



WORKSHOP SPECIFICATIONS



DISTRIBUTION CABINETS

XL³ HP 160

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The workshop manual for XL^3 HP 160 distribution cabinets is an assembly guide enriched with tips and installation reminders. Throughout the document, the assembly steps are illustrated with product photos or technical drawings to help you visualize each step in detail.

Screw diagrams are included at each stage to help you identify the necessary tools.

An essential document for efficiently assembling our products, this workshop manual is a valuable resource for panel builders and installers.

LEGAL INFORMATION

Presentation pictures do not always include Personal Protective Equipment (PPE), but this is a legal and regulatory obligation that must be scrupulously respected.

In accordance with its continuous improvement policy, Legrand reserves the right to change the specifications and illustrations without notice. All illustrations, descriptions and technical information included in this document are provided as indications and cannot be held against Legrand.



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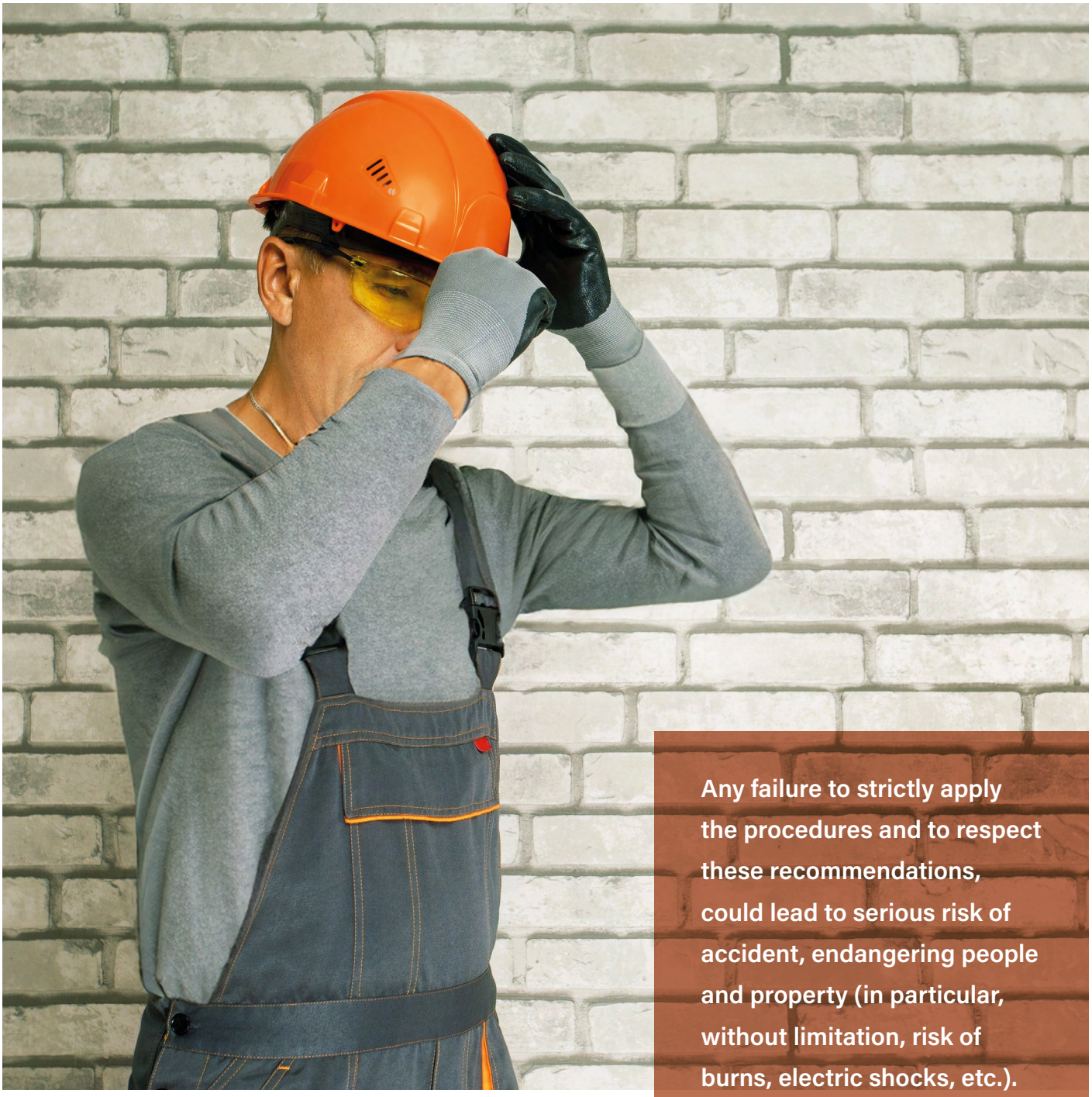
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SAFETY INSTRUCTIONS



Any failure to strictly apply the procedures and to respect these recommendations, could lead to serious risk of accident, endangering people and property (in particular, without limitation, risk of burns, electric shocks, etc.).

General information

- Use only the products and accessories recommended by the Legrand Group in the catalogue, instructions, technical data sheets and all other documents provided by Legrand (hereinafter referred to as “the Documentation”) in compliance with the installation rules.

Improper installation or use may result in the risk of arcing in the enclosure, overheating or fire. The enclosures must be used under normal conditions, they must not be subjected to Voltage / Current / Temperature values other than those specified in the Documentation.

- Legrand declines all responsibility for any modification or repair of the equipment making up the enclosure that is not authorized by the Legrand Group, as well as any failure to comply with the rules and recommendations specified by Legrand in the Documentation. In addition, in the cases mentioned above, the warranty granted by Legrand will not be applicable.
- It is necessary to check that the characteristics of the products are appropriate for their environment and use during maintenance operations, and to refer to the Documentation.
- If you have any questions or require clarification, please contact Legrand Group.

Protection/security

- The installation, use and maintenance of the enclosures and their components must be carried out by qualified, trained and authorized personnel, in accordance with the regulations in force in each country.
- People working on the installation must have the appropriate electrical authorizations for the work to be carried out.
- Wear the PPE (Personal Protective Equipment) necessary to work on live products.



- Respect the safety rules related to electrical work.
- Improper electrical and mechanical use of equipment can be dangerous and may result in personal injury or damage to property.

Maintenance

- Depending on the maintenance operations to be carried out, partial or total power cuts of the enclosure concerned should be planned before any work.
- When performing operations that involve access to the inside of the enclosure, be aware of the risk of burns before touching any.
- Before turning the power back on, make sure that there are no foreign bodies and that all physical protections have been put back in place (e.g.: screens, covers, faceplates).

Risk of electric shock, burns and explosion.

The rules and recommendations in this document are based on our knowledge of the typical conditions of use of our products in the fields of application usually encountered. However, it is always the customer’s responsibility to verify and validate that Legrand products are suitable for its installation and use.

The customer must ensure proper installation, maintenance and operation of the equipment to avoid any risk of injury to personnel or damage to property in the event of product failure, especially for applications that require a very high level of safety (e.g., those in which the failure of a component may endanger human life or health).

The rules for storage, handling, installation and maintenance and the appropriate precautions and warnings must be strictly observed and applied.

A NEW RANGE XL³ HP 160

The XL³ HP 160 cabinets allow energy distribution up to 160 A and are suitable for the needs of commercial buildings. Product developments meet market expectations: extended range, simplified implementation, and enhanced rigidity.

Presentation of the new referencing method

EXAMPLE OF A CABINET REFERENCE:

1CO3R24S

Range :
0 : common
1 : XL³ HP 160
2 : XL³ HP 630
3 : XL³ HP 6300

Product type :
CO = cabinet

Number of rows:
3R = 3 rows
3ER = 3 rows + equipable space
7E = 7 Rows to be equipped...

Number of modules :
24 or 36

Cabinet type :
S = surface-mounting metal
SPL = surface-mounting insulated
IPL = flush-mouning insulated
VI = cable sleeve

EXAMPLE OF AN EQUIPMENT REFERENCE:

1PF015DIN24

Range :
0 : common
1 : XL³ HP 160
2 : XL³ HP 630
3 : XL³ HP 6300

Product type :
PF = faceplate
PC = flat metal door
PD = curved metal door
PV = flat glass door
BPE = terminal block
BG = cable guide bracket
DIN= DIN rail

Size :
015 = height 150 mm
020 = height 200 mm
030 = height 300 mm...

Mounting :
DIN : mounted on DIN rail
DIND : off centre window DIN rail mounting

Compatible cabinet :
24 or 36 modules

Overview of the range



XL³ HP 160 SURFACE-MOUNTING METAL CABINET

- From 2 to 8 rows with 24 modules or from 6 to 8 rows with 36 modules
- 2 versions :
  - Pre-equipped, delivered ready to use with DIN rails, metal faceplates with 1/4 turn lock, one vertical wiring guide per row, and one brass bar for protective conductor connections
  - To be equipped, delivered empty
- Removable chassis
- Horizontal or vertical coupling

NEW FEATURES

- 7 and 8-row cabinets for a maximum capacity of 288 modules
- 36-module width
- To-be-equipped version for greater versatility
- Redesigned structure for enhanced rigidity
- External cable sleeve
- Horizontal coupling
- Removable and pre-cut panels for easier assembly and installation



XL³ HP 160 SURFACE-MOUNTING INSULATED CABINET

- From 2 to 8 rows of 24 modules
- Version with equipable space
- Delivered fully assembled and ready to use, with DIN rails, insulating faceplates with 1/4 turn lock, one vertical wiring guide per row, and one IP2X automatic connection terminal block for protective conductors
- Removable chassis
- Horizontal or vertical coupling

NEW FEATURES

- 7 and 8-row cabinets for a maximum capacity of 192 modules
- Horizontal coupling



XL³ HP 160 FLUSH-MOUNTING INSULATED CABINET

- From 2 to 8 rows of 24 modules
- Version with equipable space
- Delivered fully assembled and ready to use, with DIN rails, insulating faceplates with 1/4 turn lock, one vertical wiring guide per row, one brass bar for protective conductors, and a metal flush-mounting box
- Removable chassis
- Mounting in solid walls or drywall partitions

NEW FEATURES

- 7 and 8-row cabinets for a maximum capacity of 192 modules

SURFACE-MOUNTING METAL CABINETS



PRESENTATION

The XL³ HP 160 metal cabinets are designed with optimized dimensions for efficient energy distribution up to 160 A.

They are available in the following configurations:

- complete cabinets, pre-assembled from 2 to 8 rows, with 24 modules per row
- to-be-equipped cabinets, from 6 to 8 rows, with either 24 or 36 modules per row
- external cable sleeves, available for 6 to 8 rows

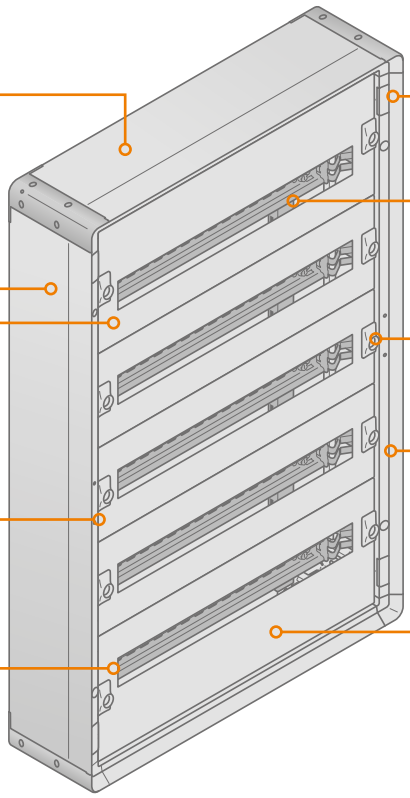
KEY POINTS

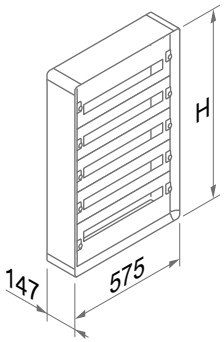
- Metal cabinet suitable for the construction of Class I assemblies
- RAL 7035
- Rated impulse withstand voltage (Uimp): up to 8 kV
- Short-circuit withstand capacity (Icc): 25 kA
- IP30 with faceplates and without door, IP40 with door, and IP43 with door and sealing gasket
- IK07 without door, IK08 with transparent door, and IK09 with metal door
- Complies with the requirements of IEC 61439-2 and IEC 61439-3 standards
- Fire resistance according to IEC 60695-2-11 – 750°C
- Suitable for installation in public-access buildings and workplace buildings

Technical datasheet available for more information on installation locations, product resistance, etc.
► Consult the online catalog at legrand.com

Technical datasheet

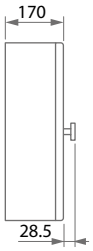
COMPLETE, PRE-ASSEMBLED CABINET



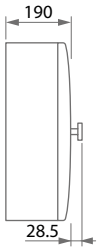


COMPLETE DISTRIBUTION CABINETS							
Number of rows	2	3	4	5	6	7	8
Total number of modules	48	72	96	120	144	168	192
External height (mm)	450	600	750	900	1050	1200	1350
Width x Depth (mm)				575 x 147			
Cat.Nos	1CO2R24S	1CO3R24S	1CO4R24S	1CO5R24S	1CO6R24S	1CO7R24S	1CO8R24S

Flat door



Curved door



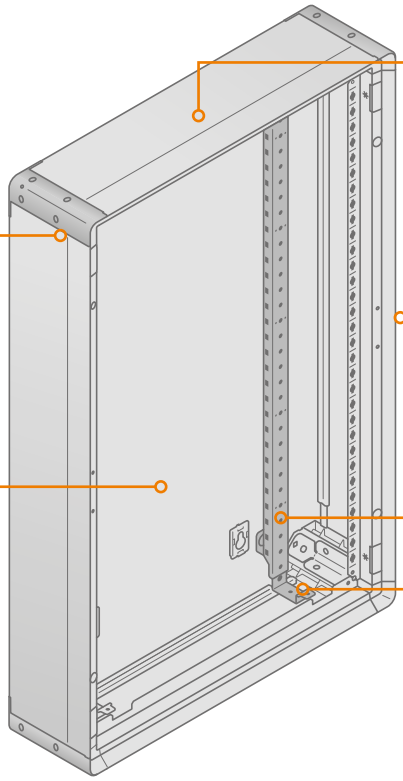
DOORS							
Flat metal door	1PC2R24	1PC3R24	1PC4R24	1PC5R24	1PC6R24	1PC7R24	1PC8R24
Flat glass door	1PV2R24	1PV3R24	1PV4R24	1PV5R24	1PV6R24	1PV7R24	1PV8R24
Curved metal door	1PD2R24	1PD3R24	1PD4R24	1PD5R24	1PD6R24	1PD7R24	1PD8R24



SURFACE-MOUNTING METAL CABINETS

PRESENTATION

PRE-ASSEMBLED CABINET, TO BE EQUIPPED



Individually removable panels (top, bottom, and sides)

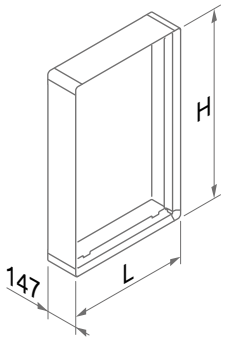
Wall mounting from inside or outside the cabinet using mounting brackets.

Several door finishes available :
- flat métal
- flat glass
- curved métal

Available in widths of 24 or 36 modules per row

Supplied with vertical uprights

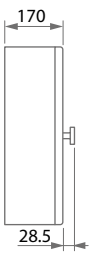
Supplied with terminal block support



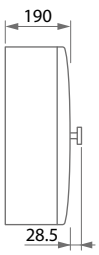
DISTRIBUTION CABINETS TO BE EQUIPPED

Number of rows	24 modules / row			36 modules / row		
	6	7	8	6	7	8
Total number of modules	144	168	192	216	252	288
External height (mm)	1050	1200	1350	1050	1200	1350
Width x Depth (mm)	575 x 147			800 x 147		
Cat.Nos	1C06E24S	1C07E24S	1C08E24S	1C06E36S	1C07E36S	1C08E36S

Flat door



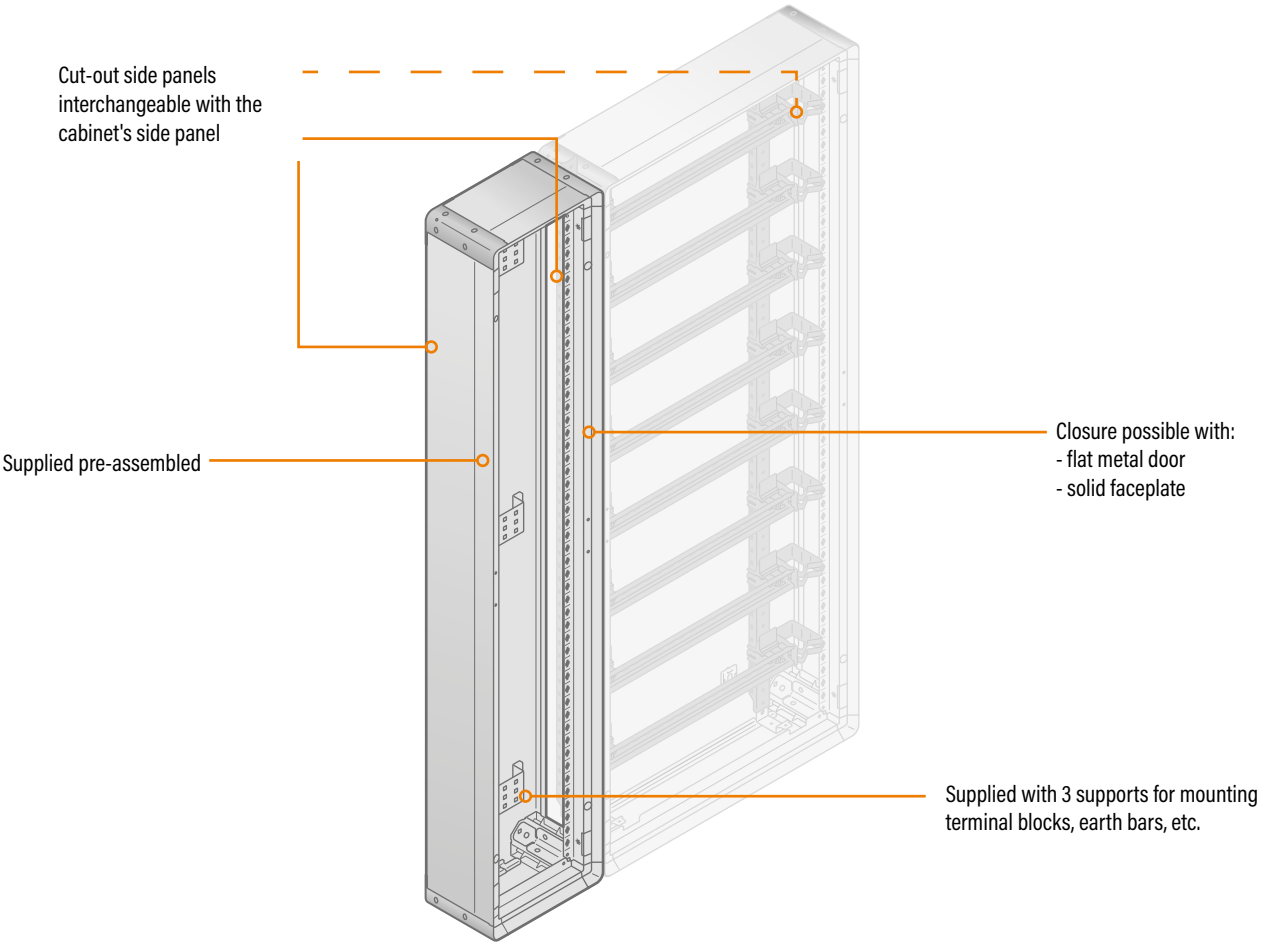
Curved door

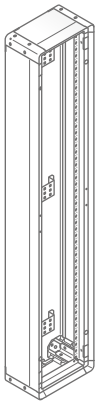


DOORS

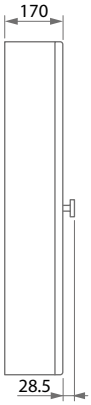
Flat metal door	1PC6R24	1PC7R24	1PC8R24	1PC6R36	1PC7R36	1PC8R36
Flat glass door	1PV6R24	1PV7R24	1PV8R24	1PV6R36	1PV7R36	1PV8R36
Curved metal door	1PD6R24	1PD7R24	1PD8R24	1PD6R36	1PD7R36	1PD8R36

EXTERNAL CABLE SLEEVE





EXTERNAL CABLE SLEEVES			
Number of rows	6	7	8
External height (mm)	1050	1200	1350
Cat.Nos	1CO6RVI	1CO7RVI	1CO8RVI



DOOR			
Flat metal door	1PC6RVI	1PC7RVI	1PC8RVI

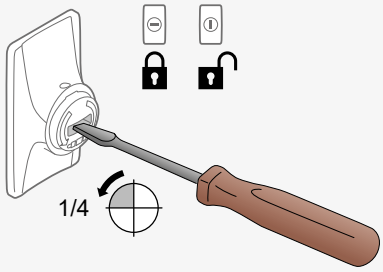


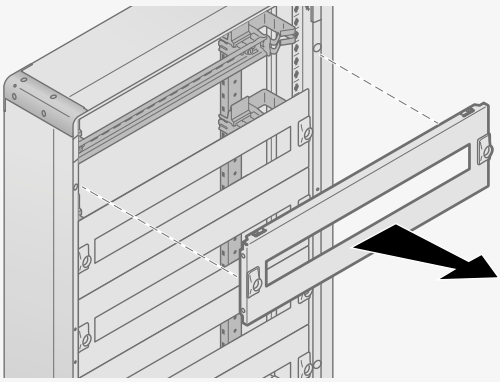
SOLID FACEPLATE			
Metal faceplate	1PFC6RVI	1PFC7RVI	1PFC8RVI

CABINET DISASSEMBLY

The complete cabinets are delivered pre-assembled.
They can be fully disassembled to allow easy access to the entire wiring volume.

REMOVE THE FACEPLATES (FOR EQUIPPED CABINETS ONLY)

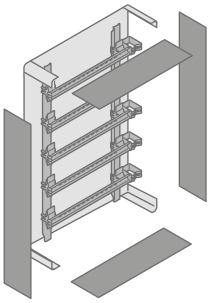




The faceplates are easy to grip thanks to the shape of the 1/4 turn lock system.
To remove them, position the 1/4 turns vertically using a 5 mm flat screwdriver (recommended).

The faceplate is locked when the 1/4 turn locks are in horizontal position.

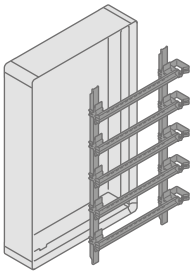
ON-SITE WIRING: POSSIBILITY TO WIRE AT THE BACK OF THE CABINET



CASE 1

Individual panel disassembly

WORKSHOP WIRING: POSSIBILITY TO WIRE ON THE CHASSIS ALONE



CASE 2

Chassis removal

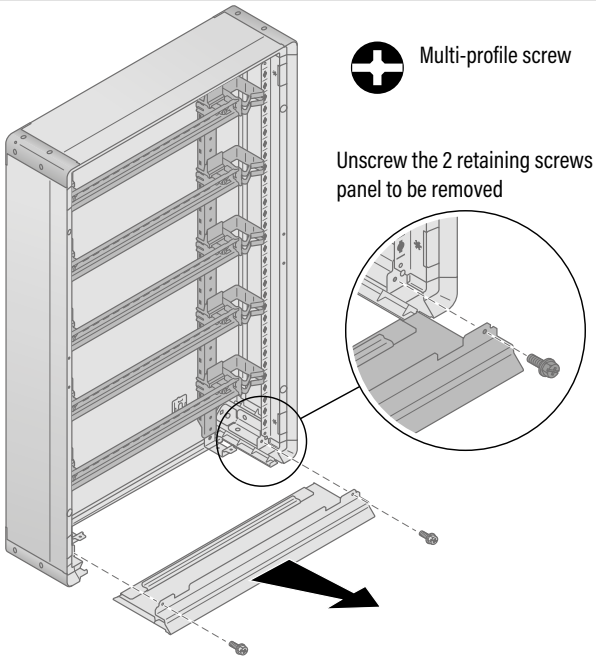
PEP sheets available for more information on the product's environmental profile
► Check the online catalog at legrand.com


Profil Environnemental Produit

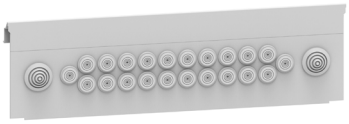
Waste optimization
The external cable ducts are delivered with hollowed-out side panels that can be interchanged with the side panel of the associated cabinet.
The cabinet's packaging box is reusable for on-site delivery.

CASE 1 Panel removal (for wiring at the back of the cabinet)

It is possible to remove a single panel (bottom, top, or side) if needed.
In this case, the corners remain in place.



It is possible to replace a top or bottom panel with a multi-grommets or brush panel for cable entry
► p. 20

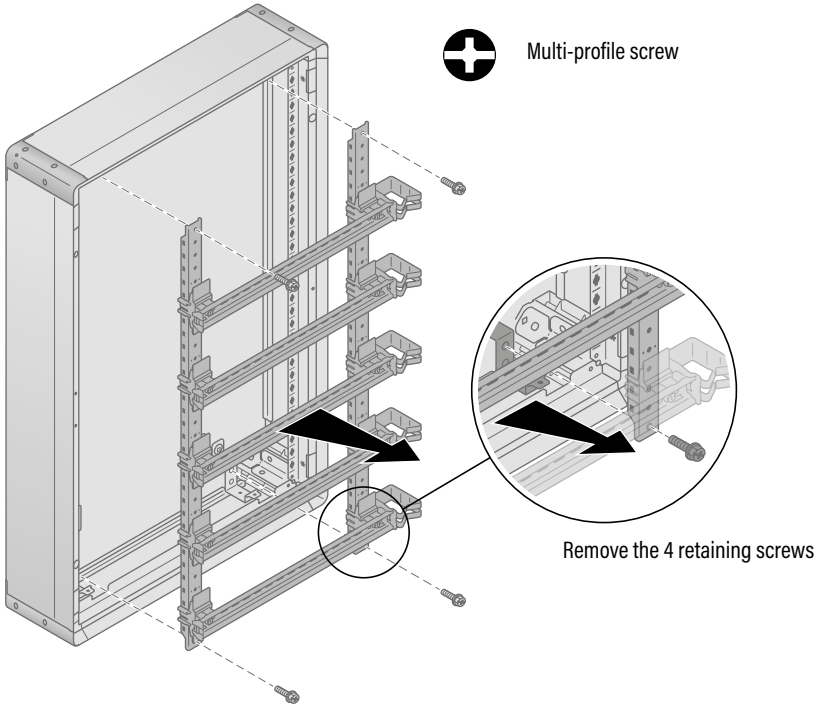


The side panels can be reassembled very easily by sliding them into the chamfered uprights

CASE 2 Chassis removal

The chassis can be removed to allow the installation and wiring of switching, protection, or measuring devices with complete freedom and optimal working comfort.

Easy installation: provides full access all around the product without having to remove the cabinet panels.



Safety (significant weight and volume): for cabinets with a width of 36 modules or more than 6 rows, it is recommended that two people handle the cabinet to ensure safe manipulation.

Chassis installation (for cabinets to be equipped only)

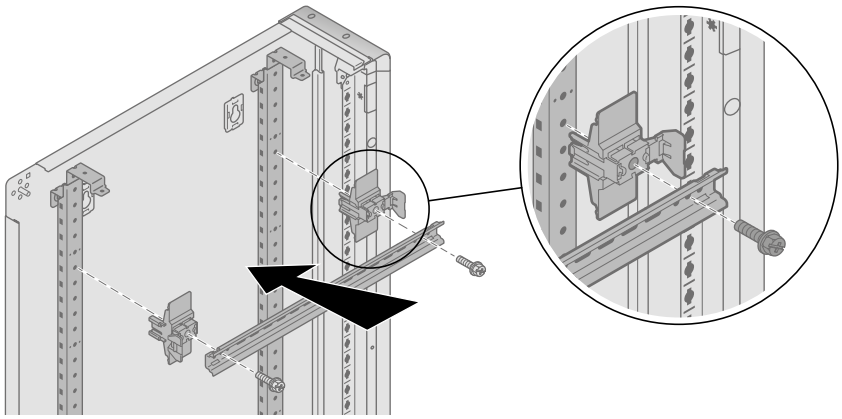
The cabinet to be equipped is delivered with vertical uprights. They must be completed with the following rail Cat.Nos:
– 1DIN24 for cabinets with 24 modules per row,
– 1DIN36 for cabinets with 36 modules per row.

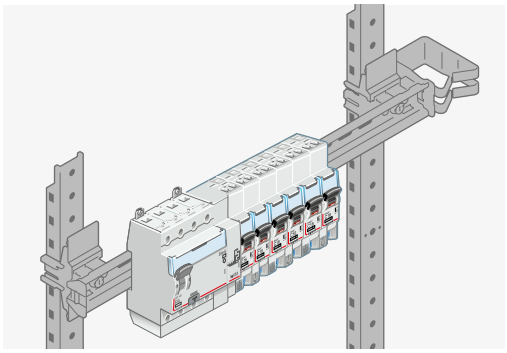
Installation flexibility: it is possible to mix row heights with a pitch of 150 or 200 mm, depending on wiring constraints.

CHASSIS INSTALLATION FOR MODULAR DEVICES

Multi-profile screw

The rail is supplied with 2 insulating supports for mounting modular devices (p. 13) and the necessary screws.

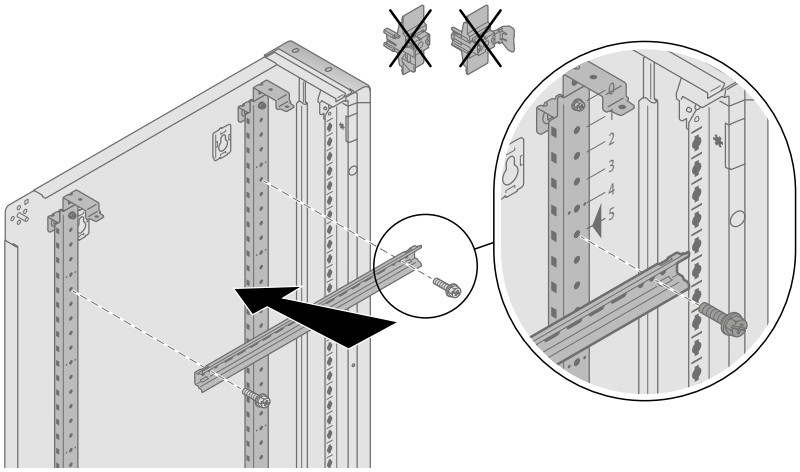


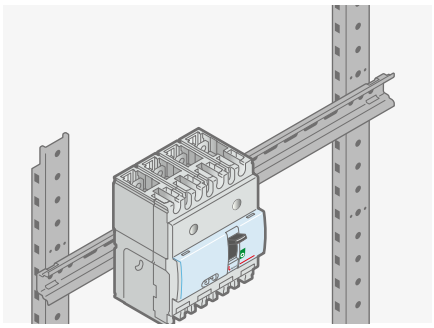


CHASSIS INSTALLATION FOR A DPX³ 160

Multi-profile screw

The DPX³ 160 is mounted on DIN rail affixed to the vertical uprights. The two insulating supports supplied with the rail are not required.



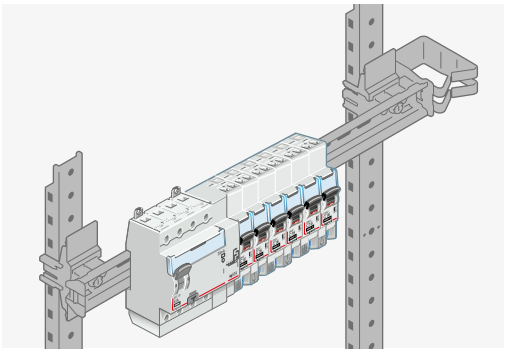


Mounting steps for the DPX³ 160 on rail (see opposite).

It is recommended to fix the rail at the 5th hole of the vertical uprights (starting from the terminal support fixing screw) in order to use a 300 mm faceplate.

The chassis is delivered assembled (for the equipped cabinet version) with rails in the upper position for mounting modular devices such as circuit breakers, contactors, time switches, etc.
It is possible to install DPX³ 160 and modular devices on the same row thanks to the rail spacer.

Mounting modular devices on DIN rail



⚠ A pitch of 200 mm is required when installing a modular device 1,5 module per pole.

Mounting DPX³ 160 on DIN rail

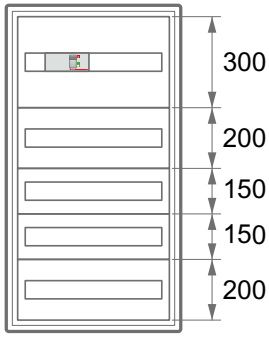
It is recommended to use an XL³ HP 160 cabinet to be equipped for installing a DPX³ 160 or DPX³ 250 (limited to 160 A), in order to benefit from the necessary space for connection.

It is possible to install a DPX³ 160 in an equipped XL³ HP 160 cabinet. It must be installed on the first row to provide the necessary space for upstream connection. It is not possible to install modular devices on the row below due to insufficient pitch.

For vertical installation in an cabinet to be equipped, it is recommended to use a 300 mm faceplate (Cat.Nos 1PF030DIN24 or 1PF030DIN36 – see example opposite), and it is mandatory when installing terminal covers on the DPX³.
For horizontal installation, refer to mounting on mounting plate **(p. 15)**.

The rail must be in the lower position (see opposite) and an adapter (Cat.No 4 210 68/71/72/73/58) is required **(see list p. 40)**. Adapter Cat.No 4 210 73 must be installed in an cabinet with a pitch greater than 150 mm.

Example of a 6-row cabinet



1



2



1. Mount the adapter onto the DPX³.
2. Secure the adapter and the DPX³ 160 together using the 4 screws supplied with the molded case. Then clip the assembly onto the rail.

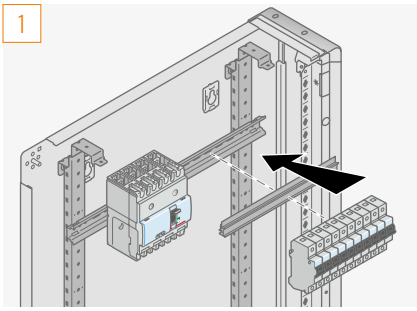
For an equipped cabinet, the insulating supports must be removed to mount the rail in the lower position, and the screws can be reused.

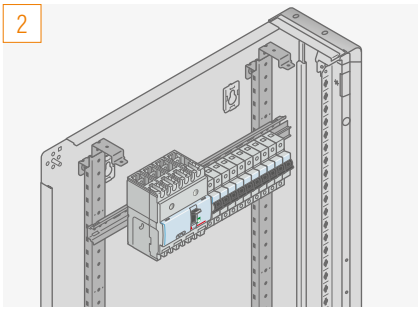
DEVICE INSTALLATION

Installation of a DPX³ 160 and modular devices on a DIN rail

In this case, repeat the assembly steps for the DPX³ 160 (p. 13).

1. Add a rail spacer, Cat.No 4 052 26
2. Snap the modular devices into place.

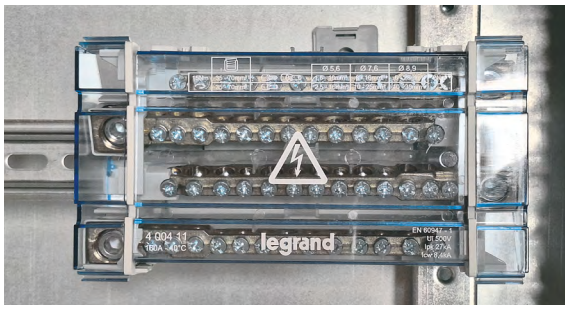




During the installation of a DPX³ 160, ensure that cable cross-sections and minimum bending radius are respected.

Mounting a modular distribution block up to 160A on a DIN rail

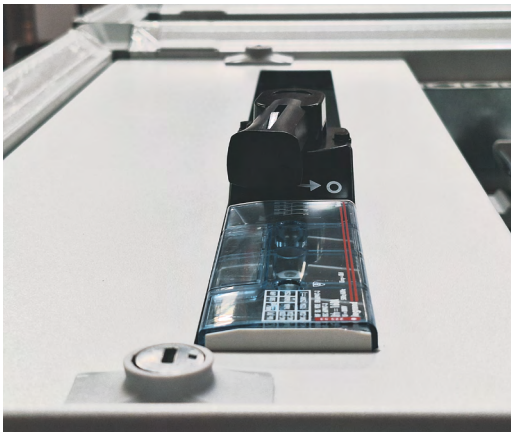
A spacing of 150 mm between rails is sufficient for wiring a modular distribution block.



Mounting a Vistop switch-disconnector (63A to 125A) on a DIN rail

The front handle of the Vistop switch-disconnector requires the use of a curved door, as the distance between the faceplate and a flat metal door does not allow for proper installation of the Vistop.

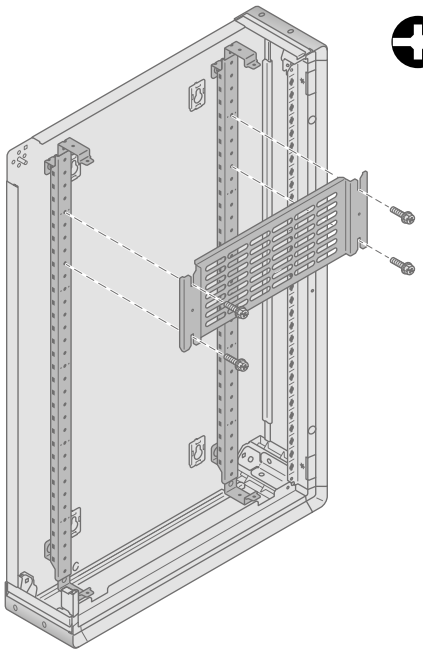
Only Vistop equipped with a front handle are compatible with installation in an XL³ HP 160 cabinet.



Mounting equipment on a perforated plate

Equipment can be mounted on the universal 150 mm high perforated plate (Cat.No 1PL015UA24 or 1PL015UA36), depending on the number of modules per row in the cabinet.

Usable depth:
- 100 mm up to the front part of the faceplate
- 85 mm up to the inner return of the faceplate

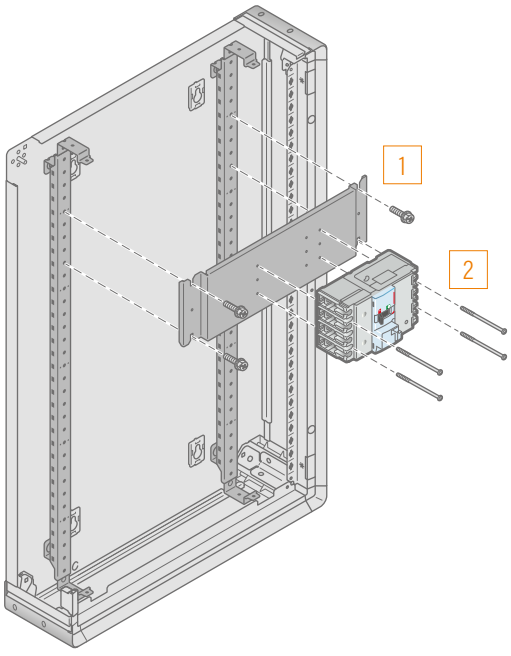


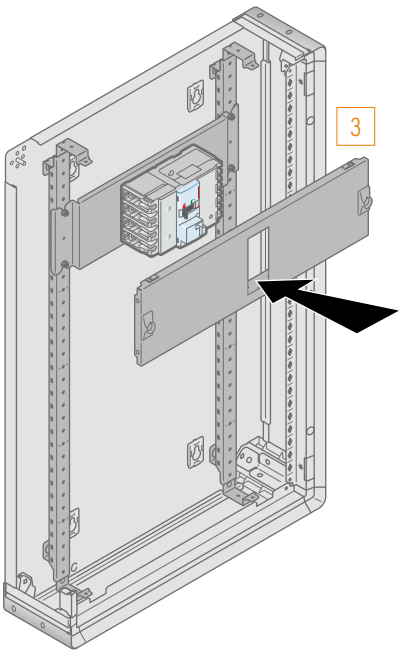
Multi-profile screw

Secure the universal perforated plate directly to the vertical uprights using the supplied screws.

Mounting a DPX³ 160 horizontally on a mounting plate

The DPX³ 160 can be installed in a horizontal position using the mounting kit Cat.No 1KH00024 or 1KH00036 (depending on the width of the cabinet).

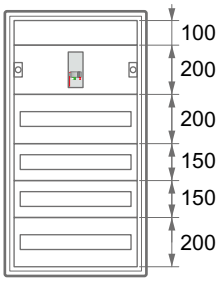




Multi-profile screw

1. Fix the mounting plate to the vertical uprights using the screws provided.
2. Attach the DPX³ to the mounting plate using the screws supplied with the DPX³.
3. Position the faceplate and lock it with a 1/4 turn.

The DPX³ 160 must be installed on the first or last row in an XL³ HP 160 cabinet to ensure sufficient space for upstream wiring.
It is necessary to:
- use a 200 mm high front panel,
- position a 100 mm high blank panel above (for top mounting) or below (for bottom mounting) the device.



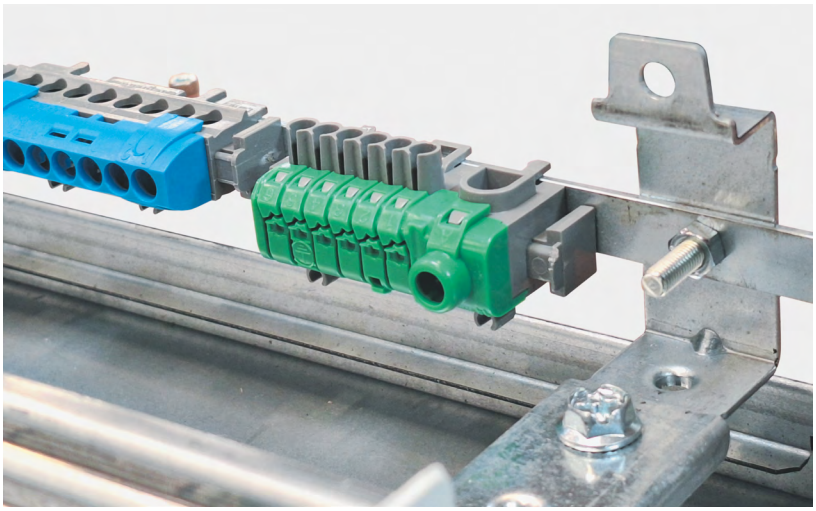


Distribution blocks

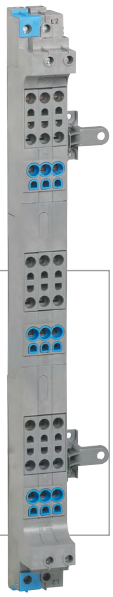
The complete XL³ HP 160 metal cabinet is supplied with a brass bar mounted on a support that can accommodate a second bar.
The XL³ HP 160 cabinet to be equipped is supplied without a bar but with a terminal block support.
It is possible to add an insulating terminal block support, Cat.No 1SFI.

Since the cabinet is reversible, the bar can be positioned at the top and/or at the bottom.

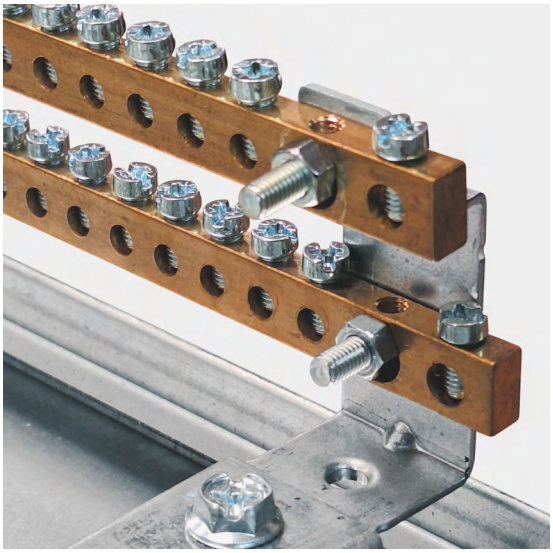
The terminal block support (supplied as standard) can accommodate 2 terminal blocks adapted to the width of the enclosure:
- Cat.No 1BPE24 or 1BPE36, depending on the width of the cabinet
- Cat.No 0 048 19 to be cut to length
- Cat.No 0 373 89 flat copper bar with threaded holes for earth connections, to be cut to size



It is possible to add or replace a 12 x 2 flat bar, Cat.No 0 048 19, to be cut to length according to the cabinet, on the existing terminal block support.



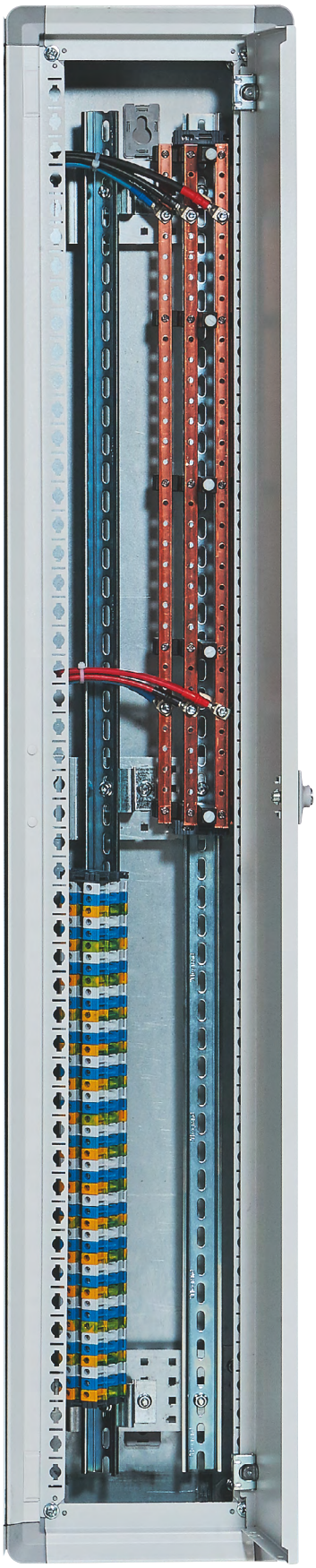
Vertical distribution VX³ and horizontal distribution HX³
► p. 26



It is possible to add a second brass bar, Cat.No 1BPE24 or 1BPE36, on the existing terminal block support. The tightening torque for the screws is 2 Nm.

The second bar is no longer accessible after the top or bottom panel has been installed.

► **Panel removal p. 11**



Example of installation of a 12 x 4 mm flat copper busbar, Cat.No 0 373 89, in an external cable sleeve using an insulating support, Cat.No 0 373 96, mounted on a vertical DIN rail and cut to length.

Equipotential bonding

FROM THE CHASSIS

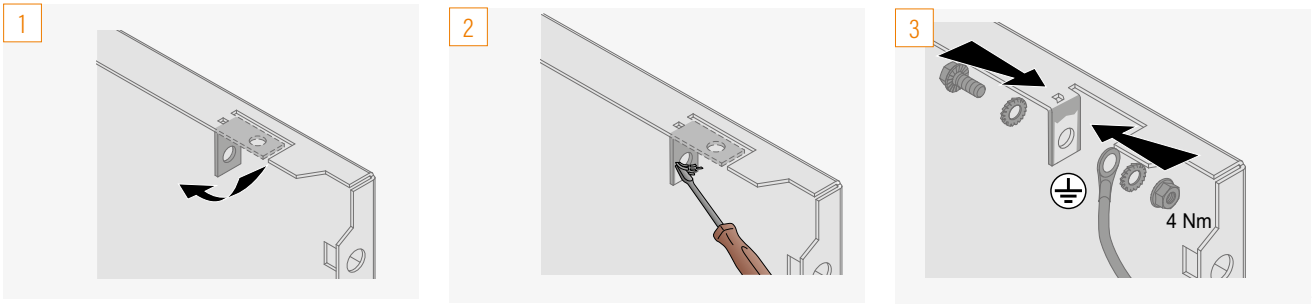
It is not necessary to connect the cabinet frame to earth; grounding is automatic.

FROM FACEPLATE

If a measuring device or a Control and Signaling Auxiliary with a voltage greater than 50 V is installed, the faceplate must be connected to ground.

Standard reminder: the relevant faceplate must be marked with an electrical hazard warning label.

Multi-profile screw

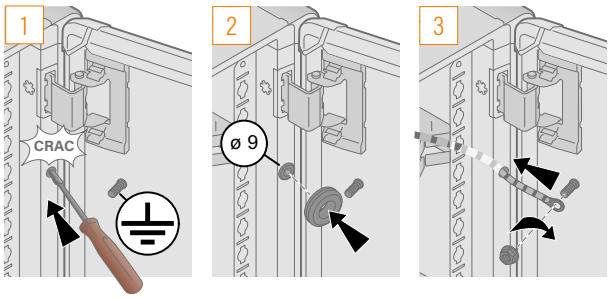


1. Fold down a tab on the top or bottom of the faceplate.
2. Use a flat tool to remove the paint from the tab to ensure proper grounding.
3. Insert and secure the equipotential bonding conductor, Cat.No 0CMT.

The diameter of the connection hole for the equipotential bonding is 4 mm.

FROM THE DOOR

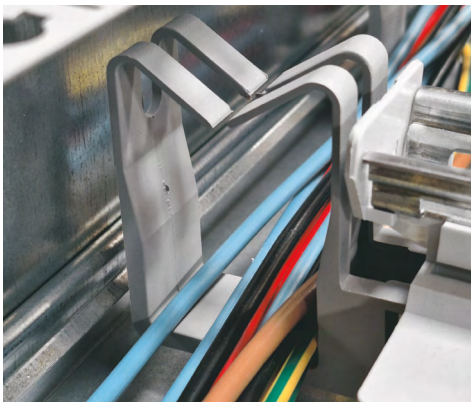
If a measuring device or a Control and Signaling Auxiliary with a voltage greater than 50 V is installed on the door, the door must be connected to ground.



1. The cabinet frame is pre-drilled to accommodate the bonding conductor.
2. Insert the supplied Ø9 mm grommet with the door.
3. Connect the equipotential bonding conductor, Cat.No 0CMR.

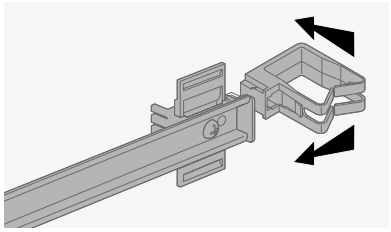
Standard reminder: the relevant door must be marked with an electrical hazard warning label.

Wiring routing



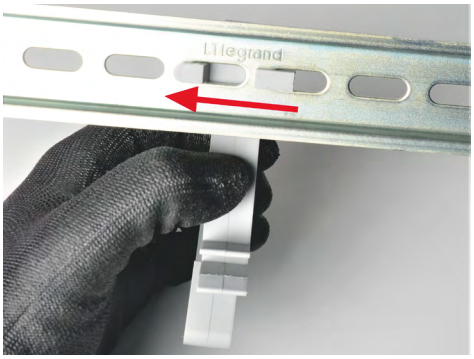
VERTICAL

The equipped XL³ HP 160 cabinet is supplied with vertical wiring guide for cable routing (one per row).
Additional wiring guide, Cat.No 1BGV, can be added on either the right or left side.



Snap the guiding strap onto the insulating supports of the DIN rails.

In case of DPX³ mounting on rail the insulating supports are removed.

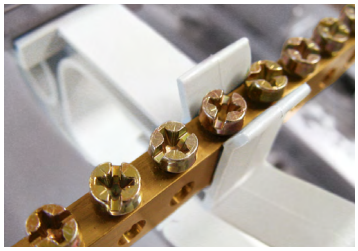


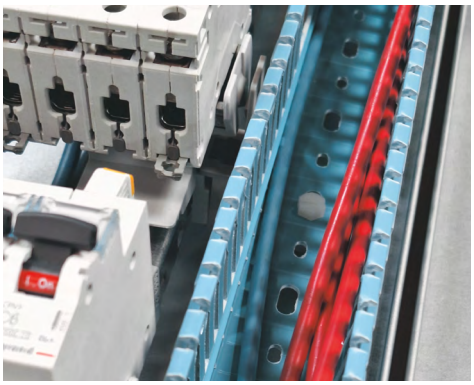
This operation can be carried out with the chassis either removed or installed in the cabinet.

HORIZONTAL

The horizontal wire guide for cable routing, Cat.No 1BGH, can be added without tools by attaching it underneath the rail.

The wire guide Cat.No 1BGH allow the installation of an additional brass bar Cat.No 1BPE24 or 1BPE36 between rows. It is also possible to use IP 2X bars for protective conductor applications.

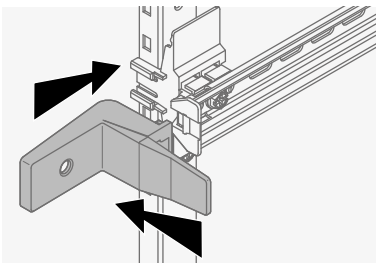




CABLE DUCT

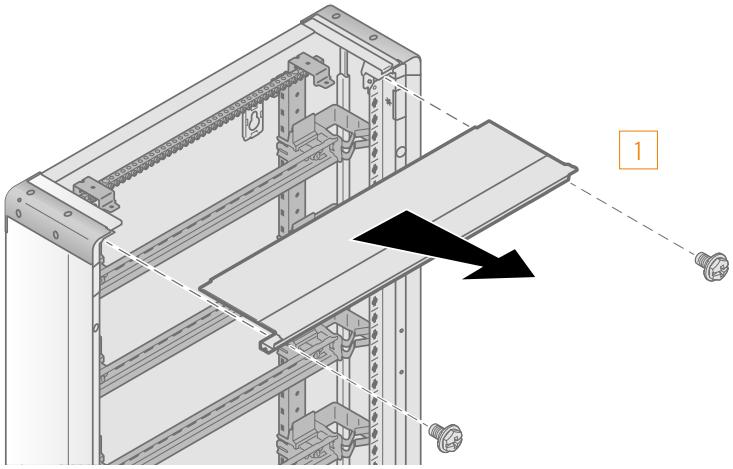
Wiring ducts (up to 40 mm wide x 80 mm high) can be installed vertically using support Cat.No 1SFG.

1. Position the cable duct in front of the insulating supports of the rails to mark the location of the duct supports.
2. Secure the duct to the supports Cat. No 1SFG using insulating rivets.
3. Snap the supports onto the DIN rail insulating supports.



Cable entry and fastening from the top/bottom of the cabinet

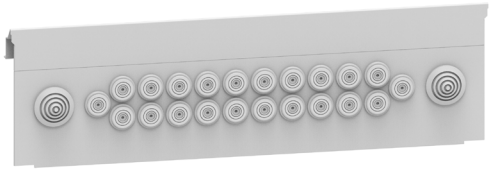
REPLACEMENT OF THE TOP/BOTTOM PANEL WITH PANEL WITH GROMMETS FOR CABLE ENTRIES

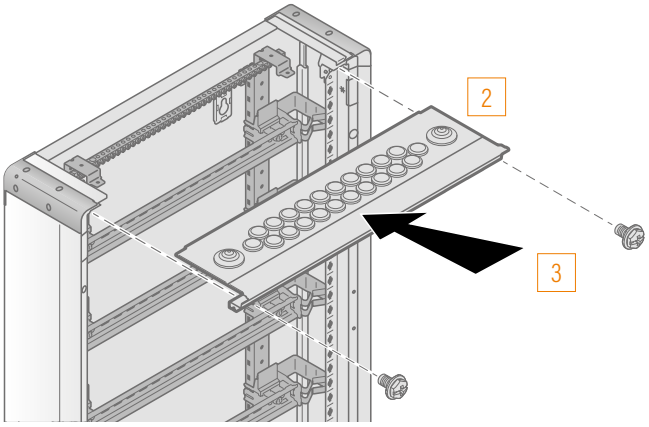


Multi-profile screw

Cable entry panels can be installed in place of a top or bottom panel.

Cable entry panel with grommets:
- 24-module version Cat.No 1PPC24CS : includes 2 end caps Ø4 mm to Ø32 mm and 22 end caps Ø4 mm to Ø20 mm,
- 36-module version, Cat.No 1PPC36CS: includes 2 end caps Ø4 mm to Ø32 mm and 32 end caps Ø4 mm to Ø20 mm

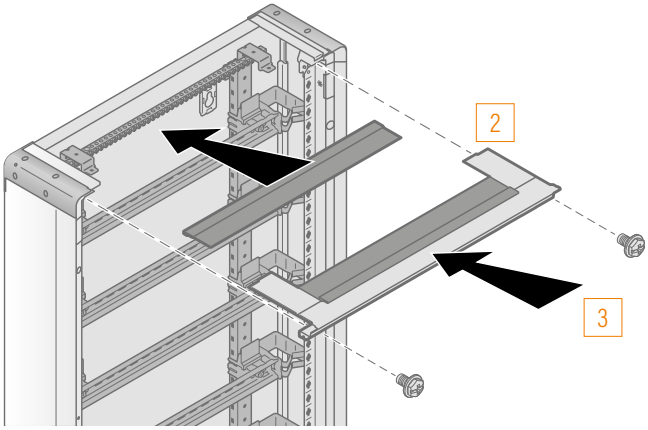




1. Remove the 2 screws securing the top or bottom panel of the cabinet and take off the original panel.
2. Replace the panel with a cable entry panel.
3. Reuse the 2 original screws to secure the end-cap panel.

Brush cable entry panel :
- 24-module version, Cat.No 1PBR24
- 36-module version, Cat.No 1PBR36.





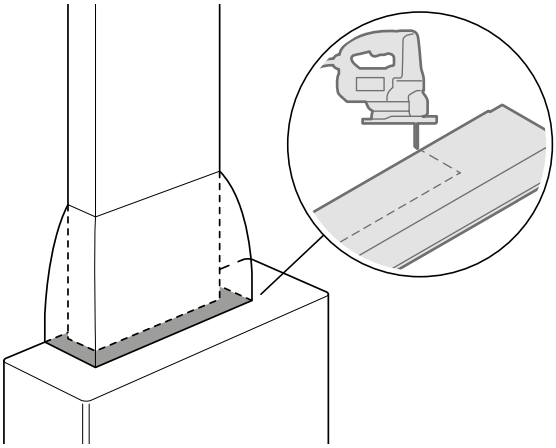
1. Remove the 2 screws securing the top or bottom panel of the cabinet and take off the original panel.
2. Position the rear brush of the panel at the back of the cabinet, then slide in the brush cable entry panel.
3. Reuse the 2 original screws to secure the brush panel.

Cable entry and fastening from the top/bottom of the cabinet

CUT-OUT FOR TRUNKING/CABINET FINISHING END CAP CAT.NO 0 300 95

The finishing end cap Cat.No 0 300 95 improves the finish between the trunking 65 x 250 and the cabinet.
The top and bottom panels of the cabinet can be cut out to allow cable entry.



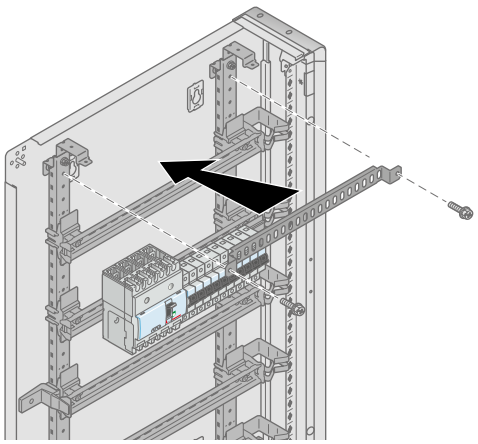


The panels can be easily cut with a jigsaw.

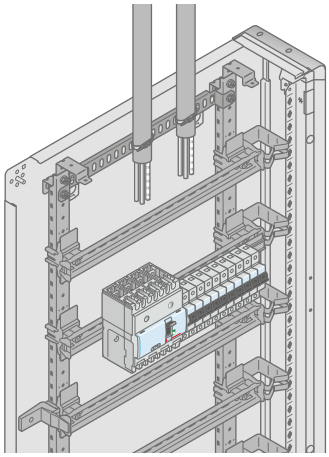
CABLE FASTENING USING A CROSSBAR

This type of equipment can be installed in each cabinet :
- 24-module version, Cat.No 1SFC24,
- 36-module version, Cat.No 1SFC36.

Multi-profile screw



1. Position the cable fastening crossbar and screw it onto the vertical uprights using the 2 supplied screws.



2. Once the crossbar is secured, cable fastening is carried out using Colson or Colring cable ties.

INSTALLATION OF EQUIPMENT

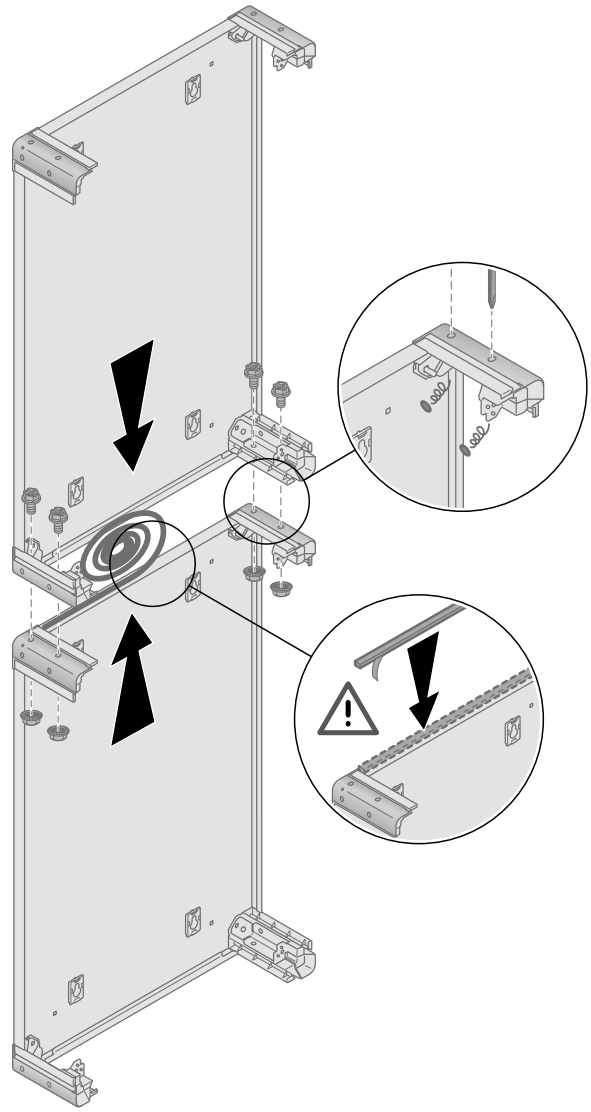
Cabinet coupling

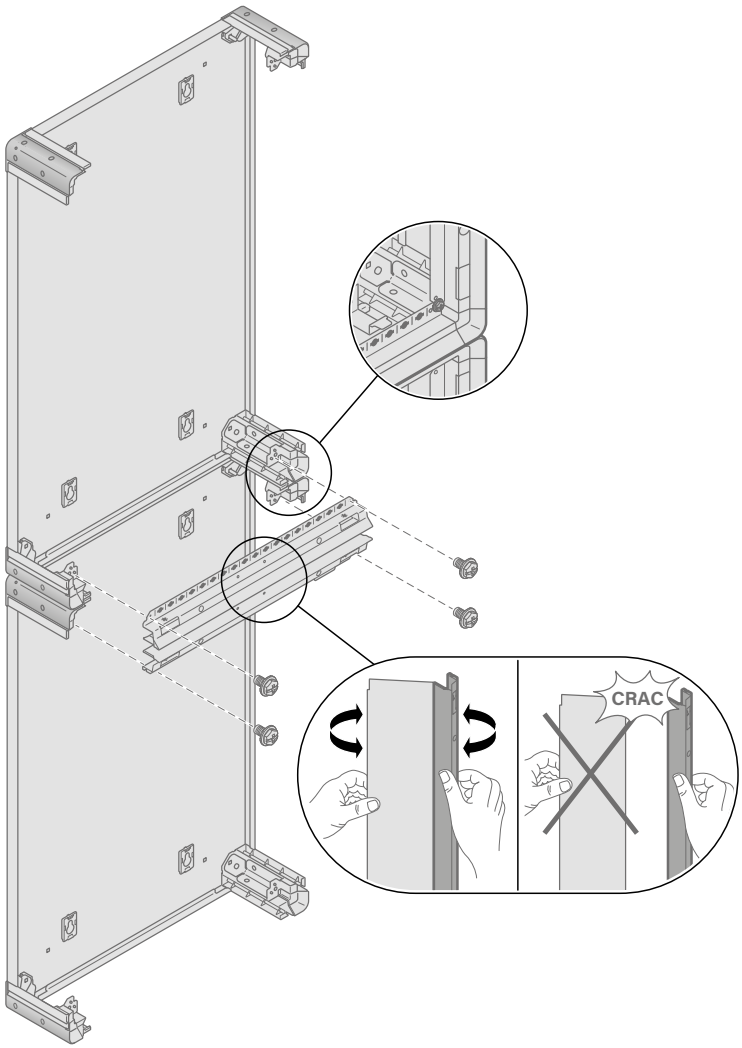
Regardless of the type of coupling to be performed (horizontal or vertical), kit Cat.No 1KJM is required.



▪ Vertical

Multi-profile screw



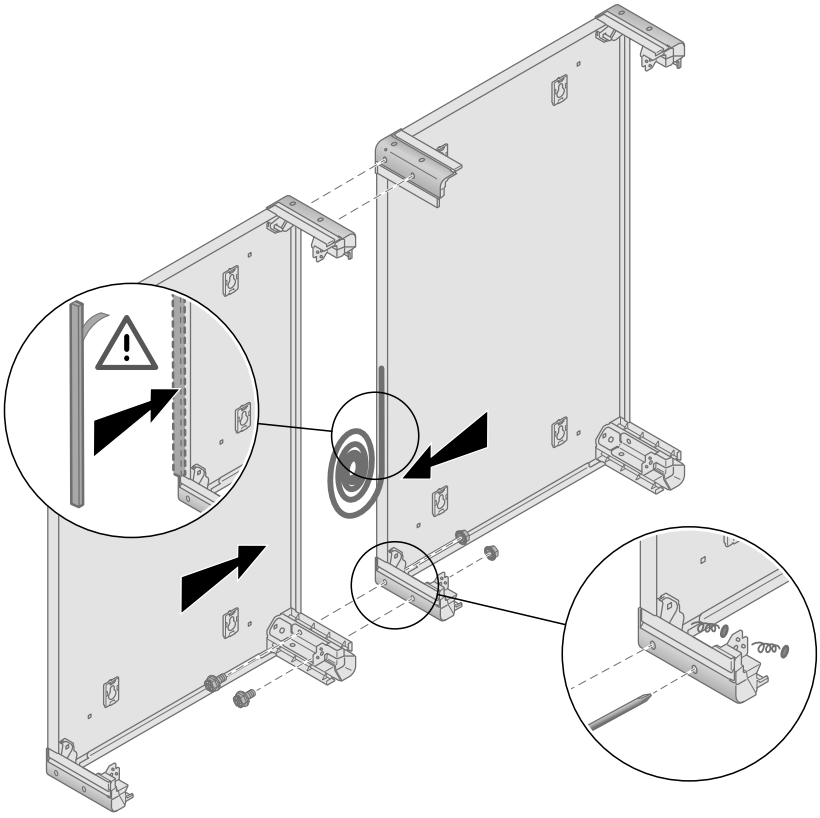


1. Unscrew the plasterboard supports and remove the side panels of the cabinets to be coupled.
2. Apply the gasket along the entire width of one cabinet.
3. Break out the pre-formed holes in the corner studs and join them using the 4 screw-nuts supplied with the coupling kit.
4. Cut the side panels using the pre-cut sections of the plasterboard supports.

Please follow the safety instructions p. 2-3

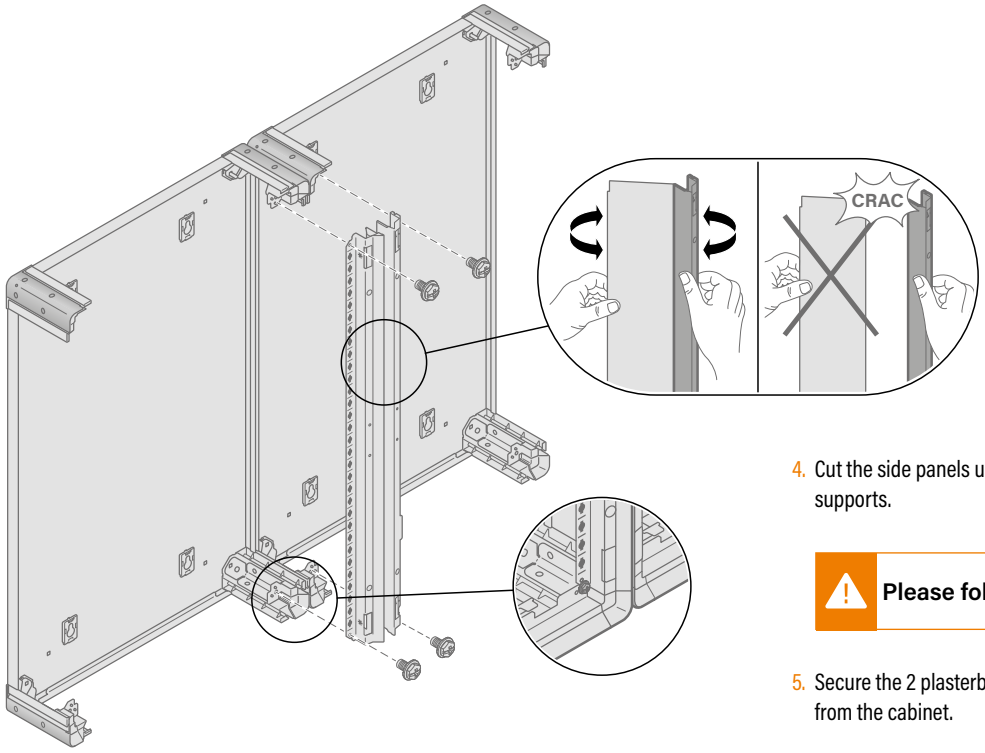
5. Secure the 2 plasterboard supports with the 4 original screws from the cabinet.

▪ Horizontal



Multi-profile screw

1. Unscrew the plasterboard supports and remove the side panels of the cabinets to be coupled.
2. Apply the gasket along the entire height of one cabinet.
3. Break out the pre-formed holes in the corner studs and join them using the 4 screw-nuts supplied with the coupling kit.



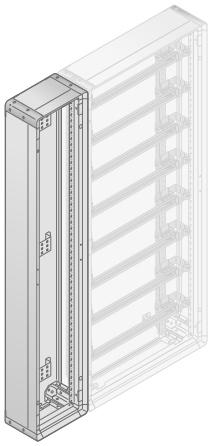
4. Cut the side panels using the pre-cut sections of the plasterboard supports.

Please follow the safety instructions p. 2-3

5. Secure the 2 plasterboard supports with the 4 original screws from the cabinet.

External cable sleeve

NEW



The external cable sleeve allows devices such as Viking terminal blocks and cables to be relocated outside the distribution cabinet, thereby freeing up space and facilitating space management. It can be installed on either the right or left hand side of XL³ HP 160 cabinets.

It is delivered pre-assembled with :
- 2 cut-out side panels
- 3 universal metal brackets pre-mounted at the back of the cable sleeve for terminal block installation
- 3 inclined brackets at 45° to be mounted

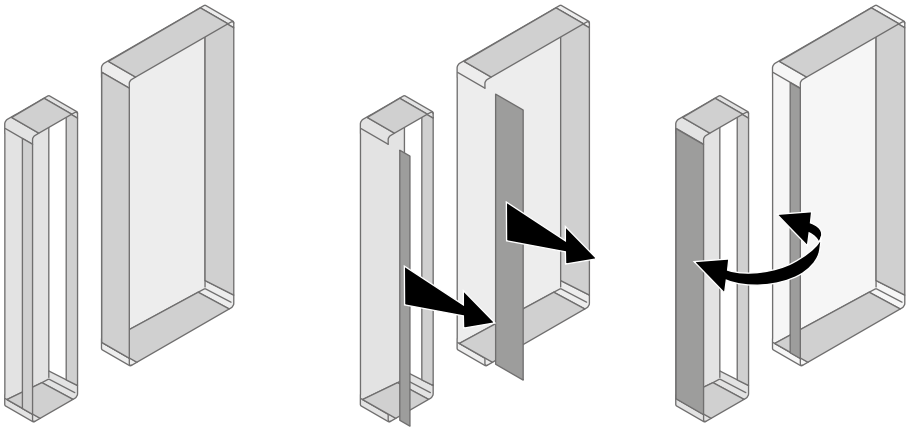
It can be equipped with a full-height faceplate, which can be sealed, and/or a flat metal door.

⚠ To install the external cable sleeve, the coupling kit Cat.No 1KJM is mandatory.

ASSEMBLY

Except for the cut-out side panels supplied with the cable sleeve, coupling the cable sleeve with the cabinet is identical to coupling two cabinets together. However, the external cut-out side panel of the cable sleeve must be swapped with the solid side panel of the XL³ HP 160 cabinet.

Steps 1, 2, 3, and 5 of the horizontal coupling process p.23 are identical..

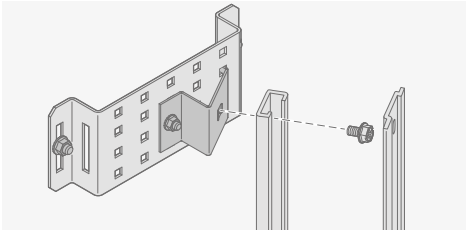


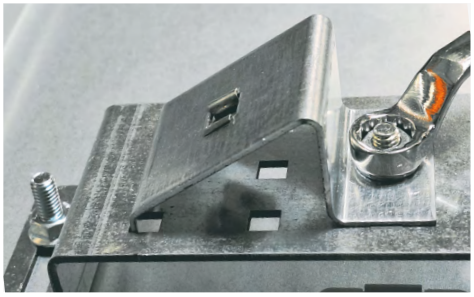
Eco: No more panels need to be cut for coupling; the existing panel on the cabinet must be used.

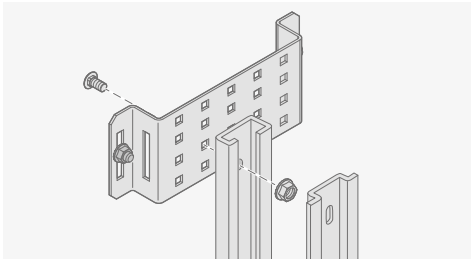
INSTALLATION OF THE INCLINED BRACKET

Multi-profile screw

The inclined bracket is supplied with the cable trunking and can be mounted onto the crossbars already positioned inside the cable sleeve.



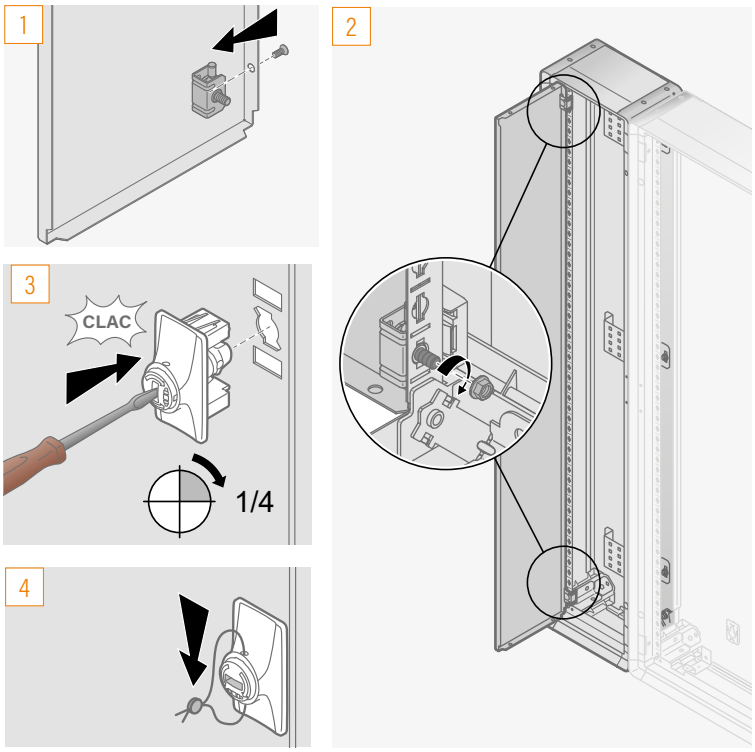




It is also possible to mount a rail directly onto the crossbars.

INSTALLATION OF THE FULL-HEIGHT FACEPLATE

Multi-profile screw



1. Insert the hinges onto the facelate and screw them at the top and bottom of the full height faceplate.
2. Secure the nut onto the faceplate support of the cable sleeve
3. Insert the 1/4 turn locking system and lock the faceplate
4. If necessary, the faceplate can be sealed.

INSTALLATION OF A CABLOFIL CABLE TRAY

It is possible to install a 30 x 150 mm or 54 x 150 mm cable tray inside an external cable sleeve (maximum cut-out on the top and bottom panels: 80 x 130 mm)



Example of cable tray installation on brackets at the back of the cable sleeve. Remove the pre-installed brackets supplied with the cable sleeve and replace them with Cablofil brackets, Cat.No RCSN (same mounting pitch as the original cable trunking brackets).

It is also possible to install a cable tray on the brackets supplied and pre-mounted inside the cable sleeve, using U-clamps secured with Cablofil screws, Cat.Nos BTRCC, CE25, or CE30.

Door installation ▶ p. 32
Earth bar installation ▶ p. 16

The distribution system

VX³ THREE-PHASE VERTICAL DISTRIBUTION

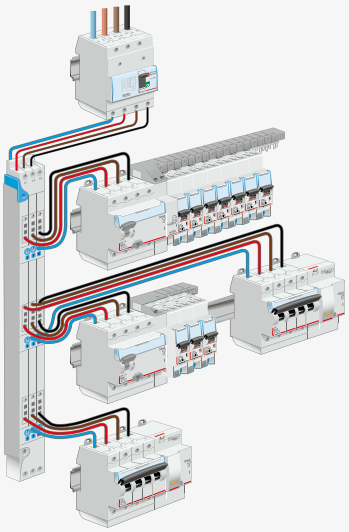
The 125 A four-pole vertical distribution blocks, Cat.Nos 4 050 34/35/36 (for 4 to 6 rows), and the 63 A blocks, Cat.Nos 4 050 23/24/25/26 (for 3 to 6 rows), are equipped with IP XXB automatic terminals and mounting brackets. Power supply can be connected either at the top or bottom of the vertical busbar using screw terminals.

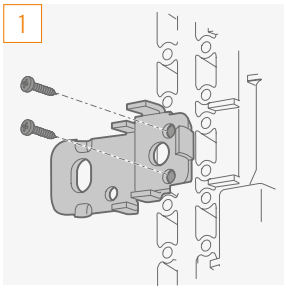


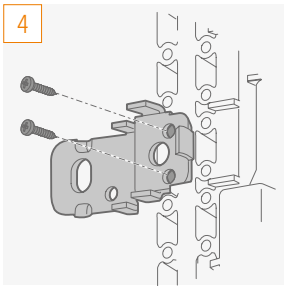
Type	Cat.Nos	Number of outputs per phase	Number of outputs per neutral
63 A	4 050 23	4	6
	4 050 24	6	9
	4 050 25	8	12
	4 050 26	10	15
125 A	4 050 34	6	9
	4 050 35	8	12
	4 050 36	10	15

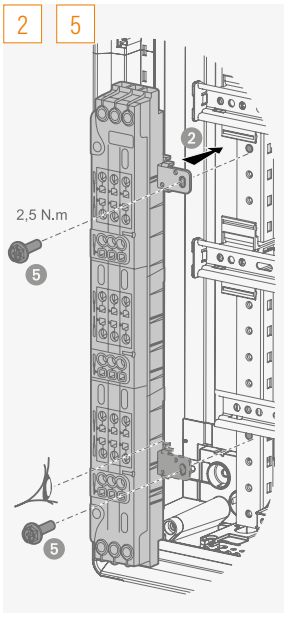
Time-saving during three-phase wiring with this busbar, which enables quick and easy wiring for each row. Automatic terminals compatible with both flexible and rigid wires.

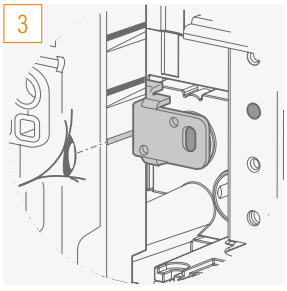
INSTALLATION EXAMPLE











Mounting

Mounting inside the cabinet is carried out using the supplied brackets, allowing for side mounting and vertical adjustment within the cabinets.

1. Screw the mounting bracket onto the back of the distribution block
2. Position the distribution block in front of the vertical uprights
3. Align the second mounting bracket with a fixing hole on the vertical upright
4. Screw the second mounting bracket in place
5. Secure the distribution block to the vertical upright of the cabinet

The side panel must be removed for this installation.

VX³ SINGLE-PHASE VERTICAL DISTRIBUTION

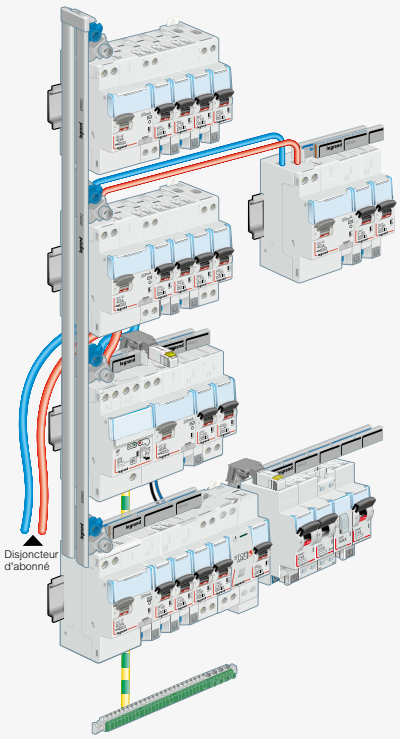
The 63 A vertical distribution blocks, Cat.Nos 4 050 03/04/05 (for 2 to 4 rows), enable safe and direct supply—without looping—to devices at the head of each row: integrated protected surge protectors, single-phase RCBOs or RCCBs.



Type	Cat.Nos	Number of row
63 A	4 050 03	2
	4 050 04	3
	4 050 05	4

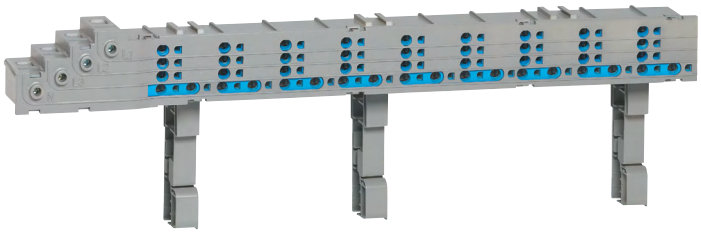
Time-saving during wiring: safe and direct supply—without looping—to devices at the head of each row.

INSTALLATION EXAMPLE WITH HORIZONTAL BUSBARS



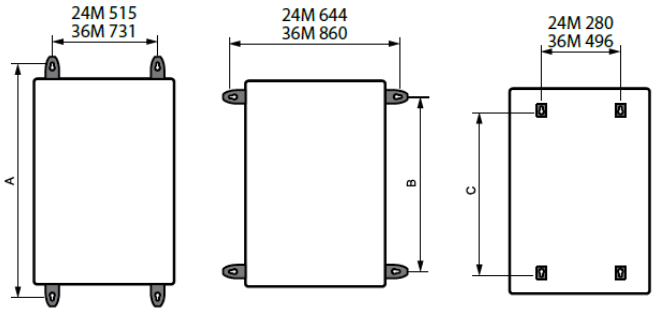
HX³ THREE-PHASE HORIZONTAL DISTRIBUTION

The 125 A horizontal distribution blocks, Cat.No 4 052 30 (3 x 9 phase outputs + 18 neutral outputs) and Cat.No 4 052 31 (3 x 4 phase outputs + 8 neutral outputs), are equipped with IP XXB automatic terminals and mounting brackets for DIN rail installation. Power supply can be connected from the top, bottom, or through-feed via screw terminals.



This distribution block requires a 200 mm high faceplate.

Cabinet fixing

2 TYPES OF FIXING METHODS ARE POSSIBLE		
	EXTERNAL FIXINGS	INTERNAL FIXINGS
		

Cabinet height (mm)	A (mm)	B (mm)	C (mm)
450	518	390	244
600	668	540	394
750	818	690	544
900	968	840	694
1050	1118	990	844
1200	1268	1140	994
1350	1418	1290	1144

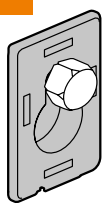
Mounting in case of coupling or external cable sleeve:
Use the sides indicated in the table above, which apply to each cabinet. These must be duplicated in the event of coupling or external cable sleeve.

MOUNTING FROM INSIDE THE CABINET

The XL³ HP 160 metal version includes four internal fixing points for secure installation.

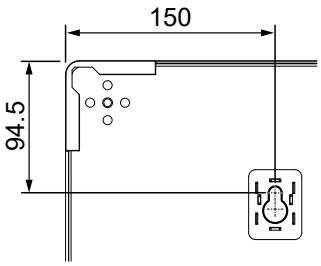


1. Punch out the slotted holes.
2. Mount the cabinet with 4 Ø 6 mm screws and washers (not included).

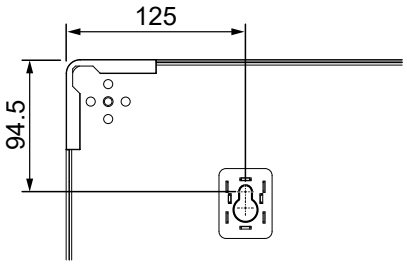


The slotted holes are designed to facilitate the mounting and dismounting of the cabinets.

For cabinet



For cable sleeve

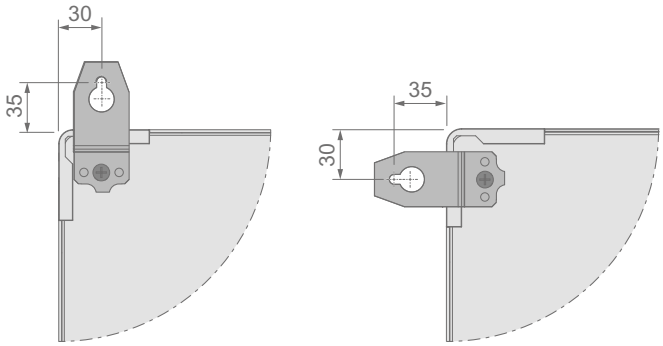


EXTERNAL MOUNTING OF THE CABINET USING THE FIXING BRACKETS CAT.NO 1FMM.



Multi-profile screw

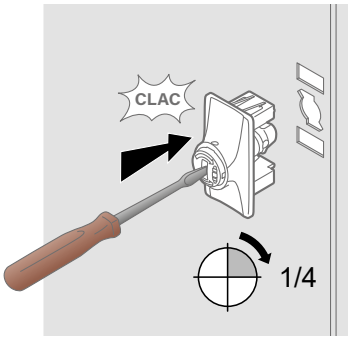
The wall-mounting brackets Cat.No 1FMM can be installed either horizontally or vertically on the back of the cabinet.
All necessary mounting hardware is supplied.



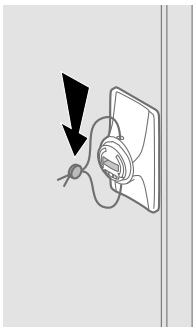
1. Remove the rear knockout from the cabinet.
2. Attach the brackets vertically or horizontally using the supplied screws.

Faceplates

Once all work inside the cabinet has been completed, the metal faceplates must be installed onto the cabinet frame.
This ensures an IP30 rating. All faceplates feature the same 1/4 turn locking system and can be sealed.

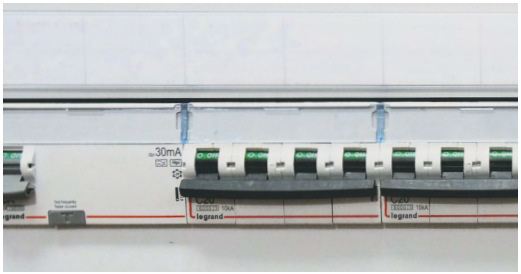


Insert the locking mechanism and secure it with a right-hand 1/4 turn.



After being locked in the horizontal position, the faceplates are sealable if necessary.

It is possible to add marker holders Cat.Nos 3 397 55 (24 modules) or 3 397 56 (36 modules) onto the faceplates.
They are supplied with sets of labels and provide additional identification alongside the label holders of modular devices.



Complete cabinets are delivered with faceplates equipped with the locking system.
For versions to be equipped, the locking system must be ordered separately (Cat.No 0KQT).

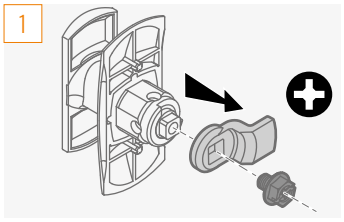
Doors

CYLINDER INSTALLATION ON THE HANDLE (OPTIONAL)

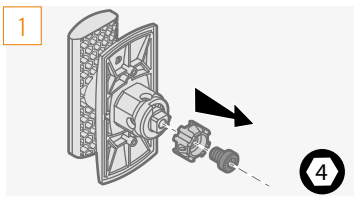
The doors are supplied with a handle to be assembled and can be fitted with interchangeable cylinders.

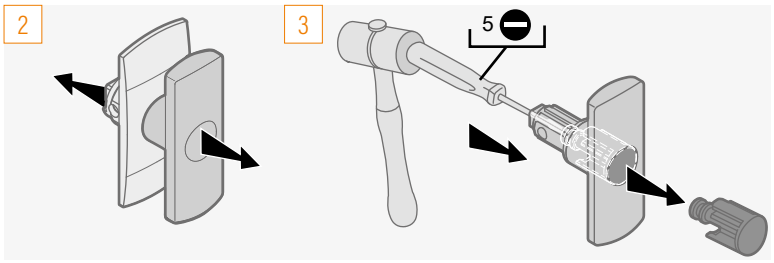
- Step 1: Remove the handle

Case 1 : door height ≤ 900 mm



Case 2 : door height ≥ 1050 mm





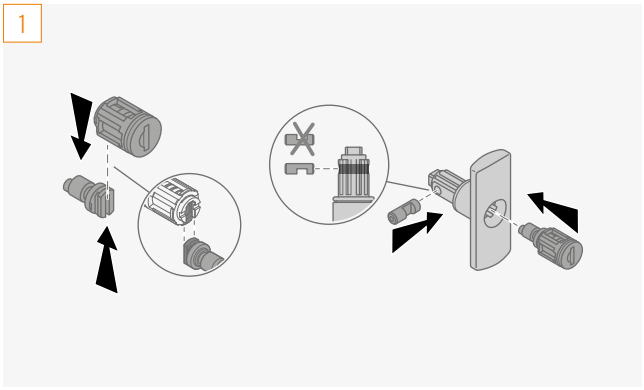
It is possible to install the cylinders after the handle has been mounted on the door.

1. Disassemble the handle support.
2. Separate the components (handle and support).
3. Remove the handle blanking plug.

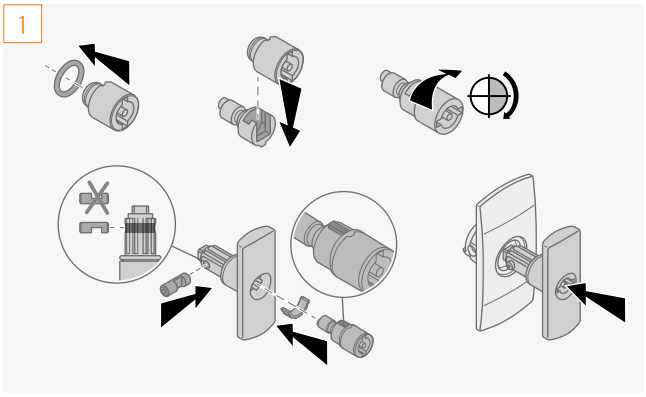
CYLINDER INSTALLATION ON THE HANDLE (OPTIONAL) - CONTINUED

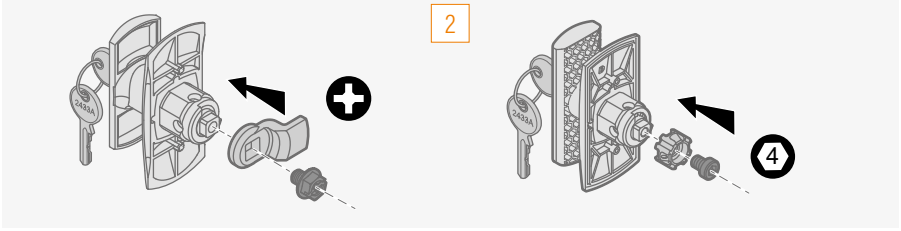
- Step 2: Cylinder assembly

Case 1 : Key-operated cylinder Cat.Nos 2CLKT405 / 2CLKT455 / 2CLKT1242E / 2CLKT2433A



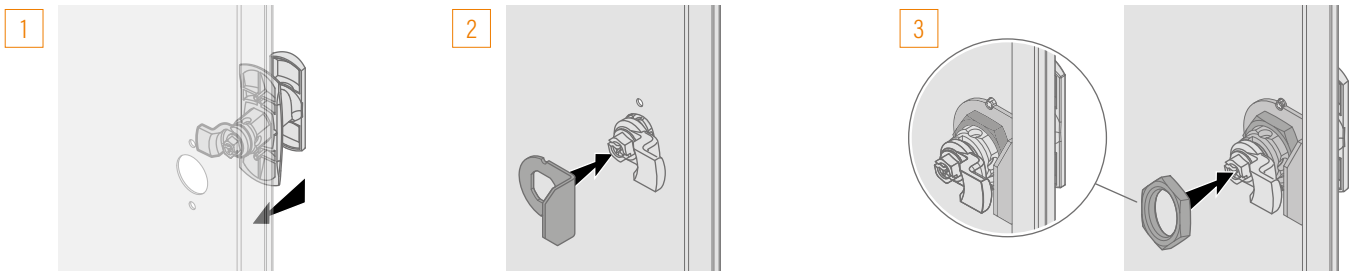
Case 2 : Double-bar cylinder Cat.No 2CLKTDB





1. Clip the adapter onto the rear side of the cylinder.
   Correctly orient the locking accessory and insert the assembly into the front section of the handle.
   Join the handle support with the front section.
2. Secure the assembly from the rear of the handle using a nut (type of nut varies depending on the handle model).

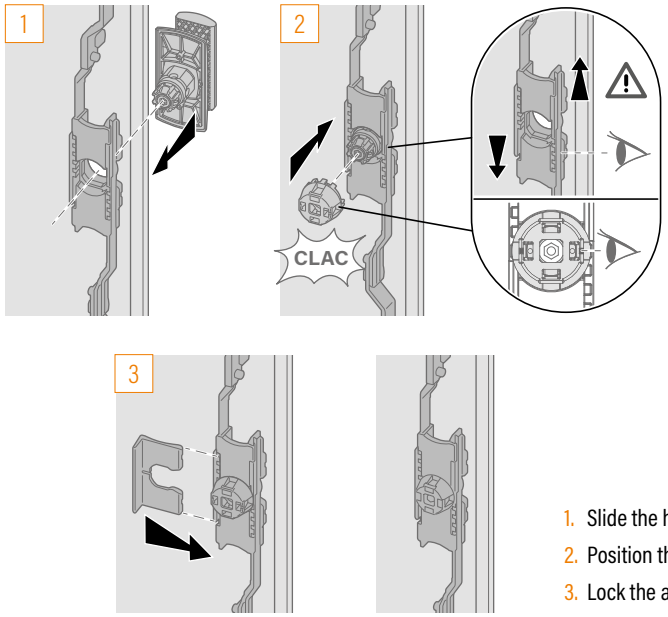
HANDLE INSTALLATION ON DOORS ≤ 900 MM

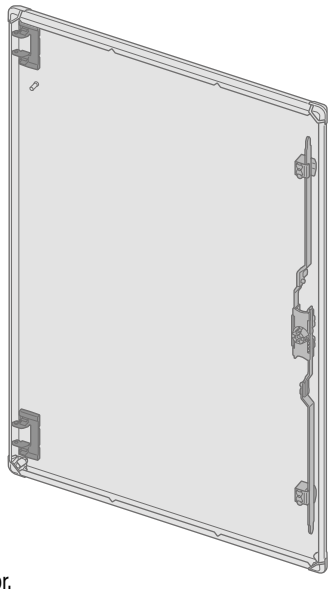


1. Slide the handle onto the exterior side of the door.
2. Position the metal bracket on the interior side of the door.
3. Lock the assembly using the nut.

Doors (continued)

HANDLE INSTALLATION ON DOORS ≥ 1050 MM



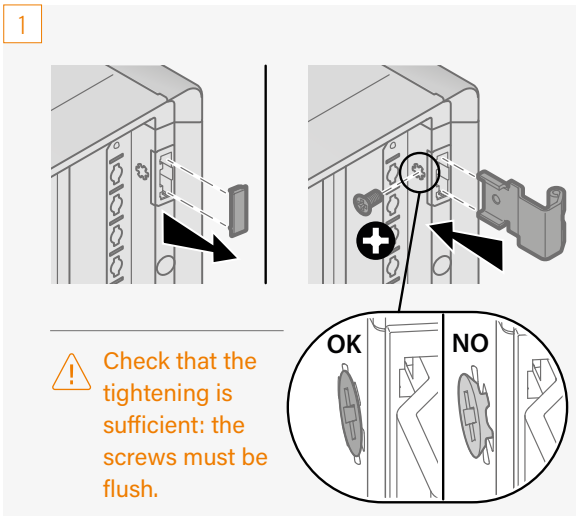


1. Slide the handle onto the exterior side of the door.
2. Position the metal bracket on the interior side of the door.
3. Lock the assembly using the nut..

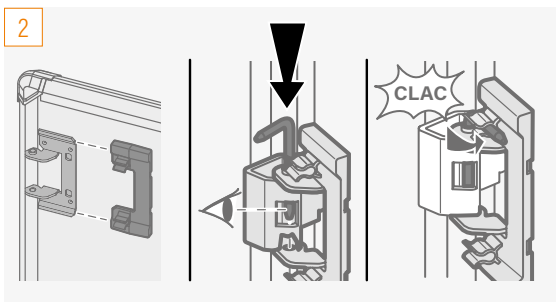
DOOR MOUNTING IN THE METAL CABINET

The doors are reversible and can be mounted on either the left or right hand side of the cabinet.
The installation steps are identical regardless of the door type (metal or glass).

Cabinets with a height ≤ 900 mm are supplied with 2 hinges and 1 door release.
Cabinets with a height ≥ 1050 mm are supplied with 4 hinges.
The door opening direction determines the hinge mounting side.



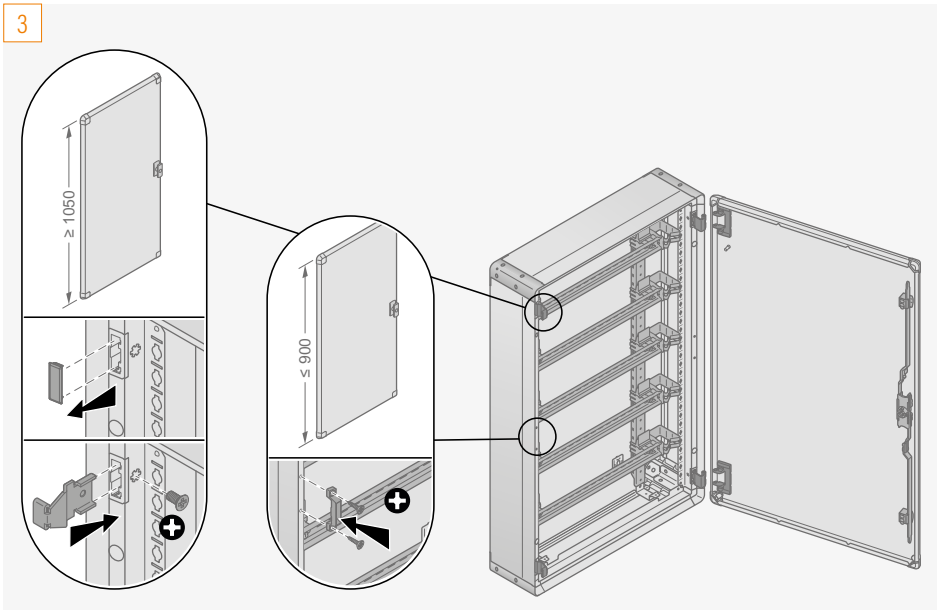
⚠ Check that the tightening is sufficient: the screws must be flush.



1. Remove the blanking plugs from the cabinet and attach the hinges in their place using the supplied screw.
2. Slide the connecting piece inside the door, align it with the hinges, and lock the assembly using the provided pin.

DOOR MOUNTING IN THE METAL CABINET (CONTINUED)

3



3. On the side opposite the hinges :
- For cabinets with H ≤ 900 mm: attach the door release on the side using the 2 supplied screws,
- For cabinets with H ≥ 1050 mm: remove the 2 blanking plugs and fix the 2 mounting tabs in their place using the small supplied screws.

Mounting of auxiliaries on the door and faceplates







Auxiliary Control and Signaling Devices (ACS) can only be installed on curved doors.
Osmoz ACS units feature an insulating plastic body, and the contact blocks provide IP2X protection. The following recommendations must be followed to ensure Class II installation compliance.

- Auxiliaries must be secured and protected by a continuous insulating sheath to prevent pulling or accidental disconnection.
- If the control voltage exceeds 50 V, the door or faceplate must be connected via an equipotential bonding conductor, and the circuits supplying the ACS must be protected by devices against indirect contact (p. 18)

For more details, refer to the best practices guide for the construction of low-voltage switchgear assemblies (standard IEC 61439-2).



Achieving IP43 rating on cabinets

Installing the gasket (Cat.No 2KIP43) around the door perimeter allows the cabinet to achieve an IP43 protection rating.

The XL³ HP 160 cabinet has the following protection ratings :
- IP30 without door and with faceplates installed,
- IP 40 with door,
- IP 43 with door and gasket.

The gasket joint must be joined at the bottom of the door.



XL³ HP 160 DISTRIBUTION CABINETS

SURFACE-MOUNTING INSULATED CABINETS

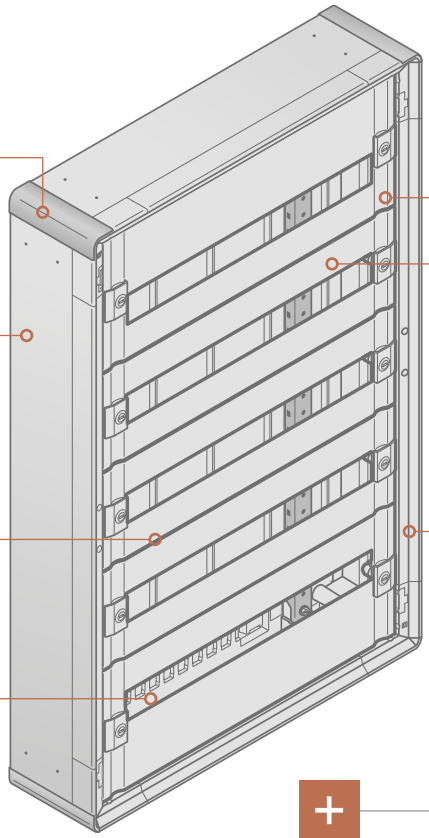


PRESENTATION

The XL³ HP 160 insulated cabinets are optimized in size for power distribution up to 160 A.

They are divided into :

- cabinets equipped with 2 to 8 rows, capable of accommodating, without accessories, DNX³ and DX³ modular circuit breakers, DPX³ 160, modular distribution blocks, etc.
- cabinets equipped with 3 to 6 rows with an equippable free space.



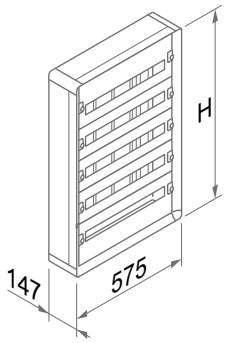
Technical datasheet available for more information on installation locations, product resistance, etc.

► Consult the online catalog at legrand.com

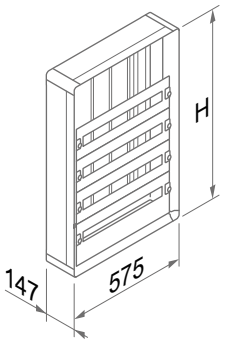
Technical datasheet

KEY POINTS

- Insulating plastic cabinet enabling the assembly of Class II systems
- RAL 7035
- Rated impulse withstand voltage (Uimp): up to 8 kV
- Short-circuit withstand current (Icc): 25 kA
- IP 30 without door, IP 40 with door, and IP 43 with door and gasket
- IK 04 without door, IK 07 with door
- Compliant with IEC 61439-2 and IEC 61439-3 standards
- Fire resistance according to IEC 60695-2-11: 750°C
- Suitable for installation in public-access buildings (ERP) and workplaces (ERT)

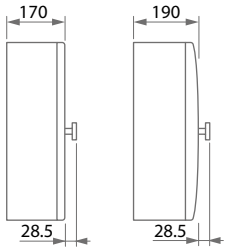


DISTRIBUTION CABINETS							
Number of rows	2	3	4	5	6	7	8
Totla number of modules	48	72	96	120	144	168	192
External height (mm)	450	600	750	900	1050	1200	1350
Width x Depth (mm)	575 x 147 mm						
Cat.Nos	1C02R24SPL	1C03R24SPL	1C04R24SPL	1C05R24SPL	1C06R24SPL	1C07R24SPL	1C08R24SPL



CABINETS WITH FREE SPACE (400 MM)							
Number of rows	-	-	-	3	4	5	6
Total number of modules	-	-	-	72 + 400 mm	96 + 400 mm	120 + 400 mm	144 + 400 mm
External height (mm)	-	-	-	900	1050	1200	1350
Width x Depth (mm)	-	-	-	575 x 147 mm			
Cat.Nos	-	-	-	1C03ER24SPL	1C04ER24SPL	1C05ER24SPL	1C06ER24SPL

Flat door Curved door

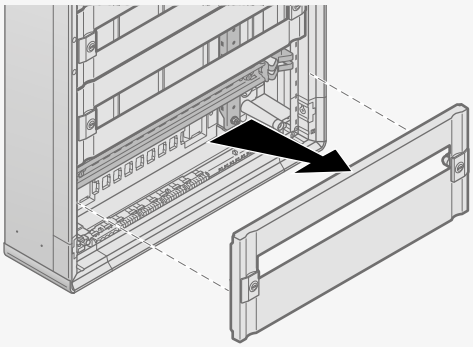


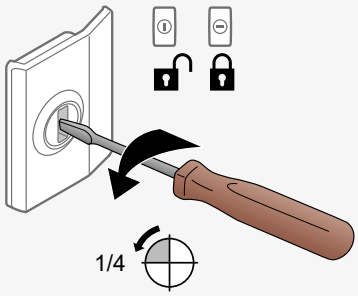
DOORS							
Flat metal door	1PC2R24	1PC3R24	1PC4R24	1PC5R24	1PC6R24	1PC7R24	1PC8R24
Flat glass door	1PV2R24	1PV3R24	1PV4R24	1PV5R24	1PV6R24	1PV7R24	1PV8R24
Curved metal door	1PD2R24	1PD3R24	1PD4R24	1PD5R24	1PD6R24	1PD7R24	1PD8R24

CABINET DISASSEMBLY

The insulating cabinets are delivered pre-assembled.
They can be fully disassembled to facilitate access to the entire wiring volume.

REMOVING THE FACEPLATES

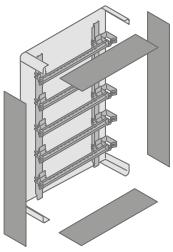




The handling of the faceplates is made easier thanks to the 1/4 turn fasteners.
To remove them, set the 1/4 turns to the vertical position using a 5 mm flat screwdriver (recommended).

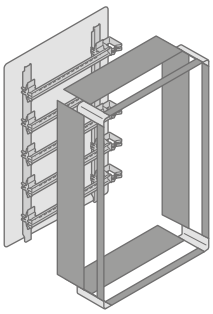
The faceplate is locked when the 1/4 turn fasteners are in the horizontal position.

FOR WIRING AT THE BACK OF THE CABINET : 2 OPTIONS



CASE 1

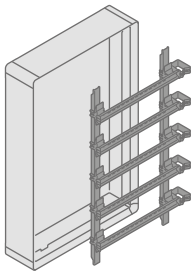
Individual panel disassembly



CASE 2

Disassembly of the frame and panels for maximum access

FOR WIRING ON THE CHASSIS ONLY



CASE 3

Chassis extraction

PEP sheet available. For more information on the Product Environmental Profile
► consult the online catalogue at legrand.com

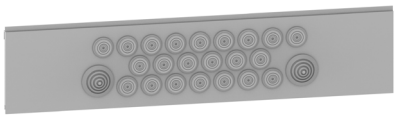
Waste optimization
The cardboard packaging is reusable for on-site delivery

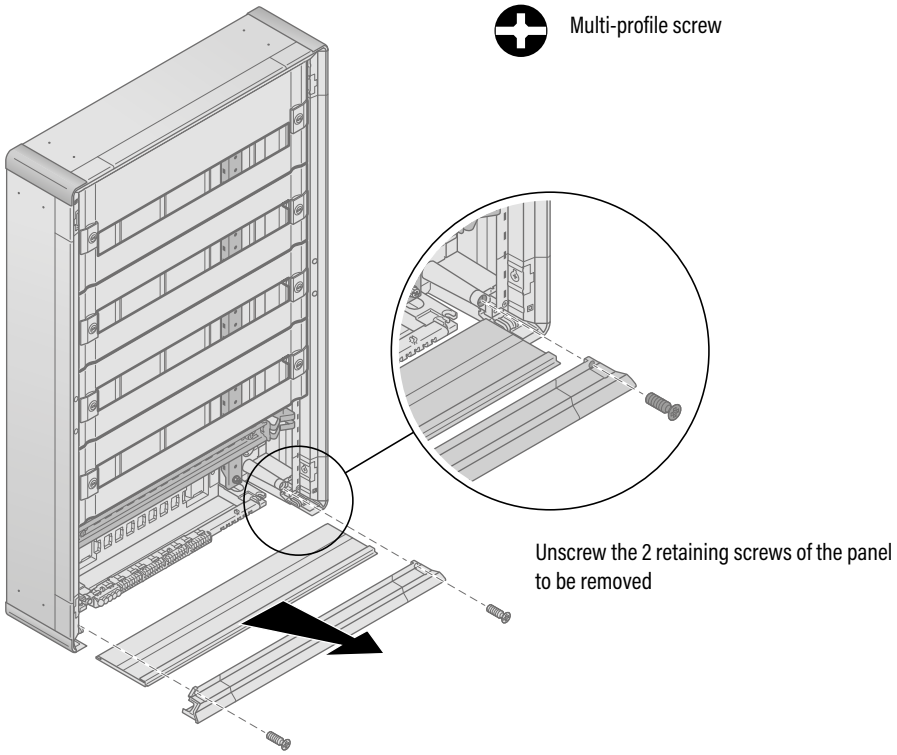
CASE 1 Individual panel disassembly

It is possible to remove a panel (bottom, top, or side) without disassembling the entire frame.
In this case, the frame corners remain in place.

The panels can be easily reassembled by sliding them into the uprights (corners).

Replace a top or bottom panel with multi-grommets panel for cable entries ► p. 44

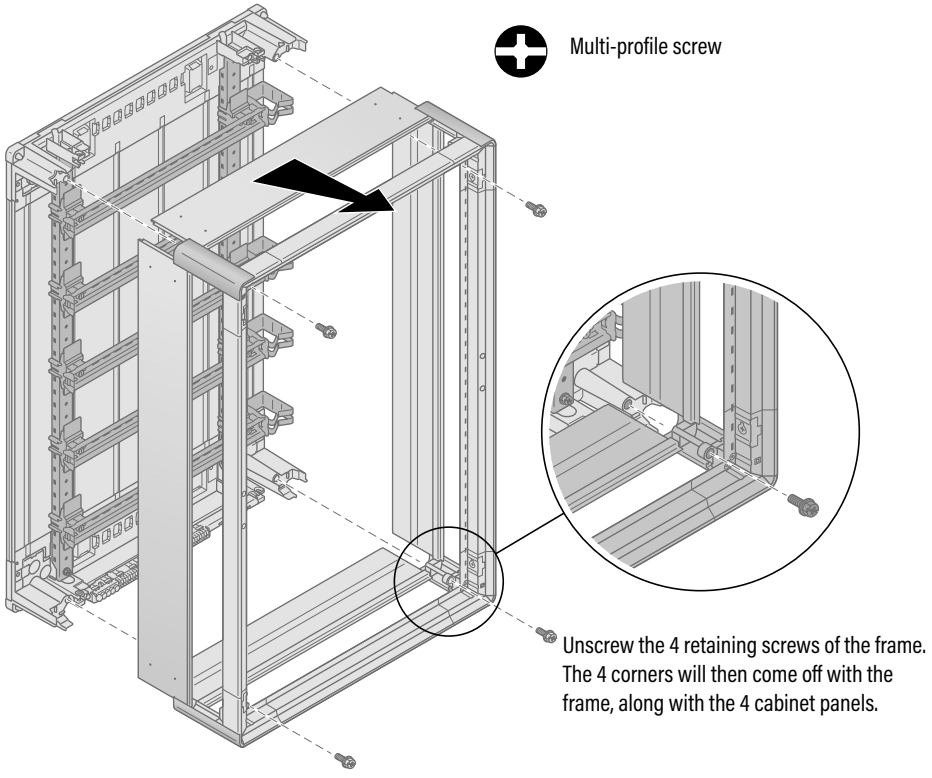




CASE 2 Disassembly of the frame and all panels

For maximum access to the wiring volume, it is recommended to remove the entire frame.

The panels are easily reassembled by sliding them into the uprights (corners).

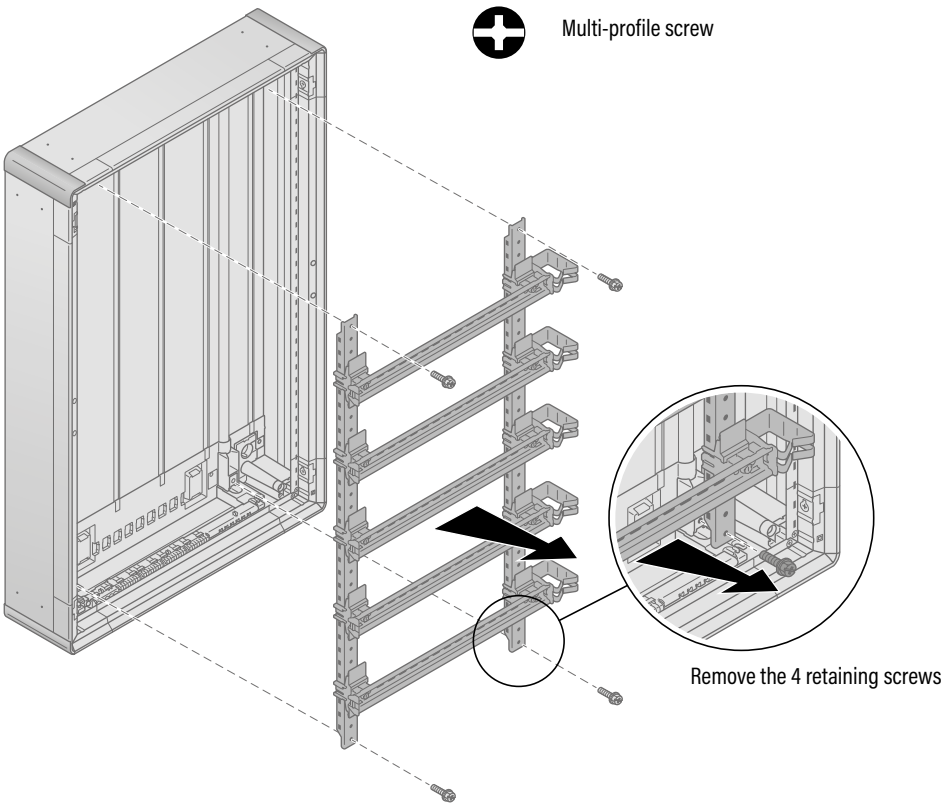


CABINET DISASSEMBLY

CASE 3 Chassis extraction

It is possible to remove the frame to freely install switching, protection, and measuring devices, ensuring maximum working comfort.

This step makes wiring easier if the cabinet is already installed on site.



⚠ For cabinets with more than 6 rows, it is recommended that 2 people handle the cabinet to ensure safe operation.

The spacing between the chassis rails is 150 mm.

The chassis is delivered pre-assembled with rails in the upper position and rail supports for the installation of modular devices (p. 13, 14). It is possible to mount DPX³ 160 and modular devices on the same row using the rail extension (p. 14). Equipment installation is also possible using the perforated mounting plate (p. 15).

Monting a DPX³ 160 on a DIN rail

It is recommended to use an XL³ HP 160 cabinet with free space to install a DPX³ 160 or DPX³ 250 (limited to 160 A) in order to provide sufficient room for wiring.

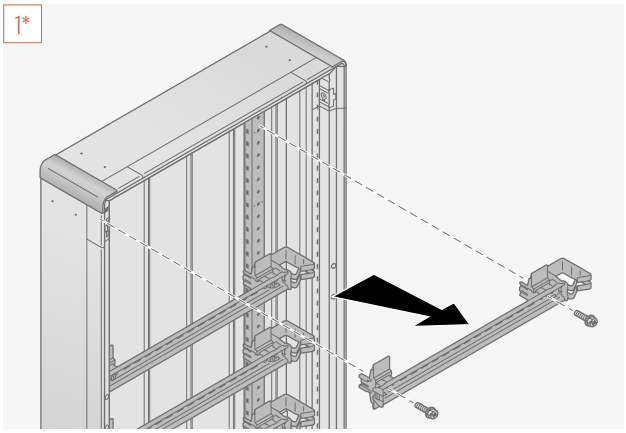
For vertical mounting of a DPX³, it is advisable to use kit Cat.No 1KTJ24.

When installing in an XL³ HP 160 cabinet, the initial rail position must be modified by removing the rail support and adding an adapter:

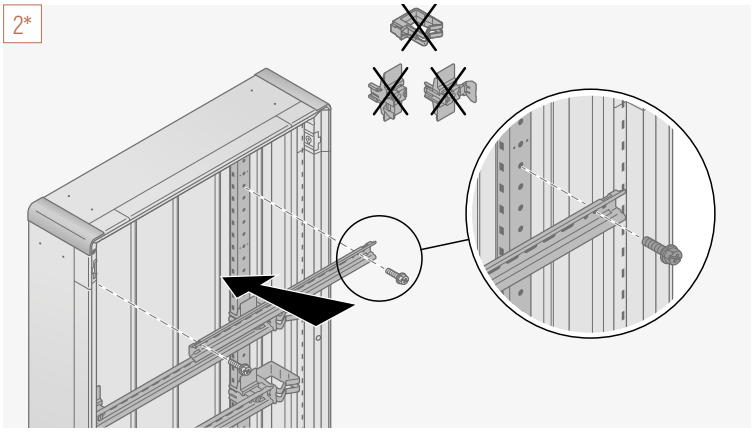
- Cat.No 4 210 71: for 1 DPX³ 160 without motor-driven handle,
- Cat.No 4 210 73: for 1 DPX³ 160 residual current version without motor-driven handle,
- Cat.No 4 210 68: for 1 DPX³ 160 with lateral motor-driven handle (with or without residual current),
- Cat.No 4 210 72: for 1 DPX³ 250 residual current version without motor-driven handle (limited to 160 A),
- Cat.No 4 210 58: for fixed version DPX³ 160 in transfer switch.

It is possible to install a DPX³ 160 in an XL³ HP 160 cabinet. It must be mounted on the first row to provide sufficient space for upstream connection.
It is not possible to install modular devices on the row below due to insufficient spacing between rails.

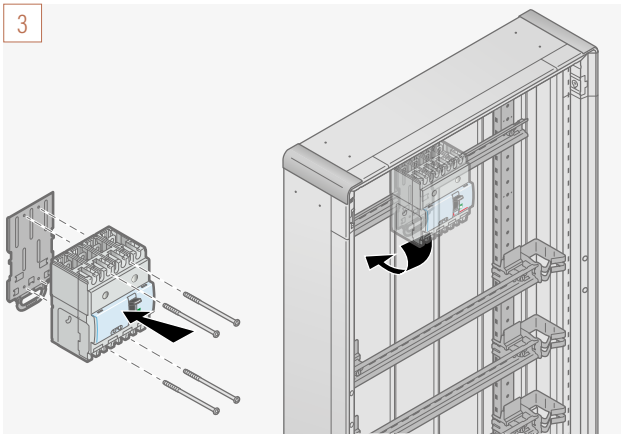
1*



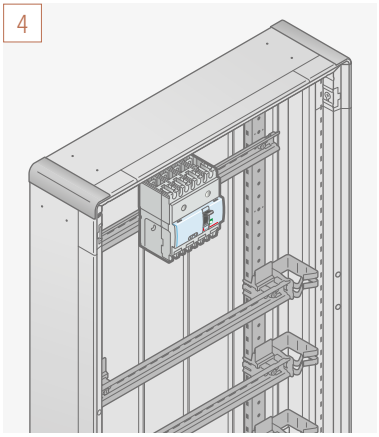
2*



3



4



1. Remove the rail using the 2 screws.
2. Remove the 2 rail insulating supports as well as the vertical wiring management accessory. Secure the rail with 2 M6x12 screws.
3. Mount the adapter onto the DPX³.
4. Fasten the adapter and the DPX³ 160 together using the 4 screws supplied with the molded case. Then snap the assembly onto the rail.

* Actions required only in the case of installation in a fully modular enclosure (with no free space)

Vertical mounting of DPX³ 160

These kits must be installed exclusively in cabinets with a 400 mm free space.

Number of rows	3	4	5	6
Total number of modules	72 + 400 mm	96 + 400 mm	120 + 400 mm	144 + 400 mm
Cabinets Cat.Nos	1CO3ER24SPL	1CO4ER24SPL	1CO5ER24SPL	1CO6ER24SPL

Cat.No 1KTJ24 : Connection kit for DPX³ 160 power circuit breaker.



COMPOSITION

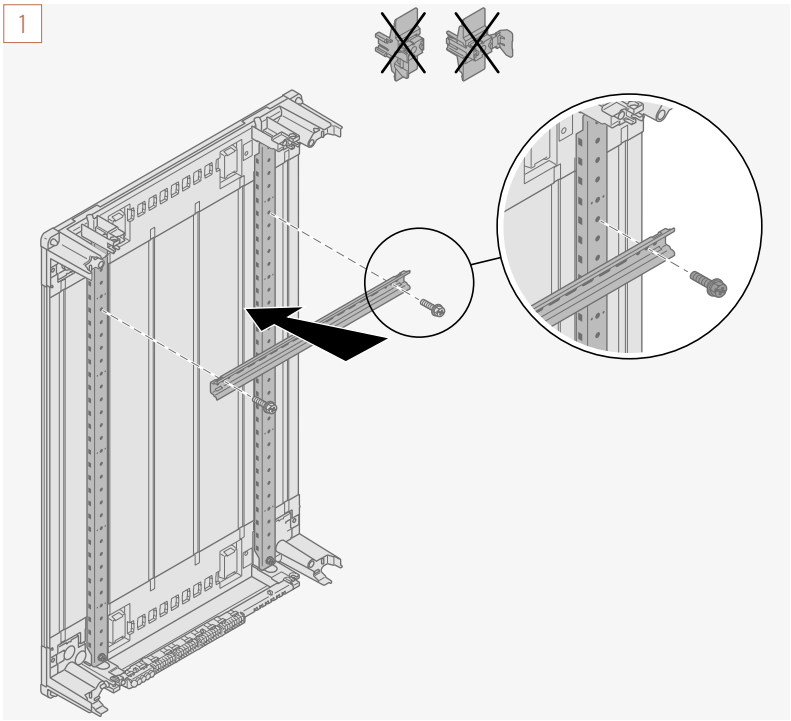
1 DIN rail, 1 insulated faceplate (height 300 mm), 1 solid faceplate (height 100 mm), and mounting hardware.

TO BE USED WITH AN ADAPTER FOR MOUNTING THE DPX³ ON A DIN RAIL:

- Cat.No 4 210 71: for 1 DPX³ 160 without motor-driven handle,
- Cat.No 4 210 73: for 1 DPX³ 160 residual current version without motor-driven handle,
- Cat.No 4 210 68: for 1 DPX³ 160 with lateral motor-driven handle (with or without residual current),
- Cat.No 4 210 72: for 1 DPX³ 250 residual current version without motor-driven handle (limited to 160 A),
- Cat.No 4 210 58: for fixed version DPX³ 160 in transfer switch.

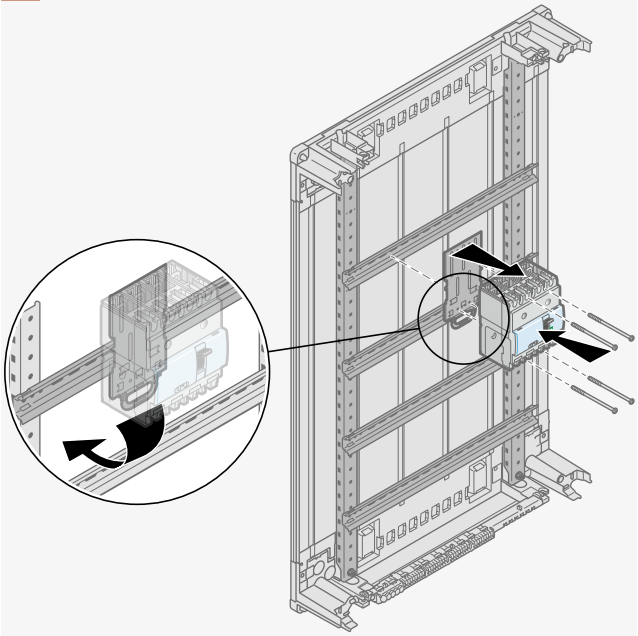
A 100mm height solid faceplate must be installed. Mounting this kit requires leaving a free space of 100 mm at the top or bottom of the cabinet.

1



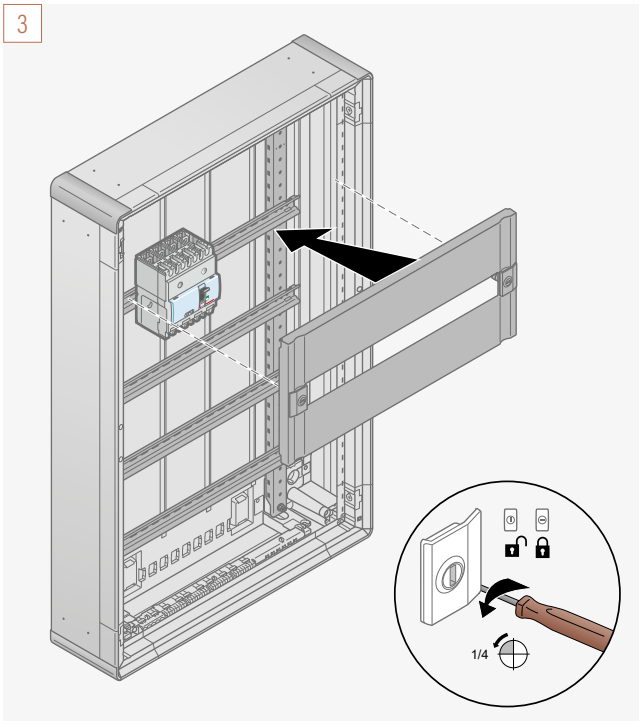
1. Secure the rail using the 2 supplied screws.

2

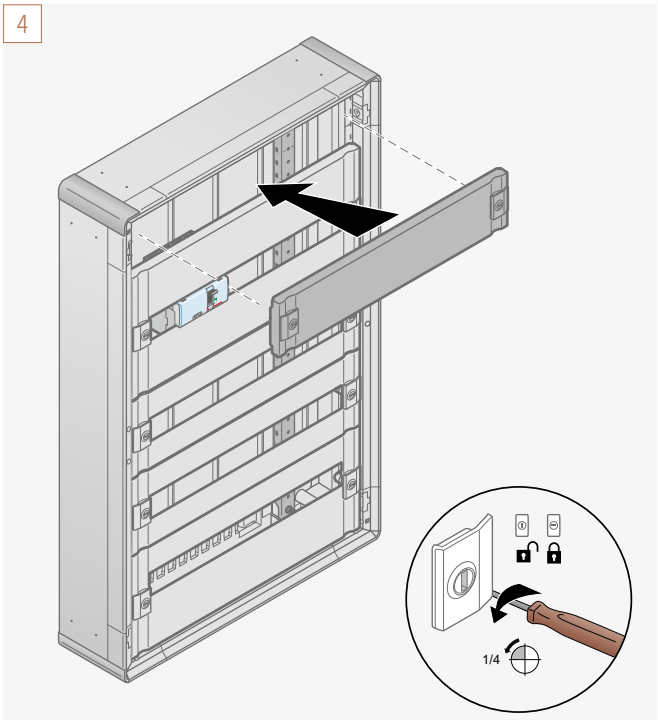


2. Mount the DPX^3 160 onto the adapter and secure it with the molded case screws. Install the assembly onto the rail.
3. Attach and lock the 300 mm faceplate with a 1/4 turn.
4. Once wiring is complete, attach and lock the 100 mm solid faceplate at the top of the cabinet with a 1/4 turn.

3



4



Distribution blocks

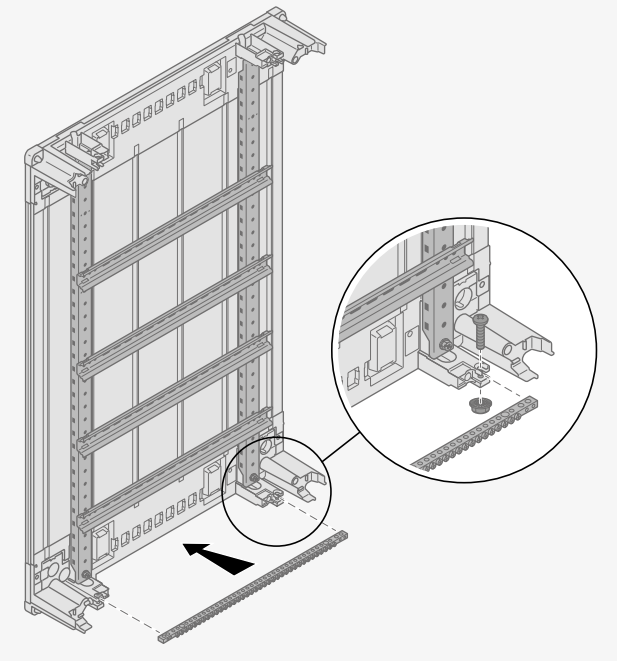
The XL³ HP 160 cabinet is supplied with a pre-installed IP 2X automatic connection distribution block (Cat.No 0 050 54).



This distribution block is compatible with both flexible and rigid wires and allows the connection of :
- 5 x 6 to 25 mm² + 5 x 6 to 35 mm² (screw terminals),
- 45 x 1.5 to 4 mm² (automatic terminals).

Additional distribution blocks can be added using the mounting brackets Cat.No 1SFI.

INSTALLATION OF BRASS BAR CAT.NO 1BPE24 USING MOUNTING BRACKETS CAT.NO 1SFI

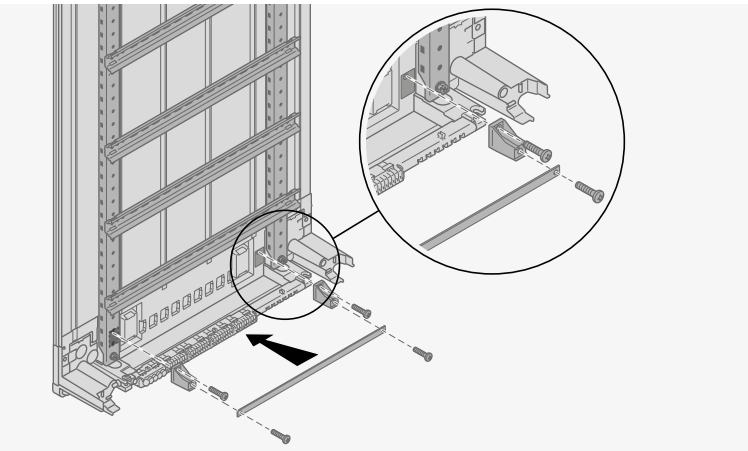


+ Wiring routing
► p. 19

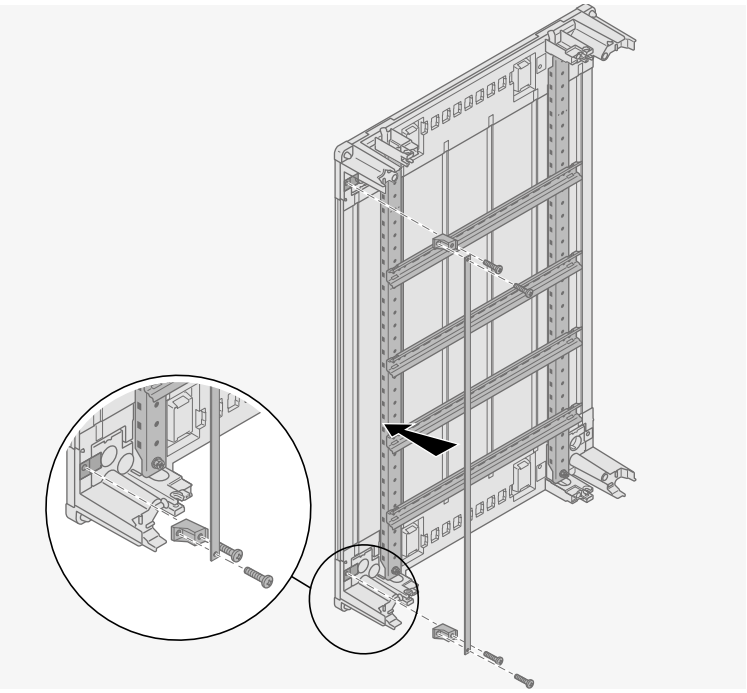


Multi-profile screw

MOUNTING THE 12X2 MM FLAT BAR CAT.NO 0 048 19 USING MOUNTING BRACKETS CAT.NO 1SFI



Example of horizontal mounting



Example of vertical mounting

VX³ vertical distribution system
► p. 26



Equipotential bonding

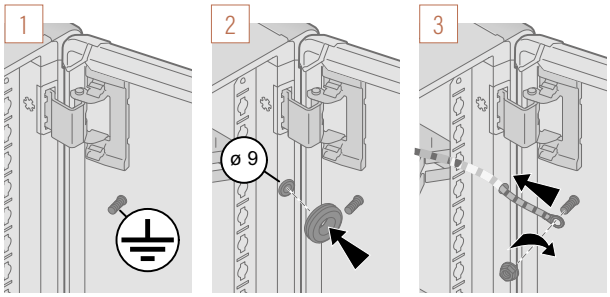
OF THE CHASSIS

It is possible to connect the cabinet chassis to earth via the terminal block.

OF THE DOOR

If a measuring device or a voltage Control and Signalling Auxiliary
with U > 50 V is installed on the door, the door must be connected to earth.

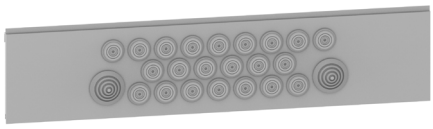
1. The cabinet frame must be drilled to accommodate the bonding conductor.
2. Insert the supplied Ø9 mm grommet with the door.
3. Connect the protective conductor.



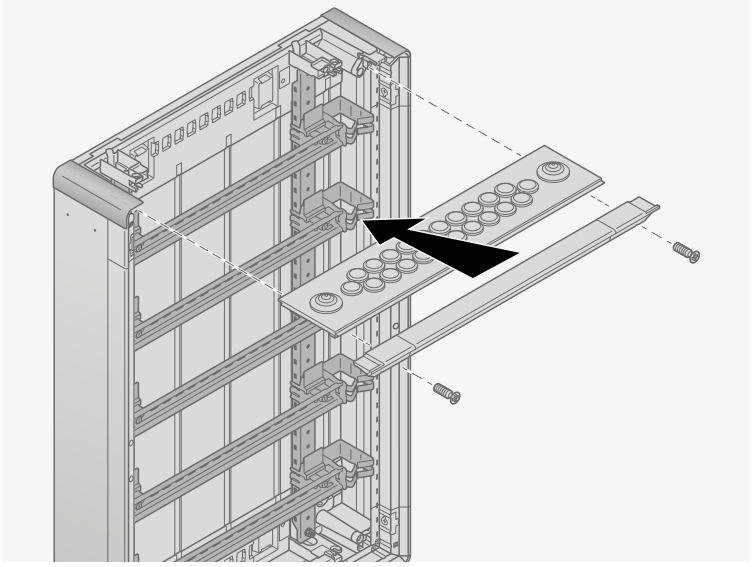
Standard reminder: the relevant door must be marked with an electrical hazard warning label.

Cable entry and fastening from the top/bottom of the cabinet

REPLACEMENT OF THE TOP/BOTTOM PANEL WITH A CABLE ENTRY PLATE WITH GROMMETS, CAT.NO 1PEP24



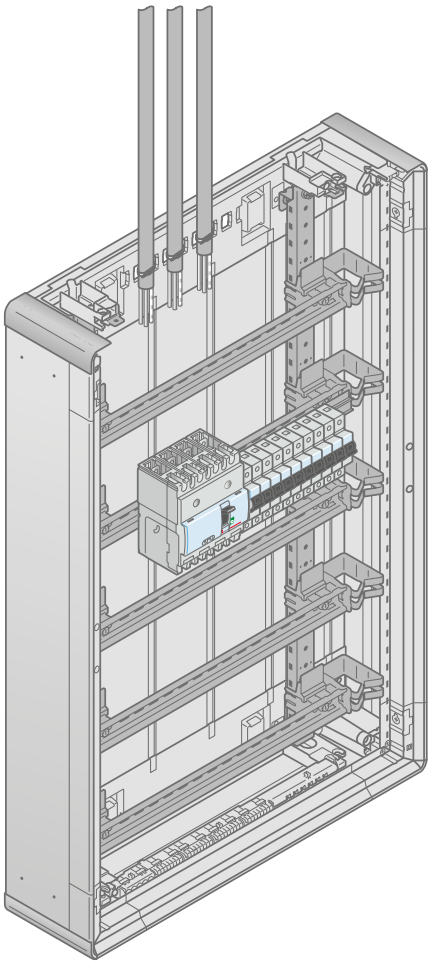
The plate Cat.No 1PEP24, equipped with grommets for cable entries, can be installed in place of a top or bottom panel.
It consists of:
- 2 end caps Ø4 mm to Ø32 mm,
- 22 end caps Ø4 mm to Ø20 mm.



Multi-profile screw

1. Remove the 2 mounting screws from the top or bottom panel of the cabinet.
2. Replace the panel with a cable entry plate, reusing the front section of the original panel.
3. Use the original screws to secure the assembly.

CABLE FASTENING





The cable entry points are pre-cut; simply break through the knockouts.

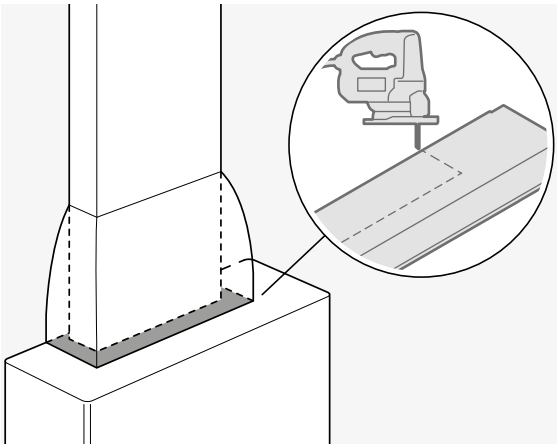


The cables can then be secured to the back of the cabinet using Colson or Colring cable ties.

CUT-OUT FOR TRUNKING/CABINET FINISHING END CAP CAT.NO 0 300 95

The finishing end cap Cat.No 0 300 95 improves the junction between the trunking 65 x 250 and the cabinet.
The top and bottom panels of the cabinet can be cut to allow cable entry.





The panels can be easily cut with a jigsaw.

+

Cable fastening using a crossbar

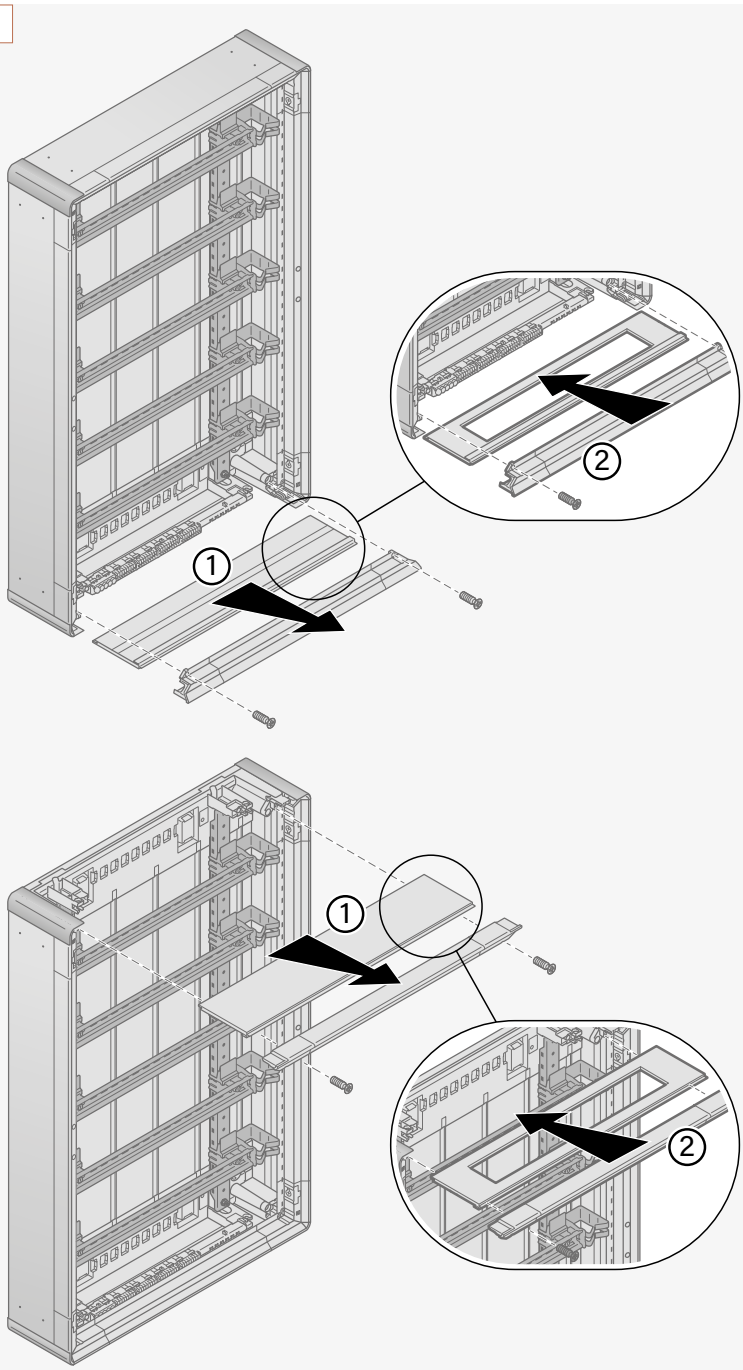
► p. 21

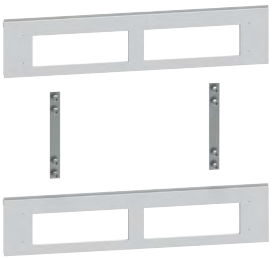


Cabinet coupling

VERTICAL COUPLING USING CAT.NO 1KJPV

1

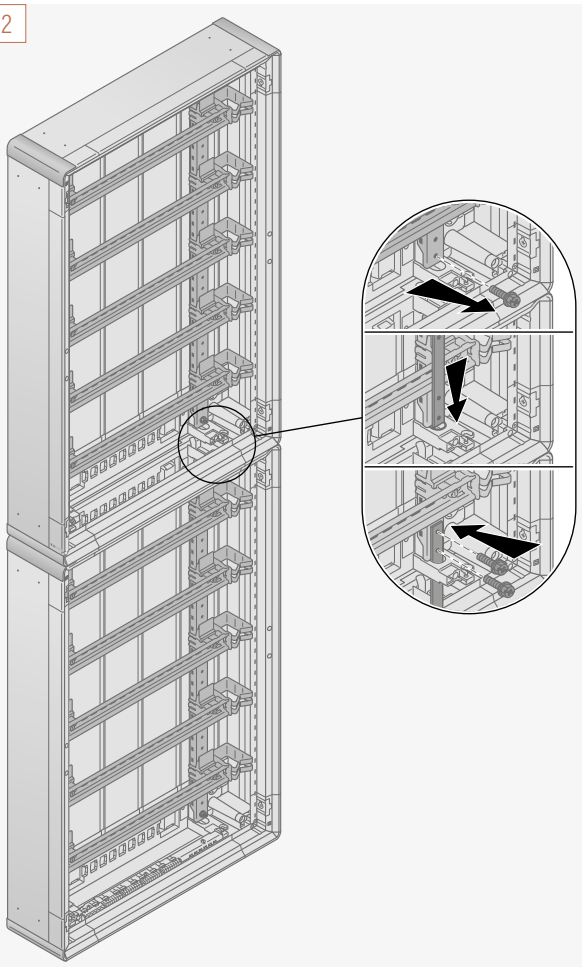




Multi-profile screw

The coupling kit includes:
- 2 internal reinforcement bars
- 2 pre-cut panels

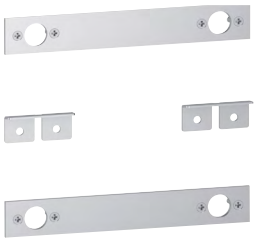
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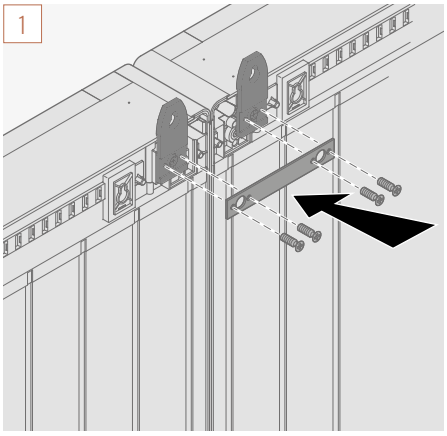
1. Remove the top and bottom panels from both cabinets to be coupled, and install the pre-cut panels in their place.
2. On the upper cabinet, remove the screws at the bottom of the cabinet from the functional uprights. Perform the opposite operation on the lower cabinet. Insert the reinforcement bars into the dedicated slots. Secure the reinforcement bars using the 2 screws provided, on both sides of the upper and lower cabinets.

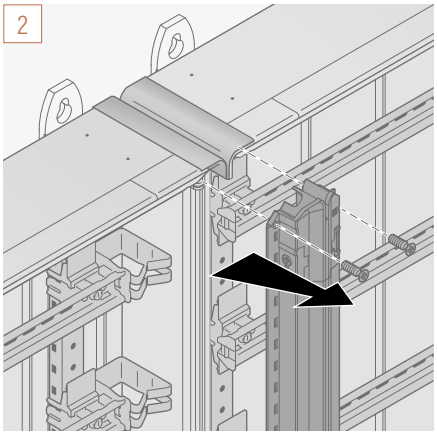
HORIZONTAL COUPLING USING CAT.NO 1KJPL

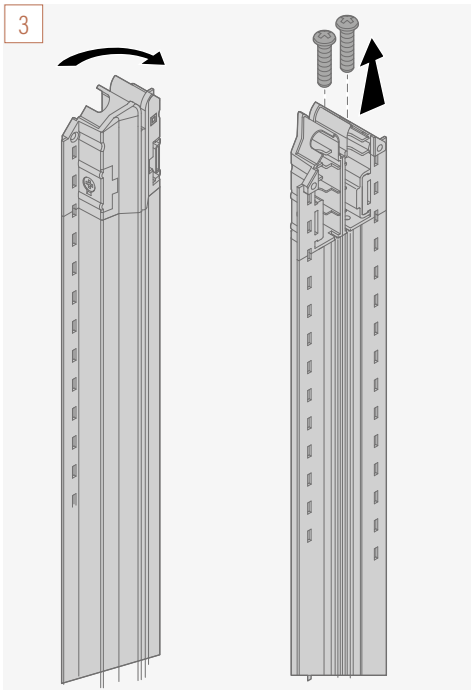
⚠ Horizontal coupling requires the wall-mounting kit Cat.No 1FMP (p. 49)

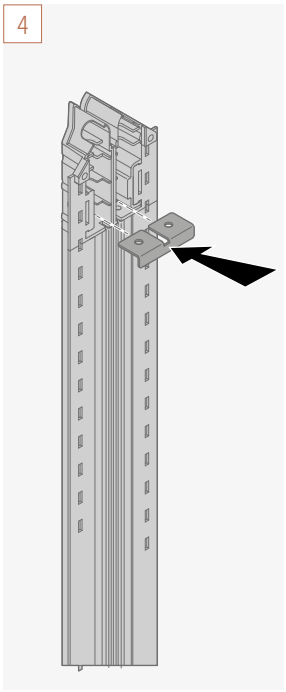


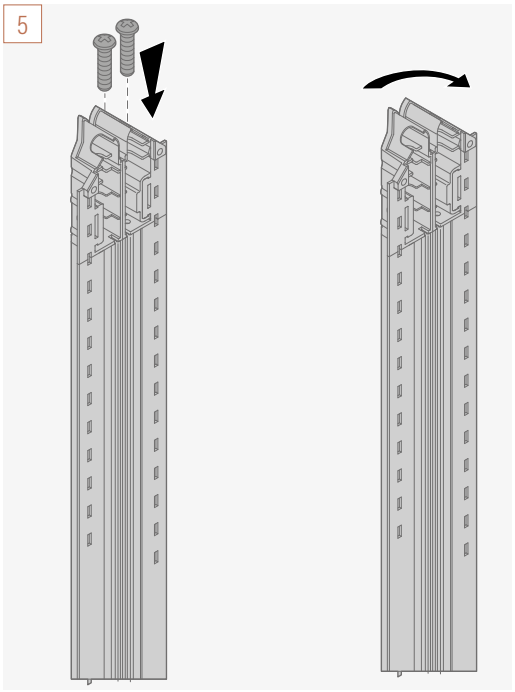
Multi-profile screw

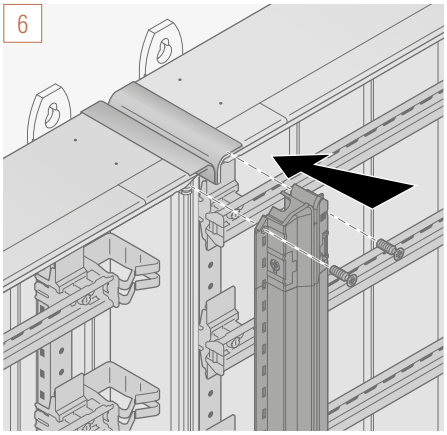






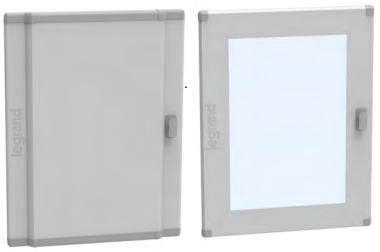






1. Secure the reinforcement bar to the rear of both cabinets (top and bottom) using the wall-mounting brackets Cat.No 1FMP.
2. Remove the vertical uprights fixed with 2 screws (top and bottom).
3. Flip the vertical uprights and remove the 2 screws located at the bottom of the uprights.
4. Position the fixing bracket included in the coupling kit.
5. Reinstall the previously removed screws and return the vertical uprights to their original orientation.
6. Reattach the vertical uprights to both cabinets using the previously removed screws.

Door installation



The doors are reversible and can be installed on either the left or right hand side of the cabinet.
Hinges and door release locations are provided on both sides of the cabinet.
The door opening direction determines the hinge mounting side.

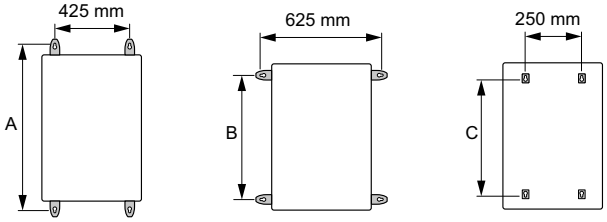
- Cabinets with a height ≤ 900 mm are supplied with: 2 hinges, 1 door release, 2 pins, and the necessary screws.
- Cabinets with a height ≥ 1050 mm are supplied with: 4 hinges, 2 mounting brackets, 2 pins, and the necessary screws.

The installation steps are identical to those for the metal cabinet p. 30 or the flush-mounted cabinet p. 59

Cabinet mounting

2 TYPES OF MOUNTING ARE POSSIBLE

EXTERNAL MOUNTING | INTERNAL MOUNTING



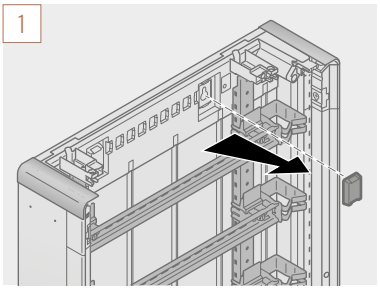
Cabinet height (mm)	Cat.Nos		A (mm)	B (mm)	C (mm)
450	1CO2R24SPL	-	500	305	343
600	1CO3R24SPL	-	650	455	493
750	1CO4R24SPL	-	800	605	643
900	1CO5R24SPL	1CO3ER24SPL	950	755	793
1050	1CO6R24SPL	1CO4ER24SPL	1100	905	943
1200	1CO7R24SPL	1CO5ER24SPL	1250	1055	1093
1350	1CO8R24SPL	1CO6ER24SPL	1400	1205	1243

Mounting in case of coupling: use the sides from the table above that apply to each cabinet, and duplicate them.

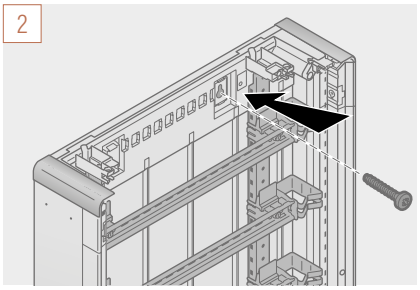
INTERNAL MOUNTING OF THE CABINET

The XL³ HP 160 cabinet is equipped with insulating screw covers for internal mounting.
Using these covers ensures compliance with Class II insulation requirements.

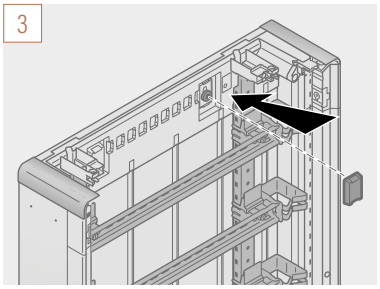
1

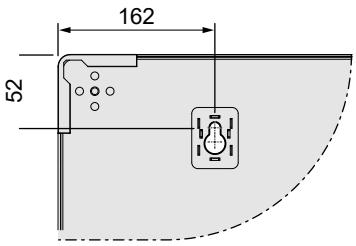


2

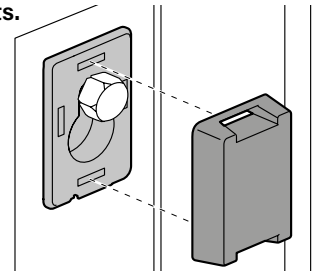


3





The screw covers allow for the mounting and removal of the cabinets.



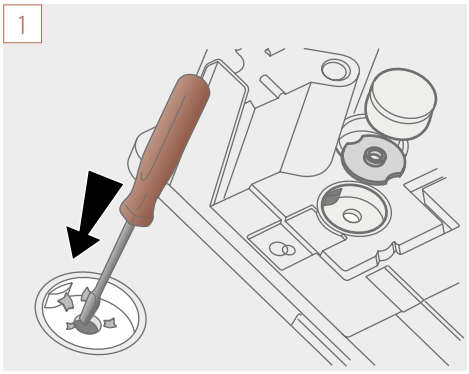
1. Remove the screw covers.
2. Secure the cabinet using 4 screws Ø 6 mm and washers (not supplied)
3. Reinstall the screw covers.

EXTERNAL MOUNTING OF THE CABINET USING THE FIXING BRACKETS CAT.NO 1FMP

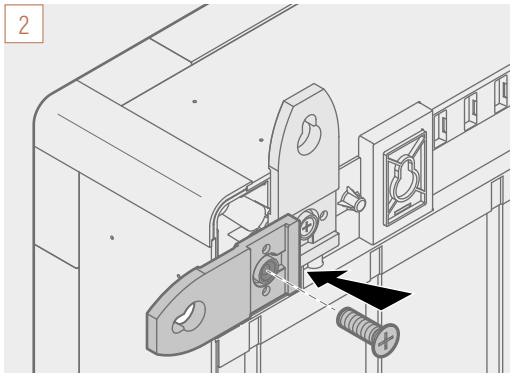
The wall-mounting brackets Cat.No 1FMP can be installed either horizontally or vertically on the rear side of the cabinet. All necessary mounting hardware is supplied.



1

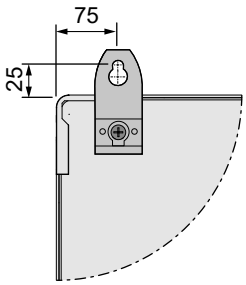


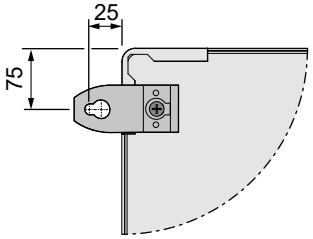
2



1. Knock out the holes corresponding to the bracket positions and install the special nut and plastic cover, then screw the bracket from the rear of the cabinet.
2. Secure the brackets vertically or horizontally using the supplied screws.

⚠ Cannot be used for lifting the cabinet.



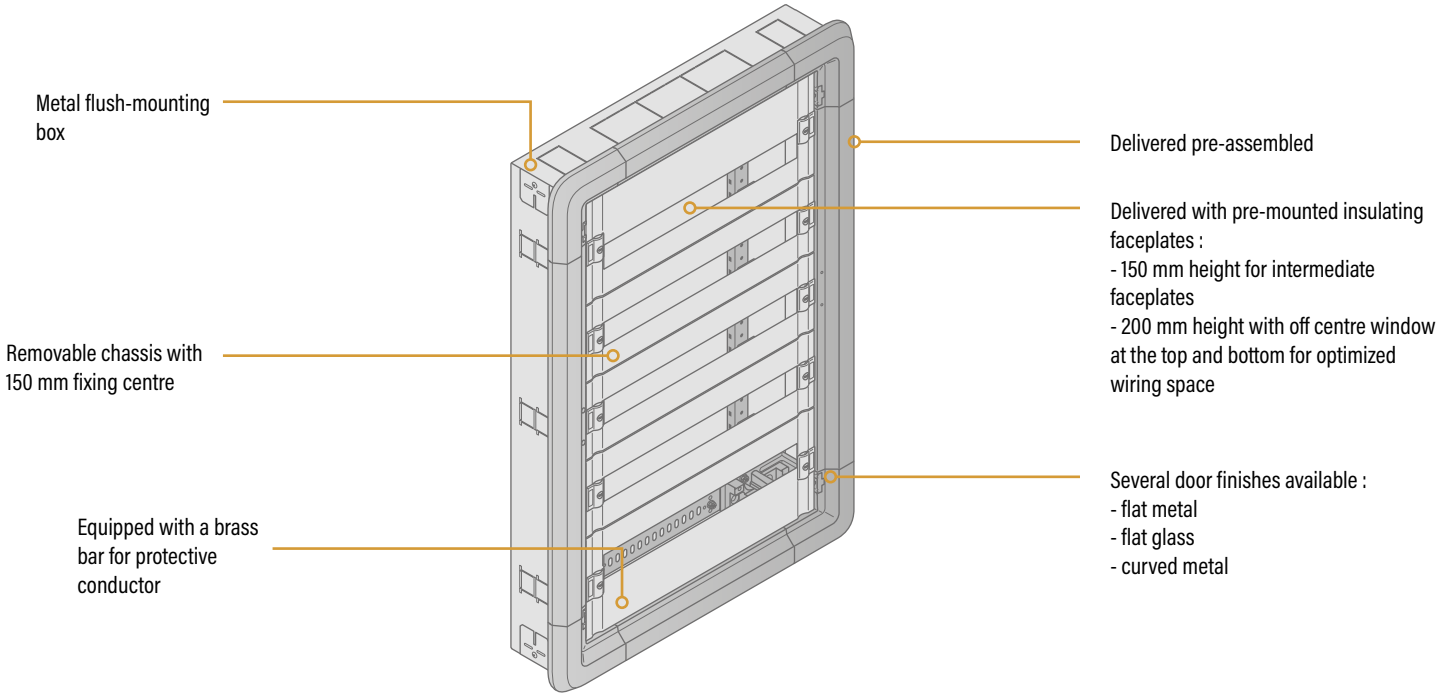


Faceplate installation ► p. 59
IP 43 ► p. 33

FLUSH-MOUNTED CABINETS



PRESENTATION



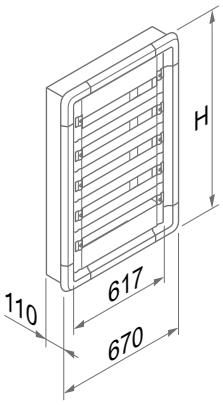
The XL³ HP 160 flush-mounted cabinets are optimized in size for power distribution up to 160 A. They can be installed in masonry walls or drywall partitions.

They are available in :

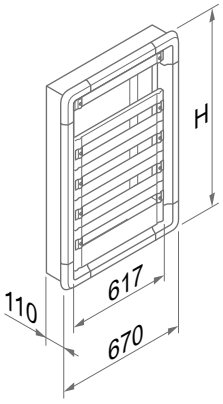
- Cabinets equipped with 2 to 8 rows, capable of accommodating DNX³ and DX³ modular circuit breakers, DPX³ 160, modular distribution blocks, etc., without additional accessories.
- Cabinets equipped with 3 to 6 rows with an empty space for additional equipment.

KEY POINTS

- Plastic insulating cabinet with metal flush-mounting box
- RAL 7035
- Rated impulse withstand voltage (Uimp): up to 8 kV
- Short-circuit withstand current (Icc): 25 kA
- IP30 - IK04 with faceplate and without door
- IP40 - IK08 with faceplate and with door
- Complies with IEC 61439-2 and IEC 61439-3 standards
- Fire resistance according to IEC 60695-2-11: 750°C
- Suitable for installations in public-access buildings and workplaces

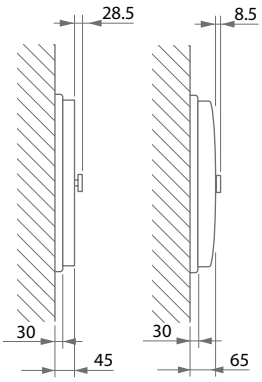


DISTRIBUTION CABINETS							
Number of rows	2	3	4	5	6	7	8
Total numbers of modules	48	72	96	120	144	168	192
External height (mm)	545	695	845	995	1145	1295	1445
Width (with frame) x Depth (mm)	670 x 110						
Cat.Nos	1CO2R24IPL	1CO3R24IPL	1CO4R24IPL	1CO5R24IPL	1CO6R24IPL	1CO7R24IPL	1CO8R24IPL



CABINETS WITH FREE SPACE (300 MM)							
Number of rows	-	-	-	3	4	5	6
Total numbers of modules	-	-	-	72 + 300 mm	96 + 300 mm	120 + 300 mm	144 + 300 mm
External height (mm)	-	-	-	995	1145	1295	1445
Width (with frame) x Depth (mm)	-	-	-	670 x 110			
Cat.Nos	-	-	-	1CO3ER24IPL	1CO4ER24IPL	1CO5ER24IPL	1CO6ER24IPL

Flat door Curved door



DOORS							
Flat metal door	1PC2R24	1PC3R24	1PC4R24	1PC5R24	1PC6R24	1PC7R24	1PC8R24
Flat glazed door	1PV2R24	1PV3R24	1PV4R24	1PV5R24	1PV6R24	1PV7R24	1PV8R24
Curved metal door	1PD2R24	1PD3R24	1PD4R24	1PD5R24	1PD6R24	1PD7R24	1PD8R24

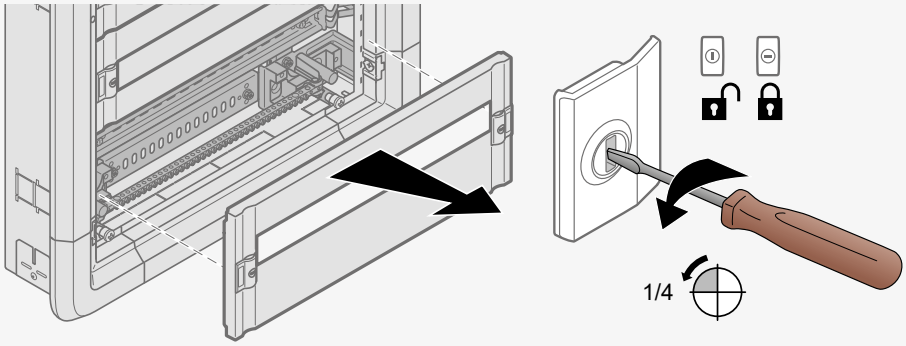
Technical datasheet available for more information on installation locations, product resistance, etc.
► Consult the online catalog at legrand.com

Technical datasheet

CABINET DISASSEMBLY

The flush-mounted cabinets are supplied pre-assembled.
They can be fully disassembled to provide easy access to the entire wiring volume.

REMOVE THE FACEPLATES



The faceplates are easy to handle thanks to the 1/4 turn fasteners.
To remove them, position the 1/4 turns vertically using a 5 mm flathead screwdriver (recommended).

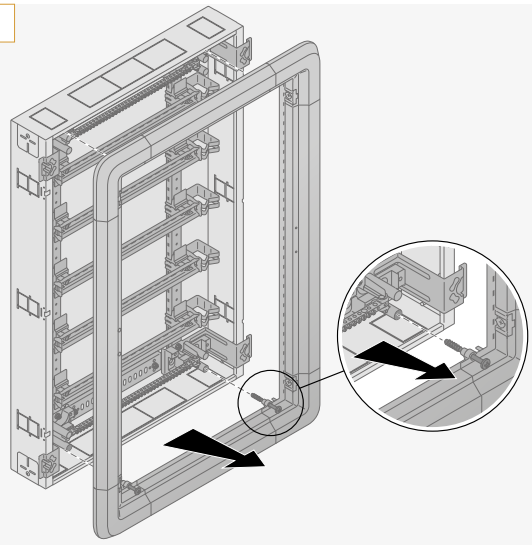
The faceplate is locked when the 1/4 turns are in the horizontal position.

Chassis removal

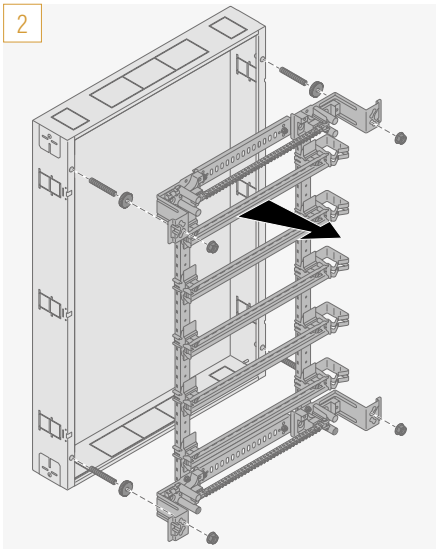
The chassis can be removed to freely install switching, protection, or measuring devices, ensuring maximum working comfort.

Multi-profile screw

1



2



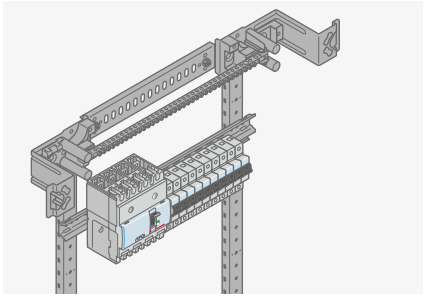
1. Remove the 4 frame retaining screws and take off the frame.
2. Remove the chassis retaining screws and take out the chassis.

The spacing between the chassis rails is 150 mm.

The chassis is delivered pre-assembled with rails in the upper position and rail supports for the installation of modular devices.

DIN rail mounting

The mounting options and steps are identical to those of the insulating cabinets.



Modular device installation ► p. 13

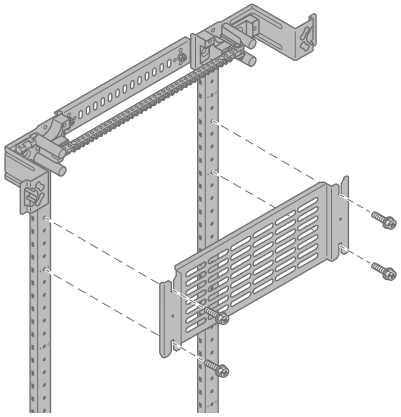
DPX³ 160 installation (in this case, it is recommended to use an cabinet with free space) ► p. 40

Installation of modular devices and DPX³ 160 on the same row ► p. 14

Mounting of equipment on a perforated mounting plate

It is possible to mount equipment on the universal perforated plate, height 150 mm, Cat.No 1PL015UA24, either by removing a rail from the chassis or by using the free space available in equipped cabinets.

Multi-profile screw



Fix the universal perforated plate directly onto the vertical uprights using the supplied screws.

Wiring routing
► p. 19





INSTALLATION OF EQUIPMENT

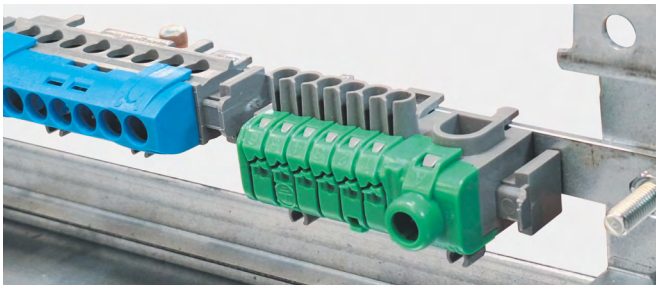
Distribution terminal blocks

The XL³ HP 160 flush-mounted cabinet is supplied with a brass bar mounted on a support that can accommodate a second bar. It is also possible to add an insulating terminal block support, Cat.No 1SFI.

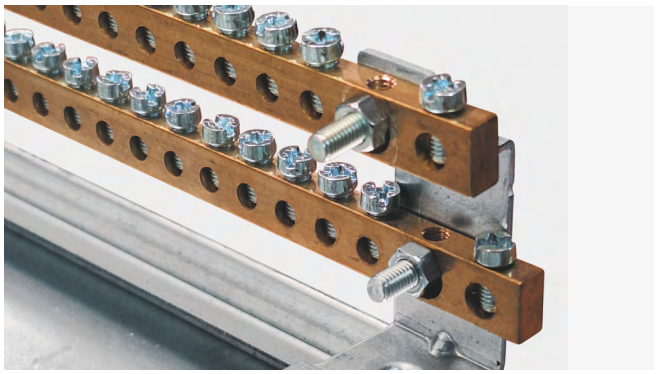
It is possible to replace the supplied brass bar or to add a second bar on the supplied support with :
- a flat bar 12 x 2, Cat.No 0 048 19, to be cut to length
- a second brass bar, Cat.No 1BPE24

i

As the cabinet is reversible, the bar can be positioned at the top and/or at the bottom.



It is possible to add or replace a flat bar 12 x 2 mm, Cat.No 0 048 19, to be cut to length according to the cabinet, on the existing terminal block support.



It is possible to add a second brass bar, Cat.No 1BPE24, on the existing terminal block support. The tightening torque for the screws will be 2 Nm.

The second brass bar is no longer accessible after the top or bottom panel has been installed.

+

VX³ vertical distribution system
► p. 26



Equipotential bonding

OF THE CHASSIS

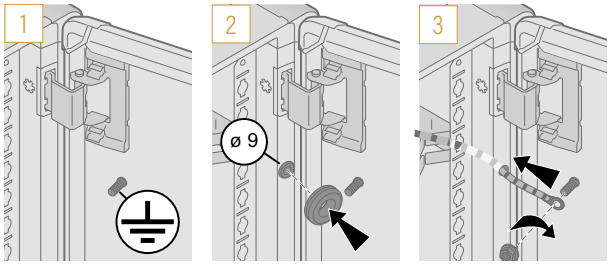
It is not necessary to connect the cabinet chassis to earth; grounding is automatic.

OF THE DOOR

If a measuring device or a Control and Signalling Auxiliary with a voltage U > 50 V is installed on the door, the door must be connected to earth.

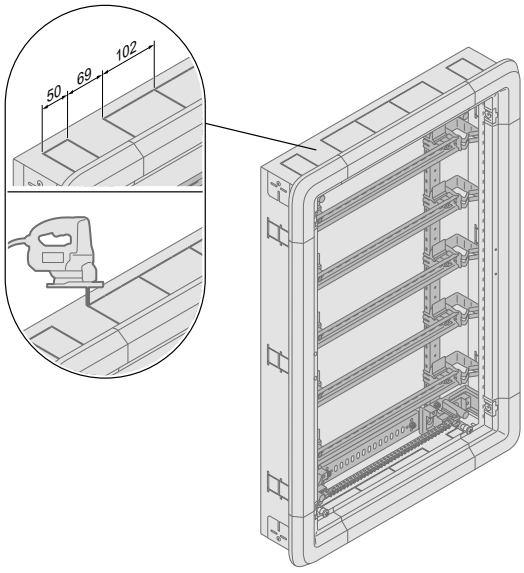
Reminder – standard: the door concerned must be marked with an electrical hazard warning label.

1. The cabinet frame must be drilled to accommodate the bonding conductor.
2. Insert the supplied Ø9 mm grommet with the door.
3. Connect the equipotential bonding conductor, Cat.No 0CMR.



Cabinet installation

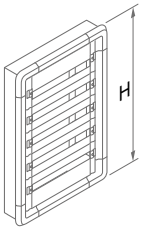
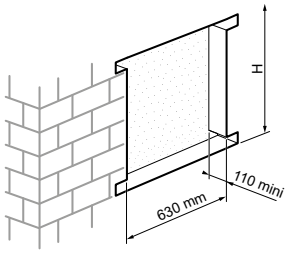
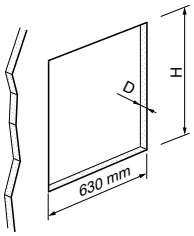
Before installing the cabinets, cut out the cable entry areas in the cable trays.



1. Using a jigsaw, cut out the necessary space for cable entry.
2. Repeat the operation on the upper and lower sides.

File the edges to reduce the risk of injury and prevent cable damage.
It is also possible to use the grommet Cat.No 0GA10 on the cutouts.

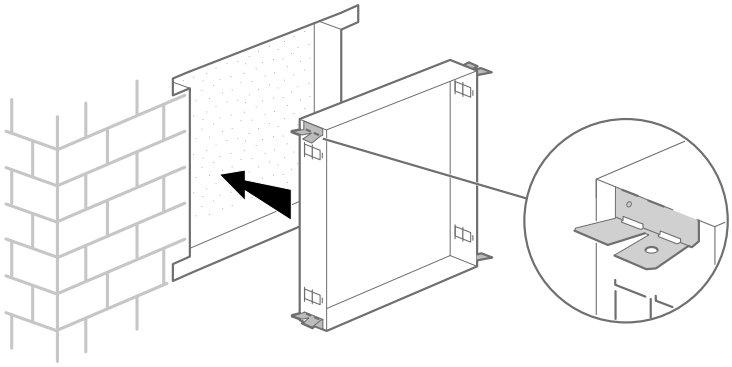
The cabinets can be installed in masonry or drywall, respecting the following flush-mounting depths :

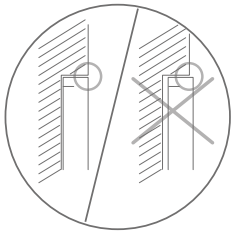
		HEIGHT	DEPTH	
		External height of cabinet (mm)	Flush mounting in masonry	Flush mounting in drywall with 1KCE kit (see p. 56, to be ordered separately)
Cat.Nos				
1C02R24IPL	-	545		
1C03R24IPL	-	695		
1C04R24IPL	-	845		
1C05R24IPL	1C03ER24IPL	995	110 mm minimum	10 to 72 mm
1C06R24IPL	1C04ER24IPL	1145		
1C07R24IPL	1C05ER24IPL	1295		
1C08R24IPL	1C06ER24IPL	1445		

Cabinet installation (continued)

FLUSH MOUNTING IN MASONRY

For flush mounting in masonry, the wall recess must have a minimum depth of 110 mm and a width sufficient to allow the passage of the fixing lugs, in addition to the width of the cabinet (630 mm).



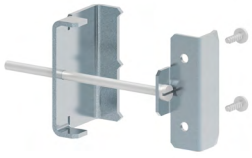


⚠ Ensure the cabinet is flush with the wall before sealing it in place.

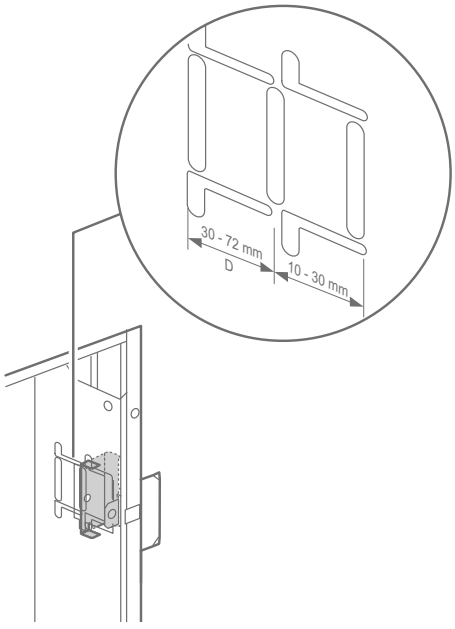
1. Lift the fixing lugs
2. Insert the cabinet into the reserved space

The cabinet can be sealed into the wall using plaster, adhesive mortar, or cement, depending on the specific case.

FLUSH MOUNTING IN DRYWALL WITH CAT.NO 1KCE



The 1KCE kit is required for installation in drywall. The opening in the partition must have a width of 630 mm and a height determined by the cabinet.



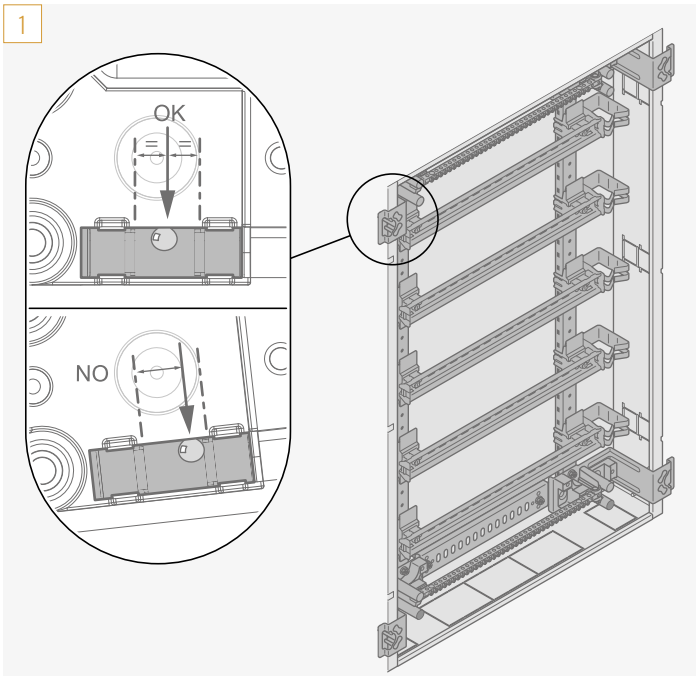
The pre-cut openings allow the fixing bracket to be positioned at various locations, depending on the partition depth (min. 10 mm / max. 72 mm).

Use cutting pliers, then file the edges of the opening to prevent injury risks.

Frame assembly

This step concerns the frame assembly if it has been removed from the cabinet for equipment installation.

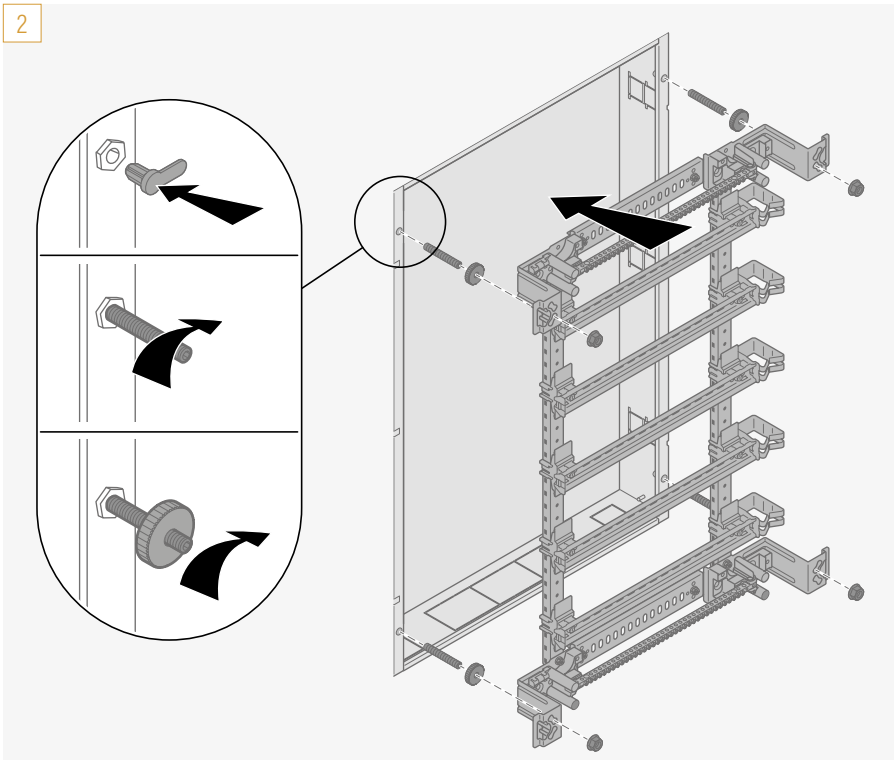
1



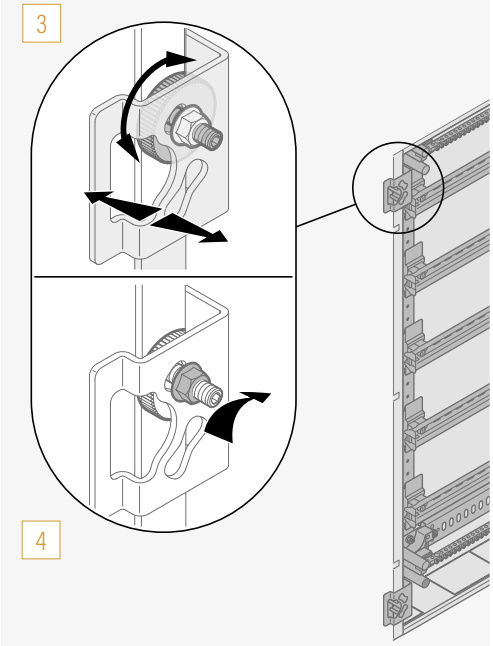
1. Before assembling the frame, check that it is properly aligned with the cabinet.

A bubble level is integrated to allow you to instantly check the installation.

2



3

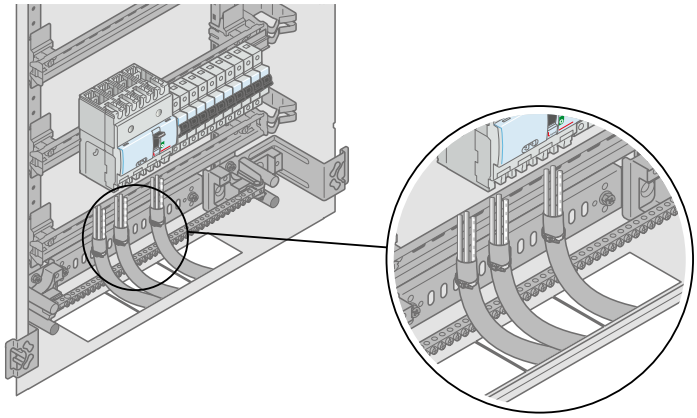


4

2. 3 steps for frame assembly: remove the knockout, screw in the threaded rod, and tighten the adjustment knob.
3. Position and adjust the frame using the knobs, which allow depth adjustment (+/- 5 mm to compensate for any wall irregularities) and proper alignment of the frame.
4. Secure the entire assembly using a nut.

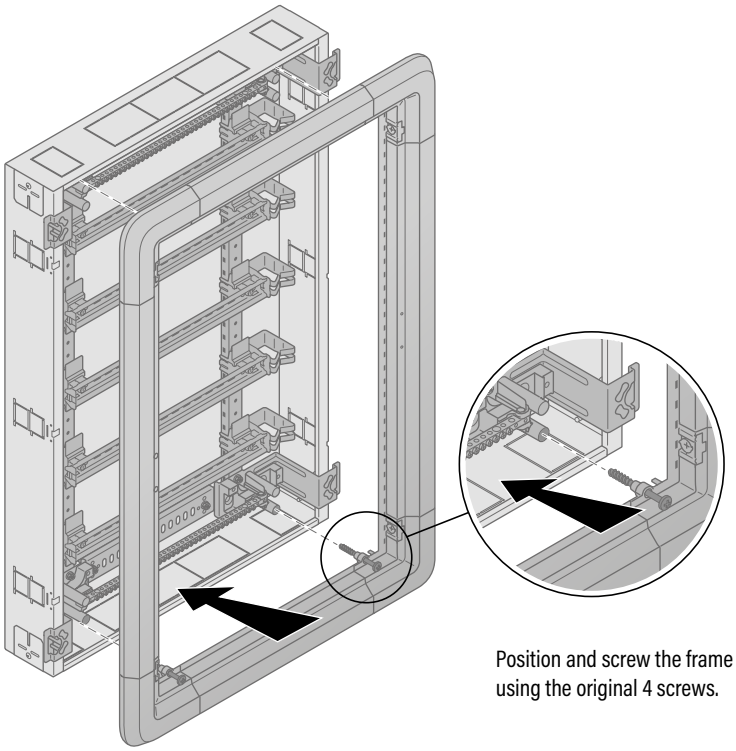
Cable fastening

The cabinet is equipped with a cable fastening rail.
It allows cables to be secured using Colson or Colring cable ties.



Frame installation

Once all operations inside the cabinet have been completed, the frame can be reinstalled. The frame will serve as a support for mounting the faceplates.

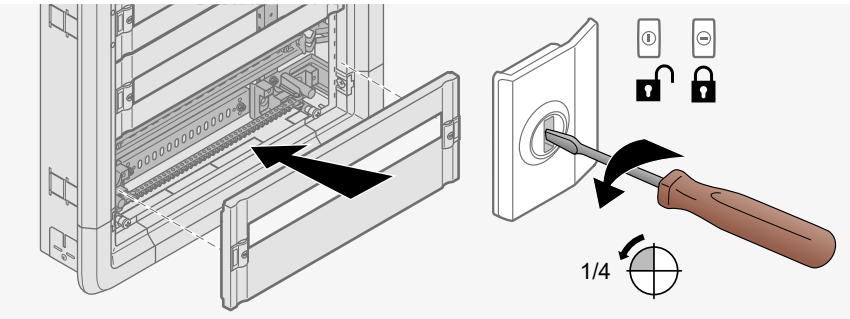


Position and screw the frame into the mounting studs using the original 4 screws.

Faceplate installation

Once all operations inside the cabinet have been completed, the insulating faceplates must be installed onto the cabinet frame. This ensures an IP30 protection rating. All faceplates feature the same 1/4 turn locking system and are sealable.

Reinstall the frame before proceeding to the front panel installation step.



IIt is possible to add 24-module label holders, Cat.No 3 397 55, onto the front panels. They are supplied with sets of labels and provide additional identification alongside the label holders of modular devices.

1. Position the front panel onto the cabinet.
2. Lock the panel by turning the lock to the left using a 5 mm flat screwdriver (recommended).
3. Once locked, the panel can be sealed.

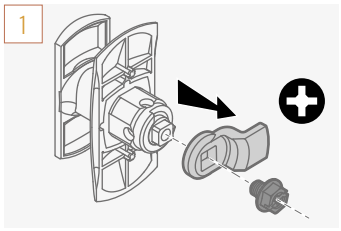
Doors

BARREL INSTALLATION ON THE HANDLE (OPTIONAL)

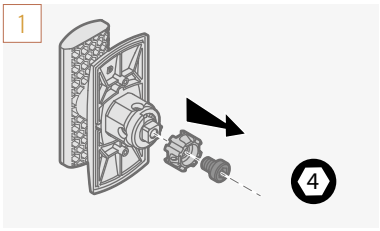
The doors are delivered with a handle to be assembled and can be fitted with interchangeable lock barrels.

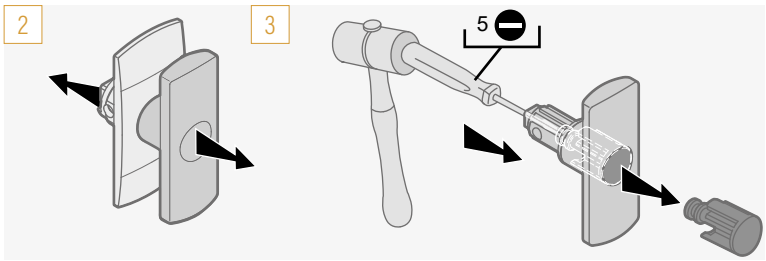
- Step 1: Handle Disassembly

Case 1 : door height ≤ 900 mm



Case 2 : door height ≥ 1050 mm





It will be possible to install the lock barrels once the handle has been mounted on the door.

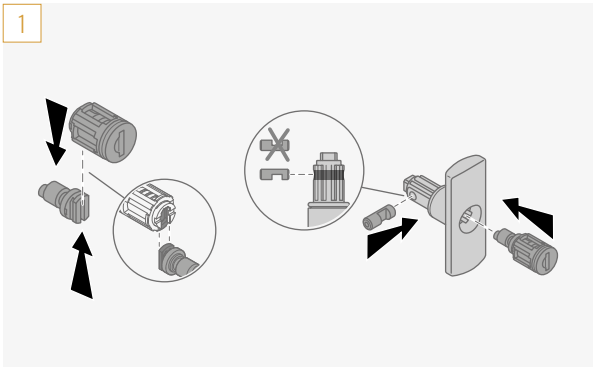
1. Disassemble the handle support.
2. Separate the components (handle and support).
3. Remove the handle blanking plug.

Doors (continued)

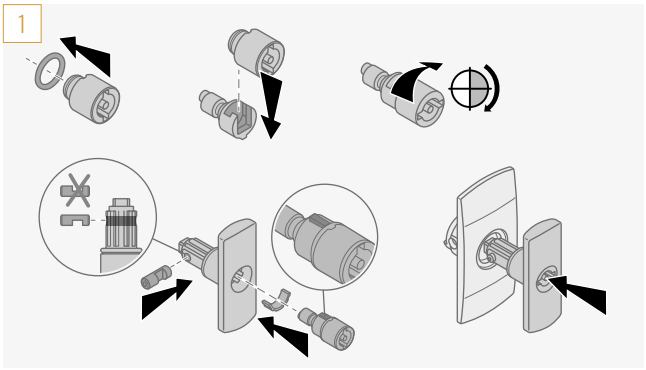
BARREL INSTALLATION ON THE HANDLE (OPTIONAL) – CONTINUED

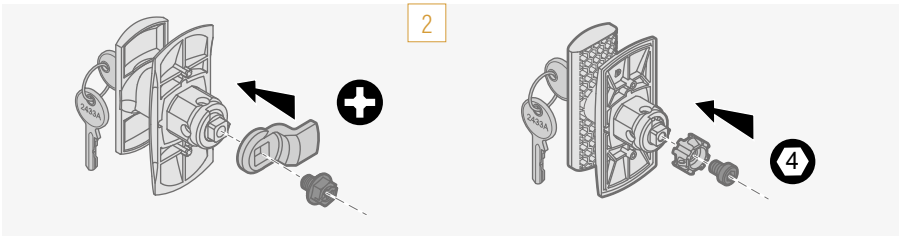
- Step 2: Barrel Installation

Case 1: Keyed Lock Barrel Cat.Nos. 2CLKT405 / 2CLKT455 / 2CLKT1242E / 2CLKT2433A



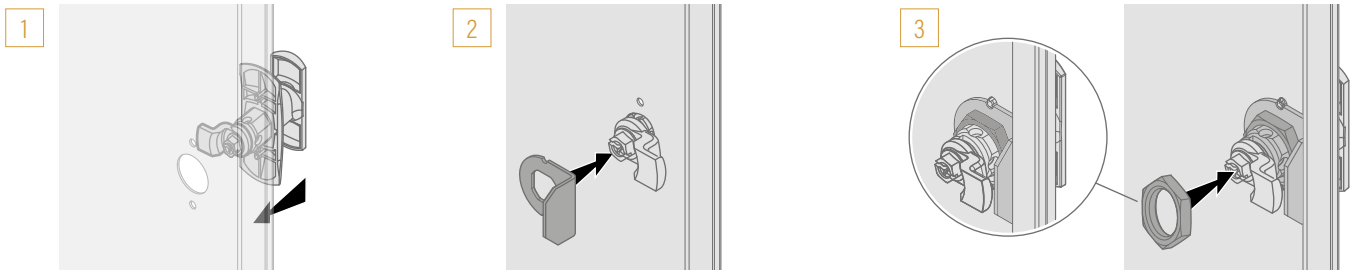
Case 2 : Double-bar Lock Barrel Cat.No 2CLKTDB





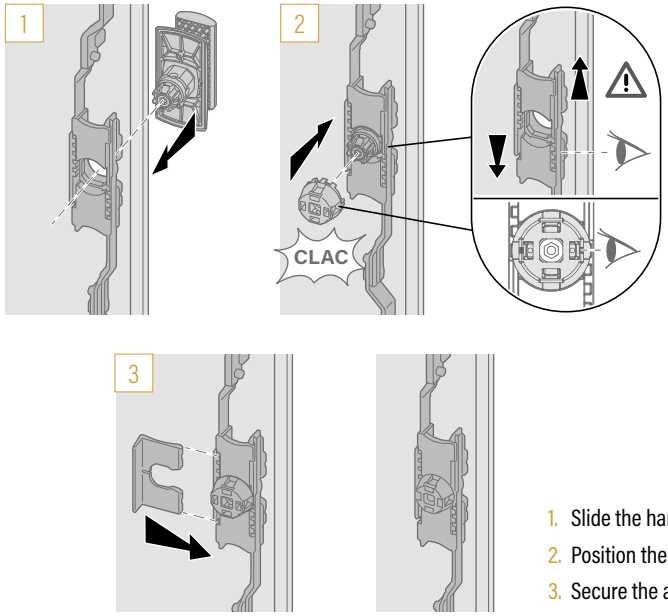
1. Clip the adapter onto the rear side of the lock barrel.
   Correctly orient the locking accessory and insert the assembly into the front section of the handle.
   Join the handle support with the front section.
2. Secure the entire assembly from the rear side of the handle using a nut (varies depending on the handle type).

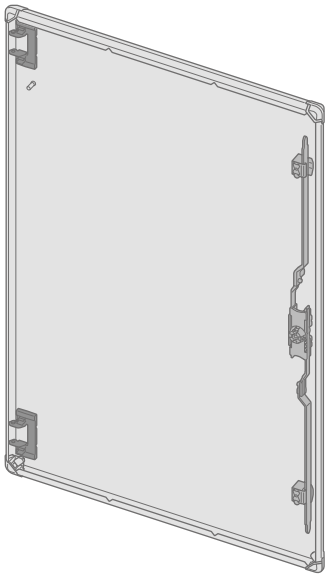
HANDLE INSTALLATION ON DOOR ≤ 900 MM



1. Slide the handle onto the outer face of the door.
2. Position the metal bracket on the inner face of the door.
3. Secure the assembly using the nut.

HANDLE INSTALLATION ON DOOR ≥ 1050 MM



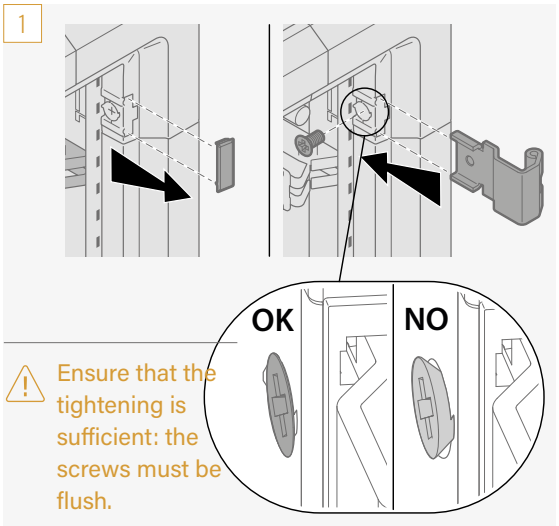


1. Slide the handle onto the external side of the door.
2. Position the metal bracket on the internal side of the door.
3. Secure the assembly using the nut.

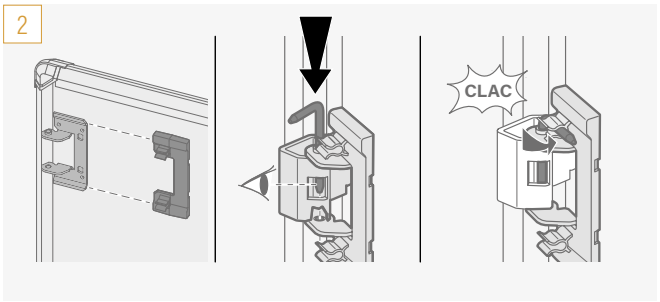
DOOR INSTALLATION ON THE CABINET

The doors are reversible and can be installed on either the left or right side of the cabinet. Mounting points for both the hinges and the door release are provided on both sides of the cabinet. The installation steps are identical regardless of the door type (metal or glass).

Cabinets with a height ≤ 900 mm are delivered with 2 hinges and 1 door release.
Cabinets with a height ≥ 1050 mm are delivered with 4 hinges.
The door opening direction determines the hinge mounting side.



⚠ Ensure that the tightening is sufficient: the screws must be flush.



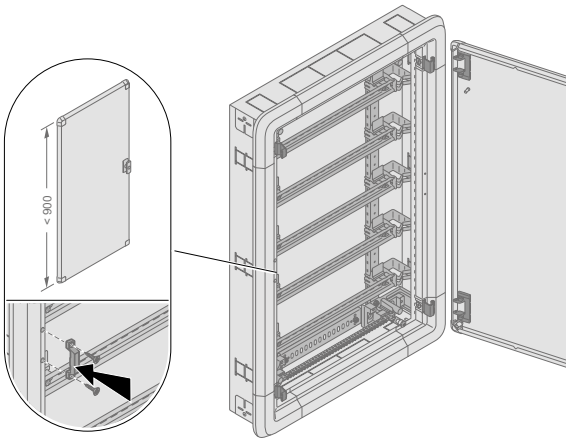
1. Remove the blanking plugs from the cabinet and fix the hinges in place using the supplied screws.
2. Slide the connecting piece inside the door, align it with the hinges, and lock the assembly using the provided pin.

Door (continued)

DOOR INSTALLATION ON THE CABINET

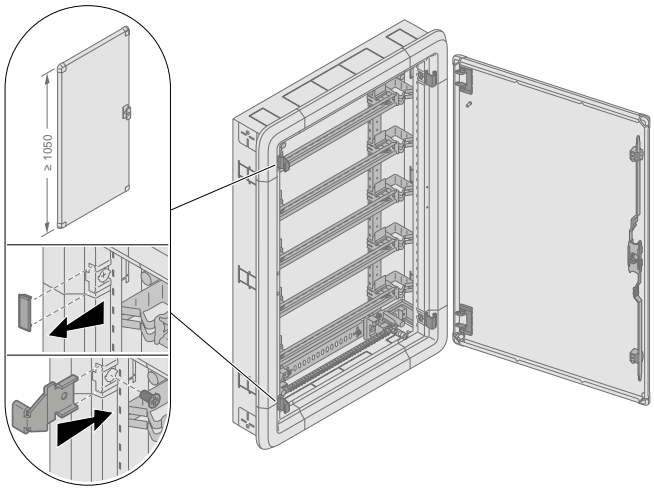
The strike plate installation varies depending on the door height.

- Case 1 : height door ≤ 900 mm



1. Fix the strike plate to the frame using the 2 supplied screws.

- Case 2 : height door ≥ 1050 mm



1. Remove the 2 blanking plugs from the cabinet (on the side opposite the hinges).
2. Fix the two mounting tabs to the frame using the supplied fixing screws.

Installation of auxiliary components on the door and faceplates

► p. 33



NOTES

NOTES

NOTES







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