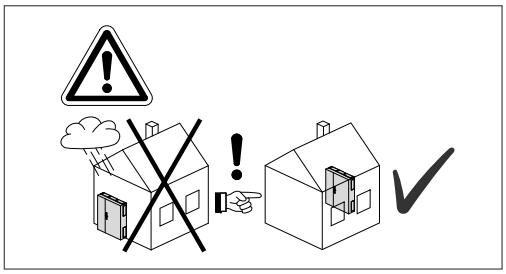
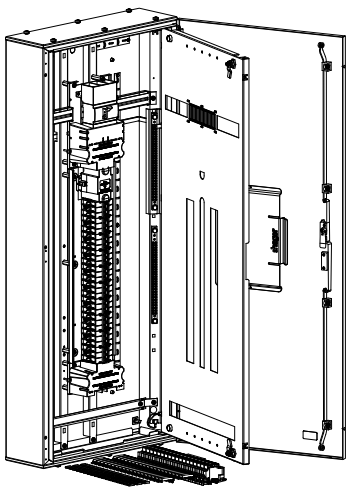
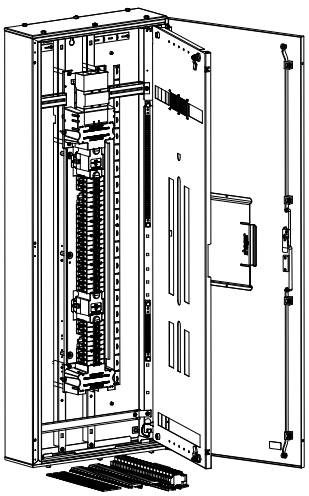
6LE009747B

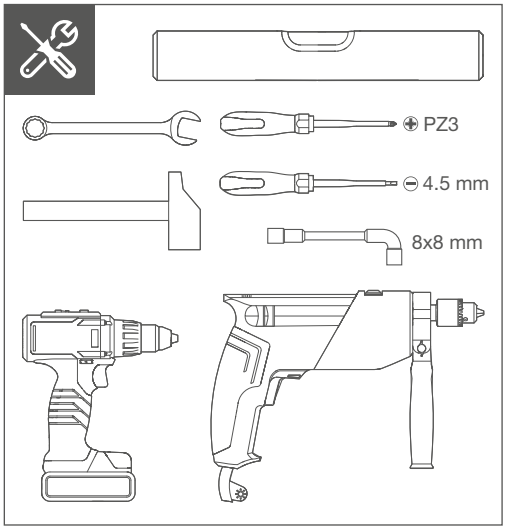
EN Instruction and installation manual

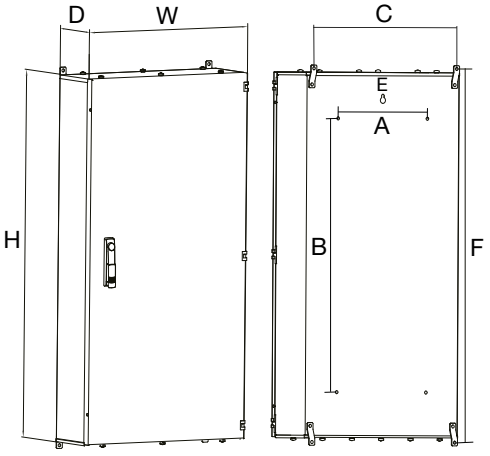
**Performa Apex PLUS Metering option panelboard**

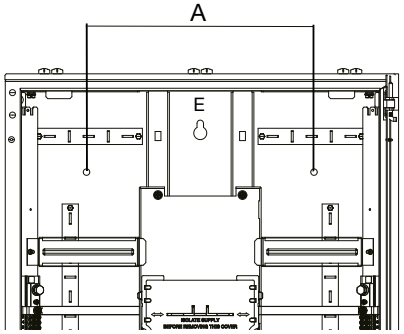









E = Central keyhole fixing point

| Dimensions | | H | W | D | A | B | C | F |
|---|---|---|---|---|---|---|---|---|
| **Apex+ Metering fixed load** | | | | | | | | |
| **JPD2400S25DW-M** | 24 poles | 1200 | 600 | 200 | 350 | 900 | 560 | 1222 |
| **JPD3600S25DW-M** | 36 poles | 1200 | 600 | 200 | 350 | 900 | 560 | 1222 |
| **JPD4800S25DW-M** | 48 poles | 1400 | 600 | 200 | 350 | 1100 | 560 | 1422 |
| **JPD6000S25DW-M** | 60 poles | 1400 | 600 | 200 | 350 | 1100 | 560 | 1422 |
| **JPD7200S25DW-M** | 72 poles | 1600 | 600 | 200 | 350 | 1300 | 560 | 1622 |
| **JPD9600S25DW-M** | 96 poles | 1800 | 600 | 200 | 350 | 1500 | 560 | 1822 |
| **Apex+ Metering split load** | | | | | | | | |
| **JPD1812S25DW-M** | 18+12 poles | 1400 | 600 | 200 | 350 | 1100 | 560 | 1422 |
| **JPD2418S25DW-M** | 24+18 poles | 1400 | 600 | 200 | 350 | 1100 | 560 | 1422 |
| **JPD3012S25DW-M** | 30+12 poles | 1400 | 600 | 200 | 350 | 1100 | 560 | 1422 |
| **JPD3618S25DW-M** | 36+18 poles | 1600 | 600 | 200 | 350 | 1300 | 560 | 1622 |
| **JPD3630S25DW-M** | 36+30 poles | 1600 | 600 | 200 | 350 | 1300 | 560 | 1622 |
| **JPD4212S25DW-M** | 42+12 poles | 1600 | 600 | 200 | 350 | 1300 | 560 | 1622 |
| **JPD4224S25DW-M** | 42+24 poles | 1600 | 600 | 200 | 350 | 1300 | 560 | 1622 |
| **JPD4818S25DW-M** | 48+18 poles | 1600 | 600 | 200 | 350 | 1300 | 560 | 1622 |
| **JPD4842S25DW-M** | 48+42 poles | 1800 | 600 | 200 | 350 | 1500 | 560 | 1822 |
| **JPD6030S25DW-M** | 60+30 poles | 1800 | 600 | 200 | 350 | 1500 | 560 | 1822 |
| **JPD7218S25DW-M** | 72+18 poles | 1800 | 600 | 200 | 350 | 1500 | 560 | 1822 |

## Safety instructions

**Installation, modification and disassembly of the product may only be carried out by an authorised electrician in accordance with the relevant installation standards and safety regulations of the country.**

**The final installation must fulfil all the requirements of the latest Edition of AS/NZS 3000.**

**These instruction is an integral part of the product and must be kept for the entire lifetime of the product.**

**Read these instructions carefully before starting any work and before using the product.**

## Mounting

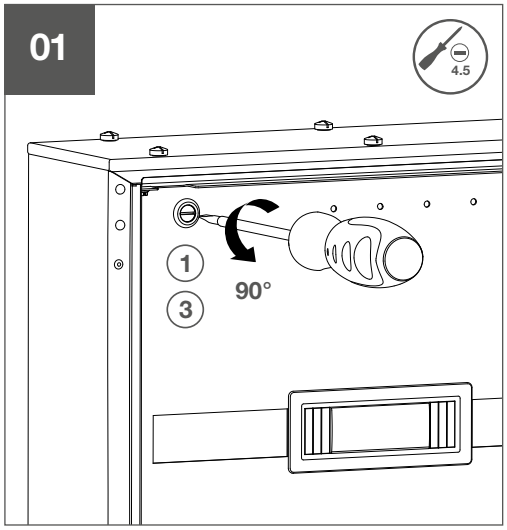
The installation location must be selected so that the load-bearing capacity of wall is suitable for the weight of the panelboard including all to built-in devices.

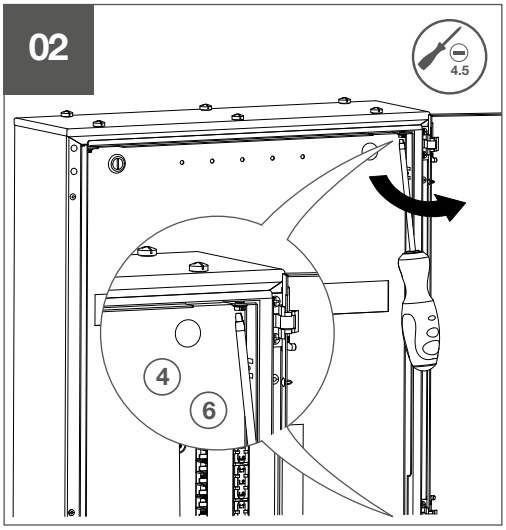
All cables must be routed via screwable cable entries on the panelboard or otherwise sealed.

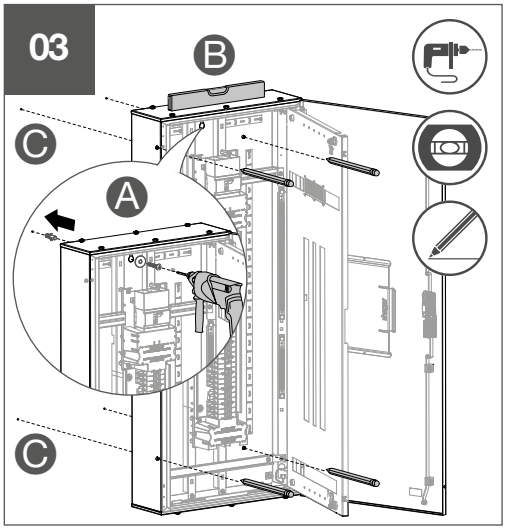
All panelboards have lockable doors and are suitable for restricted areas in accordance with AS/NZS 61439.

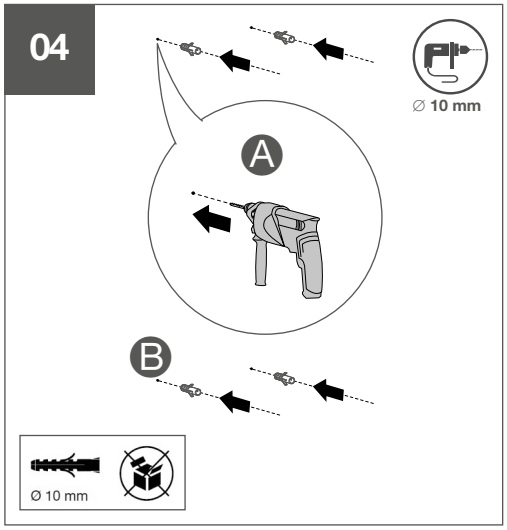
**Before commissioning**

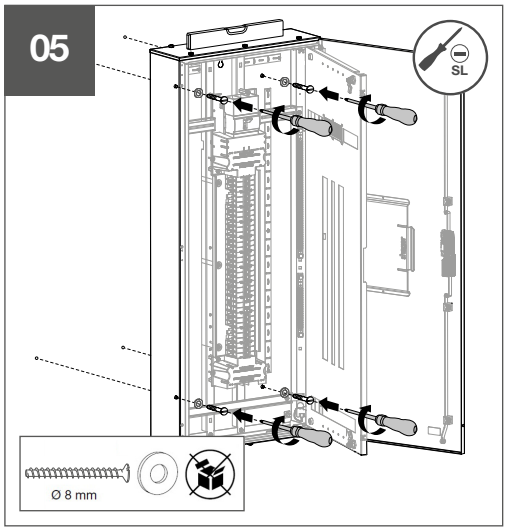
- Check the arrangement and alignment of all devices and ensure that all devices are undamaged and all connections are securely tightened.
- After completing the installation, clean the panelboard and remove filings, material residues and other foreign objects.




## Installing switchgears in the panelboard

**Danger**

Electric shock when live parts are touched!

An electric shock can lead to death!

- Isolate all connection cables before working on the device and cover any live parts in the area!

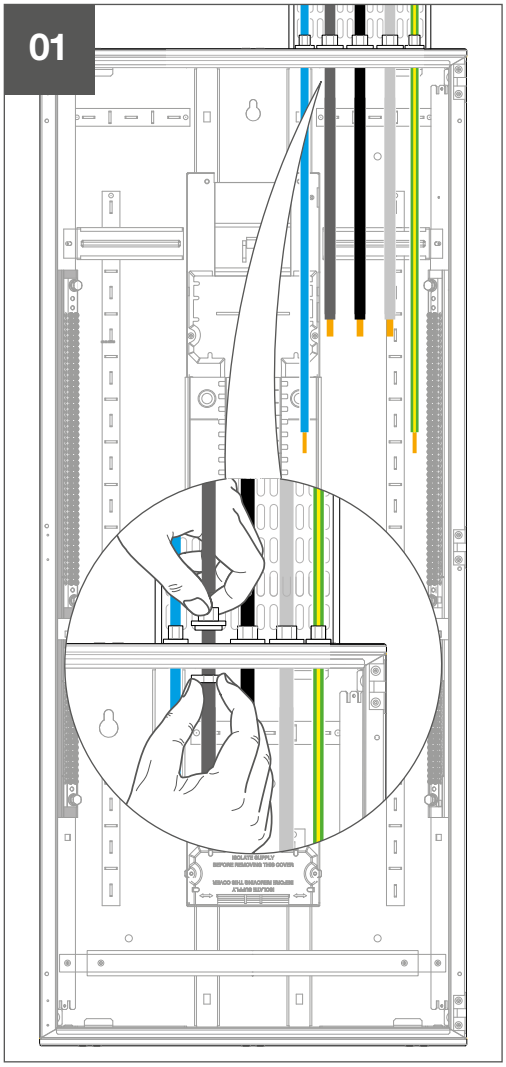
The electrician must ensure that all installed devices are suitable and fulfil the required residual current values.

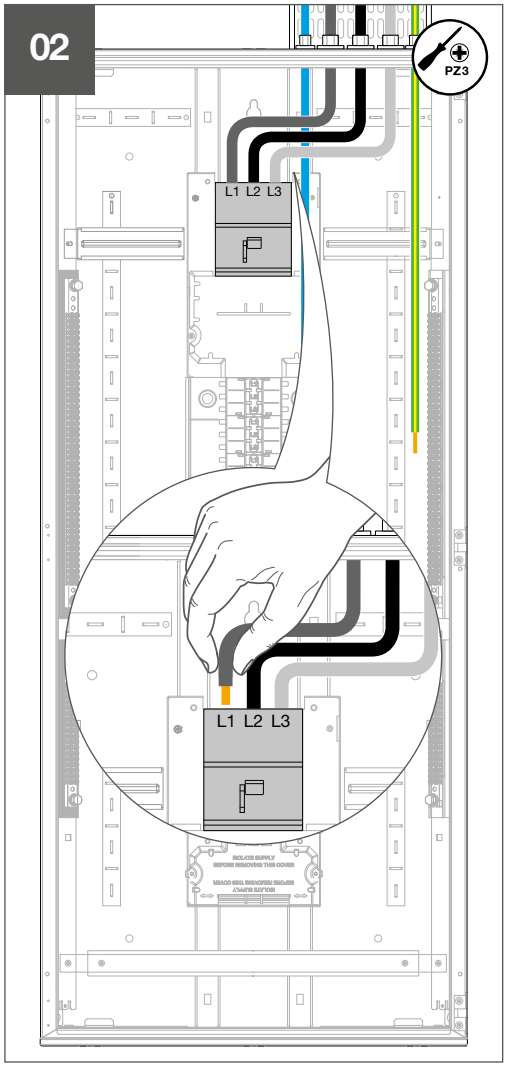
The enclosure of this panelboard has been developed for the installation of Hager MCBs and RCBOs with 10 kA. It is therefore recommended that only switchgears approved by Hager are installed, otherwise the guarantee may be invalidated.

If the fault level at the switchboard is higher than the MCBs allow, current-limiting fuses or circuit breakers must be backup them. For fuse protection levels, refer to Hager.

The devices must be mounted so that the DIN clips are facing the centre of the panelboard.

Mechanical brackets and electrical connections can come loose during transport with installed devices. In this case, the electrician must ensure that all connections are firmly tightened before the system is put into operation.

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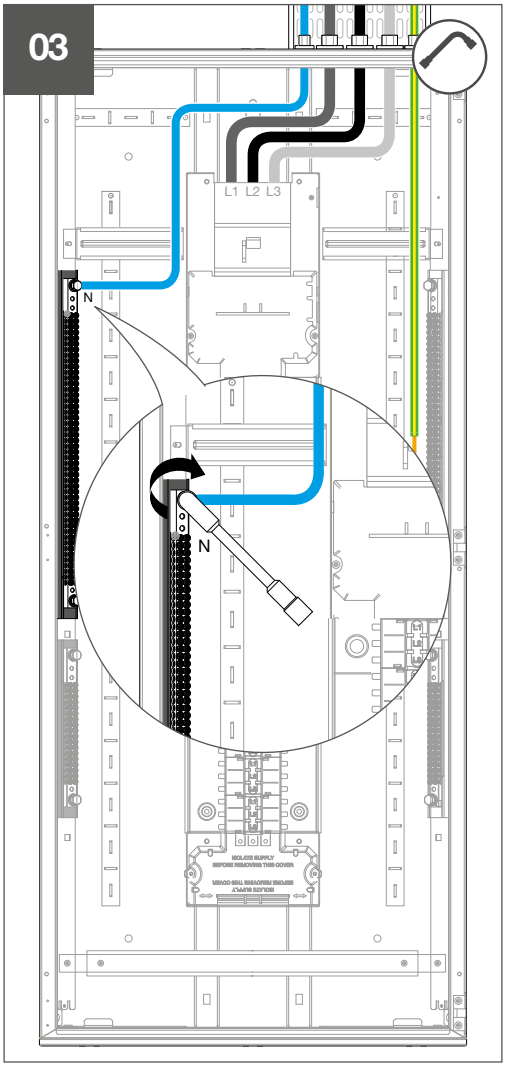
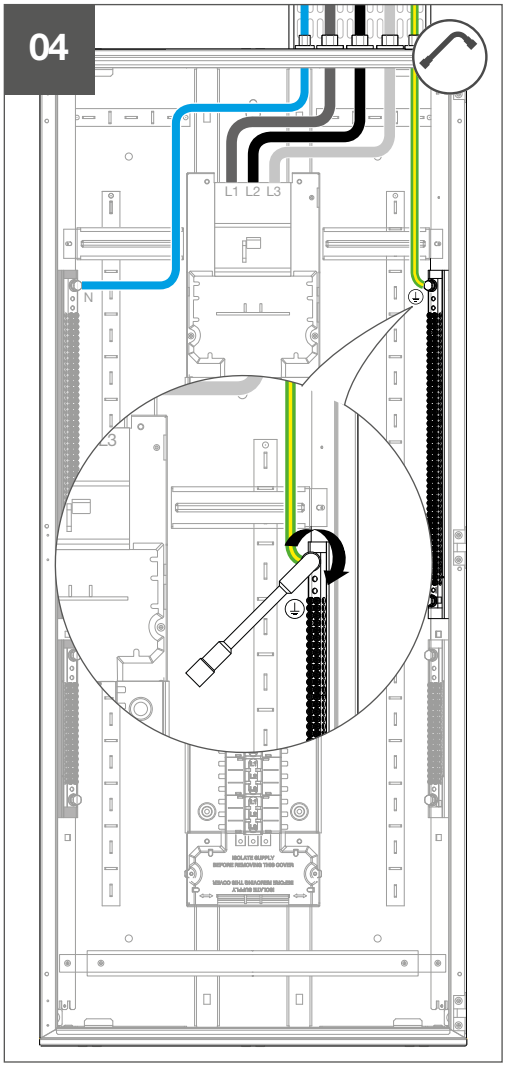
PZ3
L1 L2 L3
L1 L2 L3


03
L1 L2 L3
N
N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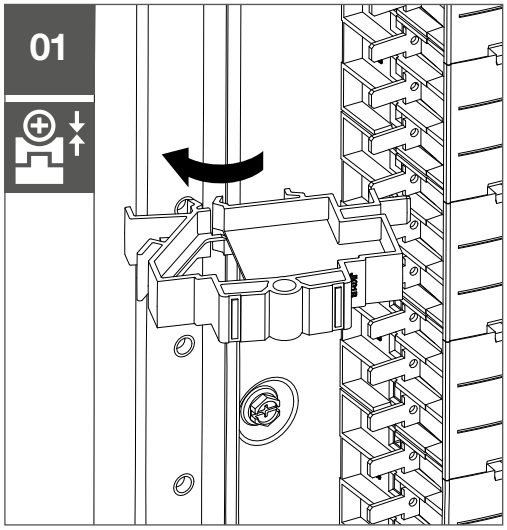
L1 L2 L3
N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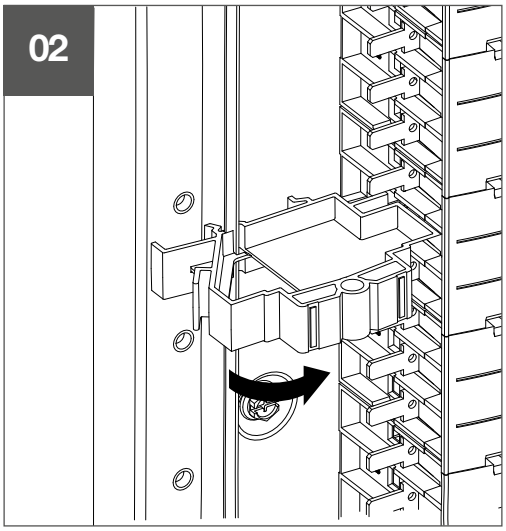
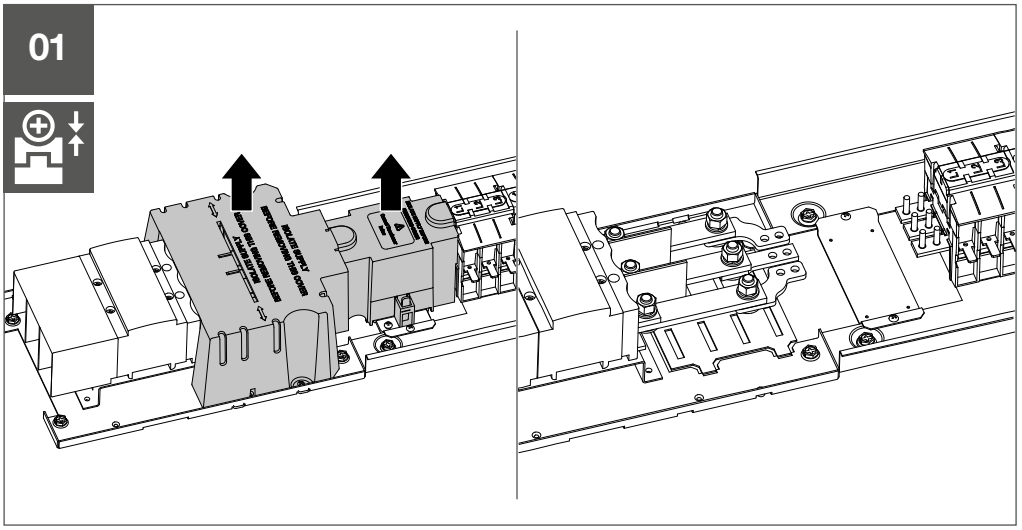

02

## CT Installation

❶ Remove the shroud.
❷ Pass the copper link bar through the CT.
❸ Install the connecting screws.
❹ Place back the shroud.

01



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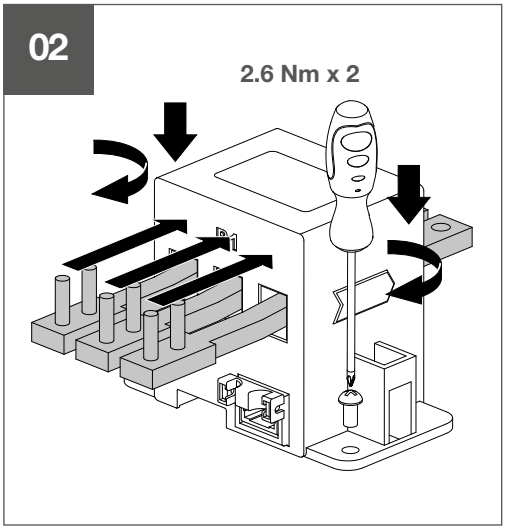


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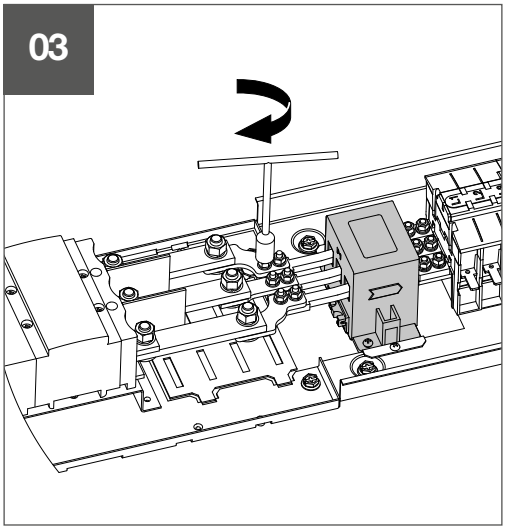

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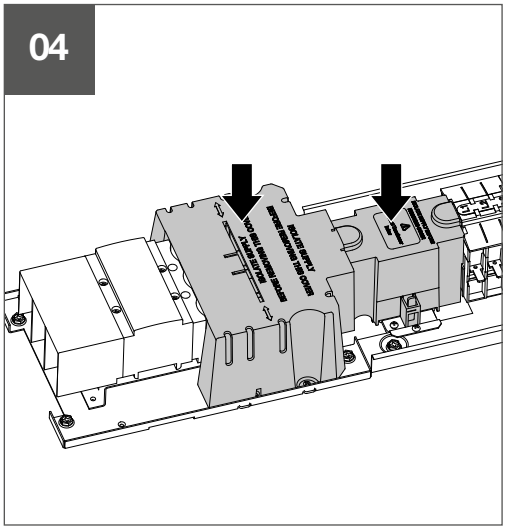
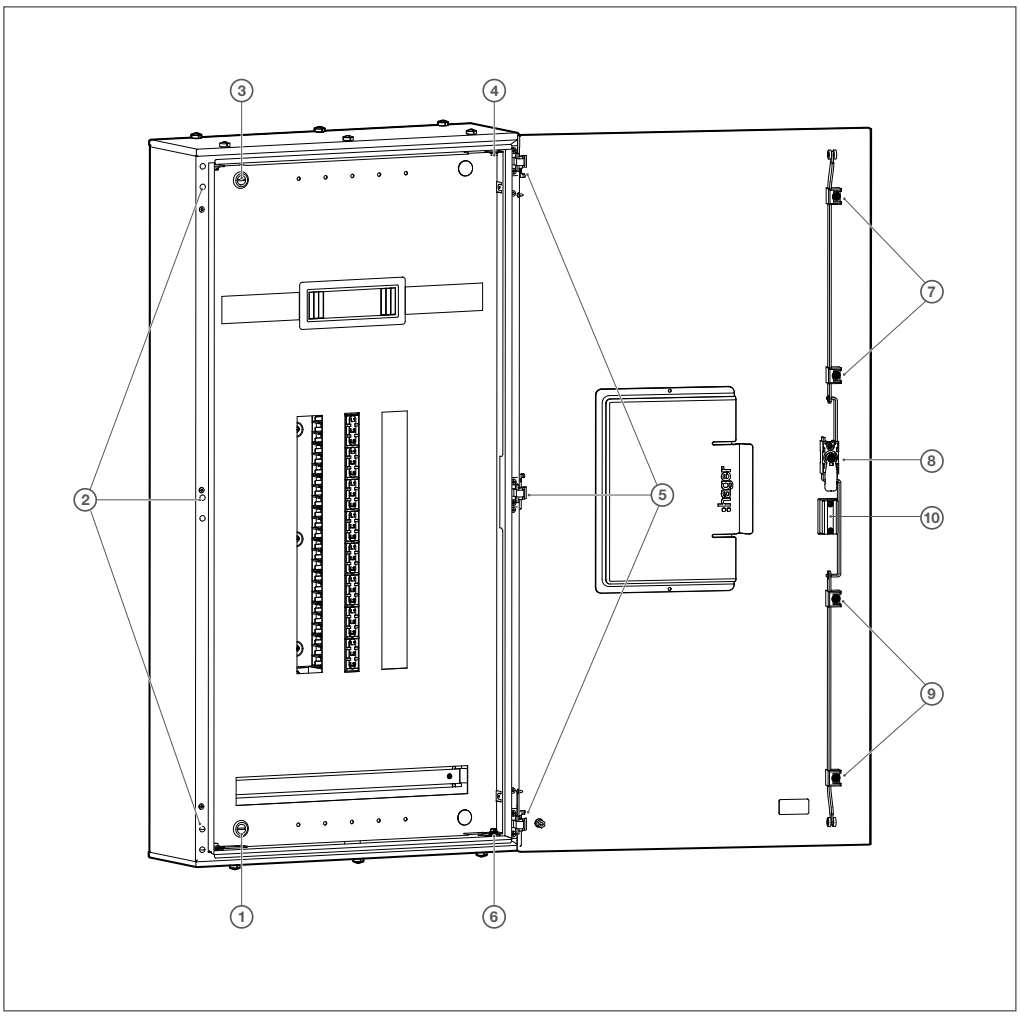


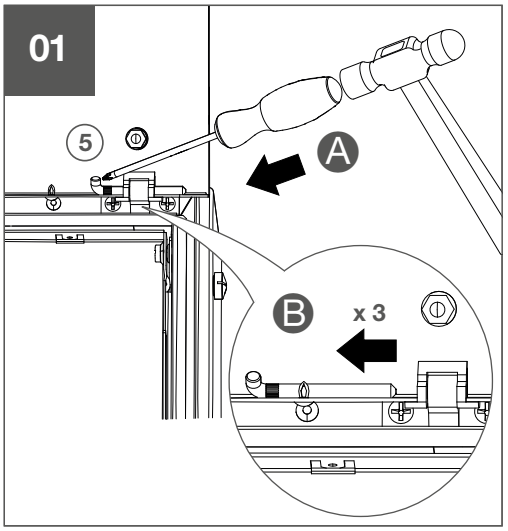
## Change the door's opening orientation

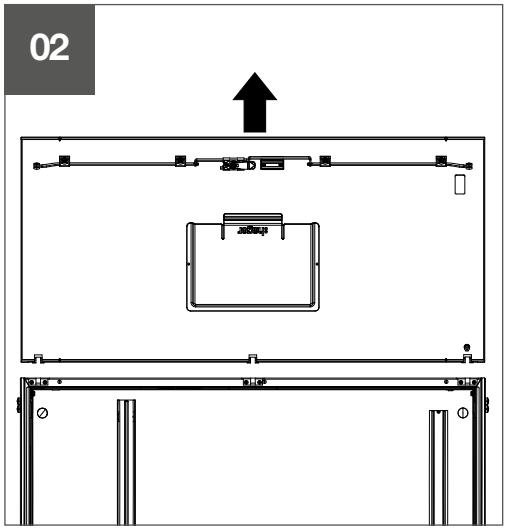


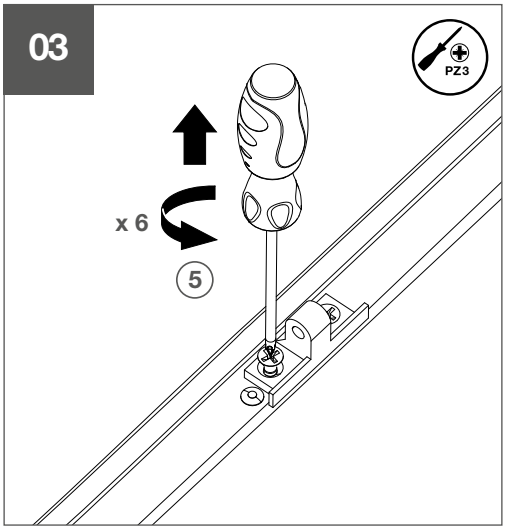

## Disassembly of the door

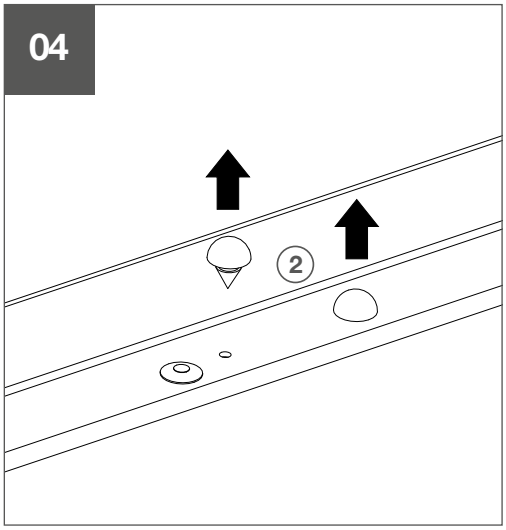
❶ Remove the hinge pins in position ⑤.
❷ Remove the door.
❸ Remove the hinge screws in position ⑤.
❹ Remove the rubber seals in position ②.
❺ Install the hinge in position ②.
❻ Remove the screws in position ⑦, ⑨.
❼ Rotate the rod in 90°.
❽ Remove the rod.
❾ Remove the handle screws in position ⑧.
❿ Remove the screws of the lock in position ⑩.

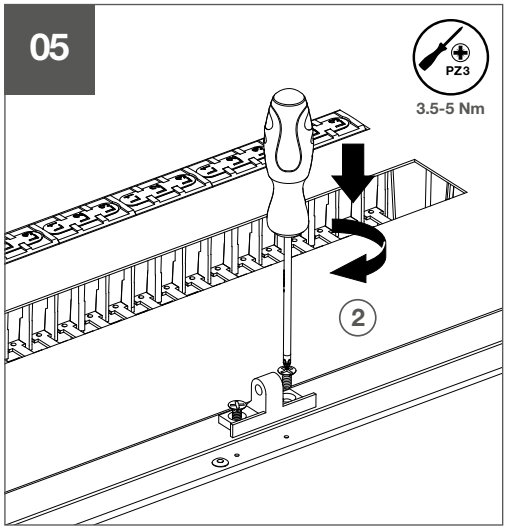
01

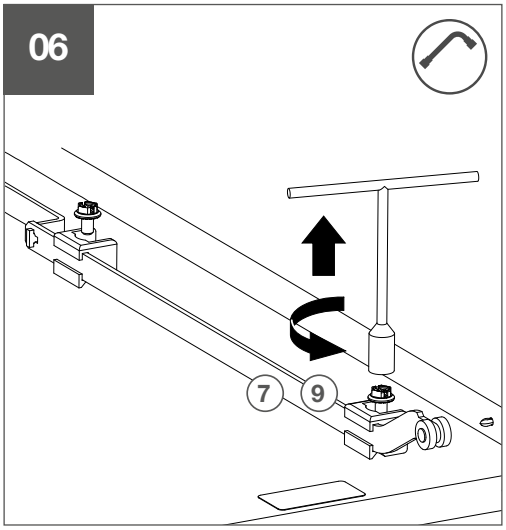


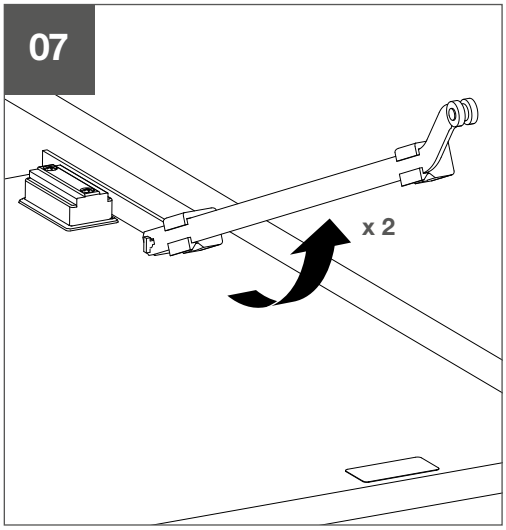


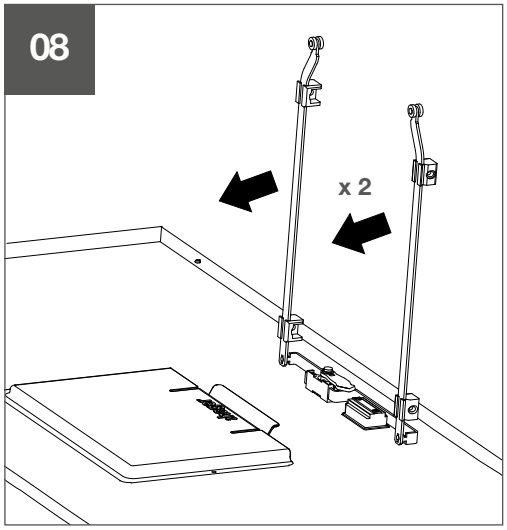



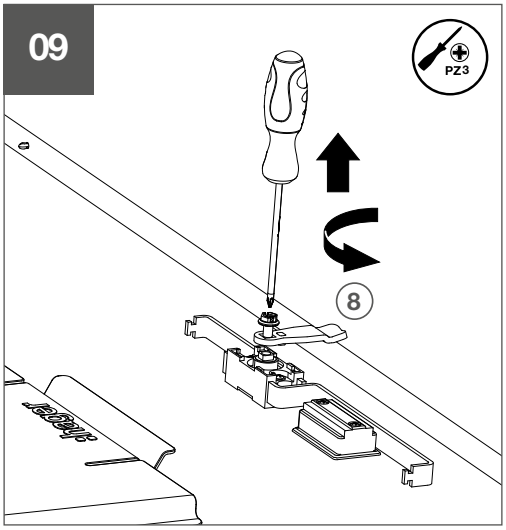



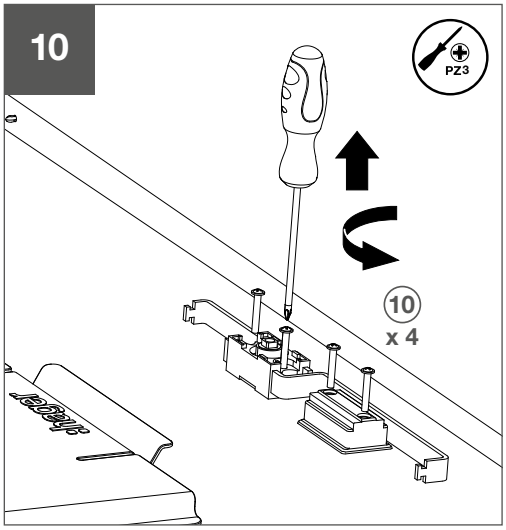



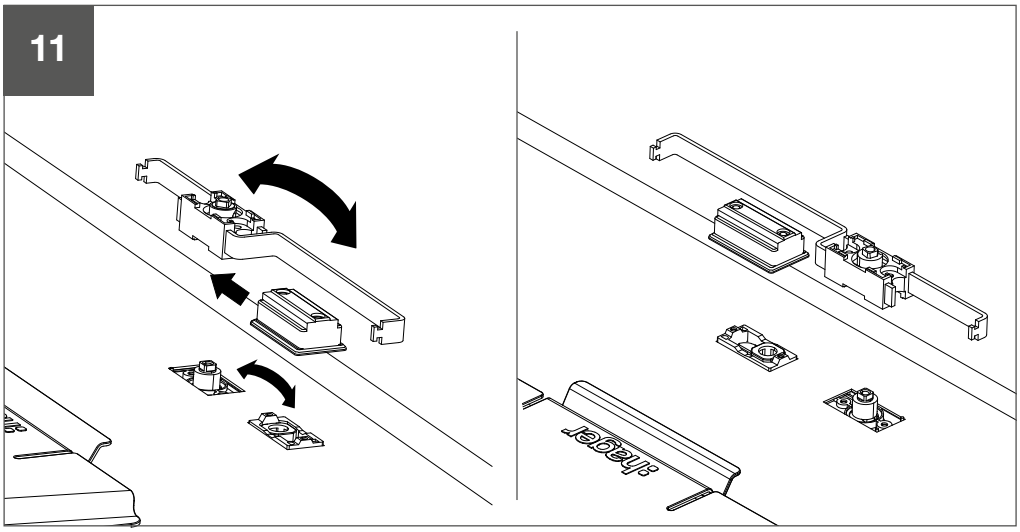



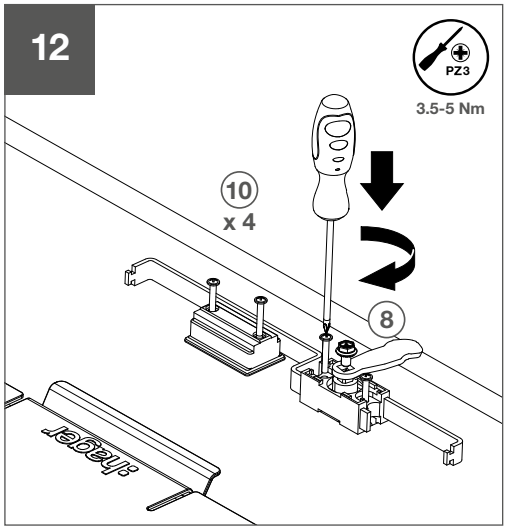



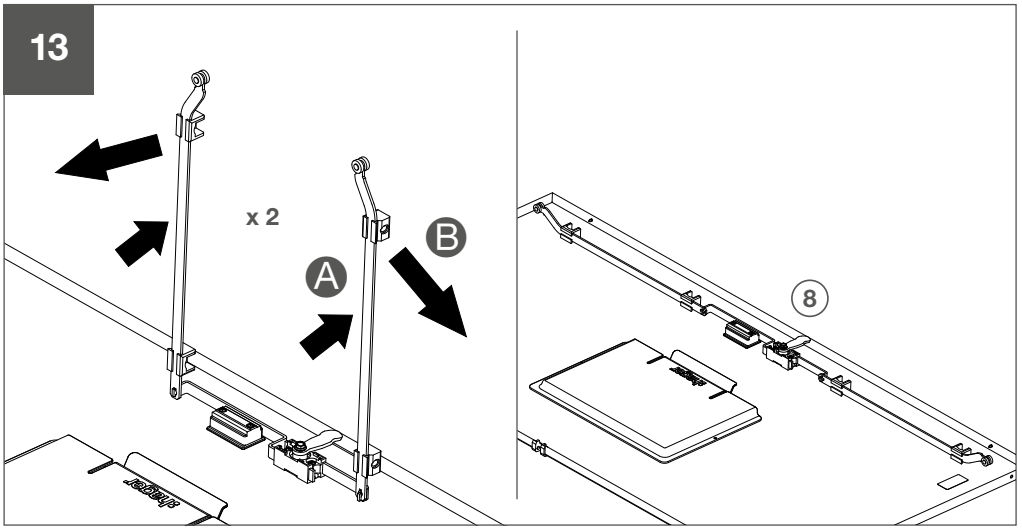



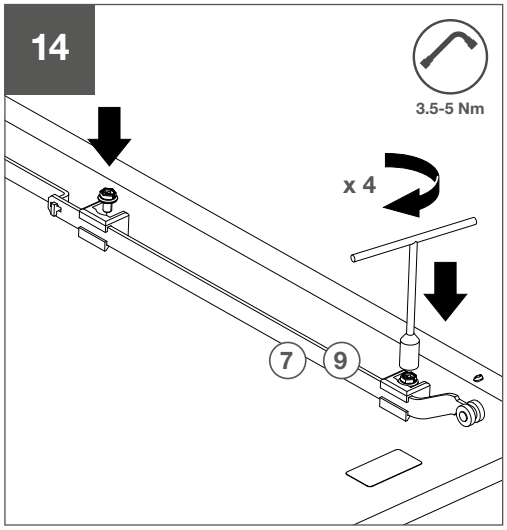

## Assembly of the door in changed opening orientation

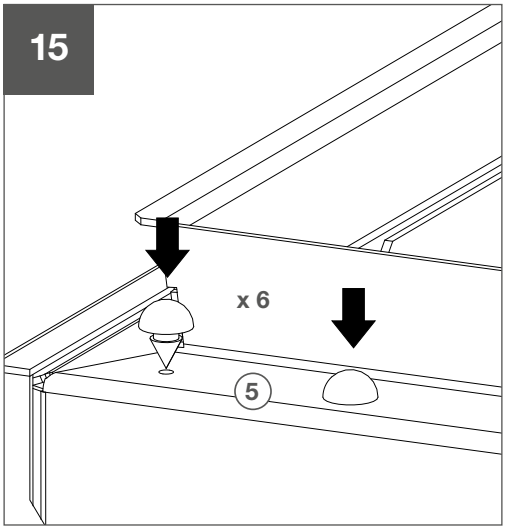
⓫ Rotate the lock vertically 180° and the handle horizontally 180°.
⓬ Install the handle screws in position ⑧ and the screws of the lock in position ⑩..
⓭ Install the cranes.
⓮ Install the screws in position ⑦, ⑨.
⓯ Install the rubber seals in position ⑤.
⓰ Install the door.
⓱ Install the hinge pins in position ②.

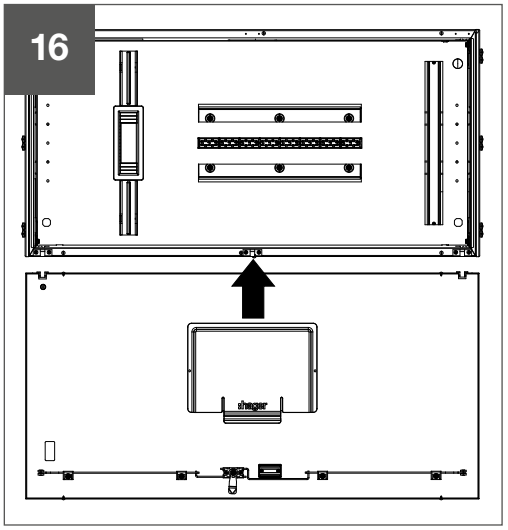


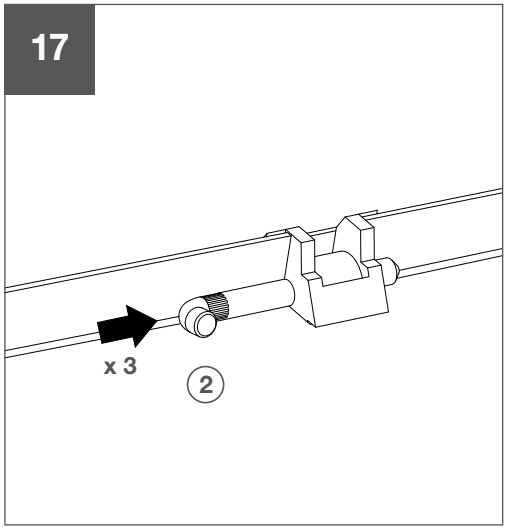




## Technical data

Rated operational voltage $U_n/U_e$ .....415 V AC, 50/ 60 Hz
Rated insulation voltage $U_i$ .....690 V AC, 50/ 60 Hz
Rated impulse withstand voltage $U_{imp}$ ..... 4 kV
Degree of protection:
- IP2XC .... opened door and sealed cable entries (with full compliment of devices pole fillers fitted)
- IP43..... closed door and sealed cable entries
Stationary / movable ..... stationary only
Type of construction.....fixed
Electrical connections .....F (fixed)
Forms of internal separation.....2a
Measure for protection of persons ..... direct/ indirect contact by the protective circuit
Service conditions.....indoor use only
Pollution degree.....2
Mechanical impact ..... IK10
Rated Current ($I_{na}$).....250 A Swd: 250 A c/w MCB's 160 A c/w RCBO's
Rated current of an outgoing circuit ($I_{nC}$) .....MCB 0.5 - 63 A (marked rated current on device) RCBO 6 - 50 A (marked rated current on device)
Electromagnetic compatibility (EMC) classification..... EMC Environment B
External design.....wall-mounted, surface type, enclosed assembly
The type of construction .....fixed parts
DBO Type .....Type B DBO
Wired according to .....AS/NZS 3000

**Earth and Neutral Links**

Neutral bars..... integrated
Neutral bar size (mm).....12.5 x 16
Split neutral .....as standard
Earth bars..... on both sides (fixed load) on one side (split load)
Earth bar size (mm).....12.5 x 16
Earth and neutral bar tunnels.....single screw tunnel Ø 7 mm (up to 25 $mm^2$ cable) solid and stranded conductors
Earth and neutral bar connection..... single stud (M6 = 2.5 Nm)
Earth and neutral bar rating..... 250 A