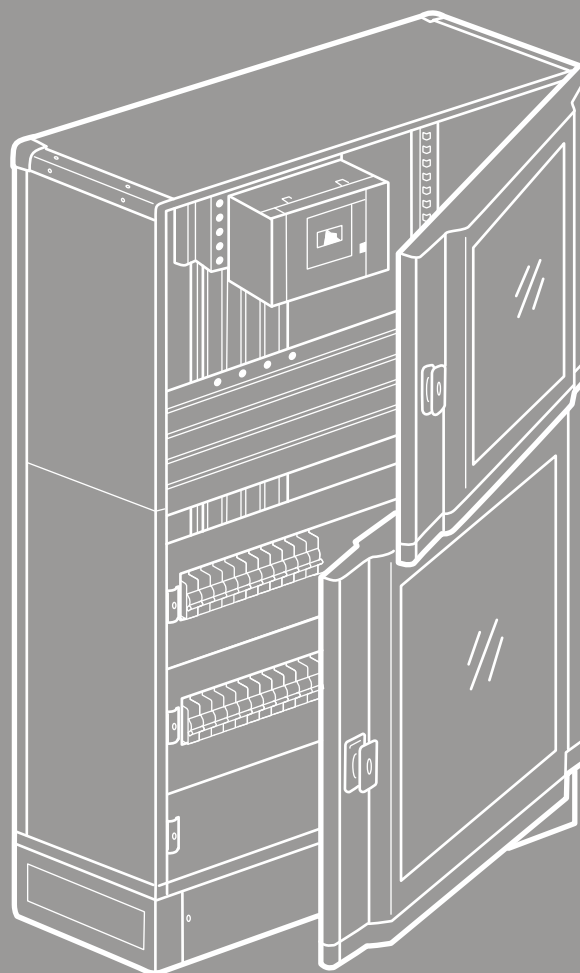


XL³ 800

Distribution enclosures



WORKSHOP SPECIFICATIONS

With its extensive ranges, the Legrand offer meets your quality standards and provides real freedom and simplicity of installation together with acknowledged reliability.

With the XL³ 800 enclosures, Legrand has introduced innovations in the concept of integration. From the wall-mounting enclosure for secondary distribution boards to the floor-standing enclosure for the main LV distribution board, from the distribution block in a wiring sleeve to XL-Part optimised distribution at the back of the enclosure, from IP 30 to IP 55, and from a 24-module row to a 36-module row, XL³ 800 has the answer to your requirements.

XL³ 800 incorporates numerous practical innovations for quick, safe assembly:

- Metal enclosures (IP 30-40-43 and IP 55)
- Products delivered flat, dismantled, for total accessibility when wiring (except for IP 55)
- Optimised equipment for easy installation
- Sealable faceplates with metal ¼ turn fastening and handles
- Screw-mounting faceplates that can be fitted with hinges
- 24-module or 36-module width enclosures (convertible to 24-module with internal wiring sleeve)
- Modular enclosures
- All you need is a 10 mm spanner and a screwdriver for assembling the side panels, rails, plates and faceplates
- Fast horizontal or vertical joining using 4 screws/nuts
- Re-usable cardboard packaging for increased protection when handling

Contents

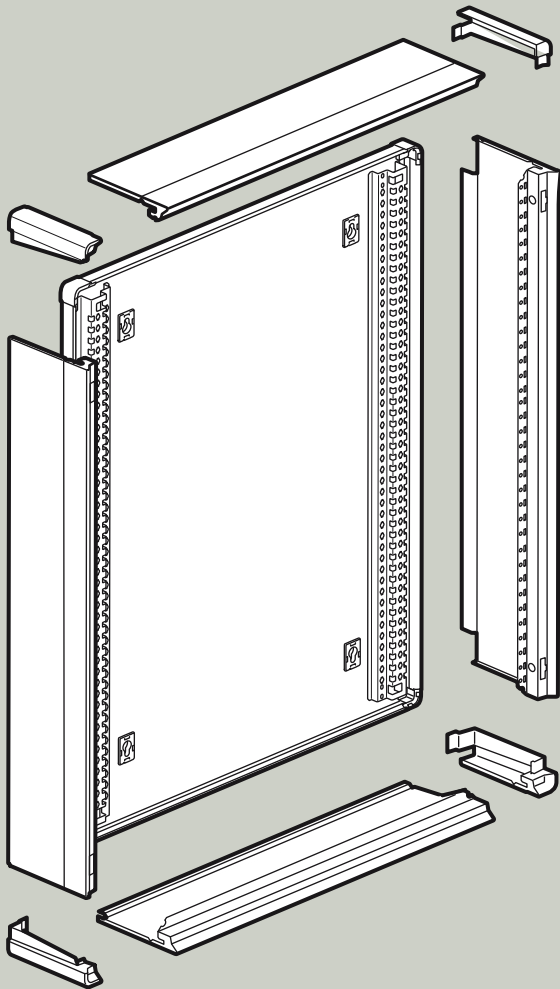
■ THE XL ³ 800 RANGE	
■ Characteristics and selection tables	2
■ ASSEMBLING THE ENCLOSURES	
■ A - XL ³ 800 IP 30-40-43 enclosures	8
■ B - XL ³ 800 IP 55 enclosures	18
■ C - XL ³ 800 IP 30-40 modular enclosures	22
■ FITTING THE DISTRIBUTION SYSTEMS	
■ A - Optimised distribution	25
■ B - Standard distribution	30
■ C - Supply busbars, terminal blocks, distribution terminals and modular distribution blocks	32
■ FITTING DEVICES AND EQUIPMENT	
■ A - Principle for defining the required space	34
■ B - Capacity of the enclosures	36
■ C - Positioning the fixing devices	36
■ D - Fitting devices on plates	38
■ E - Fitting devices on rails	40
■ H - Equipment on doors and side panels	41
■ WIRING AND CONNECTION	
■ A - Wiring	44
■ B - Protective conductors	46
■ C - Connector blocks	47
■ D - Inserting the cables	49
■ HANDLING AND ON-SITE INSTALLATION	
■ A - Handling the enclosures	50
■ B - Fixing the enclosures	51
■ APPENDICES	
■ Dimensions	52

The XL³ 800 RANGE

2

CHARACTERISTICS

- XL³ 800 can be used to create customised enclosures for all your environments.
- IP 30 to IP 55
 - IK 07 to IK 08
 - Fire resistance: 750°/5 s (IEC 60695-2) for installation in public buildings
 - Short time withstand current I_{cw}: 25 kA 1 s
 - Max. short-circuit current I_{pk}: 50 kÂ
 - 24 or 36 modules per row
 - Take devices up to 800 A (630 A for IP 55)
 - Choice of distribution: standard or optimised
 - Internal or external wiring sleeves (joinable on left and/or right), extendable (DPX and distribution)
 - Colour: RAL 7035
 - Conform to standard IEC 60439-1



3

IP 30-40-43 ENCLOSURES

Wall-mounting enclosures					Floor-standing enclosures				
External height (mm)									
Cat. No.	204 01	204 06	204 02	204 07	204 03	204 08	204 04	204 09	
Total width (mm)	660	910	660	910	660	910	660	910	
Capacity per row (modules)	24	36 ⁽¹⁾	24	36 ⁽¹⁾	24	36 ⁽¹⁾	24	36 ⁽¹⁾	
Height with faceplate (mm)	1000	1000	1200	1200	1400	1400	1800	1800	
Rounded doors	metal	212 51	212 56	212 52	212 57	212 53	212 58	212 54	212 59
	glass	212 61	212 66	212 62	212 67	212 63	212 68	212 64	212 69
Internal wiring sleeve kit		204 26		204 27		204 28		204 29	
Faceplate for internal wiring sleeve		204 46		204 47		204 48		204 49	
External wiring sleeve					204 23	204 23	204 24	204 24	
Door for external wiring sleeve					204 33	204 33	204 34	204 34	
Faceplate for external wiring sleeve					204 43	204 43	204 44	204 44	
Kit IP 43 kit	201 30	201 30	201 30	201 30	201 30	201 30	201 30	201 30	
Partitioning divider	204 90	204 91	204 90	204 91	204 90	204 91	204 90	204 91	

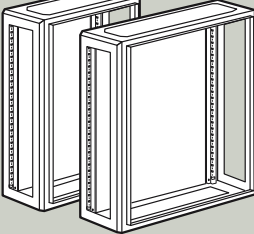
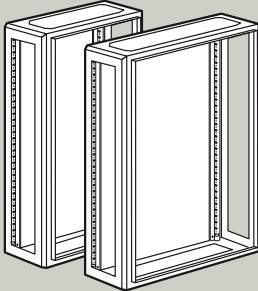
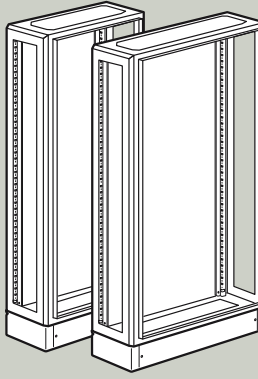
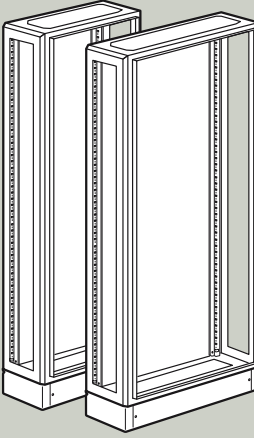


(1) or 24 modules if internal wiring sleeve

The XL³ 800 range (continued)

IP 55 ENCLOSURES

Wall-mounting enclosures

Floor-standing enclosures

External height (mm)	1995								
	1595								
	1295								
	1095								
									
Cat. No.		204 51	204 56	204 52	204 57	204 53	204 58	204 54	204 59
Total width (mm)		700	950	700	950	700	950	700	950
Capacity per row (modules)		24	36 ⁽¹⁾	24	36 ⁽¹⁾	24 ⁽¹⁾	36 ⁽¹⁾	24	36 ⁽¹⁾
Height with faceplate		1000	1000	1200	1200	1400	1400	1800	1800
Flat doors	metal								
	glass								
		212 71	212 76	212 72	212 77	212 73	212 78	212 74	212 79
		212 81	212 86	212 82	212 87	212 83	212 88	212 84	212 89
Internal wiring sleeve kit			204 76		204 77		204 78		204 79
Faceplate for internal wiring sleeve			204 46		204 47		204 48		204 49
External wiring sleeve						204 73	204 73	204 74	204 74
Door for external wiring sleeve						204 83	204 83	204 84	204 84
Faceplate for external wiring sleeve						204 43	204 43	204 44	204 44
Partitioning divider		204 90	204 91	204 90	204 91	204 90	204 91	204 90	204 91
Side panels		204 66	204 66	204 67	204 67	204 68	204 68	204 69	204 69

(1) or 24 modules if internal wiring sleeve

MODULAR ENCLOSURES (24 modules)

$$\text{Complete enclosure width 660 mm} = \text{Back + roof + base + plinth assembly} + \text{Side panel support} + \text{Side panels} + \text{Rounded doors}$$

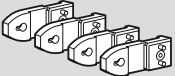
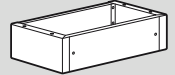




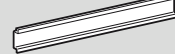

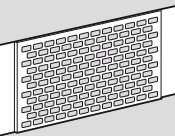
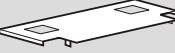



External height (mm)
Heights with faceplate (mm)

Configuration	External height (mm)	Heights with faceplate (mm)	Door Profile	Handle	Components
1	1550	600, 800	204 13	204 19	204 15, 204 16 Metal 212 49, Glass 212 39 Metal 212 50, Glass 212 60
2	1950	600, 1200	204 14	204 19	204 15, 204 18 Metal 212 49, Glass 212 39 Metal 212 52, Glass 212 62
3	1950	800, 1000	204 14	204 19	204 16, 204 17 Metal 212 50, Glass 212 60 Metal 212 51, Glass 212 61
4	1950	600, 600, 600	204 14	2 x 204 19	3 x 204 15 Metal 3 x 212 49, Glass 3 x 212 39




The XL³ 800 range (continued)

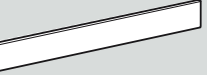

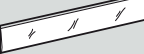
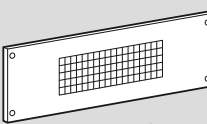

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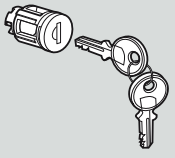

ACCESSORIES

		IP 30-43 enclosure			IP 55 enclosure		
		24 modules	36 modules	wiring sleeve	24 modules	36 modules	wiring sleeve
	Wall mounting lugs	201 00	201 00	201 00	supplied with the enclosure		
	Plinth	204 10	204 11	204 12	204 60	204 61	204 62
	IP 43 kit	201 30	201 30	201 30			
	Joining kit				204 86	204 86	204 86
	Sealing kit for joining				204 85	204 85	204 85
	Cable entry plates	adjustable	204 20	204 20			
		Cabstop			364 97	364 97	364 97
	Universal rail		206 04	206 54	206 04	206 54	
	Adjustable universal rail		206 02	206 52	206 02	206 52	
	Perforated plate	H = 200 mm	206 41		206 41		
		H = 400 mm	206 42		206 42		
	Solid plate	H = 200 mm	206 43		206 43		
		H = 400 mm	206 44	206 46	206 44	206 46	
		H = 600 mm	206 45		206 45		
	Partitioning divider		204 90	204 91	204 90	204 91	
	Divider for modular enclosure			204 94			
	Lifting rings (set of 2)				204 82	204 82	204 82
	Clip-nuts (20)		200 92				
	Aerosol paint spray RAL 7035		200 98				

7

Wiring accessories		24 modules	36 modules	wiring sleeve
	Cable fixing support	204 35	204 36	204 37
	Lina 25 ducting fixing support	204 70	205 70	
	Isolating rivets for direct fixing on functional uprights	200 80	200 80	200 80

Accessories for faceplates		
	24-module smooth adjustable blanking plate	200 51
	18-module separable blanking plate	016 65
	Adhesive label holder	203 99
	Ventilating faceplate (24 modules) H = 200 mm	209 49
	Ventilating faceplate (36 modules) H = 200 mm	209 99
	Hinges (set of 2)	209 59

Accessories for doors		
	Key barrel type 405	202 91
	Key barrel type 455	202 92
	Key barrel type 1242E	202 93
	Key barrel type 2433A	202 94
	Double bar knockout	202 96

Assembling the enclosures

8

The new Legrand XL³ 800 range of enclosures is available in 3 versions to meet the needs of all applications:

- IP 30 to IP 43 enclosures in 2 widths (660 or 910 mm)
- IP 55 enclosures in 2 widths (700 or 950 mm)
- IP 30 to IP 43 modular enclosures (width 660 mm)

They are quick and easy to install, and suitable for all types of joining, optimising compactness, space for wiring, and strength. The XL³ 800 has a particularly high-quality finish: with faceplate, with or without door.

A XL³ 800 IP 30-40-43 ENCLOSURES

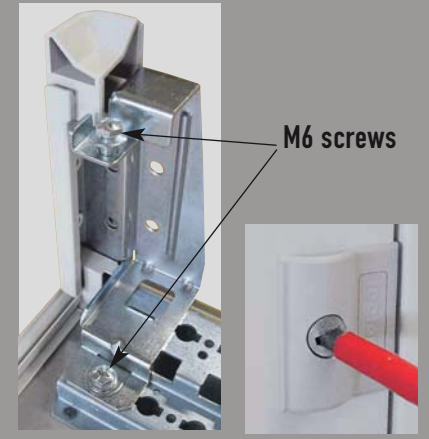
These are metal enclosures and wiring sleeves that are supplied dismantled. Each enclosure consists of a back, two functional uprights joined to the back, four corner pieces, four side panels and a cable entry plate. Enclosures ≥ 1550 mm high are supplied with a 100 mm plinth.



The assembly is delivered dismantled, for minimum dimensions



All the enclosures are supplied with an adjustable insulated cable entry plate



Standardised screws: all you need is a screwdriver and a 10 mm spanner

1. Assembling the back and the corners

A single method for mounting enclosures and wiring sleeves.



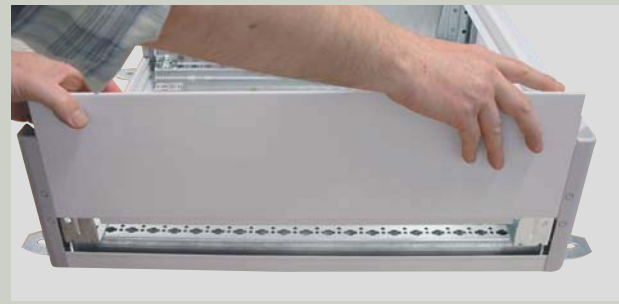
Insert the corners in the functional uprights...



... then attach with a single M6 x 10 screw

2. Fitting the side panels

Insert the side panels in the top of the corner runners then slide downwards. Lock the slide panels with four M6 x 10 screws.



Slide the side panels steadily in the corner runners until they are inserted in the back

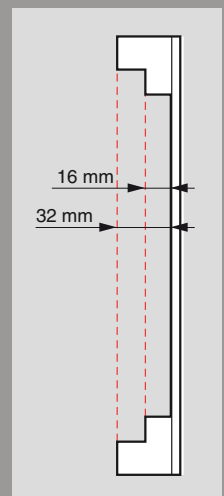


Side panel with cut-out for fitting cable entry plates and for feeding through wiring when joining enclosures (available feedthrough: 130 mm)

+



The functional uprights integrated at the back of XL³ 800 enclosures are used for quick and reliable fixing of all equipment



2 fixing heights depending on the equipment

9

Assembling the enclosures (continued)

10

3. Joining enclosures

Remove the seals from the corner pieces and join the enclosures using the four M6 screws and four nuts provided.



Care must be taken to use the correct holes

Horizontal and vertical joining can be used together

4. Fitting the plinth

As for joining enclosures, the corner piece seals must be removed before fitting the plinths.



Attach the 2 sides of the plinth using the four M6 screws and four nuts provided



The front and rear plinth covers are attached using 4 self-tapping screws

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

and adjustable for inserting the cables when joining enclosures

11

5. Fitting an internal wiring sleeve

36-module wide enclosures can be fitted with an internal wiring sleeve using kits Cat. Nos 204 26/27/28/29. These kits consist of an intermediate functional upright, two spacers and a faceplate support upright. The wiring sleeve can be installed on the right or the left.



To fix the functional upright on the crosspieces at the back of the enclosure, insert 4 clip-nuts in the marked holes



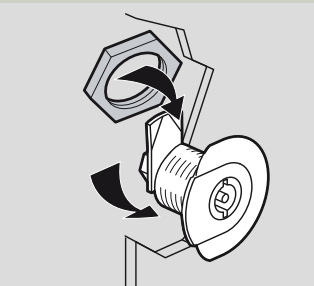
Fix the spacers at the ends of the functional upright, then fix the faceplate support on the spacers



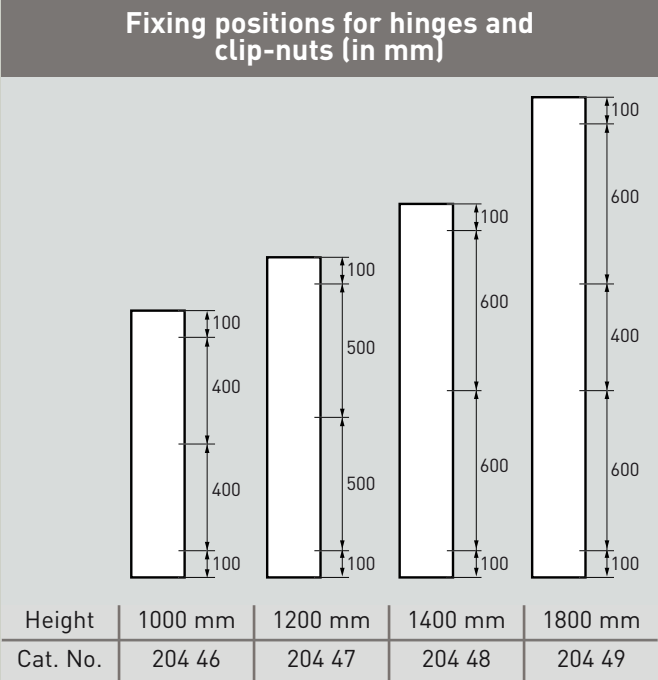
The internal wiring sleeve takes a solid faceplate with hinges and locks. Windows can be cut out to install a vertical DPX 250 or 630 with or without elcbs



The faceplate hinges can be fitted on the right or the left



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



Assembling the enclosures (continued)

12

6. Fitting the doors

The direction in which the door opens determines the side on which the hinges and latches are fitted.

■ Enclosures $\geq 1,550$ mm high

To fit the doors, the enclosures must be fitted with 3 hinges on one side and 2 latches on the other.



Enclosure opening to the right

To reverse the way the door opens, fit the hinges on the left hand side and the latches on the right hand side. The door itself will be turned round 180 degrees. The mechanism which operates the connecting rods must also be dismantled and turned round 180 degrees.



Release the 2 linking rings from the connecting rods and the mechanism

Reverse the connecting rods, then reassemble the mechanism in the same way.



Unscrew the 2 screws fixing the handle and the mechanism



For an optimum finish, insert the dummy strips in the hinge opening

Enclosures $< 1,550$ mm high



To fit the doors, enclosures must be fitted with 2 hinges on one side and a door release on the other



It is essential to fit the metal bracket so that the handle locks correctly



Self-adhesive document holder Cat. No. 365 82 is fitted inside the door

13

7. Door equipotential link

The doors are equipped with studs for connecting the equipotential link conductor Cat. No. 373 85 when control and signalling units with voltage $U > 50$ V are fitted.



Make a notch in the plastic cover for the conductor to pass behind the hinge



Conductor Cat. No. 373 85 clips directly onto the faceplate support inside the enclosure



When the plastic cover is removed, up to four 1.5 mm^2 conductors can be inserted in the enclosure

Assembling the enclosures (continued)

14

8. Fitting the key barrels

The method differs according to the type of handle used.

■ Large handle (enclosures H ≥ 1,550 mm)



Push in the 2 black clips to remove the blanking plate



Combine the adaptor casing and barrel assembly with the aluminium coloured adaptor



Insert the assembled barrel in the body of the handle

■ Small handle (enclosures H < 1,550 mm)

Once the handle has been dismantled (M6 screw) the blanking plate is automatically released.



Combine the adaptor casing and barrel assembly with the black adaptor



Insert the pin in the notch towards the front



Insert the assembled barrel in the body of the handle



Refit the handle on its support

15

9. Achieving IP 43

IP 43 is achieved by installing a door fitted with seal Cat. No. 201 30 and the insulated cable entry plate supplied with the enclosure



The plate is fitted after the upper side panel has been cut



The seal must be fitted in the bottom of the door

10. Faceplates

■ Faceplates for enclosures

Metal faceplates for XL³ 800 enclosures are available in 2 versions:

- ¼ turn locking, for 24 modules
- screw locking, for 24 and 36 modules.



The ¼ turn faceplates are sealable



Screw-mounting faceplate with captive screws

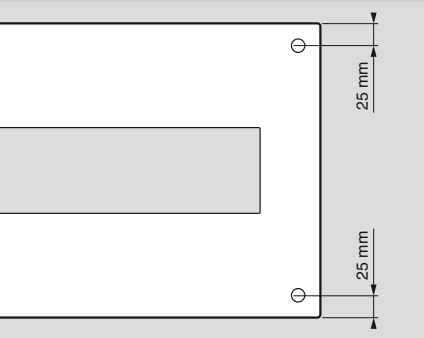


Screw-mounting faceplates can be fitted with hinges Cat. No. 209 59 on the left or right

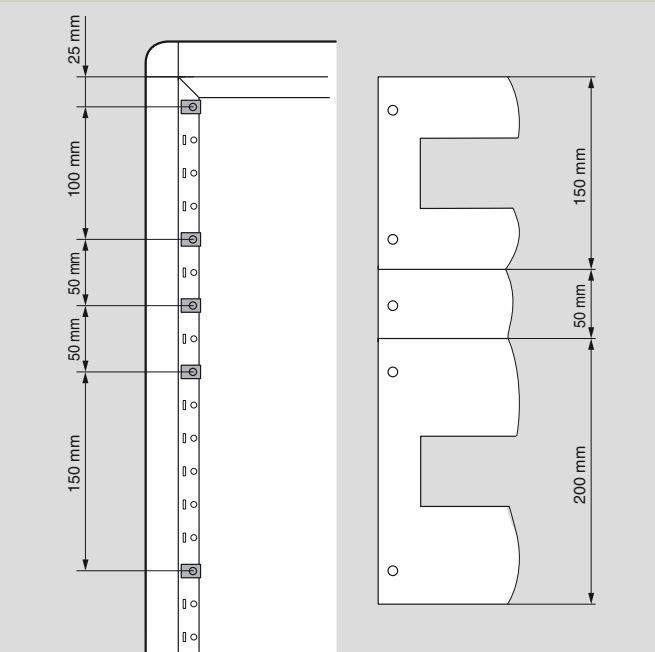
Assembling the enclosures (continued)

16

Fitting screw-mounting faceplates requires prior fitting of clip-nuts on the faceplate support uprights.



The screws are always located 25 mm from the top and bottom of the faceplate



Example of the installation of clip-nuts for 3 faceplates, heights: 150, 50 and 200 mm
The 1st clip-nut is always positioned in the 1st hole



Installing ventilating faceplates (height: 200 mm) Cat. No. 209 49/99 (24/36 modules) at the top and/or bottom of the enclosure provides natural ventilation for heat dissipation

Wiring sleeve faceplates

The wiring sleeves take solid metal faceplates. They are supplied with hinges and locks which can be fitted on the left or right hand side. The fixing positions for the clip-nuts on the faceplate support upright are given on page 11.



Faceplates height ≥ 1400 mm are pre-cut for DPX 250 and 630 with or without elcbs underneath

Equipotentiality

The equipotential link is created automatically when the faceplates are fitted.



The equipotential link of 1/4 turn faceplates is provided by the latch bolt. The earth terminal is only provided for mounting devices on the faceplate

Marking



As well as the marking on the devices, a clip-on holder for adhesive labels Cat. No. 203 99, for 24-module faceplates is available as an accessory

Blanking plates

Two types of blanking plate can be used on modular faceplates:

- Smooth adjustable strip Cat. No. 200 51 (24 modules)
- Strip which can be separated into modules or 1/2 modules Cat. No. 016 65 (18 modules)



Smooth adjustable strip Cat. No. 200 51



Faster access and work with faceplates on hinges

17

Assembling the enclosures (continued)

18

B XL³ 800 IP 55 ENCLOSURES

XL³ 800 IP 55 enclosures and external wiring sleeves are one-piece metal enclosures. They have cable gland plates at the top and bottom, and side openings for creating assemblies by horizontal joining. They are supplied without side panels. They take solid or glass rounded metal doors (to be ordered separately). Floor-standing enclosures (H ≥ 1595 mm) are supplied with a 100 mm plinth. The enclosures are available in 2 widths: 24 and 36 modules. 36 module enclosures can take an internal wiring sleeve.

+

Horizontal joining



Build IP 55 distribution assemblies as you choose

1. Fixing the side panels

The side panels are supplied in pairs, with their weatherproof seals fitted, and with their fixing screws and plastic blanking plates.



It is essential to fit the blanking plates in the enclosure joining holes to ensure IP 55 protection

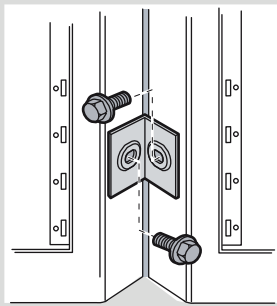
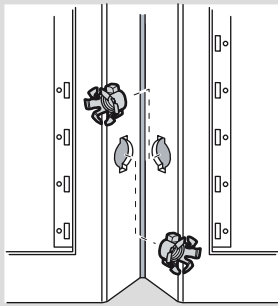
2. Joining enclosures

The enclosures are mechanically linked using joining kits Cat. No. 204 86. The weatherproof seal is obtained by prior fitting of self-adhesive seal Cat. No. 205 85.



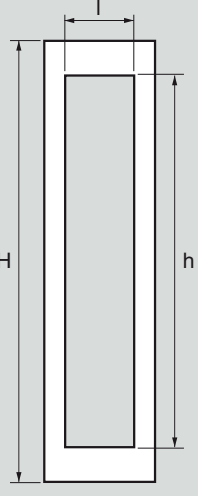
Connect the seal in the bottom part

19



Insert the clip-nuts on the upright then fit the bracket using two M6 screws

Number of joining kits Cat. No. 204 86 according to the height of the enclosures				
Height (mm)	1095	1295	1595	1995
Quantity	2	2	3	4

Usable dimensions of the lateral opening according to the height of the enclosure			
	H (mm)	L (mm)	h (mm)
	1095	128	895
	1295	128	1095
	1595	128	1395
	1995	128	1795

3. Fitting the plinth

Enclosures and external wiring sleeves are supplied with their plinths (height 100 mm). The plinths are also available separately (Cat. Nos 204 60/61/62, respective widths 700 and 950 mm, and 500 mm for wiring sleeve). They can be placed on top of one another to make the enclosures higher. If enclosures are joined horizontally, a space can be made between the plinths (pre-cut 135 x 65 mm opening on both sides)

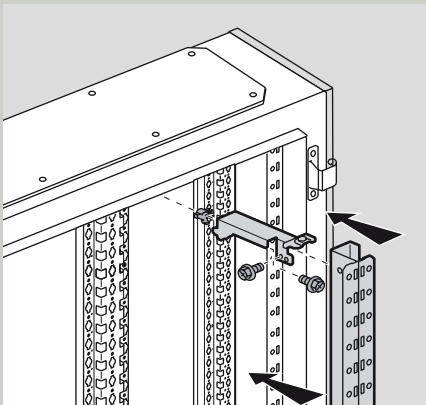


The opening is made using a hammer

4. Fitting an internal wiring sleeve

36-module IP 55 enclosures can be converted to 24 modules with a right or left internal wiring sleeve, using kits Cat. Nos 204 76/77/78/79.

An internal wiring sleeve is fitted in exactly the same way as in IP 30 enclosures (see page 11)



Assembling the enclosures (continued)

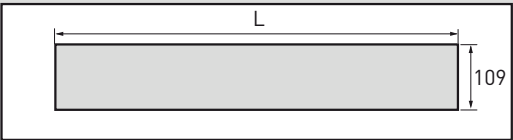
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5. Cable gland plates

The top and bottom of the enclosures are equipped with cable gland plates. These are fixed using self-tapping screws.

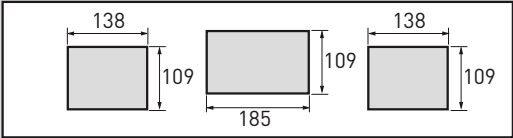
Usable dimensions of the cable feedthroughs (mm)

Top



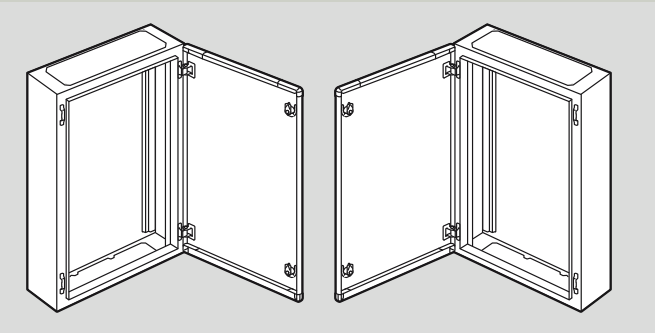
24 modules: L = 496 mm
36 modules: L = 714 mm
Ext. wiring sleeve: L = 274 mm

Bottom



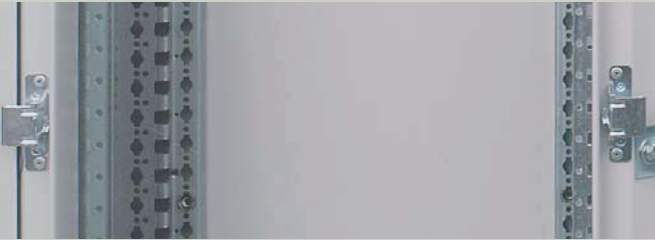
6. Fitting the doors

The enclosures are supplied with the hinges and door releases fitted.
The doors of wall-mounting enclosures (H < 1595 mm) are supplied with 2 locking handles to be fitted.
The direction of opening can be changed by simply turning the enclosure upside down or reversing the hinges and door releases.



Wall-mounting enclosures are totally reversible

The doors of the enclosures (H ≥ 1595 mm) are supplied with a connecting rod assembly and a central handle to be fitted.



For floor-standing enclosures the opening direction is changed by reversing the door: the hinges and door releases are identical

The handles are fitted and reversed in exactly the same way as for IP 30 enclosures (see page 12).

21



Quick, simple fitting



The doors are easy to fit: simply fit the hinge pins

7. Door equipotential link

If control and signalling units whose voltage is higher than 50 V are fitted, it is essential to create the door equipotential link using the integrated stud.



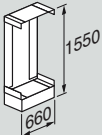
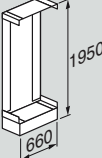
Insert the conductors in the enclosure via a solid faceplate fitted with a cable gland Cat. No. 919 14 (hole Ø 23 mm)

Assembling the enclosures (continued)

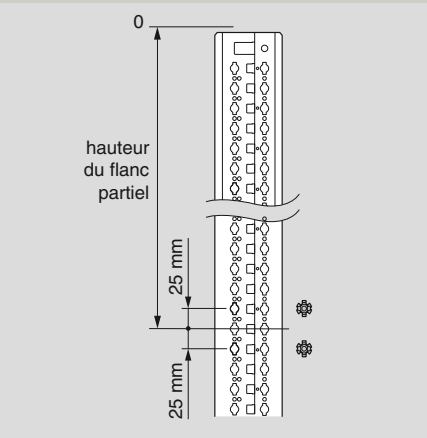
22

C XL³ 800 IP 30-40 MODULAR ENCLOSURES

XL³ 800 modular enclosures are made of metal for customer assembly. They are supplied without side panels or doors. Several compartments can be created on the same back using partial height side panels and doors, and intermediate side panel supports Cat. No. 204 19.

Possible combinations					
	Faceplate heights (mm)				
204 13 	600	204 19	204 15	212 49	212 39
	800		204 16	212 50	212 60
204 14 	600	204 19 x 2	204 15 x 3	212 49 x 3	212 39 x 3
	600				
	600				
	800	204 19	204 16	212 50	212 60
	1000		204 17	212 51	212 61
	600	204 19	204 15	212 49	212 39
	1200		204 18	212 52	212 62

For fitting the cornier pieces, please refer to page 9. Modular side panel supports Cat. No. 204 19 are fitted on the bottom part of the functional uprights using clip-nuts and M6 screws.



Place the clip-nuts 25 mm either side of the side panel joins

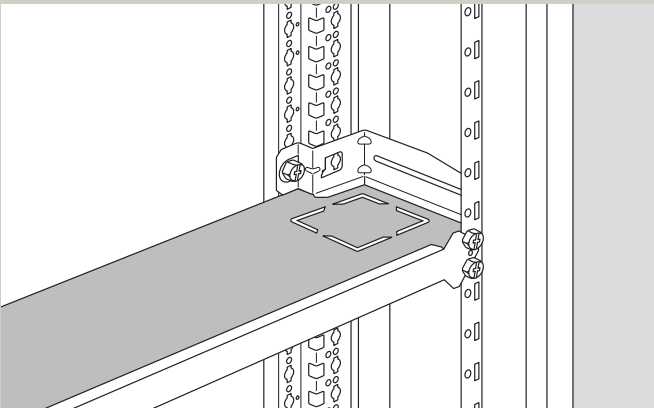


The side panels are installed by sliding them in the runners



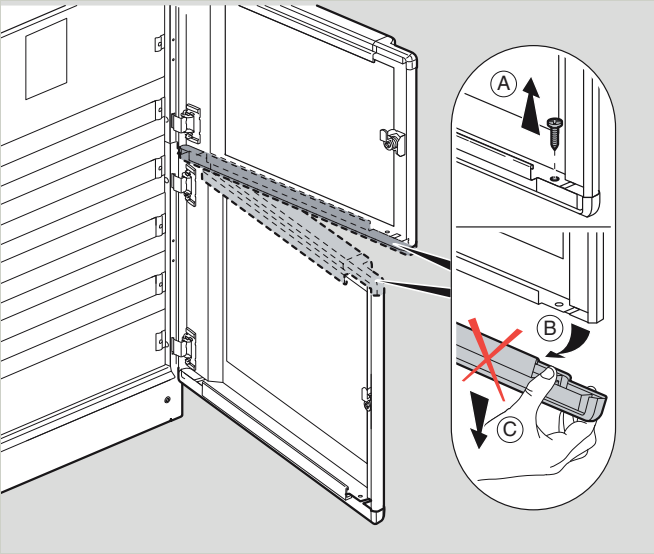
The intermediate crosspiece (supplied with the side panel supports) is fitted after the side panels are attached, and holds them in place

23



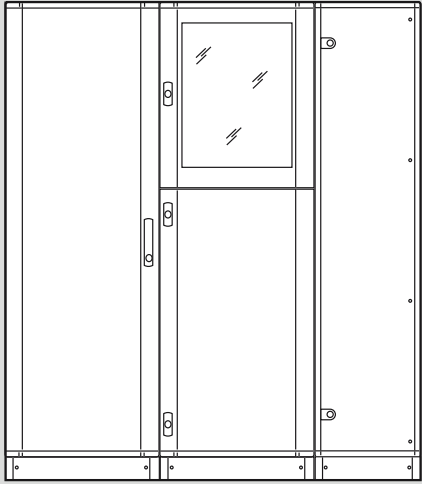
It is possible to divide the enclosure into completely separate compartments by fitting partitioning divider Cat. No. 204 94. For installation between the intermediate side panel supports

For fitting the doors, please refer to page 12.



The isolating finishing frames must first be removed from the joins of partial doors

+



Modular enclosures can be joined to wiring sleeves and non-modular XL³ 800 enclosures (except for IP 55)

Fitting the distribution systems

24

XL³ 800 gives users freedom to organise the distribution.

■ **XL-Part optimised distribution**

With its easy assembly and compact size, XL-Part optimises the assembly time and space in enclosures.

- **XL-Part 800 system:**

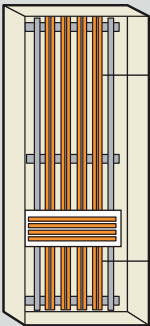
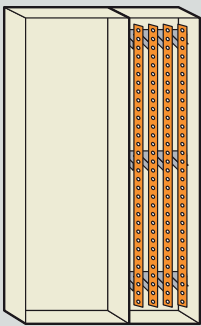
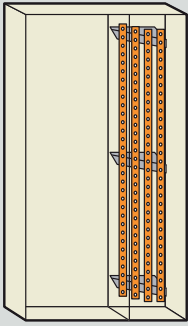
Consists of a column chassis fitted at the back of the enclosure, equipped with C-section busbars, 4-pole support bases for DPX 125, 250 ER and 630, and the 250 A row distribution block

- **XL-Part 125 and XL-Part 100 row distribution blocks**

■ **Standard distribution using vertical flat busbars:**

- In external wiring sleeve up to 800 A (inclined bars)

- In internal wiring sleeve up to 400 A (stepped bars).

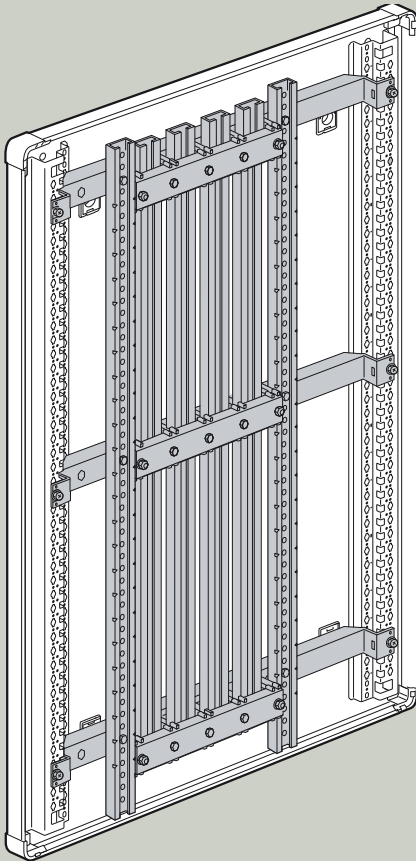
Distribution solutions		
Optimised distribution	Standard distribution	
In 24-module enclosure, or 36-module enclosure with internal wiring sleeve Up to 800 A	In external wiring sleeve Up to 800 A	In internal wiring sleeve Up to 400 A
 <p>XL-Part 800 column chassis: - Isolating supports and uprights Cat. No. 373 40 - C-section busbars Cat. No. 374 61</p> <p>250 A row distribution block: Cat. No. 373 46</p>	 <p>Set of vertical busbars with inclined bars: - Support Cat. No. 373 20 - Flat bars Cat. Nos 374 18/19/40/41</p>	 <p>Set of vertical busbars with stepped bars: - Support Cat. No. 373 10 - Flat bars Cat. Nos 374 18/19</p>

25

A OPTIMISED DISTRIBUTION

1. Fitting the XL-Part 800 column chassis

Column chassis Cat. No. 373 40 can be installed in 24-module enclosures, or 36-module enclosures equipped with an internal wiring sleeve, on the left or the right, depending on the cable entry. When the column chassis is fitted on the right, the neutral bar will also be on the right. Up to 630 A, the bars are supplied by a DPX fitted horizontally on an XL-Part base. Above 630 A, they can be connected using linking kit Cat. No. 373 39, to a DPX 1600 (rating 800 A max.) fitted on a plate.



Characteristics of the C-section busbars			
Bar		In (A)	
Cat. No.	Cross-section (mm ²)	IP > 30	IP > 30
374 61	265	800	630

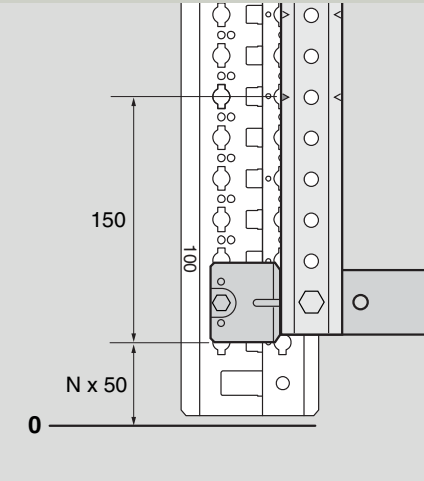
Permissible short circuit current value Peak Isc Ipk according to the configuration			
C-section busbar	With no DPX support base	With 2 DPX support bases	With 4 DPX support bases
347 61 265 mm ²	50 kÂ	90 kÂ	120 kÂ

Fitting the distribution systems (continued)



Fit the fixed part of the isolating supports on the crosspieces, then fix the crosspieces on the functional uprights

The crosspiece, equipped with the lug support, must be installed at the bottom on the enclosure.



Fix the 2 uprights of the column chassis on the crosspieces, taking care to ensure the correct positions of the markings: maintain the 50 mm spacing for the faceplates



Position the C-section busbars then position the movable part of the isolating supports (tightening torque 15 Nm)

2. Fitting the DPX support bases

The bases are used for mounting DPX 125, 250 ER and 630 horizontally. They are fixed on the uprights of the column chassis by a ¼ turn fastening, and connect directly to the C-section busbars using the 4 integrated connection screws.

Device	Support base		Faceplate	
	DPX only	DPX + elcbs underneath	Height (mm)	Cat. No.
DPX 630	374 44	374 45	300	209 25
DPX 250 ER	374 41	374 42	200	209 16
DPX 125	374 41 + 374 43	374 42 + 374 43	200	209 14



When positioning the base, the slots of the connecting screws must be parallel with the bars



To align the device correctly with its faceplate, the mark on each base must be in line with one of the marks on the upright (at 50 mm intervals)



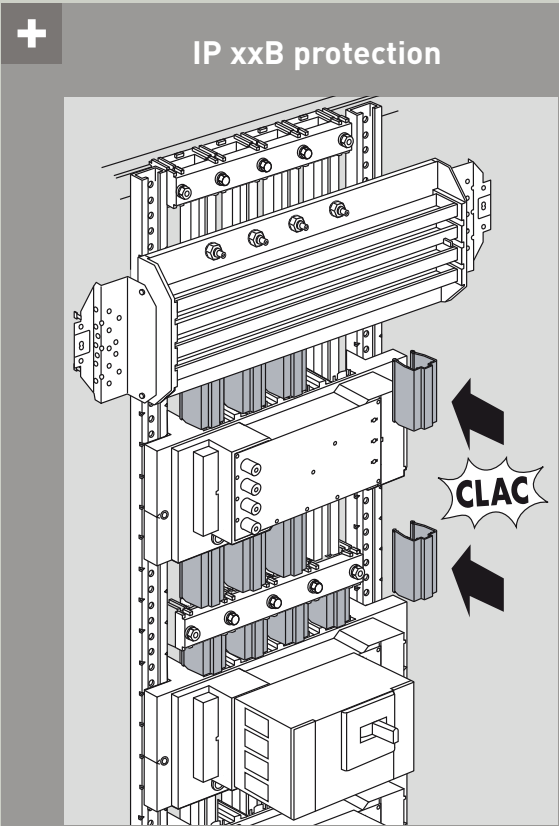
Connect the base to the busbar, rotating the 4 connecting screws a ¼ turn then tightening the lock nuts (8 to 10 Nm)

3. Fitting 250 A row distribution blocks

250 A row distribution blocks take the bases for DPX 125, 160, 250 ER and for Lexic MCBs. They are fitted in 24-module width enclosures, or 36-module enclosures with internal wiring sleeve. They are fixed on the functional uprights using M6 screws and clip-nuts

Four pole support bases for DPX		
Device	Base	
	for device only	for lateral elcbs
DPX 125	098 57	098 58
DPX 160	098 59	098 60
DPX 250 ER	098 65	098 66

Bases for Lexic devices				
Poles	"Plug-in" base for Lexic 1 mod./pole	Wired base for Lexic		
		1 mod./pole up to 63 A	1.5 mod./pole up to 125 A	1P+N 1 module up to 40 A
N	098 00	098 42	098 48	
L1	098 01	098 43	098 49	
L2	098 02	098 44	098 50	
L3	098 03	098 45	098 51	
3P	098 04	098 46	098 52	
4P	098 05	098 47	98 53/54	
L1+N				098 08
L2+N				098 09
L3+N				098 10



Installing isolating profiles Cat. No. 373 80 provides IP xxB protection

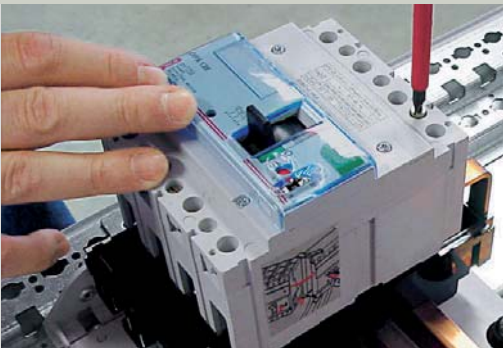
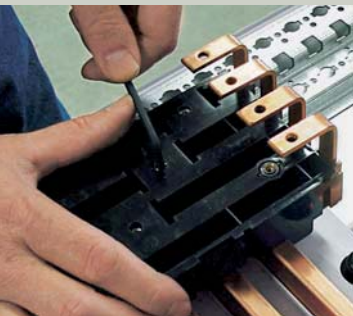
Fitting the distribution systems (continued)

■ **Row distribution block Cat. No. 373 46**

This is an additional product for use with the XL-Part 800 column chassis. It connects directly on the C-section busbars and supplies all the devices in the row.



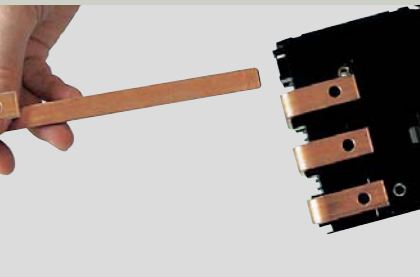
Insert the hammer head screw in the C-section busbars of the column chassis. Once the nut has been tightened (8 to 10 Nm), it is advisable to protect it using the cover provided. Fixing the bases also connects them to the distribution block bars



DPX units are held in place on the base by their usual fixing screws. Their power supply is provided via 4 copper links inserted in the top of the base

■ **Row distribution block Cat. No. 373 47**

This is independent and is supplied indirectly via the head of row device.

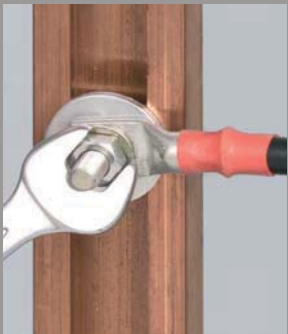


Insert the 4 copper links in the bottom of the base of the head of row device

+ Tap-offs on C-section busbars



The 125 A tap-off terminal Cat. No. 373 29 can be used for two 35 mm² connections



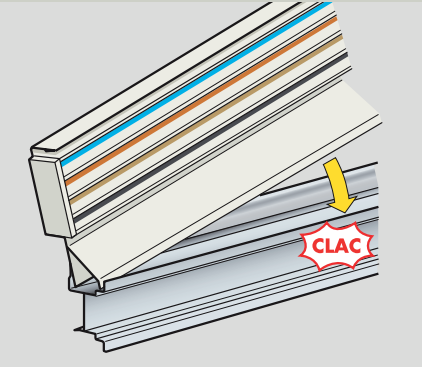
Tap-off via lugs with hammer head bolt Cat. No. 374 64 (M8) or Cat. No. 374 65 (M12)

4. Fitting the XL-Part 125 (24 module) row distribution block

The XL-Part 125 four pole distribution block Cat. No. 045 03 clips onto fixing device Cat. No. 206 00 under a 200 mm faceplate

- Direct power supply via the terminals of one of the devices up to 63 A
- Power supply via a connection module Cat. No. 045 05 (35 mm² cage terminal) up to 80 A (side power supply) and 125 A (central power supply). The "Plug-in" connection modules are used for automatic connection of all Lexic 1 module per pole MCBs, up to 63 A. Wired connection modules are used to connect all Lexic 1P + N devices, up to 32 A.

Modules		Poles	Cat. No.
Power supply (4 modules)		N, L1, L2, L3	045 10
Connection	Plug-in	N	045 14
		L1	045 11
		L2	045 12
		L3	045 13
	wired (3 modules)	L1+N, L2+N, L3+N	045 25



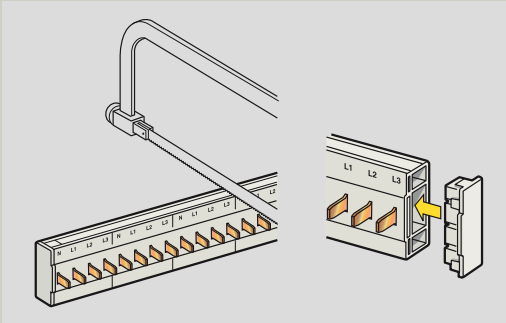
Clipping the XL-Part 125 distribution block onto aluminium profile rail Cat. No. 202 00



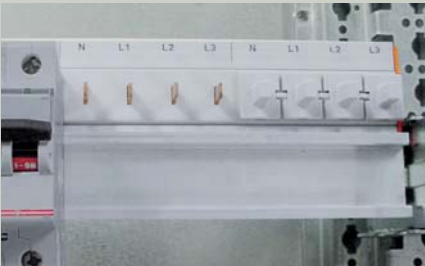
XL-Part 125 allows 4 pole, 3 pole, 2 pole, phase/neutral and single pole devices to be mixed on the same row

5. Fitting the XL-Part 100 (24-module) row distribution block

The XL-Part 100 distribution block is available in 2 versions: 3P or 4P. It clips onto rail Cat. No. 206 00. It supplies all Lexic 3 or 4 pole MCBs up to 63 A directly by a "Plug-in" system.



The distribution block can be sawn into partial rows



A dummy strip that can be cut to size can be plugged into the unused terminals to provide IP xxB protection

Fitting the distribution systems (continued)

30

B STANDARD DISTRIBUTION

1. Fitting a busbar in an external wiring sleeve

Isolating supports Cat. No. 373 20 are used to create an inclined busbar at the back of the external wiring sleeve up to 800 A.

Selection of bars			
Bars		I (A)	
Cat. No.	Cross-section (mm)	IP ≤ 30	IP > 30
374 18	25 x 5	330	270
374 19	32 x 5	450	400
374 40	50 x 5	700	630
374 41	63 x 5	800	700

Maximum distance (in mm) between the supports according to the peak current (I_{pk})

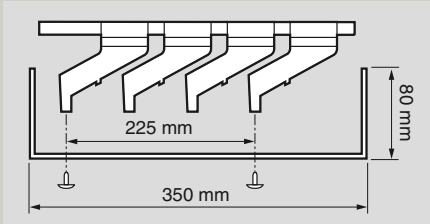
I _{pk} (kA)	Bars			
	374 18 25 x 5	374 19 32 x 5	374 40 50 x 5	374 41 63 x 5
10	800	900		
15	600	600	700	800
20	450	500	600	700
25	350	400	500	550
30	300	350	400	450
35	250	300	350	400
40	200	250	275	300
45	200	200	225	250
50	150	150	200	200
60	125	125	150	150
70	100	100	150	150
80				100



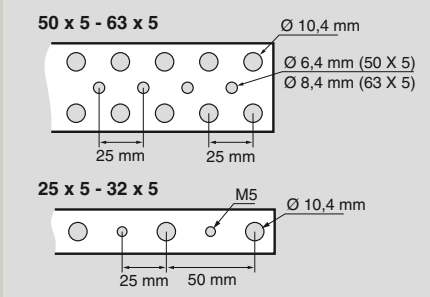
Fit the supports on the bottom profile of the functional uprights using clip-nuts and M6 screws (tightening torque 10 Nm)



Fix the bars on the supports (tightening torque 7 Nm)



The supports are supplied with 2 screws for fitting a screen (not supplied)



The copper bars are perforated every 25 mm

31

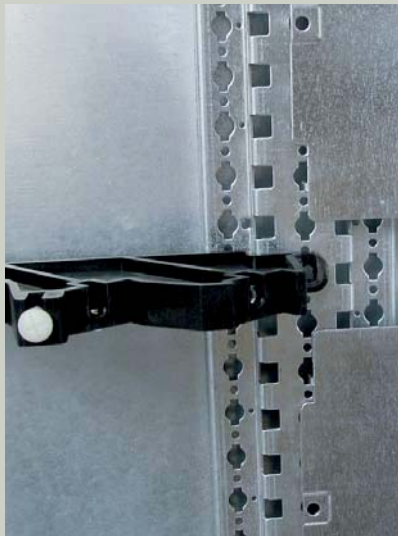
2. Fitting a busbar in an internal wiring sleeve

Isolating supports Cat. No. 373 10 are used to create a stepped busbar in an internal wiring sleeve up to 400 A. They are fixed on the functional uprights using clip-nuts and M6 screws.

Selection of bars			
Bars		I(A)	
Cat. No.	Cross-section (mm)	IP ≤ 30	IP > 30
374 18	25 x 5	330	270
374 19	32 x 5	450	400

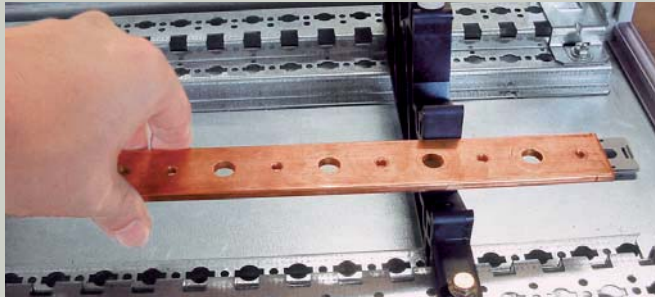
Maximum distance (in mm) between the supports according to the peak current (I_{pk})

I _{pk} (kA)	Bars	
	374 18 (25 x 5)	374 19 (32 x 5)
10	800	900
15	700	800
20	550	700
25	400	500
30	350	400
35	300	350
40	300	300
45	200	200
50	175	100
55	150	100
60	150	

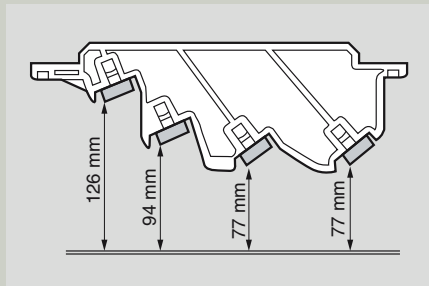


Fix the busbar supports on the functional uprights using the clip-nuts provided, inserted in the top profile of the uprights

Caution: the position of the supports must take account of the plates and rails installed in the adjoining area of the enclosure



Fit the copper bars on the supports using M6 hex. head screws with integral washer



Distances between copper bars and faceplate

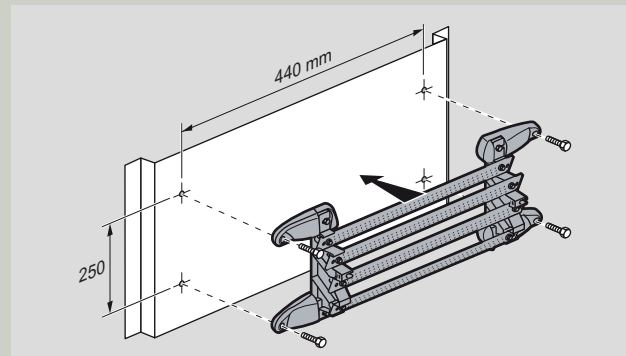
Fitting the distribution systems (continued)

32

3. Fitting the 400 A distribution block Cat. No. 373 08

■ Horizontally in enclosures

The distribution block is fixed horizontally in 24 module width enclosures on solid plate Cat. No. 206 46 (Height 400 mm) used with solid faceplate Cat. No. 208 45 or Cat. No. 209 45.



Fixing distances of distribution block Cat. No. 373 08

■ Vertically in wiring sleeve

In internal wiring sleeves, fix the distribution block in a vertical position directly on the top profile of the functional uprights.

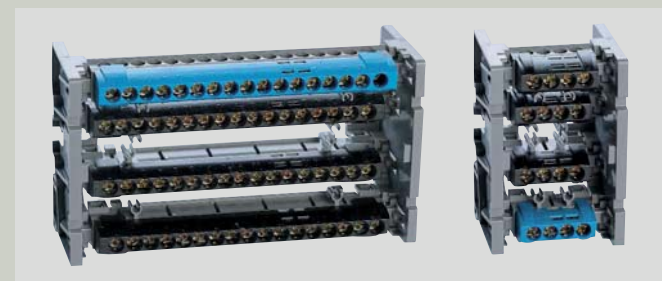
In external wiring sleeves, use 2 pieces of C-section rail Cat. No. 389 71 cut to 350 mm and fixed onto the functional uprights using M6 clip-nuts Cat. No. 200 92 as supports.



Fix the distribution block on the rails using hammer head bolts Cat. No. 367 60.

C SUPPLY BUSBARS, TERMINAL BLOCKS, DISTRIBUTION TERMINALS AND MODULAR DISTRIBUTION BLOCKS

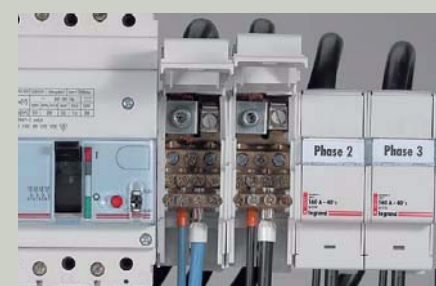
The Legrand distribution blocks for use in XL³ 800 enclosures meet the needs of a wide range of requirements, providing ease of use and maximum safety.



By combining IP 2x terminal blocks with a support Cat. No. 048 10, you can create a 2P, 3P or 4P distribution block



6 x 35 mm² rigid outputs (25 mm² flexible) for distribution terminal Cat. No. 048 67

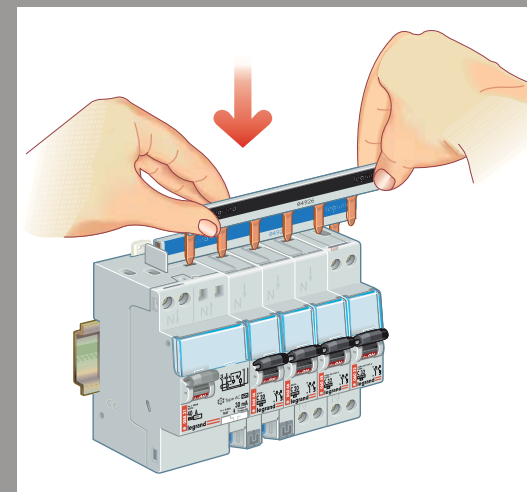


Modular single-pole distribution blocks: total isolation of poles in order to distribute between 125 and 250 A

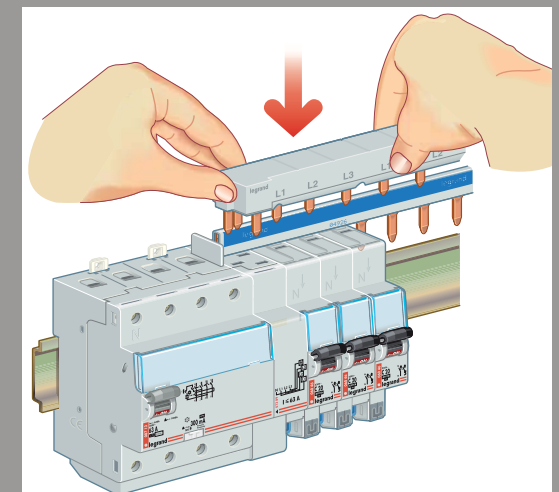
33



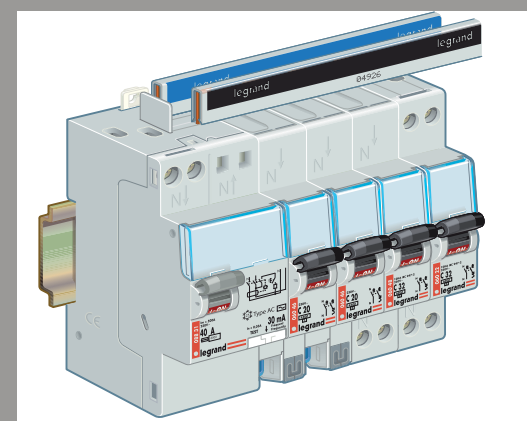
Distribution in rows using Lexic auto supply busbars: automatic connection of the single phase and 3-phase supply busbars up to 63 A



Single phase power supply to a row using the phase/neutral reversible universal supply busbar



3-phase power supply to a row using the "three prong" type supply busbar



It is possible to mix screw connection and automatic terminal connection MCBs on the same row.

Fitting devices and equipment

A PRINCIPLE FOR DEFINING THE REQUIRED SPACE

Each device, after fixing on rail or plate, receives a dedicated faceplate. The height of this faceplate defines the space required for installing devices, for their connection, for maintaining the clearances and for optimum heat dissipation conditions. Once they have been fitted, the faceplates provide IP 30 protection.

They are available in several heights:

- 150 mm to 600 mm for modular devices, Vistops and DPX units
- 50 mm to 1,800 mm for solid faceplates.

Solid faceplates provide the necessary areas for wiring, cable entries, installing busbars and fitting specific equipment.

Solid faceplates					
Height (mm)	For enclosures		36 modules	For wiring sleeve	
	24 modules			internal	external
	1/4 turn	screw mounting	screw mounting	screw mounting	screw mounting
50	208 40	209 40	209 90		
100	208 41	209 41	209 91		
150	208 42	209 42	209 92		
200	208 43	209 43	209 93		
300	208 44	209 44	209 94		
400	208 45	209 45	209 95		
600	208 46	209 46	209 96		
1050				204 46	
1250				204 47	
1400				204 48	204 43
1800				204 49	204 44

Choice of fixing devices and faceplates												
Device	Fixing	Position	Configuration	XL ³ 800 24 modules					XL ³ 800 36 modules			
				Fixing device	Plate	H (mm)	Metal faceplate		Fixing device	Plate	Metal faceplate	
							1/4 turn	screw mounting			H (mm)	screw mounting
Fitting on modular rail												
Lexic ≤ 63 A	Enclosures	vertical		206 00		150	208 00	209 00	206 50		150	209 50
Lexic > 63 A	Enclosures	vertical		206 00		200	208 01	209 01	206 50		200	209 51
Vistop 63 to 160 A	Enclosures	vertical		206 00		200	208 01	209 01	206 50		200	209 51
DPX 125	Enclosures	vertical	with modular device	206 00	262 08	200	208 01	209 01	206 50	262 08	200	209 51
DPX 160	Enclosures	vertical	with modular device	206 00	262 09	300	208 10	209 10	206 50	262 09	300	209 60
DPX 250 ER	Enclosures	vertical	with modular device	206 00	262 09	300	208 10	209 10	206 50	262 09	300	209 60
DPX-IS 250	Enclosures	vertical	with modular device	206 00	262 39	300	208 10	209 10	206 50	262 39	300	209 60
Fitting on plate												
DPX 125 (combination possible with DPX 160 and DPX 250 ER)	Enclosures	vertical	without elcbs		206 10	300	208 10	209 10		206 60	300	209 60
			with elcbs underneath		206 12	400	208 12 ⁽¹⁾	209 12 ⁽¹⁾		206 62	400	209 62 ⁽¹⁾
		horizontal		206 14	200	208 14	209 14					
DPX 160 (combination possible with DPX 125 and DPX 250 ER)	Enclosures	vertical	without elcbs		206 10	300	208 10	209 10		206 60	300	209 60
			with elcbs underneath		206 12	400	208 12 ⁽¹⁾	209 12 ⁽¹⁾		206 62	400	209 62 ⁽¹⁾
		horizontal	supply inverters		206 64	300	208 10	209 10				
			with or without elcbs		206 14	200	208 15	209 15				
DPX 250 ER (combination possible with DPX 125 and DPX 160 ER)	Enclosures	vertical	without elcbs		206 10	300	208 10	209 10		206 60	300	209 60
			with elcbs underneath		206 12	400	208 12 ⁽¹⁾	209 12 ⁽¹⁾		206 62	400	209 62 ⁽¹⁾
		horizontal	supply inverters		206 66	300	208 10	209 10				
			with or without elcbs		206 16	200	208 16	209 16				
DPX-IS 250	Enclosures	vertical	1 centred device		206 05	300	208 10	209 10				
			1 or 2 devices		206 05	300	208 06	209 06		206 55	300	209 60
DPX 250	Enclosures	vertical	without elcbs		206 20	400	208 20	209 20		206 70	400	209 70
			with elcbs underneath		206 22	600	208 22	209 22		206 72	600	209 72
		horizontal	with or without elcbs		206 24	200	208 24	209 24				
	Wiring sleeve	vertical	without elcbs		206 28 ⁽²⁾					206 78 ⁽³⁾		
with elcbs underneath				206 29 ⁽²⁾					206 79 ⁽³⁾			
DPX 630	Enclosures	vertical	without elcbs		206 20	400	208 20	209 20		206 70	400	209 70
			with elcbs underneath		206 22	600	208 22	209 22		206 72	600	209 72
		horizontal	with or without elcbs		206 25	300	208 25	209 25				
	Wiring sleeve	vertical	without elcbs		206 28 ⁽²⁾					206 78 ⁽³⁾		
with elcbs underneath				206 29 ⁽²⁾					206 79 ⁽³⁾			
DPX-IS 630	Enclosures	vertical	device only		206 07	300	208 07	209 07		206 57	400	209 57
Vistop 800	Enclosures	vertical	device only		206 09	300	208 10	209 10				
DPX 1600	Enclosures	vertical	device only		206 30	400	208 30	209 30		206 80	400	209 80
		horizontal	device only		206 30	400	208 34	209 34		206 80	400	209 84

[1] With window adaptor, to be ordered separately, Cat. Nos below:
203 67: adaptor for DPX 125 earth leakage module
203 68: adaptor for DPX 160 earth leakage module
203 69: adaptor for DPX 250 ER earth leakage module

[2] device for external wiring sleeve
[3] device for internal wiring sleeve

Fitting devices and equipment (continued)


B CAPACITY OF THE ENCLOSURES

The usable faceplate height of each enclosure defines its equipment capacity.

Enclosure		External height (mm)	Usable faceplate height (mm)
24 modules	36 modules		
204 01/51	204 06/56	1050/1095	1000
204 02/52	204 07/57	1250/1295	1200
204 03/13/53	204 08/58	1550/1595	1400
204 04/14/54	204 09/59	1950/1995	1800

C POSITIONING THE FIXING DEVICES

In order to fit and lock the plates, 2 clip-nuts must first be fitted on the functional uprights according to the faceplate layout.

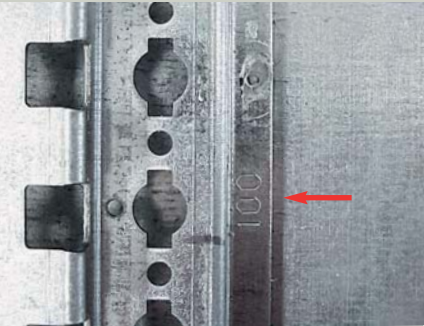
Likewise the  rail fixing device attachment pieces must be positioned in accordance with the faceplate layout.



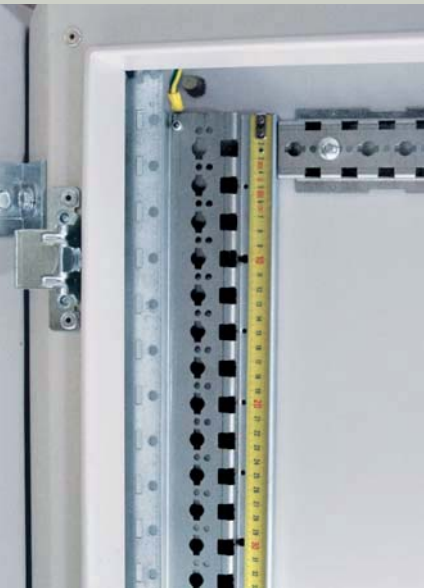
Two clip-nuts (provided) are sufficient to hold all versions of plates

- The positioning of a fixing device (plate or rail) depends on 3 criteria:
- The height of the faceplate: always a multiple of 50 mm
 - The spacing of the fixing points on the functional uprights: 25 mm
 - The reference point:
 - In IP 30 enclosures this is located 100 mm from the top of the faceplate frame (point 100) and marked by the number 100, engraved on each functional upright
 - In IP 55 enclosures, it is located at the top of the functional upright (point 0).

Principle: Divide the height of the faceplate by 2. This gives the position for fitting the clip-nut or attachment piece in relation to a reference point.



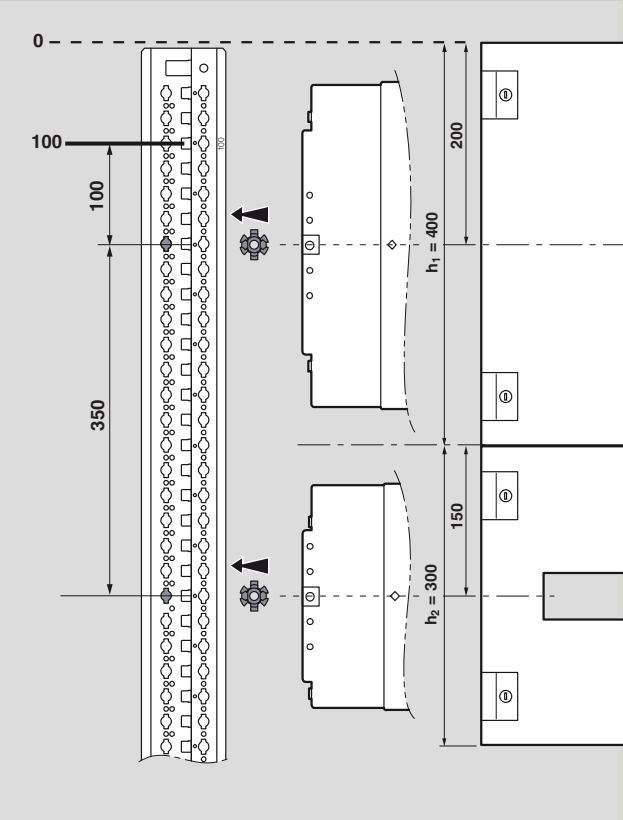
In IP 30 enclosures, point 100 is marked on the functional upright



In IP 55 enclosures, point 0 corresponds to the top of the functional upright

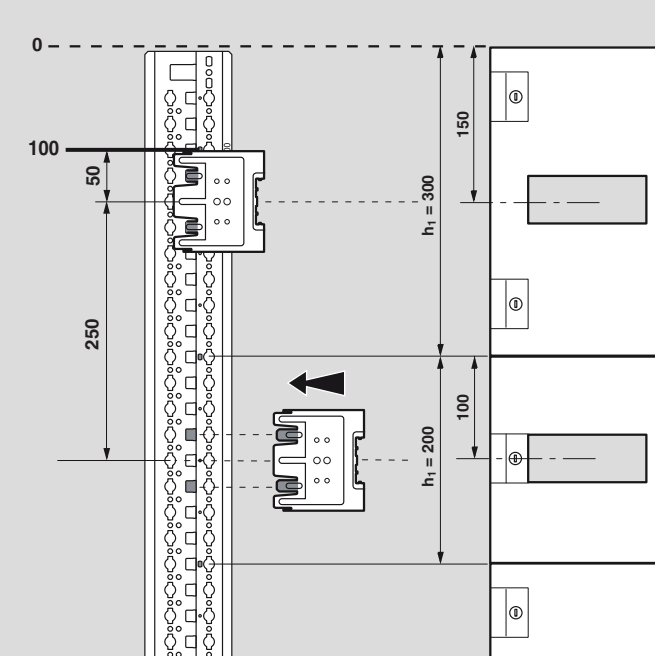
■ Positioning the clip-nuts for the plates

- Example: fitting 2 plates and their faceplate at the top of the enclosure (see diagram below)
- 1st faceplate: height $h_1 = 400$ mm
Position of the plate fixing point in relation to the top of the faceplate frame: $400 / 2 = 200$ mm, i.e. 100 mm from point 100
 - 2nd faceplate: height $h_2 = 300$ mm
Position of the plate fixing point in relation to the bottom of the 1st faceplate: $300 / 2 = 150$ mm, i.e. 350 mm from the 1st clip-nut ($150 + 200$).



■ Positioning the attachment pieces for rail fixing devices

- Example: fitting 2 rail fixing devices and their faceplate at the top of the enclosure (see diagram below).
- 1st faceplate: height $h_1 = 300$ mm
Position of the attachment piece insertion point in relation to the top of the faceplate frame: $300 / 2 = 150$ mm, i.e. 50 mm from point 100
 - 2nd faceplate: height $h_2 = 200$ mm
Position of the attachment piece insertion point in relation to the bottom of the 1st faceplate: $200 / 2 = 100$ mm, i.e. 250 mm from the axis of the first attachment piece ($100 + 150$).



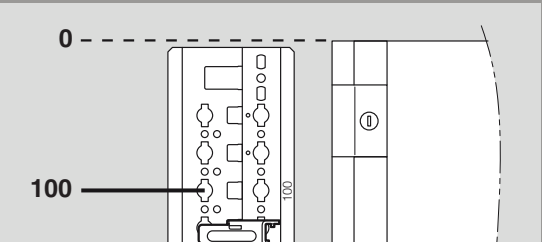
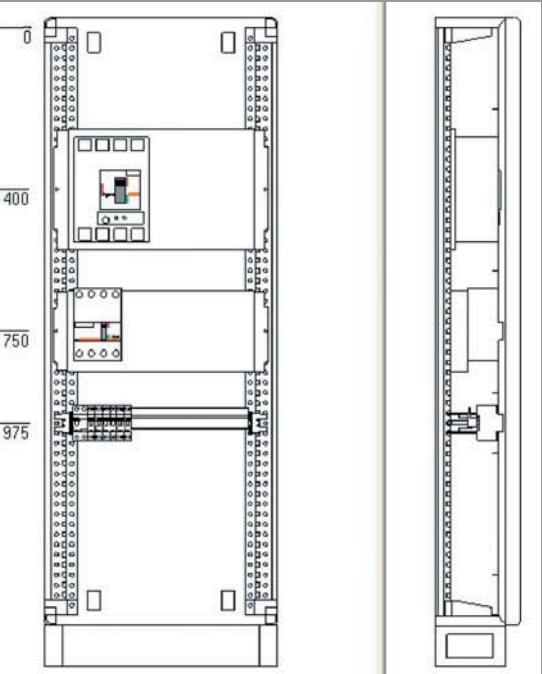
Fitting devices and equipment (continued)

38



XL-PRO²

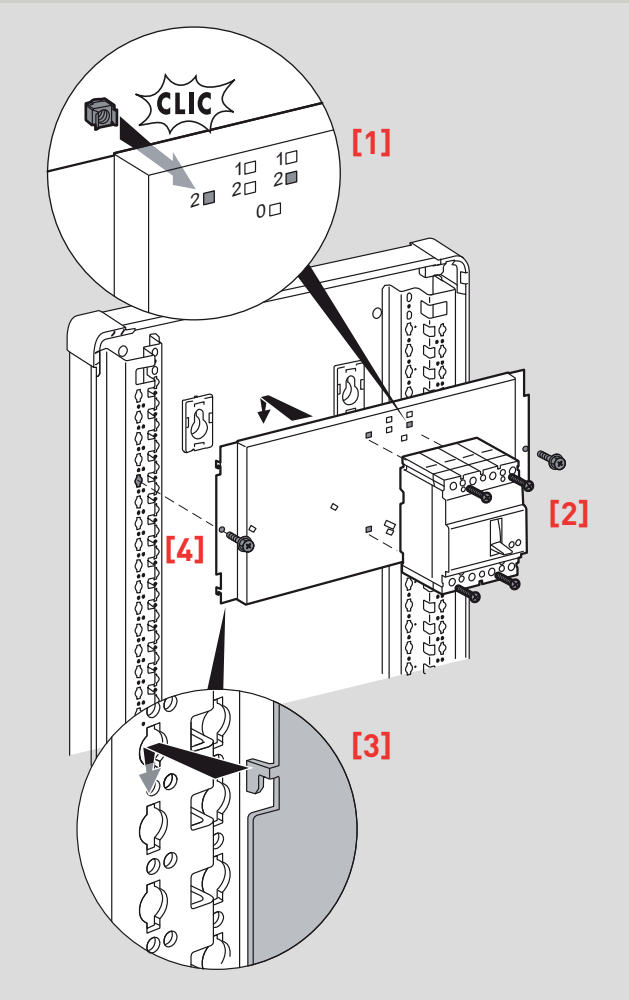
The XL-PRO² design software automatically calculates the positions of the plates and rails according to the layout of your panel.



The positions indicated by XL-PRO² are given in relation to point 0 (located 6 mm above the end of the functional upright for XL³ 800 IP 30-40-43 enclosures)

D FITTING DEVICES ON PLATES

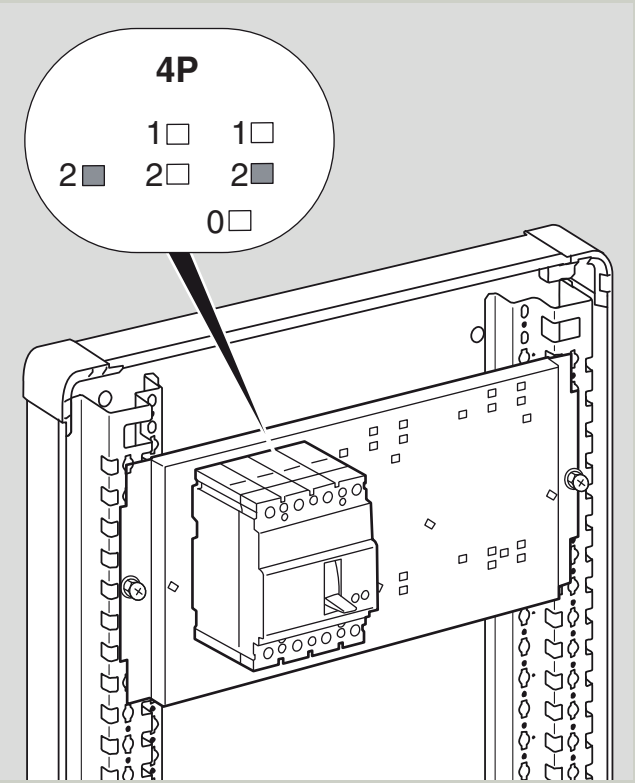
After fitting the cage-nuts [1], the next steps consist of fixing the devices on their plates [2] then attaching [3] and locking [4] the plates on the functional uprights previously fitted with clip-nuts.



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

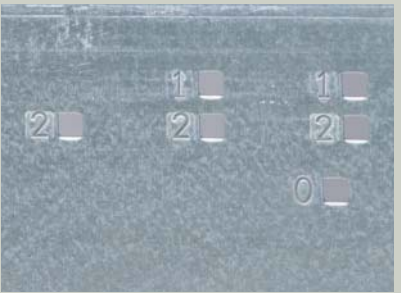
- 0 for the DPX 125
- 1 for the DPX 160
- 2 for the DPX 250 ER
- 3 for the DPX 250
- 4 for the DPX 630.

Plates that are dedicated to a single device (e.g. : DPX-IS) have no markings.

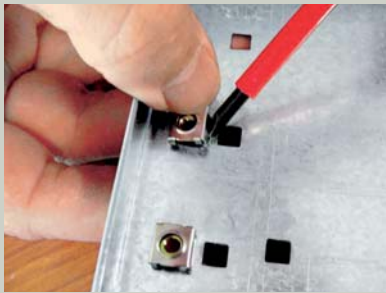


Insert the cage-nuts in the holes provided for the device. For example, for the DPX 250 ER 4P, these are the outermost holes marked "2" (see instructions)

39



Each plate has the numbers corresponding to the DPX units it can take

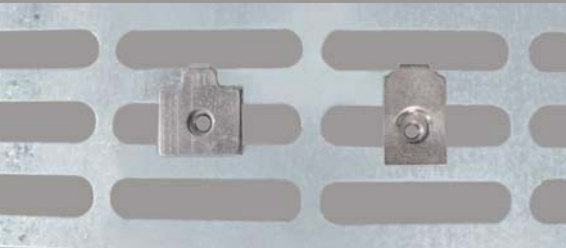


Fitting the cage-nuts

Plates Cat. No. 206 64 for DPX 160 and Cat. No. 206 66 for DPX 250 ER can be used to create manual supply inverters for fixed DPX units (front terminal connection only). They are supplied with all the parts for creating the mechanical interlock for the devices.



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



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

Fitting devices and equipment (continued)

40

E FITTING DEVICES ON RAILS

Rail fixing devices can be fitted in enclosures.

1. 2-position indexed rail Cat. No. 206 00/50

These rails (capacity 24 and 36 modules respectively), made of particularly rigid aluminium profile are used for fitting modular devices in upper position and DPX units in lower position. The modular devices can be fitted beside DPX units using spacer Cat. No. 262 99.

+ Rail fixing device with 2 indexed positions

Tool-free fitting:



1 - Fitting the attachment pieces on the functional uprights



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

Number of DPX that can be installed on a 24-module rail			
Device	Poles	DPX/row	Remaining modules
DPX 125	3P	5	3
	4P	4	1.5
	4P + lateral elcbs	2	1.5
DPX 160	3P	4	4
	4P	3	4
	4P + lateral elcbs	1	11
DPX 250 ER	3P	4	4
	4P	3	4
	4P + lateral elcbs	1	11

2. Universal rail Cat. Nos 206 04/54

This rail fixes directly on the top profile of the functional uprights or on isolating supports Cat. No. 200 90. It is designed for installing terminals at the back of enclosures (see page 52) but can also take any rail-fixing device.

3. Adjustable, inclinable rail Cat. Nos 206 02/52

The attachment piece + bracket assembly is used to adjust the height and slope of the rail to create staggered terminal blocks (see page 47).

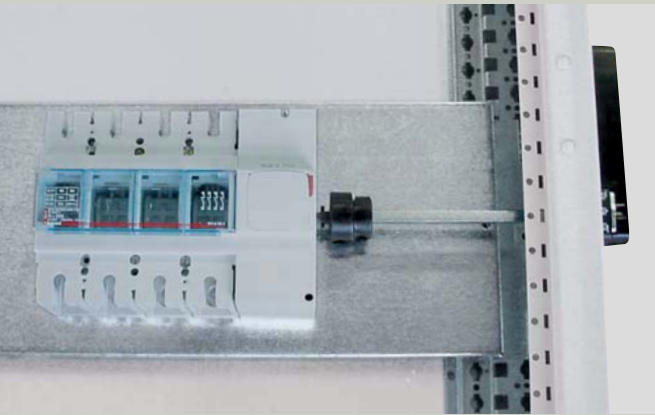
41

G EQUIPMENT ON DOORS AND SIDE PANELS

1. Remote side handles

■ DPX-IS 250/630

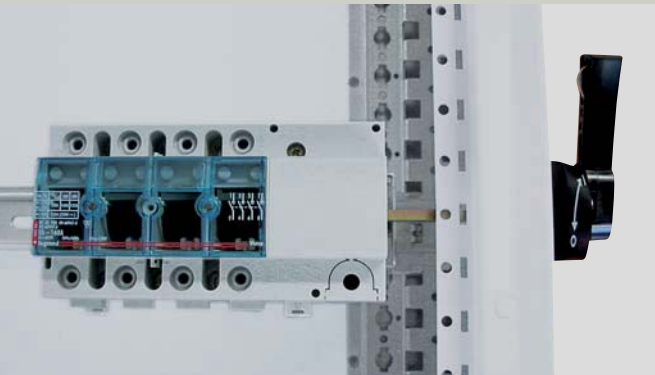
Remote handles are supplied with a template for drilling the side panel. The operating rod must be cut according to requirements.



DPX-IS with side handle must be fitted on a plate

■ Vistop 63 to 160 A

Vistops with side handle are supplied with the accessories required for locating the handle on the outside of the enclosure. A template is provided for drilling the side panel. The operating rod must be cut according to the position of the Vistop on the rail.



Vistop at the end of the rail

Fitting devices and equipment (continued)

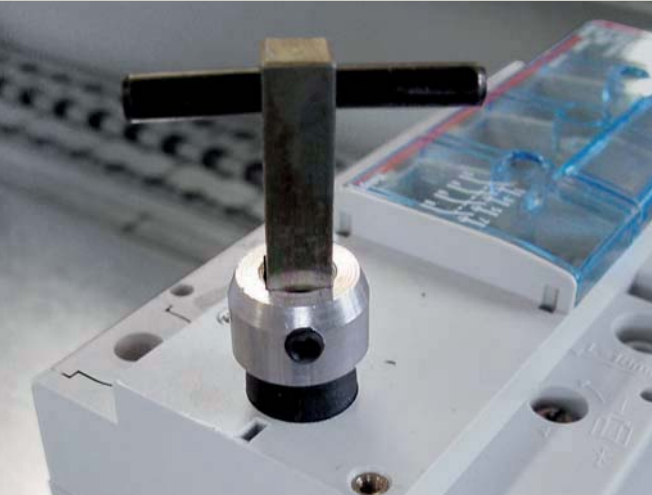
42

2. Front handles on doors for Vistop 63 to 160 A

The remote front handles are supplied with a drilling template. The operating rod must be cut to 37 mm.



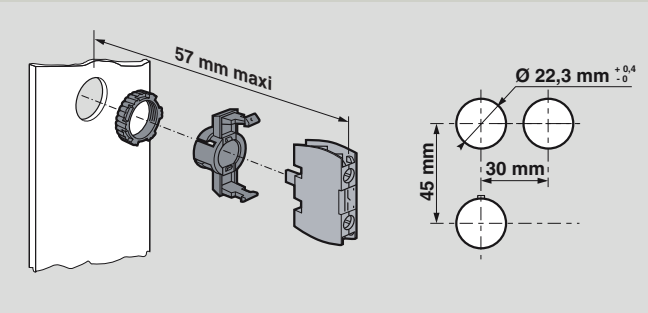
The locking accessory installed inside the door prevents the door opening if the device is in "closed" position



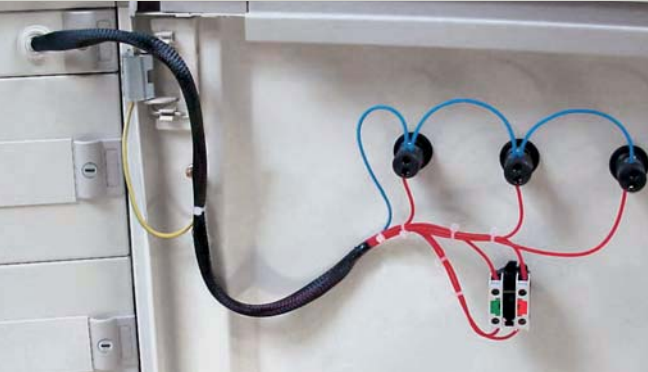
Tighten the operating rod on the Vistop using an Allen key

3. Control and signalling devices on the door

Metal rounded doors have a distance of 57 mm between the faceplate and the door, enabling 50 mm deep Signis control and signalling units to be fitted. Hole drilled using 22.3 mm diameter punch.



The connecting wires (up to 4) can be inserted in the enclosure with the door equipotential link via the hinge space (see page 13).



When there are more than 4 wires, and in IP 55 enclosures, use a solid faceplate with a cable gland Cat. No. 919 14 (Ø 23 mm hole)

43

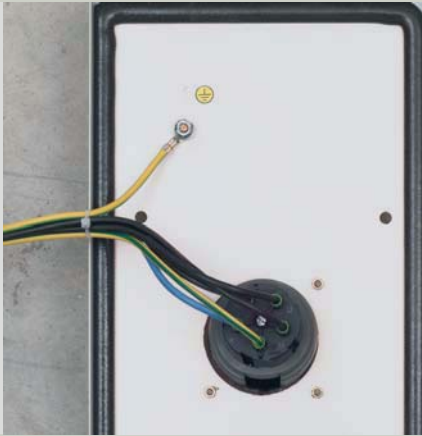
4. Hypra sockets on IP 55 enclosures

Inclined panel sockets and sockets with standard fixing centres type 16 A LV, 32 A LV and 63 A LV in all versions (2P+E, 3P+E and 3P+E+N), can be fitted on the removable side panels of XL³ 800 IP 55 enclosures.



Caution: fitting 16 A LV and 32 A LV sockets depth 40 to 54 mm makes it impossible to use Lina 25 ducting

Due to their 98 mm depth, 63 A LV sockets must be installed between 2 fixing devices (rails or plates). The 125 A LV socket cannot be fitted.



Caution: it is essential to create an equipotential link between the side panel and the enclosure (see section on page 46)

Wiring and connection

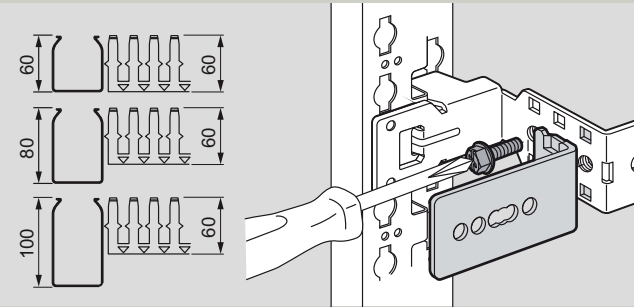
44

A WIRING

1. Lina 25™ ducting

Supports Cat. No. 204 70 and 205 70 are used for horizontal and vertical installation of Lina 25 ducting in XL³ 800 enclosures. They are fixed on the functional uprights and consist of a depth-adjustable bracket for aligning the 60, 80 or 100 mm height horizontal ducting with 60 mm height vertical ducting.

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



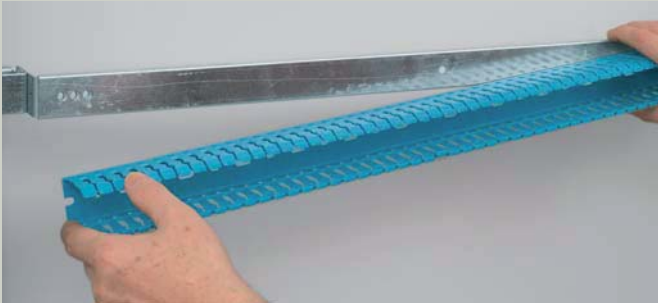
3 adjustment positions according to the height of the ducting



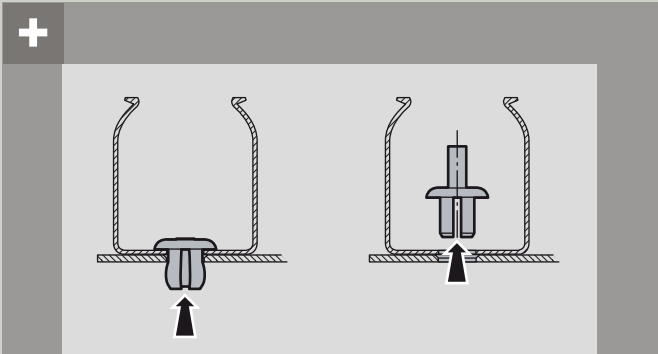
The ducting is fixed on the supports using the isolating rivets provided.

Lina 25™ ducting capacity			
Cat. No.	Width (mm)	Height (mm)	Capacity ⁽¹⁾ (mm ²)
362 07	40	60	2008
362 08	40	80	2717
362 12	60	60	3115
362 13	60	80	4216

(1) Number of conductors multiplied by their cross-section

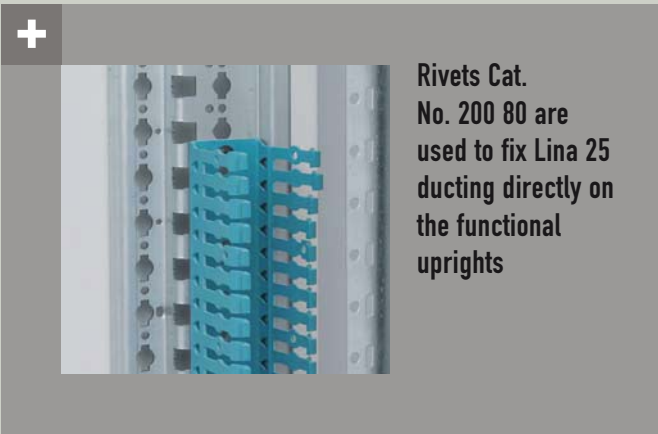


The profile supplied with supports Cat. No. 205 70 is fixed using the rivets at the same time as the ducting. An additional rivet is supplied for fixing the ducting at the centre



The ducting is dismantled by removing the pin from the isolating rivet. The rivets are available separately (Cat. No. 366 46)

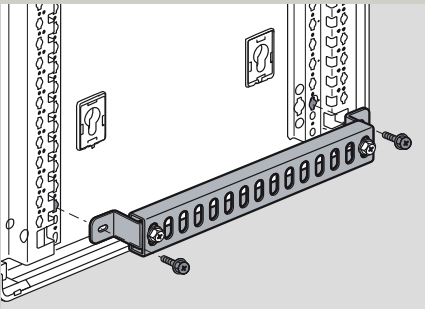
45



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

2. Cable fixing supports

Supports Cat. Nos 204 35, 204 36 and 204 37 are used to hold the cables in place with Colson clamps. They are installed in 24-module enclosures, 36-module enclosures, and external wiring sleeves respectively. They are fixed at the back of the enclosure, on the functional uprights, using 2 brackets.



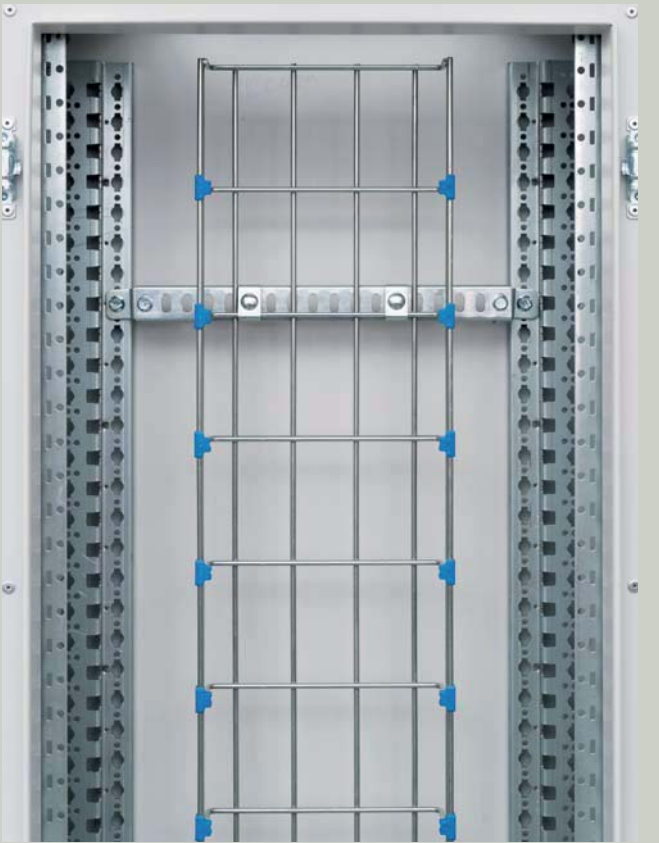
Insert the clip-nuts on the bottom profile of the functional uprights then screw on the brackets



Holding cables in position in a wiring sleeve

3. Cable guide

Cable guide Cat. No. 332 34 can be installed vertically in the external wiring sleeve. First install the two cable fixing supports Cat. No. 332 34 (see opposite) then fit clip-nuts Cat. No. 200 92 on them.




Fix the cable guide on supports Cat. No. 204 37 with the clamps and screws provided

Wiring and connection (continued)

46

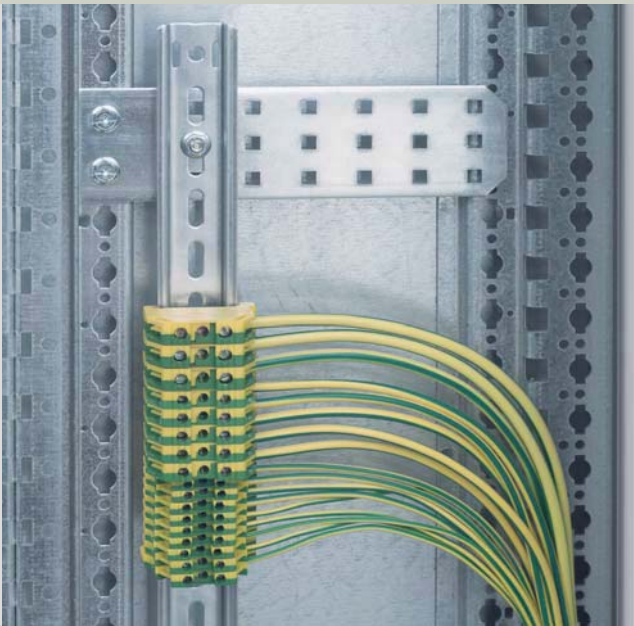
B PROTECTIVE CONDUCTORS

The main protective conductor is connected and interconnected with all the other protective conductors on the main terminal, which is itself directly linked to the enclosure chassis.

This main terminal can be in the form of a terminal block, a terminal bar, a  rail with terminal blocks, or a copper bar.

1. Viking terminal blocks fitted on rail

Capacity: 0.25 mm² to 50 mm² for rigid conductors (up to 35 mm² for flexible conductors). These are used for connecting and interconnecting protective conductors.



Viking terminal blocks on rail with universal support
Cat. No. 201 95

2. Dedicated copper bar

Most commonly installed in the wiring sleeve, the copper bar is required as soon as the cross-section of the conductors is greater than or equal to 16 mm².

Determining the cross-section of the protective conductor	
Cross-section of the phase conductor (S in mm ²)	Minimum cross-section of the protective conductor (S _{PE} in mm ²)
S ≤ 16	S
16 < S ≤ 35	16
S > 35	S/2



Main terminal in wiring sleeve consisting of a copper bar
32 x 5 mm

47

C CONNECTOR BLOCKS

1. Standard horizontal blocks

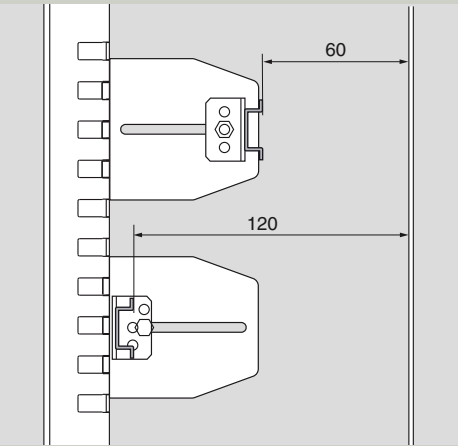
Rails Cat. No. 206 02 (24 modules) and Cat. No. 206 52 (36 modules) are used to create connector blocks in XL³ 800 enclosures.



Output terminal block at the bottom of the enclosure on rail
Cat. No. 206 02



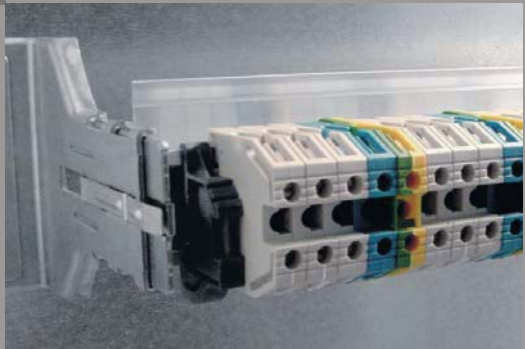
The depth of rails Cat. Nos 206 02/52 can be adjusted and they can be sloped at angles of up to 45°



Minimum and maximum distances between rail
Cat. No. 206 02/52 and faceplate

Number of terminal blocks per rail according to the pitch		
Terminal block pitch (mm)	24-module rail 206 02	36-module rail 206 52
5	95	145
6	80	120
8	60	90
10	48	73
12	40	60
15	31	48
22	20	30

Wiring and connection (continued)

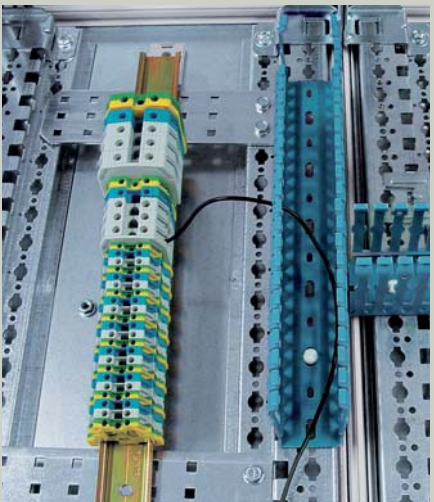


Due to their reinforced aluminium profile, 2-position rails Cat. No. 206 00 and Cat. No. 206 50 can be used to create blocks that will withstand high mechanical stresses (heavy loads, large cross-section cables, etc).
The distance between the rail and the faceplate is 70 mm in low position and 40 mm in high position

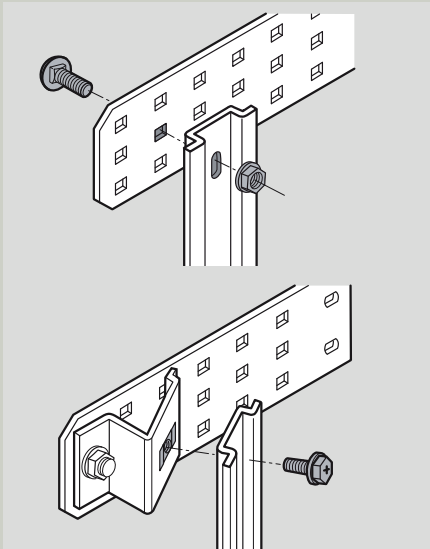
Number of terminal blocks per rail according to the pitch		
Terminal block pitch (mm)	24-module rail Cat. No. 206 00	36-module rail Cat. No. 206 50
5	85	135
6	70	112
8	52	85
10	42	68
12	34	55
15	27	44
22	18	29

2. Vertical connector blocks in wiring sleeve

It is possible to create a vertical connector block in wiring sleeves using supports Cat. No. 201 95 and rails Cat. No. 374 04/07 cut to the required length.



Example of creating a vertical connector block in a wiring sleeve using the universal support for wiring sleeves Cat. No. 201 95

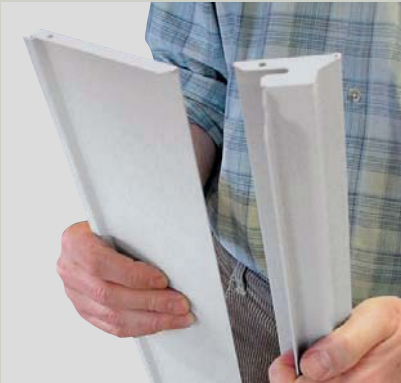


Support Cat. No. 201 95 can be used to create a flat or inclined connector block

D INSERTING THE CABLES

1. IP-30-40-43 enclosures

XL³ 800 IP 30-40-43 enclosures are supplied with an adjustable plastic cable entry plate. This plate is also available separately (Cat. No. 204 20).




Break the top or bottom metal side panel along the pre-cut line



Insert the plate between the back and the front of the side panel

2. IP 55 enclosures

Using cable glands maintains the IP protection of the enclosure. They are fitted on the removable top and bottom plates provided in each enclosure.



Gland plate equipped with cable glands

ISO screw-in cable glands				
Gland	Nut	Ø min. (mm)	Ø max. (mm)	Ø hole (mm)
979 31	979 41	6	9	15.2
979 33	979 43	9	12	20.4
979 34	979 43	11	14	20.4
PG screw-in cable glands				
Gland	Nut	Ø min. (mm)	Ø max. (mm)	Ø hole (mm)
980 10	980 30	3	6	12.7
980 11	980 31	5	8	15.2
980 12	980 32	7	10	18.6
980 13	980 33	9	12	20,4
980 14	980 34	10	14	22,5
980 15	980 35	14	18	28,3
980 16	980 36	16	24	37
980 17	980 37	22	30	47
980 18	980 38	30	35	54
980 19	980 39	31	40	60

Handling and on-site installation

50

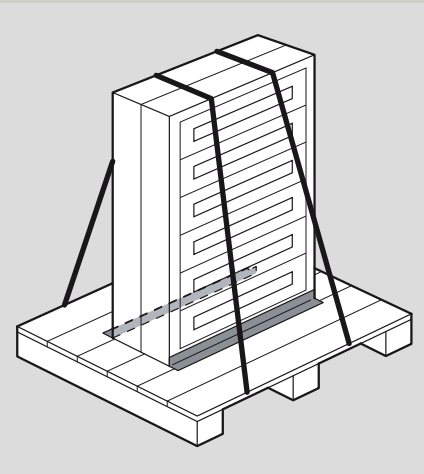
A HANDLING THE ENCLOSURES

1. Rolling

It is possible to handle the enclosures by fitting castors Cat. No. 347 93 (set of 4 adjustable castors with integral brake).



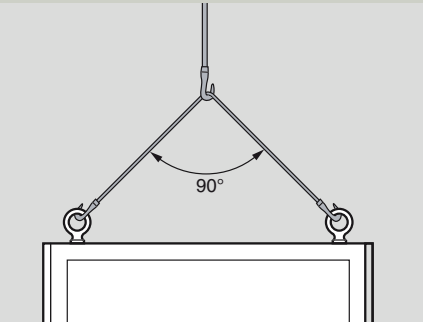
Castors Cat. No. 347 93 are fixed directly on the plinths of the enclosures boring 12 mm holes



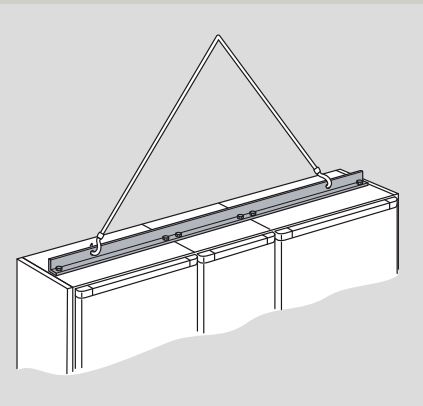
Caution: when handling enclosures using a fork-lift truck, they must be installed on a pallet. Direct handling could damage the plinths or the enclosures

2. Sling hoisting

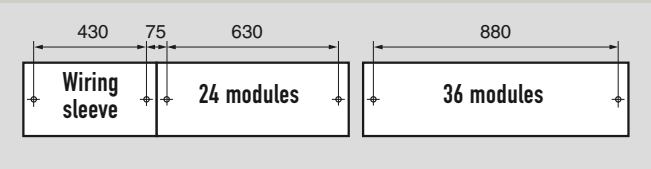
Lifting rings Cat. No. 204 82 can be installed for easy handling of IP 55 enclosures. The rings must be turned round according to the direction of the slings: lateral forces on incorrectly positioned rings may lead to their breaking.



It is advisable to limit the angle between the slings to 90°



It is advisable to use a bolted bracket in place of the rings when hoisting an assembly consisting of a number of enclosures with a sling.



Spacing of the fixing points of the lifting rings (in mm)

51

B FIXING ENCLOSURES

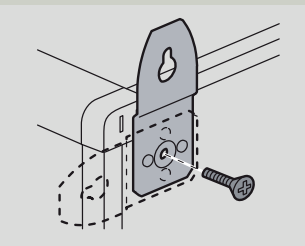
1. Wall fixing

■ IP 30-40-43 ENCLOSURES

XL³ 800 enclosures must be fixed to a wall or a partition. This can be done via the internal fixing points or using external fixing lugs Cat. No. 201 00.



Internal fixing using Ø 6 mm screw and washer



The external fixing lugs are adjustable

Internal and external fixing centres (mm)		
	24 modules	36 modules
	A = 415 B = 245 C = 215	A = 665
	D = 560 E = 100 F = 360	D = 810
	G = 710 H = 1170	G = 960

■ IP 55 enclosures

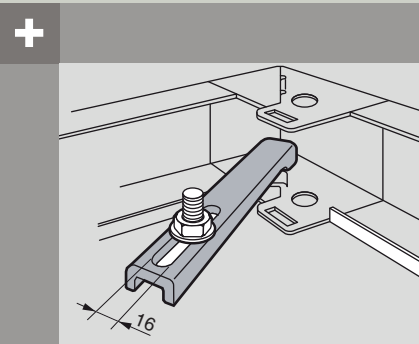
To ensure IP 55 protection, the enclosures are fixed using the external fixing lugs supplied with the enclosure (4 lugs for wall-mounting enclosures, 2 for floor-standing enclosures). They are fitted on the back of the enclosure.

Fixing centres of external fixings (mm) for IP 55		
H	1095	1295
24 modules	A = 624 B = 1165	A = 624 B = 1365
36 modules	A = 874 B = 1165	A = 874 B = 1365
External wiring sleeve	A = 424 B = 1165	A = 424 B = 1365

2. Fixing to the floor

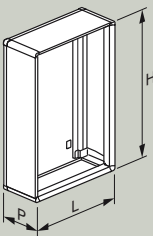
The plinths have four Ø 11 mm holes drilled in them for fixing enclosures to the floor.

Distances between the holes on the floor		
24 modules A = 630 mm	36 modules A = 884 mm	Wiring sleeve A = 432 mm

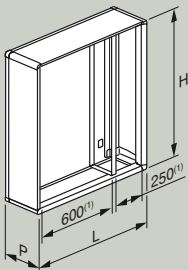


Lugs Cat. No. 345 49 are used for fixing enclosures by clamping the corners of the plinth

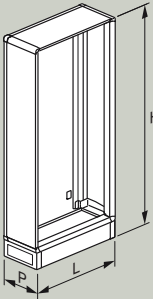
DIMENSIONS



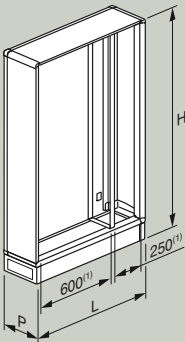
Wall-mounting enclosures



Wall-mounting enclosures with internal wiring sleeve

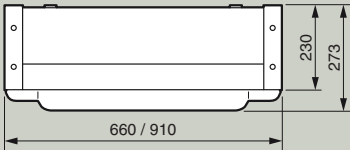


Floor-standing enclosures External sleeves



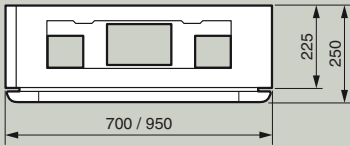
Floor-standing enclosures with internal wiring sleeve

IP 30-40-43 enclosures		External dimensions (mm)		
		L	H	D
Wall-mounting enclosures	204 01	660	1050	230
	204 02	660	1250	230
	204 06	910	1050	230
	204 07	910	1250	230
Floor-standing enclosures	204 03	660	1550	230
	204 04	660	1950	230
	204 08	910	1550	230
	204 09	910	1950	230
External wiring sleeve	204 23	460	1550	230
	204 24	460	1950	230



IP 43 with rounded door

IP 55 enclosures		External dimensions (mm)		
		L	H	D
Wall-mounting enclosures	204 51	700	1095	225
	204 52	700	1295	225
	204 56	950	1095	225
	204 57	950	1295	225
Floor-standing enclosures	204 53	700	1595	225
	204 54	700	1995	225
	204 58	950	1595	225
	204 59	950	1995	225
External wiring sleeve	204 73	500	1595	225
	204 74	500	1995	225



IP 55 with flat door

Agences régionales

1 • Région parisienne

75 -- 77 - 78 - 91 - 92 - 93 - 94 - 95
93171 Bagnollet cedex
B.P. 37 - 82 rue Robespierre
☎ : 01 49 72 52 00
Fax : 01 49 72 92 38
@ : agence-legrand.paris@legrand.fr

2 • Nord

59 - 62
59650 Villeneuve d'Ascq
Z.I. La Pilaterie - 19 C, rue de la Ladrie
☎ : 03 28 33 86 00
Fax : 03 20 89 18 66
@ : agence-legrand.lille@legrand.fr

02 - 08 - 51 - 60 - 80

51100 Reims
Pôle Technologique Henri Farman
11, rue Clément Ader
☎ : 03 26 40 05 20
Fax : 03 26 82 15 82
@ : bureau-legrand.reims@legrand.fr

3 • Est

52 - 54 - 55 - 57 - 88
54320 Maxéville
Parc d'activités Saint Jacques
8bis, rue Blaise Pascal
☎ : 03 83 98 08 09
Fax : 03 83 98 61 59
@ : agence-legrand.nancy@legrand.fr

67 - 68
67201 Eckbolsheim
8, rue Gay Lussac
☎ : 03 88 77 32 32
Fax : 03 88 77 00 87
@ : bureau-legrand.strasbourg@legrand.fr

4 • Bourgogne-Franche-Comté

10 - 21 - 25 - 39 - 70 - 71 - 89 - 90
21000 Dijon
Apogée Bâtiment C - 7, boulevard Rembrandt
☎ : 03 80 71 27 26
Fax : 03 80 71 22 80
@ : agence-legrand.dijon@legrand.fr

5 • Rhône-Alpes

01 - 07 - 26 - 42 - 43 - 69
69344 Lyon Cedex 07
Les Jardins d'Entreprise - Bât. H1
213, rue de Gerland
☎ : 04 78 69 87 42
Fax : 04 78 69 87 59
@ : agence-legrand.lyon@legrand.fr

38 - 73 - 74
38170 Seyssinet - Pariset
Z.A.C. de la Tuilerie
36, rue de la Tuilerie - City parc
☎ : 04 76 48 61 15
Fax : 04 76 96 50 20
@ : bureau-legrand.grenoble@legrand.fr

6 • Méditerranée

04 - 05 - 06 - 13 (sauf Arles) - 20 - 83 - MC
13855 Aix en Provence Cedex 3
Europarc de Pichauray - Bât. B2
1330, avenue Jean Guilibert de la Lauzière
☎ : 04 42 90 28 28
Fax : 04 42 90 28 39
@ : agence-legrand.aix-en-provence@legrand.fr

30 - 34 - 84 - 13 Arles
34130 Mauguio
Mas des Cavaliers 2
471, rue Charles Nungesser
☎ : 04 99 13 74 74
Fax : 04 99 13 74 89
@ : bureau-legrand.montpellier@legrand.fr

7 • Midi-Pyrénées

09 - 11 - 12 - 31 - 32 - 46 - 48 - 65 - 66 - 81 - 82
31130 Balma
Les Espaces de Balma
16, avenue Charles de Gaulle
☎ : 05 62 57 70 70
Fax : 05 62 57 70 71
@ : agence-legrand.toulouse@legrand.fr

8 • Sud-Ouest

16 - 17 - 24 - 33 - 40 - 47 - 64
33700 Mérignac
Domaine de Pelus - 10, avenue Pythagore
☎ : 05 57 29 07 29
Fax : 05 57 29 07 30
@ : agence-legrand.bordeaux@legrand.fr

9 • Centre

Exclusivement pour contacts commerciaux
des départements suivants :
03 - 15 - 19 - 23 - 36 - 58 - 63 - 86 - 87
87000 Limoges
24, av. du Président Kennedy - Magré 8
☎ : 05 55 30 58 24
Fax : 05 55 06 09 07
@ : agence-legrand.limoges@legrand.fr

18 - 37 - 41 - 45
45100 Orléans
Le Lafayette - 7, rue Vieille Levée
☎ : 02 38 22 65 65
Fax : 02 38 22 54 54
@ : bureau-legrand.orleans@legrand.fr

10 • Ouest

44 - 49 - 53 - 72 - 79 - 85
44481 Carquefou Cedex - B.P. 90717
La Fleuriaye - Espace Performance 1
☎ : 02 28 09 25 25
Fax : 02 28 09 25 26
@ : agence-legrand.nantes@legrand.fr

22 - 29 - 35 - 56
35769 Saint-Grégoire Cedex
Centre Espace Performance III
Alphasys Bât. M1
☎ : 02 99 23 67 67
Fax : 02 99 23 67 68
@ : bureau-legrand.rennes@legrand.fr

11 • Normandie

14 - 27 - 28 - 50 - 61 - 76
76230 Bois-Guillaume
Rue Gustave Eiffel - Espace leader
☎ : 02 35 59 65 10
Fax : 02 35 59 93 33
@ : agence-legrand.rouen@legrand.fr

Formation clients

Innoval - 87045 Limoges cedex - France
☎ 05 55 06 88 30 ou 05 55 06 72 56
Fax : 05 55 06 74 91
@ : formation.innoval@legrand.fr

Relations Enseignement Technique

☎ 05 55 06 88 05
Fax : 05 55 06 88 62

Service Prescription Internationale

Coordination projets et chantiers

B.P. 37 - 82, rue Robespierre
93171 Bagnollet cedex - France
☎ : 01 49 72 52 00
Fax : 01 48 97 17 47
@ : prescription.paris@legrand.fr

Service export

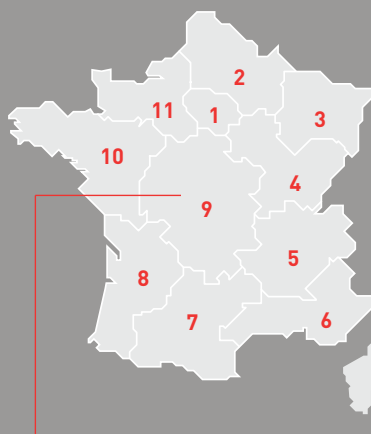
87045 Limoges cedex - France
☎ : 05 55 06 87 87
Fax : 05 55 06 75 75
@ : direction-export.limoges@legrand.fr

Assistance technique après-vente

87045 Limoges cedex - France
N°Azur : 0 810 48 48 48
N°Azur Fax : 0 810 48 00 00

Prix appel local

Du lundi au vendredi de 8h à 18h.
Le samedi de 8h à 13h



Head office: 05 55 06 87 87



LEGRAND SNC
snc au capital de 6 200 000 D
RCS Limoges 389 290 586
Code A.P.E. 516 J
N° d'identification TVA
FR 15 389 290 586

Siège social

128, av. du Maréchal-de-Lattre-de-Tassigny
87045 Limoges Cedex - France
☎ : 05 55 06 87 87 +
Fax : 05 55 06 88 88