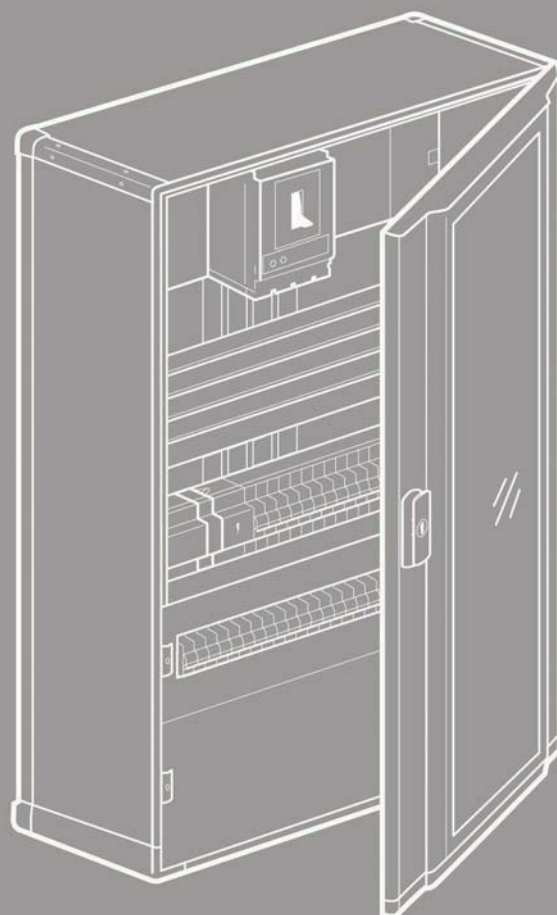


XL³400

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 400 enclosures, Legrand has optimised the concept of product integration. Whichever enclosure you choose, and whatever your preferred way of working and the technical demands of your installations, you will find the answer to your requirements with XL³ 400.

XL³ 400 incorporates numerous practical innovations for quick, safe assembly:

- Metal or insulated enclosures
- Products delivered dismantled for full wiring accessibility
- Optimised equipment for easy installation
- Sealable faceplates with metal ¼ turn fastening and handles
- 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

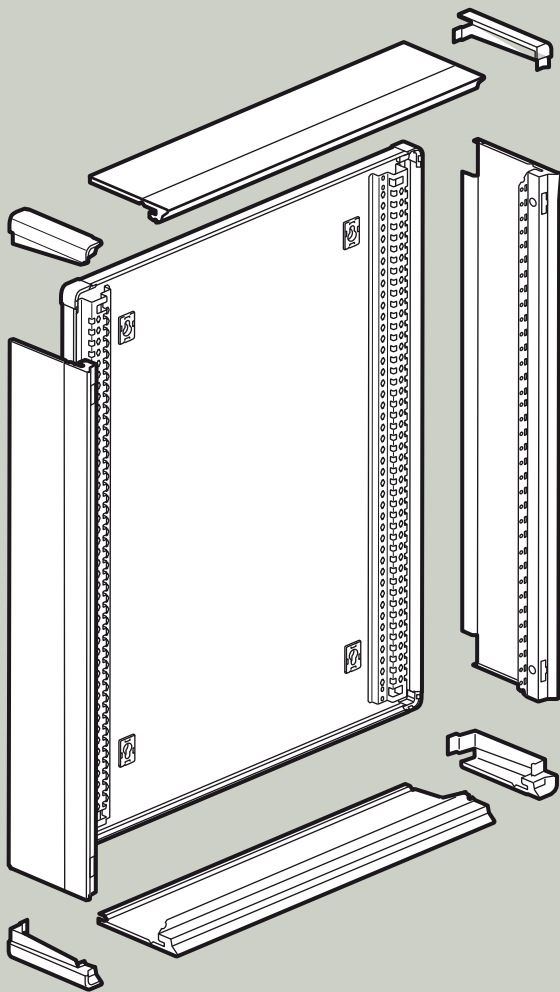
■ THE XL ³ 400 RANGE	
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The XL³ 400 RANGE

2

CHARACTERISTICS

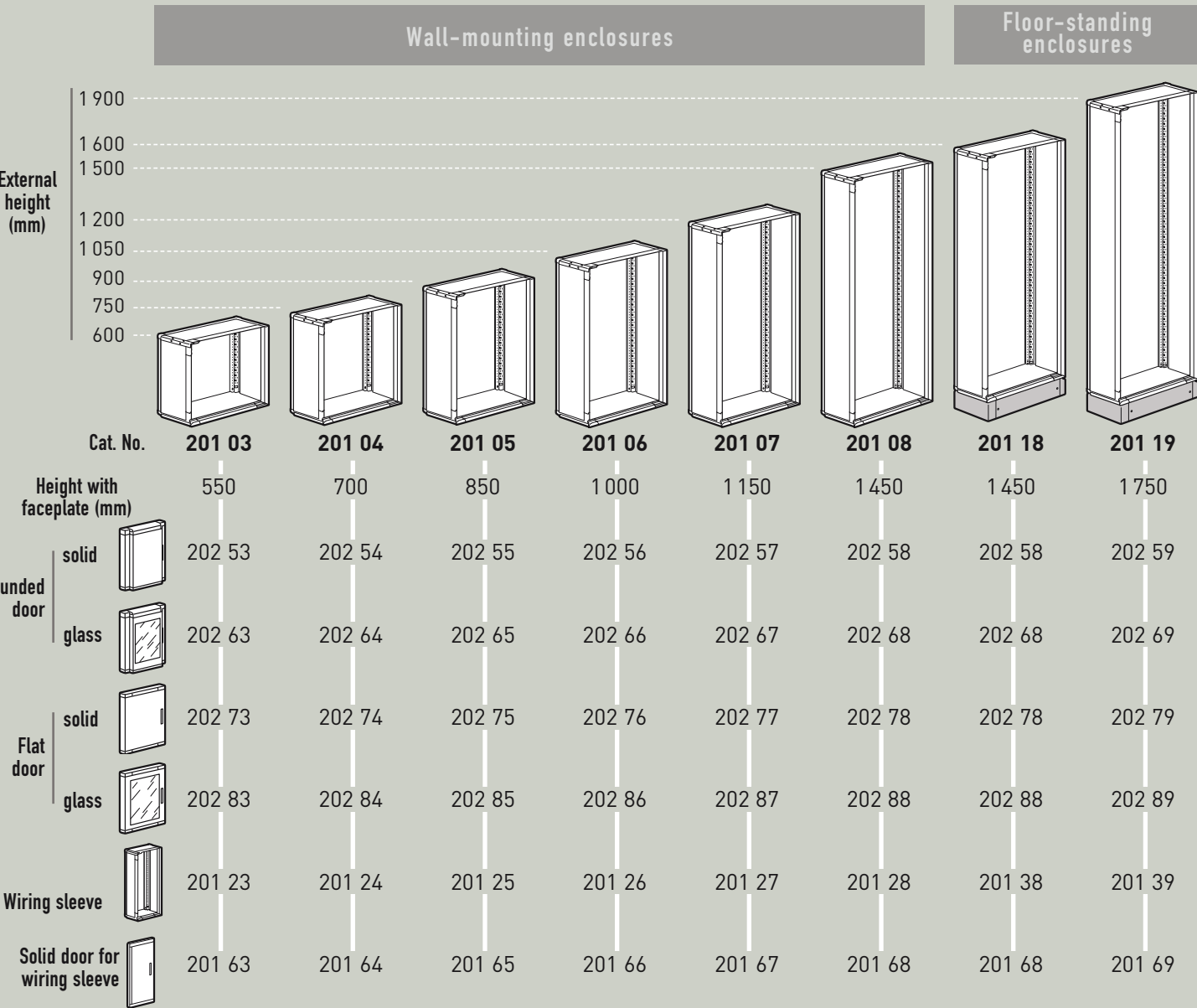
- XL³ 400 can be used to create customised enclosures for all your environments.
- IP 30 to IP 55
 - IK 04 to IK 08
 - Class I and class II
 - Fire resistance: 750°/5 s (IEC 60695-2) for installation in public buildings
 - Short time withstand current Icw: 25 kA 1 s
 - 24 modules per row
 - Take devices up to 400 A
 - Choice of distribution: standard or optimised (XL-Part 250 active backplate, 250 A row distribution block, etc.)
 - Joinable (left and/or right) and extendable wiring sleeves: Lexic, DPX and distribution devices
 - Colour: RAL 7035
 - Conform to standard IEC 60439-1



3

IP 30-40-43 METAL ENCLOSURES

Depth: 175 mm – External width: 575 mm (see dimensions on page 58)

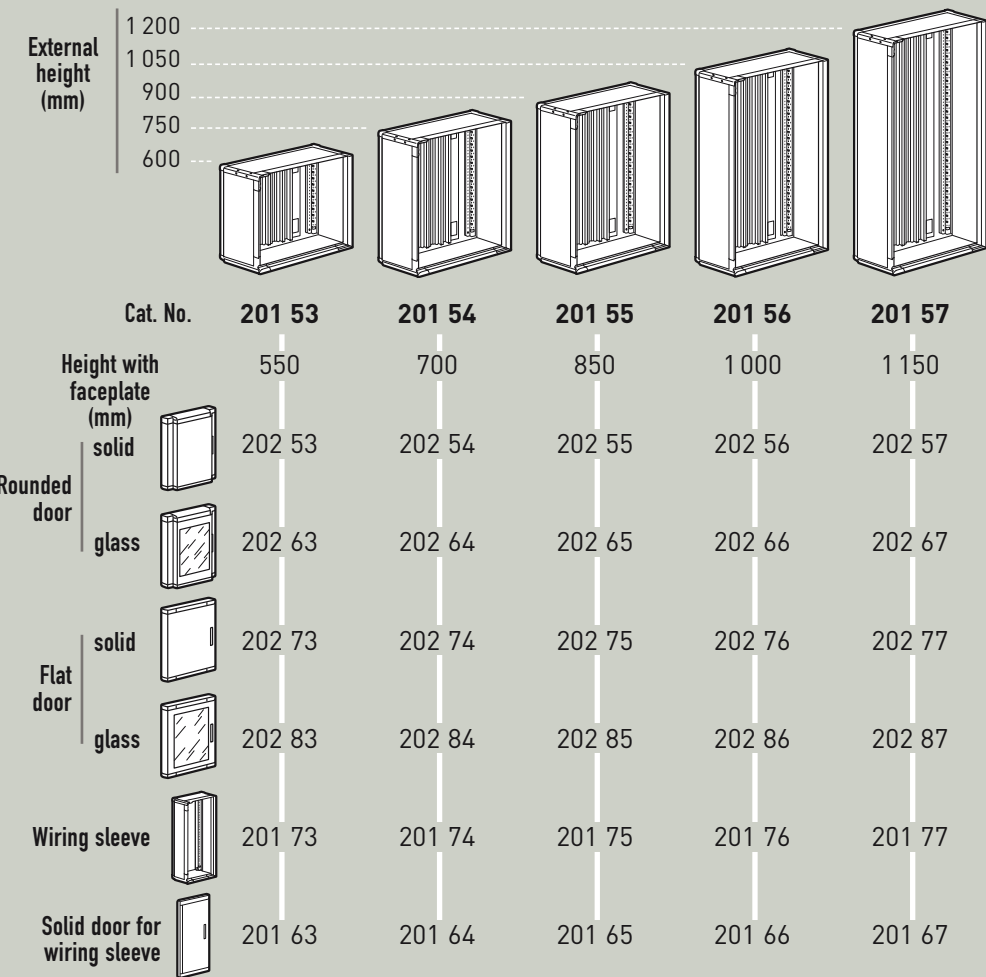


The XL³ 400 range (continued)

4

IP 30-40-43 INSULATED ENCLOSURES

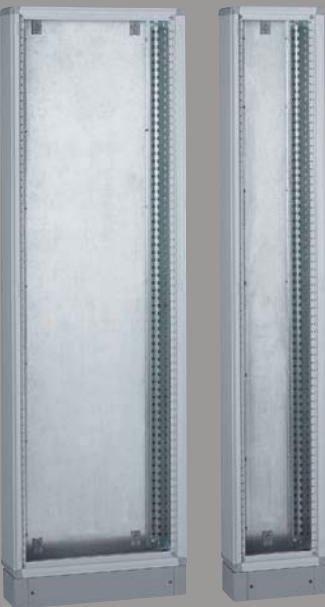
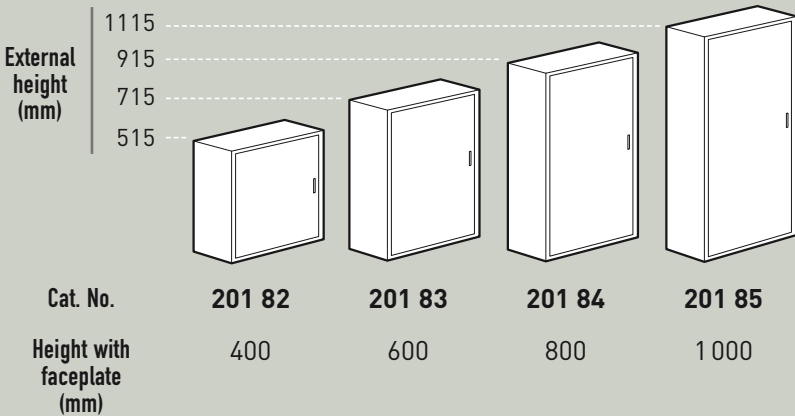
Depth: 175 mm - External width: 575 mm (see dimensions on page 58)



5

ONE-PIECE IP 55 ENCLOSURES

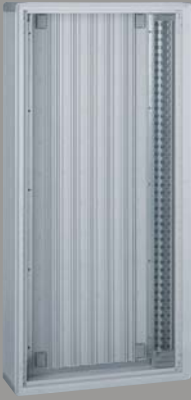
Depth: 215 mm - External width: 650 mm (see dimensions on page ##)



Metal floor-standing enclosure and wiring sleeve



Metal wall-mounting enclosure

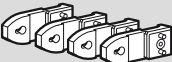
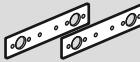
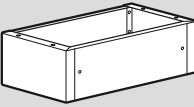

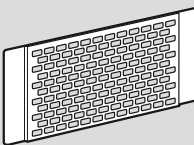
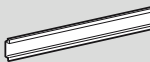


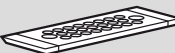
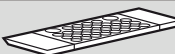
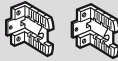





Insulated enclosure

The XL³ 400 range (continued)

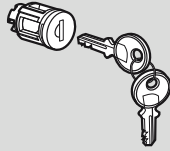



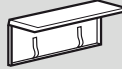


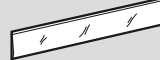



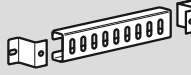

6

ACCESSORIES

		metal	insulated	IP 55
	External fixing lugs	201 00	201 50	
	Horizontal joining strengthening bars		201 51	
	Plinths for enclosures	201 10	201 10	
	Plinths for wiring sleeves	201 12	201 12	
	IP 43 kit	201 30	201 30	
	Universal plate for enclosures H: 200 mm	202 41	202 41	202 41
	Universal plate for enclosures H: 300 mm	202 42	202 42	202 42
	Universal plate for wiring sleeve H: 300 mm	202 43	202 43	
	Universal rail W: 515 mm	202 04	202 04	202 04
	Horizontal partitioning divider	201 90	201 90	201 90
	Adjustable cable entry plate	201 20		
	Knockout cable entry plate ^(*)	201 21	201 71	
	Cabstop cable entry plate			364 99
	Isolating supports	200 90	200 90	200 90
	Clip-nuts (20)	200 92	200 92	200 92
	M6 screw (50)	200 91	200 91	200 91
	Aerosol paint spray RAL 7035	200 98	200 98	200 98

^{*} Availability: June 2005

7

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
	Equipotential link conductor	373 85
	Flexible plastic document holder	097 99
	Rigid plastic document holder	365 82
Accessories for faceplates		
	24-module smooth adjustable blanking plate	200 51
	8-module separable blanking plate	016 65
	Adhesive label-holder	203 99
Wiring accessories		
	Lina 25 ducting fixing support	201 70
	Horizontal wire guides	200 94
	Vertical wire guides	201 93
	Cable fixing for enclosures	201 35
	Cable fixing for wiring sleeve (except for IP 55)	201 37
	DLP finishing strip	201 60

Assembling the enclosures

8

The new Legrand XL³ 400 range of enclosures is available in 3 versions to meet the needs of all applications: metal, insulated and one-piece IP 55 enclosures. They are quick and easy to install, and suitable for all types of joining, optimising compactness, space for wiring and strength. The XL³ 400 has a particularly high-quality finish: with faceplate, with or without door.

A XL³ 400 METAL enclosures

Metal enclosures and wiring sleeves 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 more than 1500 mm high are supplied with a plinth.



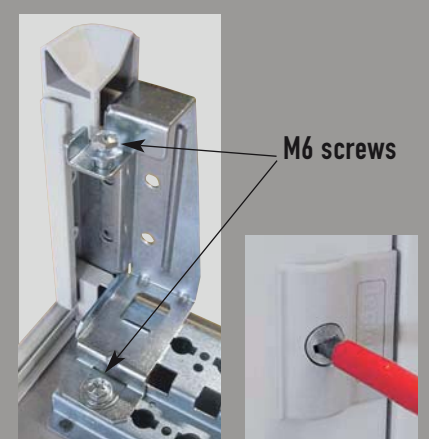
All components are delivered dismantled, for minimum dimensions



One-piece cardboard packaging, can be re-used for the delivery of the assembled enclosure to the site



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.



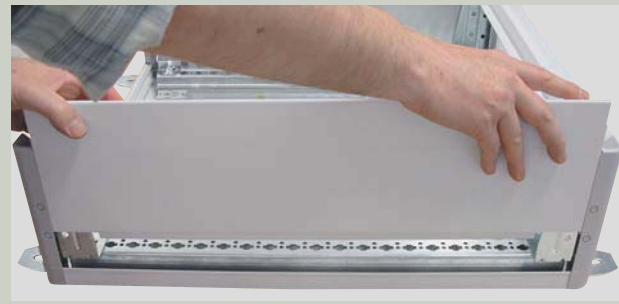
Insert the corners in the functional uprights...



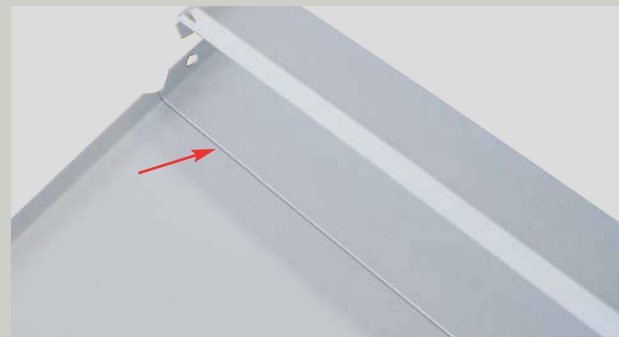
... then attach with a single M6 x 10 screw

2. Fitting the side panels

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



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

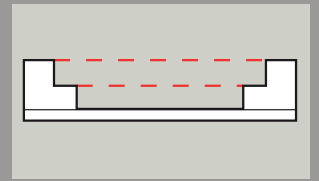


Side panel with cut-out for fitting cable entry plates and for feeding through wiring when joining enclosures

+



The functional uprights integrated at the back of XL³ 400 enclosures are used for quick and reliable fixing of all equipment



Two fixing heights

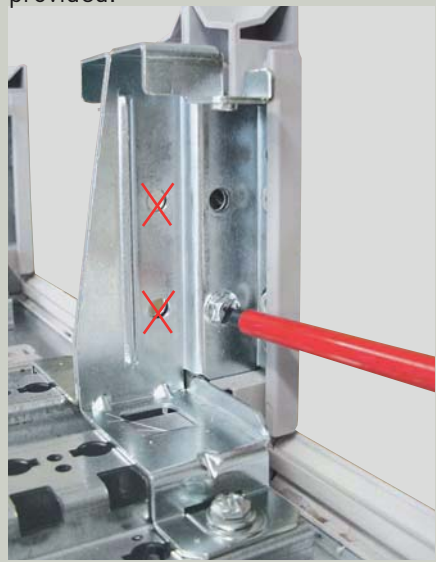
9

Assembling the enclosures (continued)

10

3. Joining enclosures

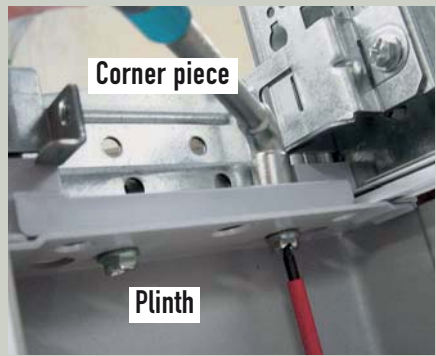
Remove the seals from the corner pieces and join the enclosures using the four M6 screws and four nuts provided.



Care must be taken to use the correct holes

4. Fitting the plinth

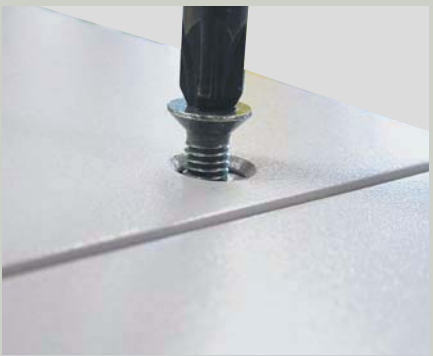
As for joining enclosures, the corner piece seals must be removed before fitting the plinths.



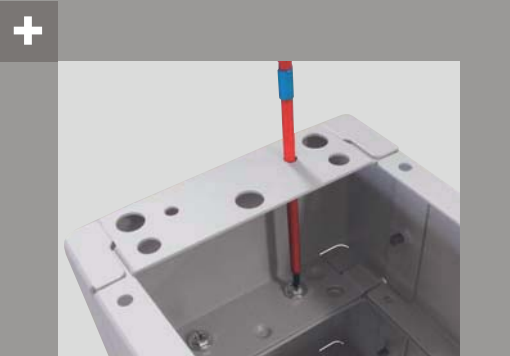
Corner piece

Plinth

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



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



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

+

Joining with no accessories

Horizontal and vertical joining can be used together

11

5. Fitting the doors

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

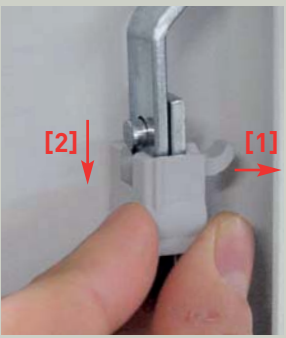
■ Enclosures $\geq 1,500$ mm high

To fit the doors, enclosures $h \geq 1500$ mm must be fitted with 3 hinges on one side and 2 latches on the other.



The doors are supplied to be fitted to "open 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



Fitting the seals supplied with the doors ensures IP 30 protection

+

Fully integrated handle

The door is opened in 2 stages:

1 - Disengage

2 - Rotate

Assembling the enclosures (continued)

12


■ Enclosures < 1,500 mm high



To fit the doors, enclosures h < 1500 mm must be fitted with 2 hinges on one side and one 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

6. Door equipotential link

The doors have studs for connecting equipotential link conductor Cat. No. 373 85.



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



Conductor Cat. No. 373 84 clips directly onto the faceplate support inside the enclosure



When the plastic cover is removed, up to 4 conductors can be inserted in the enclosure (see page 47)

13

7. Fitting the key barrels

The method differs according to the type of handle used.

■ Large handle (enclosures H ≥ 1,500 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 < 1,500 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

Assembling the enclosures (continued)

14

8. Achieving IP 43

IP 43 is achieved by fitting the insulated cable entry plate at the top, by fitting a door and by fitting seal Cat. No. 201 30



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



The seal must be fitted in the bottom of the door

9. Faceplates

All the faceplates are locked using a simple, sealable ¼ turn fastening.



Sealing the faceplate

■ Marking



As well as the marking on the devices, a self-adhesive marking strip for 24-module faceplates (Cat. No. 203 99) is available as an accessory

■ Equipotentiality

The equipotential link is created automatically when the faceplates are fitted. An additional terminal is provided on metal faceplates (for fitting a device on the faceplate).

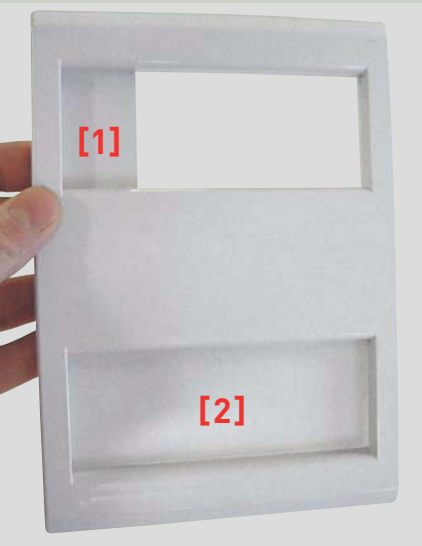


Additional terminal

Rotary slider providing the equipotential link with the enclosure

■ Window adaptors

These 3 adaptors, only for use when fitting DPX 125, 160 and 250 ER with or without elcbs underneath, have knockouts (areas [1] and [2]).



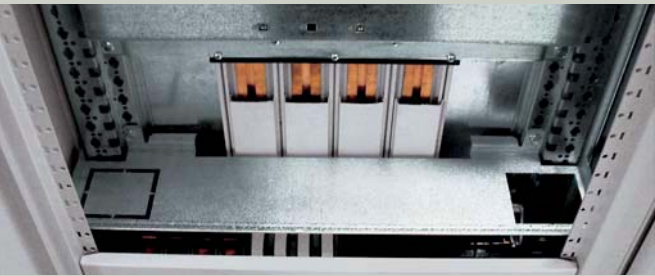
- Break [1] when using a 4P unit
- Break [2] when using an elcbs underneath



The adaptors are attached to the faceplates using 4 screw-in metal clips

10. Divider for horizontal compartmentalisation

Divider Cat. No. 201 90 can be used to create 2 separate compartments within the enclosure. It is attached to the bottom part of the functional uprights.



The feedthroughs for the Lina 25 ducting and for the active backplate are pre-cut

15

Assembling the enclosures (continued)

16

B XL³ 400 INSULATED ENCLOSURES

Like metal enclosures, XL³ 400 insulated enclosures and wiring sleeves are supplied dismantled in reusable packaging.

Each enclosure consists of a back, four corner pieces, four side panels and a faceplate frame in four separate parts.

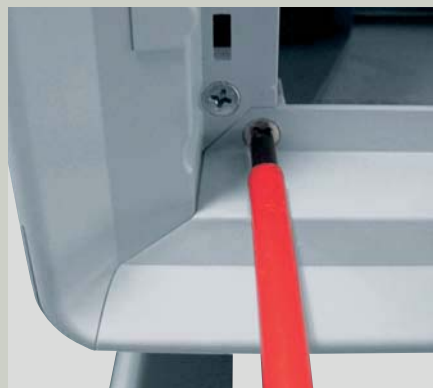
The metal back, joined to the functional uprights, provides optimum rigidity. Inside it is fitted with an insulated back which can take C-section busbars Cat.No. 373 30 and supports Cat. No. 373 31/32 to create an XL-Part 400 active backplate. It is insulated at the back to ensure it is class II.

All the other parts of the enclosure are made of insulated plastic material.

1 - Assembling the enclosures and wiring sleeves

As with metal enclosures, each corner piece is inserted in the functional uprights and attached using an M6 screw (see page 9).

The side panels are installed by sliding them in the corner runners. They are held in place by the faceplate frame.



Each side of the frame is attached separately to the corner pieces by 2 Phillips screws



The backs of the insulated enclosures are ready to take C-section busbars to create an active backplate

2 - Joining enclosures

Enclosures and wiring sleeves can be joined horizontally or vertically in the same way as for metal enclosures (see page 10). For the cable feedthroughs, simply do not fit the side panels.



Joining an enclosure and a wiring sleeve

3 - Fitting the doors

Fitting and reversing the doors is in all respects identical to metal enclosures (see page 11).

Fitting the seal Cat. No. 201 30/32 on the door ensures IP 43 protection (see page 14).

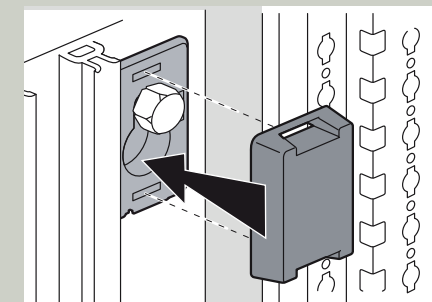
4 - Faceplates

Insulated faceplates, like metal faceplates have a sealable ¼ turn fastening.



The shape of the faceplates is specially designed for ease of handling

5 - Complying with class II



To comply with class II, replace the plastic covers that are supplied to insulate the fixing screws

17

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The blanking plates for the unused hinge positions are held in place by a screw, which can be inserted with no need for any tool

Fitting the distribution systems

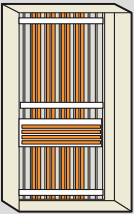
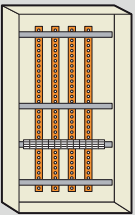
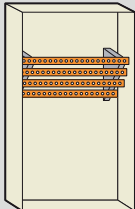
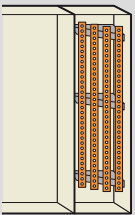
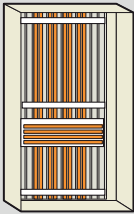
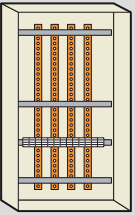
18

XL³ 400 gives users the freedom to organise the distribution.

■ **XL-Part “optimised” distribution:**
designed to optimise the volume of XL³ 400 enclosures, it uses C-section busbars for integration in a special insulated back (XL-Part 400 active backplate) and 250 A row distribution blocks

■ **“Standard” distribution using flat busbars:**

- Vertical at the back of the enclosure, can be used with the Lexiclic distribution block
- Horizontal at the back of the enclosure
- Vertical stepped in wiring sleeves

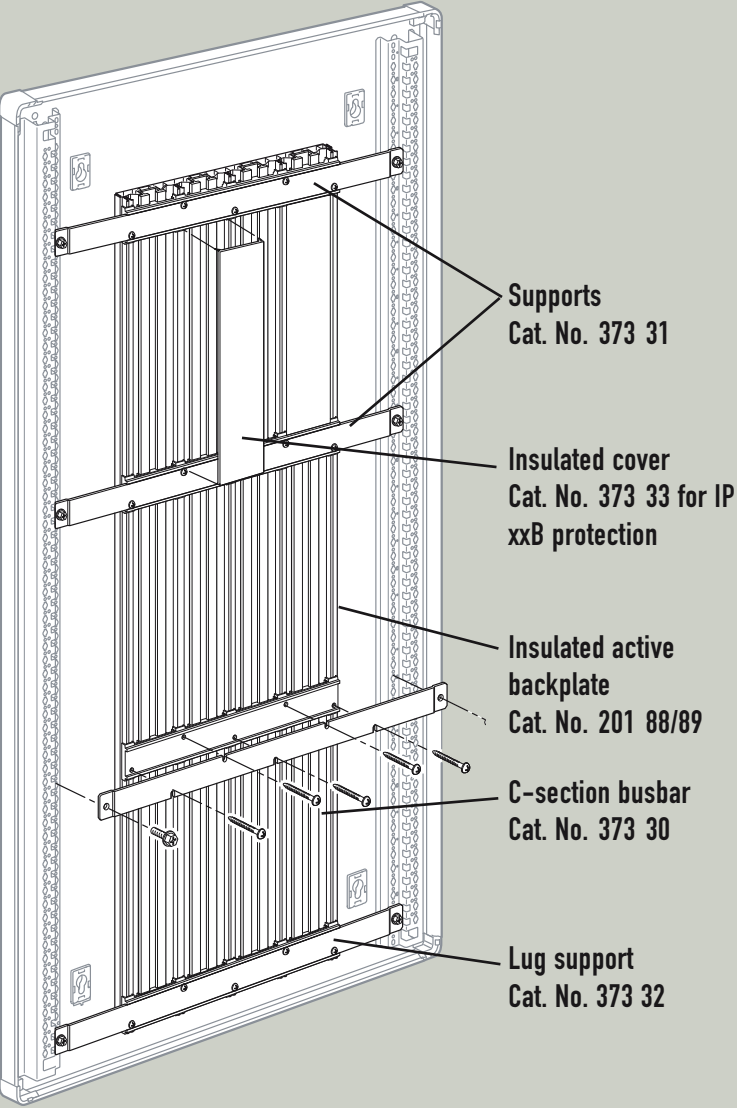
Distribution solutions up to 400 A			
	Optimised distribution in enclosure	Standard distribution	
		in enclosure	in wiring sleeve
XL ³ 400 metal IP 43	 <p>XL-Part 400 active backplate: - insulated back Cat. No. 201 88/89 - C-section busbars Cat. No. 373 30 - supports Cat. No. 373 31 - lug support Cat. No. 373 32</p> <p>Row distribution block 250 A Cat. No. 373 36/37</p>	<div>vertical</div> <div>horizontal</div>	
XL ³ 400 insulated IP 43	 <p>XL-Part 400 active backplate: - C-section busbars Cat. No. 373 30 - supports Cat. No. 373 31 - lug support Cat. No. 373 32</p> <p>Row distribution block 250 A Cat. No. 373 36/37</p>	<div>Set of vertical busbars - support Cat. No. 373 15 - flat bars Cat. No. 374 18/19/34</div> <div>Distribution block 400 A Cat. No. 373 08</div> <div>Row distribution block Lexiclic Cat. No. 373 16/17/18</div>	<div>Set of vertical busbars - support Cat. No. 373 10 - flat bars Cat. No. 374 18/19</div>
XL ³ 400 IP 55		 <div>Set of vertical busbars - support Cat. No. 373 15 - flat bars Cat. No. 374 18/19/34</div> <div>Row distribution block Lexiclic Cat. No. 373 16/17/18</div>	

19



A “OPTIMISED” DISTRIBUTION

1. Fitting the XL-Part 400 active backplate

Insulated enclosures are prefitted with an insulated back. Metal enclosures can be fitted with an insulated back as an option (Cat. No. 201 88/89). An active backplate is created by equipping the insulated back with C-section busbars held in place by supports.



Maximum distance “D” between the supports according to peak current I_{pk}

	In (A)		I _{pk} (kÂ)	D (mm)
373 30	400	373 31	17	1800
			26	1000
			40	800
			50	600



Preparation of the equipment to create optimised distribution in an enclosure h = 1,900 mm

Fitting the distribution systems (continued)

20



Cut the C-section busbars to the required length then start by fixing lug support Cat. No. 373 32 at the bottom of the insulated backplate



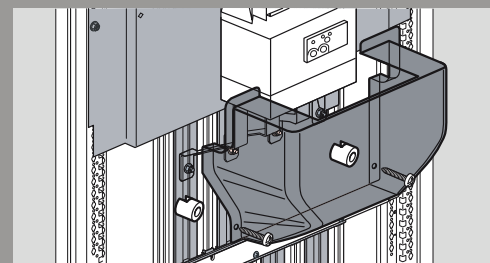
Then fit a support Cat. No. 373 31 at the top of the insulated backplate



You can then install the plate to take the power supply device for the busbar and the intermediate supports Cat. No. 373 31 (the number used depends on the peak short-circuit current value, see table on page 19)



The linking kits are used for direct connection of the main device:
Cat. No. 373 34: DPX 250
Cat. No. 373 35: DPX 250 + elcbs
Cat. No. 373 38: DPX 630



These kits can be fitted with IP xxB protection (Cat. No. 373 70/71/72)



Current transformers Cat. No. 046 98/99 for DPX 250/400 are fitted directly on the linking kits

21

2. Fitting the 250 A row distribution block

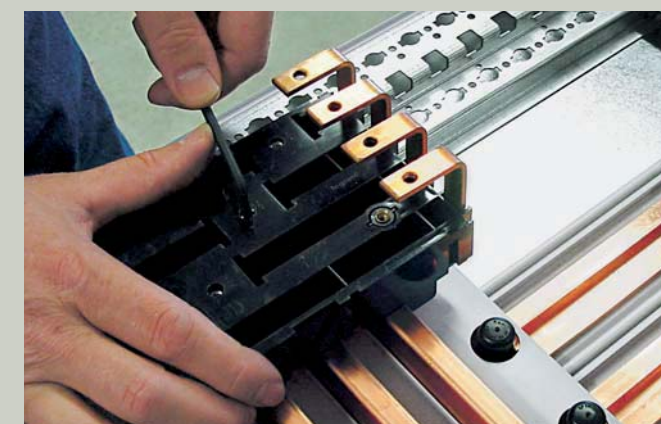
The row distribution block takes the device support bases. It is supplied either directly via the active backplate (Cat. No. 373 36), or indirectly via the head of row device (Cat. No. 373 37).



Row distribution block Cat. No. 373 36 is connected directly on the C-section busbars of the active backplate

■ Direct power supply via the active backplate

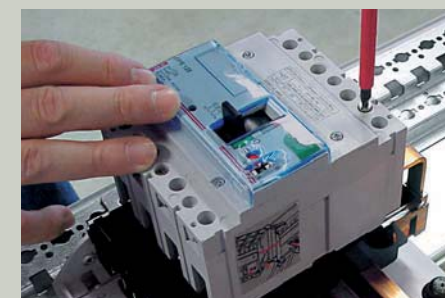
All the devices in the row are supplied directly via distribution block Cat. No. 373 36.



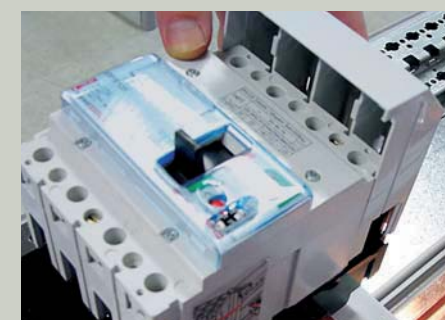
Fitting a support base for DPX 125 on row distribution block Cat. No. 373 36. It is fixed using 4 screws (one screw on each bar)



Inserting the hammer screw for connection on the vertical busbar. Once the nut has been tightened, it is advisable to protect it with the insulated cover provided



The DPX 125 is fitted with its usual fixing screws



Installing the terminal shield supplied with the base to maintain the IP protection

Fitting the distribution systems (continued)

■ Indirect power supply via the main device

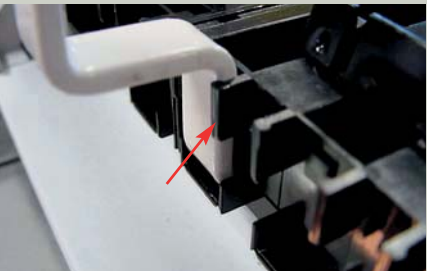
With distribution block Cat. No. 373 37, it is the DPX that supplies the row distribution block Cat. No. 373 37



The 4 copper links are then inserted in the bottom of the base



If the DPX has a lateral elcbs, it is the base of the elcbs that supplies the distribution block via the 4 insulated links



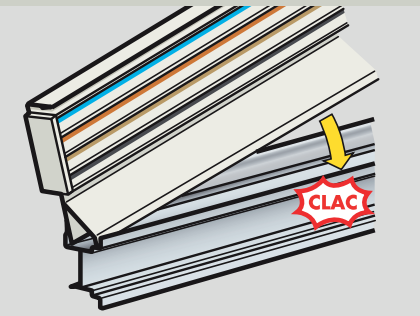
Clipping the links in place

3. Fitting the XL-Part 125 row distribution block

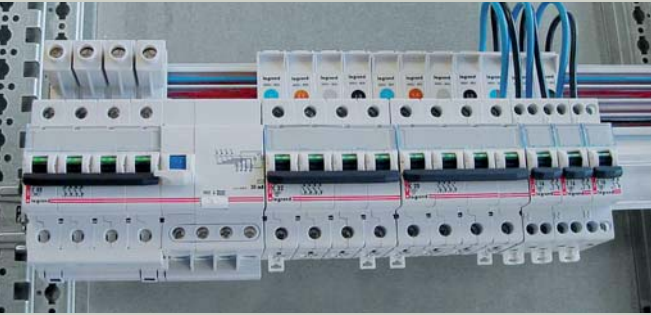
The XL-Part 125 four pole distribution block clips onto fixing device Cat. No. 202 00 under a 200 mm faceplate.

- 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 125 A (central power supply) and 80 A (side power supply).

The "Plug-in" connection modules are used for automatic connection of all Lexic MCBs, 1 module per pole, up to 63 A. Wired connection modules are used to connect all Lexic 1P + N devices, up to 32 A.



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

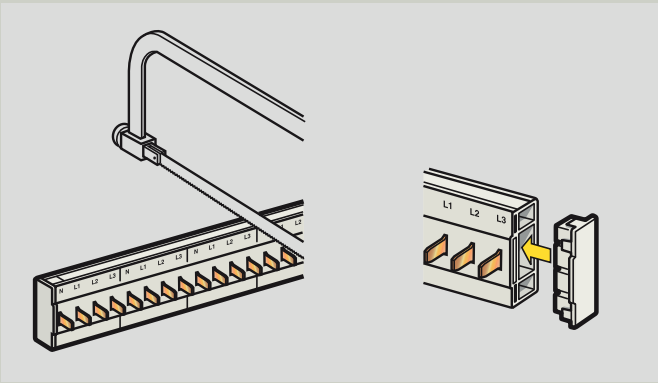


XL-Part 125 allows 4 pole, 3 pole, 2 pole, phase/neutral and single pole devices to be mixed on the same row

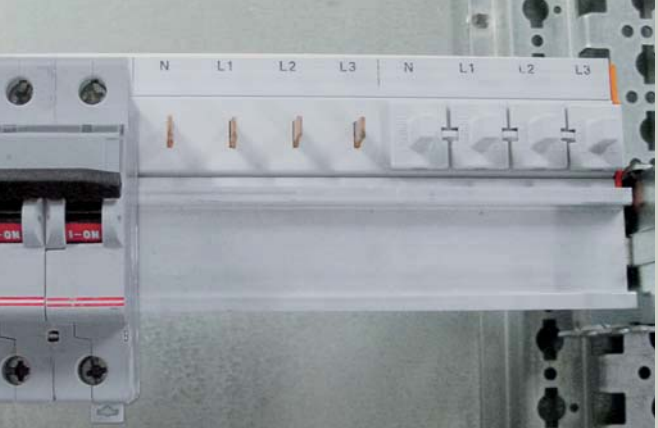
4. Fitting the XL-Part 100 row distribution block

The XL-Part 100 distribution block is available in 2 versions: 3P or 4P. It clips onto rail Cat. No. 202 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

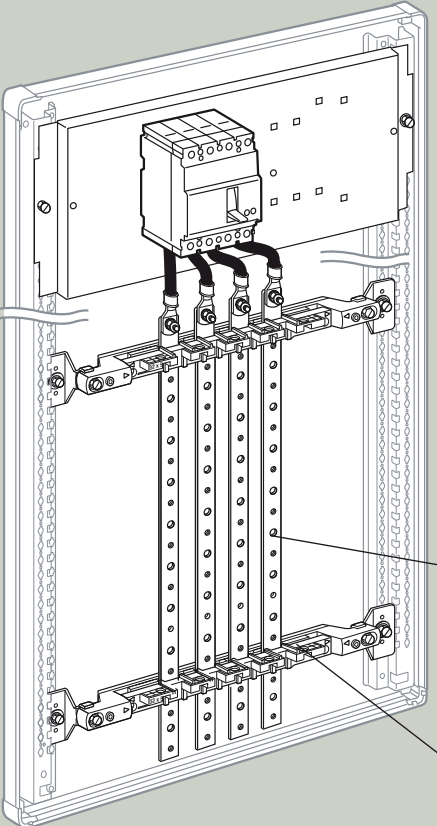
Fitting the distribution systems (continued)

B “STANDARD” DISTRIBUTION AT THE BACK OF THE ENCLOSURE

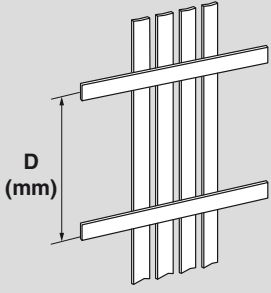
Standard distribution at the back of the enclosure can be created vertically with busbar supports Cat. No. 373 15, with the addition of Lexiclic if required, or horizontally with distribution block Cat. No. 373 08.

1. Fitting the vertical busbar

Support Cat. No. 373 15 is used to fit the busbar at the back of enclosures



Selection of bars			
Bars		I(A)	
Cat. Nos	Cross-section (mm)	IP ≥ 30	IP > 30
373 34	18 x 4	250	200
373 18	25 x 5	330	270
373 19	32 x 5	450	400

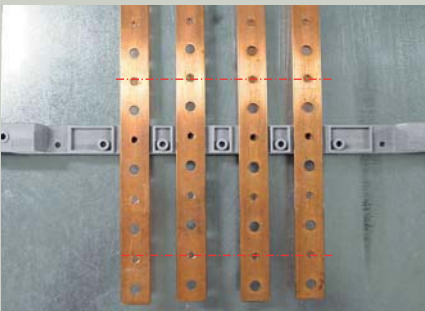
Maximum distance “D” between the supports according to the peak current (Ipk)				
	Bars	374 34 (18 x 4)	374 18 (25 x 5)	374 19 (32 x 5)
		Peak Isc Ipk (kA)		
	10	1000	1200	1500
	15	700	1000	1200
	20	550	750	950
	25	400	600	750
	30	350	500	650
	40	250	350	450
	50	200	300	400
	60	200	250	300



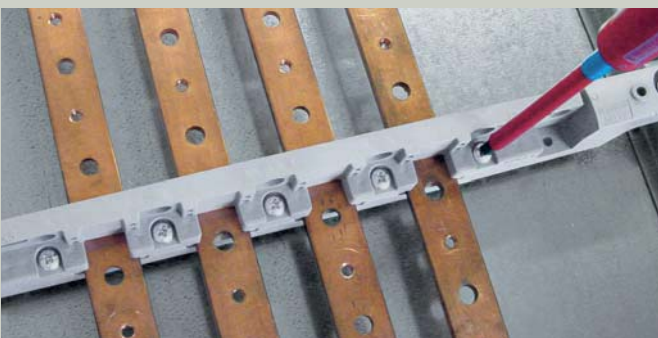
Start by fitting the 2 support retaining lugs on the bottom of the functional uprights using the clip-nuts and M6 screws provided



Fix the isolating support on the 2 lugs using the remaining two M6 screws



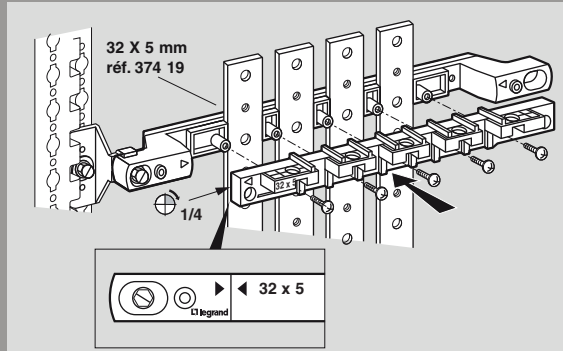
Cut your bars to the required length and place them on the isolating supports, aligning them with the fixing holes



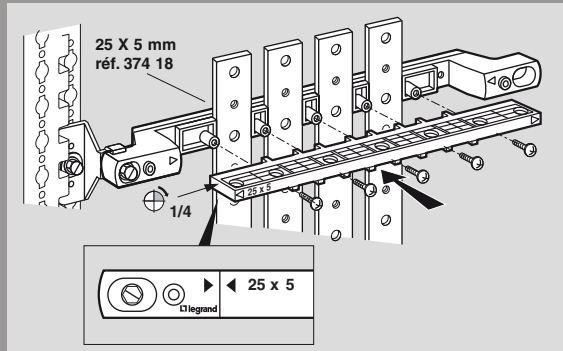
Once the correct position has been determined, fix the retaining crosspiece on the support with the 5 cheese head screws.
Do not tighten these screws fully as the position of the bars may be subsequently adjusted

+ 3 bar cross-sections on the same support

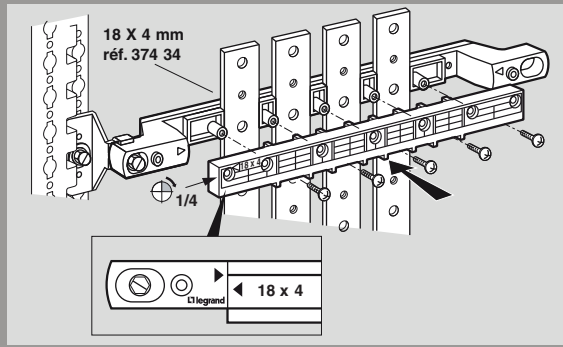
Bars 32 x 5



Bars 25 x 5



Bars 18 x 4



Fitting the distribution systems (continued)

26

2. Fitting Lexiclic distribution blocks

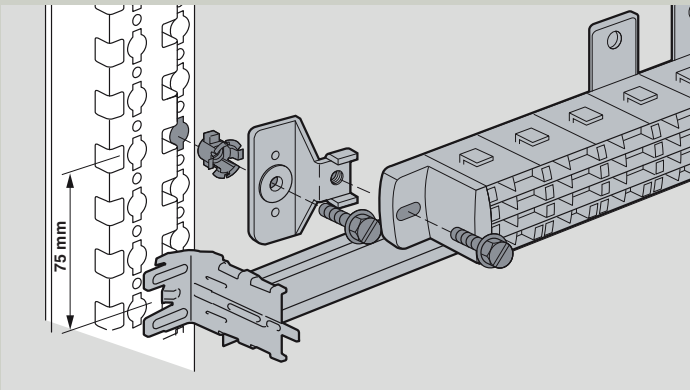
Lexiclic distribution blocks			Connection cords				
Max. permissible current (A)	1P + N	3P + 2N	I max. per cord (A)	120 mm		320 mm	
				black	blue	black	blue
			250	373 17*	373 16* 373 18	40	048 91
63	048 95	048 96				048 97	048 98

* Cat. Nos 373 16 and 373 17 are supplied with connecting cords

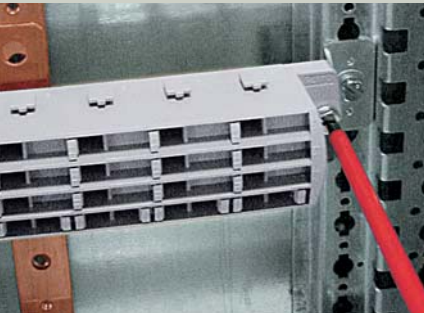
The distribution blocks are supplied with fixing lugs and protective screen (screws provided)

Characteristics:

- Conforming to standards NF EN 60947-3 and IEC 60947-3
- Fire resistance: 960°C
- Voltage Ue: 500 V
- Insulation voltage Ui: 600 V
- Ipk: 60 kA
- Icw: 10.5 kA
- In: 250 A at 40°C



Keep a distance of 75 mm between the rail and the Lexiclic for fitting under a 200 mm faceplate



Lexiclic distribution blocks are fitted in the same way as isolating support
Cat. No. 373 15



The 75 mm fixing centre enables Lina 25 40 x 60 ducting to be installed for wiring the top row

27

■ Connection on rear busbar

The distribution block is connected on the busbar using 13 mm screws and nuts.



Caution: Do not tighten the bars on their supports until the fixing holes on the distribution block and the bars have been aligned



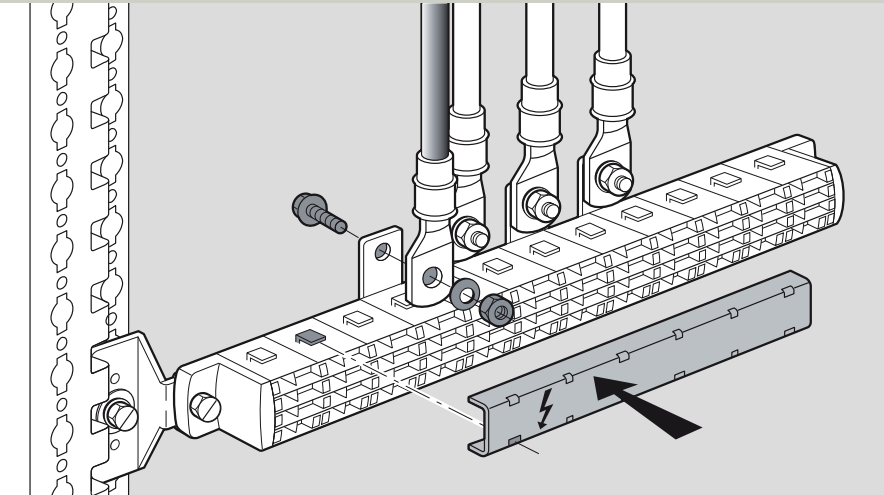
Permanently lock the bars by tightening the 5 screws fixing them on the retaining crosspieces



Clip the transparent protective cover on the distribution block

■ Direct connection

Lexiclic can also be used for direct connection with no rear busbar.



Fitting the distribution systems (continued)

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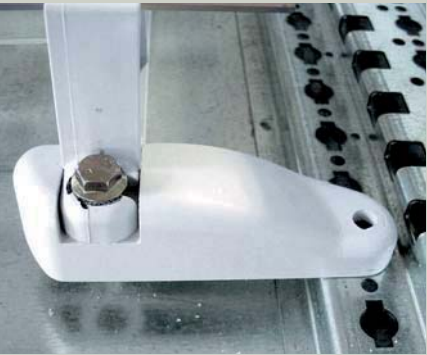
3. Fitting 400 A stepped distribution block Cat. No. 373 08 horizontally

The 400 A distribution block Cat. No. 373 08 consists of 2 isolating supports, 4 tinned copper bars 32 x 4 mm with protective cover and protection screen. Each bar has 2 x Ø 8.5 mm smooth holes and 21 tapped holes with M6 screws for connection via terminals (70 mm² max.).

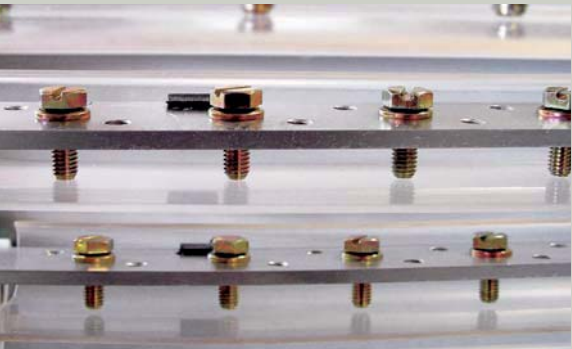
Four insulated lugs are supplied for fitting the distribution block horizontally in XL³ 400 enclosures.



Install the 4 fixing lugs on the distribution block



Fit the distribution block on the bottom profile of the functional uprights using clip-nuts and M6 screws

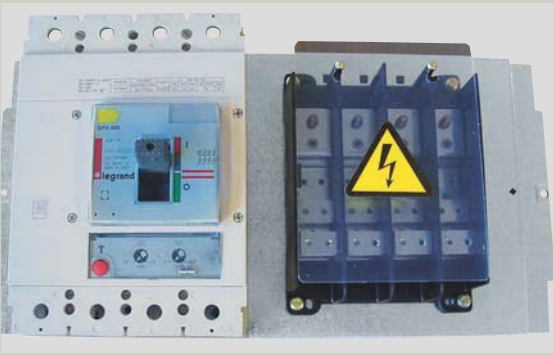
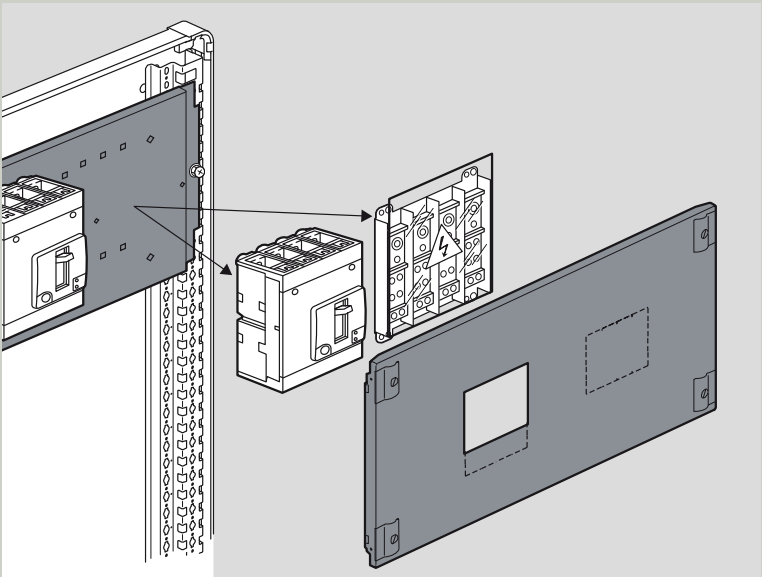


The protective covers are fitted on each bar using staples

29

4. Fitting the 250 A extra-flat distribution block Cat. No. 374 00

As the extra-flat distribution block has a high short-circuit resistance (60 kÅ) it can be installed at the supply end of the panel. It can be installed next to a DPX 250 or 630 on fixing plate Cat. No. 202 20. Connections on plates, incoming: 150 mm² per pole, outgoing: up to 3 x 70 mm² per pole.



Distribution block Cat. No. 374 00 saves a considerable amount of space in small enclosures

Fitting the distribution systems (continued)

30

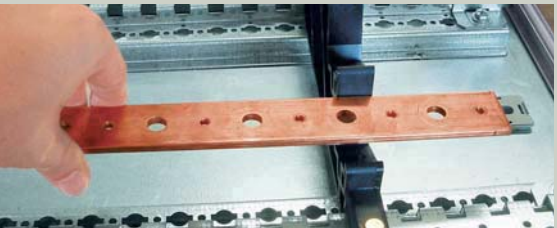
C “STANDARD” DISTRIBUTION IN WIRING SLEEVES

1. Fitting the vertical busbar

Standard distribution in wiring sleeves is created using busbar supports
Cat. No. 373 10



Fit the busbar supports on the functional uprights of the wiring sleeve using the clip-nuts and M6 screws provided. Insert the clip-nuts on the top profile of the uprights

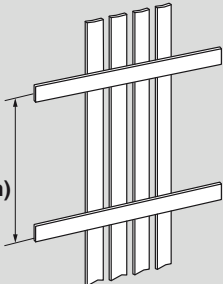


Position the copper bars on the supports

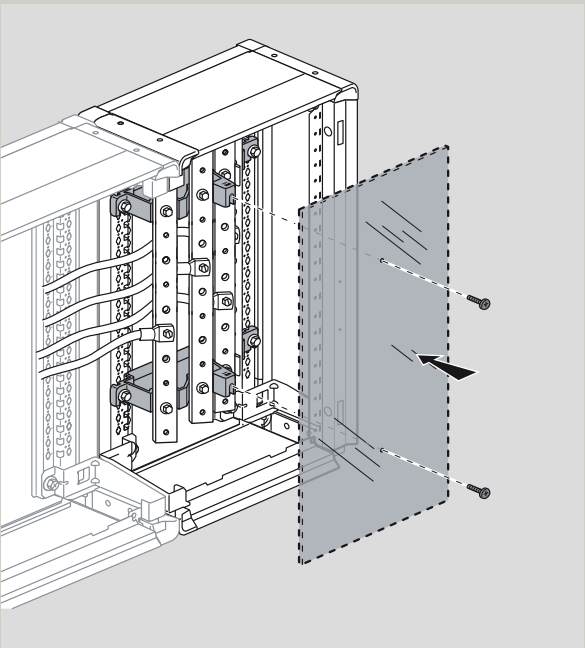


Fit the copper bars on the supports using M6 hex. head screws with integral washer

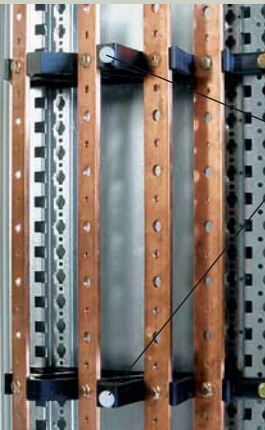
Selection of bars			
Bars		I(A)	
Cat. Nos	Cross-section (mm)	IP ≥ 30	IP > 30
373 18	25 x 5	330	270
373 19	32 x 5	450	400

Maximum distance “D” between the supports according to the peak current (I _{pk})				
 D (mm)	Bars		374 18 25 x 5	374 19 32 x 5
	Peak I _{sc} I _{pk} (kA)	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	-

31



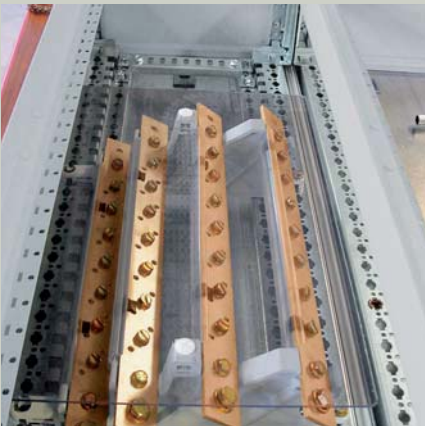
Each bar support is supplied with an isolating screw for fitting a protective screen if required



Isolating screws

2. Fitting the 400 A distribution block Cat. No.373 08 vertically

The 400 A distribution block Cat. No. 373 08 (see page 28) can be installed vertically in wiring sleeves.



Fit the distribution block directly on the top profile of the functional uprights using 4 clip-nuts and 4 M6 screws

Fitting the distribution systems (continued)

32


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

The Legrand distribution blocks for use in XL³ 400 enclosures meet the needs of a wide range of requirements, providing ease of use and maximum safety.

1. Lexic supply busbars

1, 2, 3 or 4-pole supply busbars can be connected directly and supply power to Lexic modular devices up to 90 A. They are a flexible solution, take up little space and are easy to adapt for distribution in rows. Lexic auto devices are used to connect supply busbars with no need for any tools (see opposite).

2. Distribution terminal blocks

Totally universal in their application, this type of terminal block can be used to distribute up to 100 A on between 4 and 33 outputs, depending on the catalogue number. The incoming cross-section is between 4 and 25 mm², and that of the outputs between 4 and 16 mm². These terminal blocks are fixed on a flat 12 x 2 bar or on a  rail.



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


3. Distribution terminals

These single pole distribution blocks are fixed directly in the terminals of DPX 125, 160, 250 ER, 250 and DPX-IS 250 devices and Vistop modular devices from 63 to 160 A. They are used for direct, simplified distribution for panels where the number of main circuits is limited.



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

4. Modular distribution blocks

These combine compactness and high connection capacity. They clip onto the  rails. Legrand modular distribution blocks are totally isolated: they are used at the supply end of the panel up to 250 A or in subgroups of outputs in panels with a higher power rating.



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

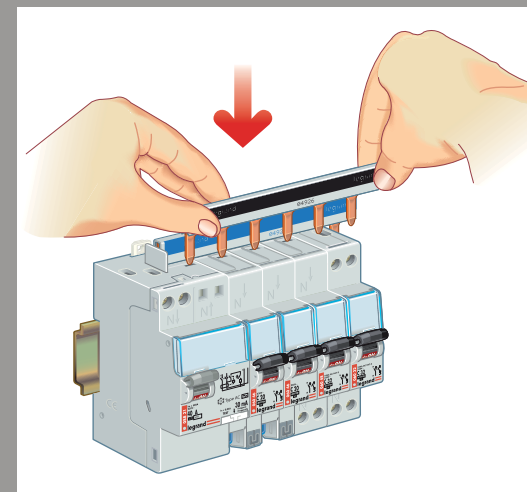


Modular
distribution blocks
can take an
additional IP 2x
terminal block

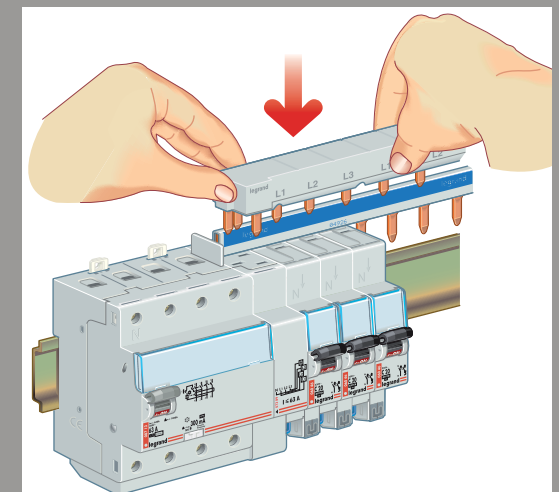
33



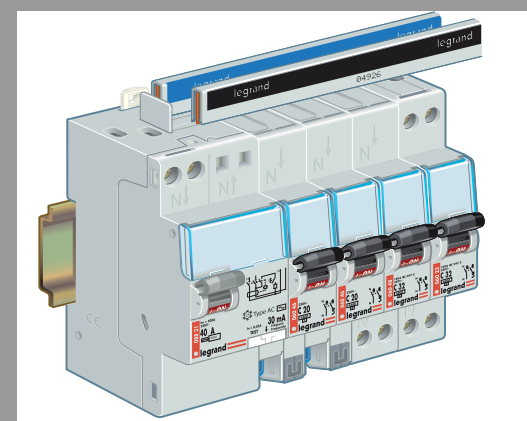
Distribution in rows using Lexic auto supply busbars: automatic connection of the single phase and 3-phase supply busbars up to 63 A



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

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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.

The faceplates are either metal or insulated.

Once they have been fitted, they provide IP 30 protection.

They are available in several heights:

- from 150 mm to 600 mm for modular devices, Vistop and DPX
- from 50 mm to 1,750 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		For wiring sleeves	
	Metal	Insulated	Metal	Insulated
50	203 40	203 90	201 41	
100	203 41	203 91	201 42	
150	203 42	203 92		
200	203 43	203 93	201 40	
300	203 44	203 94		201 97
400				201 98
550			201 43	201 99
700			201 44	
850			201 45	
1000			201 46	
1150			201 47	
1450			201 48	
1750			201 49	

Choice of fixing devices and faceplates												
	Devices (fixed version with front terminals)	Type of mounting	Position	Configuration	Fixing device	Max. no. of devices per row	Faceplate			Window adaptor	Connection space for main device (mm)	
							Height (mm)	metal	insulated			
Fitting in enclosure	Modular devices and Vistop up to 160 A	on rail			202 01	24 modules	150 ⁽¹⁾	203 00 ⁽¹⁾	203 50 ⁽¹⁾		50	
							200	203 01	203 51		50	
	DPX 125	on rail	vertical	with or without lateral elcbs	202 00 + 262 08	4	200	203 01	203 51		50	
				without elcbs	202 10	3	300	203 10	203 60		50	
		on plate	vertical	with elcbs underneath	202 12	3	400	203 12	203 62	203 67	50	
				horizontal	with or without elcbs underneath	202 14	1	200	203 14	203 64	203 67 ⁽²⁾	50
	DPX 160	on rail	vertical	with or without lateral elcbs	202 00 + 262 09	3	300	203 10	203 60		100	
				without elcbs	202 10	3	300	203 10	203 60		100	
		on plate	vertical	with elcbs underneath	202 12	3	400	203 12	203 62	203 68	100	
				horizontal	with or without elcbs underneath	202 14	1	200	203 15	203 64	203 68 ⁽²⁾	50
	DPX 250 ER	on rail	vertical	with or without lateral elcbs	202 00 + 262 09	3	300	203 10	203 60		100	
				without elcbs	202 10	3	300	203 10	203 60		100	
		on plate	vertical	with elcbs underneath	202 12	3	400	203 12	203 62	203 69	100	
				horizontal	with or without elcbs underneath	202 16	1	200	203 16	203 64	203 69 ⁽²⁾	50
	DPX-IS 250	on rail	vertical		202 00 + 262 39	1	300	203 10	203 60		100	
		on plate	vertical		202 05	1	300	203 10	203 60		100	
	DPX 250	on plate	vertical	off centre without elcbs	202 20	2	400	203 20	203 70		100	
				centred without elcbs	202 21	1	400	203 21	203 71		100	
				off centre with elcbs underneath	202 22	2	400	203 22	203 72		100	
				centred with elcbs underneath	202 23	1	600	203 23	203 73		100	
				horizontal	with or without elcbs underneath	202 24	1	200	203 24	203 74		50
	DPX 630 (up to 400 A)	on plate	vertical	off centre without elcbs	202 20	2	400	203 20	203 70		150	
				centred without elcbs	202 21	1	600	203 21	203 71		150	
				off centre with elcbs underneath	202 22	2	600	203 22	203 72		150	
				centred with elcbs underneath	202 23	1	300	203 23	203 73		150	
	DPX-IS 630 (up to 400 A)	on plate	vertical		202 07	1	400	203 07			150	
	Fitting in sleeve	Modular devices and Vistop up to 160 A	on rail			202 03	9 modules	150 ⁽¹⁾	203 03 ⁽¹⁾	203 53 ⁽¹⁾		50
200								203 04			50	
DPX 125/160/250 ER		on plate	vertical	without elcbs	202 18	1	300	203 18			100	
				with elcbs underneath	202 19	1	400	203 19		203 67 / 68 / 69	100	
DPX 250/630 (up to 400 A)		on plate	vertical	without elcbs	202 28	1	400	203 28			150	
				with elcbs underneath	202 29	1	600	203 29			150	

(1) Up to 63 A only
(2) For insulated faceplate only

Fitting devices and equipment (continued)

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B CAPACITY OF THE ENCLOSURES

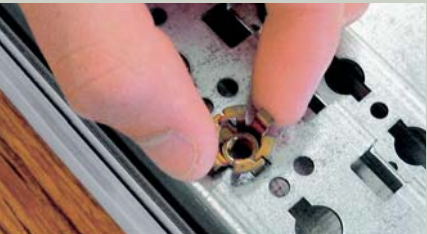
The usable faceplate height of each enclosure defines its equipment capacity.

Wall-mounting enclosures	Floor-standing enclosures	Wiring sleeve	External height (mm)	Usable faceplate height (mm)
201 03/53		201 23/73	600	550
201 04/54		201 24/74	750	700
201 05/55		201 25/75	900	850
201 06/56		201 26/76	1050	1000
201 07/57		201 27/77	1200	1150
201 08		201 28	1500	1450
	201 18	201 38	1600	1450
	201 19	201 39	1900	1750
201 82			515	400
201 83			715	600
201 84			915	800
201 85			1115	1000

C POSITIONING THE FIXING DEVICES

2 clip-nuts must first be fitted on the functional uprights for fitting and locking the plates. It is essential to position these clip-nuts correctly, according to the faceplate layout.

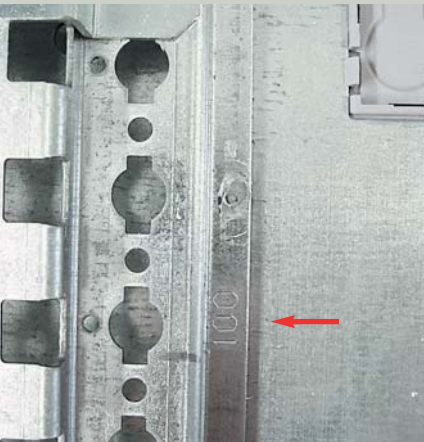
Likewise the rail fixing device attachment pieces must be positioned in accordance with this faceplate layout.



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 ("point 100"): located 100 mm from the top of the faceplate frame and marked by the number 100, engraved on each functional upright.

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.

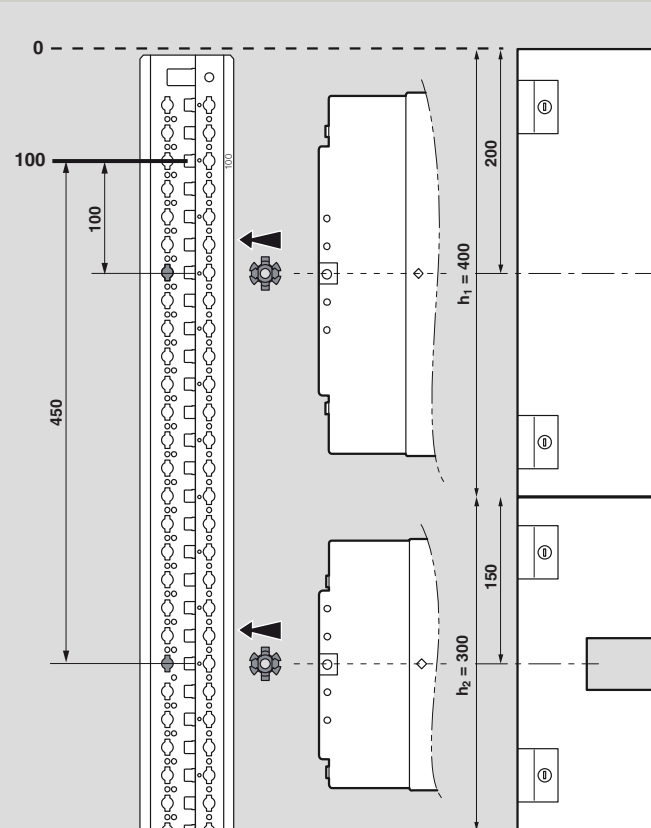


Point 100 is marked on the functional upright

Positioning the clip-nuts for the plates

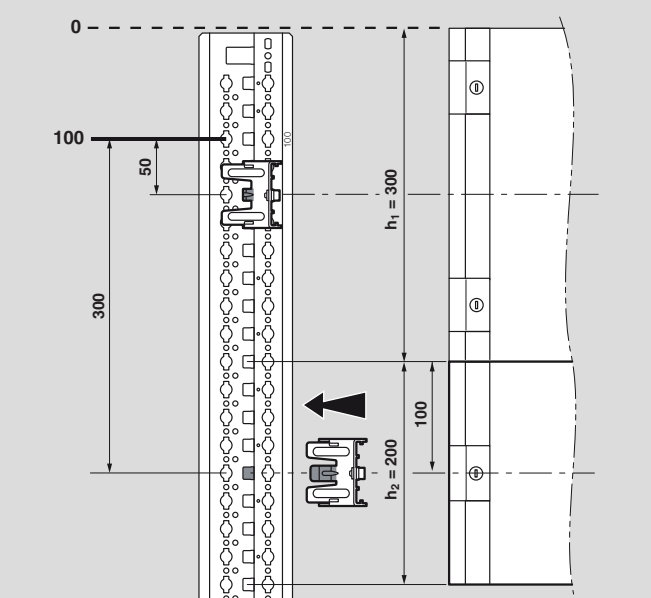
- Example: fitting 2 plates and their faceplate
- 1st faceplate: height $h_1 = 400$ mm at the top of the enclosure
- Position of the plate fixing point in relation to the top of the faceplate frame: divide the height of the faceplate by 2, giving 200 mm.
- Then measure 100 mm from "point 100" (i.e. 4 cut-outs on the functional upright).

- 2nd faceplate: height $h_2 = 300$ mm
- Position of the plate fixing point in relation to the bottom of the 1st faceplate: divide the height of the faceplate by 2, giving 150 mm.
- Position of the plate fixing point in relation to the top of the faceplate frame: add the height of the 1st faceplate, i.e. $150 + 400 = 550$ mm.
- Then measure 450 mm from "point 100" (i.e. 18 cut-outs on the functional upright).



Positioning the attachment pieces for rail fixing devices

- Example: fitting 2 rail fixing devices and their faceplates
- 1st faceplate: height $h_1 = 300$ mm at the top of the enclosure
- Position of the attachment piece insertion point in relation to the top of the faceplate frame: divide the height of the faceplate by 2, giving 150 mm.
- Insert the attachment piece 50 mm from "point 100", i.e. in the 2nd cut-out above this point.
- 2nd faceplate: height $h_2 = 200$ mm
- Position of the attachment piece insertion point in relation to the bottom of the 1st faceplate: divide the height of the faceplate by 2, giving 100 mm.
- Position of the attachment piece insertion point in relation to the top of the faceplate frame: add the height of the 1st faceplate, i.e. $100 + 300 = 400$ mm
- Insert the attachment piece 300 mm from "point 100", i.e. in the 12th cut-out above this point.



37

Fitting devices and equipment (continued)

+

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

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 onto 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.

4P

1 1

2 2 2

0

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)

Fitting the cage nuts

Each plate has the numbers corresponding to the DPX units it can take. Here, the cage nuts have been positioned for fitting a DPX 250 ER 4P

+

Perforated universal plates Cat. No. 202 41/42 for enclosures and Cat. No. 202 43 for wiring sleeves can be used for fitting any device at the back of the enclosure (maximum height available under faceplate: 105 mm). They are fixed on the functional uprights in the same way as dedicated plates.

Usable area: - Cat. No. 202 41: 459 x 294
- Cat. No. 202 42: 459 x 194
- Cat. No. 202 43: 141 x 294

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

Fitting devices and equipment (continued)

40

E FITTING DEVICES ON RAILS

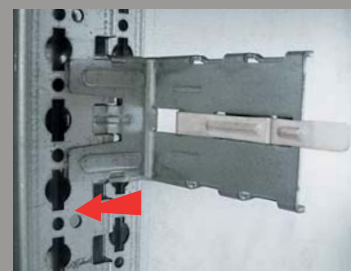
Rail fixing devices can be fitted in enclosures and in wiring sleeves.

1. 2-position indexed rails Cat. No. 202 00

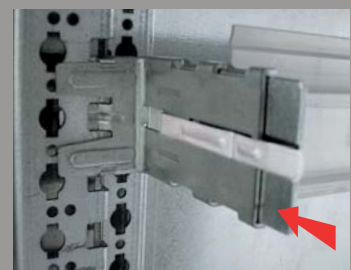
This particularly rigid 24-module aluminium profile rail is used for fitting modular devices in upper position and DPX units in lower position. The modular devices can be fitted beside DPX units using spacer Cat. No. 262 99.

+ Rail fixing device with 2 indexed positions Cat. No. 202 00

Tool-free fitting:



1 - Fitting the attachment pieces on the functional uprights

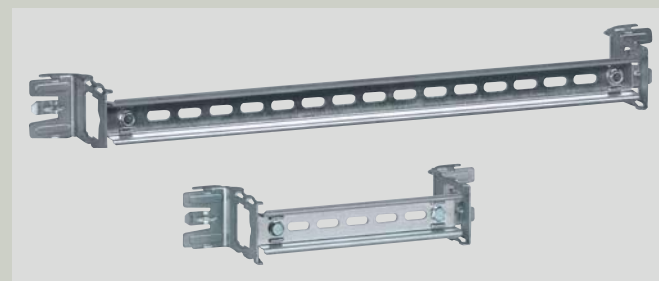


2 - Clipping the rail on the attachment pieces (2 positions)

2. Fixed rails Cat. No. 202 01/03

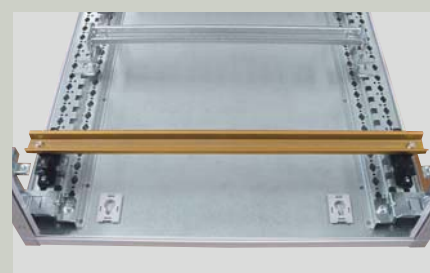
These rails are specifically designed for fitting modular devices in enclosures (24 modules) and wiring sleeves (9 modules).

They take guide rings for horizontal wiring, with no need for any accessories (see page 48).



3. Universal rail Cat. No. 202 04

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.



Universal rail
Cat. No. 202 04 on
isolating supports
Cat. No. 200 90

4. Adjustable, inclinable rail Cat. No. 202 02

The attachment piece + bracket assembly is used to adjust the height and slope of the rail to create staggered terminal blocks (see page 52).

41

F FITTING DEVICES IN WIRING SLEEVES

Special fixing devices (rail and plates) and faceplates are used for fitting all modular devices, Vistop up to 160 A and DPX up to 400 A in wiring sleeves (see table on page 35).

The wiring sleeve is equipped with the same functional uprights as the enclosures. The mounting principle is therefore absolutely identical.

2. Devices on plates



DPX 125 with elcbs underneath under faceplate
Cat. No. 203 19 with window adaptor Cat. No. 203 67
Window adaptors:
Cat. No. 203 67 for DPX 125
Cat. No. 203 68 for DPX 160
Cat. No. 203 69 for DPX 250 ER
are essential when using an elcbs

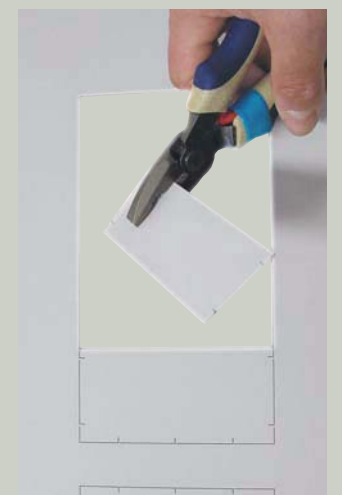
1. Device on rail Cat. No. 202 03



Fitting a Vistop 125 A under a faceplate with modular window height 200 mm and modular devices under faceplate height 150 mm. Fixing the conductors on a support Cat. No. 201 37 under 100 mm solid faceplate at the supply end



DPX 630 with elcbs underneath on plate
Cat. No. 202 29



Faceplates Cat. Nos 203 28/29 have cut-out windows for adapting to the different configurations of devices

Fitting devices and equipment (continued)

42

G EDF CONNECTION PLATES

1. French electricity tariff kits

The 3-phase kit Cat. No. 202 31 is supplied equipped with a subscriber plate for MCB and electronic meter.

The single phase kit Cat. No. 202 30 is supplied without subscriber plate. It can take one of the following 4 plates:

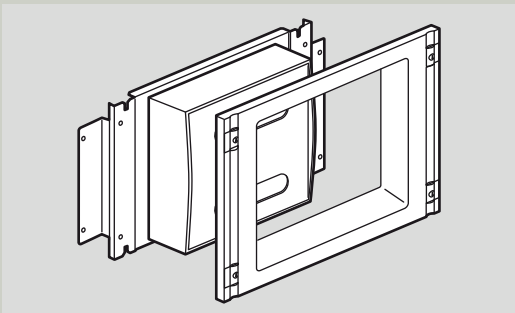
Cat. No. 011 91 for MCB only, usable depth: 40 mm

Cat. No. 011 92 for MCB only, usable depth: 55 mm

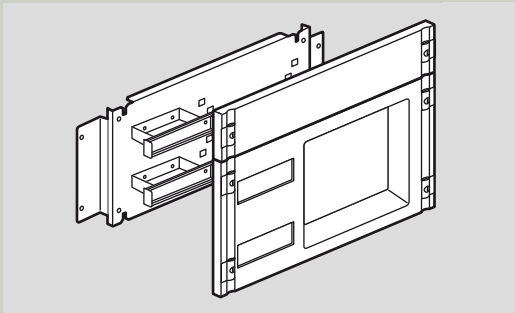
Cat. No. 011 81 for MCB and meter, usable depth: 40 mm

Cat. No. 011 82 for MCB and meter, usable depth: 55 mm

The metal plates are fixed on the functional uprights of XL³ 400 enclosures, for Cat. Nos 202 30 and 202 31, via 2 additional brackets.



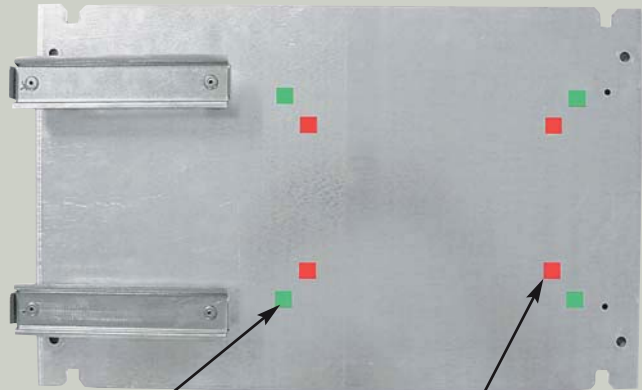
3-phase kit Cat. No. 202 31



Single phase kit Cat. No. 202 30



Fitting the cage nuts, via the rear of the metal plate



Fixings for Cat. Nos 011 91 and 011 92

Fixings for Cat. Nos 011 81 and 011 82

43

1. French electricity tariff kits

Legrand has 2 types of French electricity tariff kits:

- for MCB only, for fitting in enclosures and wiring sleeves
- for isolating switch + MCB in enclosures

These kits are available in MCB only version or isolating switch + MCB version.

Contract power	Rating	Devices	In enclosure	In wiring sleeve
36 kVA to 144 kVA	250 A	DPX 250 ER only	202 34 ⁽¹⁾	202 35
		DPX 250 ER + DPX-IS 250	202 32	
Up to 250 kVA	400 A	DPX 630 only	202 36	202 37
		DPX 630 + DPX-IS 630	202 33	

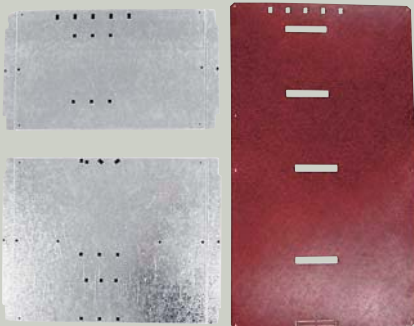
⁽¹⁾ Fitting in horizontal position



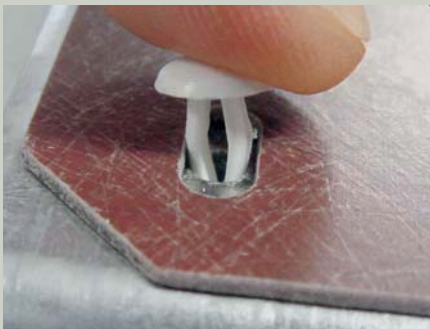
Kit Cat. No. 202 33 with devices

Fitting plates and insulated plates

For all the kits, the insulated plate is supplied fitted on the device fixing plates, except for Cat. No. 202 33 which has two separate plates.



Composition of kit Cat. No. 202 33 (rating 400 A)



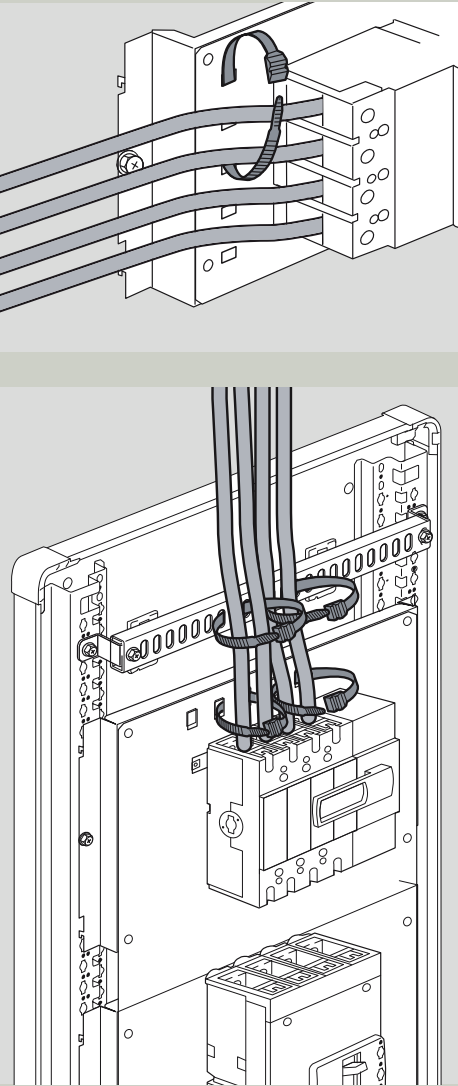
After fixing the 2 plates to the functional uprights in the enclosure, the insulated plate must be installed using the isolating clips provided

Fitting devices and equipment (continued)

44

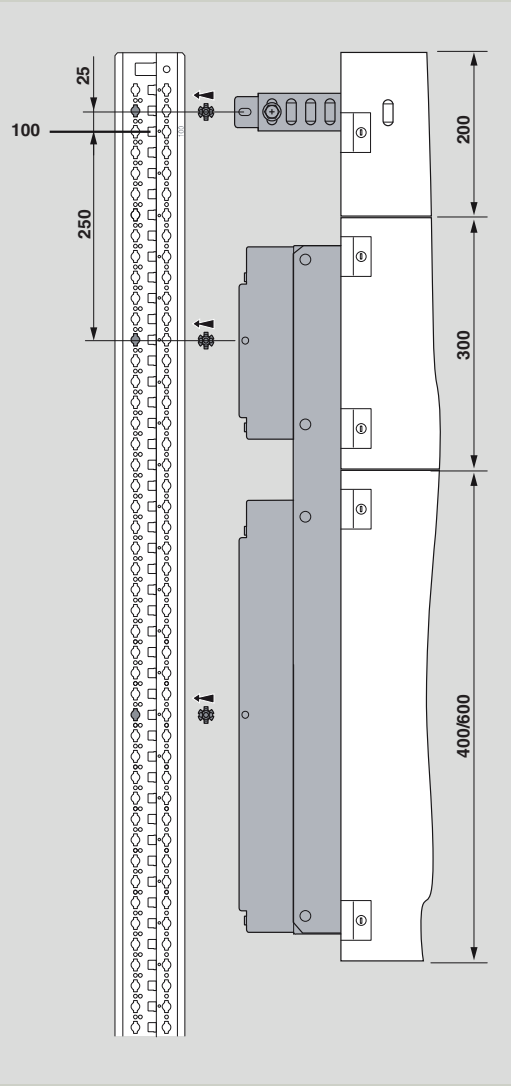
■ Holding the conductors in place in enclosures or wiring sleeves

The conductors supplying the main device (isolating switch or MCB) must be fitted on the device fixing plate using Colson clamps.



If the conductor cross-section is too large for fixing on the plate only, use cable fixing support Cat. No. 201 35/37 as well

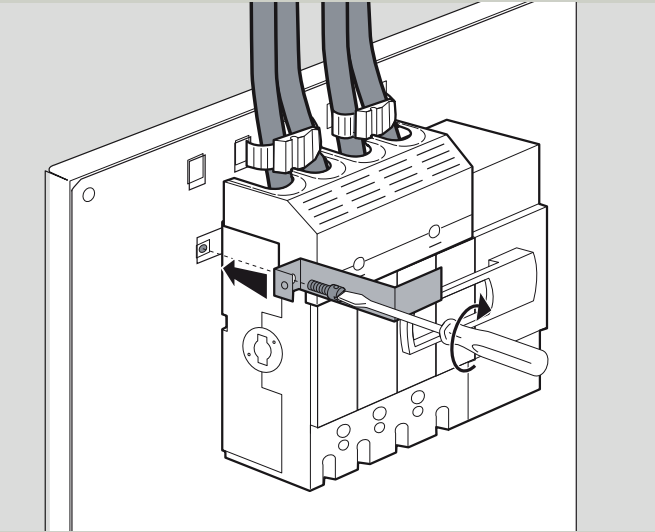
Example of installing kits Cat. Nos 202 32/33 with support Cat. No. 201 35 to hold the conductors in place



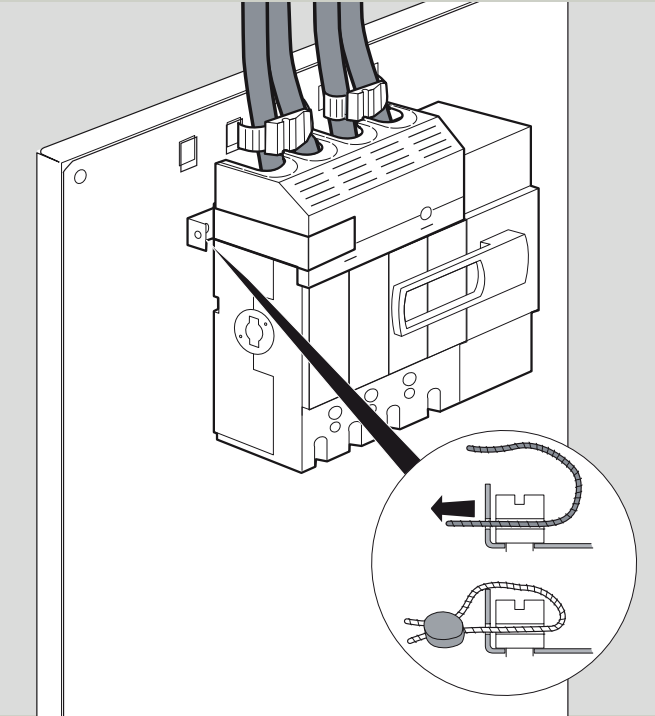
45

■ Fitting a sealable terminal shield on the incoming terminals of the isolating switch

DPX-IS 250: terminal shield Cat. No. 262 87
DPX-IS 630: terminal shield Cat. No. 262 45



After fitting the terminal shield, seal it by fixing the flange on the plate



Insert the sealing wire through the screw head and the flange

Fitting devices and equipment (continued)

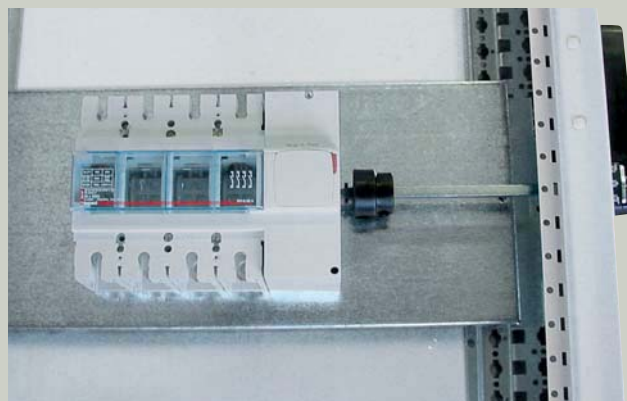
46

H EQUIPMENT ON DOORS AND SIDE PANELS

1 - Remote side handles

■ DPX-IS 250

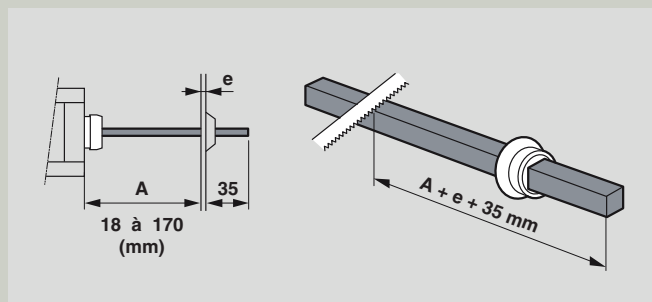
Remote handle Cat. No. 262 37/38 is supplied with a template for drilling the side panel.
The operating rod must be cut according to requirements.



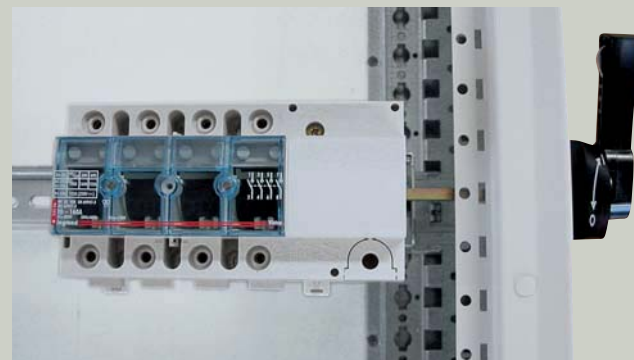
The DPX-IS with side handle must be fitted on a plate. Cut the rod to 193 mm

■ 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: cut the rod to 108 mm

47

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

Remote front handles Cat. No. 227 32 can only be installed on rounded doors. The hole is drilled using the template provided. The operating rod must be cut to 37 mm.



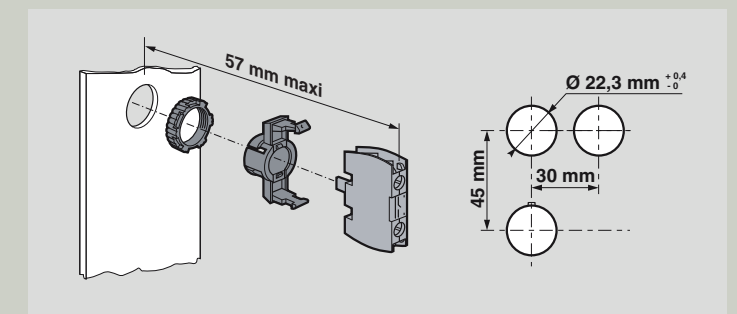
The locking accessory installed inside the door prevents the door opening if the device is in closed position



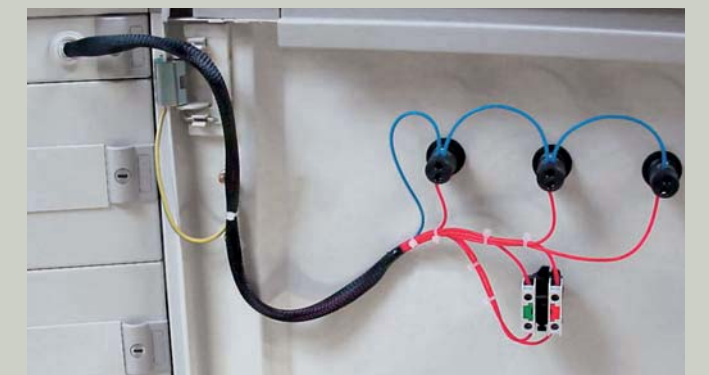
Tighten the operating rod on the Vistop using an Allen key

3 - Control and signalling devices on the door

Metal rounded doors with a distance of 57 mm between the faceplate and the door enable 50 mm deep Signis control and signalling units to be mounted. Hole drilled using 22.3 mm diameter Greenlee punch.



The connecting wires (up to 4) can be inserted in the enclosure with the door equipotential link via the hinge space (see page 12).



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

Wiring and connection

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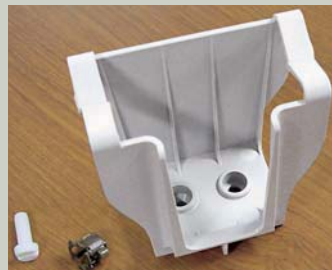
A WIRING

1. Wiring rings

Legrand has developed guide rings for vertical and horizontal wiring for the whole range of XL³ enclosures.

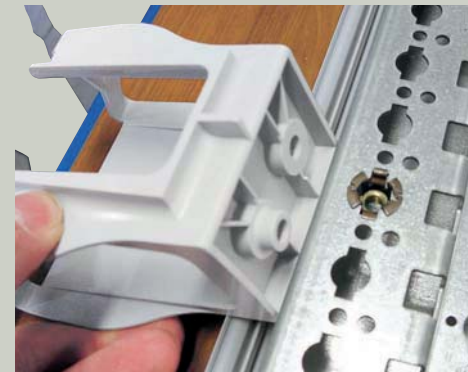


Guide ring for horizontal wiring
Cat. No. 200 94



Guide ring for vertical wiring
Cat. No. 201 93

The guide ring for horizontal wiring is quick to fit, and does not require any tools: insert the fixing hooks on the ring in the holes in the universal rail, then lock by moving sideways



The guide ring for vertical wiring is fitted using clip-nuts and one M6 isolating screw. It is attached to the top part of the functional uprights.

Example of wiring using rings



49

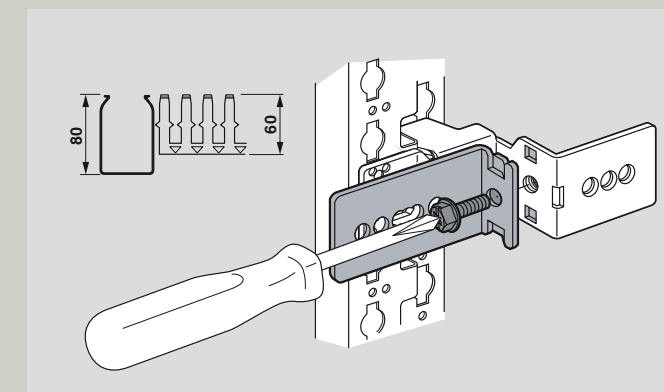
2. Fitting Lina 25 ducting

The ducting supports can be used to mix various heights of ducting together, vertically and horizontally, in one enclosure, while optimising the connection of devices.

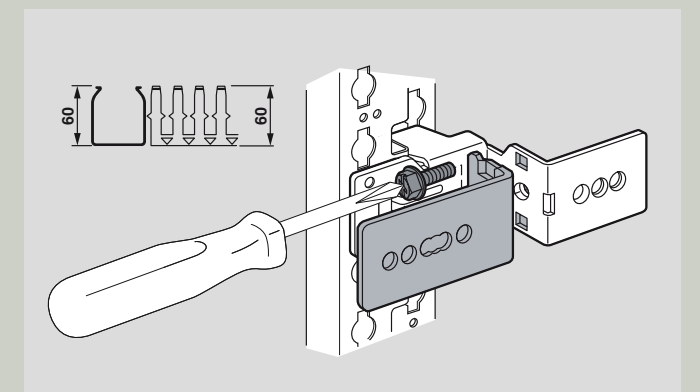
It is also possible to alternate rows equipped with 60 mm deep ducting with rows equipped with 80 mm deep ducting.



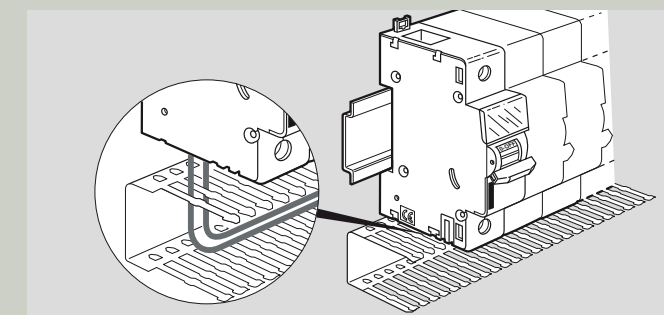
Lina 25 ducting mounting supports
Cat. No. 201 70



Mounting example no. 2: using 80 mm depth ducting vertically and 60 mm depth ducting horizontally



Mounting example no. 2: using 60 mm depth ducting vertically and horizontally



The support is used align the ducting perfectly with the terminals of the devices to be connected, to make it easier to insert the conductors in the ducting

Wiring and connection (continued)

50

B PROTECTIVE CONDUCTORS (PE)

The main terminal of the protective conductors is used to connect:

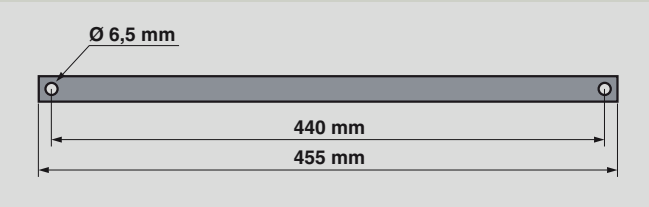
- The main protective conductor
- The protective conductors of the load circuits
- Optionally, the protective conductor of the transformer
- The equipotential links

This type of connection can be made in XL³ enclosures using the following solutions:

- Terminal blocks (unprotected or IP 2x) fitted on 12 x 2 mm flat bar
- Ready to use bar with holes Cat. No. 373 01
- Flat copper bar with clamp Cat. No. 373 02
- 12 x 4 mm non-perforated copper bar Cat. No. 373 49
- Copper bar with tapped holes Cat. No. 373 89
- Viking terminal blocks fitted on rail

1. Terminal blocks (unprotected or IP 2x)

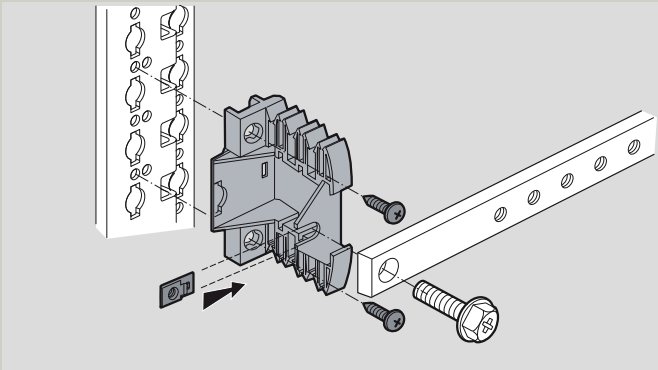
The terminal blocks must be fitted on the 12 x 2 flat bar that is sold by the metre (Cat. No. 048 19).



Dimensions for cutting and drilling the flat bar



Direct fitting of the flat bar on the functional uprights



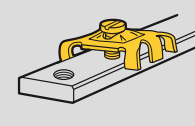
Fitting on isolating supports Cat. No. 200 90 (class II)

2. Copper bar with tapped holes Cat. No. 373 89

This bar, cross-section 12 x 4 mm, can be fitted at the back of the enclosure, on the functional uprights, or even on isolating support Cat. No. 200 90 to create insulated earths.



Connectors specially designed for copper bar with tapped holes Cat. No. 373 65 are used to connect 1.5 to 10 mm² cross-section conductors



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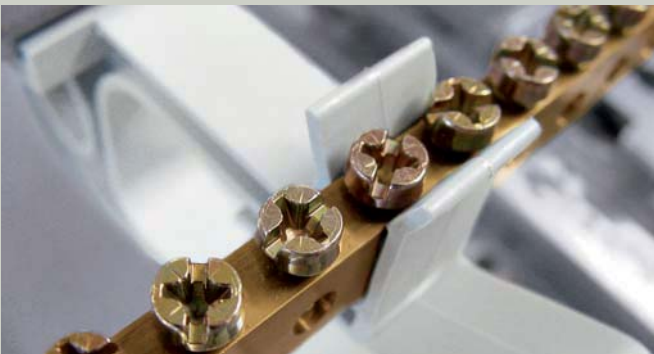
3. Ready to use bar with holes Cat. No. 373 01



This bar has 36 x Ø 5.3 mm holes (for wire cross-sections from 1.5 to 10 mm²) and 2 x Ø 9 mm holes (for wire cross-sections up to 35 mm²). It can be installed on the functional uprights of XL³ 400 enclosures using fixing brackets, on wiring guide rings Cat. No. 200 94 or on support end stops Cat. No. 393 99.

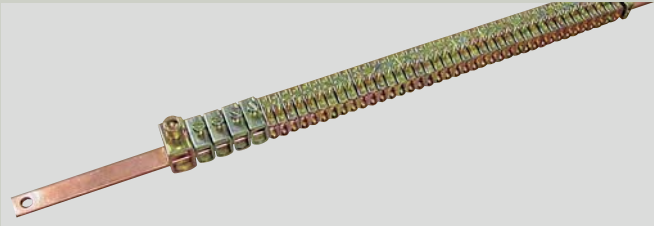


Fitting on support end stop Cat. No. 393 99



Fitting on ring Cat. No. 200 94

4. Flat copper bars with clamps



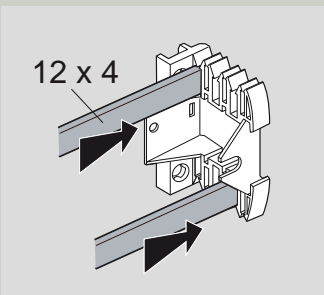
The 12 x 4 mm cross-section flat bar is supplied with:

- 40 clamp connectors for 1.5 to 4 mm² conductors
- 4 clamp connectors for 6 to 16 mm² conductors
- 1 clamp connector for conductors with cross-sections up to 35 mm²

The non-perforated copper bar sold by the metre Cat. No. 373 49 and the following clamp connectors can be used to create a "made to measure" terminal block:

- Cat. No. 373 60 for 1.5 mm² conductors
- Cat. No. 373 61 for 6 to 16 mm² conductors
- Cat. No. 373 62 for 10 to 35 mm² wires

These bars can be fixed directly to the functional uprights or on isolating supports Cat. No. 200 90 to create insulated earths.



Fitting on isolating support Cat. No. 200 90

5. Viking terminal blocks fitted on rail

See next page "Output terminal blocks".

Wiring and connection (continued)

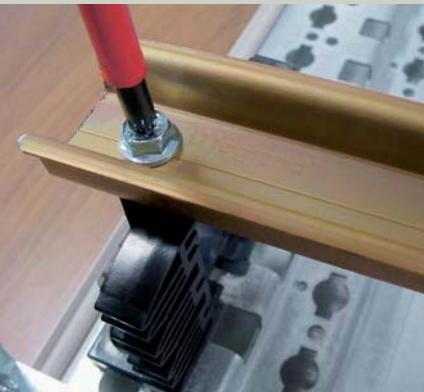
52

C TERMINAL BLOCKS

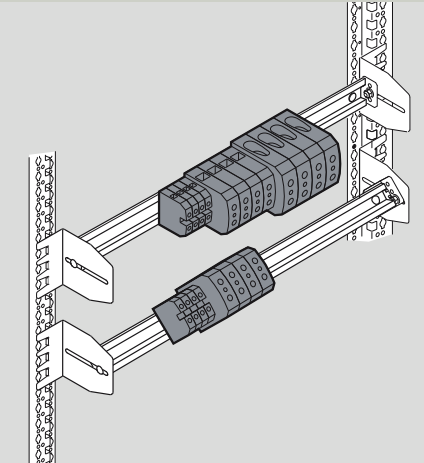
Viking terminal blocks combined with Legrand rails can be used to create output terminal blocks and terminal blocks for protective conductors.

In enclosures

- Rail Cat. No. 202 02 fixed directly on the functional uprights or on isolating supports Cat. No. 200 90
- Adjustable fixing device Cat. No. 202 02



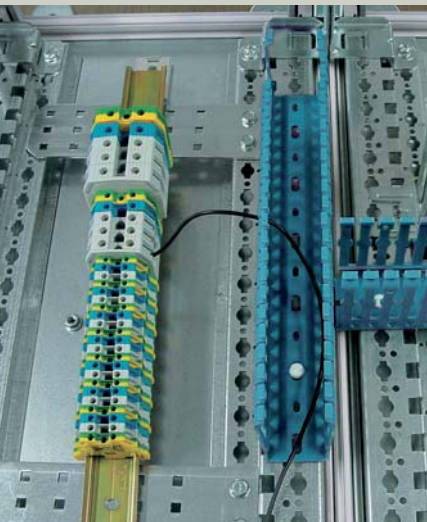
Fixing a rail in isolating supports Cat. No. 200 90



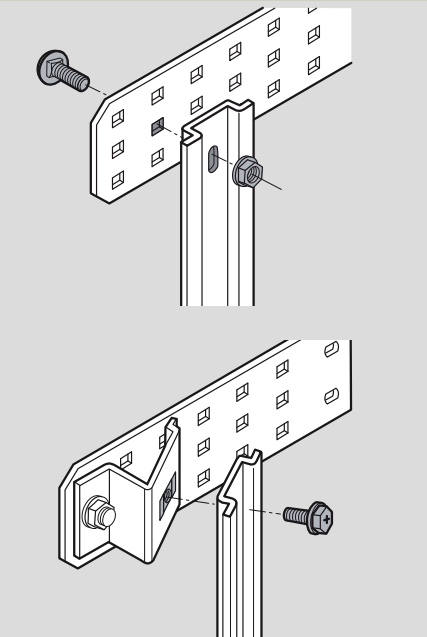
Staggered terminal blocks with adjustable fixing device Cat. No. 202 02

In wiring sleeve

- Universal support Cat. No. 201 95 and rail to be cut to length Cat. No. 374 04/07



Example of creating a vertical terminal 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 terminal block

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D SUPPORTS FOR TERMINAL BLOCKS ON PLATES

All XL³ plates are designed to take a rail. This enables terminals to be fitted for connecting the auxiliaries of MCBs, modular devices, distribution blocks, auxiliary power supplies, etc.

This method of installation on rails is not suitable for fixing modular devices with faceplates.

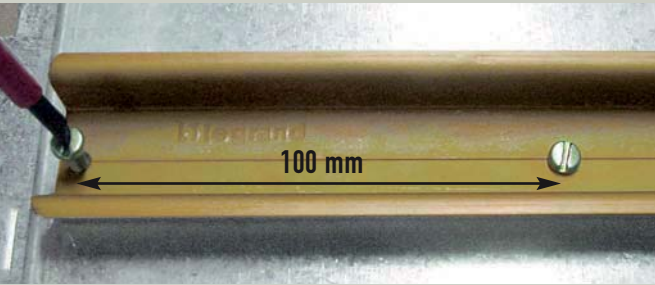


Plate Cat. No. 202 16 for DPX 250 ER with elcbs equipped with a rail with terminal block for connecting the auxiliaries

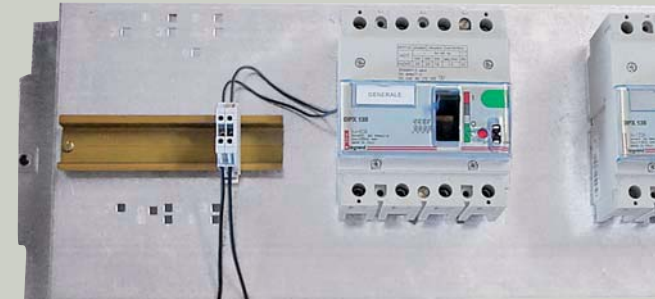
Example of plate Cat. No. 202 10:



Identify the unmarked holes and fit them with cage nuts



Drill Ø 4 mm holes 100 mm apart, then screw on using 2 x M3 screws and 2 cage nuts clipped behind the plate



DPX 125 equipped with auxiliaries connected on Viking terminals on plate Cat. No. 202 10

Wiring and connection (continued)

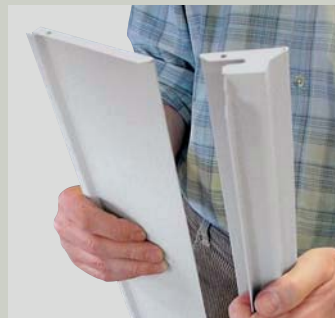
54

E INSERTING THE CABLES

1. Adjustable cable entry plate

XL³ 400 metal enclosures are supplied with sheet metal side panels. To help make the cuts for the cable entries, a plastic plate is supplied with each enclosure.

This plate is also available separately (Cat. No. 201 20).



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

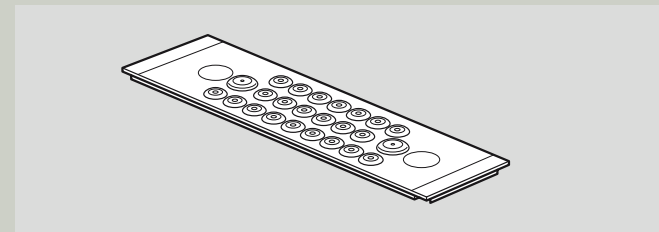


Insert the plate between the back and the front of the side panel



Example of cutting the cable entry plate creating the joint with ducting

2. Plates with knockout cable entries



These plates have 22 x Ø 20 mm cable glands, 2 x Ø 32 mm cable glands and 2 x Ø 40 mm cut-outs. The cable glands enable cables with an outer diameter of up to 16 mm to be inserted directly. If it is not necessary to make a cut in the gland to insert the cable, the cable itself cuts the gland.

The protection level after insertion of the cables is IP 43.

■ Metal enclosures: plate Cat. No. 201 21

The plate is fitted in exactly the same way as the adjustable cable entry plate (see opposite).

■ Insulated enclosures: plate Cat. No. 201 71

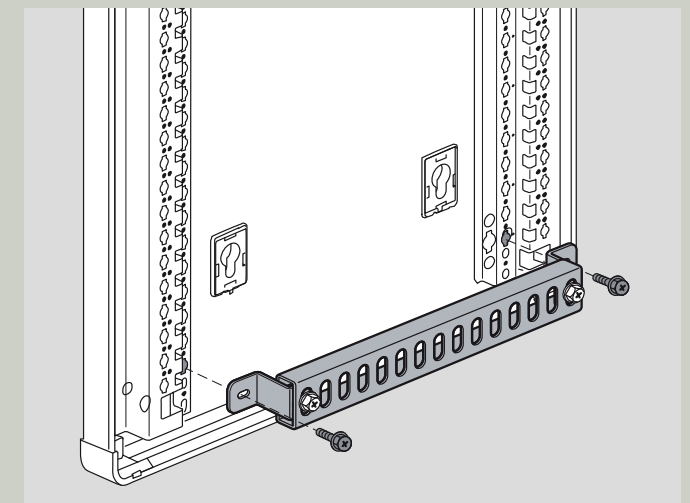
This plate is fitted in place of the top or bottom side panels of the enclosures. It is held in place by the faceplate-door frame.

3. Holding the cables in place

2 fixing rails are available for fixing the cables on the cable entry plate at the back of the enclosure:

- Cat. No. 201 35 for enclosures
- Cat No. 201 37 for wiring sleeves

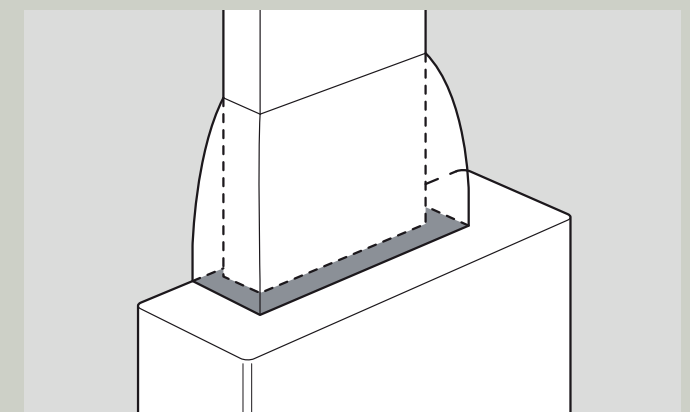
The cables are attached to the rail using Colson clamps.



Install the cable fixing support on the bottom profile of the functional uprights with the brackets and screws provided

4. DLP-enclosure finishing strip Cat. No. 201 60

This is used to improve the finish of the joint between the ducting and the enclosure and to increase the space for spreading the cables



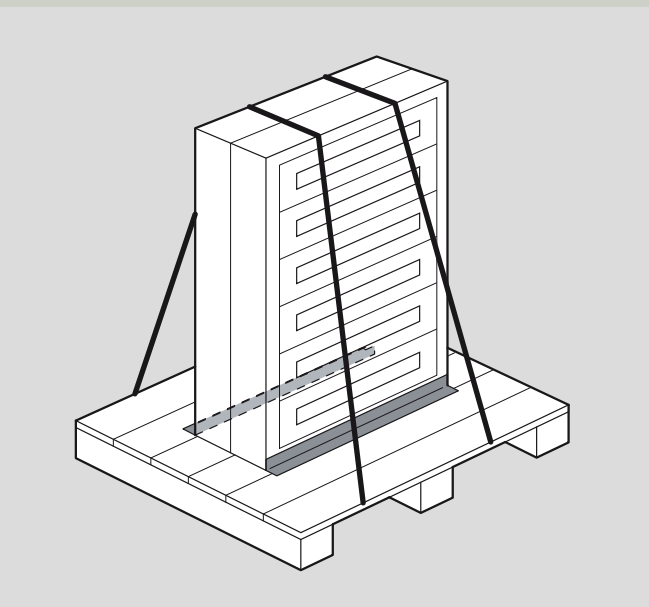
The finishing strip provides more space for spreading the cables

55

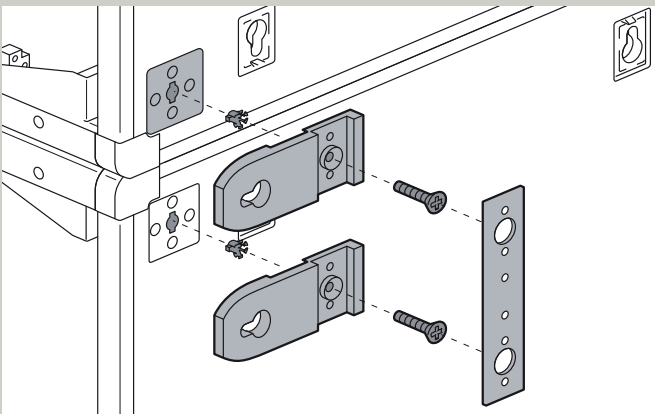
Handling and on-site installation

A HANDLING AND TRANSPORT

Assembled enclosures should preferably be transported flat and not stacked, or in a vertical position on pallets, taking all necessary precautions to hold and strap them in position.



Holding in position with corner pieces and strapping for transporting enclosures in a vertical position, back to back, on a pallet



Class II joined assemblies can be strengthened using bars Cat. No. 201 51 fitted on the fixing lugs



Protect mounted and assembled enclosures with the re-usable packaging

B FIXING ENCLOSURES

XL³ 400 enclosures must be fixed to a wall or a partition. All the fixing points must be used (4 for enclosures, 2 for wiring sleeves) even when they are joining together.

1. Internal fixings

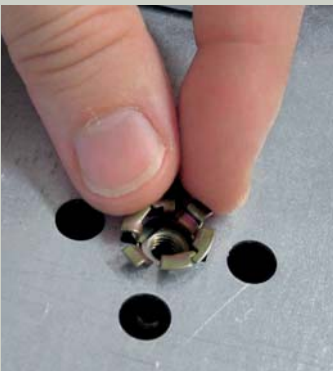
Knock out the blanking plates then fix the enclosure using Ø 6 mm screws and washers. The internal fixings are always accessible, even when the enclosure is assembled. Do not forget to replace the isolating terminal shield for class II enclosures.

2. External fixings

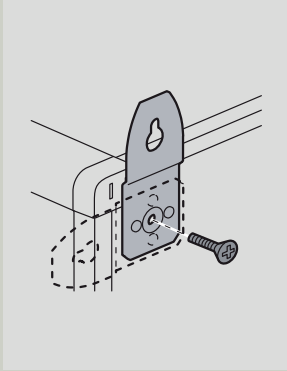
Enclosures can be fixed using lugs Cat. No. 201 00 for the metal XL³ 400, and Cat. No. 201 50 for insulated XL³ 400.



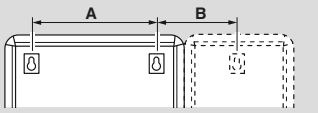
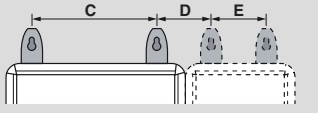
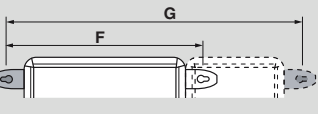
The keyhole shaped openings are used for easy attachment and removal of enclosures



Fitting the clip-nut



Screw on the lug in the required position

Internal and external fixing centres	
	A = 330 mm B = 277.5 mm
	C = 475 mm D = 100 mm E = 210 mm
	F = 625 mm G = 935 mm

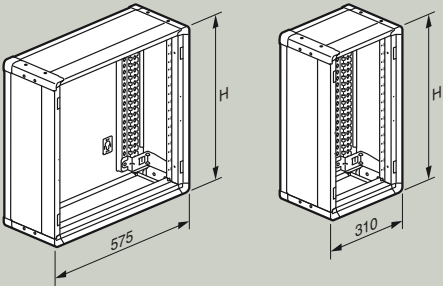
Appendices

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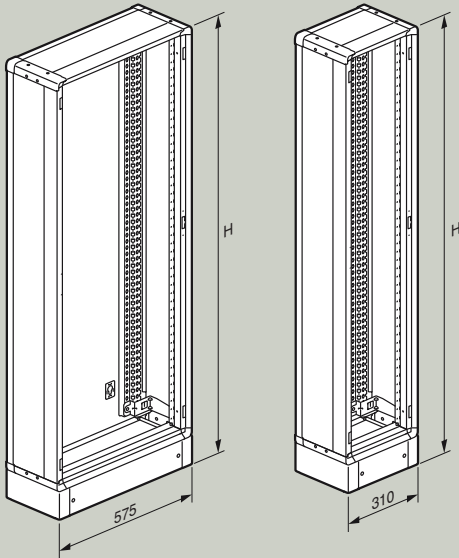
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DIMENSIONS

■ Metal enclosures

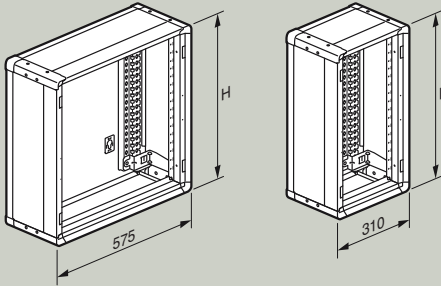


Wall-mounting enclosures		Sleeves
Cat. No.	Cat. No.	H (mm)
201 03	201 23	600
201 04	201 24	750
201 05	201 25	900
201 06	201 26	1050
201 07	201 27	1200
201 08	201 28	1500



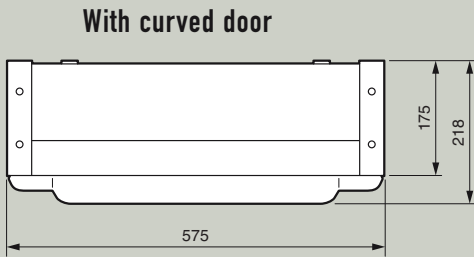
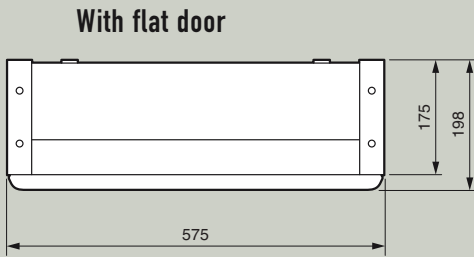
Floor-standing enclosures		Sleeves
Cat. No.	Cat. No.	H (mm)
201 18	201 38	1600
201 19	201 39	1900

■ Insulated enclosures



Wall-mounting enclosures		Sleeves
Cat. No.	Cat. No.	H (mm)
201 53	201 73	600
201 54	201 74	750
201 55	201 75	900
201 56	201 76	1050
201 57	201 77	1200

■ Enclosures with door



Agences régionales

1 • Région parisienne

75 - 77 - 78 - 91 - 92 - 93 - 94 - 95
93171 Bagnole 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
8 bis, 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 Guibert 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
Alphasis 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 Bagnole 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

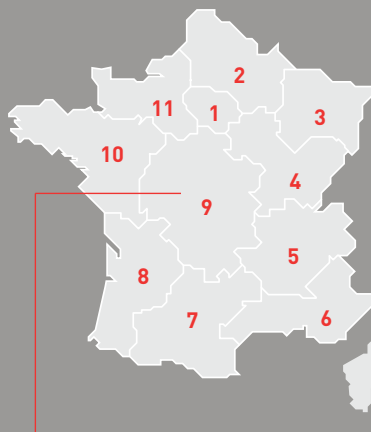
87045 Limoges cedex - France

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