Typ		Article no.	Units per package
	Wall-fixing brackets					
	Includes fasteners     For both wall-mounted distribution boards and floor	or-mounted distribution	n boards			
V106918	To secure the mounting frame at a distance of 10	0 mm from the wall	WI	BW12-ID	001925	10
V106818	To secure the mounting frame at a distance of 25 Floor-mounted distribution board top mount.	mm from the wall	WI	BW25-ID	081983	10
V106718	To secure the mounting frame at a distance of 10 Floor-mounted distribution board top mount.	0 mm from the wall	WI	3W100-ID	084356	10
	Corner plate for wall-mounted and		distribut	ion boards		
	<ul><li>For connecting the horizontal and vertical sections</li><li>Includes fasteners</li></ul>					
vt07118	00062604_0		EV	B-ID	002299	10



#### Units per package For use with

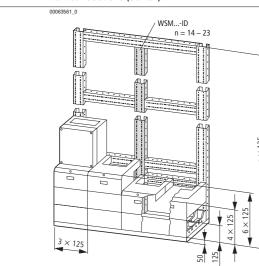
#### For floor-mounted distribution boards with a width of 4 sections

#### Vertical sections (outside)



	14 x 125	1750	WS14-ID	027405	1	
_	15 x 125	1875	WS15-ID	029778	1	
	16 x 125	2000	WS16-ID	032151	1	
23	17 x 125	2125	WS17-ID	034524	1	
125	18 x 125	2250	WS18-ID	036897	1	
n × 125	19 x 125	2375	WS19-ID	039270	1	
_	20 x 125	2500	WS20-ID	034525	1	
	21 x 125	2625	WS21-ID	036898	5	
•	22 x 125	2750	WS22-ID	039271	5	
	23 x 125	2875	WS23-ID	041644	1	

#### Vertical sections (center)



1750	WSM14-ID	044017	5
1875	WSM15-ID	046390	5
2000	WSM16-ID	048763	5
2125	WSM17-ID	051136	5
2250	WSM18-ID	053509	5
2375	WSM19-ID	055882	5
2500	WSM20-ID	058255	5
2625	WSM21-ID	060628	5
2750	WSM22-ID	063001	5
2875	WSM23-ID	065374	5
	2125 2250 2375 2500 2625 2750	2125 WSM17-ID  2250 WSM18-ID  2375 WSM19-ID  2500 WSM20-ID  2625 WSM21-ID  2750 WSM22-ID	2125       WSM17-ID       051136         2250       WSM18-ID       053509         2375       WSM19-ID       055882         2500       WSM20-ID       058255         2625       WSM21-ID       060628         2750       WSM22-ID       063001



VT62313

6 x 125	675	WW6A-ID	067747	1	
12 x 125	1400	WW12A-ID	070120	1	

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**EATON CORPORATION CA015006EN** 

	For use with	Type name	Article no.	Units per package
	Cross plates for wall-mounted and floor-mounted distr  • For connecting the horizontal and vertical sections  • Includes fasteners	ibution boards		
VI07018	Assembly brackets	KVB-ID	002300	10
	For connecting distribution boards, and for use with transport units     Includes fasteners			
vt07218	Wall-mounted distribution boards top and bottom on the WW section 2 for wall-mounted distribution boards, 1 for floor-mounted distribution boards  00008576.0	ARB-ID	002302	10
vt66713	For enclosure assembly at transport splits	VS-TR-CI	002330	25
	Lift eye fix, with lift eye kit			
	For fixing eye bolts on the distribution board support frame, M12 thread     One set contains 2 x fasteners and 2 x M12 eyelets			
V11518	Wall-mounted distribution boards, floor-mounted distribution boards For mounting on the WS vertical sections	TOB/XAT-CI	193464	1
	Fixing screws			
VT11609	For fixing Ci enclosures to the W wall-mounting brackets and the WS, WW sections.	LT284-M6X20-C	050325	100

For use with	Type name	Article no.	Units per package
Plinths			
<ul> <li>For installing floor-mounted distribution boards</li> <li>RAL 7022</li> <li>Sheet steel, welded, galvanized, powder-coated</li> </ul>			
Width 375 mm	SS5-ID0375	079611	1
Width 750 mm	SS5-ID0750	081984	1
Width 1125 mm	SS5-ID1125	084357	1
Width 1500 mm	SS5-ID1500	086730	1
Foot			
For fixing enclosures to the floor			
To left and right of the SS5-ID plinth (for SS5-ID1500 also in the center)	FHF-ID	089103	2
Support struts			
• For floor-mounted distribution boards, to support the vertical sections on the	floor		
Plinth height 50 cm	STR50-ID	072493	1
Plinth height 75 cm	STR75-ID	074866	1
Strap			
• For connecting the distribution boards (and if transport splits are applied)			
In the plinth, 1 strap required for plinth heights ≤ 50 cm 2 pieces required for a plinth height of 75 cm	LPS-ID	086731	5
Foot aven			
<ul> <li>Support brackets for the front plate (bottom)</li> <li>1 per section width</li> </ul>			
Between the externally fitted FHF-ID feet	SLHF-ID	091476	5
Support brackets			
<ul><li>Support brackets for the top plate</li><li>2 per section width</li></ul>			
	HDP-ID	093849	5

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Ci insulated enclosures





# Ci insulated enclosures

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	For use with	Type name	Article no.	Units per package
	Support brackets  • Additional fastening for the HPD-ID support bracket			
vt07418	For SS5-ID0375: None required For SS5-ID0750: 1 piece For SS5-ID1125: 2 pieces For SS5-ID1500: 2 pieces	SWHDP-ID	032152	5
	Top plate  • Also serves as support for the front plate (top)  • 1 per section width			
VT59713	T per section with	DP-ID	096222	5
	Cable compartment cladding			
	Front plates  • For covering the plinth compartment (cabling compartment)  • 1 per section width			
v19418 Ø	Height 750 mm	FP75-ID	013168	2
	Height 500 mm	FP50-ID	010795	4
	Height 250 mm	FP25-ID	098595	4
	Side plates  • Cover for external sides  • Can be fitted on the left or right			
00PIC-406	Height 750 mm	SWRL75-ID	020287	1
	Height 500 mm	SWRL50-ID	017914	1
	Height 250 mm	SWRL25-ID	015541	1
¢ma*i				
	Intermediate plates • Cover between plinths of different heights			
	Right-hand side			
200PIC-412	Between plinth heights of 750 mm and 250 mm	ZPR50-ID	022660	1
	Between plinth heights of 750 mm and 500 mm, or 500 mm and 250 mm	ZPR25-ID	025033	1

	For use with	Type name	Article no.	Units per package
	Left-hand side			
3200PIC-411	Between plinth heights of 750 mm and 250 mm	ZPL50-ID	029779	1
	Between plinth heights of 750 mm and 500 mm, or 500 mm and 250 mm	ZPL25-ID	027406	1

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### Ci insulated enclosures

#### General accessories

Metric cable glands/cable grommets

sions

mm



per package

Article no. Units



### Ci insulated enclosures

DA412

079219 2

1.95

#### Metric cable glands, pressure compensation plugs

	Cable entry		Hole diameter		Type name	Article no.	Units per package
	Pressur	e compens	sating gromn	nets with filter, metric or P	G		
	<ul><li>For use</li><li>Color: R.</li></ul>		ire bottom or sid	es, PE and PVC			
VT06608	M25		25.5		KT-M25F	224556	50
	PG16		23.5		KT16F	024404	100
	Cable	Hole	External cable	For use with	Туре	Article no.	Units
	entry	diameter	diameter	NYM/NYY cable, 4-core	name		per package
		mm	mm	mm <sup>2</sup>			
	IP69K ve	entilation (	cable gland				
	• Color: R	AL 7035					
VT02610	M20	20.5	6-13	H05VV-F4x2.5/3x4 mm <sup>2</sup> , NYM 5x1.5/5x2.5 mm <sup>2</sup>	V-M20-VENT	120814	1
	Cable entry				Туре	Article no.	Units
	,				name		per package
	IP66 pre	essure con	pensating p	lug, metric			
	• Color: R	AL 7035					
VT33209	M40x1.5				DAV-M40	107225	2
	IP55 pre	essure con	npensating p	lug, PG			
	• Color: R	AL 7035					

#### Metric diaphragm grommets

- IP66, with built-in push-through membrane
- PE and thermoplastic elastomer, halogen-free, silicone-free

Ccable entry Drilling dimen- External cable For use with NYM/NYY cables,

4-core

diameter

mm



M16	16.5	1-9	H03VV-F 3 x 0.75 mm <sup>2</sup> , NYM 1 x 16 / 3 x 1.5 mm <sup>2</sup>	KT-M16	216983	100
M20	20.5	1-13	H03VV-F 3 x 0.75 mm <sup>2</sup> , NYM 5 x 1.5 / 5 x 2.5 mm <sup>2</sup>	KT-M20	207602	100
M25	25.5	1-18	H03VV-F 3 x 0.75 mm <sup>2</sup> , NYM 4 x 10 mm <sup>2</sup>	KT-M25	207603	100
M32	32.5	1-25	H03VV-F 3 x 0.75 mm <sup>2</sup> , NYM 4 x 16 / 5 x 10 mm <sup>2</sup>	KT-M32	207604	100

name

#### Metric cable glands to EN 50262

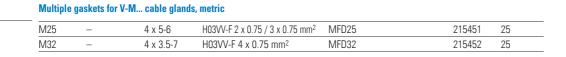
- IP68 up to 5 bar, polyamide, halogen-free
- Flammability classification V2 in accordance with UL94
- Color: RAL 7035

#### Metric cable glands with lock nuts and built-in strain relief



	_					
M12	12.5	3-7	H03VV-F 3 x 0.75 mm <sup>2</sup> , NYM 1 x 2.5 mm <sup>2</sup>	V-M12	215078	20
M16	16.5	4-5-10	H03VV-F 3 x 1.5 mm <sup>2</sup> , NYM 1 x 16 / 3 x 1.5 mm <sup>2</sup>	V-M16	215077	20
M20	20.5	6-13	H05VV-F 4 x 2.5 / 3 x 4 mm <sup>2</sup> , NYM 5 x 1.5 / 5 x 2.5 mm <sup>2</sup>	V-M20	206910	20
M25	25.5	9-17	H05VV-F 5 x 2.5 / 5 x 4 mm <sup>2</sup> , NYM 5 x 2.5 / 5 x 6 mm <sup>2</sup>	V-M25	206911	20
M32	32.5	13-21	NYM 5 x 10 mm <sup>2</sup>	V-M32	206912	10
M40	40.5	16-28	NYM 5 x 16 mm <sup>2</sup>	V-M40	209668	10
M50	50.5	21-35	NYM 4 x 35 / 5 x 25 mm <sup>2</sup>	V-M50	206913	5
M63	63.5	34-48	NYM 4 x 35 mm <sup>2</sup>	V-M63	214835	3







Stoppers for unused openings in MFD multiple gaskets										
M25	_	_	_	MFV25-6	215453	50				
M32	_	_	_	MFV32-7	215454	50				

#### **Cable grommets**

- For wall thickness of 2-3 mm
- Color: RAL 7035
- Soft PVC
- $\bullet$  IP66 if cable entry takes place from below



	•	•			
-	58	14-54	_	KT3	031523 2
_	75	14-68	_	KT4	036269 3

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PG29



#### Cable ducts and accessories

	Length mm	Width mm	Bundle area	a Special feat	ures Tensile stre N	ngth Type name	Article no.	Units per package			
	ITB inc	lustrial cal	ole binders								
	<ul> <li>For bundling and fastening of cables, cable looms, tubes, pipes, etc</li> <li>Continuous ribbing up to point</li> <li>Temperature resistant from -40 to +85 °C</li> <li>Made from natural-colored PO 6.6, flame-resistant to UL 94 V2</li> <li>Resistant to oils, gasoline, salt water, solvents, mold</li> </ul>										
VT08809	98	2.5	21	_	8	ITB1	083550	1000			
VT08909	140	3.6	35	-	13	ITB2	085923	1000			
VT09009	205	4.2	60	with	220	ITB3	088296	100			
				4.8 mm lu	g						



### Ci insulated enclosures

#### Conductor supports

	For use with					Type name	Article no.	Units per package
	Insulated • Short-circuit			norts for copper	band			
	Section str	ip						
wa_v122613	Latch fastene	r				BZ248	076516	10
wa_vi34013	3 x 9 x 0.8 + E 6 x 9 x 0.8 + E					BZ249	078889	10
673	4 x 16 x 0.8 + 6 x 16 x 0.8 + 10 x 16 x 0.8 -	BZ248				BZ251	081262	10
	11 x 21 x 1 +	BZ248				BZ252	083635	10
	Dimensions mm		Description			Type name	Article no.	Units per package
	DIN rail • In accordanc • Supplied in I							
TSSSX7	35 x 7.5			cuit rating as PE cond <sup>2</sup> copper conductor as		o TS35X7.5	053030	20
TS35X15	35 x 15			cuit rating as PE cond <sup>2</sup> copper conductor as		o TS35X15	050657	10
	Circuit	Rated un I <sub>u</sub> A	interrupted cu	rrentTerminal capacities <sup>1)</sup> mm²	Copper band mm	Type name	Article no.	Units per package
4300PIC-283	For snap-fitti     Can be group     With L, N, an	on all sides ng onto DI ng onto mo ped with ac nd protectiv	, VDE appro N rail, in accounting plate dditional K5	ved cordance with IEC/EN es and directly onto th 0/1 terminals r markings	e CI enclosure stackir			40
	O     O	150		<ul><li>○ 2.5 - 50</li><li>○ 2.5 - 50</li><li>○ 2.5 - 35</li></ul>	■9 x 0.8	K50/1	098573	10



Solid round conductors
 Stranded round conductors
 Flexible round conductors with correctly crimped ferrule
 Copper band

Different cover depths enable the implementation of four standard mounting depths in

25 mm increments (top edge of mounting plate to bottom edge of cover):

## Engineering Basic enclosures, selecting the enclosure size

#### Copper band

Rated current Dimensions Cross section 2 Color Type Article no. Units range 1 (number of layers x width x thickness of one layer)

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#### Laminated and insulated copper band

- Tinned E-Cu conductor
- Rated voltage 1000 V AC/1500 V DC
- UL approved for max. 600 V AC
- Dielectric strength: 20 kV/mm
- The insulating material is heat resistant up to +105 °C
- Self-extinguishing in accordance with UL 94 V0
- 2000 mm long
- Continuous currents to DIN 43671, see technical data



100	3 x 9 x 0.8	21.6	black	CU-BAND3X9X0,8-BK	081167	20
	3 x 9 x 0.8	21.6	blue	CU-BAND3X9X0,8-BU	080960	20
	3 x 9 x 0.8	21.6	yellow/green	CU-BAND3X9X0,8-GNYE	081006	20
160	6 x 9 x 0.8	43.2	black	CU-BAND6X9X0,8-BK	081414	10
	6 x 9 x 0.8	43.2	blue	CU-BAND6X9X0,8-BU	081344	10
	6 x 9 x 0.8	43.2	yellow/green	CU-BAND6X9X0,8-GNYE	081367	10
200	9 x 9 x 0.8	64.8	black	CU-BAND9X9X0,8-BK	081515	10
	9 x 9 x 0.8	64.8	blue	CU-BAND9X9X0,8-BU	081436	10
	9 x 9 x 0.8	64.8	yellow/green	CU-BAND9X9X0,8-GNYE	081485	10
250	6 x 16 x 0.8	74.4	black	CU-BAND6X16X0,8-BK	081310	10
	6 x 16 x 0.8	74.4	blue	CU-BAND6X16X0,8-BU	081222	10
	6 x 16 x 0.8	74.4	yellow/green	CU-BAND6X16X0,8-GNYE	081275	10
400	10 x 16 x 0.8	124	black	CU-BAND10X16X0,8-BK	080739	5
	10 x 16 x 0.8	124	blue	CU-BAND10X16X0,8-BU	079736	5
	10 x 16 x 0.8	124	yellow/green	CU-BAND10X16X0,8-GNYE	080698	5
	5 x 24 x 1	120	black	CU-BAND5X24X1-BK	119032	5
630	11 x 21 x 1	231	black	CU-BAND11X21X1-BK	080923	5
	11 x 21 x 1	231	blue	CU-BAND11X21X1-BU	080769	5
	11 x 21 x 1	231	yellow/green	CU-BAND11X21X1-GNYE	080836	5
	8 x 24 x 1	192	black	CU-BAND8X24X1-BK	119033	5
	10 x 24 x 1	240	black	CU-BAND10X24X1-BK	119034	5
	5 x 32 x 1	160	black	CU-BAND5X32X1-BK	119035	5
800	10 x 32 x 1	320	black	CU-BAND10X32X1-BK	119036	3
1000	10 x 40 x 1	400	black	CU-BAND10X40X1-BK	119037	3
1250	10 x 50 x 1	500	black	CU-BAND10X50X1-BK	119038	2
1600	10 x 80 x 1	800	black	CU-BAND10X80X1-BK	119039	1

#### Basic enclosures, selecting the enclosure size

#### **Enclosure dimensions**

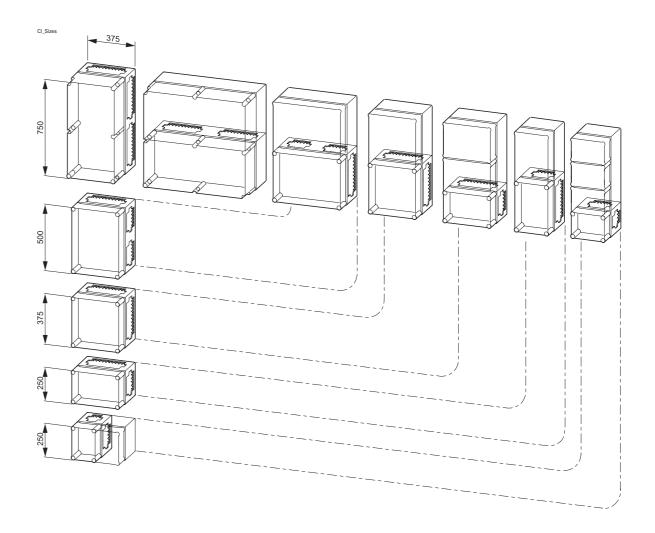
Width: 187.5 mm 375 mm

Height: 200 mm 250 mm 250 mm 375 mm 300 mm

500 mm 750 mm

For distribution assemblies with section widths in 375 mm increments.

Rotating the enclosures by 90° enables section widths in increments of 250 mm.



Notes <sup>1)</sup> Continuous currents to DIN 43671, see technical data

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<sup>&</sup>lt;sup>2)</sup> Cross section: the device wiring instructions (e.g. terminal capacity of least ... mm<sup>2</sup>) must be observed

xEnergy Safety

M3-CI..

Basic enclosures, installing switchgear in panel enclosures, mounting plates

#### Basic enclosures, installing switchgear in panel enclosures, mounting plates Mounting plates are available for installing the switchgear in power distribution The following table shows the maximum number of permissible devices. The PE/N enclosures. In certain cases, additional HS50-CI spacers are required. terminals for the panel enclosures are not included. Device Rated operatio- Max. number of permissible devices for distributor assemblies Mounting plate Spacer nal current CI43(E)-200 CI43(E)-200 CI44(E)-200 CI45(E)-200 CI48(E)-200 CI48(E)-250 Rotated by 90° CI45(E)-250 Quantity Quantity Quantity Quantity Quantity Quantity NH fuse switch-disconnectors XNH00-A. M3-CI. HS50-CI 160 XNH1-A 250 M3-CI. HS50-CI XNH2-A. M3-CI. HS50-CI 390 XNH3-A. M3-CI. HS50-CI 550 NH fuse base GS00-160 M3-CI. HS50-CI 160 M3-CI. GS1 HS50-CI 250 M3-CI. GS2 400 HS50-CI M3-CI.. GS3 500 HS50-CI Switch-disconnector, circuit breaker M3-CI.. NZM1 140 2 M3-CI.. NZM2 230 NZM3 510 M3-CI..

#### Modular busbar systems up to 1600 A, overview, 50 mm system

- 5-conductor system up to 400 A with 1/1 cross-section possible
- 5-conductor system up to 630 A L1 L3 with 1/1 cross-section, PE/N with 1/2 cross-section
- Fuses with 25 A to 400 A, for mounting on busbar systems up to 630 A
- EN13601-Cu-ETP-R250

1420

NZM4

Rated operational current	Busbar cross-section		Distance between busbar centers
l <sub>e</sub>			mm
A	L1, L2, L3	PE, N, PEN	
	mm	mm	
160	12 x 5	12 x 5	40
250	20 x 5	20 x 5	50
400	20 x 10	20 x 5	50
630	20 x 15	20 x 10	50
1000	2 x 30 x 10	30 x 10	1)
1600	3 x 40 x 10	2 x 20 x 15	1)

Notes 1)Special busbars can only be used as the main busbar.

They cannot be used as dropper bars for devices.

xEnergy Safety

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Modular busbar systems up to 1600 A, overview, 60 mm system

Rated operational current I <sub>e</sub>	Busbar cross-section		Distance between busbar centers	Mountable devices	Protective shroud against accidental contact
A	L1, L2, L3 mm	N/PE mm	mm		
160	12 x 5	12 x 5	60	D02-S0/63/3-R-27 D02-LTS/63/3-S60 XNH000-S125-BT XNH00-S160-BT1	GA-44-S60 GA-43-S60
250	20 x 5	20 x 5 / 12 x 5	60	D02-S0/63/3-R-27 D02-LTS/63/3-S60 XNH00-S160-BT1 XNH1-S250-BT	GA-44-S60 GA-43-S60
400	20 x 10	20 x 10 / 20 x 5	60	D02-S0/63/3-R-27 D02-LTS/63/3-S60 XNH00-S160-BT1 XNH1-S250-BT XNH2-S400-BT	GA-44-S60 GA-43-S60
630	30 x 10	30 x 10 / 30 x 5	60	D02-S0/63/3-R-27 D02-LTS/63/3-S60 XNH00-S160-BT1 XNH1-S250-BT XNH2-S400-BT	GA-44-S60 GA-43-S60

Notes Distance between the busbar supports  $\leq$  290 mm

Cu: EN13601-Cu-ETP-R250

#### Modular busbar selection tables up to 630 A, up to 5 poles, 60 mm system

- 3 poles (with or without devices)
- CI44-S60-... enclosures

Busbar system in CI enclosure: assembled from individual modules for between 1 and 4 Ci enclosures	Rated operatio- nal current A	C144-200	SL630	CU12X5 <sup>1)</sup>	CU20X5 <sup>1)</sup>	CU20X10 <sup>1)</sup>	CU30X10 <sup>1)</sup>	FL4-X	BS4-CI
v.( <del></del>	160	1	2	3 x 360	-	-	-	2	-
N 1 2 3 3 E	250	1	2	-	3 x 360	-	-	2	-
375	400	1	2	-	-	3 x 360	-	2	-
	630	1	2	-	-	-	3 x 360	2	-
	160	2	4	3 x 720	-	-	-	2	1
750	250	2	4	-	3 x 720	-	-	2	1
	400	2	4	-	-	3 x 720	-	2	1
	630	2	4	-	-	-	3 x 720	2	1
	160	3	6	3 x 1080	-	-	-	2	2
	250	3	6	-	3 x 1080	-	-	2	2
1175	400	3	6	-	-	3 x 1080	-	2	2
	630	3	6	-	-	-	3 x 1080	2	2
<u> </u>	160	4	8	3 x 1440	-	-	-	2	3
	250	4	8	-	3 x 1440	-	-	2	3
1500	400	4	8	-	-	3 x 1440	-	2	3
1500	630	4	8	-	-	-	3 x 1440	2	3

Notes <sup>1)</sup> The specifications in mm apply to 60 mm systems with 3 poles

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Modular busbar selection tables up to 1000 A, up to 5 poles, 50 mm system

N, PE, PEN at 1600 A

- Up to 5 poles
- Cl..., SKA...

Busbar system in CI enclosure: assembled from individual modules for between 1 and 4 Ci enclosures	Rated operational current	C144-200	SH1005/4	CU30X10 <sup>1)</sup>	FL4-X	BS4-CI
N L1 L2 L3 375	1000	1	2	3000	2	-
N L1 L2 L3 750	1000	2	3	6000	2	1
N L1 L2 L3 L175	1000	3	4	9000	2	2
N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1000	4	5	12000	2	3

Modular busbar selection tables up to 1000 A, up to 5 poles, 50 mm system

 $\overline{\text{Notes}^{1)}}$  The specifications in meters are applicable to 5-pole systems

In order to achieve an even distribution of the current load (and temperature rise) for the individual busbars, the latter must be connected in parallel at a distance of max. 375 mm by means of busbar terminals. Feeder and outgoer terminals must be connected in parallel.

#### Modular busbar selection tables up to 1600 A, 3 poles, 50 mm system

- 3 poles
- Cl..., SKA..

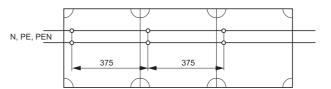
Busbar system in CI enclosure: assembled from individual modules for between 1 and 4 Ci enclosures	Rated operatio- nal current A	C144-200	SH1603/4	CU40X10 <sup>1)</sup>	FL4-X	BS4-CI
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1600	1	2	3375	2	-
L1 L2 L3 750	1600	2	3	6750	2	1
L1 L2 L3 1175	1600	3	4	10125	2	2
1500	1600	4	5	13500	2	3

Notes <sup>1)</sup> The specifications in meters are applicable to 3-pole systems

In order to achieve an even distribution of the current load (and temperature rise) for the individual busbars, the latter must be connected in parallel at a distance of max. 375 mm by means of busbar terminals. Feeder and outgoer terminals must be connected in parallel.

#### N, PE, PEN at 1600 A

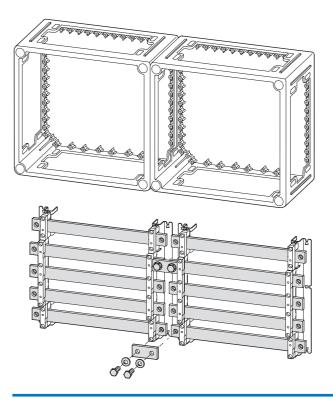
In the 1600 A busbar system, 2 x CU20X15 each are used as N, PE and PEN conductors. For an even current load, the busbars must be connected in parallel at a distance of no more than 375 mm.



#### Transport split, busbar link, System 60 mm

During transport splits, the busbar supports remain in their original position and do not need to be offset. As a result, the installation space for device structures on the copper bars is not reduced, it is the full installation space available.

The transport separation is realized with screw connection elements made of copper. In end enclosures, transport splits should always be fitted to facilitate subsequent



#### Distance between busbar supports when using transport splits, busbar links, 50 mm system

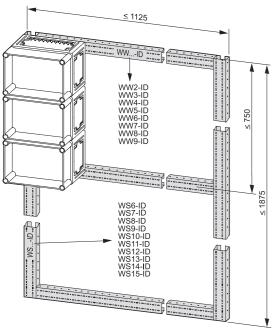
Busbar supports	Busbar system	Additional support bracket for busbar supports	Distance between busbar supports	Terminal	
			mm	L1, L2, L3	N, PE, PEN
SH0165/2	160 A, 5-pole	HSH0632	125	K12X5-1	K12X5-1
SH0635/3	250 A, 5-pole	HSH-CI	175	K20X5	K20X5
	400 A, 5-pole	HSH-CI	175	K20X10	K20X5
	630 A, 3-pole	HSH-CI	125	K20X10	-
SH0635/4	250 A, 5-pole	HSH-CI	125	K20X5	K20X5
,	400 A, 5-pole	HSH-CI	125	K20X10	K20X5
	630 A, 5-pole	HSH-CI	125	K20X10	K20X10
SH1005/4	1000 A, 5-pole	HSH-CI	125	AVS30L	AVS30PEN
SH1603/4	1600 A, 3-pole	HSH-CI	125	AVS40	-
SH0632	250 A, 1-, 2-pole	HSH0632	~ 170	-	K12X5, K20X5
	400 A, 1-, 2-pole	HSH0632	~ 170	-	K12X5, K20X5
	630 A, 1-, 2-pole	HSH0632	~ 170	-	K12X5, K20X5

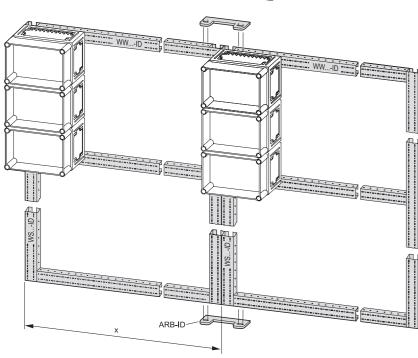
Notes 2 x HSH-Cl or 2 x HSH0632 are required in order to secure each busbar support outside the knockouts. Exception: For SH0632, only 1 x HSH0632 is required.

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#### Selecting the WW...-ID, WS...-ID mounting frames

#### Wall-mounted distribution boards





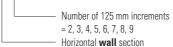
The sections are arranged in increments of 125 mm, in line with the enclosure widths and heights.

#### Vertical sections:

# WS...-ID Number of 125 mm increments = 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 Vertical wall section

#### Horizontal sections:

#### WW...-ID



Vertical and horizontal sections are connected using the EVB-ID corner plates and KVB-ID cross plates (which must be ordered separately).

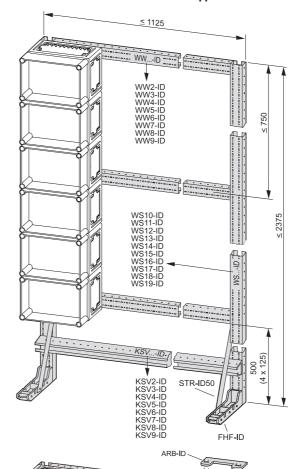
The vertical sections of the support frame are fastened with 2 WBW...-ID wall fixing brackets (which must be ordered separately).

If wall-mounted distribution boards wider than 1125 mm are required, these are split into several transport units accordingly. The ARB-ID assembly bracket is used to mechanically interconnect the wall sections at the top and bottom. The enclosures are then joined together using the K-Cl wedgelock fasteners.

x = Transport unit

#### Selecting the WW...-ID, WS...-ID mounting frames

#### Wall-mounted distribution boards, supported on the floor

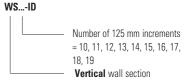


The sections are arranged in increments of 125 mm, in line with the enclosure widths and heights.

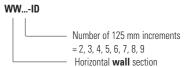
For vertical sections, an additional 500 mm (4 x 125 mm) are

For vertical sections, an additional 500 mm (4 x 125 mm) ar added (this applies to KSV...).

#### Vertical sections:



#### Horizontal sections:



Vertical and horizontal sections are connected with EVB-ID corner plates and KVB-ID cross plates (order separately).

The vertical sections of the support frame are fastened to the wall using 2 WBW...-ID wall fixing brackets (which must be ordered separately).

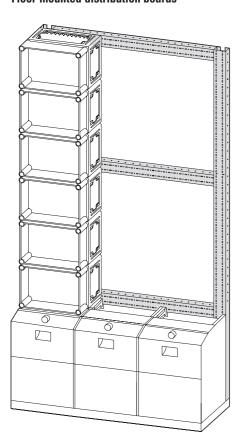
If larger wall-mounted distribution boards are required, these are split into several transport units accordingly. The ARB-ID assembly bracket and the LPS-ID straps are used to mechanically interconnect the wall sections.

x = Transport unit

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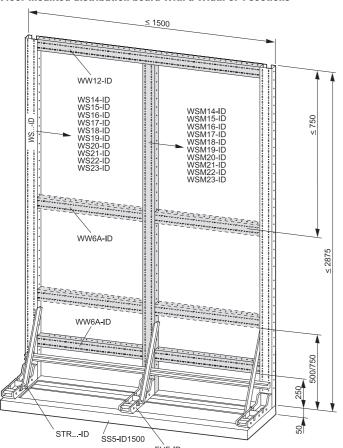
#### Selecting the WW...-ID, WS...-ID mounting frames

#### Floor-mounted distribution boards



Larger distribution systems are assembled on support frames and laid out as floor-mounted distribution boards with cable compartment cladding.

#### Floor-mounted distribution board with a width of 4 sections



The sections are arranged in increments of 125 mm, in line with the enclosure widths and heights.

Vertical sections:

WS...-ID

Number of 125 mm increments
= 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Vertical wall section

Horizontal sections: **WW...-ID** 

Number of 125 mm increments = 2, 3, 4, 5, 6, 7, 8, 9 Horizontal **wall** section

For distribution boards wider than 1500 mm, a vertical center section must be added. In this case, smaller horizontal sections are used.

WSM...-ID

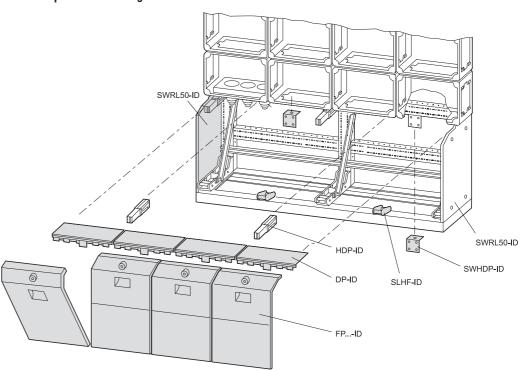
Number of 125 mm increments = 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 Vertical wall section for center mounting

Vertical and horizontal sections are connected using the EVB-ID corner plates and KVB-ID cross plates (which must be ordered separately).

The vertical sections of the support frame are fastened to the wall using 2 WBW...-ID wall fixing brackets (which must be ordered separately).

When mounting very heavy devices (e.g. the NZM4), a reinforced frame is recommended. For this purpose, the frame will be equipped with an additional WSM...-ID center section and an FHF-ID foot.

#### Cable compartment cladding for floor-mounted distribution boards



Floor-mounted distribution boards are mounted on a plinth. Three different cable compartment heights (250 mm, 500 mm and 750 mm, plus 50 mm for the plinth) are available for the insertion, sorting and marshaling of cables. In addition, cable anchoring rails for T clips can also be integrated inside the plinth. The fronts of the cable compartments are closed off using insulating front plates.

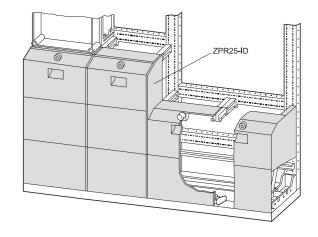
#### Compatibilit

Cable compartments of different heights can also be combined. The side openings are closed off using intermediate plates. Both left- and right-hand versions are available. The final height is the result of the difference between the various front plates.

# **ZP...-ID**25 = 250 mm h

25 = 250 mm high intermediate plate 50 = 500 mm high intermediate plate

R = intermediate plate on the right L = intermediate plate on the left



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1 108 Ci insulated enclosures

xEnergy Safety

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How to select the wiring

How to select the wiring  Connections to busbars				
Type of connection	Terminal type <b>K 12 x 5-1</b>		Terminal type K 12 x 5-2	
	13		21	
Copper bar to copper bar	(2 x) 12 x 5	-	(2 x) 12 x 5 (3 x) 12 x 5	-
Copper bar to (1 x) L-KL-R strap can be fitted with AK16, AK35)	(1 x) 12 x 5	+ L-KL-R	(1 x) 12 x 5 (2 x) 12 x 5	+ L-KL-R
Copper bar to (2 x) L-KL-R strap can be fitted with AK16, AK35)	-	-	(1 x) 12 x 5 (2 x) 12 x 5	+ (2 x) L-KL-R
Sopper bar to copper strip	12 x 5	+ 3 x 9 x 0.8 6 x 9 x 0,8	12 x 5	+ 3 x 9 x 0.8 6 x 9 x 0,8 9 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8
Copper bar to (2 x) copper strip	-	-	12 x 5	+ (2 x) 3 x 9 x 0.8 (2 x) 4 x 16 x 0.8
Copper bar to (4 x) copper strip	-	-	12 x 5	+ (4 x) 3 x 9 x 0.8
Copper busbar to round copper conductor <sup>1)</sup>	12 x 5	+ 16 - 25 mm²	12 x 5	+ 25 mm²

Connections to busbars (continued)						
Type of connection	Terminal type <b>K 20 x 5</b>		Terminal type <b>K 20 x 10</b>		Terminal type <b>K 20 x 15</b>	
	22		22		25	
Copper bar to copper bar	(2 x) 20 x 5	_	(2 x) 20 x 5	_	(2 x) 20 x 10	_
	(2 x) 20 x 10		(2 x) 20 x 10 (2 x) 20 x 15		(2 x) 20 x 15	
Copper bar to (1 x) L-KL-R strap (can be fitted with AK16, AK35)	(1 x) 20 x 5 (2 x) 20 x 5 (1 x) 20 x 10	+ L-KL-R	(1 x) 20 x 5 (2 x) 20 x 5 (1 x) 20 x 10 (2 x) 20 x 10 (1 x) 20 x 15	+ L-KL-R	(2 x) 20 x 10 (1 x) 20 x 15 (2 x) 20 x 15	+ L-KL-R
Copper bar to (2 x) L-KL-R strap (can be fitted with AK16, AK35)	(1 x) 20 x 5	+ (2 x) L-KL-R	(1 x) 20 x 5 (2 x) 20 x 5 (1 x) 20 x 10 (2 x) 20 x 10 (1 x) 20 x 15	+ (2 x) L-KL-R	(2 x) 20 x 10 (1 x) 20 x 15 (2 x) 20 x 15	+ (2 x) L-KL-R
Copper bar to copper strip	20 x 5	+ 3 x 9 x 0.8 6 x 9 x 0.8 9 x 9 x 0.8	20 x 5 20 x 10 20 x 15	+ 3 x 9 x 0.8 6 x 9 x 0.8 9 x 9 x 0.8	20 x 5	+ 10 x 16 x 0.8 11 x 21 x 1
		4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8		4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8 11 x 21 x 1	20 x 10 20 x 15	+ 3 x 9 x 0.8 6 x 9 x 0.8 9 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8 11 x 21 x 1
Copper bar to (2 x) copper strip	20 x 5	+ (2 x) 3 x 9 x 0.8 (2 x) 4 x 16 x 0.8	20 x 5	+ (2 x) 3 x 9 x 0.8 (2 x) 6 x 9 x 0.8 (2 x) 9 x 9 x 0.8 (2 x) 4 x 16 x 0.8 (2 x) 4 x 16 x 0.8 (2 x) 6 x 16 x 0.8 (2 x) 10 x 16 x 0.8	20 x 5 20 x 10	+ (2 x) 6 x 9 x 0.8 (2 x) 9 x 9 x 0.8 (2 x) 6 x 16 x 0.8 (2 x) 10 x 16 x 0.8 (2 x) 11 x 21 x 1
			20 x 10	+ (2 x) 3 x 9 x 0.8 (2 x) 6 x 9 x 0.8 (2 x) 6 x 9 x 0.8 (2 x) 6 x 9 x 0.8 (2 x) 9 x 9 x 0.8 (2 x) 4 x 16 x 0.8 (2 x) 6 x 16 x 0.8	20 x 15	+ (2 x) 3 x 9 x 0.8 (2 x) 6 x 9 x 0.8 (2 x) 9 x 9 x 0.8 (2 x) 4 x 16 x 0.8 (2 x) 6 x 16 x 0.8 (2 x) 10 x 16 x 0.8 (2 x) 11 x 21 x 1
Copper bar to (4 x) copper strip	20 x 5	+ (4 x) 3 x 9 x 0.8	20 x 5	+ (4 x) 3 x 9 x 0.8 (4 x) 6 x 9 x 0.8 (4 x) 9 x 9 x 0.8	20 x 5 20 x 10 20 x 15	+ (4 x) 6 x 9 x 0.8 (4 x) 9 x 9 x 0.8
			20 x 10 20 x 15	+ (4 x) 3 x 9 x 0.8 (4 x) 6 x 9 x 0.8		

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Declaration of conformity

#### How to select the wiring

Connections to	o busbars (cont	(Inuea)					
Terminal type		Type of conr <b>Copper bar</b>	ection to copper strip	Type of conne Copper bar t (flexible with	o round conductor		ction o L-KL-R strap I with AK16, AK35)
		Ш		n. f	j	(1 x) L-KL-R	max. 200 A
		₩.					<b>*</b>
				₩ п		<u>(\$)\$[\$]\$[\$]</u>	s
						(2 x) L-KL-R	max. (2 x) 200 A
K 12 x 5/25	1 25 1	12 x 5	+ (1 x) 3 x 9 x 0.8	12 x 5	+ 1.5 - 6 mm <sup>2</sup>	12 x 5	+ (1 x) L-KL-R
	25		(2 x) 3 x 9 x 0.8 (1 x) 6 x 9 x 0.8				(2 x) L-KL-R
- 1			(2 x) 6 x 9 x 0.8				
			(1 x) 4 x 16 x 0.8				
			(2 x) 4 x 16 x 0.8				
			(1 x) 6 x 16 x 0.8				
Щ	LJ		(2 x) 6 x 16 x 0.8				
20 x 5/25		20 x 5	+ (1 x) 3 x 9 x 0.8	20 x 5	+ 1.5 - 6 mm <sup>2</sup>	20 x 5	+ (1 x) L-KL-R
	25 ▶		(2 x) 3 x 9 x 0.8				(2 x) L-KL-R
<b>A</b>			(1 x) 6 x 9 x 0.8				
			(2 x) 6 x 9 x 0.8				
			(1 x) 4 x 16 x 0.8 (2 x) 4 x 16 x 0.8				
			(1 x) 6 x 16 x 0.8				
7			(2 x) 6 x 16 x 0.8				
			(2 X) 0 X 10 X 0.0				
( 20 x 10/35		20 x 5	+ (1 x) 3 x 9 x 0.8	20 x 10	+ 1.5 - 6 mm <sup>2</sup>	20 x 10	+ (1 x) L-KL-R
	35 ▶	20 x 10	(2 x) 3 x 9 x 0.8				(2 x) L-KL-R
_			(1 x) 6 x 9 x 0.8				
-[[			(2 x) 6 x 9 x 0.8				
			(1 x) 9 x 9 x 0.8				
			(2 x) 9 x 9 x 0.8				
H			(1 x) 4 x 16 x 0.8 (2 x) 4 x 16 x 0.8				
	U		(1 x) 6 x 16 x 0.8				
			(2 x) 6 x 16 x 0.8				
			(1 x) 10 x 16 x 0.8				
			(2 x) 10 x 16 x 0.8				
( 20 x 15/40		20 x 5	+ (1 x) 3 x 9 x 0.8	20 x 5	+ 1.5 - 6 mm <sup>2</sup>	20 x 5	+ (1 x) L-KL-R
	<b>40</b> ►	20 x 10	(2 x) 3 x 9 x 0.8	20 x 10		20 x 10	(2 x) L-KL-R
_		20 x 15	(1 x) 6 x 9 x 0.8	20 x 15		20 x 15	
			(2 x) 6 x 9 x 0.8				
			(1 x) 9 x 9 x 0.8				
<b>4</b>			(2 x) 9 x 9 x 0.8				
Н			(1 x) 4 x 16 x 0.8 (2 x) 4 x 16 x 0.8				
	U		(1 x) 6 x 16 x 0.8				
			(2 x) 6 x 16 x 0.8				
			(1 x) 10 x 16 x 0.8				
			(2 x) 10 x 16 x 0.8				
			(1 x) 11 x 21 x 1				
( 20 x 15/50		20 x 15	+ (1 x) 11 x 21 x 1	20 x 15	+ 1.5 - 6 mm <sup>2</sup>	20 x 15	+ (1 x) L-KL-R
	<del>■ 50</del> ►		(2 x) 11 x 21 x 1				2 x) L-KL-R
_							

#### **Declaration of conformity**



# **Declaration of Conformity**

We, EATON Industries (Austria) GmbH 3943 Schrems, Eugenia 1 Austria

declare under our sole responsibility that the product (family)

#### Eaton - Low-Voltage switchgear and controlgear assemblies

#### xEnergy Safety / Ci..

(the declaration of conformity applies to all listed types within our actual product catalogue)

provided that it is installed, maintained and used in the application intended for, with respect to the relevant manufacturer's instructions, installation standards and "good engineering practices"

complies with the provisions of Council directive(s):

Low Voltage Directive 2014/35/EU

EMC Directive 2014/30/EU

based on compliance with following standard(s):

EN62208/11, EN61439-1/11, EN61439-2/11



Senior Vice President General Manager



**Director Quality** & Systems

Doc.Id.: xEnergy\_Safety\_Ci..\_200416

Affixing date of CE mark: 1985





# Ci insulated enclosures

CI distribution boards

#### Ci basic enclosures

#### **IEC/EN 62208**

Full compliance with the IEC/EN 62208 standard is a prerequisite for using basic enclosures to assemble a low-voltage main distribution system or a low-voltage sub-distribution system in line with IEC/EN 61439-2.

xEnergy Safe complies with the following specifications:

Inscriptions	The requirements of the product standard are met.
Static load	Ci23: 6.5 kg; Ci43: 12.5 kg; Ci44: 25 kg; Ci45: 37.5 kg; Ci48: 50 kg; The requirements of the product standard are met.
Lifting	Max. weight that can be installed for each enclosure size: Ci23: 5 kg; Ci43: 10 kg; Ci44: 20 kg; Ci45: 30 kg; Ci48: 40 kg Meets the requirements if assembled and secured using the support frame and the lifting aid, as per the latest applicable instruction leaflet.
Pulling out of metal inserts	350 N The requirements of the product standard are met.
Impact test	IK10 (IK09 for side plates and flanges) The requirements of the product standard are met.
IP degree of protection	IP65 The requirements of the product standard are met.
Heat resistance	The requirements of the product standard are met.
Resistance to normal heat	The requirements of the product standard are met.
Resistance to abnormal heat	Base: 960 °C/cover: 850 °C The requirements of the product standard are met.
Insulation resistance	Insulation resistance $U_i$ = 1000 V AC/1500 V DC The requirements of the product standard are met.
Protection against electric shock	Protection class 2, fully insulated.
Resistance to ultra-violet (UV) radiation	Total exposure duration = 500 h The requirements of the product standard are met.
	For enclosures containing pre-installed components, Eaton recommends the use of a protective shield.
Corrosion resistance	Ci enclosures and the installed metal parts. Cyclic damp heat, as defined in IEC 60068-2-30 Salt spray fog test in accordance with IEC 60068 The requirements of the product standard are met.
Radiated heat dissipation	Radiated heat dissipation

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For design verifications at the component level, please refer to the xEnergy Safety documents provided by Eaton.

**CI** distribution boards

#### IEC/EN 61439-2 (VDE 0660-600-2)

A design verification is available for the functional units of the switchgear assemblies. Customers may use them to assemble switchgear assemblies, distribution boards and indi-

vidual control panels.

Devices for front mounting: The stated reference values apply to the basic elements of the distribution board. For installed devices, terminals, etc., the corresponding characteristic values and ratings apply. For design verifications at the component level, please refer to the xEnergy Safety documents provided by Eaton.

Corrosion resistance	Salt spray fo	ng test in accord	I in IEC 60068-2-3 ance with IEC 60 duct standard are	068		
Heat resistance of enclosures	The requirer	ments of the prod	duct standard are	met.		
Glow-wire test	covers: 650	°C	/cover: 850 °C/b		960 °C/	
5		· .	duct standard are			
Resistance to ultra-violet (UV) radiation	UV-resistant	t for 500 h, in ac	cordance with IS	0 4892-2		
Lifting	4-row floor-mounted distribution board and additional weight of 500 kg, assembled and secured using the support frame and the lifting aid, as per the latest applicable instruction leaflet. The requirements of the product standard are met.					
Impact test		or side plates an ments of the prod	d flanges) duct standard are	e met.		
Inscriptions	The requirer	ments of the prod	duct standard are	met.		
Degree of protection of enclosures	IP65 The requirements of the product standard are met.					
Clearances and creepage distances	With Eaton circuit breaker, main busbar and K terminal. The requirements of the product standard are met.					
Protection against electrical shock and continuity of protective circuits	Protection c	lass 2, fully insu	lated			
Installation of equipment	The installat	tion of the equip	ment is the pane	l builder's respo	nsibility.	
Internal circuits and connections	The installat	tion of internal c	ircuits and conne	ctions is the par	nel builder's resp	onsibility.
Connections to external conductors	The installat	tion of connectio	ns to external co	nductors is the p	panel builder's re	esponsibility.
Insulation properties	Insulation resistance U <sub>i</sub> = 1000 V AC/1500 V DC					
Temperature rise limit			duct standard are dissipation of the			
remperature rise illinit			duct standard are			
Short-circuit rating	With Eaton	feeder unit/outg	oer circuit breake uit current I <sub>cc</sub> = 50	er, copper band a	and K terminal.	
60 mm busbar system						
CU copper busbar	12x5	20x5	20x10	30x10		
Rated operational current	160 A	250 A	400 A	630 A		
Rated short-time withstand current $t = 1 \text{ s; } l_{cw}$	9 kA	15 kA	33 kA	37 kA		
Rated peak withstand current I <sub>pk</sub>	43 kA	49 kA	61 kA	78 kA		
Distance between busbar supports	290 mm	290 mm	290 mm	290 mm		
50 mm busbar system	400.6	050 *	400 *	000 *	4000 1	4000 1
Rated operational current	160 A	250 A	400 A	630 A	1000 A	1600 A
Rated short-time withstand current t = 0.1 s; I <sub>cw</sub>	20 kA	25 kA	35 kA	40 kA	80 kA	80 kA
Rated short-time withstand current t = 1 s; l <sub>cw</sub>	4 kA	7 kA	14 kA	28 kA	50 kA	50 kA
Rated peak withstand current I <sub>pk</sub>	40 kA 52.5 kA 73.5 kA 84 kA 105 kA 105 kA					
The requirements of the product standard are met.  Mechanical functions			pports ≤ 375 mi duct standard are			

For design verifications at the component level, please refer to the xEnergy Safety documents provided by Eaton.

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xEnergy Safety

xEnergy Safety	
General information	
Ambient temperature of basic enclosures	-40 °C to +80 °C
Materials	
Material	
Base	Glass-fiber reinforced polycarbonate
Cover	Non-reinforced polycarbonate
Color	
Base	RAL 7035, light gray
Cover	Transparent and colorless or RAL 7035, light gray
Material properties of basic enclosures	
Electrical	
Creepage resistance to IEC 60112	
Base	KB160, KC175
Cover	KB100, KC200
Surface resistance to IEC 60093	>1 Ω x 1013
Insulation resistance to IEC 60243-1	30 kV/mm
Thermal	
Continuous thermal stability	
Enclosure	-40 °C to 120 °C
Enclosure bolt	85 °C
Gasket	2° 08
Chemical	
Resistant to	Acids < 10 %, mineral oil, alcohol, fats, saline solutions
Partially resistant to	Acids > 10 %
Non-resistant to	Alkalis, benzene
Atmospheric	
Water absorption to EN ISO 62	0.29 %
Flammability characteristics	
UL	
Base	UL94V1
Cover	UL94V2
Halogen-free	Yes (base and cover)
Modular grid (basic enclosure dimensions)	25 mm (DIN 43660)
Surface protection with metals	Galvanized, passivated
Power distribution enclosures	
Operating and environmental conditions	
Ambient temperature	
Mean value over 24 hours	35 °C
Limit values	-5 °C to +40 °C
Altitude	Max. 2000 m

xEnergy Safety

# Ci insulated enclosures 1.115

Radiated heat dissipation

Standards	VDE approval in accordance with DIN EN 60947-7-1
	The product complies with the EC's RoHS Directives
Color	RAL 7035 light gray
Materials	
Terminal body	Untreated brass (CuZn39Pb2)
Enclosure	PA 6 (halogen-free)
Screws	Steel, Zn thick-film passivated
Flame resistance	Self-extinguishing
Mechanical values	
Stripping lengths 50 mm <sup>2</sup>	16 mm
Hexagon socket head screws	5 mm
Dimensions W x H x D (mm)	24.8 x 40.5 x 60.8
Electrical values	
Rated uninterrupted current	150 A
Rated operational voltage	690 V
Terminal capacity	2 x 50 mm <sup>2</sup>
Solid round copper conductor, stranded round copper conductor	2.5 - 50 mm <sup>2</sup>
Flexible round copper conductor with ferrule	2.5 - 35 mm <sup>2</sup>
Flat copper conductor	3 x 9 x 0.8 mm
For use with	CI, CI-K; T cam switches; P switch-disconnectors; NZM circuit breakers CU-BAND3X9X0.8-BK

#### **Radiated heat dissipation**

Radiated heat dissipation	Туре	Dimensions W x H x D mm	Heat dissipation W
Max. radiated heat dissipation of a Ci insulated enclosure in separate n	nounting, $\Delta$ T Cl23125	187.5 x 250 x 150	32
= 45 K.	Cl23150	187.5 x 250 x 175	36
	CI43125	250 x 375 x 150	46
	CI43150	375 x 250 x 175	50
	CI43200	375 x 250 x 225	56
	CI44125	375 x 375 x 150	61
	CI44150	375 x 375 x 175	68
	CI44200	375 x 375 x 225	72
	CI44250	375 x 375 x 275	78
	CI45200	375 x 500 x 225	95
	CI45250	375 x 500 x 300	115
	CI48200	375 x 750 x 225	128
	CI48250	375 x 750 x 275	141
Max. radiated heat dissipation of a Ci insulated enclosure when used in	n a distributi- Cl23125	187.5 x 250 x 150	16
on board, as specified in IEC/EN 61439-2 bei $\Delta T$ = 45 K.	Cl23150	187.5 x 250 x 175	25
	CI43125	375 x 375 x 150	42
	CI43150	375 x 250 x 175	42
	CI43200	375 x 250 x 225	42
	CI44125	375 x 375 x 150	53
	CI44150	375 x 375 x 175	54
	CI44200	375 x 375 x 225	54
	CI44250	375 x 375 x 275	54
	CI45200	375 x 500 x 225	67
	CI45250	375 x 500 x 300	97
	CI48200	375 x 750 x 225	93
	CI48250	375 x 750 x 275	93

Notes • If there is no information concerning the load conditions of the individual circuits, a rated diversity factor should be selected, as defined in IEC/EN 61439.

 Alternatively, the "Eaton Temperature Calculator" software tool can be used to calculate the temperature rise values for switchgear assemblies and basic enclosures.

114 EATON CORPORATION CA015006EN 115 EATON CORPORATION CA015006EN

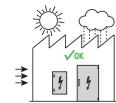


Glow wire test 750 °C

in accordance with EN 60695-2-11

Cable glands/grommets

#### **Installation site conditions**

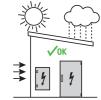


Indoor installation

Flame resistance

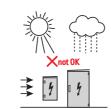
Flammability to UL94

The enclosure must be continuously protected against sunlight and climatic conditions such as rain and wind.



Protected outdoor installation

The enclosure must be continuously protected against sunlight and climatic conditions such as rain and wind.



Unprotected outdoor installation

The enclosure is not intended for unprotected outdoor installation.

Cable g	qlands/g	grommets

	KT-M	V-M	MFD	MFV	KT-M25F	STB-MF
Materials	Polyethylene and ther- moplastic elastomer, halogen-free		Thermoplastic elastomer	Polyamide	PVC and polyethylene	Glass-fiber reinforced polyamide with flame protection, self-extin- guishing
Color	Gray, RAL 7035	Gray, RAL 7035	Black, similar to RAL 9005	Red	Grey, RAL 7032 + white	Gray, RAL 7035
Degree of protection	up to IP66	IP68 up to 5 bar (30 min.)	IP66	-	up to IP50	IP56, may only be mounted below the enclosure or on the enclosure sides
Chemical resistance	Resistant to: Alcohol, animal and vegetable fats, weak alkalis, weak acids, water	Resistant to: Acetone, gasoline, benzene, diesel oil, grease, oils, paint sol- vents and varnishes	-	-	Resistant to: Diluted non-oxidizing acids, alkalis and salts alcohols, aromatic and halogenated hydrocar- bons, wetting agents	d grease, oils, paint sol-
Danger of stress fracture	Relatively high	Low	-	-	Relatively high	Low
Temperature resistance	-40 °C to 80 °C, for a short time up to approx. 100 °C	-20 °C to 100 °C, for a short time up to approx. 120 °C	-20 °C to 100 °C, for a short time up to approx. 120 °C	-25 °C to 80 °C, for a short time up to approx. 120 °C	0 °C to 60 °C, for a short time up to approx. 80 °C	40 °C to 100 °C, for a short time up to approx. 150 °C

Glow wire test 750 °C -

in accordance with EN

60695-2-11 V2



# Ci insulated enclosures 1.117

	CU-BAND
Standards	EN 61439-2 (max. 1000 V AC and 1500 V DC)
	UL 758 (max. 600 V AC and 750 V DC)
Insulating material	Heat resistant up to +105 °C
· ·	Self-extinguishing in accordance with UL 94 VO
	Dielectric strength 20 kV/mm
Copper	E-CU, tinned
Operating temperature	-30 °C / +105 °C
Length	2 m
Colors	black (BK), blue (BU), green/yellow (GNYE)
UL File No.	E248096. UL report applies to both US and Canada

Continuous currents to DIN 43671 for E-Cu busbars in indoor installations at an air temperature of 35 °C around the conductor and a busbar temperature of max. X °C

	Continuous current AC									
Rated current range [A]	Dimensions	Cross-section [mm	$X^2$ X = 65 °C X = 85 °C		X = 105 °C	Classification	Color			
	Number of layers x width x thickness of one layer [mr	m]	ΔT = 30 K	ΔT = 50 K	ΔT = 70 K					
100	3 x 9 x 0.8	21.6	98 A	130 A	152 A	CU-BAND3X9X0.8	BK, BU, GNYE			
160	6 x 9 x 0.8	43.2	147 A	196 A	228 A	CU-BAND6X9X0.8	BK, BU, GNYE			
200	9 x 9 x 0.8	64.8	179 A	238 A	277 A	CU-BAND9X9X0.8	BK, BU, GNYE			
250	6 x 16 x 0.8	74.4	252 A	335 A	391 A	CU-BAND6X16X0.8	BK, BU, GNYE			
400	10 x 16 x 0.8	128	330 A	439 A	512 A	CU-BAND10X16X0.8	BK, BU, GNYE			
400	5 x 24 x 1	120	369 A	491 A	572 A	CU-BAND5X24X1	BK			
630	11 x 21 x 1	231	563 A	749 A	873 A	CU-BAND11X21X1	BK, BU, GNYE			
630	8 x 24 x 1	192	483 A	642 A	749 A	CU-BAND8X24X1	BK			
630	10 x 24 x 1	240	559 A	743 A	866 A	CU-BAND10X24X1	BK			
630	5 x 32 x 1	160	477 A	634 A	739 A	CU-BAND5X32X1	BK			
800	10 x 32 x 1	320	721 A	959 A	1118 A	CU-BAND10X32X1	BK			
1000	10 x 40 x 1	400	850 A	1131 A	1318 A	CU-BAND10X40X1	BK			
1250	10 x 50 x 1	500	1020 A	1357 A	1581 A	CU-BAND10X50X1	BK			
1600	10 x 80 x 1	800	1500 A	1995 A	2325 A	CU-BAND10X80X1	BK			

The rated currents and wiring instructions of the connected devices (e.g. terminal capacity of least ... mm²) must be observed. Multiplication factor of 1.72 if 2 x CU-BAND are used in parallel.

Multiplication factor of 2.25 if 3 x CU-BAND are used in parallel, in accordance with DIN 43671.

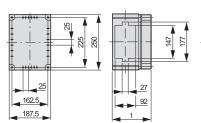


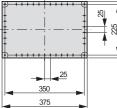
Dimensions [mm]

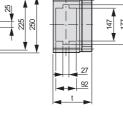
#### **Insulated enclosures**

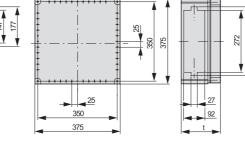
CI23... RS.../I23.. CI43... KST43... ZG/I43E-G-.. RS.../I43...

CI44... KST44... SKA...-I44, ZG/I44E-...

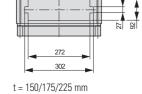


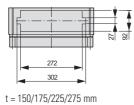










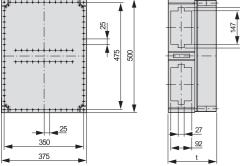


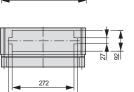
t = 150/175 mm

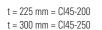
CI45... ZG/I45E-.

CI48... KST48... ZG/I48-...

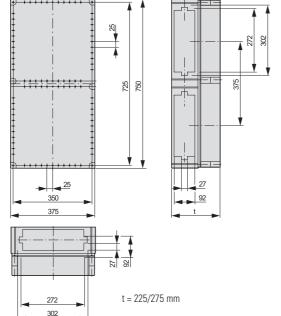
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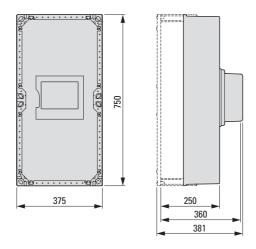






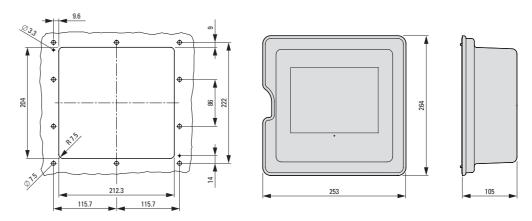
#### **Insulated enclosures**

D250-CI48-NZM-RTR

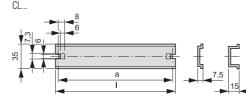


#### **Enclosure shroud**

NZM-RTR



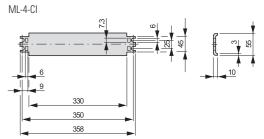
#### Mounting rails



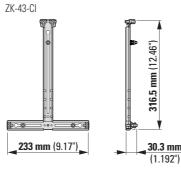
	Туре	I	а	
	CL2	170.5	162.5	
2	CL3	233	225	
<u>L</u>	CL4	358	350	
Ĭ	CL2-15	170.5	162.5	
15	- CL3-15	233	225	
	CI 4-15	358	350	

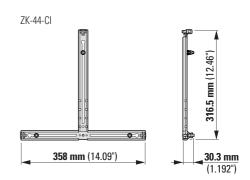
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# **Module mounting rail**



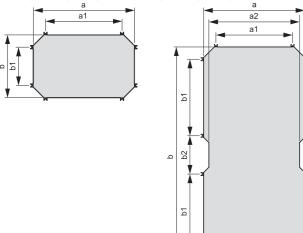






#### **Mounting plates**

M3-CI-..., IM4-CI..., M-CI..., MM-CI M3-CI48, IM4-CI48, M-CI48, MM-CI48...



а	b	a1	b1	a2	b2
142.5	205	62.5	125	-	-
330	205	250	125	-	-
330	330	250	250	-	-
330	455	250	375	-	-
330	705	250	250	296	125
	142.5 330 330 330	142.5     205       330     205       330     330       330     455	142.5     205     62.5       330     205     250       330     330     250       330     455     250	142.5     205     62.5     125       330     205     250     125       330     330     250     250       330     455     250     375	142.5     205     62.5     125     -       330     205     250     125     -       330     330     250     250     -       330     455     250     375     -

M3-... mounting plate: 3 mm thick

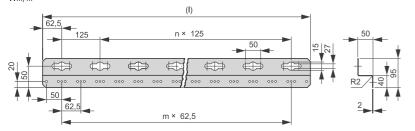
IM4-... insulating mounting plate: 4 mm thick

M-Cl... mounting plate: 1.5-2.0 mm thick

micro-perforated mounting plate: 1.5 mm thick

#### Wall-fixing brackets

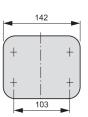
W.../...

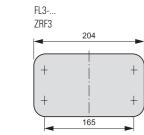


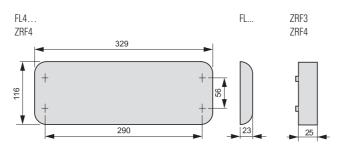
Туре	I	n	m
W4/8-CI	625	4	8
W6/8-CI	875	6	12
W8/16-CI	1125	8	16
W10/20-CI	1375	10	20
W16/32-CI	2125	16	32

#### Flanges, spacers



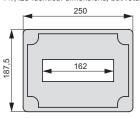


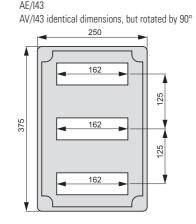


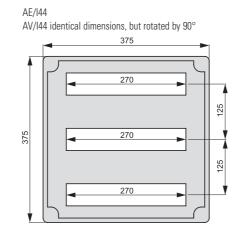


#### MCB enclosures, MCB distribution board enclosures

AE/I23 AV/I23 identical dimensions, but rotated by 90°

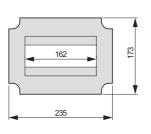


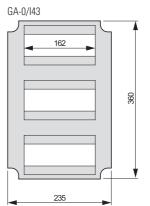


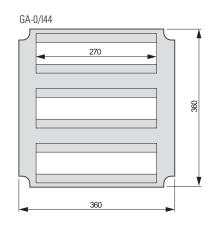


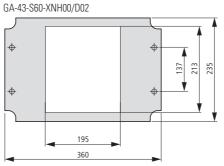
#### Protective shrouds against accidental contact

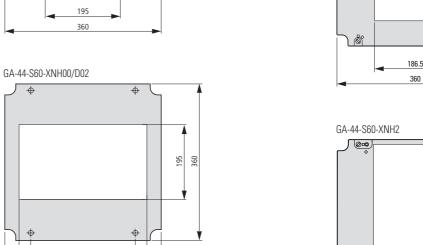
GA-0/12

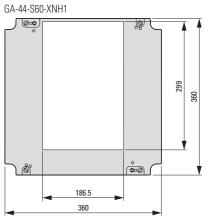


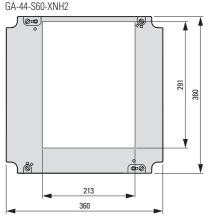








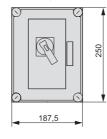


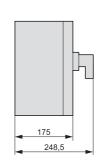


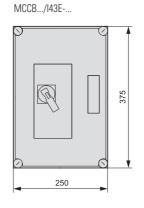
#### Prepared MCCB enclosures

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MCCB1-63/I23E-150







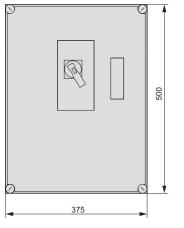
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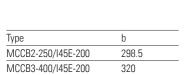
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a b	-	

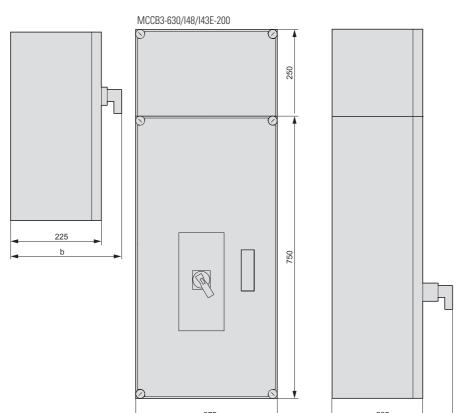
Туре	а	b
MCCB1-125/I43E-150	175	248.5
MCCB1-160/I43E-200	225	298.5
MCCB2-200/I43E-200	225	298.5

#### **Prepared MCCB enclosures**

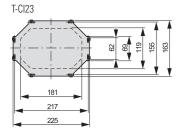


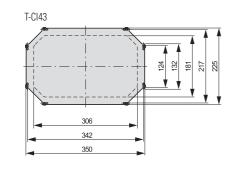


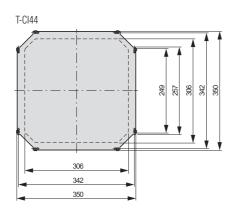




#### Doors

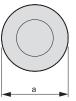


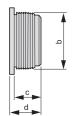




#### **Metric diaphragm grommets**

KT-M..



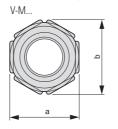


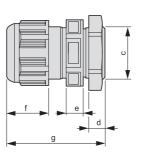
Туре	а	b	С	d	
KT-M16	21.2	16	9.5	11	
KT-M20	25.2	20	9.5	11	
KT-M25	30.2	25	9.5	11	
KT-M32	37.2	32	9.5	11	

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#### Metric cable glands

xEnergy Safety





Type	а	b	c d	е	f	g
V-M12	16	18	M12x1.5 9	5.3	14	29 - 34
V-M16	20	22	M16x1.5 9	5.3	16.5	31 - 37
V-M20	24	27	M20x1.5 10	6.1	20	36 - 45
V-M25	29	32	M25x1.5 10	8.1	20	38 - 47
V-M32	36	40	M32x1.5 12	10.1	20	42 - 51
V-M40	46	51	M40x1.5 12	11.1	29	52 - 65
V-M50	55	61	M50x1.5 14	12.1	33	59 - 72
V-M63	68	75	M63x1.5 15	12.1	36.5	64 - 78

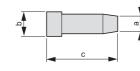
#### Multiple gaskets

NI D...

Туре	а
MFD25	5.0 - 6.0
MFD32	3.5 - 7.0

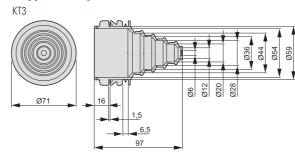
#### **Stoppers**

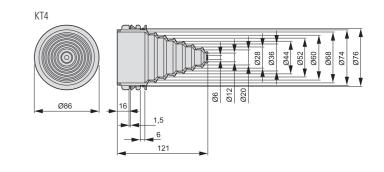
MFV...



Туре	а	b	С
MFV25-6	5.5	6	20
MFV32-7	7	8	20

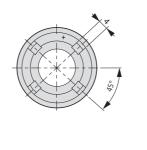
#### **Stepped cable grommets**

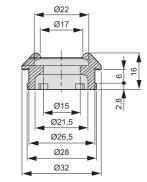


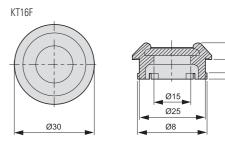


#### **Pressure compensating grommets**

KT-M25F

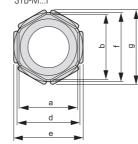


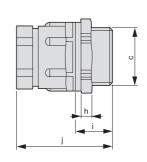




#### Ventilation cable glands

STB-M.

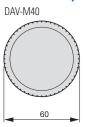


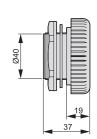


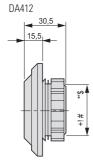
Туре	С	h	i	j	g	f	b	а	d	е
STB-M20F	20	5	15	40	29	27	23	21	24	27
STB-M25F	25	6	15	45	35.5	35.5	33.4	30	33	32

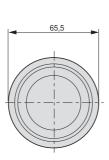


#### **Pressure compensating plugs**

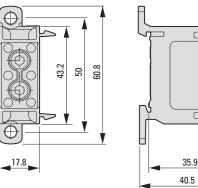


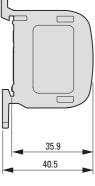




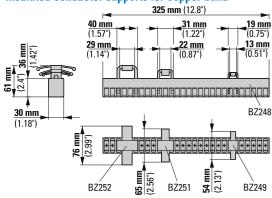


#### **Insulated individual terminal K50/1**





#### Insulated conductor supports for copper band





# Eaton Partner program

The key to your success with xEnergy switchboard systems is the Eaton Partner program. Joining the program is well worth it: Not only will you receive a wealth of insider information, you will also be the first to get informed about facts and innovations regarding xEnergy.

To learn more about the xEnergy Partner Program please contact your nearest Eaton Sales Office.

Visit us at www.xenergy-partner.com

#### **Benefits**

- Listing as a Licensed Partner on the Eaton website
- Access to BAs, ILs (building and assembly instructions), Configurator, certificates and technical data sheets
- Continuously up-dated product information
   Software downloads
- Installation instructions
- Information material for your customers, such as catalogues and flyers
- Certificates of conformity and guidelines regarding IEC standards

# xEnergy Light

#### Power distribution board and control panel up to 1600 A



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

The robust 2 mm thick, multiple-folded sheet-steel frame provides the stability required for any application, in stand-alone enclosures as well as in add-on enclosures which are common in power distribution.

Flat-pack orders allow for space-saving and therefore cost-efficient deliveries. xEnergy Light can also be ordered as a pre-assembled cabinet. xEnergy Light meets of course the requirements of the latest IEC 61439-1/3 and IEC/EN 62208 standards.

#### Benefits:

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

#### Features:

- IEC 61439 and IEC/EN 62208
- Combination options with different installation systems such as EP, xEnergy Basic, SASY60i,...
- Degree of protection IP40 and IP55
- Stand-alone cabinet or add-on system
- Foam-shaped door sealings
- Consistent system up to 1600 A

# xEnergy Basic

#### Wall-mounted and floor-standing enclosures for electrical distribution up to 630 A



The smallest distribution board of our xEnergy family is the most flexible and variable system in the entire range. The diversity of different types and sizes makes the use in almost every application possible. Thanks to its certification as low-voltage distribution board intended to be operated by ordinary persons acc.to IEC/EN 61439-1/3 as well as to IEC/EN 62208, the xEnergy Basic is the first choice for electrical distribution in residential and functional buildings.

#### **Benefits:**

- Wide range of products
- Pre-assembled or flat-pack
- The interior is completely flexible
- Large number of accessories
- Compatible with other products

#### **Features:**

- Sheet steel enclosure polyester powdercoated (grey or white)
- Floor-standing, surface-mounted or flush-mounted version
- Three different ways of assembling the interior fitting
- Degree of protection IP30, IP43 or IP54
- Impact resistance
   IK07
- Protection class I

# xEnergy Main: Controls systematically. Saves in three ways. Thinks ahead.



With Eaton, you have a business partner who supports your expertise in every respect. With Eaton xEnergy, you have a switchboard system that provides you with a wide variety of options for reliable power distribution, motor control, automation and specific solutions to meet your customers' needs.

The xEnergy system thinks ahead, it is designed to meet constantly increasing requirements. Designed to provide maximum efficiency in implementing your specific project needs, Eaton xEnergy provides the optimum solution for low-voltage switchgear and controlgear assemblies up to 6300 A.

Every single functional module in this switchgear assembly is perfectly prepared and systematically planned – from the switchgear and mounting system technology to the enclosures and design software tools.

# Systematic switching = Shaping the future xEnergy is a technically so-

phisticated and cost-effective combination of the enclosure. switchgear, controlgear and protective devices, and mounting systems to provide the Panelbuilder with the equipment to optimally switch and control power, in other words to dominate it. The system is modular and offers many smart combination options to allow you to meet the most exacting of project requirements xEnergy provides a wide range of benefits to the Panelbuilder and the end-customer.

These benefits also include the optimal added value in your own panel building business and the certainty that – with Eaton – you will always be building state-of-the-art and safety-tested panels.

They will also help you to save time, money and space.

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### xEnergy Elite protects people and assets, guaranteeing business continuity, durable and scalable

xEnergy Elite is Eaton's low voltage motor control and power distribution solution which offers performance data, arc risk mitigation, and continuous switchgear health checks that optimizes safety, reliability and efficiency.

With xEnergy Elite motor control and power distribution solutions you can optimize your processes and minimize risk.

#### Protecting people and assets

- · Certified arc fault protection in accordance with IEC / TR 61641 criteria 1-7
- Fully insulated arc-free main and distribution busbars
- Elite contact system provides complete ingress protection in all drawer unit positions, Disconnect -Test - Connected
- · Genuine personnel protection with ARCON® - Arc Fault Protection
- Reduced energy levels and hazards during service operations with Arc-flash Reduction Maintenance System™ (ARMS)
- Zone Selective Interlocking (ZSI) for reducing thermal and dynamical load
- Diagnose 24/7 Temperature Monitoring System

#### **Business continuity**

- Verified and tested to IEC 61439-2
- · Modification without system shutdown
- · Servicing of functional units during operating conditions
- "Maintenance-free" busbar connection and racking system
- · Elite contact system design
- Continuous switchboard monitoring for fault prevention
- Eaton C445 motor management relays with industry-leading diagnostic

  • Basic arc fault protection up to 'Open capabilities and analytics
- · Breaker Health diagnostics
- Global supported platform with worldwide standardized industrialization processes

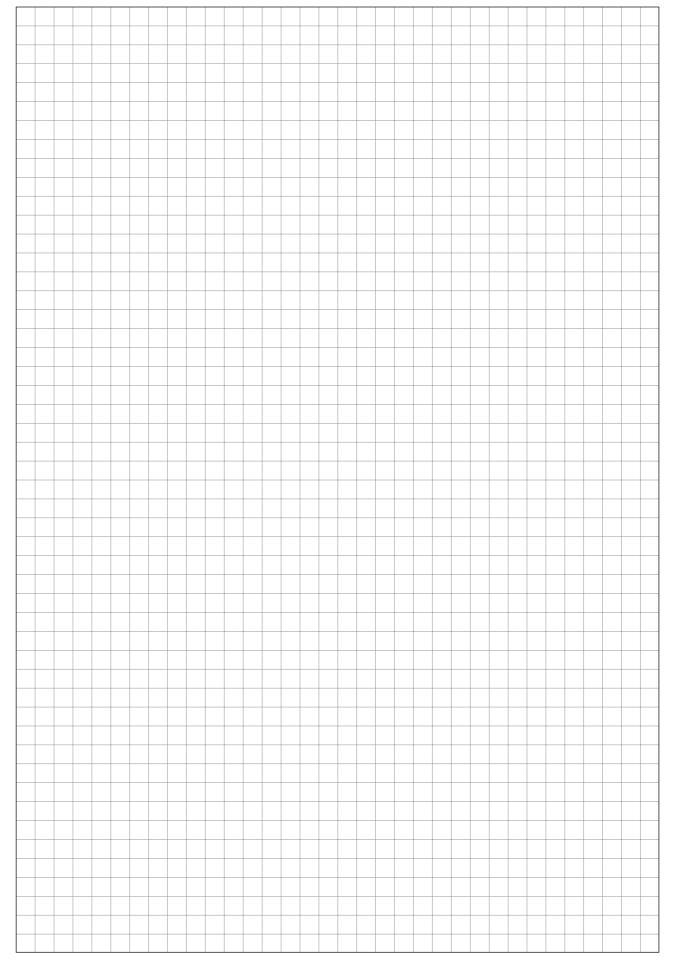
#### **Durable and scalable**

- · Robust chromed frame-based system
- · Non-sliding motor starters and feeders
- Elite contact system for 1000+ operations
- Up to 32 drawers in a single section
- 1/4, 1/2 and full width drawers up to 315 kW
- Drawers individually connected to distribution busbar system
- Fused and breaker-based technology
- door arc fault safety

**xEnergy** Safety

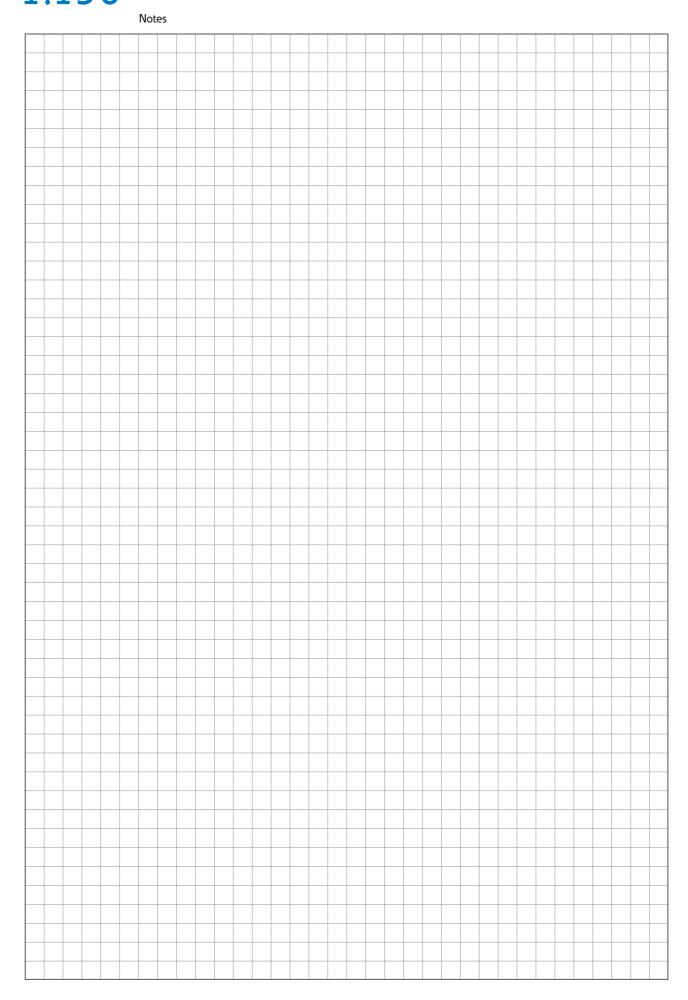
### Ci insulated enclosures

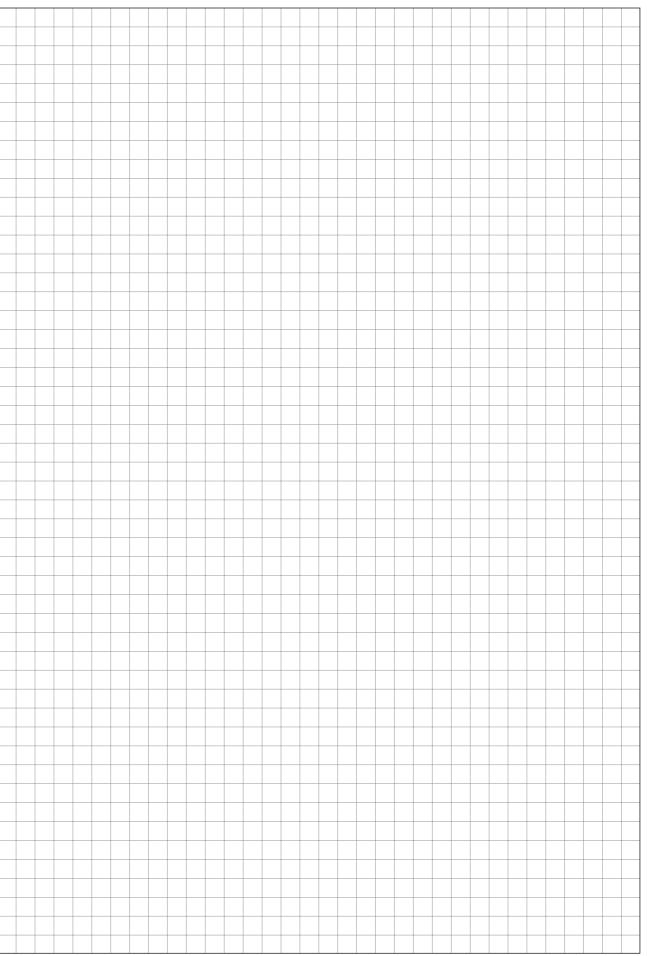
Ci insulated enclosures



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Notes





Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to help our customers manage power - today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy, helping to solve the world's most urgent power management challenges, and doing what's best for our stakeholders and all of society.

For more information, visit Eaton.com.



Eaton Industries (Austria) GmbH Schevdgasse 42 1210 Vienna Austria

Eaton EMEA Headquarters Route de la Longeraie 7 1110 Morges, Switzerland

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