WORKSHOP SPECIFICATIONS

ENCLOSURES

XL³ 4000 and XL³ 6300



GLOBAL SPECIALIST IN ELECTRICAL
AND DIGITAL BUILDING INFRASTRUCTURES

legrand®

With its extensive ranges, the Legrand offer meets your quality standards and provides real freedom and simplicity of installation together with acknowledged reliability.
The XL^3 4000 and XL^3 6300 enclosures are available in various widths, depths and heights so that it is easy for you to create the configuration you want. Enclosures can be joined side by side or back to back, and each panel can be replaced by a door to define the composition most suited to your requirements. Both these enclosures are designed so that they are fully modular, with no restrictions.
Likewise, freedom of distribution has received particular attention: "standard" distribution (copper or aluminium busbars) or "optimised" distribution (aluminium busbars) which not only make for easy assembly, but also enable you to save time and space when installing them. The optimised system, with its patented connection, will ensure your maintenance and extension operations are safe and take less time. It will also be possible to meet the requirements of the various increased safety levels using these enclosures. This freedom thus enables different types of distribution to be used together in the same assembly.
These enclosures fit in perfectly with the whole range of XL^3 enclosures, both in terms of appearance and installation method.

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THE XL³ 4000 AND XL³ 6300 RANGES



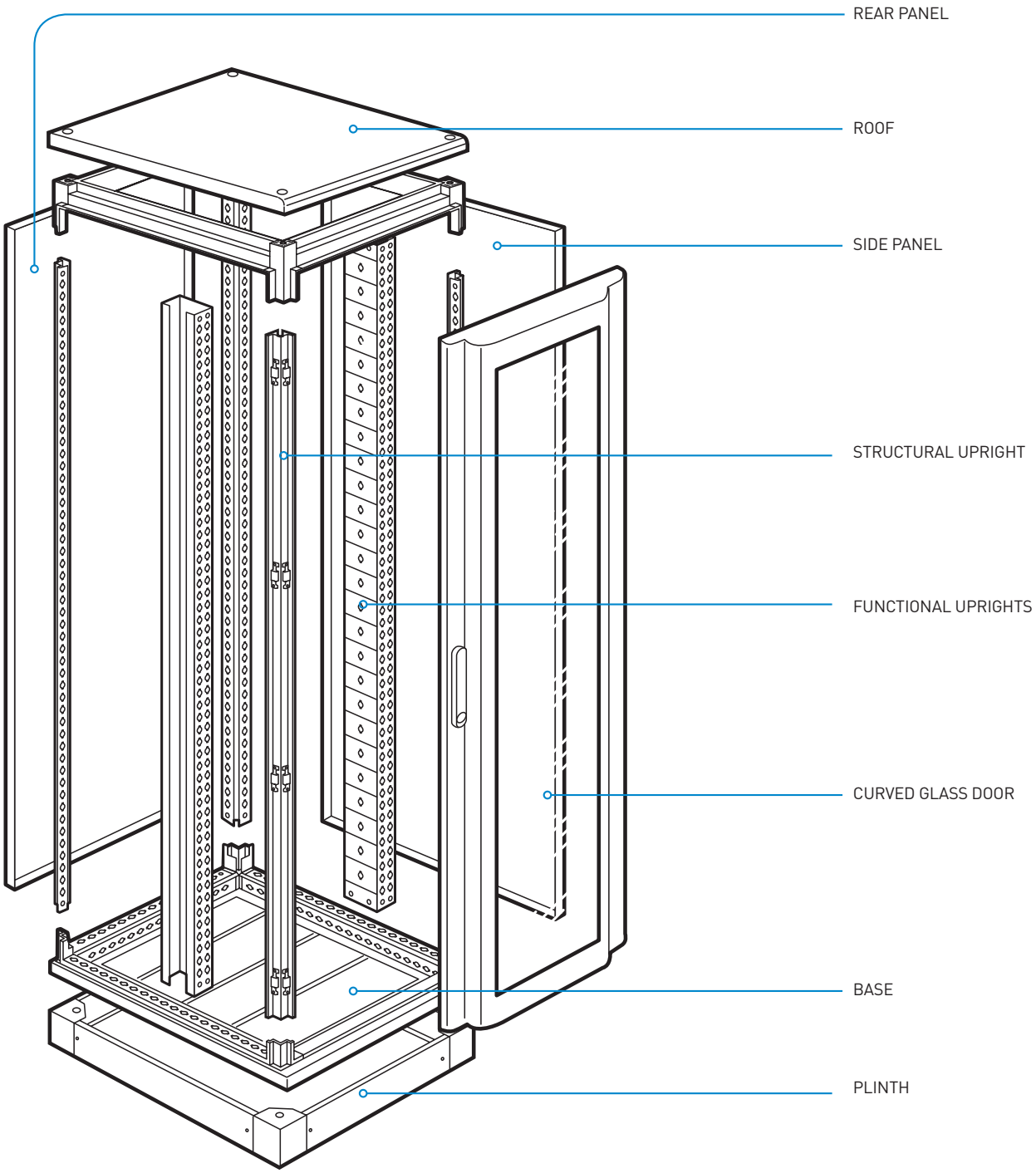
Assembly consisting of two enclosures and an XL³ 4000 cable sleeve



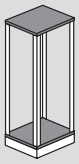
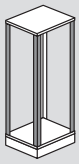
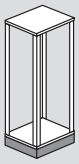
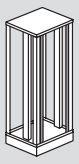
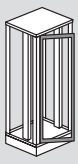
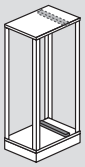
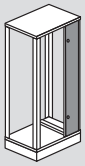
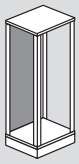
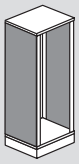
XL³ 6300 enclosure

GENERAL CHARACTERISTICS

- IP 30/IK 07
- IP 55/IK 08 with door and seal for joining (XL³ 4000 only)
- Fire resistance: 750°/30 s
- Short-time withstand current Icw: up to 110 kA – 1 s (with 4000 A busbar)
- Rated peak withstand current Ipk: 240 kÂ
- 2 heights:
  - 2000 mm (XL³ 4000 only)
  - 2200 mm
- Take devices up to 6300 A
- 3 types of faceplate (¼ turn sealable, screw-mounting with or without hinges, with hinges and locks)
- Choice of distribution: standard or optimised, copper or aluminium
- Connection with Zucchini prefabricated busbars
- Internal or external cable sleeve (XL³ 4000)
- Separation form: up to 4b
- Increased safety level: up to IS 333
- Colour: RAL 7035 (RAL 7004 for the plinths)
- Conform to standard IEC 61439-1


REAR PANEL
ROOF
SIDE PANEL
STRUCTURAL UPRIGHT
FUNCTIONAL UPRIGHTS
CURVED GLASS DOOR
BASE
PLINTH

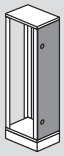
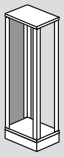
XL³ 4000 ENCLOSURES

ENCLOSURES		ROOF-BASE ASSEMBLY	STRUCTURAL UPRIGHTS	PLINTHS	FUNCTIONAL UPRIGHTS	FACEPLATE SUPPORTS		CROSSPIECES FOR INT. CABLE SLEEVES	FRONT COVERS FOR INT. CABLE SLEEVES	REAR PANELS	SIDE PANELS	
						FIXED	PIVOTING					
Width x depth (mm)	Height (mm)											
 725 x 475	2000	0 205 04	0 205 00	0 205 14	0 205 12	0 205 58	0 205 68	-	-	0 205 42	0 205 41	
	2200		0 208 50		0 208 52	0 208 55	-			0 208 58	0 208 57	
 725 x 725	2000	0 205 05	0 205 00	0 205 15	0 205 13	0 205 58	0 205 68	-	-	0 205 42	0 205 42	
	2200		0 208 50		0 208 53	0 208 55	-			0 208 58	0 208 58	
 725 x 975	2000	0 205 06	0 205 00	0 205 18	0 205 13	0 205 58	0 205 68	-	-	0 205 42	0 205 43	
	2200		0 208 50		0 208 53	0 208 55	-			0 208 58	0 208 59	
 975 x 475	2000	0 205 07	0 205 00	0 205 17	0 205 12	0 205 58	0 205 69	-	-	0 250 43	0 205 41	
	2200		0 208 50		0 208 52	0 208 55	-			0 208 59	0 208 57	
 (1) 975 x 475	2000	0 205 07	0 205 00	0 205 17	0 205 16	0 205 59	0 205 79	0 205 21	0 205 47	0 250 43	0 205 41	
	2200		0 208 50		0 208 54	0 208 56	-		0 208 66	0 208 59	0 208 57	
 975 x 725	2000	0 205 08	0 205 00	0 205 18	0 205 13	0 205 58	0 205 69	-	-	0 250 43	0 205 42	
	2200		0 208 50		0 208 53	0 208 55	-			0 208 59	0 208 58	
 (1) 975 x 725	2000	0 205 08	0 205 00	0 205 18	0 205 16	0 205 59	0 205 79	0 205 22	0 205 47	0 250 43	0 205 42	
	2200		0 208 50		0 208 54	0 208 56	-		0 208 66	0 208 59	0 208 58	
 975 x 975	2000	0 205 09	0 205 00	0 205 19	0 205 13	0 205 58	0 205 69	-	-	0 250 43	0 205 43	
	2200		0 208 50		0 208 53	0 208 55	-			0 208 59	0 208 59	
 (1) 975 x 975	2000	0 205 09	0 205 00	0 205 19	0 205 16	0 205 59	0 205 79	0 205 23	0 205 47	0 250 43	0 205 43	
	2200		0 208 50		0 208 54	0 208 56	-		0 208 66	0 208 59	0 208 59	

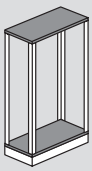
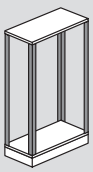
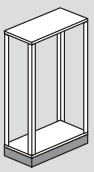
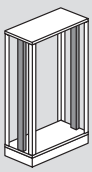
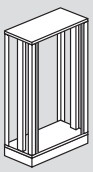
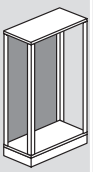
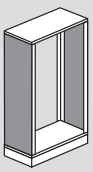
(1) With internal cable sleeve

DOORS				
	CURVED		FLAT	
	METAL	GLASS	METAL	GLASS
				
	0 205 54	0 205 64	0 205 74	0 205 84
	0 208 61	0 208 63	-	-
	0 205 54	0 205 64	0 205 74	0 205 84
	0 208 61	0 208 63	-	-
	0 205 54	0 205 64	0 205 74	0 205 84
	0 208 61	0 208 63	-	-
	0 205 57	0 205 67	0 205 77	0 205 87
	0 208 62	0 208 64	-	-
	0 205 57	0 205 67	0 205 77	0 205 87
	0 208 62	0 208 64	-	-
	0 205 57	0 205 67	0 205 77	0 205 87
	0 208 62	0 208 64	-	-
	0 205 57	0 205 67	0 205 77	0 205 87
	0 208 62	0 208 64	-	-
	0 205 57	0 205 67	0 205 77	0 205 87
	0 208 62	0 208 64	-	-
	0 205 57	0 205 67	0 205 77	0 205 87
	0 208 62	0 208 64	-	-

XL³ 4000 CABLE SLEEVES

ENCLOSURES		ROOF-BASE ASSEMBLY	STRUCTURAL UPRIGHTS	PLINTHS	FRONT COVERS	REAR PANELS	SIDE PANELS	METAL DOOR
Width x depth (mm)	Height (mm)							
475 x 475	2000	0 205 01	0 205 00	0 205 11	0 205 48	0 205 41	0 205 41	0 205 71
	2200		0 208 50		0 208 67	0 208 57	0 208 57	0 208 65
475 x 725	2000	0 205 02	0 205 00	0 205 14	0 205 48	0 205 41	0 205 42	0 205 71
	2200		0 208 50		0 208 67	0 208 57	0 208 58	0 208 65
475 x 975	2000	0 205 03	0 205 00	0 205 17	0 205 48	0 205 41	0 205 43	0 205 71
	2200		0 208 50		0 208 67	0 208 57	0 208 59	0 208 65

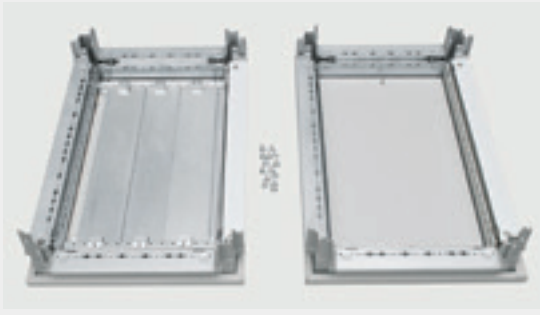
XL³ 6300 ENCLOSURES

ENCLOSURES		ROOF-BASE ASSEMBLY	STRUCTURAL UPRIGHTS	PLINTHS	FUNCTIONAL UPRIGHTS	FACEPLATE SUPPORTS	REAR PANELS	SIDE PANELS
Width x depth (mm)	Height (mm)							
1425 x 475	2200	0 211 33	0 211 36	0 211 30	0 211 37	0 208 55	0 211 41	0 208 57
1425 x 725	2200	0 211 34	0 211 36	0 211 31	0 211 37	0 208 55	0 211 41	0 208 58
1425 x 975	2200	0 211 35	0 211 36	0 211 32	0 211 37	0 208 55	0 211 41	0 208 59

ASSEMBLING THE ENCLOSURES

ASSEMBLING THE STRUCTURE

XL³ 4000 and 6300 enclosures and XL³ 4000 cable sleeves consist of a "roof-base" assembly, 4 structural uprights and rear and side panels.



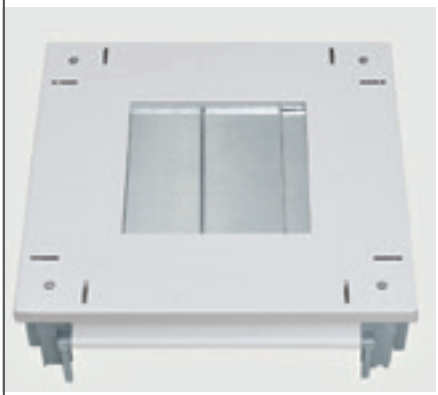
The "roof-base" assembly is supplied with its screws.

1 ASSEMBLING THE PLINTHS

XL³ 4000



The plinths of XL³ 4000 enclosures consist of 4 corner pieces and 4 side panels.



Turn the base upside down to access the plinth fixing points.



For bases whose width and depth are identical, the direction of the runners on the cable entry plate can be reversed.

Start by fixing the corner pieces at the 4 corners.

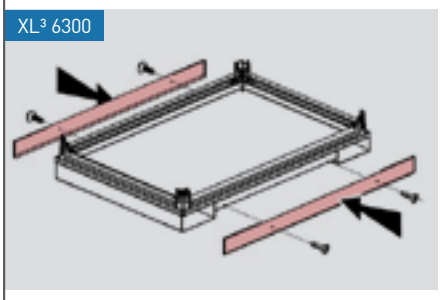


The corner pieces are drilled so that an 8 mm Allen key can be inserted (the handle supplied with the "Debro-lift" mechanism for DPX is suitable).



Fit the side panels as required, then turn the assembly upside down to fit the structural uprights.

XL³ 6300



Unlike the plinths of XL³ 4000 enclosures, which are supplied dismantled, the plinths of XL³ 6300 enclosures are one-piece, but they are fixed onto the enclosure in the same way.

2 MOUNTING THE STRUCTURAL UPRIGHTS

The structural uprights are supplied in sets of 4 and are common to all the enclosures and cable sleeves in their range.

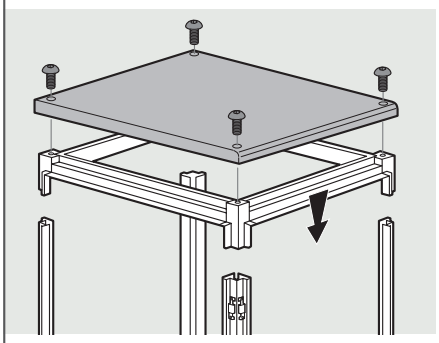
- Cat.No 0 205 00 – XL³ 4000 height 2000 mm
- Cat.No 0 208 50 - XL³ 4000 height 2200 mm
- Cat.No 0 211 36 - XL³ 6300 height 2200 mm



Push each upright onto the base and fix it using two M8 countersunk head screws without fully locking them.

The 2 painted uprights must be placed at the front of the structure (painted side of the base) ensuring that their perforated side is at the back.

3 MOUNTING THE ROOF



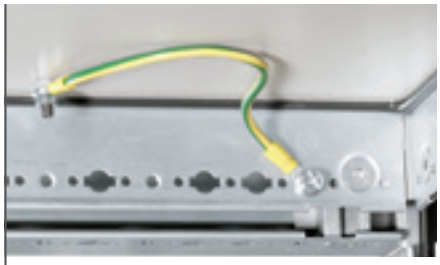
Insert the 2 pieces that make up the roof in the ends of the structural uprights.

The painted part and the rounded part of the roof must be placed at the front of the structure.



Attach the roof using M8 countersunk head screws then fully tighten all the structural assembly screws.

ASSEMBLING THE ENCLOSURES

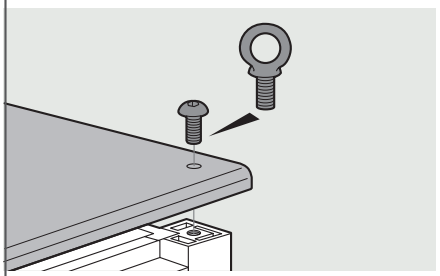


Create the equipotential links from the roof and the plinth to the structure using the conductors and screws supplied with the "roof-base" assembly.
The connection points for this are marked with the ⏚ symbol.

For earthing, use the connection points marked at the back of the enclosure, as those located at the front are reserved for mounting the faceplate support uprights.



The roof height spacers Cat.No 0 205 46 improve the ventilation of XL³ 4000 enclosures.



The 4 fixing screws for the roof can be replaced by M12 lifting rings Cat.No 0 205 82. The height of the enclosure is then increased by 53 mm (see page 74).

4 JOINING TWO STRUCTURES

- IP 30

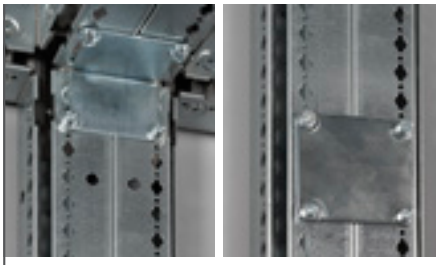
The outer sides of the structural uprights are pre-equipped with connection pieces for joining.
These pieces are also used for mounting the panels and doors.



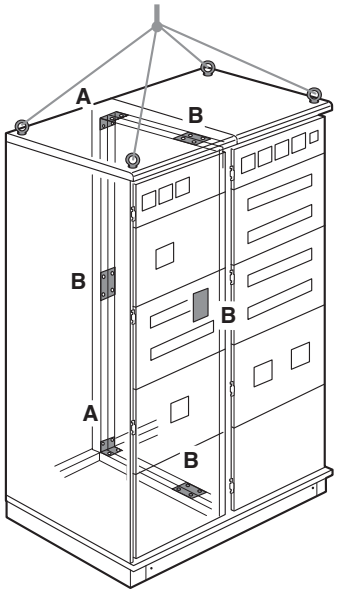
Join the connection pieces of the 2 structures using the M6 screws in joining kit Cat.No 0 205 86.



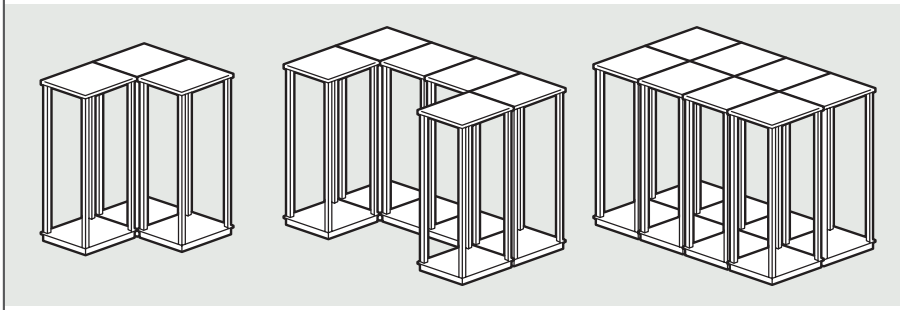
The joining kit comprises 8 x M6 screws and a tool for holding the screws in place while they are tightened.



If the panel is to be moved or transported, the structure must be reinforced after joining using reinforcement plates Cat.Nos 0 205 88/89. (see page 74).



Example of reinforcement of a joined assembly
A: 1 set of 2 L-shaped plates
Cat.No 0 205 88
B: 2 sets of 2 flat plates Cat.No 0 205 89



The modularity of the structure enables enclosures to be joined together side by side or back to back. Numerous configurations can therefore be created to meet the specific requirements of services areas.

- IP 55

The joining operations are identical to those described for IP 30 protection. However a weatherproof seal Cat.No 0 205 85 must be inserted between the structures to be joined.



Apply the seal in one piece and ensure that it is attached at the bottom

As the structural uprights are the same design, it is possible to join XL³ 6300 enclosures to XL³ 4000 enclosures of the same height, creating a uniform assembly.

5 MOUNTING THE FUNCTIONAL UPRIGHTS

The functional uprights are essential in enclosures. They take the fixing devices or plates for all Legrand devices: DX³ modular circuit breakers, DPX & DPX³ moulded case circuit breakers, DMX³ air circuit breakers, IS and optimised chassis, etc.

Reduced-width functional uprights, for XL³ 4000 enclosures, optimise the wiring space, in particular in enclosures 475 mm deep. Only fixed version devices with front terminals can be mounted on this type of upright.

All versions and configurations can be mounted on standard functional uprights.

[1] **[2]** **[3]**



1: XL³ 4000 reduced-width functional upright:
- Cat.No 0 205 12 for enclosure height 2000 mm
- Cat.No 0 208 52 for enclosure height 2200 mm

2: XL³ 4000 standard functional upright:
- Cat.No 0 205 13 for enclosure height 2000 mm
- Cat.No 0 208 53 for enclosure height 2200 mm

3: XL³ 6300 functional upright:
- Cat.No 0 211 37

- XL³ 6300 and XL³ 4000 enclosures with no internal cable sleeve

XL³ 4000



XL³ 6300



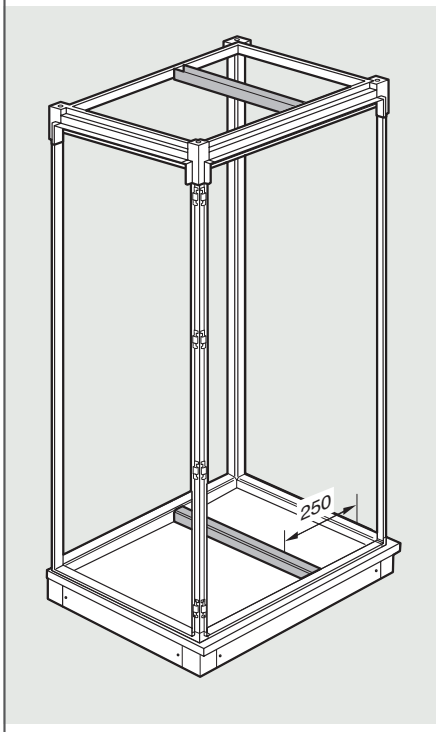
Fix the functional uprights using the tapped holes provided.

The square shape cut-outs must be at the front.

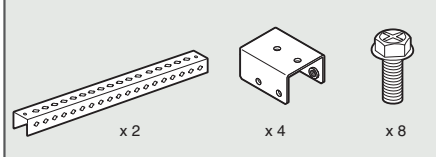
ASSEMBLING THE ENCLOSURES

- XL³ 4000 enclosure with internal cable sleeve

In 975 mm wide enclosures, the internal cable sleeve can be used to obtain a mounting area with 600 mm of usable space and a sleeve with 250 mm of usable space.
This sleeve can be created on the right or left side of the structure.



Before installing the functional uprights, the enclosure must be fitted with two crosspieces which will be used to delimit the sleeve compartment and for fixing the functional uprights.

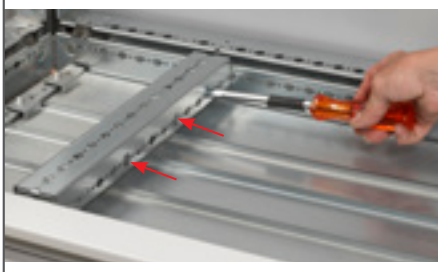


Crosspieces Cat.Nos 0 205 21/22/23 are supplied in pairs with their brackets and fixing screws.

Selection of crosspieces		
Enclosure depth (mm)	Crosspieces	
	Cat.No	Length (mm)
475	0 205 21	350
725	0 205 22	600
975	0 205 23	850



Fix the mounting brackets onto the structure of the enclosure using the tapped holes.



Fix the crosspiece onto the brackets then insert four clip-nuts into the 5th and 9th holes in the crosspiece.



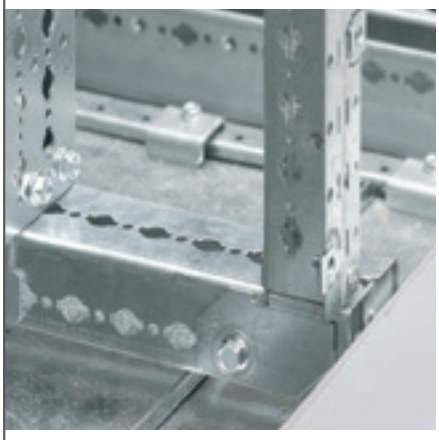
Fix the narrowest functional upright onto the separate crosspieces. The other upright is fixed directly to the structure of the enclosure.

6 MOUNTING THE FACEPLATE SUPPORT FRAMES

- Fixed frames Cat.Nos 0 205 58/59 and Cat.Nos 0 208 55/56



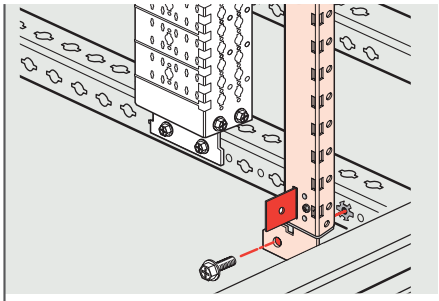
In enclosures without an internal cable sleeve, the two faceplate support uprights are fixed directly onto the structure of the enclosure.



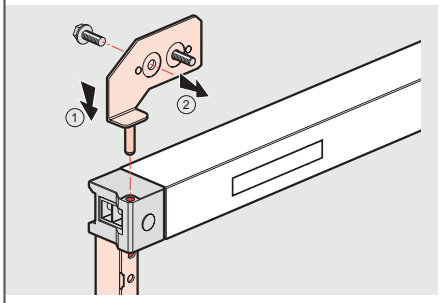
In enclosures with an internal cable sleeve, the double upright is fixed onto separate crosspieces Cat.Nos 0 205 21/22/23. Pivoting frame Cat.Nos 0 205 68/69/79.

- Pivoting frames Cat.Nos 0 205 68/69/79

Pivoting frames are only available for enclosures height 2000 mm. They consist of two crosspieces and two faceplate support uprights and are supplied dismantled.
In enclosures without an internal cable sleeve, any direction of opening can be chosen. In enclosures with an internal cable sleeve, the hinges must be on the side opposite the sleeve.



Fit the door stopper on the side opposite the hinges.



Fix the lower hinge onto the front crosspiece of the enclosure, then place the frame (previously assembled) in position and fix the upper hinge.



The pivoting frame is locked using two screws. A retractable handle, supplied with the frame, is installed in the upper crosspiece for ease of opening when all the faceplates are in place.

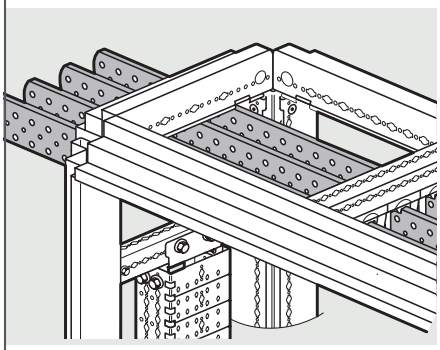
The pivoting frames reduce the usable faceplate height to 1700 mm instead of 1800 mm with a fixed frame.

7 PARTIAL CHASSIS: CUTTING THE FUNCTIONAL UPRIGHTS

XL³ 4000 enclosures have been specially designed to have two separate compartments:
- One compartment for the functional units
- One compartment for the busbars

For mounting 1600 A busbar supports, use enclosures at least 725 mm deep, and for mounting 4000 A busbar supports, use 925 mm deep enclosures.
If there are size restrictions, it is possible to work with smaller depth enclosures, by cutting the functional uprights.

- Single partial chassis (busbar at top or bottom)



Example: busbar with supports Cat.Nos 0 373 22/23 for depth 475 mm
The functional uprights will have 200 mm cut off for a 1600 A busbar and 300 mm for a 4000 A busbar.

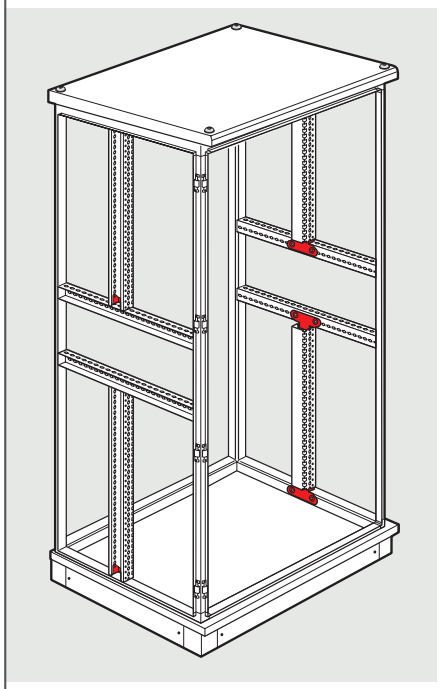


Position the crosspieces on the structure of the enclosure (set of crosspieces Cat.No 0 205 31 for 475 mm depth and Cat.No 0 205 32 for 725 mm depth).



The functional uprights that have been cut are fitted on the separate crosspieces equipped with clip-nuts. double partial chassis (transfer busbar)

- Double partial chassis (transfer busbar)



Two sets of crosspieces Cat.Nos 0 205 31/32 and an additional set of brackets Cat.No 0 205 30 are required to create a double partial chassis.
The double partial chassis is only possible with reduced-width uprights Cat.No 0 205 12.

FINISHING THE STRUCTURE

1 OBTAINING IP PROTECTION LEVELS

▪ IP 30

IP 30 protection is obtained without doors. The finish can be improved by using one of the finishing kits.

Width (mm)		Height 2000 mm	Height 2200 mm
XL³ 4000	475	0 205 61	0 208 31
	725	0 205 62	0 208 32
	975	0 205 63	0 208 33
XL³ 6300	1450	-	0 211 48



The finishing profiles clip onto the structure.

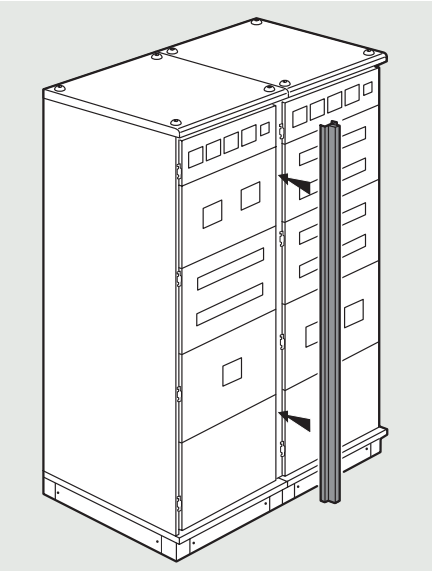


A perfect finish between the 2 joined enclosures

▪ IP 55



IP 55 protection is obtained by mounting a door (unless mounted on cable trough).



The finish between the doors is achieved by using strip Cat.No 0 205 65 for 2000 mm height and Cat.No 0 208 47 for 2200 mm height.

2 DIFFERENT TYPES OF FACEPLATE

There are three types of faceplate in the XL³ 4000 range.

▪ 1/4 turn faceplates

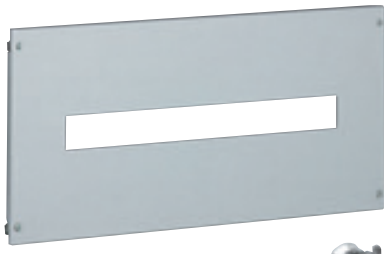
These are specifically for fixed 24-module wide devices (Ik3 < 25 kA).



▪ Screw-mounting faceplates

These are specifically for fixed 24-module and 36-module wide devices.

They can be mounted on hinges (on the left or the right) for ease of working.





Hinge Cat.No 0 209 59 for screw-mounting faceplate

▪ Faceplates with hinges and locks

These are specifically for plug-in and draw-out devices in the DPX/DPX³ range, and all the devices in the DMX³ range.

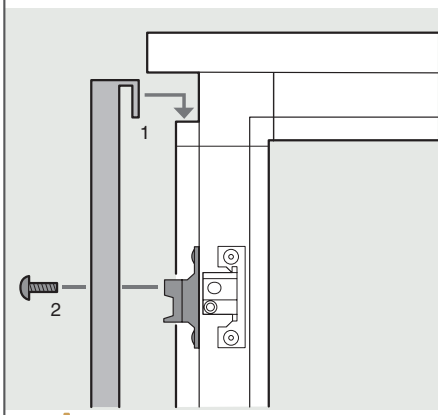


3 MOUNTING THE REAR AND SIDE PANELS

In addition to the faceplates, finishing an enclosure generally consists of adding a rear panel and two side panels.



The panels are fixed on the structural uprights using eight M6 screws.



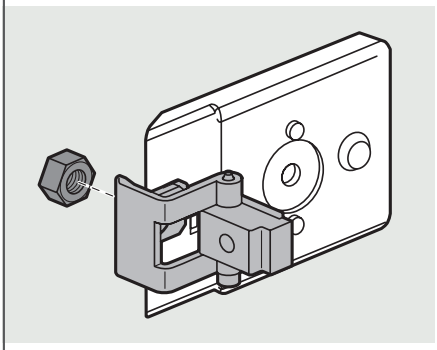
The internal fold on the panels makes them easier to install on the structure (the long fold indicates the top of the panel).

4 MOUNTING THE FRONT COVERS ON CABLE SLEEVES

There are two types of cable sleeve in the XL³ 4000 range: internal cable sleeves and external cable sleeves.
Each cable sleeve has a specific front cover:
- Cat.No 0 205 47: front cover for internal cable sleeve (Cat.No 0 208 66 for height 2200 mm)
- Cat.No 0 205 48: front cover for external cable sleeve (Cat.No 208 67 for height 2200 mm)

These two front covers are equipped with hinges and locks.

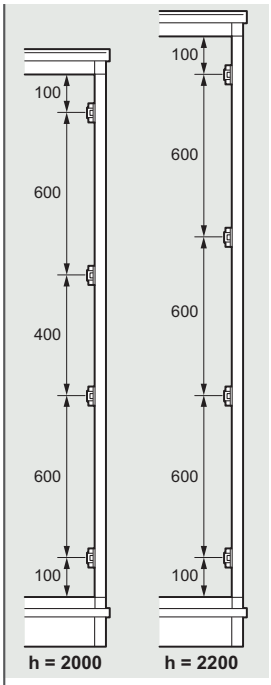
- Mounting the front cover on internal cable sleeves



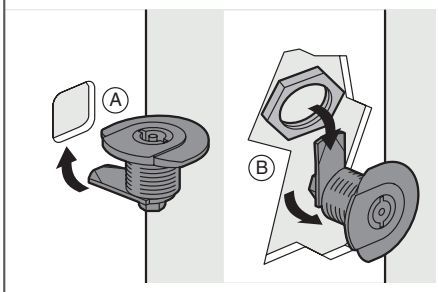
Fit the hinges on the fixing lugs.



Fix the four "lug + hinge" assemblies on the back of the structural upright using clip-nuts and M6 screws.



Position of the lugs (mm)

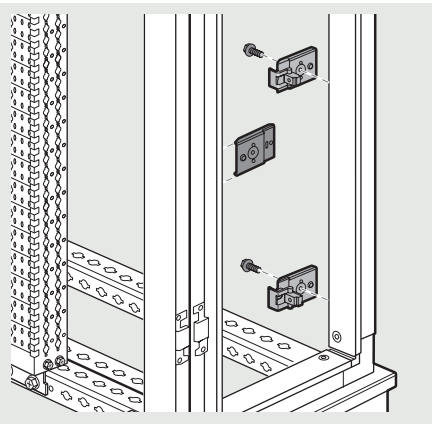


On the side opposite the hinges, insert the 2 locks in the cut-outs on the front cover and fix them using the nuts provided.

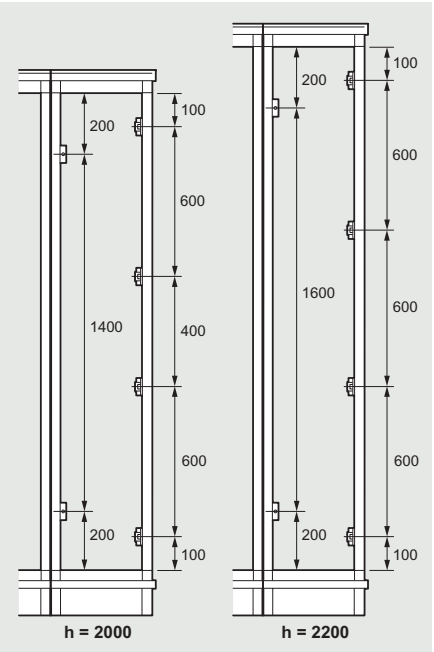


Fix the front cover on the hinges using the countersunk head screws provided, then insert the plastic covers in the screw heads to complete the finish.

- Mounting the front cover on external cable sleeves



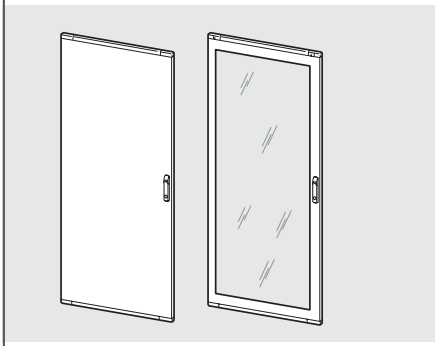
The 2 additional lugs are used for attaching the locks and must be fixed on the structural upright of the cable sleeve, on the side opposite the hinges



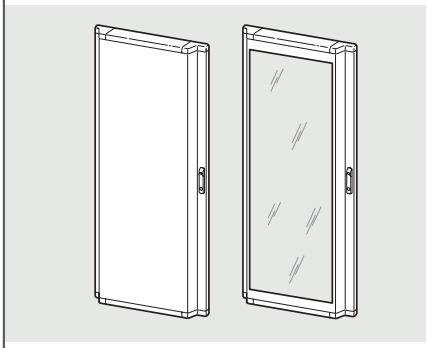
Position of the lugs (mm)

5 MOUNTING THE DOORS

There are four types of door for XL³ 4000 enclosures (flat metal, flat glass, rounded metal and Curved glass) available in two widths: 725 mm and 975 mm.
For external cable sleeves, there is a 475 mm wide flat metal door.



Flat doors



Curved doors



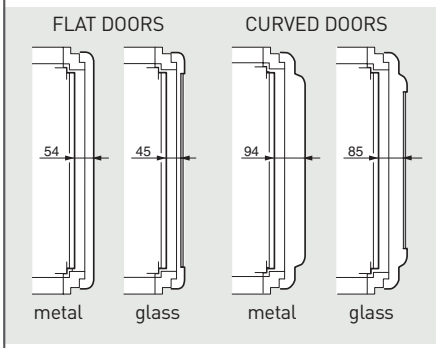
The doors are fitted on the structural uprights using connection pieces. The connection pieces are also used for fixing panels and joining enclosures.



The doors are simply fixed on these pieces using four pins. They can be fitted on the left or the right hand side.



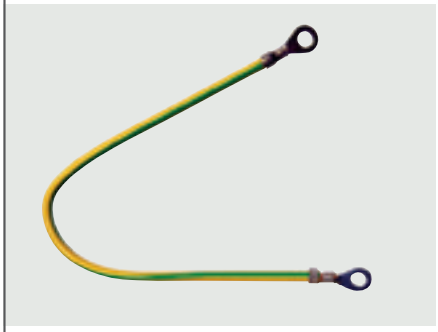
The connection pieces on the structural uprights can take either finishing panels or doors. It is therefore possible to fit doors on all 4 sides of enclosures. Total accessibility is therefore maintained whatever the configuration of the panel.



Curved doors increase the distance between the faceplate and the door by 40 mm in comparison with flat doors. They are specifically adapted for use when mounting devices on doors or for remote handles, equipment on faceplates, etc.

6 CREATING THE EQUIPOTENTIAL LINKS

The equipotential links of the roof and the base are described on page 8.
The equipotentiality of the faceplates and panels is provided directly by the mounting components.
The equipotential link of the doors is created automatically via the hinges.
When electrical equipment with an operating voltage of more than 50 V is fitted on the door, the faceplates or the finishing panels, an additional equipotential link must be created. For this purpose all these parts have copper-plated M6 studs providing a reliable contact.



Use link cord Cat.No 0 373 85, length: 350 mm.



At one end the cord is fixed onto the structure of the enclosure using a clip-nut and an M6 screw.





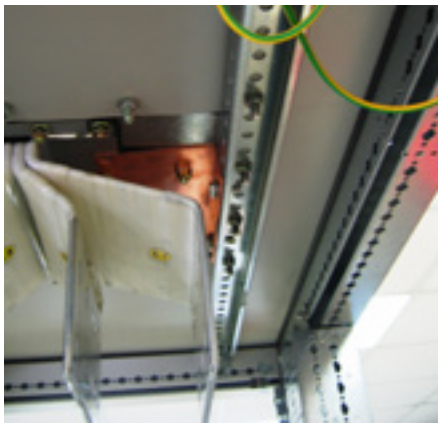
At the other end the cord is fixed on the stud on the door or on a faceplate



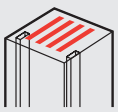
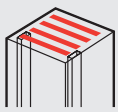
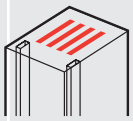
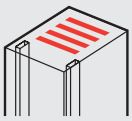
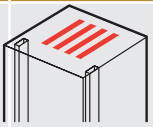
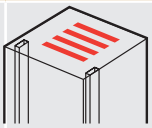
Creating the equipotential link of a side panel

CONNECTING TO ZUCCHINI SCP BUSBARS

Connection interfaces Cat.Nos 0 450 90, 0 450 92/93/94/95/96/97/98 are used for 4-pole connection up to 4000 A, between Zucchini prefabricated busbars and the main LV distribution board. They are mounted on the roof of XL³ 4000 enclosures. They can be positioned parallel or perpendicular to the front of the enclosure, depending on the type of connection.
The roof must be drilled in accordance with the instructions, and reinforced using the set of crosspieces Cat.No 0 205 29.



The connection interface is fixed on the reinforcement crosspieces across the roof.

MOUNTING OPTIONS							
		Dimensions of the XL³ 4000 enclosure (mm)					
		725 x 725		725 x 975		975 x 975	
Connection interface	In						
0 450 90	630 A	•	-	•	•	•	•
0 450 92	1000 A	•	-	•	•	•	•
0 450 93	1250 A	•	-	•	•	•	•
0 450 94	1600 A	•(1)	-	•(1)	•	•(1)	•
0 450 95	2000 A	•(1)	-	•(1)	•	•(1)	•
0 450 96	2500 A	-	-	-	-	•(1)	•
0 450 97	3200 A	-	-	-	-	•	•
0 450 98	4000 A	-	-	-	-	•	•

(1) For optimised distribution kit (see p. 36)

MOUNTING THE SWITCHBOARD FEED UNIT ON XL³ 6300

Two switchboard feed units can be mounted on an XL³ 6300 enclosure and connected via a copper busbar to supply a DMX³ 6300.





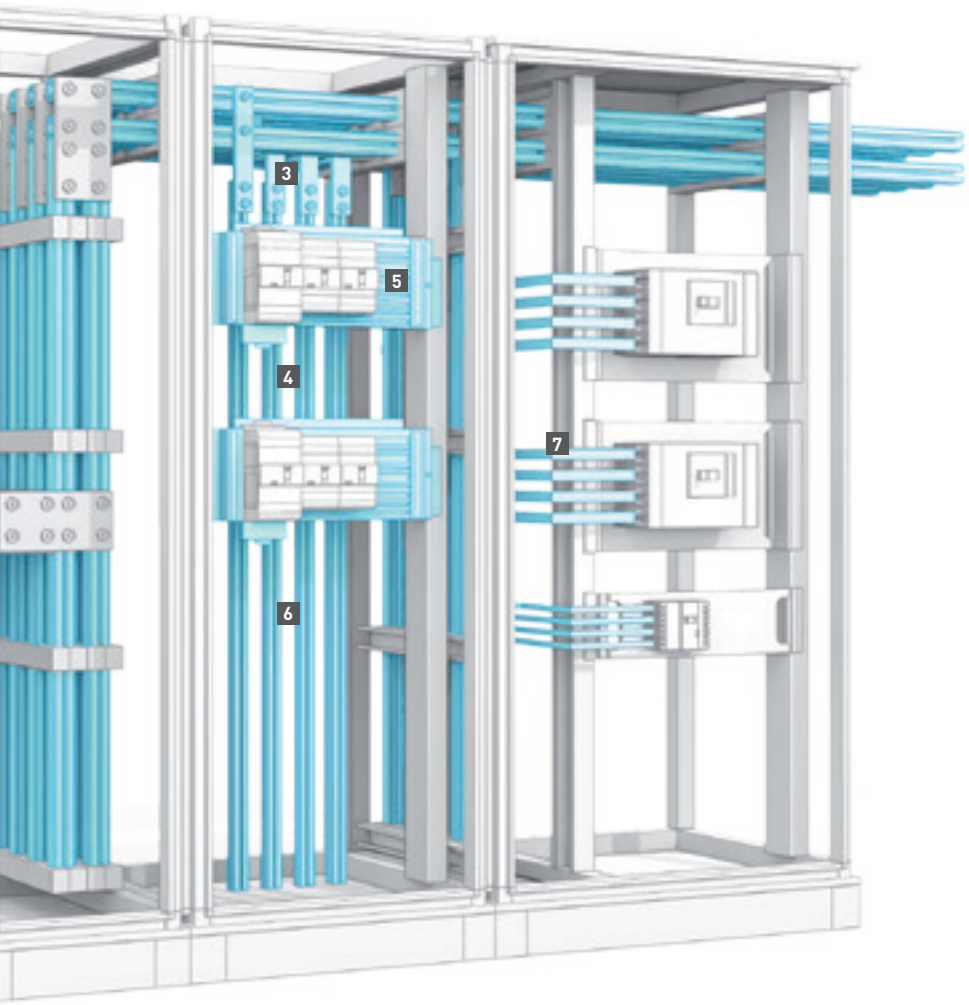
DISTRIBUTION SYSTEMS

XL³ 4000 enclosures offer a great deal of freedom of choice for distribution. To meet various requirements, such as different ways of working, quick installation, ease of maintenance, continuity of service, etc. Legrand offers three types of solutions in terms of distribution:
- Optimised distribution
- Standard distribution
- Increased Safety (see specific Increased Safety workshop specifications)

OPTIMISED DISTRIBUTION

XL³ 4000 enclosures give users freedom to organise the distribution. With VX³ busbars and HX³ optimised row distribution blocks, Legrand provides a complete, coherent system for horizontal and vertical distribution. This distribution system increases safety and assists with quick installation and optimisation of the space in the enclosure.





1 DMX³ – SCP CONNECTION INTERFACE CONNECTION KIT
Prefabricated connections for direct connection of the SCP switchboard feed units to the DMX³ with no bending or drilling

2 DMX³ CONNECTION KIT ON TRANSFER BUSBAR
Prefabricated connections for direct connection of the DMX³ on the busbar with no bending or drilling

3 CONNECTION KIT FOR VX³ BUSBAR POWER SUPPLY
Prefabricated connections for direct connection of VX³ busbars

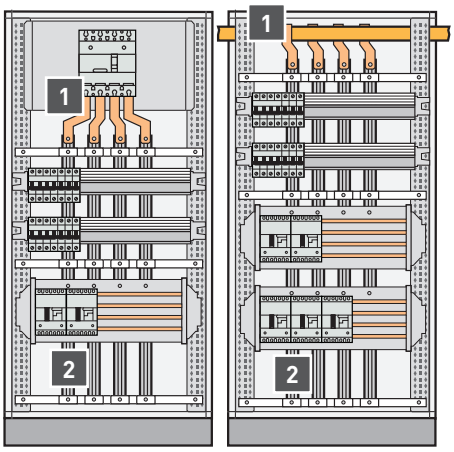
4 VX³ BUSBARS, FROM 800 TO 3200 A
Can be mounted in a cable sleeve, at the back of the enclosure or behind functional uprights

5 HX³ - OPTIMISED DISTRIBUTION BLOCK UP TO 400 A
Both DPX³ - DX³ together on the same row

6 TINNED COPPER ALUMINIUM BUSBARS
Their surface treatment ensures electrolytic compatibility with copper and durability of the contacts. Their C-section enables connection without any drilling, using the special hammer head bolts and tap-off terminals.

7 CONNECTION KITS
Prefabricated connections for supplying 250 and 400 A HX³ row distribution blocks and protection devices without any bending or drilling.

BUSBARS AT THE BACK OF XL³ 4000 ENCLOSURES



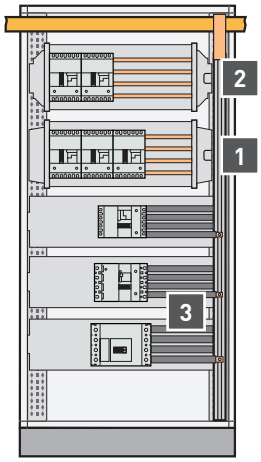
1 POWER SUPPLY KITS

Via vertical main device in enclosure		Via main horizontal busbar (fixing centres 75 mm)	
DPX 630	DPX 1600	aluminium	copper
4 044 63	4 044 64	4 045 30	4 045 31

2 BUSBARS AT THE BACK OF ENCLOSURES

Isolating support		4 044 60
Isolating lug support		4 044 61
Isolating rails		4 044 62
Tinned copper aluminium C-section busbars	800 A	4 044 33

SIDE-MOUNTED BUSBARS BEHIND UPRIGHTS IN XL³ 4000 ENCLOSURES



1 SIDE-MOUNTED BUSBARS (ALIGNED BARS, FIXING CENTRES 75 MM)

Isolating support	Enclosure depth 725 mm	0 373 66
	Enclosure depth 975 mm	0 373 86
Additional support		0 373 50
Tinned copper aluminium C-section busbars	800 A	0 373 54
	1000 A	0 373 55
	1250 A	0 373 56
	1450 A	0 373 57
	1750 A	0 373 58

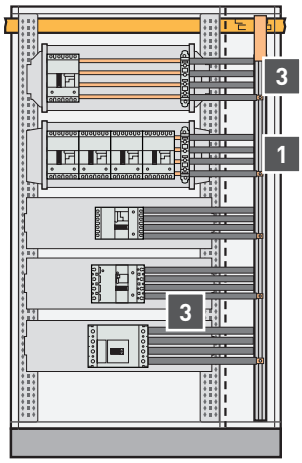
2 KITS FOR CONNECTION ON MAIN HORIZONTAL BUSBAR

Fixing centres 75 mm copper or aluminium	Fixing centres 125 mm copper
0 373 82	4 045 45 (in 725 mm depth)
	4 045 46 (in 975 mm depth)

3 CONNECTION KIT

Device in horizontal position			HX³ row distribution block
DPX³ 160	DPX³ 250	DPX 630	
4 045 40	4 045 41	4 045 42	4 045 43

SIDE-MOUNTED BUSBARS IN XL³ 4000 INTERNAL CABLE SLEEVE



1 BUSBARS IN CABLE SLEEVE (ALIGNED BARS, FIXING CENTRES 75 MM)

Isolating support	Enclosure depth 725 mm	0 373 66
	Enclosure depth 975 mm	0 373 86
Additional support		0 373 50
Tinned copper aluminium C-section busbars	800 A	0 373 54
	1000 A	0 373 55
	1250 A	0 373 56
	1450 A	0 373 57
	1750 A	0 373 58

2 KITS FOR CONNECTION ON MAIN HORIZONTAL BUSBAR

Fixing centres 75 mm copper or aluminium	Fixing centres 125 mm copper
0 373 82 (1 bar/pole)	4 045 45 (in 725 mm depth)
0 373 83 (2 bars/pole)	4 045 46 (in 975 mm depth)

3 CONNECTION KIT

Enclosure	Device in horizontal position			HX³ row distribution block
	DPX³ 160	DPX³ 250	DPX 630	
Depth 475 mm	4 045 50	4 045 51	4 045 52	4 045 53
Depth 725 and 975 mm	4 045 60	4 045 61	4 045 62	4 045 63

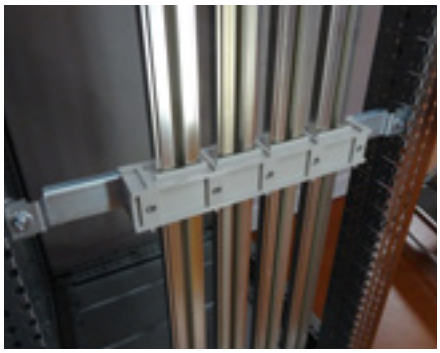
MOUNTING VX³ OPTIMISED BUSBARS

VX³ vertical optimised distribution in XL³ 4000 enclosures consists of C-section aluminium busbars and prefabricated connection kits. It is used to create distribution assemblies up to 3200 A with no bending or drilling of the bars.
C-section aluminium busbar supports can be used for all types of assembly and are very easy to use:
- Vertical mounting at the back of the enclosure
- Vertical side-mounting behind upright (branch busbar)
- Vertical side-mounting in internal or external cable sleeve (branch busbar)
- Horizontal mounting (transfer or main busbar)

To optimise the space inside the enclosure, the aligned versions of these busbar supports have 75 mm fixing centres.

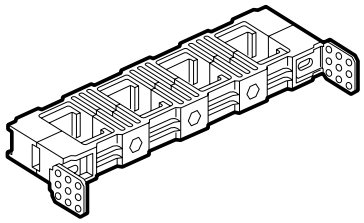
SUPPORTS FOR BUSBARS AT THE BACK OF THE ENCLOSURE (LIMITED TO 800 A)

- Cat.No 4 044 60 and Cat.No 4 044 61 for 725 mm width enclosure.

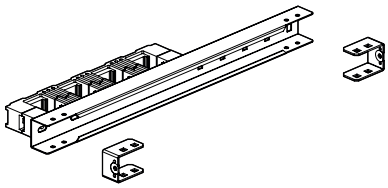


SUPPORTS FOR SIDE-MOUNTED BUSBARS IN ENCLOSURES OR CABLE SLEEVES

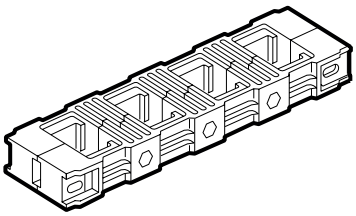
- Cat.No 0 373 66 for enclosure depth 475 or 725 mm



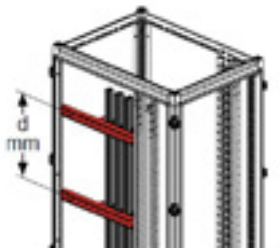
- Cat.No 0 373 86 for enclosure depth 975 mm



It is possible to increase the strength of the busbars using additional supports Cat.No 0 373 50.



It is important to comply with the maximum distance between supports for every assembly in order to ensure that the busbars are held in place when subjected to electrodynamic forces.

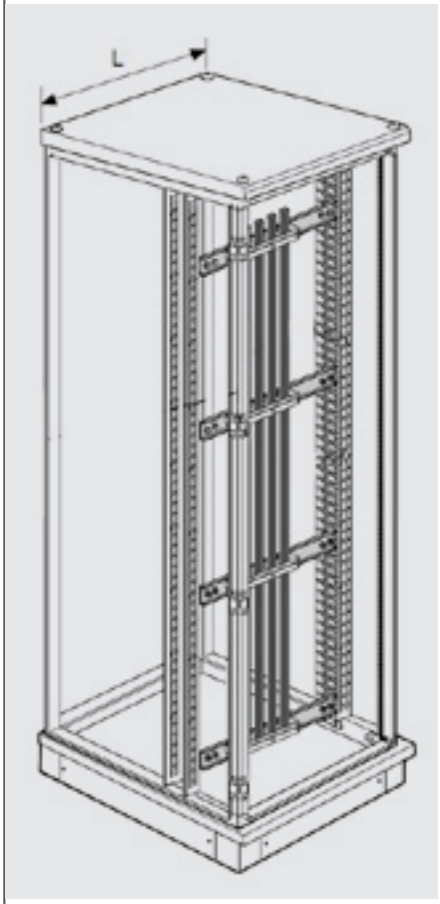


MAXIMUM DISTANCES BETWEEN SUPPORTS (mm)

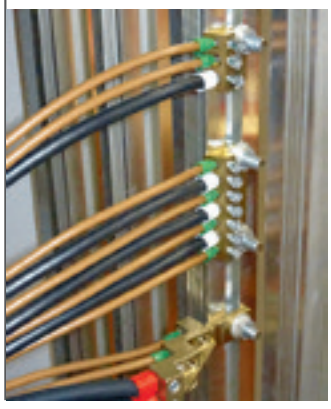
In(A)		BUSBARS	SUPPORTS	Ipk (kA)									
				30	40	52	63	73	84	94	105	132	154
				Icw (KA)									
IP ≤ 30	IP > 30			15	20	25	30	35	40	45	50	60	70
800	630	**4 044 33**	**4 044 60/61**	1600	1000	800	700	600	600	500	500	400	400
		1 x 0 373 54	**0 373 66**	1600	1000	800	700	600	600	500	500	-	-
			0 373 86	1600	1000	800	700	600	600	500	500	-	-
1000	800	**1 x 0 373 55**	**0 373 66**	1600	1000	800	700	600	600	500	500	-	-
			0 373 86	1600	1000	800	700	600	600	500	500	-	-
1250	1000	**1 x 0 373 56**	**0 373 66**	1600	1000	800	700	600	600	500	500	500	400
			0 373 86	1600	1000	800	700	600	600	500	500	500	400
1450	1250	**1 x 0 373 57**	**0 373 66**	1600	1000	800	700	600	600	500	500	500	400
			0 373 86	1600	1000	800	700	600	600	500	500	500	400
1750	1600	**1 x 0 373 58**	**0 373 66**	1600	1000	800	700	600	600	500	500	500	400
			0 373 86	1600	1000	800	700	600	600	500	500	500	400
3500	3200	**2 x 0 373 58**	**2 x 0 373 66**	1600	1000	800	700	600	600	500	500	500	400
			0 373 86 + 0 373 50	1600	1000	800	700	600	600	500	500	500	400

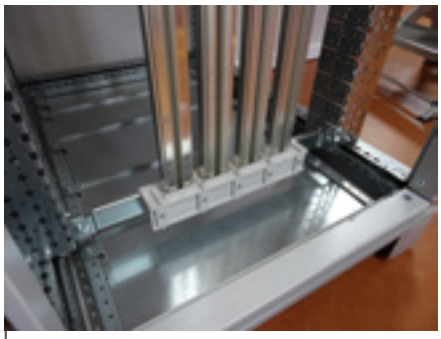
1 VERTICAL MOUNTING AT THE BACK OF ENCLOSURES

This type of mounting is used for distribution up to 800 A in order to connect 400 A row distribution blocks directly on the busbar (see page 28).



The busbar supports 4 044 60 and 4 044 61 are mounted directly on the functional uprights.





Fix the lug support Cat.No 4 044 60 between the functional uprights and position the busbars



Fix the intermediate supports Cat.No 4 044 61 complying with the maximum distances.



Check that the bars are tightened correctly by retightening the screws on the supports.

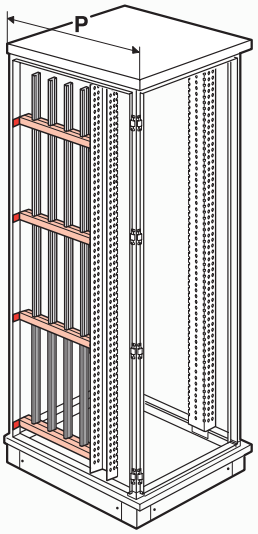
It is possible to create tap-offs on an aluminium busbar with the connectors that are available on page 42. They are fixed using hammer head bolt Cat.No 4 044 92.

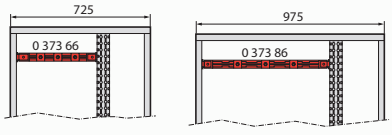
2 VERTICAL SIDE-MOUNTING

- **"Compact" mounting behind the functional uprights**

This type of mounting is the most advantageous in terms of the space it takes. It enables a vertical busbar up to 1600 A to be created without having to use a cable sleeve.
The support is fixed to the rear of the functional upright.

This type of mounting is not possible with reduced-width functional upright Cat.No 0 205 12.





The main busbar can be created independently using flat bars (with 1600 A supports Cat.No 0 373 22 or 4000 A supports Cat.No 0 373 24) or using single (1600 A) or double (3200 A) C-section aluminium bars.



Fix the supports between the functional upright and the structural upright

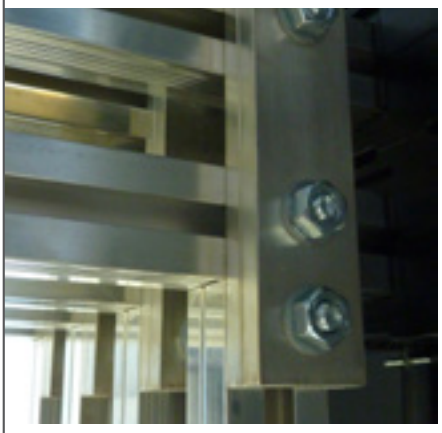


Position the busbars and tighten the supports to ensure the bars are held in place.
(Tightening torque: see page 27)



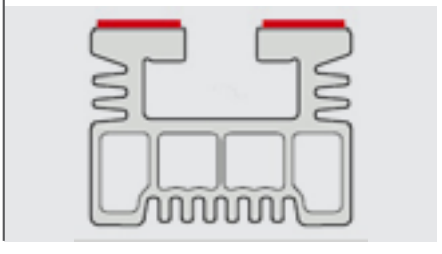


Connection between an aluminium busbar and a main busbar created using flat bars with single connection plates Cat.No 0 373 82



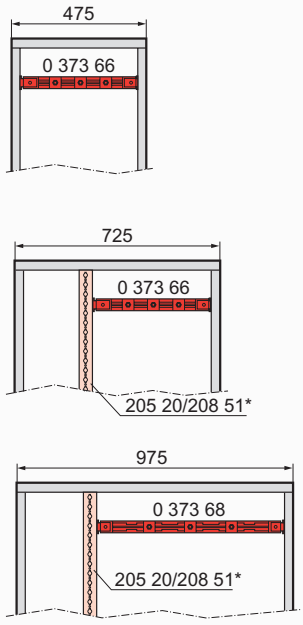
Connection between an aluminium busbar and a double main busbar created using aluminium bars

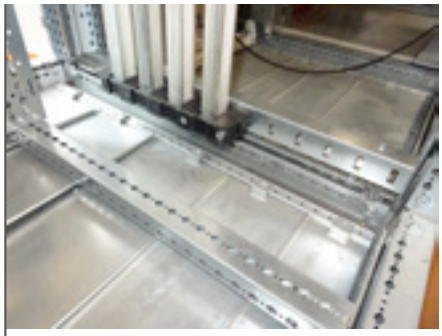
Legrand aluminium busbars are given a special protective treatment which prevents any surface oxidation and ensures electro-chemical compatibility between the surfaces that are in contact (galvanic effect). The electrical contacts must be made on the front of the busbars (flat contact surface).



- **Side-mounting in a cable sleeve**

The busbar is placed in an internal or external cable sleeve. The supports will be fixed between the structural uprights of the cable sleeve for depths 475 or 725 mm or between the structural upright and an intermediate upright (Cat.No 0 205 20 or 0 208 51) for depth 975 mm.





Example of mounting support Cat.No 0 373 86 in 975 mm deep cable sleeve.



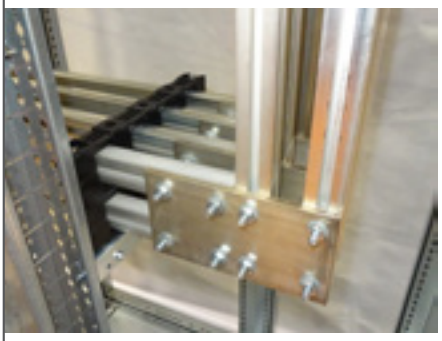
Busbar installed in cable sleeve.

3 HORIZONTAL MOUNTING

This is used for creating main busbars, generally placed at the top or the bottom of the enclosure, and also for creating transfer busbars, for supplying the main busbar from the main device.

It is created using the same busbar supports as for vertical mounting. The supports will be fixed in the same way as for vertical busbars, but will be placed horizontally (rotated 90°).





Supports Cat.Nos 0 373 66 and 0 373 68 can be doubled to create a busbar with a current of 3200 A max. If the branch busbar is also double, the connection will be made using large plates Cat.No 0 373 83.

4 JOINING THE SUPPORTS FOR DOUBLE BUSBARS

To create a double aluminium busbar, simply use joining kit Cat.No 0 373 77 to screw the busbar supports together.
The 2 longest screws are used for the ends and the 3 shorter ones in the centre.

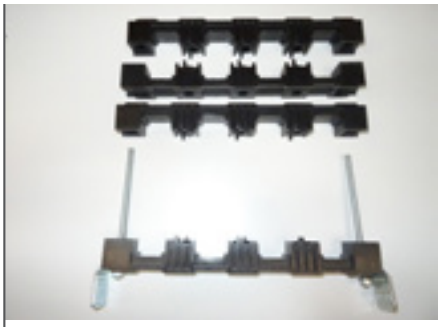


Example: Cat.No 0 373 66 + 0 373 50 + 0 373 77

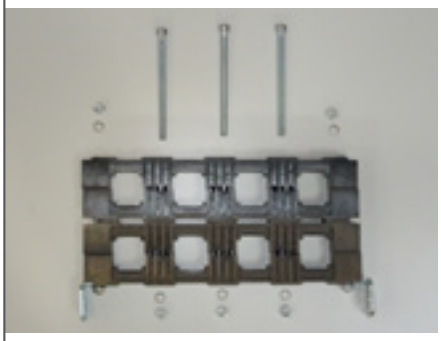


Joining kit + Cat.No 0 373 77

5 CONNECTING BUSBARS

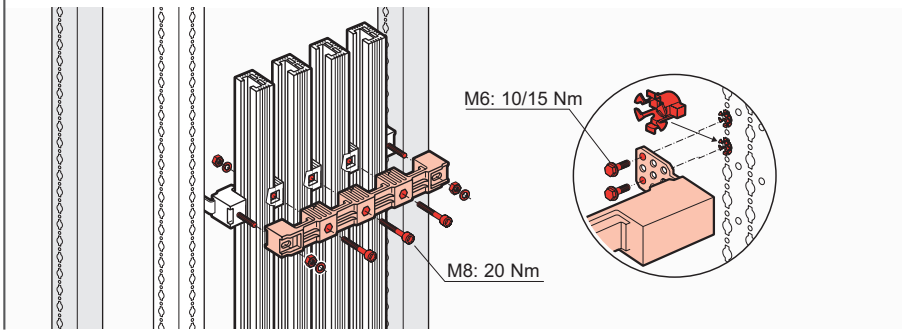


Position the longest screws at the ends and assemble the supports

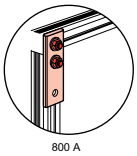


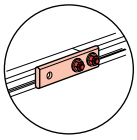
The shortest screws are used to tighten the busbars.

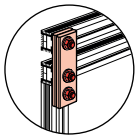
Tightening torques
The tightening torque of the five M8 screws used to hold the busbars in place must be 20 Nm. The tightening torque of the four M6 screws used to fix the supports on the XL³ structure must be between 10 and 15 Nm.

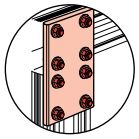


To create a tap-off or an extension between two busbars, the aluminium busbars will be connected together using joining plates Cat.Nos 0 373 82 or 0 373 83. These plates will be fixed using hammer head bolts Cat.No 0 373 59. The choice and number of plates depend on the current carried by the busbars.









I(A)	NUMBER OF BARS	CONNEC-TORS
0 - 800 A	x 1	0 373 82 x 1
800 - 1600 A	x 1	0 373 82 x 2
1600 - 3200 A	x 2	0 373 83 x 1

The hammer head bolt is fixed in place by simply rotating it a quarter turn inside the busbar. This system provides considerably flexibility of connection, as the hammer head bolt can be used in any position on the busbar.

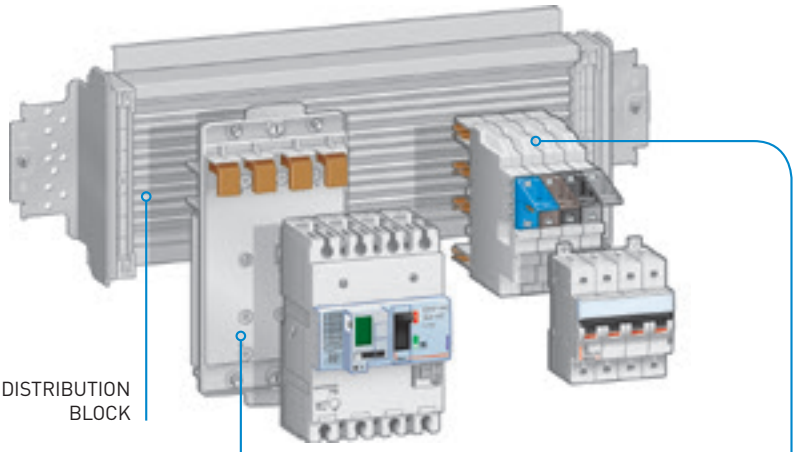
The recommended tightening torque for the hammer head bolts is 50 Nm.

It is also possible to connect optimised aluminium busbars to 4000 A copper or aluminium main busbars with different fixing centres (125 mm) with the connection kits below.

KIT CAT. NO	MAIN BUSBAR	POSITION OF VX³ busbar	ENCLO-SURE DEPTH (mm)
4 045 30	Alumini-um	Back of enclosure 800 A	725
4 045 31	Copper	Back of enclosure 800 A	725
4 045 45	Copper	Side-mounted vertical 1600 A	725
4 045 46	Copper	Side-mounted vertical 1600 A	975



6 MOUNTING 400 A HX³ DISTRIBUTION BLOCKS



400 A HX³ 4-pole row distribution blocks

The distribution block can be supplied directly via a VX³ busbar (with or without connection accessories, depending on the configuration) or via a head of row device.

- Rated voltage (Ue): 230/400 V±
- Rated frequency: 50/60 Hz
- Rated peak withstand current (Ipk): 52 kÂ
- Insulation voltage (Ui): 1000 V
- Rated current: 250/400 A maximum (central power supply)
- Protection index: IP 20
- Maximum connection cross-section for the power supply module: flexible bars 32 x 4 mm

400 A HX³ row distribution blocks take bases for DPX³ 160 and 250 and for modular circuit breakers. These distribution blocks are fixed on the functional uprights in 24-module enclosures, or 36-module enclosures with internal cable sleeve.

The Legrand range of 400 A distribution blocks consists of two catalogue numbers:

- Cat.No 4 044 83: row distribution block with direct connection on the 800 A VX³ busbar at the back of the enclosure.
- Cat.No 4 044 84: row distribution block without connections. This will be used with a side-mounting power supply module Cat.No 4 044 82, or supplied directly via a head of group protection device installed on the row distribution block. Which distribution block is chosen will depend on the type of busbar installed.

- **800 A VX³ distribution at the back of the enclosure (see page 24)**

In this particular case, distribution block Cat.No 4 044 83 will be used.



Position and fix the row distribution block on the functional uprights of the enclosure.



The row distribution blocks are pre-equipped with hammer head bolts. Tighten them to connect the block to the busbar.

- **Distribution in a cable sleeve**

Select row distribution block Cat.No 4 044 84 together with power supply module Cat. No. 4 044 82.



Position and fix the row distribution block on the functional uprights of the enclosure.



Position and lock the side-mounting power supply module for the row distribution block (Cat No. 4 044 82) on the side of the cable sleeve on which the busbar is located.



Then connect the power supply module to the busbar using the prefabricated connection kit.

Cat.Nos of the connection kits
- Cat.No 4 045 53: for side-mounting busbar in internal cable sleeve, enclosure depth 475 mm
- Cat.No 4 045 63: for side-mounting busbar in internal cable sleeve, enclosure depth 725 or 975 mm

- **Distribution behind upright**

In this case, no side-mounting power supply module is required. The connection kit is fixed directly to the back of the row distribution block.



Cat.No of the connection kit
Cat.No 4 045 43: for side-mounting busbar behind upright (enclosure depth 725 or 975 mm).

- **Direct power supply via head of group device**

A device mounted on the row distribution block can be supplied directly via the bottom terminals in order to create head of group protection. In this case, the maximum current will be 250 A (limited by the DPX^3 250).



- **Tap-off from aluminium C-section busbars**

The connection can be made via cables connected to the busbar by IPxxB 250 A tap-off terminals Cat.No 4 044 89.



Tightening torque 20 Nm



This terminal enables 2 conductors to be connected and provides IP XXB protection with the screw cover inserted.

7 EQUIPPING 400 A HX³ ROW DISTRIBUTION BLOCKS

▪ Mounting a DPX³

The circuit breakers are mounted on the HX³ distribution block using support bases. The four support bases for DPX³ enable automatic connection of 3P and 4P DPX³ 160 and DPX³ 250 A circuit breakers.

Support bases for DPX³		
Device	**DPX³ 160**	**DPX³ 250**
3P	4 045 00	4 045 02
4P	4 045 01	4 045 03



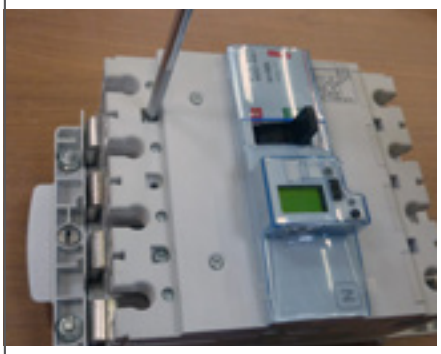
Support bases for DPX³ consist of a fixed part, a movable part, an anti-withdrawal kit and two terminal shields. They enable automatic connection of a DPX³ 160 or 250 (when off-load) to the row distribution block while energised.

When mounting a DPX³ 160, the upstream cage terminals must first be removed from the device.

A) MOUNTING THE CIRCUIT BREAKER ON THE BASE



Install the movable part of the base, inserting the conductive parts into the upstream terminals of the DPX³ circuit breaker.



Secure the device to the base using the fixing screws supplied with the base.



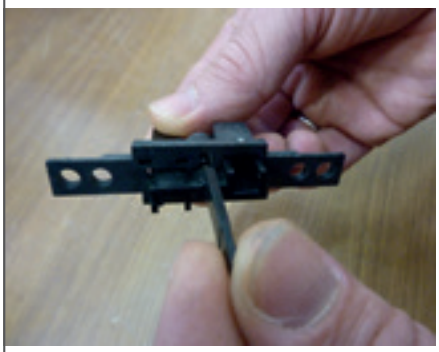
Make the upstream electrical connections with the screws supplied with the circuit breaker (no. 4 Allen key for DPX³160, tightening torque 7 N.m, and no. 5 Allen key for DPX³250, tightening torque 10 N.m).

B) INSTALLING THE ANTI-WITHDRAWAL KIT

The anti-withdrawal kit prevents a circuit breaker being withdrawn in the closed position.



Insert the spring...



...then assemble the two parts of the kit.

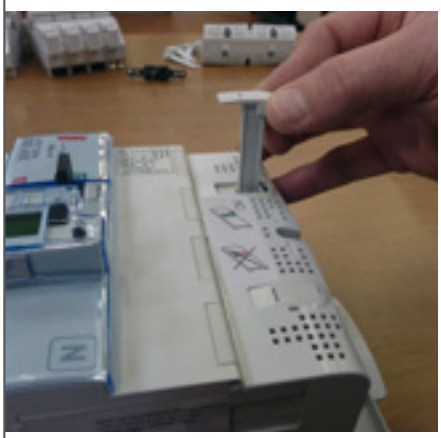


Fix the kit on the back of the movable part of the support base with the two screws supplied (tightening torque 1 N·m).

C) FITTING THE TERMINAL SHIELD



Engage the rear part of the terminal shield then push it down at the front.



Lock the terminal shield by inserting the 2 sealed plugs.

For downstream connection of the DPX³, the downstream terminal shield must be removed.

D) MOUNTING THE DPX³ ON THE DISTRIBUTION BLOCK

The DPX³ equipped with a support base can be installed on the 400 A row distribution block while energised.



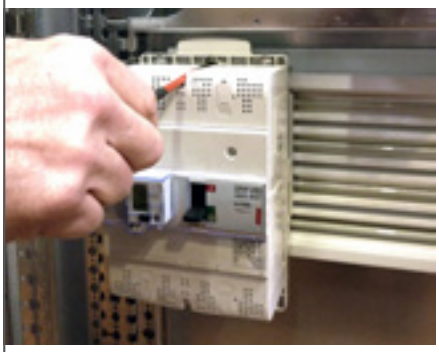
Position the fixed part of the support base on the row distribution block.



It is locked automatically.



Clip the DPX³ on this base in open position.



Lock the assembly with the top and bottom ¼ turn screws.

▪ Mounting DX³ circuit breakers

Installing modular circuit breakers on the 400 A HX³ distribution block requires the use of support bases for DX³. They raise modular circuit breakers to the same height as DPX³, so that they can be installed together on the same row.

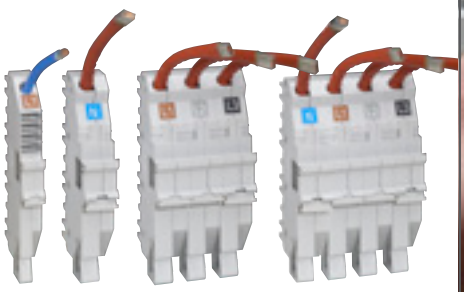
A) MOUNTING DX³ ON WIRED BASE

This type of base is used to connect modular devices with screw terminals and either 1 or 1.5 modules per pole depending on the catalogue number chosen.

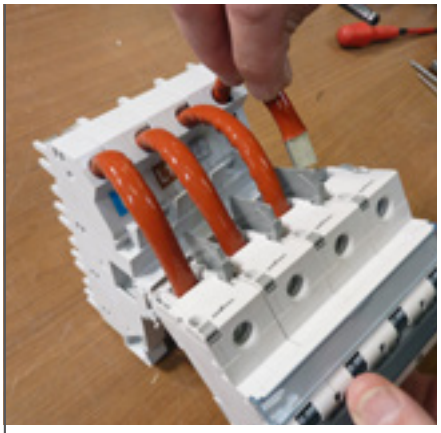
The circuit breakers do not require any preparation.

Wired bases for DX³

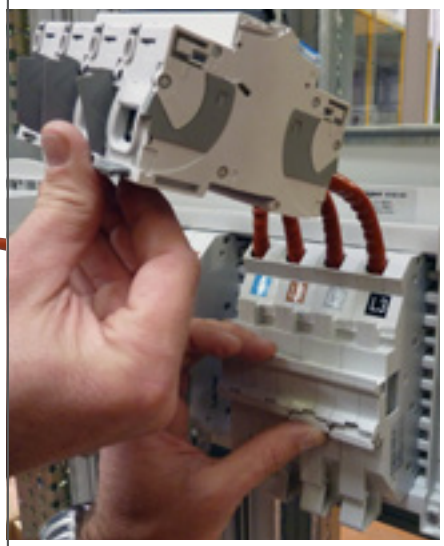
Device	Connection	1 mod/pole	1.5 mod/pole
1P	L1	4 045 24	4 045 18
	L2	4 045 25	4 045 19
	L3	4 045 26	4 045 20
	N	4 045 23	4 045 17
3P	L1, L2, L3	4 045 22	4 045 16
4P	L1, L2, L3, N	4 045 21	4 045 15



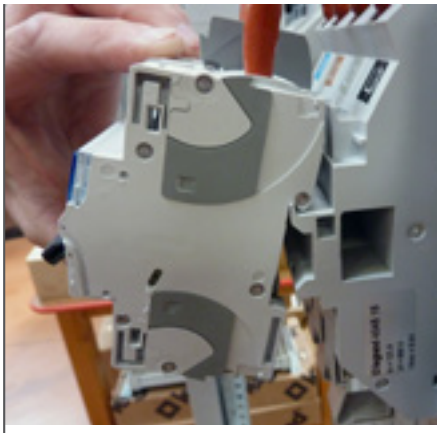
To prevent any risk of contact with live parts, the wires must be connected to the circuit breaker before the base is installed on the distribution block.



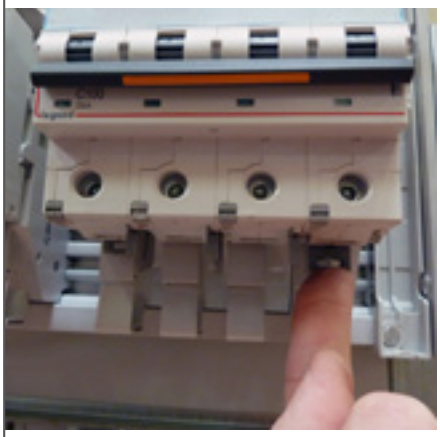
Connect the wires in the circuit breaker without installing it on the "rail" part of the support base.
Recommended tightening torque:
2.5 N·m for DX³ with 1 module/pole
5.5 N·m. for DX³ with 1.5 module/pole



Holding the circuit breaker with one hand, clip the base onto the row distribution block and lock it using the locking levers.



Engage the device in the same way as on a standard modular rail.



Complete the installation by locking the circuit breaker clips.

DX³ devices compatible with modular bases

Devices	Plug-in bases	Wired bases
2P and 4P DX³-ID RCCBs – outgoing lines via the bottom	•	•
2P and 4P DX³ RCBOs – protection of outgoing lines	•	•
1P, 2P, 3P and 4P DX³ circuit breakers – 1 module/pole	•	•
1P, 2P, 3P and 4P DX³ circuit breakers – 1.5 modules/pole		•

- **Installing support bases for DX³**

A) MOUNTING DX³ CIRCUIT BREAKERS ON PLUG-IN BASE

Plug-in (wireless) bases for DX³ are intended for devices with 1 module per pole which are connected via the rear of the circuit breaker.

Plug-in bases for DX³		
Device	**Connection**	**1 mod/pole**
1P	L1	4 045 10
	L2	4 045 11
	L3	4 045 12
	N	4 045 13
3P	L1, L2, L3	4 045 09
4P	L1, L2, L3, N	4 045 08



The plug-in bases are supplied with the corresponding connection modules which must be installed first on the circuit breakers.

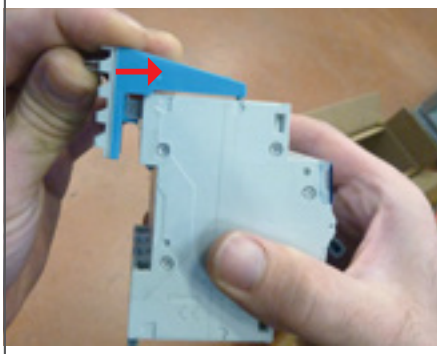


There are four colours of connection module corresponding to the four poles on the row distribution block.

Blue	Brown	Grey	Black
Neutral	Phase 1	Phase 2	Phase 3

This enables the required phase to be selected. It is thus very easy to balance the phases on the whole row.

The connection module is fitted via the rear of the circuit breaker.



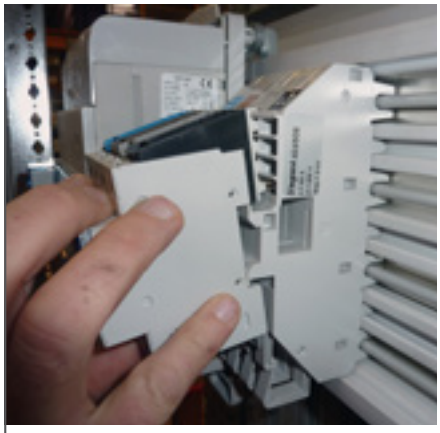
Position the upper part of the connection module (marked "Max 80") on the top of the circuit breaker then push it forward to engage the module pin in the device's plug-in mechanism. This mechanism ensures the contact pressure is correct. Then do the same for the other poles.



Clip the base on the distribution block...



... then lock the assembly using the levers.



Then push on the circuit breaker to clip it onto the base, and lock it with the clips. Further circuit breakers can be added while energised but off-load (circuit breaker in open position).





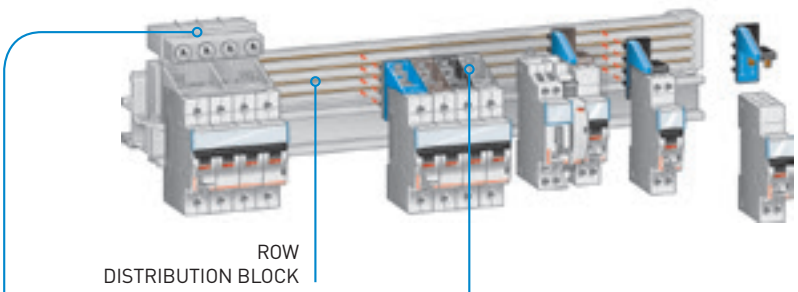
The circuit breaker is correctly installed once it is locked on the rail.

8 MOUNTING HX³ PLUG-IN ROW DISTRIBUTION BLOCKS

80 and 125 A HX³ plug-in 4-pole row distribution blocks

Tool-free installation on 2-position aluminium ⊔ rails.

- Rated voltage (Ue): 230/400 V~
- Rated frequency: 50/60 Hz
- Permissible short-circuit current (Ipk): 25 kÂ
- Insulation voltage (Ui): 690 V~
- Rated current:
  - up to 125 A: direct connection on power supply module
  - up to 80 A: direct connection on modular device
- Protection index: IP 20
- Maximum connection cross-section of power supply module: 50 mm



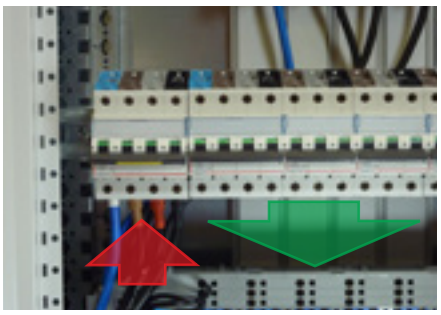
4-POLE POWER SUPPLY MODULE
Supplied with the distribution block, for direct power supply of the block via screw terminals. Power can also be supplied direct by a head of row device via its upstream terminals.

CONNECTION MODULES
For mounting on Legrand DX³ 1P+N, 2P, 3P and 4P circuit breakers, used for automatic connection to the distribution block. The phase to be connected is selected by the choice of connection module.

The HX³ plug-in row distribution block is used for 4-pole distribution of DX³ devices (1 module per pole) up to 80 A by direct connection to a circuit breaker or 125 A with the power supply module.
With its IPXXB insulation, devices can be safely connected and disconnected automatically while the block is energised. Like the 250 or 400 A row distribution blocks, it provides total freedom to combine 1P+N, 1P, 2P, 3P and 4P DX³.
It is mounted in XL³ 400 and XL³ 800 enclosures in the same way.
HX³ Plug-in 24 modules – Cat.No 4 052 40
HX³ Plug-in 36 modules – Cat.No 4 052 41
125 A power supply module for HX³ Plug-in – Cat.No 4 052 42

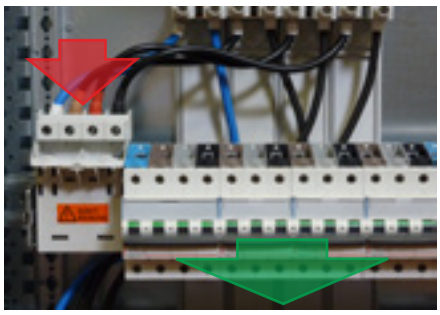
Can be connected and disconnected while energised but the circuit must be off-load (circuit breaker open).

UP TO 80 A

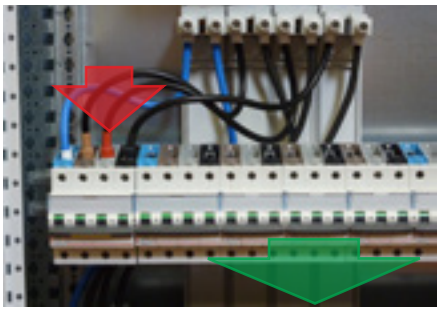


Indirect power supply to the distribution block via a "head of row device"

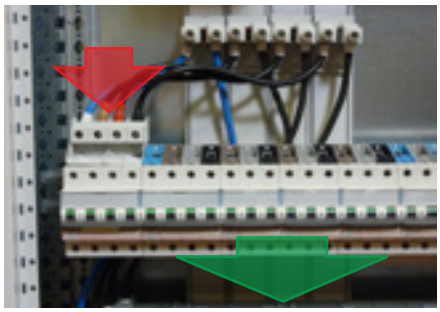
UP TO 125 A



Direct power supply to the distribution block via power supply module Cat.No 4 052 42 fitted with its protective cover



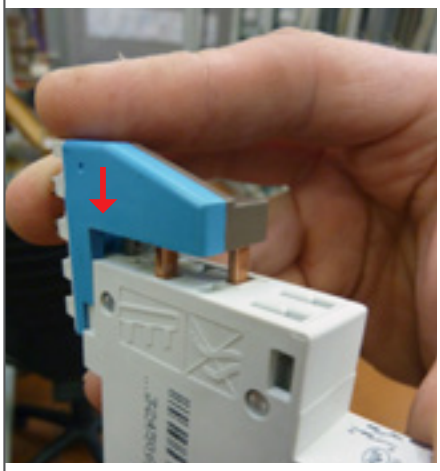
Direct power supply to the distribution block via the terminals of one of the devices



Direct power supply to the distribution block via power supply module Cat.No 4 052 42 equipped with a device

▪ Installing connection modules

A) 1P+N DEVICES - 1 MODULE



For 1P+N circuit breakers with **automatic connection terminals**, the connection module can be installed without any tools, simply by pressing down on it.



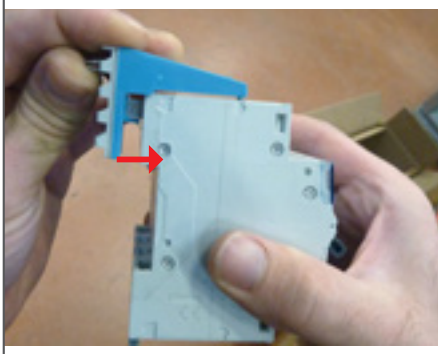
For 1P + N circuit breakers with **screw terminals** the device's terminals must first be opened with a PZ2 screwdriver.





Install the module in the same way as on automatic terminals so that the connection module's teeth are inserted in the circuit breaker terminals, then tighten to the correct torque (1.6 to 2 N·m).

▪ Devices with 1 module per pole

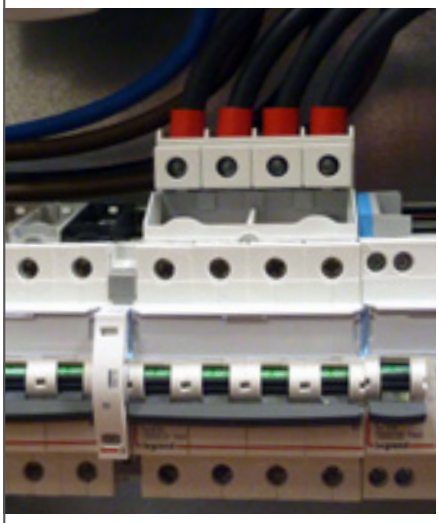


These are mounted in the same way as 250 and 400 A row distribution blocks (see page 33).

Compatible modular devices	Connection modules
1P+N DNX³ circuit breakers – 1 module – screw or automatic terminals	4 052 22 (L1N, L2N, L3N)
1P+N DX³ RCBOs – protection of outgoing lines	
2P and 4P DX³-ID RCCBs – incoming via the top/outgoing via the bottom	4 052 23 (L1, L2, L3, N)
2P and 4P DX³ RCBOs – protection of outgoing lines	
1P, 2P, 3P and 4P DX³ circuit breakers – 1 module/pole	

▪ Distribution block power supply

A) CONNECTION TO THE POWER SUPPLY MODULE (UP TO 125 A)



Cables up to 35 mm² can be connected to the power supply module.
When its protective cover is removed, it can take a 4-pole device.

When the power supply module is equipped with a device, this device must never be removed while energised.

B) CONNECTION ON THE TERMINALS OF A DEVICE (UP TO 80 A)



To supply the distribution block directly via the terminals of one of the devices, first break off the protective caps on the connection modules.

9 VX³ OPTIMISED CONNECTION KITS

Legrand offers a range of optimised connection kits for connecting protective devices to busbars with no bending or drilling.

- **DMX³/SCP connection interface connection kits**

These kits are used for quick, easy connection of SCP switchboard feed units to the upstream terminals of size 1 DMX³. The kits are mounted in enclosures 725 mm and 975 mm deep.

KIT CAT. NO	NOMINAL CURRENT	SCP CAT. NO	DMX³ SIZE 1 VERSION
4 043 00	1600 A	0 450 94	Fixed
4 043 01	2000 A	0 450 95	Fixed
4 043 02	2500 A	0 450 96	Fixed
4 043 03	1600 A	0 450 94	Draw-out
4 043 04	2000 A	0 450 95	Draw-out
4 043 05	2500 A	0 450 96	Draw-out

It is essential that prefabricated busbar system incoming lines are mounted vertically. See the selection chart on page 16.





- **Connection kits for transfer**

These kits are used for quick, easy connection of the downstream terminals of protective devices, such as DMX³, DMX³-I or DPX³ 1600, directly to the transfer busbar. The kits are also available for size 1 or 2, fixed or draw-out, supply inverter, etc. DMX³. To select the right kit, please refer to the following tables.

DMX³ SIZE 2				
KIT CAT.NO	DMX³ VERSION	DMX³ MAX. CURRENT	TRANSFER BUSBAR MAX. CURRENT	NO. OF BARS PER POLE
4 043 60	Fixed	3200	3200	2
4 043 61	suply inverter - fixed	3200	3200	2
4 043 62	draw-out	3200	3200	2
4 043 63	inverter draw-out	3200	3200	2

DMX³ SIZE 1				
KIT CAT.NO	DMX³ VERSION	DMX³ MAX. CURRENT	TRANSFER BUSBAR MAX. CURRENT	NO. OF BARS PER POLE
4 043 64	Fixed	2000 A	2000 A	2
4 043 65	suply inverter - fixed	2000 A	2000 A	2
4 043 66	Draw-out	2500 A	2500 A	2
4 043 67	suply inverter draw-out	2500 A	2500 A	2
4 043 68	Fixed	1600 A	1600 A	1
4 043 69	suply inverter - fixed	1600 A	1600 A	1
4 043 70	Draw-out	1600 A	1600 A	1
4 043 71	suply inverter draw-out	1600 A	1600 A	1

DPX³ 1600				
KIT CAT.NO	DPX³ 1600 VERSION	CONNECTION TYPE	ENCLOSURE DEPTH	NO. OF BARS PER POLE
4 043 80	Fixed	Front terminals	475 mm *	1
4 043 81	Fixed	Front terminals	725/975 mm	1
4 043 82	Draw-out	Front terminals	725/975 mm	1
4 043 83	Fixed	Rear terminals	725/975 mm	1
4 043 84	Draw-out	Rear terminals	725/975 mm	1

* in partial chassis



Connection kits for transfer supplied dismantled

▪ **Connection kits for protective devices**
These kits are used to connect DPX³ 160, DPX³ 250 and DPX³ 630 protective devices with any nominal current and breaking capacity to 1600 A side-mounted busbars (1 bar/pole) with or without cable sleeve. The circuit breakers are mounted horizontally on their dedicated plates.

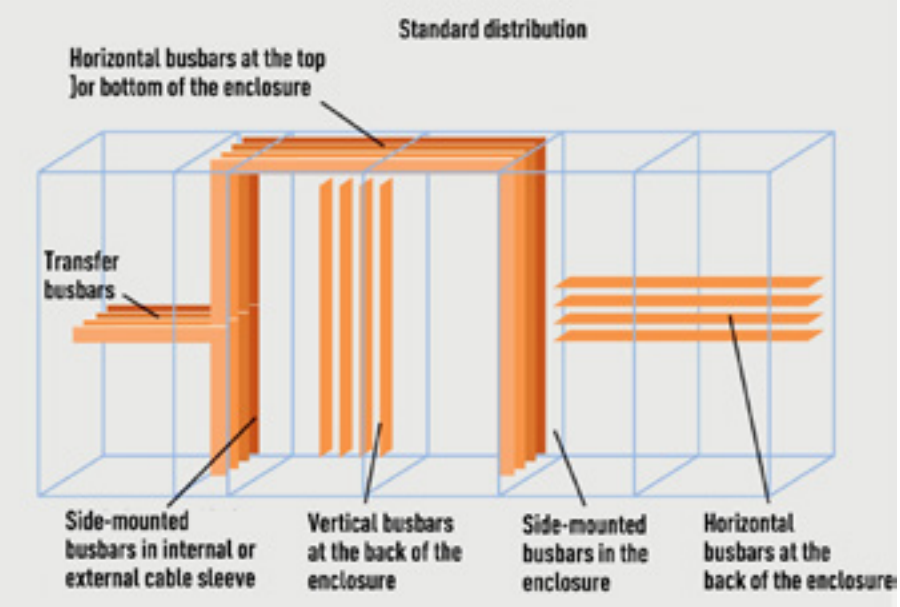


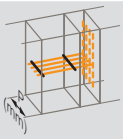
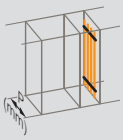
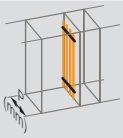
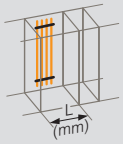
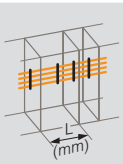


KIT CAT.NO	CIRCUIT BREAKER	BUSBAR MOUNTING TYPE	ENCLOSURE DEPTH (mm)
4 045 40	DPX³ 160	behind upright	725/975
4 045 41	DPX³ 250	behind upright	725/975
4 045 42	DPX³ 630	behind upright	725/975
4 045 50	DPX³ 160	in internal sleeve	475
4 045 51	DPX³ 250	in internal sleeve	475
4 045 52	DPX³ 630	in internal sleeve	475
4 045 60	DPX³ 160	in internal sleeve	725/975
4 045 61	DPX³ 250	in internal sleeve	725/975
4 045 62	DPX³ 630	in internal sleeve	725/975

STANDARD DISTRIBUTION

Legrand standard distribution enables numerous different compositions of busbars to be created and the isolating supports provide high flexibility for installations up to 6300 A in both enclosures and cable sleeves with copper or aluminium bars.



XL³ STANDARD DISTRIBUTION												
In max.			Flat copper bars						C-section aluminium bars			
			400 A	800 A	1000 A	1600 A	4000 A	6300 A	1600 A			
Supports / Mounting												
			0 373 15	0 373 20	0 373 21	0 373 22/23	0 373 24/25	0 373 12/13	0 373 66	0 373 68	0 373 67	0 373 69
	Horizontal main top or bottom	D: 475				•(5) + 0 205 51			•(5)			
		D: 725				• + 0 205 52	•(5)	•(5)	•(6)	•(5)		
		D: 975				• + 0 205 53	•(1)	•(1)	•(1, 7)	•(7)		
	Horizontal transfer	D: 725				• + 0 205 51	•(4, 5)	•(4, 5)	•	•(5)		
		D: 975				• + 0 205 52	•	•	•(1)	•		
	Side-mounted vertical in cable sleeve	D: 475		• + 0 205 51	• + 0 205 51	• + 0 205 51			•		•	
		D: 725		• + 0 205 52	• + 0 205 52	• + 0 205 52	•	•	•(1)	•	•(1)	•
		D: 975		• + 0 205 53	• + 0 205 53	• + 0 205 53	•(1)	•(1)	•(1)	•(1)	•(1)	•(1)
	Side-mounted vertical in enclosure behind upright	D: 725		• + 0 205 51		• + 0 205 51			•			
		D: 975		• + 0 205 52		• + 0 205 52	•	•	•(1)	•		
	Vertical at the back	W: 475		• + 0 205 51		•(2) + 0 205 51			•			
		W: 725	• + 0 373 14	• + 0 205 52		• + 0 205 52			•	•		
		W: 975		• + 0 205 53		• + 0 205 53			•	•(1)		
	Horizontal at the back	W: 475		•(3) + 0 205 51		•(3) + 0 205 51	•(3) + 0 205 51	•(3) + 0 205 51				
		W: 725		•(3) + 0 205 52		•(3) + 0 205 52	•(3) + 0 205 52	•(3) + 0 205 52				
		W: 975		•(3) + 0 205 53		•(3) + 0 205 53	•(3) + 0 205 53	•(3) + 0 205 53				

(1) With upright Cat.No 0 205 20 in cable sleeve
(2) Depth 725 mm minimum
(3) Fixed supports only
(4) In additional cable sleeves
(5) Partial chassis
(6) With crosspieces Cat.No 0 205 52
(7) With crosspieces Cat.No 0 205 53

1 MOUNTING COPPER BUSBARS

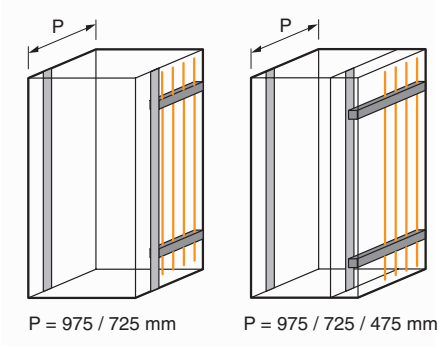
▪ **In < 800 A: support Cat.No 0 373 20**

Isolating supports Cat.No 0 373 20 are used to create sloping vertical busbars. They take flat bars up to 63 x 5 mm. They can be side-mounted in enclosures and cable sleeves (internal and external) or at the back of the enclosure, whatever the width and depth of the enclosure. They are fixed on mounting crosspieces Cat.Nos 0 205 51/52/53 (see page 42).



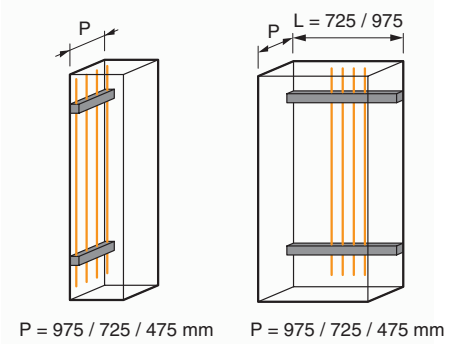
Isolating support Cat.No 0 373 20

Support Cat.No 0 373 20:
4 mounting possibilities



Side-mounted in enclosure

Side-mounted in internal cable sleeve



Side-mounted in external cable sleeve

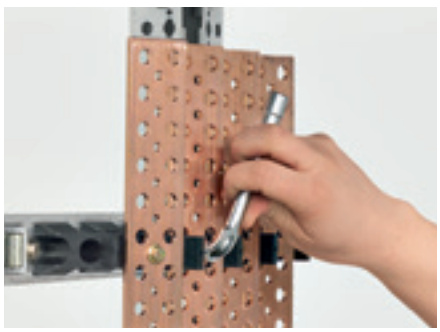
At the back of the enclosure

SELECTION OF BARS			
Bars		I (A)	
Cat.No	Cross-section (mm)	IP < 30	IP > 30
0 374 18	25 x 5	330	270
0 374 19	32 x 5	450	400
0 374 40	50 x 5	700	630
0 374 41	63 x 5	800	700
0 374 34	18 x 4	245	200

MAXIMUM DISTANCE (IN mm) BETWEEN SUPPORTS ACCORDING TO THE PEAK CURRENT (Ipk)					
Bars		0 374 18 25 x 5	0 374 19 32 x 5	0 374 40 50 x 5	0 374 41 63 x 5
Ipk (kÂ)	10	800	900	-	-
	15	600	600	700	800
	20	450	500	600	700
	25	350	400	500	550
	30	300	350	400	450
	35	250	300	350	400
	40	200	250	275	300
	45	200	200	225	250
	50	150	150	200	200
	60	125	125	150	150
	70	100	100	150	150
	80	-	-	100	100



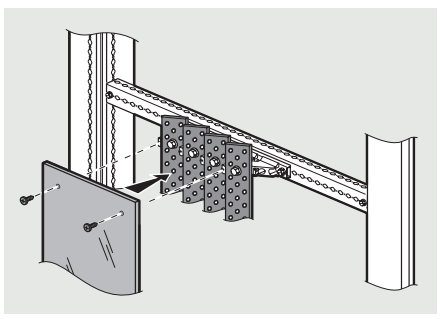
Fix the crosspiece on the uprights using the brackets provided



Fix the copper bars on the support (tightening torque 7 Nm)

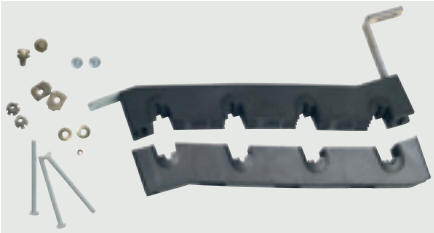


Fix the support using the M6 screws (tightening torque 10 Nm)



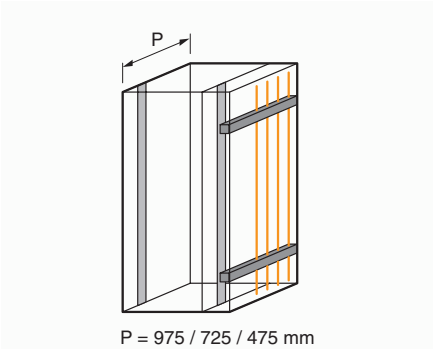
It is possible to fix a protective cover (not supplied) with the 2 screws provided

▪ **In < 1000 A:support Cat.No 0 373 21**
Isolating supports Cat.No 0 373 21 are used to create staggered vertical bus-bars. They take flat bars up to 80 x 5 mm and C-section bars up to 440 mm². They are mounted at the side, in internal and external cable sleeves (all depths), using crosspieces Cat.Nos 0 205 51/52/53 (see page 42).



Isolating support Cat.No 0 373 21

Support Cat.No 0 373 21



P = 975 / 725 / 475 mm

Side-mounted in internal or external cable sleeve

SELECTION OF BARS				
	Bars		I (A)	
Type	Cat. No	Cross-section	IP < 30	IP > 30
Flat	0 374 40	50 x 5 mm	700	630
	0 374 41	63 x 5 mm	800	700
	0 374 59	75 x 5 mm	950	850
	0 374 43	80 x 5 mm	1000	900
C-section	0 374 60	155 mm²	500	400
	0 374 61	265 mm²	800	630
	0 374 62	440 mm²	1250	1000

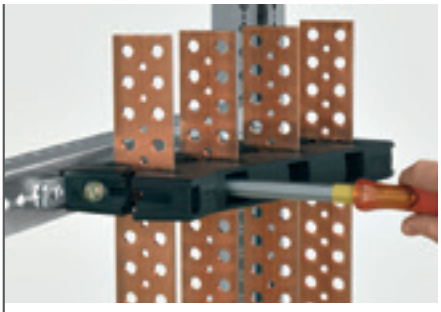
MAXIMUM DISTANCE (IN mm) BETWEEN THE SUPPORTS ACCORDING TO THE PEAK CURRENT (Ipk)							
Ipk (kÂ)	Flat bars				C-section bars		
	0 374 40 50 x 5	0 374 41 63 x 5	0 374 59 75 x 5	0 374 43 80 x 5	0 374 60 155 mm²	0 374 61 265 mm²	0 374 62 440 mm²
10	1000	1200	1200	1200	1100	1600	1600
15	800	900	1000	1000	800	1000	1300
20	650	700	750	750	600	800	1000
25	500	600	600	600	450	650	800
30	400	500	550	550	400	550	700
35	350	450	450	450	350	450	600
40	300	350	400	400	300	400	550
45	300	300	350	350	250	350	500
50	250	250	300	300	250	300	450
60	200	250	250	250	200	300	400
70	150	200	200	200	150	250	350
80	100	150	200	200		200	300
90	100	150	200	200		200	250
100	100	150	150	150		150	250
110	100	100	150	150		150	200
120	100	100	100	100		150	200



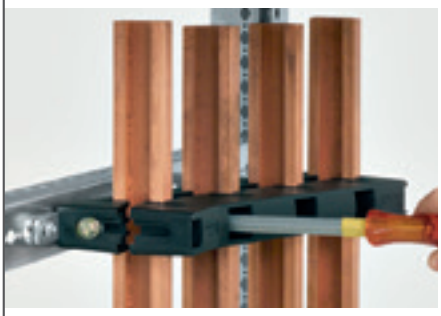
Fix the crosspieces Cat.Nos 0 205 51/52/53 on the structure of the enclosure, then attach the clip-nuts



Fix the supports on the crosspieces using M6 screws (tightening torque 10 Nm)



Insert the bars then fix the movable part of the isolating supports (tightening torque 7 Nm): flat bars Cat.Nos 0 374 40/41/43/59 ...

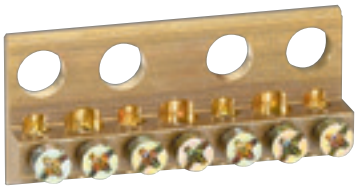


...or C-section busbars Cat.Nos 0 374 60/61/62

The connectors for copper bars are fixed onto flat copper bars and onto the distribution block Cat.No 0 374 00 and are used for wiring the outgoing lines.



Cat.No 0 374 03:
1 x 1.5 to 6 mm²
+ 2 x 6 to 16 mm²



Cat.No 0 374 05:
4 x 1.5 to 6 mm²
+ 3 x 6 to 16 mm²



Cat.No 0 373 99:
ø10 x 4 x 6 to 35 mm²
+ ø8.9 x 2 x 6 to 35 mm²

- **In < 1600 A: support Cat.Nos 0 373 22/23**

Isolating supports Cat.Nos 0 373 22/23 take one or two flat bars per pole, up to 100 x 5 mm. They can be used to create numerous busbar configurations:
- Main busbars at the top or bottom
- Transfer busbars
- Side-mounted vertical busbars in enclosure or cable sleeve (internal and external)
- Vertical busbars at the back of the enclosure
- Horizontal main busbars at the back of the enclosure

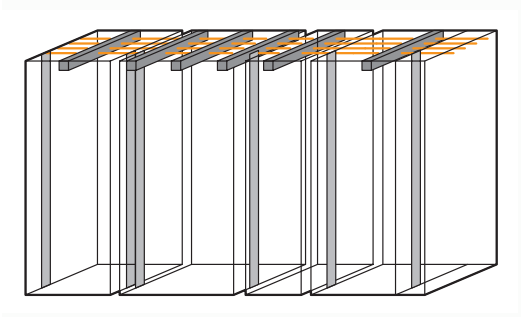


Fixed support Cat.No 0 373 22

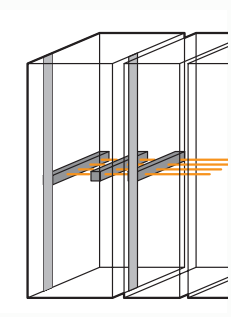


Additional support Cat.No 0 373 23 used in addition to the fixed supports

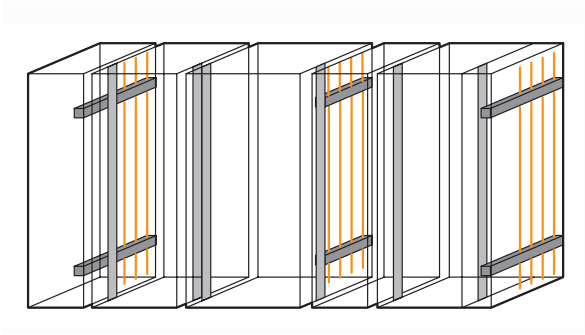
Supports Cat.Nos 0 373 22/23: 5 mounting possibilities



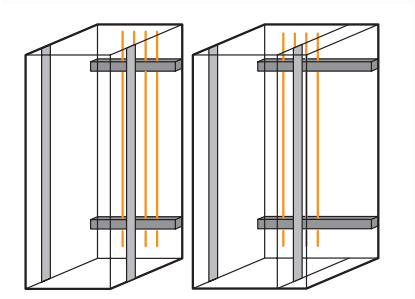
Top or bottom horizontal main busbar(1)



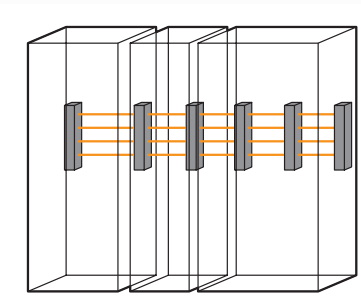
Transfer busbar



Side-mounted vertical busbars



Vertical busbars at the back of the enclosure

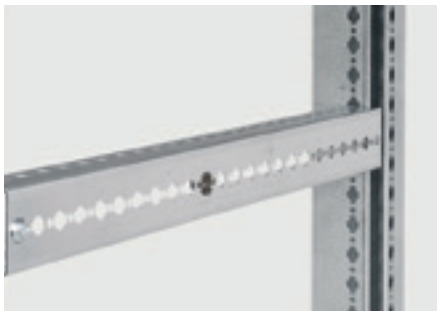


Main busbar at the back of the enclosure

(1) Mounting a top or bottom main busbar in a 475 mm depth enclosure requires the creation of a partial chassis (see page 11)

SELECTION OF BARS									
Bars		I (A)							
		1 bar per pole				2 bars per pole			
		edgewise		flat		edgewise		flat	
Cat.No	Cross-section (mm)	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30
0 374 40	50 x 5	700	630	430	350	1150	1000	650	510
0 374 41	63 x 5	800	700	500	400	1350	1150	770	590
0 374 59	75 x 5	950	850	600	475	1500	1300	890	700
0 374 43	80 x 5	1000	900	630	500	1650	1450	940	740
0 374 46	100 x 5	1250	1050	750	580	1900	1600	1120	900

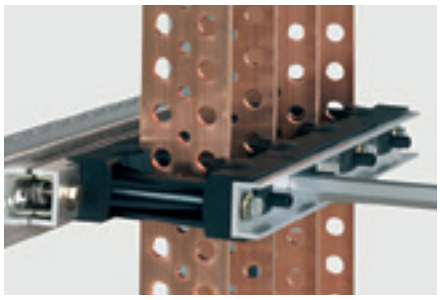
MAXIMUM DISTANCE (IN mm) BETWEEN THE SUPPORTS ACCORDING TO THE PEAK CURRENT (Ipk)										
Ipk (kÂ)	1 bar per pole					2 bars per pole				
	0 374 40 50 x 5	0 374 41 63 x 5	0 374 59 75 x 5	0 374 43 80 x 5	0 374 46 100 x 5	0 374 40 50 x 5	0 374 41 63 x 5	0 374 59 75 x 5	0 374 43 80 x 5	0 374 46 100 x 5
10	1000	1200	1200	1200	1200					
15	800	900	1000	1000	1200					
20	650	700	750	750	900					
25	500	600	600	600	700					
30	400	500	550	550	600	700	800			
35	350	450	450	450	550					
40	300	350	400	400	450	550	600	650	650	700
45	300	300	350	350	400					
50	250	250	300	300	350	450	500	500	500	550
60	200	250	250	250	300	350	400	400	400	450
70	150	200	250	250	250	250	350	350	350	400
80	100	150	200	200	200	250	300	300	300	300
90	100	150	200	200	200	200	250	300	300	300
100	100	150	150	150	150	200	200	250	250	250
110	100	100	150	150	150	150	200	200	200	200
120	100	100	100	100	100	150	150	200	200	200



Fix the crosspieces Cat.Nos 0 205 51/52/53 on the structure of the enclosure, then attach the clip-nuts

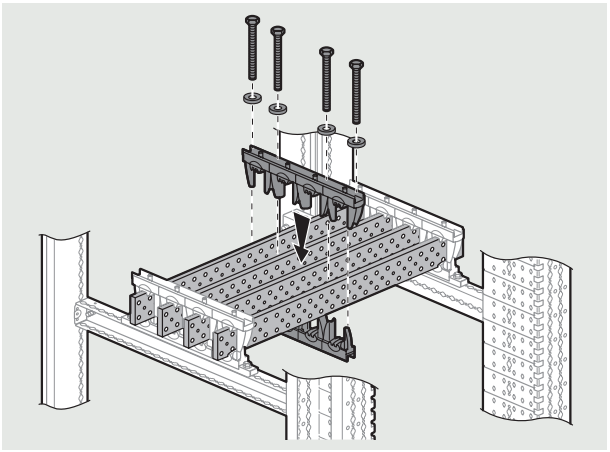


Fix the supports on the crosspieces using M6 screws (tightening torque 10 Nm)

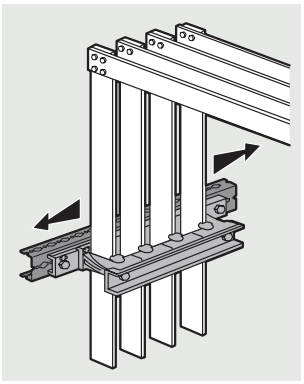


Insert the bars then fix the movable part of the isolating supports (tightening torque 7 Nm): flat bars Cat.Nos 0 374 40/41/43/46/59

Additional support Cat.No 0 373 23



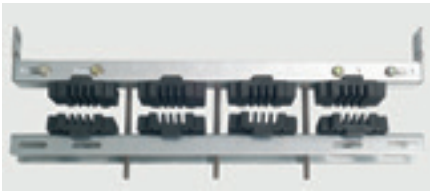
To withstand high short-circuit currents, the number of busbar supports must be increased. Occasionally, due to their position, supports cannot be fixed on the frame. Additional supports have been developed for this situation. They are not fixed to the frame, but hold the bars in relation to one another to withstand the electrodynamic stresses which occur if there are short-circuits.



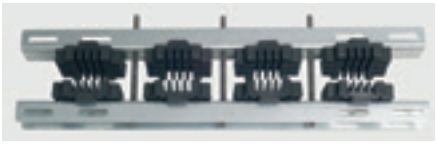
Crosspieces Cat.Nos 0 205 51/52/53 enable the position of the bars to be adjusted by 5 mm so that it is easier to connect a vertical busbar to a horizontal busbar

- **In < 4000 A: supports Cat.Nos 0 373 24/25**

Isolating supports Cat.Nos 0 373 24/25 take one to four 5 mm thick flat bars up to 120 x 5 or one to three 10 mm thick flat bars up to 125 x 10.
They can be used to create numerous busbar configurations:
- Transfer busbars
- Main busbars at the top or the bottom
- Horizontal main busbars at the back of the enclosure
- Side-mounted vertical busbars in enclosure and cable sleeve (internal and external)

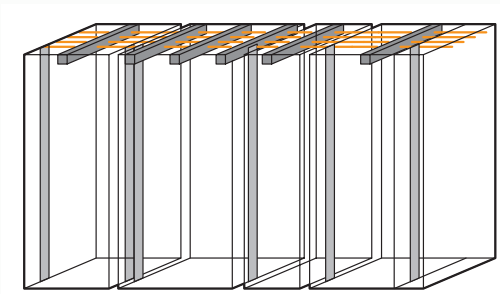


Fixed support Cat.No 0 373 24

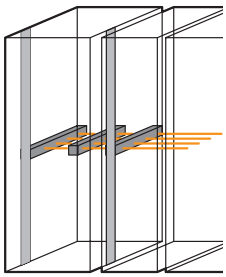


Additional support Cat.No 0 373 25 used in addition to the fixed supports

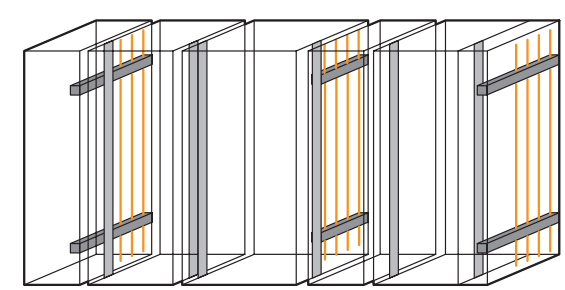
Supports Cat.Nos 0 373 24/25: 4 mounting possibilities



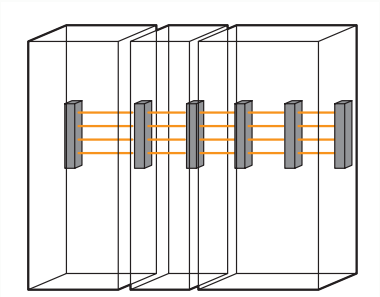
Top or bottom horizontal main busbar[1]



Transfer busbar[2]

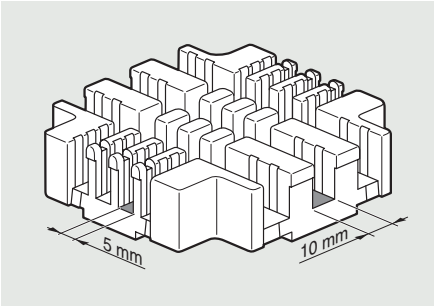


Side-mounted vertical busbars



Main busbar at the back of the enclosure

(1) Mounting a top or bottom main busbar in a 725 mm depth enclosure requires the creation of a partial chassis (see page 11)
(2) Mounting a transfer busbar in a 725 mm depth enclosure requires the creation of a partial chassis (see page 11) and the use of 2 internal or external cable sleeves.



Position the insulators on the supports according to the thickness of the copper bars



Fix the supports on the uprights using 4 clip-nuts + screws (tightening torque 10 Nm)



Adjust the depth of the busbar to connect it with the other busbars (tightening torque 20 Nm)

DISTRIBUTION SYSTEM

SELECTION OF 5 mm thick bars									
Bars		I (A)							
Cat.No	Cross-section (mm)	1 bar per pole				2 bars per pole			
		edgewise		flat		edgewise		flat	
		IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30
0 374 40	50 x 5	700	630	500	420	1180	1020	750	630
0 374 41	63 x 5	800	700	600	500	1380	1180	750	630
0 374 59	75 x 5	950	850	700	600	1600	1400	1000	850
0 374 43	80 x 5	1000	900	750	630	1700	1480	1050	900
0 374 46	100 x 5	1250	1050	850	700	2050	1800	1200	1050
	125 x 5	1450	1270	1000	800	2500	2150	1450	1250

MAXIMUM DISTANCE (IN mm) BETWEEN THE SUPPORTS ACCORDING TO THE PEAK CURRENT (Ipk)										
Ipk (kÂ)	1 bar per pole					2 bars per pole				
	50 x 5	63 x 5	75 x 5 80 x 5	100 x 5	125 x 5	50 x 5	63 x 5	75 x 5 80 x 5	100 x 5	125 x 5
10	1550	1700	1700	1700	1700	1700	1700	1700	1700	1700
15	1050	1200	1350	1550	1700	1550	1700	1700	1700	1700
20	800	900	1000	1150	1350	1200	1350	1500	1700	1700
25	650	750	800	950	1100	950	1100	1200	1400	1550
30	550	600	700	800	900	800	900	1000	1150	1300
35	450	550	600	650	800	700	800	900	1000	1150
40	400	450	550	600	700	600	700	800	900	1000
45	350	400	450	550	600	550	600	700	800	900
50	350	350	450	500	550	500	550	650	700	800
60	300	300	350	400	450	400	450	550	600	700
70	250	250	300	350	400	350	400	450	500	650
80		250	250	300	350	300	350	400	450	550
90			250	250	300	300	300	350	400	500
100				250	300	250	300	300	350	500
110				250	250	250	250	300	350	450
120					250		250	250	300	450
130					250			250	300	400
140								250	250	400
150									250	350
160									250	350
170										350
180										300
190										
200										
210										
220										

	3 bars per pole				4 bars per pole			
	edgewise		flat		edgewise		flat	
	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30
	1600	1380	1000	900	2020	1720	1120	1000
	1900	1600	1100	1000	2350	1950	1350	1200
	2200	1900	1250	1100	2700	2300	1600	1400
	2350	2000	1300	1150	2850	2400	1650	1450
	2900	2450	1600	1400	3500	2900	1900	1650
	3450	2900	1800	1600	4150	3450	2150	1950

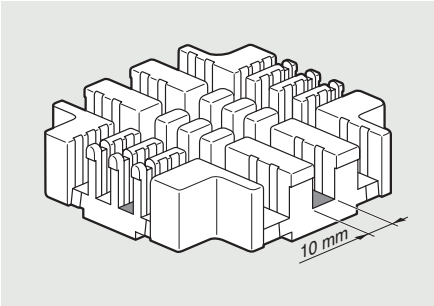
	3 bars per pole					4 bars per pole				
	50 x 5	63 x 5	75 x 5 80 x 5	100 x 5	125 x 5	50 x 5	63 x 5	75 x 5 80 x 5	100 x 5	125 x 5
	-	-	-	-	-	-	-	-	-	-
	1700	-	-	-	-	-	-	-	-	-
	1550	1700	1700	1700	1700	1700	1700	1700	1700	1700
	1250	1450	1600	1700	1700	1550	1700	1700	1700	1700
	1050	1200	1350	1550	1700	1300	1500	1700	1700	1700
	900	1050	1150	1300	1500	1150	1250	1450	1650	1700
	800	900	1050	1150	1300	1000	1100	1300	1450	1650
	700	800	900	1050	1200	900	1000	1150	1300	1450
	650	750	850	950	1050	800	900	1050	1150	1350
	550	600	700	800	900	650	750	850	1000	1100
	450	550	600	700	750	600	650	750	850	950
	400	450	550	600	700	500	600	650	750	850
	350	400	500	550	600	450	500	600	650	750
	350	400	450	500	550	400	450	550	600	700
	300	350	400	450	500	350	450	500	550	600
	300	300	350	400	450	350	400	450	550	550
	250	300	350	350	400	300	350	400	500	550
	250	250	300	350	400	300	350	400	450	500
	250	250	300	350	350	300	300	350	400	450
		250	250	300	350	250	300	350	400	350
		250	250	300	350	250	300	300	350	300
			250	300	300	250	250	300	350	300
			250	250	300	250	250	300	300	250
				250	300		250	250	300	250
				250	250		250	250	250	200
				250	250			250	250	200

SELECTION OF 10 mm thick bars												
Bars	I (A)											
	1 bar per pole				2 bars per pole				3 bars per pole			
Cross-section (mm)	edgewise		flat		edgewise		flat		edgewise		flat	
	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30
80 x 10	1460	1270	1150	950	2500	2150	1700	1500	3450	2900	2500	2000
100 x 10	1750	1500	1350	1150	3050	2550	2000	1650	4150	3500	2900	2400
120 x 10	2000	1750	1650	1450	3600	2920	2500	2000	4800	4000	3500	3000

MAXIMUM DISTANCE (IN mm) BETWEEN THE SUPPORTS ACCORDING TO THE PEAK CURRENT (Ipk)									
Ipk (kÂ)	1 bar per pole			2 bars per pole			3 bars per pole		
	80 x 10	100 x 10	120 x 10	80 x 10	100 x 10	120 x 10	80 x 10	100 x 10	120 x 10
20	1700	1700	1700	1700	1700	1700	1700	1700	1700
25	1600	1700	1700	1700	1700	1700	1700	1700	1700
30	1350	1550	1700	1700	1700	1700	1700	1700	1700
35	1150	1300	1450	1700	1700	1700	1700	1700	1700
40	1050	1150	1300	1500	1700	1700	1700	1700	1700
45	900	1050	1150	1350	1550	1700	1700	1700	1700
50	850	950	1050	1200	1400	1550	1600	1700	1700
60	700	800	850	1000	1150	1300	1350	1550	1700
70	600	700	750	900	1000	1100	1150	1300	1500
80	550	600	650	750	900	1000	1000	1150	1300
90	500	550	600	700	800	900	900	1050	1100
100	450	500	550	600	700	800	850	900	950
110	400	450	500	550	650	750	750	800	800
120	350	400	450	550	600	650	700	750	750
130	350	350	400	500	550	600	650	700	700
140	300	350	400	450	500	600	600	650	650
150	300	350	350	450	500	550	550	650	600
160	250	300	350	400	450	500	550	600	500
170	250	300	300	350	450	500	500	500	500
180	250	300	300	350	400	450	500	450	450
190	250	250	300	350	400	450	450	400	400
200	200	250	300	300	350	400	450	400	400
210	200	250	250	300	350	350	400	350	350
220		250	250	300	350	300	350	300	300
230		200	250	300	300	300	300	300	300
240			200	250	300	250	300	250	250
250			200	250	300	250	250	250	250

- **In < 6300 A: supports Cat. Nos 0 373 12/13**

Isolating supports Cat.Nos 0 373 12/13 take one to three 10 mm thick flat bars up to 200 mm height.
They are used for creating transfer, vertical and side-mounted busbars in cable sleeves.



Position the insulators on the supports according to the thickness of the copper bars

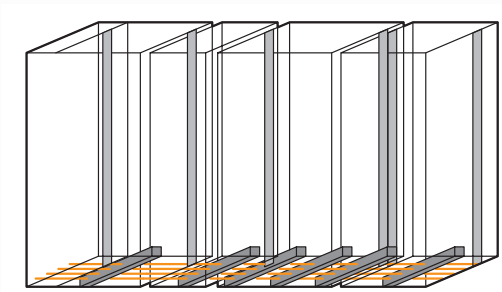


Fix the supports on the uprights using 4 clip-nuts + screws (tightening torque10 Nm)

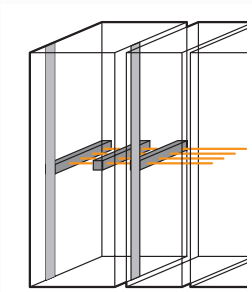


Adjust the depth of the busbar to connect it with the other busbars (tightening torque 20 Nm)

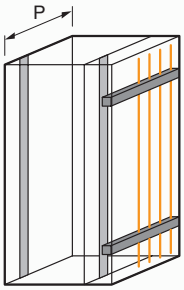
Supports Cat.Nos 0 373 12/13: 4 mounting possibilities



Bottom horizontal main busbar[1]

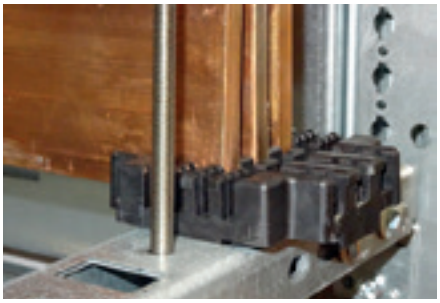


Transfer busbar[2]



P = 975 / 725 / 475 mm

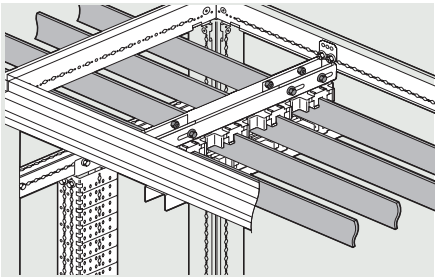
Side-mounted in internal cable sleeve



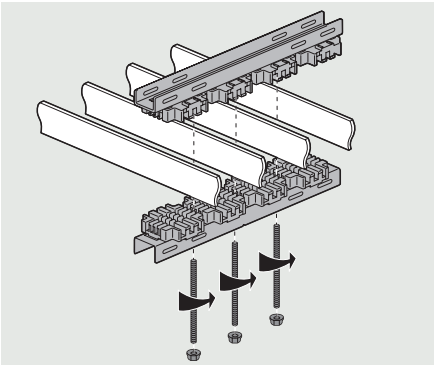
To prevent contact between the bar and the side panel, position the bar in the centre of the last support.

SELECTION OF 10 mm thick bars												
Bars	I (A)											
	1 bar per pole				2 bars per pole				3 bars per pole			
Cross-section (mm)	edgewise		flat		edgewise		flat		edgewise		flat	
	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30	IP < 30	IP > 30
200 x 10	3300	3000	2750	2400	5200	4800	3600	3250	7000	6400	5400	4800

MAXIMUM DISTANCE (IN mm) BETWEEN THE SUPPORTS ACCORDING TO THE PEAK CURRENT			
	200 X 10	200 X 10	200 X 10
Ipk (kA)	1 BAR PER POLE	2 BARS PER POLE	3 BARS PER POLE
20	1700	1700	1700
25	1700	1700	1700
30	1550	1700	1700
35	1300	1450	1700
40	1150	1350	1700
45	1050	1150	1600
50	950	1050	1450
60	800	900	1250
70	700	800	1100
80	650	700	950
90	600	650	850
100	500	600	750
110	450	550	700
120	400	500	650
130	400	500	600
140	350	450	550
150	350	400	500
160	350	400	500
170	300	400	450
180	300	350	450
190	300	350	400
200	250	300	350
210	250	300	350
220	200	250	300
230	200	250	300
240		200	250



Supports Cat.Nos 0 373 12 and 0 373 24 enable the depth of the busbar to be adjusted so that it can be aligned with and connected to other busbars.

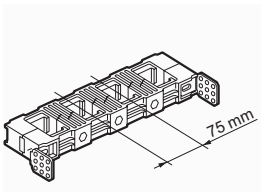


Additional supports Cat.Nos 0 373 13 and 0 373 25 hold the bars in relation to one another and maintain the maximum distances between supports when it is not possible to fix them on the enclosure frame.

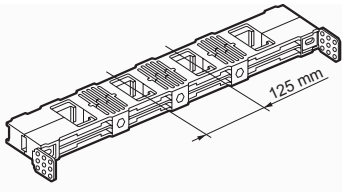
2 MOUNTING ALUMINIUM BUSBARS

In addition to the copper standard distribution range, Legrand offers the possibility of creating standard distribution with C-section aluminium bars. This range includes staggered supports in addition to the supports and bars for optimised distribution. It is therefore possible to create aluminium or mixed copper and aluminium standard distribution.
In this section, only assemblies not covered in the optimised distribution section will be described.

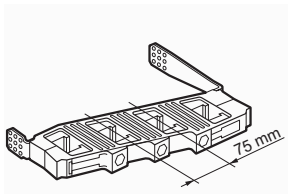
Bar supports are available in "aligned version" for mounting behind uprights, at the back of enclosures or horizontally, and in "staggered version" for mounting in internal or external cable sleeves.
(see Optimised distribution section)
These two versions are available with 75 mm fixing centres for mounting in enclosures depth 725 mm or 475 mm (with partial chassis) and with 125 mm fixing centres for mounting in enclosures depth 975 mm or 725 mm (with partial chassis).



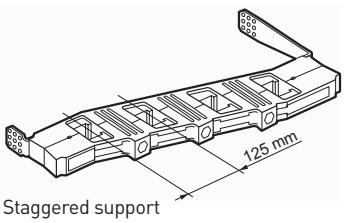
Aligned support
Cat.No 0 373 66



Aligned support
Cat.No 0 373 68



Staggered support
Cat.No 0 373 67



Staggered support
Cat.No 0 373 69

It is important to comply with the maximum distance between supports for every assembly in order to ensure that the busbars are held in position when subjected to electrodynamic forces.

Aligned version - Maximum distances between supports (mm)

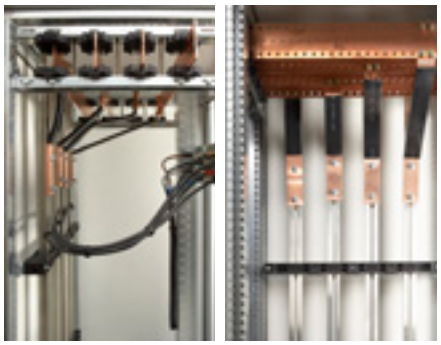
In(A)		C-SECTION BARS	SUPPORTS	Ipk (KA)									
				30	40	52	63	73	84	94	105	132	154
				Ick (kA)									
IP ≤ 30	IP > 30			15	20	25	30	35	40	45	50	60	70
800	630	1 x 0 373 54	0 373 66	1600	1000	800	700	600	600	500	500	-	-
			0 373 68	1600	1000	800	600	500	500	400	400	-	-
1000	800	1 x 0 373 55	0 373 66	1600	1000	800	700	600	600	500	500	-	-
			0 373 68	1600	1000	800	600	500	500	400	400	-	-
1250	1000	1 x 0 373 56	0 373 66	1600	1000	800	700	600	600	500	500	500	400
			0 373 68	1600	1000	800	600	500	500	400	400	400	300
1450	1250	1 x 0 373 57	0 373 66	1600	1000	800	700	600	600	500	500	500	400
			0 373 68	1600	1000	800	600	500	500	400	400	400	300
1750	1600	1 x 0 373 58	0 373 66	1600	1000	800	700	600	600	500	500	500	400
			0 373 68	1600	1000	800	600	500	500	400	400	400	300
3500	3200	2 x 0 373 58	2 x 0 373 66	1600	1000	800	700	600	600	500	500	500	400
			2 x 0 373 68	1600	1000	800	600	500	500	400	400	400	300

Staggered version - Maximum distances between supports (mm)

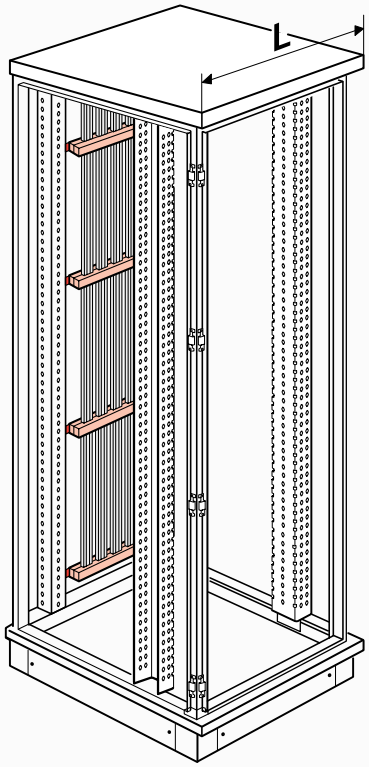
In(A)		C-SECTION BARS	SUPPORTS	Ipk (KA)									
				30	40	52	63	73	84	94	105	132	154
				Ick (kA)									
IP ≤ 30	IP > 30			15	20	25	30	35	40	45	50	60	70
800	630	1 x 0 373 54	0 373 67	1600	1000	800	700	600	600	500	500	-	-
			0 373 69	1600	1000	800	600	500	500	400	400	-	-
1000	800	1 x 0 373 55	0 373 67	1600	1000	800	700	600	600	500	500	-	-
			0 373 69	1600	1000	800	600	500	500	400	400	-	-
1250	1000	1 x 0 373 56	0 373 67	1600	1000	800	700	600	600	500	500	500	400
			0 373 69	1600	1000	800	600	500	500	400	400	400	300
1450	1250	1 x 0 373 57	0 373 67	1600	1000	800	700	600	600	500	500	500	400
			0 373 69	1600	1000	800	600	500	500	400	400	400	300
1750	1600	1 x 0 373 58	0 373 67	1600	1000	800	700	600	600	500	500	500	400
			0 373 69	1600	1000	800	600	500	500	400	400	400	300
3500	3200	2 x 0 373 58	2 x 0 373 67	1600	1000	800	700	600	600	500	500	500	400
			2 x 0 373 69	1600	1000	800	600	500	500	400	400	400	300

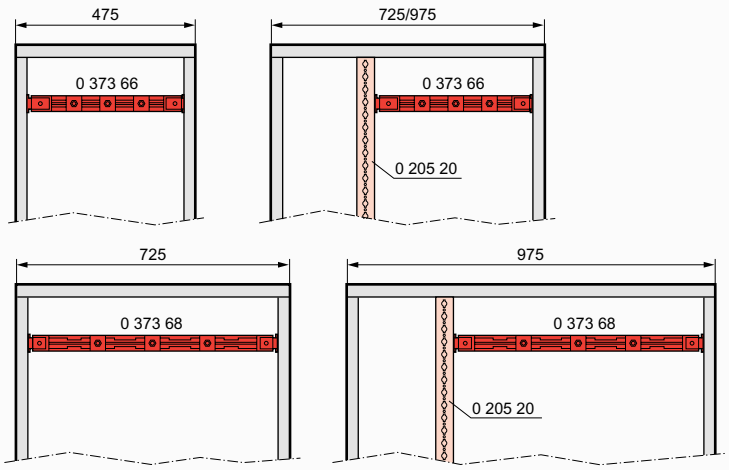
- **Vertical mounting at the back of the enclosure**

This type of mounting is useful when the branch busbar cannot be side-mounted. Devices with rear terminals must then be connected.
Busbar supports Cat.No 0 373 66 (75 mm fixing centres) can be mounted directly at the back of the cable sleeve or at the back of 725 or 975 mm depth enclosures using the intermediate upright
Cat.No 0 205 20/208 51. Busbar supports Cat.No 0 373 68 (125 mm fixing centres) can be mounted directly at the back of 725 mm depth enclosures or at the back of 975 mm depth enclosures using the intermediate upright Cat.No 0 205 20/208 51.



The connection with the main horizontal busbar must be customised. The use of flexible bars is ideal for this.

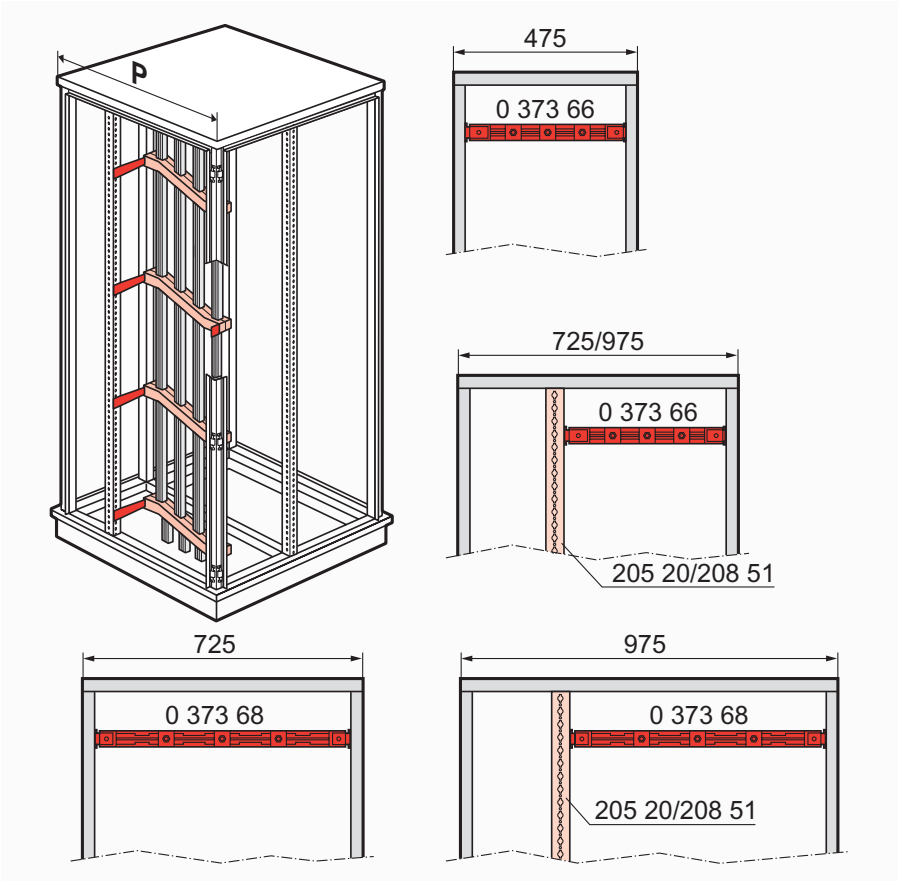


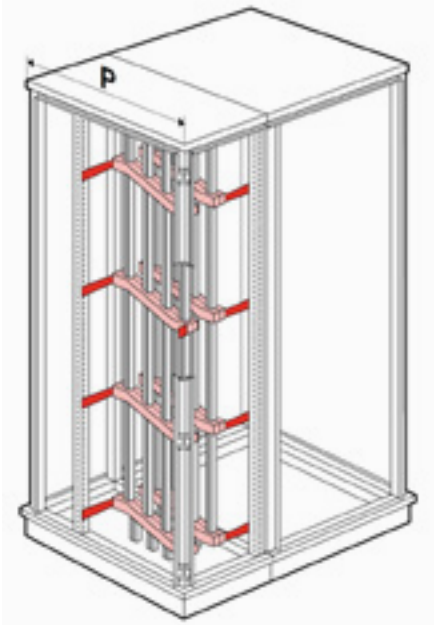


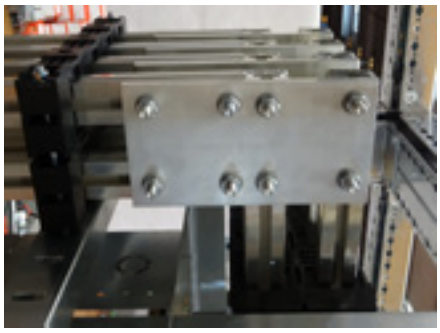
▪ **Side-mounting in a cable sleeve**
This type of mounting is particularly suitable for ease of connection.
The aluminium busbar is placed in a cable sleeve. The staggered busbars provide excellent accessibility from the side for making connections. The supports can be fixed between the structural uprights of the sleeve or between the rear of the functional upright and the structural upright. It is also possible to use the intermediate upright Cat.No 0 205 20/208 51 to mount supports Cat.No 0 373 66 in 725 or 975 mm deep sleeves, or supports Cat.No 0 373 68 in 975 mm deep sleeves.
The main busbar can be created independently using flat bars (with 1600 A supports Cat.No 0 373 22 or 4000 A supports Cat.No 0 373 24) or using single C-section aluminium bars (with 1600 A supports Cat.No 0 373 66) or double C-section aluminium bars (3200 A supports Cat.No 0 373 68).



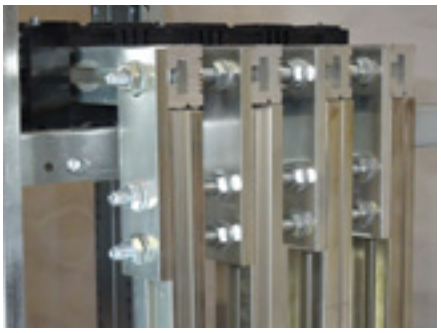
The joining kit is not required when creating a double busbar in an external cable sleeve. Busbar supports Cat.Nos 0 373 67/69 are fixed head to tail either side of the sleeve.







As the fixing centres between busbars are the same (75 mm for supports Cat.Nos 0 373 22 and 0 373 66, 125 mm for supports Cat.Nos 0 373 24 and 0 373 68), connection is very easy using single connection plates (Cat.No 0 373 82) or double connection plates (Cat.No 0 373 83).

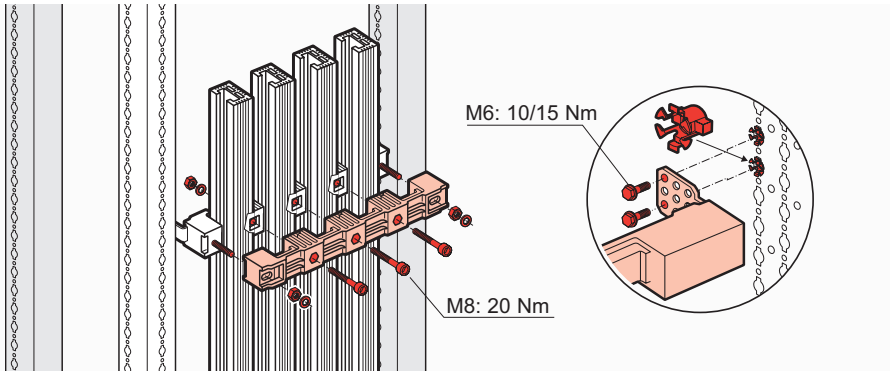




XL³ 4000 external cable sleeves can be used to mount a double aluminium busbar without any accessories.
However only a single busbar can be mounted in internal cable sleeves.

- **Tightening torques**

The tightening torque of the five M8 screws used to hold the busbars in place must be 20 Nm.
The tightening torque of the four M6 screws used to fix the supports on the XL³ structure must be between 10 and 15 Nm.



MOUNTING DEVICES AND EQUIPMENT

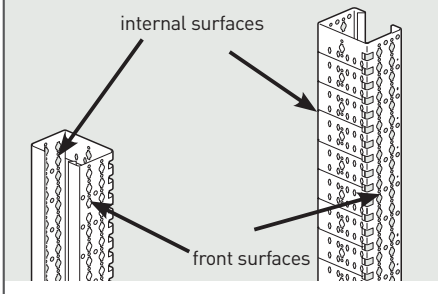
With their comprehensive range of equipment, XL³ 4000 enclosures can take Legrand breaking and protection devices and their accessories (add-on modules, motor-driven handles, etc.).
DPX circuit breakers (fixed, plug-in and draw-out versions) can be installed vertically or horizontally in these enclosures.



For comprehensive details of the possible configurations and to select the corresponding fixing devices and faceplates, please consult the selection charts in the Legrand general catalogue.

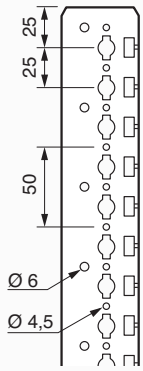
1 FIXING DEVICES INSTALLATION

The enclosure must be equipped with functional uprights, prior to the installation of different fixing devices
(see page 9).
2-position ⌙⌡ rails and plates for fixed devices with front terminals and no rotary or motor-driven handle are mounted on the front of reduced-width or standard functional uprights.
Adjustable fixing devices for fixed DPX³ with front terminals equipped with a rotary or motor-driven handle, fixed DPX³ with rear terminals, and plug-in or draw-out DPX³, as well as plates for DPX³ supply inverters and plates for DMX³ devices, are mounted on the internal surface of standard uprights only. Runners, at 50 mm intervals, are used to guide adjustable plates. The oblong notches are used to lock the plates at the correct depth.



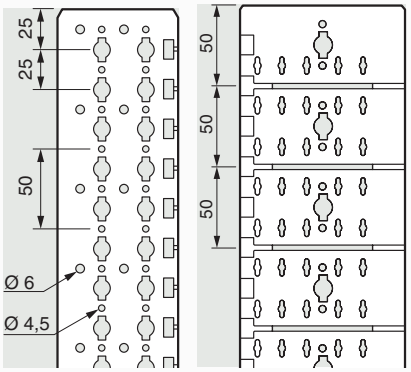
The standard functional uprights in XL³ 4000 enclosures have 2 usable surfaces with numerous perforations

Reduced-width upright



Front surface

Standard upright



Front surface Internal surface

The ⌂ shaped holes are designed to take ¼ turn clip-nuts. The Ø 6 mm holes on the front surface are used to fit the fixing bracket when the uprights are cut (see page 9).
The uprights also have Ø 4.5 mm holes for fixing various products using self-tapping screws.

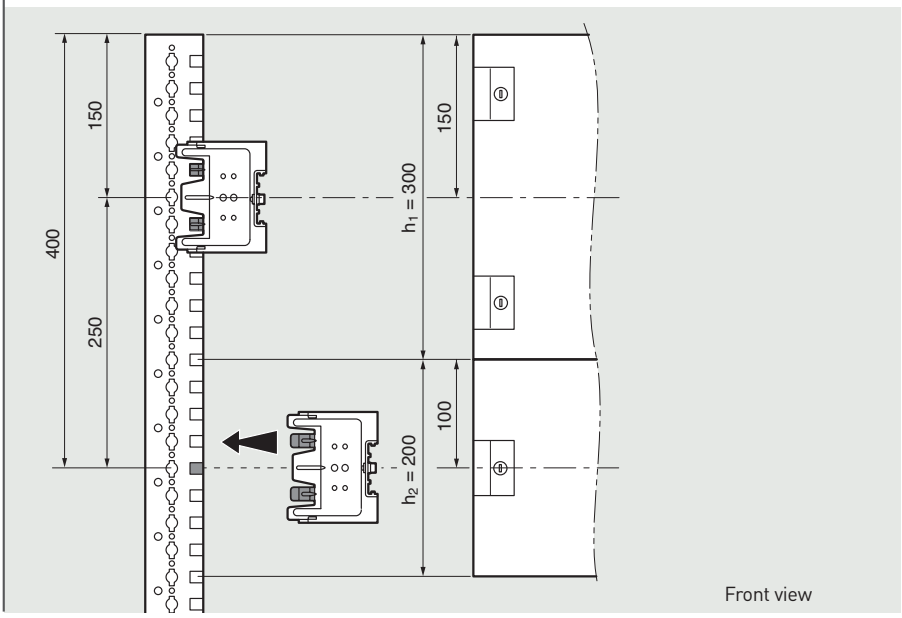


Fitting the clip-nuts

▪ **Mounting 2-position rails**

The position of the rail depends on the height and position of the associated faceplate. The centre of the rail attachment pieces corresponds to the axis of the faceplate. It is therefore very easy to determine the position for inserting the attachment pieces on the functional uprights. The top of the functional upright corresponds to the top of the 1st faceplate. This is the reference point or point 0.

Example: mounting 2 rails and their faceplates at the top of the enclosure.
- 1st faceplate: height h1 = 300 mm
Position of the attachment pieces of the 1st rail in relation to point 0: 300/2 = 150 mm
- 2nd faceplate: height h2 = 200 mm
Position of the attachment pieces of the 2nd rail in relation to the bottom of the 1st faceplate: 200/2 = 100 mm i.e. a total of: 300 + 100 = 400 mm from point 0



Front view

▪ Mounting fixed plates

The fixing point for plates (for fixed devices with front terminals) always corresponds to the axis of the associated faceplate. As with rails, it is easy to determine the insertion point for the clip-nuts on the functional upright according to the height and position of the faceplate. The clip-nuts will be inserted in the innermost holes.

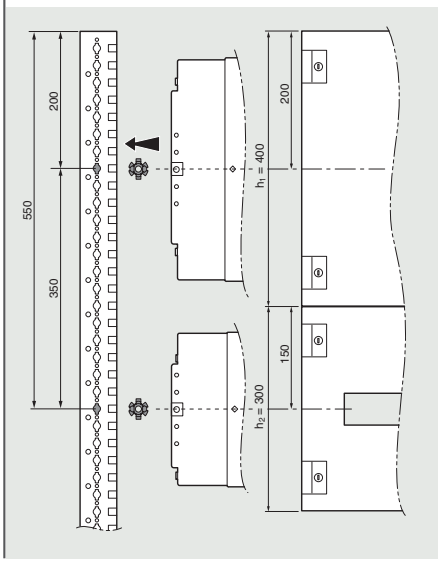
Example: mounting 2 plates and their faceplates at the top of the enclosure.

- 1st faceplate: height h1 = 400 mm

Position of the clip-nuts in relation to point 0: 400/2 = 200 mm

- 2nd faceplate: height h2 = 300 mm

Position of the clip-nuts in relation to the bottom of the 1st faceplate: 300/2 = 150 mm i.e. a total of: 400 + 150 = 550 mm from point 0



Fixed DPX³ in horizontal position





The plates enable the device to be mounted facing either direction (incoming line on the right or left) with the same faceplate.



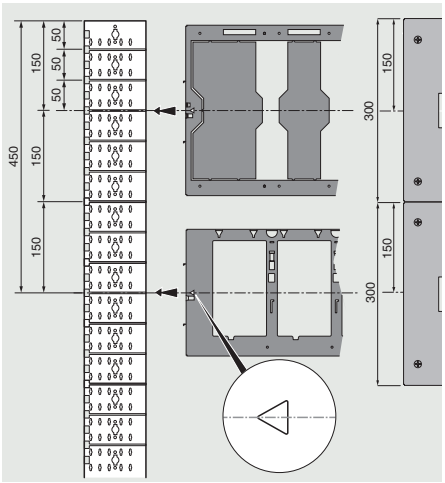
The plates have numerous cut-outs for feeding though conductors. Seal Cat.No 0 202 40 (length 20 m) is used to protect the cables.

▪ Mounting adjustable fixing devices and plates

Adjustable fixing devices are used for mounting all DPX³ devices vertically in all configurations (fixed, plug-in, draw-out, front terminal, rear terminal, with or without add-on module mounted underneath, etc.). The adjustable plates are used for mounting all these devices horizontally.

Positioning in terms of height

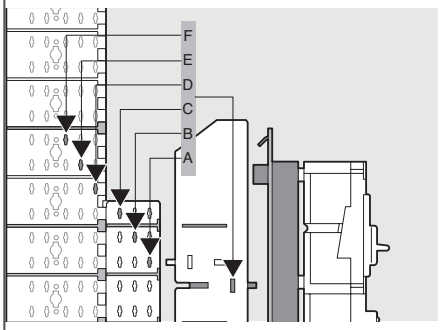
The ◁ markings correspond to the axis of the faceplate, on the front of the devices. It is therefore easy to determine the vertical position of the device according to the height and position of the associated faceplate.



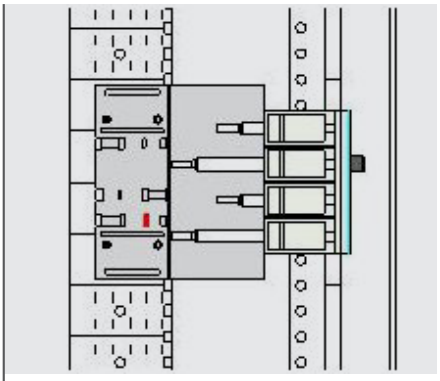
Positioning in terms of depth
The greater the depth of the device, the further back it must be positioned (rotary handles, motor-driven handles, etc.).



Slide the plate to the required position

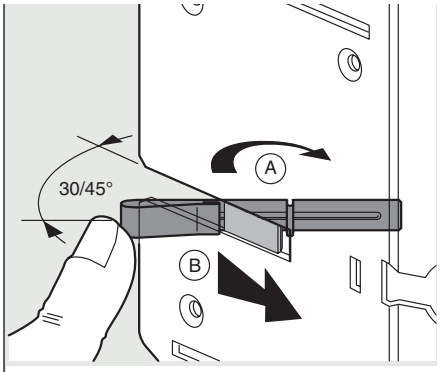


Using a combination of uprights and spacers it is possible to have 6 adjustable positions in terms of depth, marked A to F on the above drawing



XL-pro 3 can be used to display the exact adjustment position for the proposed plate.

The locking springs of the fixing devices and plates can be fitted either way round, and are not factory-fitted. Their position depends on which way round the fixing device is mounted.



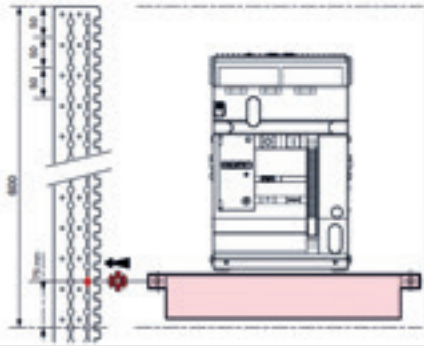
Fitting the springs

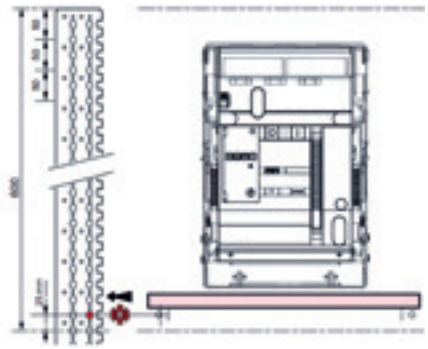


Pressing the spring unlocks the plate

▪ **Mounting plates for DMX³**

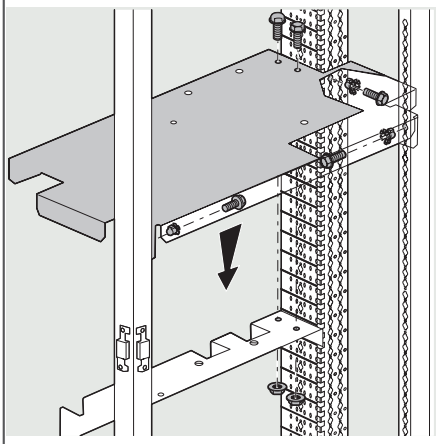
These plates are available for fixed and draw-out version DMX³, for 24 and 36 module enclosures. They consist of a plate and a strengthening crosspiece.
Start by fitting the 4 clip-nuts on either side: 1 on the faceplate support frame and 3 on each surface of the upright





The clip-nuts are inserted at a distance of 25 mm for the draw-out version and 75 mm for the fixed version.

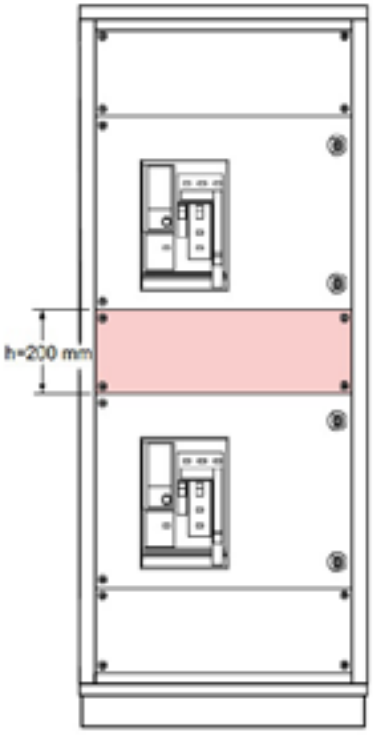
Fix the strengthening crosspiece on the rear and internal surfaces of the functional uprights using four M6 screws.



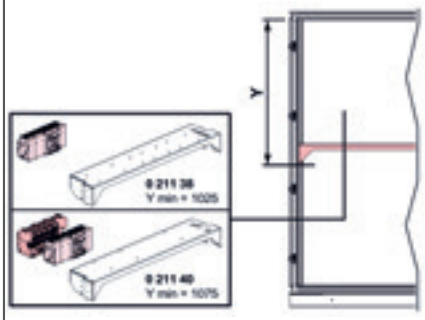
The plate is then fixed using eight M6 screws:
- 4 on the top of the strengthening crosspiece
- 2 on the front surfaces of the functional uprights
- 2 on the structural uprights of the enclosure

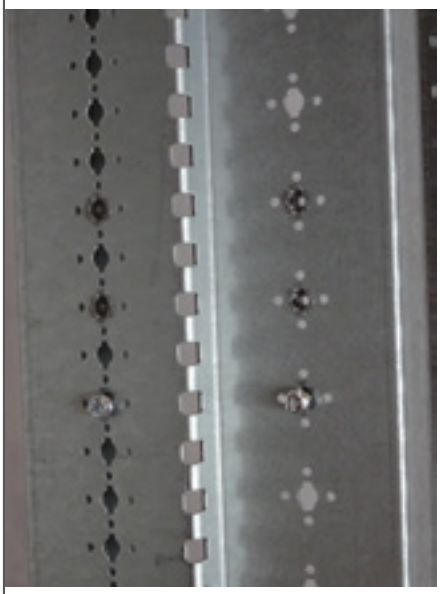


When there are two DMX³ in the same enclosure (for example, supply inverter), it is necessary to leave a space of 200 mm between the two faceplates. This space corresponds to the height required for the transfer busbar.



▪ **Mounting the support for DMX³ 6300**
Position 2 clip-nuts on each internal surface of the functional uprights at distance Y from the top of the enclosure. Screw in two M6 screws without tightening them.





Then position 2 clip-nuts 50 mm above the screws.



Pre-position the support on the screws then allow it to slide until it stops.



Tighten the 6 screws on each upright.

- **Mounting plates for DPX³ supply inverters**

Using the special plates, fixed, plug-in or draw-out version supply inverters, from the DPX³ 160 up to the DPX³ 1600, can be created, with manual or motor-driven handle.



The plates for supply inverters are supplied with all the parts for creating the mechanical interlock for the devices



DPX³ 1600 supply inverter being mounted

Plates Cat.Nos 0 206 86/87 for DPX³ 1600 are fixed either directly on the uprights (draw-out devices), or using the support provided (fixed devices).



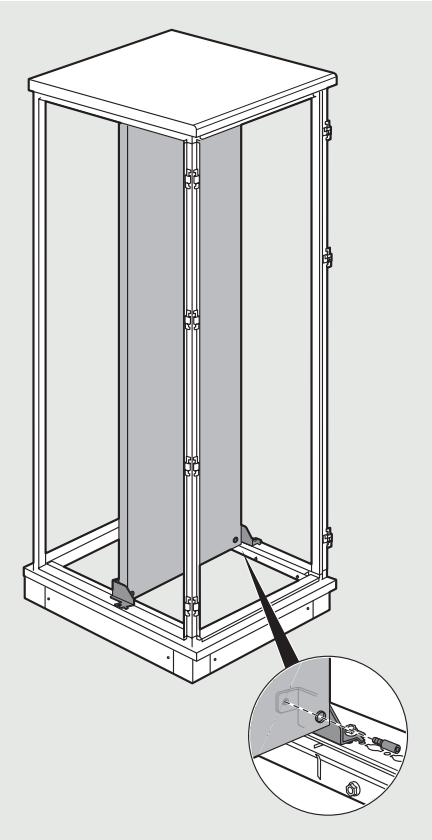
Direct insertion of plate Cat.No 0 206 86 on the functional upright



Locking the plate using M6 screws and clip-nuts

- **Universal plates**

The depth of solid plate Cat.No 0 205 40 can be adjusted. Mounted in an XL³ 4000 enclosure, height 2000 mm, width 725 mm, it enables the whole usable faceplate height to be used for mounting non-modular control and automation products. This solid plate can be fixed at different depths.



Mounting the solid plate

2 MOUNTING DEVICES ON ⌙ RAILS

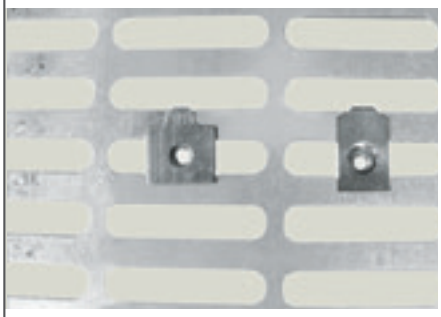
Perforated universal plates
Cat.Nos 0 206 41/42 or solid universal faceplates Cat.Nos 0 206 43/44/45 can be used for mounting any device at the back of the enclosure (maximum height available under faceplate: 145 mm).



Perforated plate



Solid plate



The perforated plates take M4 and M5 clip-nuts Cat.Nos 0 364 40/41

Indexed 2-position ⌙ rails
Cat.Nos 0 206 01/51 (capacity 24 and 36 modules respectively) are made of a particularly rigid aluminium profile.
They can be used for mounting modular devices and DPX³ 160 and 250 moulded case circuit breakers.

Device for fixing on rail with "2 indexed positions" Cat.No 0 206 00/50

Tool-free mounting:

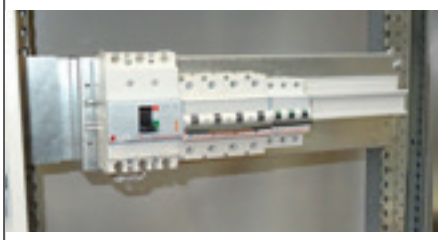


1 - Fitting the attachment pieces on the functional uprights



2 - Clipping the rail onto the attachment pieces (2 positions)

It is also possible to use plates equipped with rails (Cat.Nos 0 206 11, 0 206 61 or 0 206 08). These enable DPX³, DX³, etc. products to be installed on the same rail using spacer Cat.No 0 262 99 or 4 052 26.



Adaptors for DPX³ 160 & 250
These adaptors are used for mounting fixed version DPX³ 160 and 250 vertically, directly on a rail. This provides a great deal of freedom of choice and the ability to combine different products on the same row.
To do this, the adaptor specific to each circuit breaker must be mounted first.

DPX³ 160	EARTH LEAKAGE MODULE	SIDE MOTOR-DRIVEN HANDLE	DPX³ 250
4 210 68	with or without	with	4 210 69
4 210 71	without	without	4 210 72
4 210 73	with	without	4 210 74

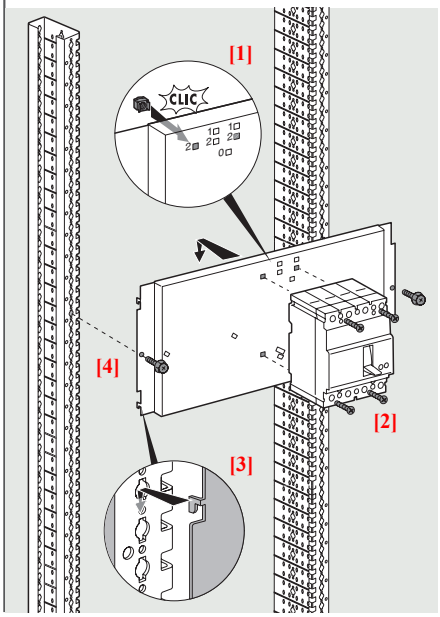
To create a DPX³ 160 or 250 supply inverter, Cat.No 4 210 58 must be used.



3 MOUNTING DEVICES ON PLATES

▪ **Fixed plates**

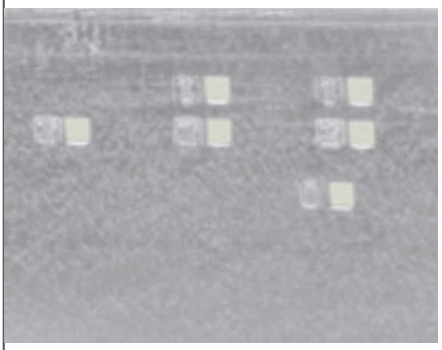
After fitting the cage nuts [1], the next steps consist of fixing the devices on their plates [2] then attaching [3] and locking [4] the plates on the functional uprights previously fitted with clip-nuts.



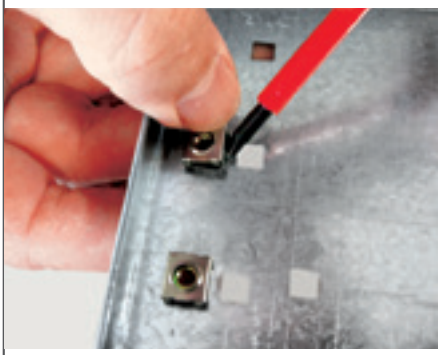
When one plate can take various types of DPX³, the fixing holes are marked with numbers (the same numbers are always used for the same type of device):

- 0 for DPX³ 125
- 1 for DPX³ 160
- 3 for DPX³ 250
- 4 for DPX³ 630
- 5 for DPX³ 1600

Plates that are specifically for one device only (e.g.: DPX³-IS) have no markings.



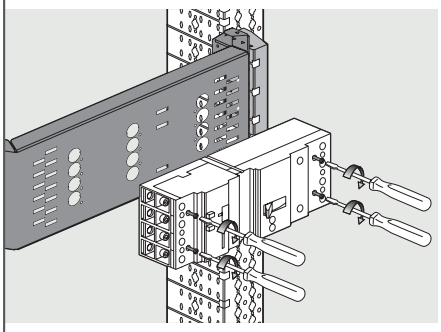
Each plate is marked with the numbers corresponding to the DPX³ devices it can take



Insert the cage-nuts in the holes specifically for the device.

▪ **Adjustable plates**

These plates are used for mounting DPX³ devices horizontally. They are specifically for one model of device.



Fix the device with its fixing screws in the tapped holes on the plate



4 EQUIPMENT ON DOORS AND REMOTE HANDLES

▪ Mounting DMX³

Fixed or draw-out DMX³ devices are placed on the plate and fixed using screws and nuts (see page 62). Given the weight of the devices, the use of lifting equipment is strongly recommended.



Installing a draw-out DMX³ in its base



4000 A assembly with DMX³ supply inverter at the supply end

▪ Front handles on doors

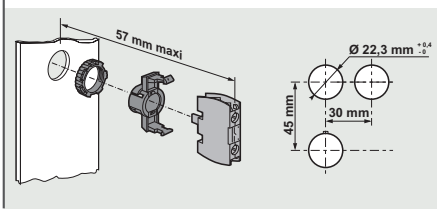
The rotary handles of DPX³ and DPX³-IS can be located remotely on curved doors only.



Remote rotary handle Cat.No 4 210 04 for DPX³ 250

▪ Control and signalling devices on the door

50 mm deep Osmoz control and signalling units can be mounted on metal curved doors with a distance of 94 mm between the faceplate and the door.



If the supply voltage of the control and signalling units is greater than 50 V, an equipotential link must be created with the door or the side panel using conductor Cat.No 0 373 85.

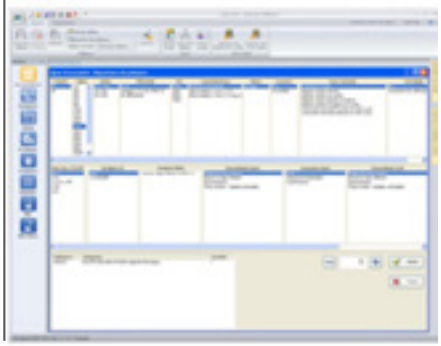


To feed through the conductors, use a solid faceplate fitted with a Plexo cable gland (see page 15)

5 XL-PRO³ DESIGN SOFTWARE

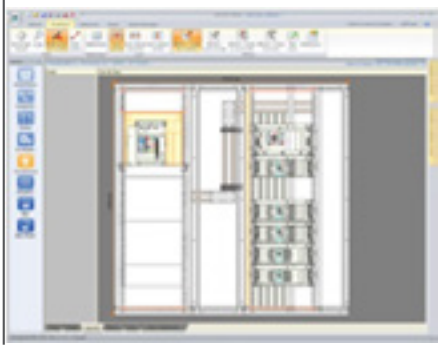
XL PRO³ 6300 is intended for designers and builders of power distribution panels up to 6300 A.
It is ideal for the most demanding designs such as Increased Safety, separation forms, or optimised or conventional distribution up to 6300 A.
XL PRO³ 6300 automatically determines the type of enclosure, calculates the costs, draws up the purchase order and draws the circuit and installation diagrams, etc.
And as any modifications you make are incorporated immediately, with XL PRO³ it is simplicity itself to design your distribution cabinets and enclosures.

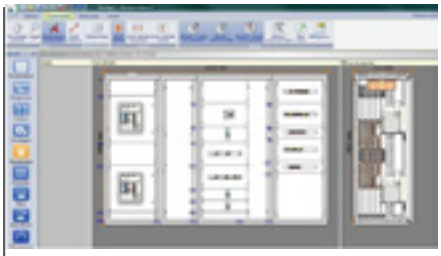
Example of a design:
XL PRO³ selects and adds the products that make up the panel, by selecting their characteristics.
The characteristics of the catalogue numbers and their accessories are shown as they are selected.



XL PRO³ automatically calculates which enclosures can take all the products used in the panel. This calculation takes into account the dimensions of the devices and their fixing devices, and the space required to connect them.
Depending on the type of enclosure chosen, XL PRO³ instantly calculates the overall dimensions and the total faceplate height used, while taking into account the number of enclosures required.
The preview module displays various views of the panel and can be used to make certain adjustments to it: dimensions of the enclosures and busbars, product layout, addition of accessories, etc.

All the documents contained in the study can be printed out to make up the folder.





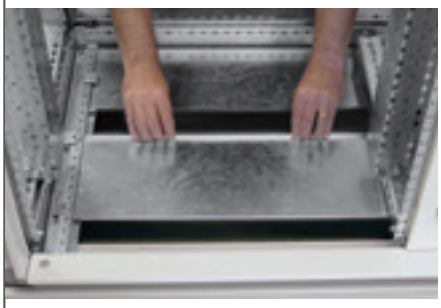


WIRING AND CONNECTION

1 CABLE ENTRY

▪ **Cable entry apertures**

The enclosures and cable sleeves in the XL³ 4000 range all have cable entry apertures at the bottom.



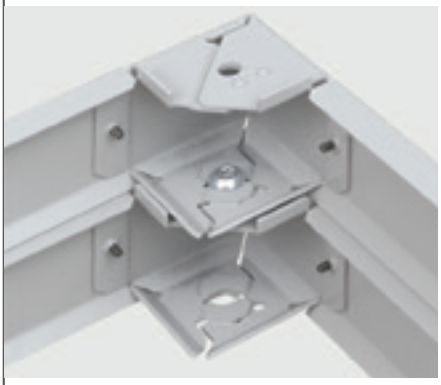
Sliding plates enable the size of the aperture to be adapted to the quantity of cables to be fed through



For enclosures whose width is the same as the depth, the direction in which the aperture opens can be altered

▪ **Plinths**

The plinths consist of 4 corner pieces and 4 side panels. They are 100 mm high. The side panels can be removed for feeding through cables. They can be removed from one or more sides as required.



The plinths can be placed on top of one another for better spreading of the cables

▪ **Cable tray**

Cablofil wire mesh can be installed vertically in external cable sleeves. First install two fixing supports Cat.No 0 205 21/22/23 then fix the tray on these supports. See the Cablofil catalogue for the catalogue numbers of the trays



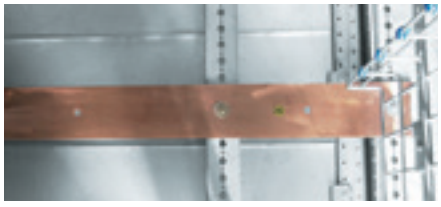


2 PROTECTIVE CONDUCTORS

As a general rule, the main terminal for the protective conductors in XL³ 4000 distribution assemblies is created using a copper bar fixed at the bottom of the enclosures. The following must be connected to this terminal:
- The main protective conductor
- Optionally, the protective conductor of the transformer
- The protective conductors of the load circuits
- The equipotential links

The minimum cross-section of this bar can be determined using the table below:

MINIMUM CROSS-SECTION OF THE PROTECTIVE CONDUCTOR ACCORDING TO THE CROSS-SECTION OF THE PHASE CONDUCTOR (ACCORDING TO EN 60439-1)	
Cross-section of the supply phase conductors S (mm²)	Minimum cross-section of the corresponding protective conductor SPE (mm²)
S ≤ 16	S
16 ≤ S ≤ 35	16
35 ≤ S ≤ 400	S/2
400 ≤ S ≤ 800	200
S > 800	S/4



Main terminal consisting of a copper or aluminium bar

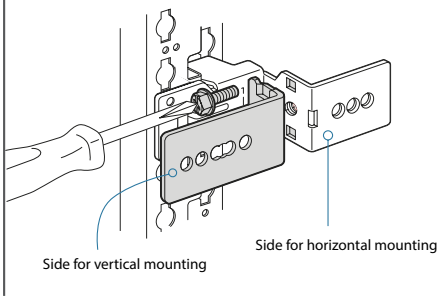


3 LINA 25 DUCTING

▪ **Fixing on supports**

The ducting fixing supports can be used to mix various heights of Lina 25 ducting together vertically and horizontally in one enclosure, while optimising the connection of devices.
- 24 modules: Cat.No 0 204 70
- 36 modules: Cat.No 0 205 70









The ducting is fixed on the supports using the isolating rivets provided.



Additional isolating rivets, Cat. No 0 366 46, are available separately.



Supports Cat.No 0 205 70 are supplied with a profile to strengthen the horizontal ducting in 36-module enclosures.

- **Direct fixing on the functional uprights**



Rivets Cat.No 0 200 80 are used to fix Lina 25 ducting directly on the functional uprights.

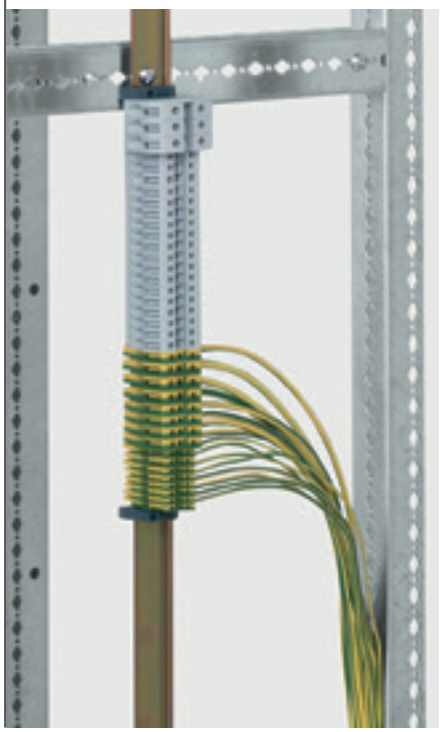


Rivet Cat.No 0 200 800

4 OUTPUT TERMINAL BLOCKS

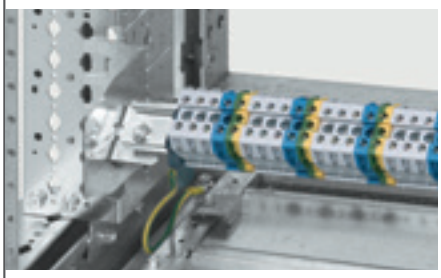
- **Vertical terminal block in cable sleeve**

Use crosspieces Cat.Nos 0 205 21/22/23 according to the depth of the cable sleeve. The ⌙⌡ rail is cut to the required size then fixed on the crosspieces using M6 clip-nuts Cat.No 0 200 92.

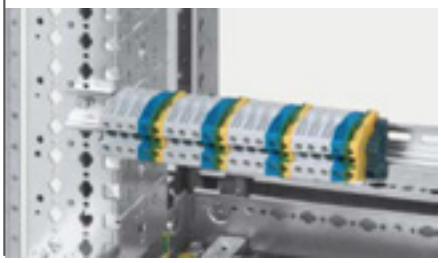


- **Horizontal terminal blocks in enclosures**

Adjustable and inclinable terminal blocks Devices Cat.Nos 0 206 02/52 consist of a 2 rail and 2 supports, enabling the depth and slope of the rail to be adjusted.
They are designed to create staggered terminal blocks at the top or bottom of 24-module or 36-module enclosures.



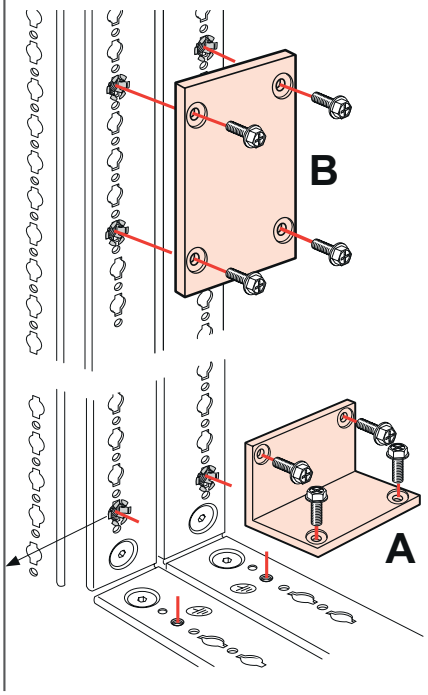
Fixed terminal blocks
Universal rails Cat.Nos 0 206 04 (24 modules) and 0 206 54 (36 modules), are fixed directly on the functional uprights at the top or bottom of the enclosure.



INSTALLING THE ENCLOSURES

TRANSPORT AND HANDLING

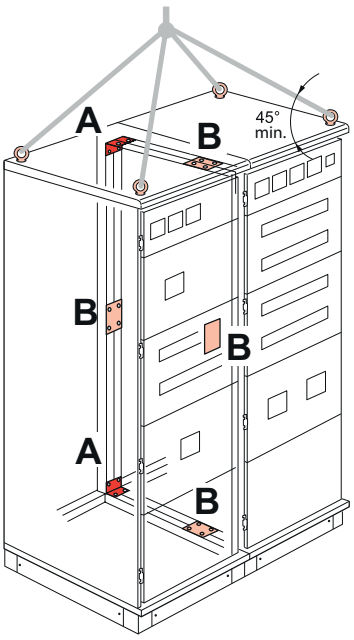
Enclosures can be handled using forklift trucks or via lifting rings Cat.No 0 205 82.
Before carrying out any handling operations, side-by side enclosures must be joined together using brackets Cat.No 0 205 88 (A) and joining plate Cat.No 0 205 89 (B)



▪ **Handling using a truck**
This type of handling is only suitable for enclosures equipped with plinths that can be placed side by side.
It will then be possible to remove the side panels of the plinths to insert the forks of the forklift truck. Of course, great care must be taken with this type of handling to avoid the enclosure toppling over. It is therefore recommended that the necessary precautions are taken.



▪ **Lifting**
The lifting rings are generally used for lifting enclosures less than 2 m wide. Care must be taken to ensure that the angle formed by the cables is always less than 45°.
It is also necessary to check that the maximum load permitted by the cables and the lifting equipment is adequate.



Lifting panels with angled profiles

When the units which make up the panel are more than 2 m wide or when they contain components that are particularly heavy, the handling operations can be carried out using angled profiles. It is advisable to check that the cables and lifting equipment are suitable and to ensure that the angle formed by the cables remains less than 45°.

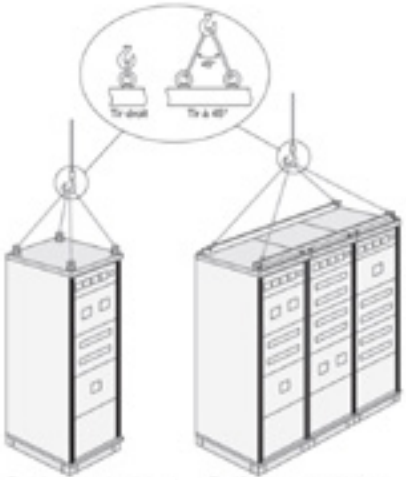


Fig. 3A - Lifting panels with cables

Fig. 3B - Lifting panels with cables and angled profiles

The weight lifted depends on the angle formed by the cables

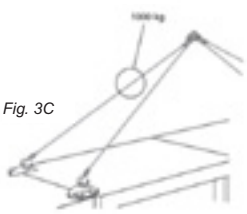


Fig. 3C

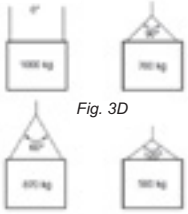


Fig. 3D

▪ Fixing to the floor

Fixing the panel to the floor

For panels that are to be fixed to the floor, the floor must be level with no uneven areas (its maximum slope must be 1‰, both lengthwise and widthwise in relation to the panel).

The panel must be fixed to the ground using expansion bolts: a 15 mm diameter drill must be used to make the holes in the floor into which the M8 bolts must then be inserted. For very wide panels, the operations can be made easier by fixing them using sliding bolts in the C-section metal profiles installed when the floor was laid.

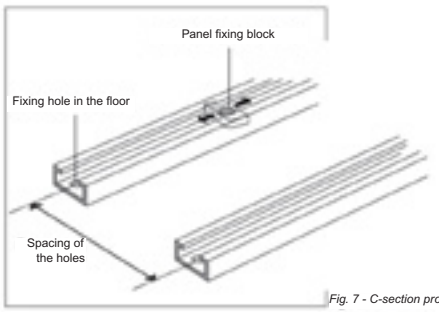
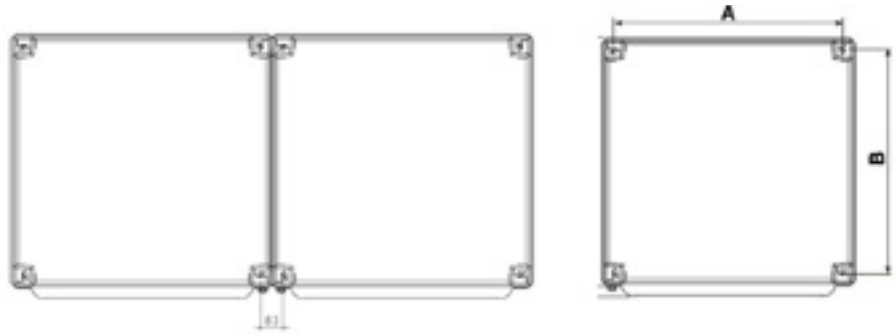


Fig. 7 - C-section profiles

DIMENSIONS

	DIMENSIONS (MM)		A	B
	WIDTH	DEPTH		
XL³ 4000	475	475	392	392
		725		642
		975		892
	725	475	642	392
		725		642
		975		892
	975	475	892	392
		725		642
		975		892
XL³ 6300	1425	475	1342	392
		725		642
		975		892

To obtain the dimensions of the plinth, add 80 mm to dimensions A and B

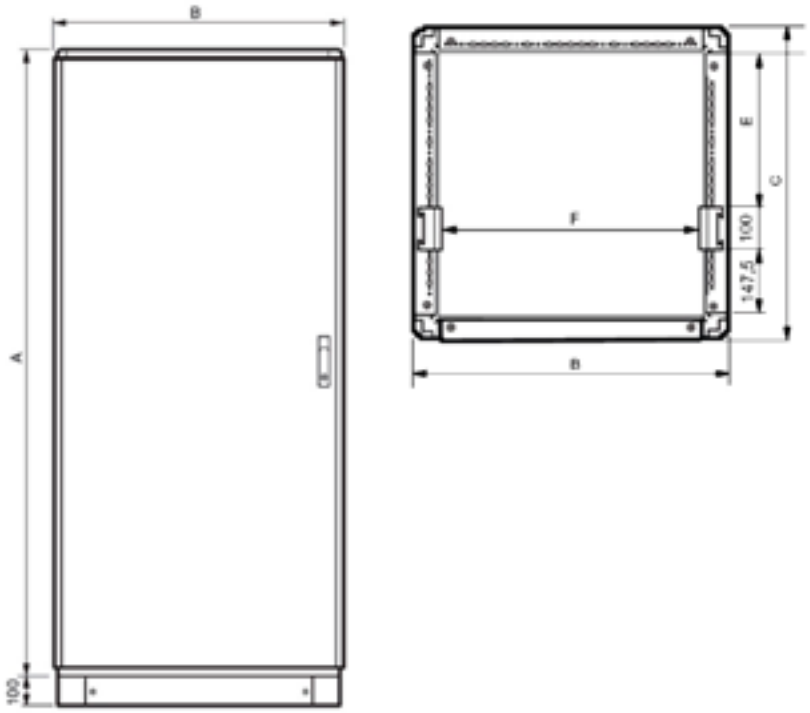


Centre distances between the fixing points

	DIMENSIONS		A	B	C	E	F
	WIDTH	DEPTH					
XL³ 4000	475	475	1932/2132	475	475	100	300
		725		475	725	350	300
		975		475	975	600	300
	725	475	1932/2132	725	475	100	550
		725		725	725	350	550
		975		725	975	600	550
	975	475	1932/2132	975	475	100	800
		725		975	725	350	800
		975		975	975	600	800
XL³ 6300	1425	475	2132	1425	475	100	1240
		725		1425	725	350	1240
		975		1425	975	600	1240

Internal distance between faceplate and door: Flat door 47 mm – Curved door 87 mm

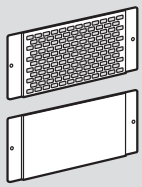
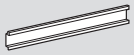
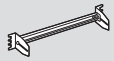
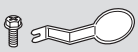
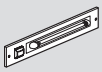
External dimensions

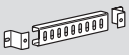
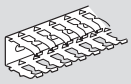


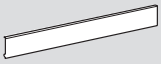
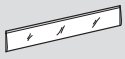
The dimensions shown are for a structure comprising the roof/base and functional uprights. The dimensions relating to the thicknesses of the doors and the external panels must be added to these measurements, on the required sides, as indicated below:
- Sheet metal panels: 6.5 mm
- Glass or sheet metal doors: 6.5 mm
- Curved glass doors: add 53.5 mm

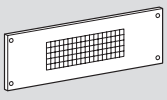
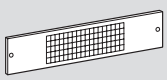
Example of the calculation of the total dimensions: external dimensions with curved door and rear panel for a 475 mm deep enclosure:
C + 6.5 + 53.5
475 + 6.5 + 53.5 = 535 mm

ACCESSORIES

EQUIPMENT AND ACCESSORIES FOR ENCLOSURES		24 MODULES	36 MODULES
	Perforated plate (Height 200 mm)	0 206 41	
	Perforated plate (Height 400 mm)	0 206 42	
	Solid plate (Height 200 mm)	0 206 43	
	Solid plate (Height 400 mm)	0 206 44	0 206 46
	Solid plate (Height 600 mm)	0 206 45	
	Adjustable solid plate (Height 100 mm)	0 206 40	0 206 90
	Adjustable solid plate (Height 200 mm)	0 206 47	0 206 49
	Adjustable solid plate (Height 400 mm)	0 206 48	
	Solid plate supplied with runners (Height 1800 mm)	0 205 40	
	Universal ⌙⌜ rail	0 206 04	0 206 54
	Adjustable universal e	0 206 02	0 206 52
	Clip-nuts for M6 screws (x 20)	0 200 92	
	M6 screws (x 50)	0 200 91	
	Equipotential link conductor	0 373 85	
	Aerosol paint spray (400 ml) RAL 7035	0 200 98	
	M12 lifting rings (x 4)	0 205 82	
	Screws for structural joining	0 205 86	
	Flat reinforcement plates (x 2)	0 205 89	
	L-shaped reinforcement plates (x 2)	0 205 88	
	IP 55 sealing kit for use when joining enclosures (20 m)	0 205 85	
	Kit for joining plinths	0 205 10	
	Spacers for functional uprights (x2)	0 207 50	
	Additional brackets for functional uprights (x2)	0 205 30	
	Lighting kit	0 209 89	

WIRING ACCESSORIES			
	Cable fixing support	24 modules	0 204 35
		36 modules	0 204 36
	Set of 2 fixing supports for Lina 25 ducting	24 modules	0 205 70
		36 modules	0 204 70
	Lina 25 ducting (Width x Height mm)	25 x 60	0 362 02
		40 x 60	0 362 07
		40 x 80	0 362 08
		60 x 60	0 362 12
		60 x 80	0 362 13
	Isolating rivet for direct fixing on functional uprights		0 200 80
	Protective cable seal for cut-outs on plates		0 202 40

ACCESSORIES FOR FACEPLATES		
	Set of 2 hinges (for screw-mounting faceplate) Cat.No 0 209 59	0 209 59
	24-module smooth adjustable blanking plate Cat.No 0 200 51	0 200 51
	18-module separable blanking plate Cat.No 0 016 65	0 016 65
	Clip-on holder for adhesive labels Cat.No 0 203 99	0 203 99

ACCESSORIES FOR NATURAL VENTILATION		
	Perforated faceplate for natural ventilation (H 200 mm, 24 mod) Cat.No 0 209 49	0 209 49
	Perforated faceplate for natural ventilation (H 200 mm, 36 mod) Cat.No 0 209 99	0 209 99
	Ventilation panel for plinth (24 modules) Cat.No 0 205 44	0 205 44
	Ventilation panel for plinth (36 modules) Cat.No 0 205 45	0 205 45
	Spacers for raising the roof Cat.No 0 205 46	0 205 46



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