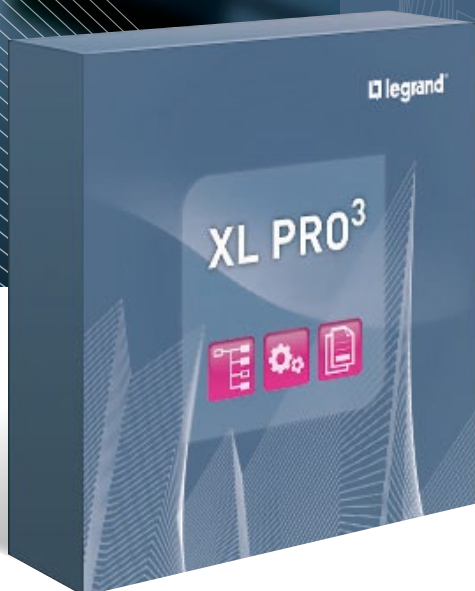


DISTRIBUTION PANEL
DESIGN SOFTWARE

XL PRO³ USER MANUAL



PRODUCTS AND SYSTEMS FOR ELECTRICAL AND
DIGITAL BUILDING INFRASTRUCTURES

 **legrand**[®]

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This symbol accompanies tips and supplementary functions.



This symbol accompanies important elements.

NOTE: Functions with a grey background are available only in version 6300 of the program.

WARNING/DISCLAIMER

The XL PRO³ software for electrical distribution must be used in accordance best practice and in particular the standards and regulations applicable to the installation concerned. Legrand will not be held responsible for any failure to comply with these basic principles. This software is protected by copyright law and international agreements. Any reproduction or distribution of the software, in whole or in part, by any means whatsoever, is strictly prohibited. Persons in contravention of these conditions will be guilty of infringement of copyright and will be liable to the penalties provided for by law. Copyright Legrand 2007

INSTALLATION AND START-UP

A Installation

1. Hardware and software requirements

- Intel Pentium IV or equivalent processor running Windows XP (Service Pack 2), Windows Vista, Windows 7 or Windows 8
- Adobe Reader X
(can be download free of charge from:
<http://www.adobe.com/fr/products/reader.html>)
- 1 GB of RAM recommended

2. Installation

- Close all open applications
- Insert the XL PRO³ CD-ROM or download the software from the www.legrand.fr website
- Follow the instructions in the installation program which starts automatically

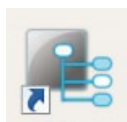
3. Unlocking

This software is protected. You will be given your personal activation key by your Legrand contacts.

You can however use it immediately 30 times without the key to start creating your studies with XL PRO³. After that the software will lock and you will need your key to continue working with XL PRO³.

B Start-up

To start XL PRO³:

- Double-click on the icon on the desktop
- 
- OR
- Select XL PRO³ in the menu: Start > Programs > Legrand > XL PRO³
 - The software starts up automatically

C First use

- The first time you launch the program, you are requested to input your email and company name. If you are already subscribed to our services, this information will enable the program to automatically complete the information in the **Company Name** window. Otherwise, you must enter your company's information.

Properties	Value
Corporate name	Rech
Corporate name*	Rech
Legetype selection	...
Name*	Monrobot
First name*	Caroline
Address*	3 avenue du M&S
Address 2	
Area code*	87000
City*	Limoges
Phone number	
Fax	
email address	
Website	
Activity	
Function	

In accordance with Article 34 of the law "Informatique and Freedoms" you have a right to access, modify, correct or delete data about you.
To do so, please contact:
LEGRAND
128, avenue de Lattre de Tassigny 87045 LIMOGES

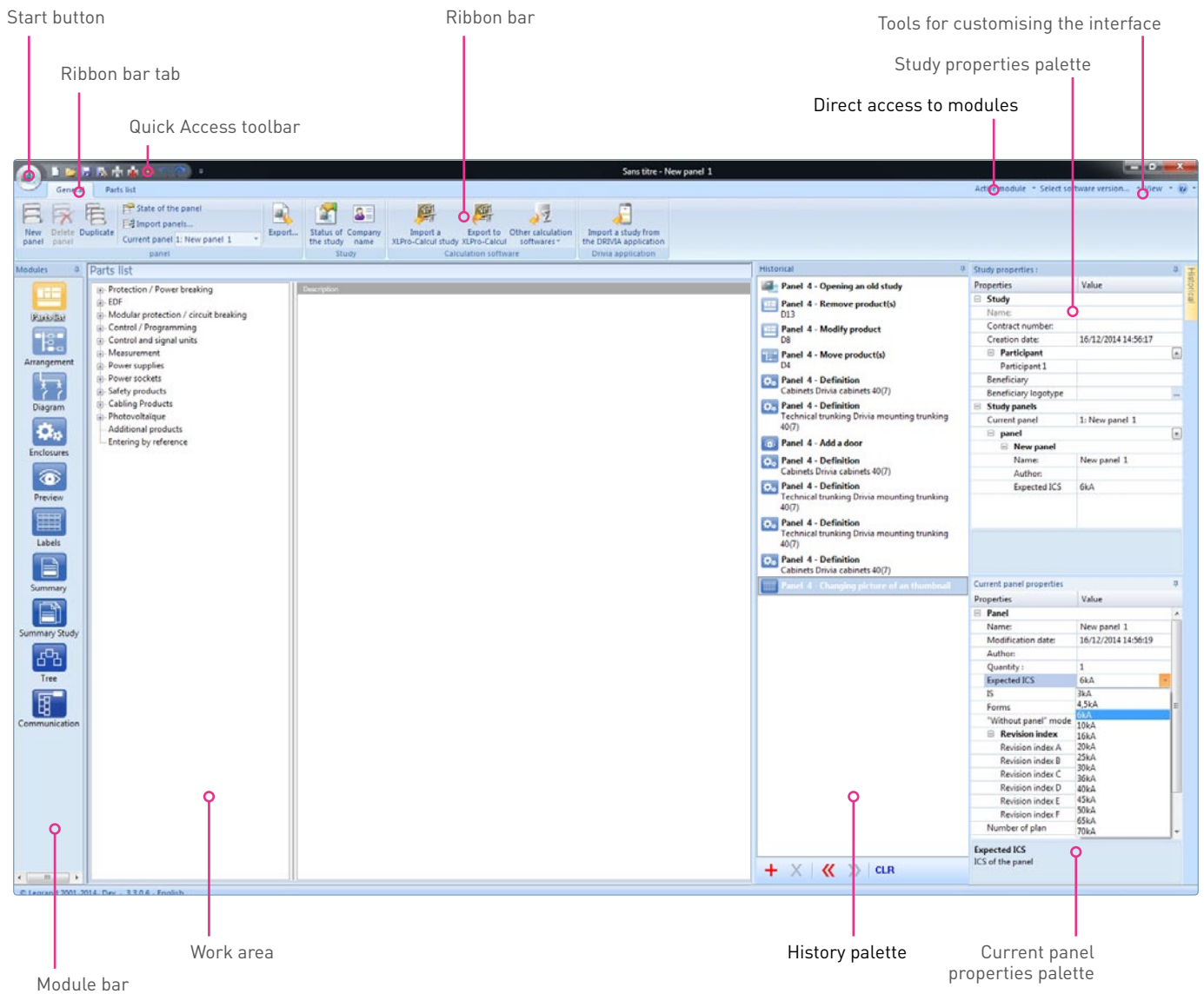
Required Information
 Allow commercial use of data

Confirm Undo

- This information can be modified at any time, either in the menu or in the **General** tab in the ribbon bar (see page 13), which both enable you to open the **Company name** dialogue box again.
- You can also customise your work interface by changing the colours and the language (see page 03).

THE XL PRO³ INTERFACE

A Introduction



B Tools for customising the interface

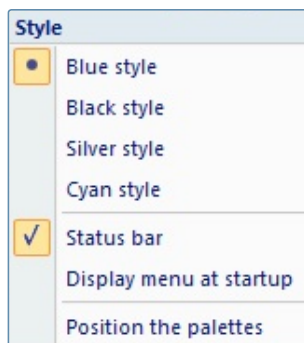


1. Selecting the software version

This menu enables you to select the language of your interface: English, French or other

2. Display

This menu gives you access to the **Style** window.

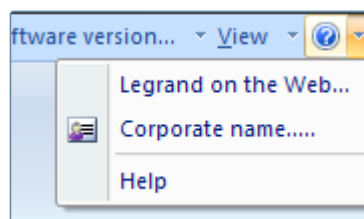


In this window you can choose the graphic style of the interface, whether or not the status bar is displayed, whether or not the main menu is displayed when the software starts up, and move the **Study properties** and **Current panel properties** palettes (see details of the palettes on pages 08-09).

3. Help menu

- Clicking on gives you access to all the information about your version of the software.
- Clicking on the arrow to the right of this opens a window.

In this window you can:



- Access the Legrand website directly
- Open the **Corporate name** menu to modify your details
- Download the user manuals in PDF format by clicking on **Help**

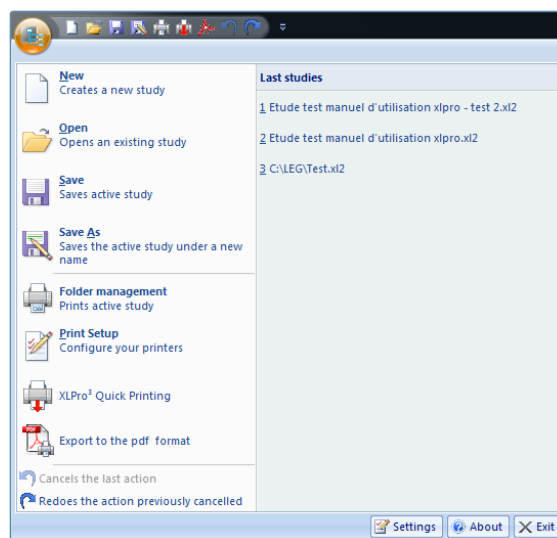
THE XL PRO³ INTERFACE

C Start button

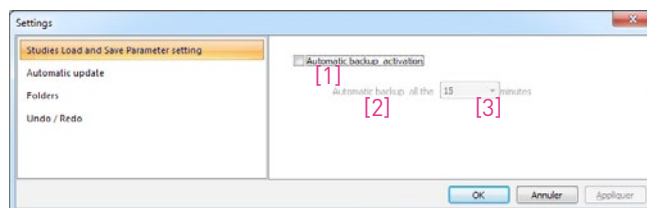
Clicking on the **start button** opens the start menu in which you can access the following functions:

- **New:** starts a new study. If you have made changes to the current study, XL PRO³ will suggest you save them.
- **Open:** opens an existing study. Once you have saved any changes made to the current study, you must select your file in the standard open window.
- **Save:** saves the current study. When you save the study for the first time, the standard **Save As** window opens, so that you can name the file (this name becomes the name of the study). The default location to which the file is saved is the **My studies in XL PRO³** folder, but you can choose another location.
- **Save As:** saves the current study under another file name and/or to another location.
- **Folder management:** opens the Folder management tab in the ribbon bar (see page 102).
- **Print Setup:** opens the standard window for selecting the printer and paper.
- **Quick Printing:** prints the image displayed on the screen, with no page layout formatting, from the various modules.
- **Save to the pdf format:** saves the image displayed on the screen in PDF format, with no page layout formatting, from the various modules.
- **Undo** the last action
- **Redo** a previously undone action
- **Last studies:** provides quick access to a recent study.
- **Options:** to define auto-save, update, folder and undo function parameters (see adjacent).
- **About:** this is used, among other things, to access information on the installed version of the XL PRO³ software.

- **Exit:** closes the software. If you have made changes to the current study, XL PRO³ will suggest you save before closing.



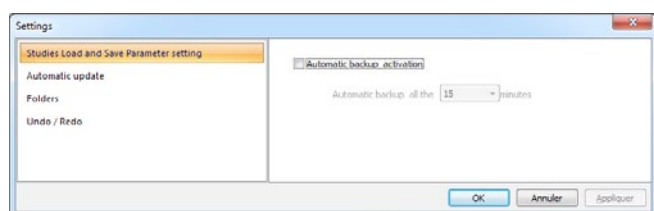
- The **Options** button opens a window::



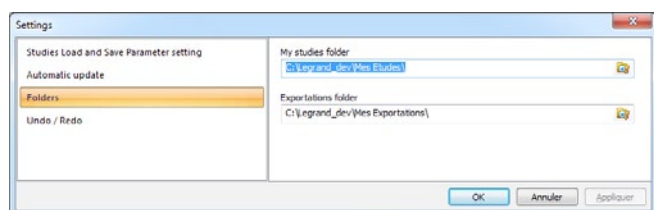
- Configure auto-save: Tick the box [1] to activate auto-save and activate the menu [2]. Click the arrow to open the dropdown menu [3] and set the save frequency. Finally, confirm your choices by clicking the **OK** button.

Each automatic backup deletes and replaces the previous one.
If you wish to return to a previous version of your study in progress, save the various stages **by renaming them each time.**

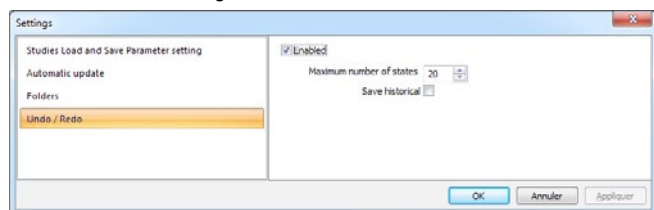
- Authorise (or not) searching and downloading of program updates.
- Search for available **updates**.



- Choose the location for saving and exporting studies.



- Activate and configure the Undo/Redo functions.



D Quick Access toolbar

Located to the right of the start button, this gives you instant access to all the functions you have chosen. To select them:

- Select or deselect the functions listed in the dropdown menu:



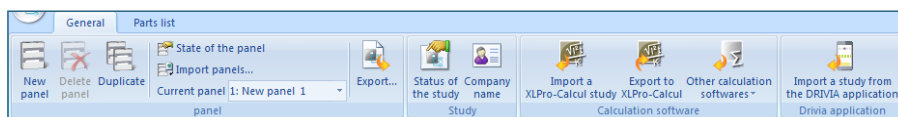
- Or right-click on one of the icons in the ribbon bars (see page 05) then on **Add to the quick access toolbar**.

THE XL PRO³ INTERFACE

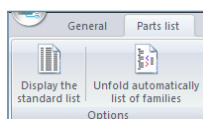
E Ribbon bars

These are horizontal toolbars in which the contents are divided into tabs. Each tab corresponds to a family of functions/actions. Apart from the **General** tab, the tabs available in the interface's ribbon bar vary according to which module you are in.

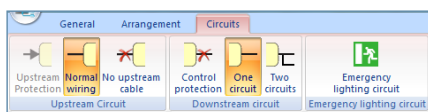
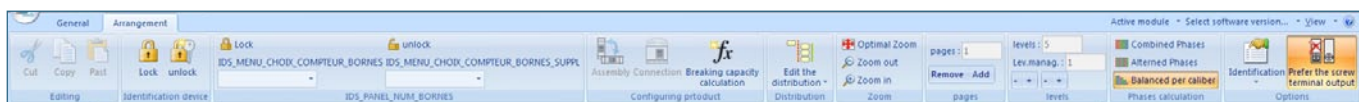
■ **General tab** (accessible from all modules) - see page 13



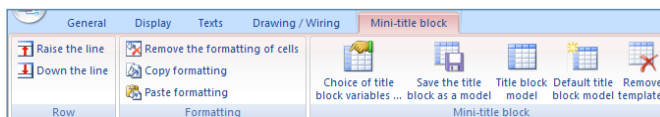
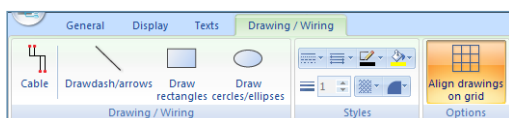
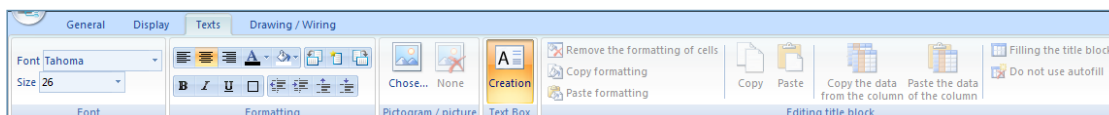
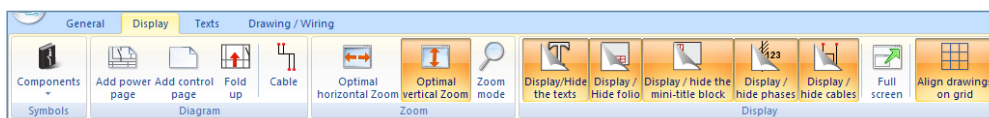
■ **Parts list module tab** - see page 16



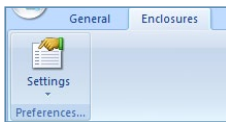
■ **Arrangement module tabs** - see page 29



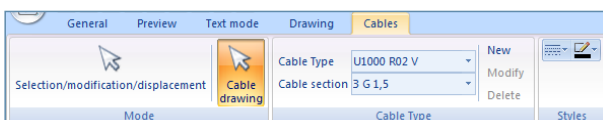
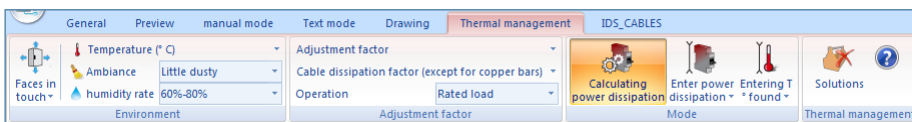
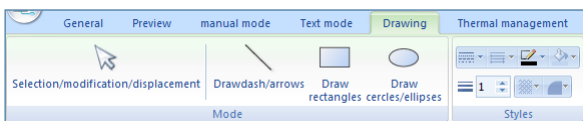
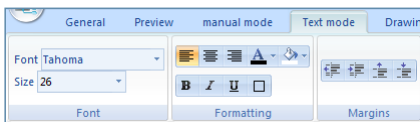
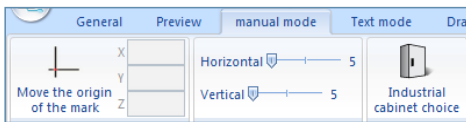
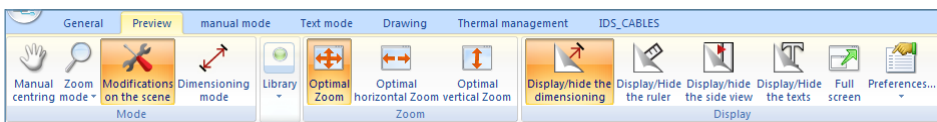
■ **Circuit diagram module tabs** - see page 45



■ Enclosures module tab - see page 48



■ Preview module tabs - see page 58

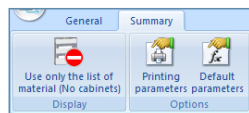


THE XL PRO³ INTERFACE

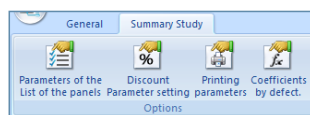
■ Labels module tab - see page 90



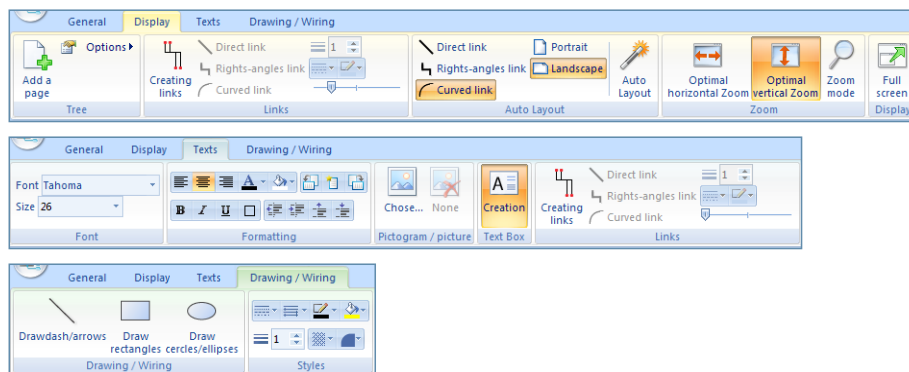
■ Summary module tab - see page 93



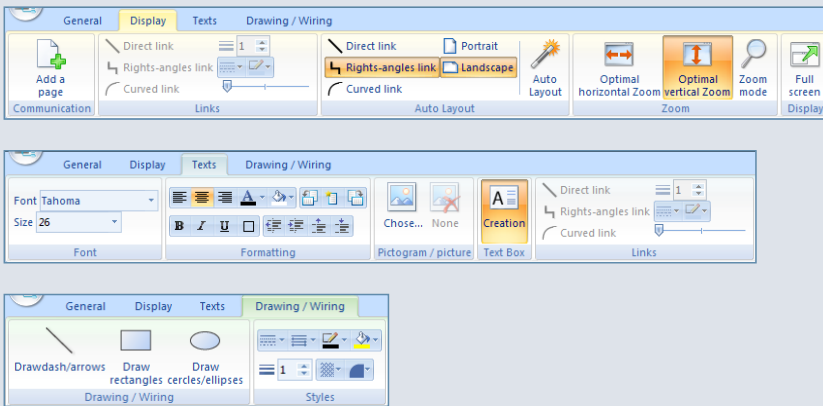
■ Summary Study module tab - see page 98



■ Tree module tabs - see page 102



■ New Folder Management start menu tab - see page 113



THE XL PRO³ INTERFACE

F Palettes


1. Study properties palette

Properties	Value
Study	
Name:	
Contract number:	
Creation date:	16/12/2014 16:14:03
Participant (+)	
Participant 1	
Beneficiary	
Beneficiary logotype	...
Study panels	
Current panel	1: New panel 1
panel (+)	
New panel	
Name:	New panel 1
Author:	
Expected ICS	6kA



The selection of the ICS (Isc) is important as it determines the choice of protection devices and helps calculate the number of busbar supports, and whether or not to incorporate a door. Select the prospective Isc (Expected ICS) of the panel in the dropdown menu which appears by clicking on this category.



The  icons enable you to automatically hide the **Study properties** and **Current panel properties** windows which appear in the form of vertical tabs. Click on these tabs to make them reappear. Click on the work area to close them.

- The **Study properties** window is displayed automatically on the right-hand side of your work area, enabling you to enter information about the study and the panels it contains:
- The **study name** will be allocated when you first save the study.
- You can perform the following for the study:
 - Allocate a **Contract number**
 - Choose the **Creation date**
 - Specify the various **Participants**. You can add more participants by clicking on (+)
 - Specify the **Beneficiary**
 - Import the **Beneficiary logo** by clicking on ...
- In the **Study panels** part you can add **New panels** by clicking on (+) and perform the following for each panel:
 - Choose a **Name**
 - Specify the **Author**
 - Specify the **Expected ICS**

2. Current panel properties palette

Properties	Value
Panel	
Name:	New panel 1
Modification date:	16/12/2014 16:14:04
Author:	
Quantity :	1
Expected ICS	6kA
IS	111
Forms	1
"Without panel" mode	No
Revision index	
Revision index A	
Revision index B	
Revision index C	
Revision index D	
Revision index E	
Revision index F	
Number of plan	

Expected ICS
ICS of the panel

■ The **Current panel properties** window is displayed automatically on the right-hand side of your work area, enabling you to enter information about the current panel:

- The **Panel name**
- Its **Modification date**
- The name of its **Author**
- The **Quantity**
- Its **Expected ICS** (presumed Isc). This information is important and you will be asked for it when creating all new panels. The Expected ICS dropdown menu will open automatically.
- Its **Revision indexes**
- A **Number of plan**
- tool see tip on page 08
- Depending on the version of XL PRO you are using, you will be able to create tables without enclosure in **Without enclosure** mode.

3. History palette

Historical

- Panel 4 - Opening an old study**
- Panel 4 - Remove product(s)**
D13
- Panel 4 - Modify product**
D8
- Panel 4 - Move product(s)**
D4
- Panel 4 - Definition**
Cabinets Drivia cabinets 40(7)
- Panel 4 - Definition**
Technical trunking Drivia mounting trunking 40(7)
- Panel 4 - Add a door**
- Panel 4 - Definition**
Cabinets Drivia cabinets 40(7)
- Panel 4 - Definition**
Technical trunking Drivia mounting trunking 40(7)
- Panel 4 - Definition**
Technical trunking Drivia mounting trunking 40(7)
- Panel 4 - Definition**
Cabinets Drivia cabinets 40(7)
- Panel 4 - Changing picture of an thumbnail**

■ This displays your actions in chronological order and enables you to take steps backward and undo them.

■ This tool complements the icon present in the **Quick Access** menu bar, which en-ables you to undo your last action.

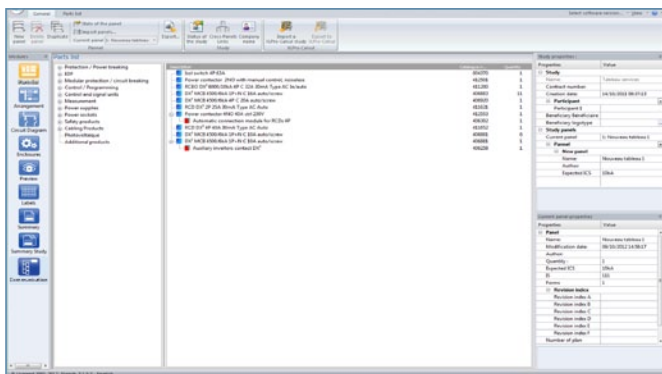
THE XL PRO³ INTERFACE

G Work area

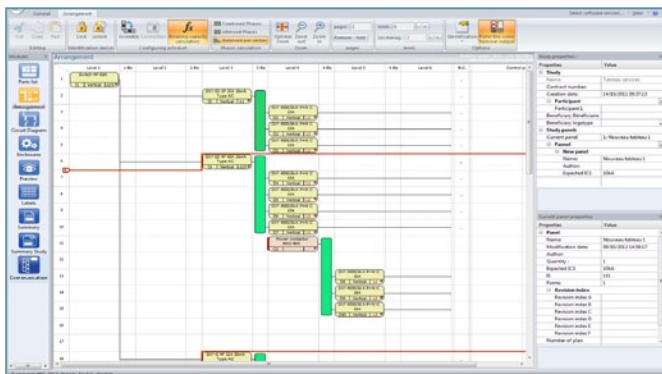
As with the ribbon bar (see page 05), the work area changes according to which module you are in.

To make your work area larger you can hide the **Study properties** and **Current panel properties** palettes (see tip on page 10)

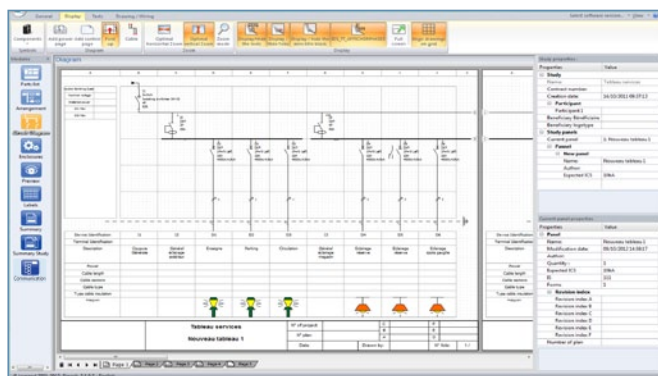
■ Parts list module work area - see page 18



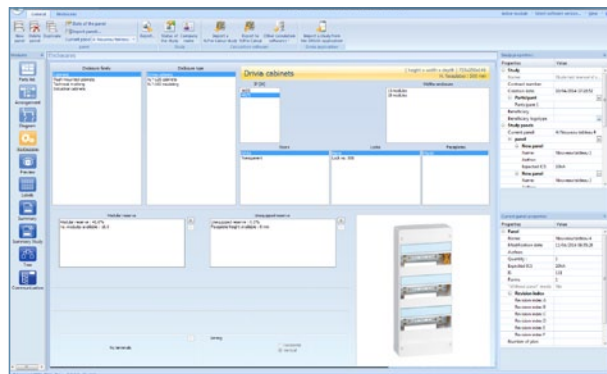
■ Arrangement module work area - see page 30



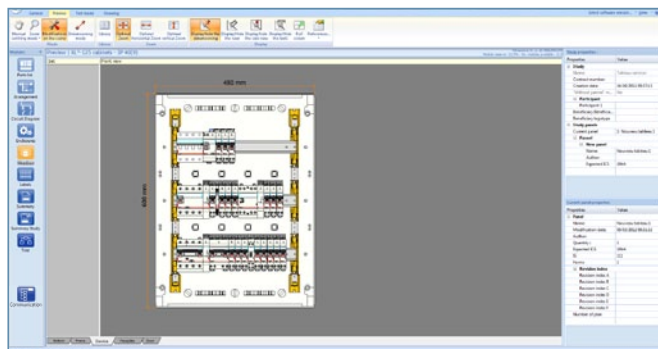
■ Circuit diagram module work area - see page 40



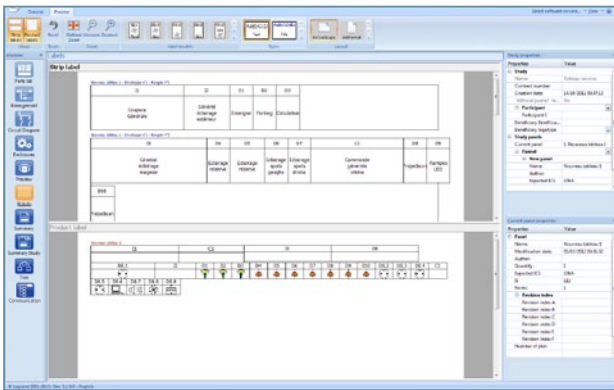
■ Enclosures module work area - see page 50



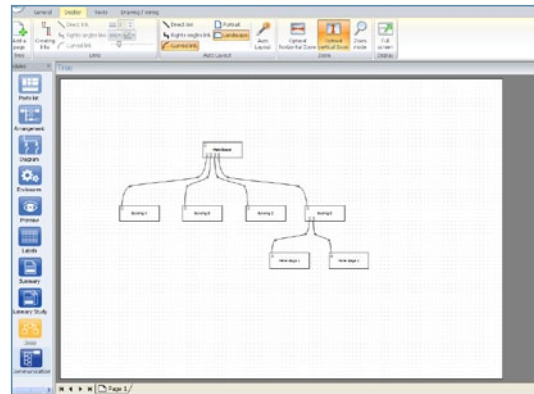
■ Preview module work area - see page 52



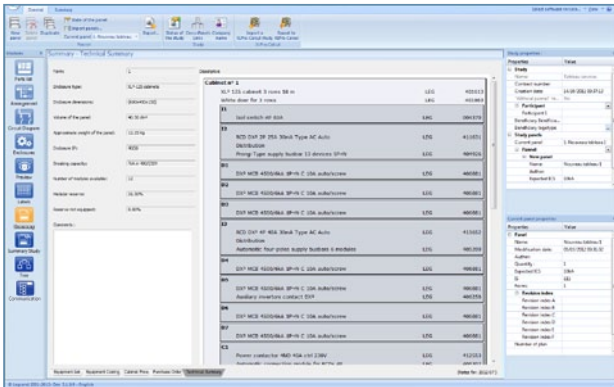
■ Labels module work area - see page 90



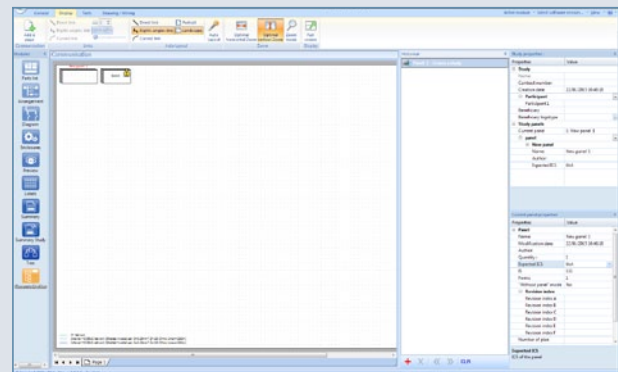
■ Tree module work area - see page 102



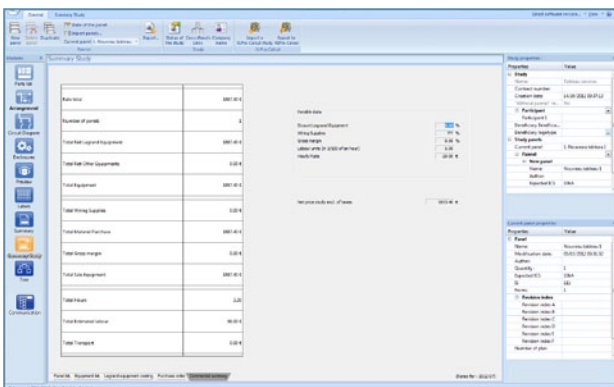
■ Summary module work area - see page 93



■ Communication module workspace (depending on program version) - see page 113



■ Summary Study module work area - see page 98



THE XL PRO³ INTERFACE

Module bar


- This gives the logical progression of the steps, displayed in the form of icons, for creating your study and your panels.
- However, you can choose to go back to a previous step or jump one or more steps at any time, as necessary.
- Each module provides access to:
 - Specific functions which appear in the ribbon bar (see page 06)
 - A specific work area (see page 12)

Dialogue boxes may also appear, making it easier for you to confirm the current step.

- Each module will be described in detail in this document, in the order in which they appear.



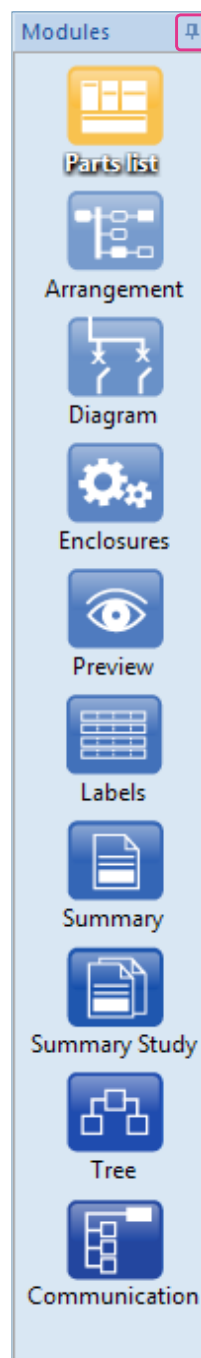
Hide/show the module bar.

The  icon enables you to automatically hide the module bar which appears in the form of a vertical tab. Click on this tab to make it reappear. Click on the work area to close it.

Hide/show module icons.

Right-clicking the icon of the module you wish to hide brings up a selection window. Click on **Hide** to temporarily hide the selected icon.

Right clicking in the module bar opens the same window. Click on **Show all modules** to show the icons of all the modules.



PARTS LIST MODULE:

selection of the products used in the panel

ARRANGEMENT MODULE:

electrical organisation of the panel

CIRCUIT DIAGRAM MODULE:

panel circuit diagram

ENCLOSURES MODULE:

choice of the enclosure to house the panel's products

PREVIEW MODULE:

display and modification of the layout

LABELS MODULE:

page layout of the panel's labels

SUMMARY MODULE:

summary, costing and purchase order for the current panel

SUMMARY STUDY MODULE:

grouping together and management of all the panels in the study

TREE MODULE:

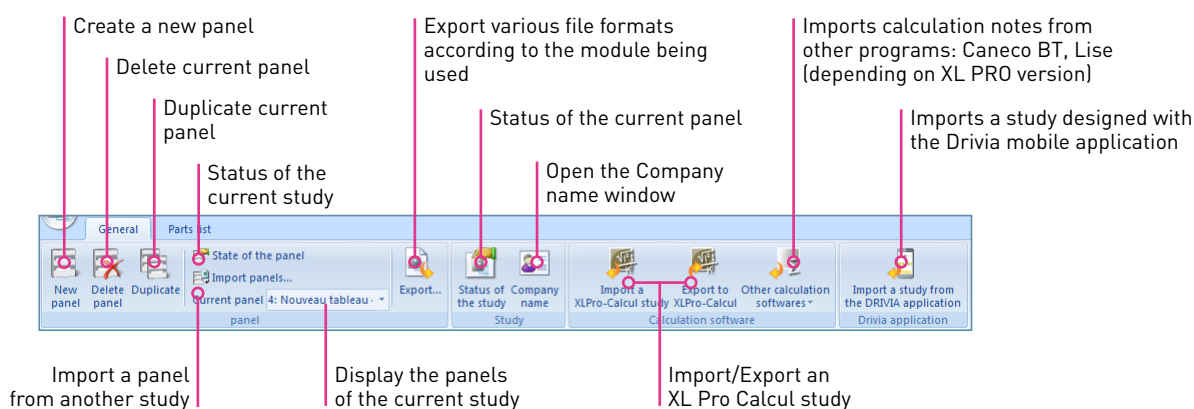
management of the tree structure between several panels

COMMUNICATION MODULE:

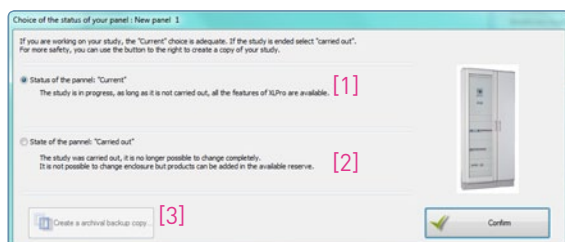
(depending on program version)
Management of communication between more than one table, switches, etc.

GENERAL TAB

This tab in the ribbon bar is accessible in all modules. It contains all the cross-module functions that you may need at any time, and which are therefore present at each step of your study.



- **New:** opens the **Current panel properties** window to create a new panel in the current study.
- **Delete:** deletes the current panel. This option is only active if the study includes more than one panel.
- **Duplicate current panel:** automatically creates a new panel identical to the current panel. The default name of this new panel is “copy of” followed by the name of the current panel. To rename it, select the **Current panel properties** option in the same menu.
- **State of the panel:** specifies whether the creation of the panel is **Current** [1] or has already been **Carried out** [2].



Select the status of your study:
It is strongly recommended that you make a backup copy of your panel before selecting **Carried out**, by clicking on the button [3].

When you open a study that was created with an earlier version of the software, you will be asked whether your study is still current, in order to authorise its modification and offer updating of certain products

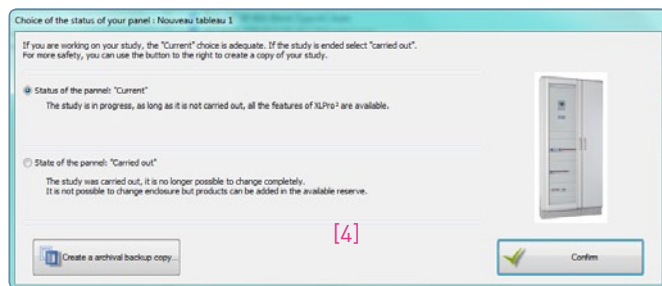
By default panels are always selected as being **Current**, which enables them to be modified and their parts lists to be updated automatically by XL PRO³ according to available new products.

Select **Carried out** if you want to fix the main product characteristics and catalogue numbers in your panel, in particular the enclosure.

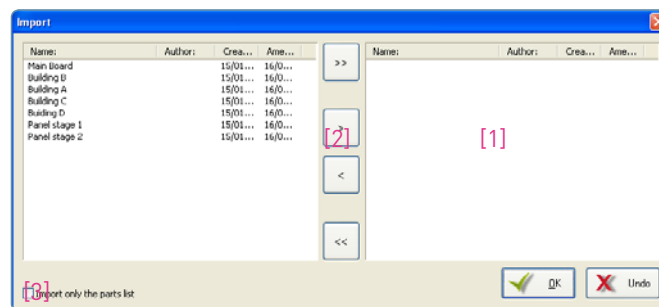
GENERAL TAB

When the status of your study is **Carried out**, a new button appears: **Create a "Current" copy of your study** [4].

It enables you to save a copy of your study for which the status is **Current**, and therefore modifiable.

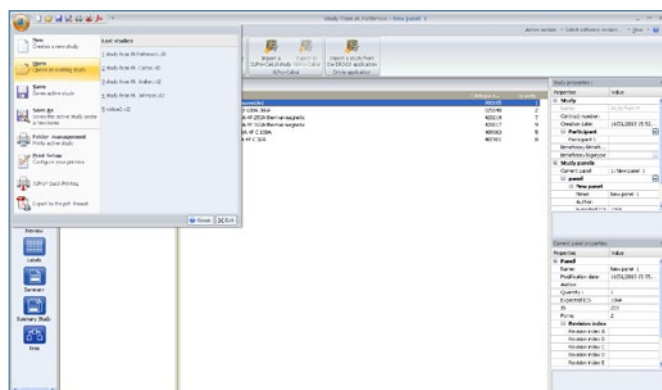


The Import window is then used to select, in that study, the panel(s) to be imported. The panels you want to import must be transferred to the right-hand side of the window [1] using the buttons [2]. You can choose to import only the parts list of a panel by selecting the box [3].



! You must redefine the enclosure of your **Current copy** before regenerating the Preview.

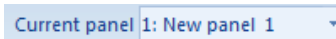
■ Import panels: adds one or more panels from another study to the current study. The **Open** window is used to select the study containing the panel(s) to be imported.



The **>>** button transfers all the panels, the **<** button transfers the selected panel only. If you make a mistake, the panels can be transferred back to the left-hand side using the **<<** or **<** buttons. You can also transfer a panel from one side to the other by double-clicking on the relevant line.

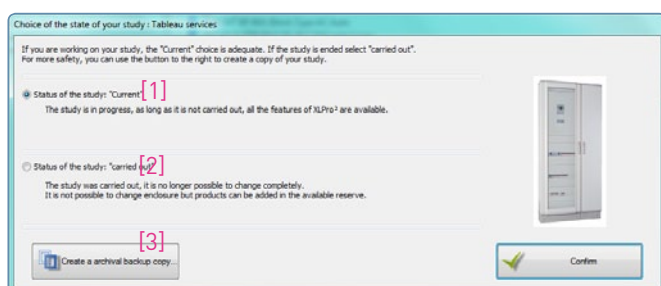
Clicking on the **Import** button imports the selected panels, which are then added to the content of the current study.

■ Current panel gives direct access to all the panels in the current study. The current panel appears in the selection window.

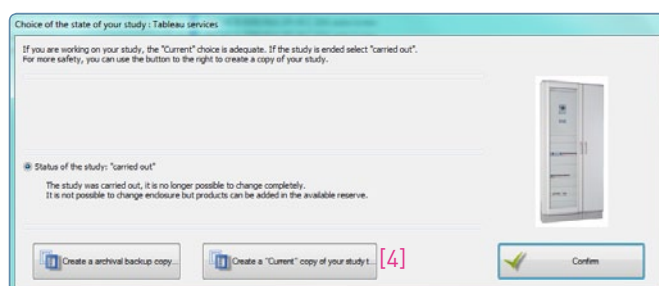


■ Export: exports the circuit diagram, the preview and the summaries in various file formats (see the modules concerned).

■ **Status of the study:** specifies whether the creation of the study is **Current** [1] or has already been **Carried out** [2]



When the status of your panel is **Carried out**, a new button appears: **Create a Current copy of your study** [4].



When you open a study that was created with an earlier version of the software, you will be asked whether your study is still current, in order to authorise its modification and offer updating of certain products.

By default the study is always selected as being **Current**, which enables the software to automatically update the parts lists of the various panels in the study according to available new products.

Select **Carried out** if you want to fix the main product characteristics and catalogue numbers in your study, in particular the enclosures.



It is strongly recommended that you make a backup copy of your panel before selecting **Carried out**, by clicking on the button [3].

It enables you to save a copy of your panel for which the status is **Current**, and therefore modifiable.



You must redefine the enclosure of your **Current copy** before regenerating the Preview.

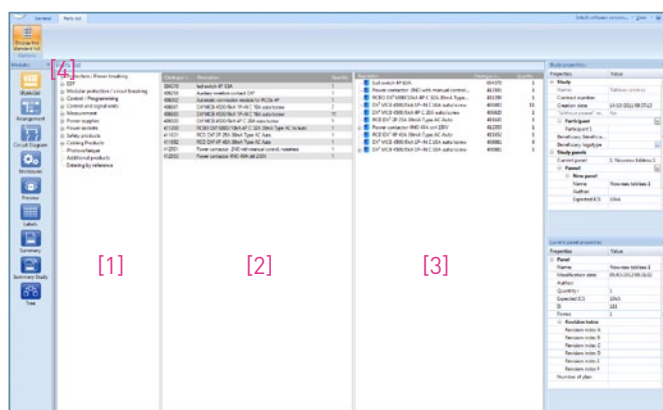
- **Company name:** to change your company's details.
- **Import an XL PRO Calcul study:** to import a study created with XL PRO Calcul.
- **Export to XL PRO Calcul:** to export a study created with XL PRO.

PARTS LIST MODULE

The parts list module is used to add the products that make up the panel, by selecting their characteristics.

A Introduction

■ The **Parts list** module window has 3 panes.



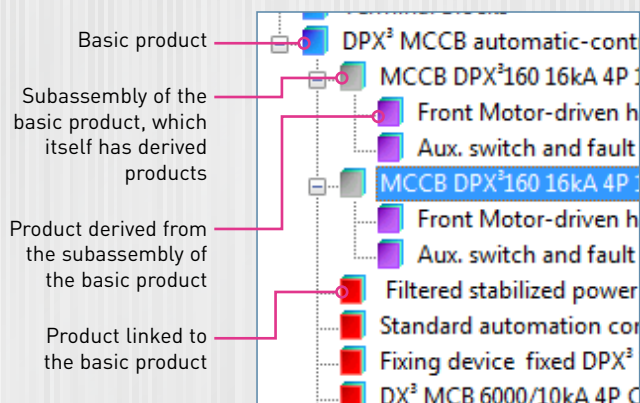
- **Pane [1]** shows all the products which may be used when designing a distribution panel. They are classified by family and subfamily. To display the content of a family, click on the sign to its left. To hide it, click on the sign.
- **Pane [2]**, or the **Standard list**, displays all the products in the panel as they are selected, in catalogue number order. It is shown by clicking on the corresponding button [4] in the **Parts list** tab in the ribbon bar.
- **Pane [3]** displays the same products arranged in the order in which they were entered, grouping the associated products under the main product. To display the secondary products, click on the sign to the left of the main product. This list is described as active as it can be used to make modifications.

The standard list can be hidden by deselecting the corresponding option in the **Parts list** menu in the menu bar.

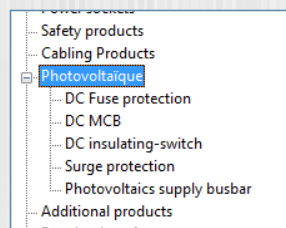
You can then work more easily in the active list (descriptions are not shortened).



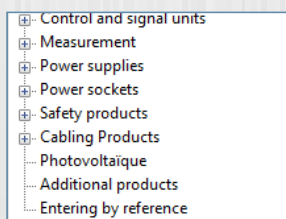
The colour helps to identify the products



If you select a photovoltaic product, only those products that are compatible with this family will then be accessible. The sign disappears for the other products:



Conversely, if you select other types of product, the photovoltaic family will not be available for your current panel:



B Selecting products

1. Characteristics selection windows

■ Selecting a subfamily in the first pane will open a window for selecting the characteristics and options for this type of product and its accessories. This window is different for each subfamily. However the list of catalogue numbers corresponding to the characteristics and options selected is always shown in the bottom left-hand corner. The and buttons are used to adjust the quantity of products with identical characteristics and options that you want to add to the design of the panel.

■ Click on **Add** to confirm, then on **Close** to change the product type.

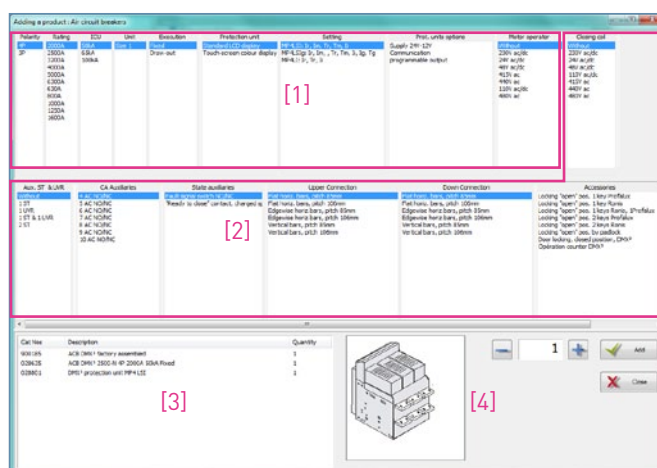
2. Examples of selecting products

A. SELECTING AN MCCB

■ In the first pane of the **Parts list** window, open the **Protection/Power breaking** family. MCCBs are spread across several subfamilies: **Air circuit breakers**, **Moulded case circuit breakers**, **Supply inverters** corresponding respectively to the DMX³ and DPX³ ranges, mounted on their own or in supply inverters. Supply inverters are covered in greater detail on page 23.

■ The method described here for an air circuit breaker also applies for moulded case circuit breakers, although the characteristics selection window is not totally identical.

■ Select the **Air circuit breakers** subfamily.



■ The characteristics selection window is divided into several parts. The first columns [1] concern the circuit breaker itself.

■ The next columns [2] concern the selection of the **Control type**, the Auxiliaries, the Connection method, the Accessories and, in certain cases, factory assembly.

■ The summary [3] displays the **Catalogue number** of the main product and all the catalogue numbers of the associated products you have selected.

■ The drawing area [4] shows a preview of the product being selected when this is necessary.

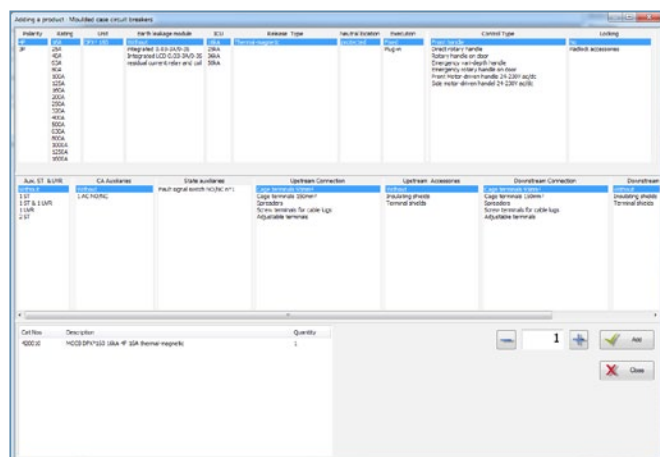
PARTS LIST MODULE

■ The various options must be selected in the order in which they appear (from left to right and top to bottom). You must therefore start by choosing the number of poles in the MCB, its rating, then the type of unit, the breaking capacity, type of release required and so on until you reach the accessories.

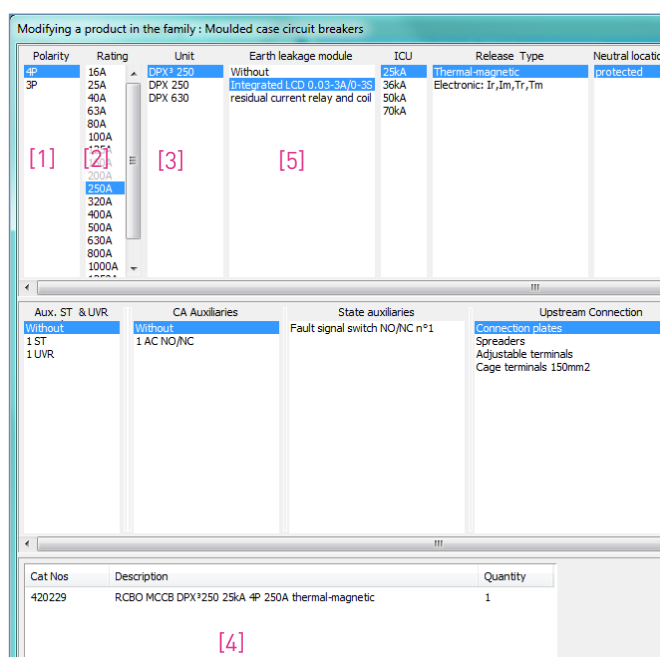
■ The options given in each column vary according to the choices made in the preceding columns. They are an exact reflection of the Legrand offer.

> Selecting a main device for a 250 A panel

■ The first option at the top of each column is selected by default. The device shown in the list of catalogue numbers is a **DPX³ 160, 4P, 16A**.



- In the **Polarity** column leave the option **4P** [1]
- In the **Rating** column select **250 A** [2]
- Select the **Unit: DPX³ 250** in the corresponding column [3]. The catalogue number is updated and becomes **4 202 19** [4]
- In the next 6 columns leave the basic default options unchanged



> Adding an earth leakage module

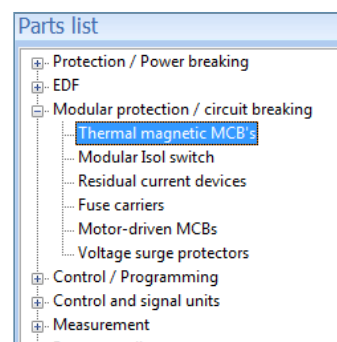
- To select an **Earth leakage module** click on **Integrated** in the appropriate column [5]
- The catalogue number is updated and becomes **4 202 29** in area [4]

■ Click on **Add** to confirm, then on **Close** to change the product type.

B. SELECTING MODULAR CIRCUIT BREAKERS

■ Open the **Modular protection/circuit breaking** family and select the **Thermal magnetic MCBs** subfamily.

■ The polarity and rating characteristics are selected first.

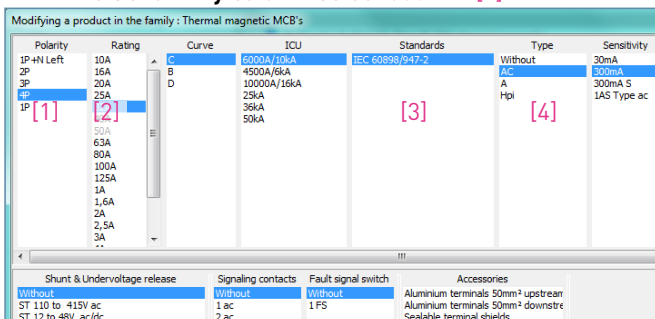


> Selecting an RCBO for a cluster of lighting circuits

- In the **Polarity** column select **4P** [1]
- In the **Rating** column select **32 A** [2]

The most frequently used ratings appear at the top of the list in ascending order. The least used ratings are at the bottom of the list.

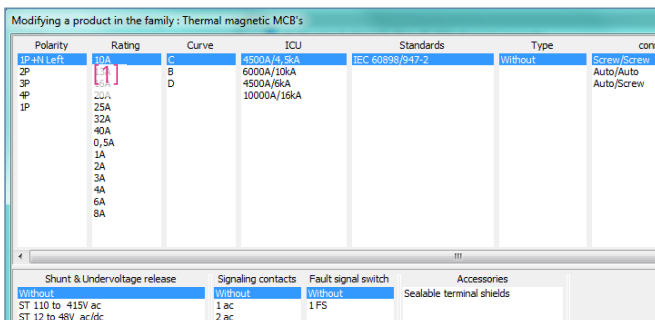
- In the **Type** column select **AC** [3]
- In the **Sensitivity** column select **300 mA** [4]



- Leave the quantity at 1, then click on **Add**

> Selecting phase + neutral MCBs for lighting circuits

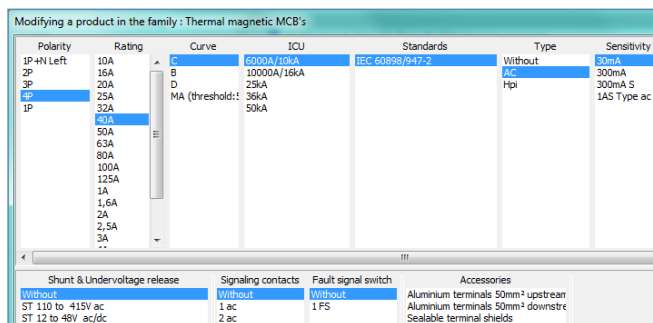
- In the **Rating** column select **10 A** [1]
- Leave all the other options at their default values



- Leave the quantity at 3, then click on **Add**

> Selecting an RCBO for power socket circuits

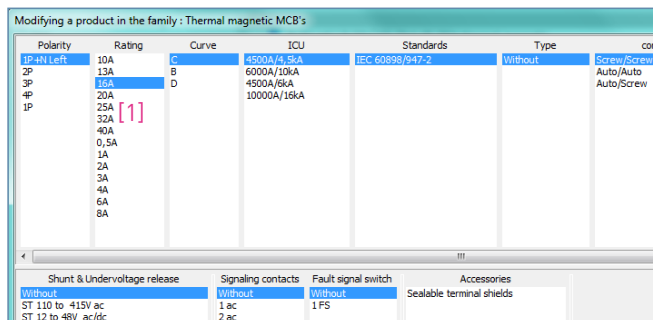
- Select **1 4P, 40 A, AC, 30 mA** RCBO, as shown below:



- Leave the quantity at 1, then click on **Add**

> Selecting phase+neutral MCBs for power socket circuits

- In the **Rating** column select **16 A** [1]
- Leave all the other options at their default values



- Adjust the quantity to 5, click **Add**, then on **Close**

■ All the products added are shown in the parts list together with their selected quantities.

Description	Catalogue	Quantity
RCBO MCCB DPV250 25kA 4P 250A thermal-magnetic	420229	1
RCBO DVX 6000/10kA 4P C 32A 300mA Type AC	411208	1
DNX MCCB 4500/4,5kA 1P+N C 10A	406773	3
RCBO DVX 6000/10kA 4P C 40A 30mA Type AC	411190	1
DNX MCCB 4500/4,5kA 1P+N C 16A	406774	5
MCCB DPV250 25kA 4P 250A thermal-magnetic	420219	1

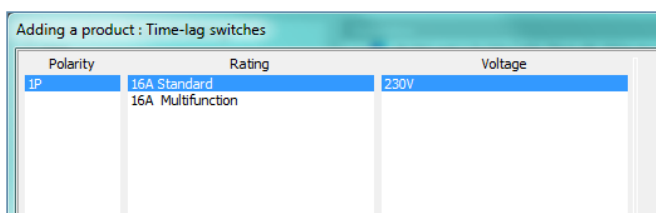
PARTS LIST MODULE

3. Selecting control and programming devices

- The products in the **Control/Programming** family are used to control and automate the functions of the installation.

A. SELECTING A TIMER

- In the **Control/Programming** family select **Time-lag switches**
- Leave all the default options unchanged

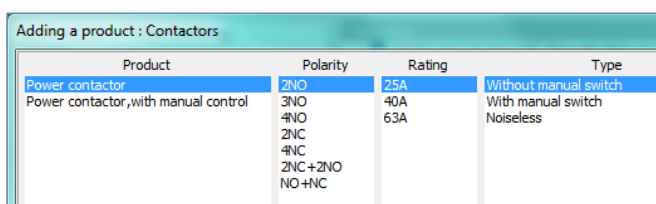


- Click on **Add**, then on **Close**

B. SELECTING CONTACTORS

To automate 2 circuits for external lighting:

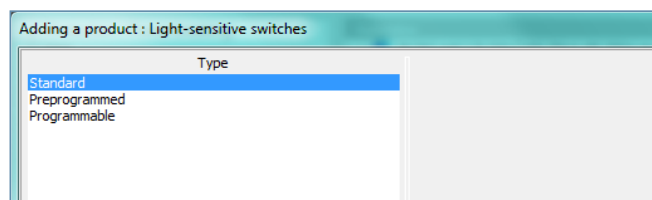
- In the **Control/Programming** family select **Contactors**



- Leave all the default options unchanged
- Increase the quantity to **2** then click on **Add**, and then on **Close**

C. SELECTING A LIGHT SENSITIVE SWITCH

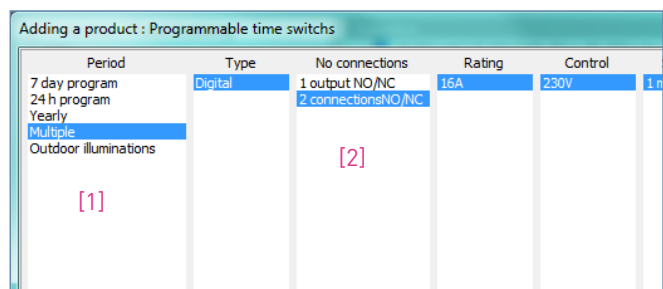
- In the **Control/Programming** family select **Light-sensitive switches**
- Leave all the default options unchanged



- Click on **Add**, then on **Close**

D. SELECTING A DIGITAL TIME SWITCH

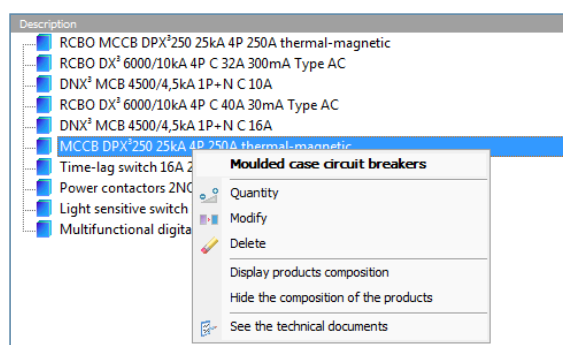
- In the **Control/Programming** family select **Programming/time switches**
- In the **Period** column select **Multiple** [1]
- In the **No. of connections** column select **2 connections NO/NC** [2]



- Leave the other default options unchanged
- Click on **Add**, then on **Close**

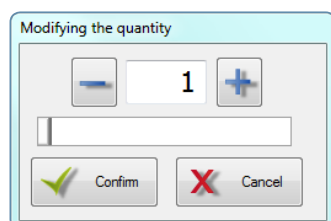
C Modifications

- The active list is used to make corrections to the parts list. If the names of the products are truncated, you can hide the standard list to free up more space on the screen (see page 16).
- Right-click on the product to be modified, then select the required operation from the popup menu.



1. Modifying the quantity

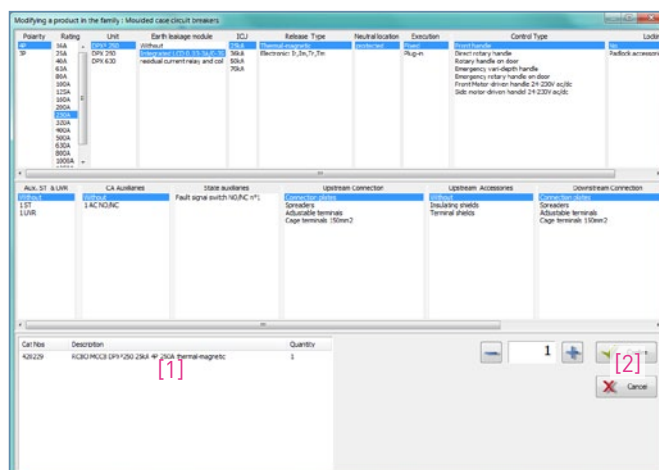
- To modify the quantity of identical products, select **Quantity**, then use the and buttons to set the new quantity required. The cursor or keyboard (direction arrows) can also be used.



- Adding 2 additional MCBs for lighting circuits
 - **DNX C 1P+N 10A MCB** in the active list
 - **Quantity** in the popup menu
 - Change the quantity to **5**
 - Click on the **Confirm** button
- The new quantity immediately appears in the last column in the list. Modifying the quantity

2. Modifying the characteristics and options of a device

- To modify the characteristics and options of a device, select **Modify** in the popup menu. The modifications are made in a window identical to the Adding a product window.
- The list of catalogue numbers [1] reflects the changes made. The **Add** button is replaced by the **Confirm** button [2].





You can make as many modifications as you want, but, as is the case when adding a product, the subsequent columns may be reinitialised if the options that were previously chosen are no longer compatible with the modifications.

Check your data carefully before confirming.


The "Quantity" field can be used to adjust the number of products to be modified. Thus, if the parts list of your panel contains several identical products, it is possible to change only some of them by adjusting the quantity required before confirming the operation. By default, the quantity is set to the total number of products.

PARTS LIST MODULE

- Adding an auxiliary to a DPX MCB
To install an emergency breaking device for the entire panel, the main device must be equipped with a release.
 - Right-click on the line **MCCB DPX³250 25kA 4P** in the active list
 - Select **Modify** in the popup menu
 - In the **Aux. ST & UVR** column select **1 ST** coil. Then in the **Aux. ST no.1** column select **200-277 ac/dc**
 - Click on the **Confirm** button 
- If you return to the list of products in the **Parts list** module and click on the  to the left of the MCCB you can see that the release has been added.

Description	Reference no.	Quantity
RCBO MCCB DPX ³ 250 25kA 4P 250A thermal-magnetic	420229	1
Shunt release MCCB DPX ³ coil voltage 200-277 Vac/dc	421016	1
RCBO DX ³ 6000/100A 4P C 32A 300mA Type AC	411208	1
DNX ³ MCB 4500/4.5kA 1P+N C 10A	406773	5
RCBO DX ³ 8000/100A 4P C 40A 30mA Type AC	411390	1
DNX ³ MCB 4300/4.5kA 1P+N C 16A	406774	5
MCCB DPX ³ 250 25kA 4P 250A thermal-magnetic	420219	1
Time-lag switch 16A 230V	412602	1
Power contactors 2NO-2SA/230V coil	412523	2
Light sensitive switch 1 function	412623	1
Multifunctional digital timer 2X16A	412641	1



3. Deletion

- To delete one or more products, select **Delete** from the popup menu.
In the window which appears, adjust the number of products that you want to remove, then click on the  **Delete** button.

Quantity to be deleted

-

+

 Delete
 Cancel



It is not possible to delete an associated product or an accessory directly as this operation would delete the main product. The latter forms a whole together with its associated products. The Modify option must be used to perform this type of operation.

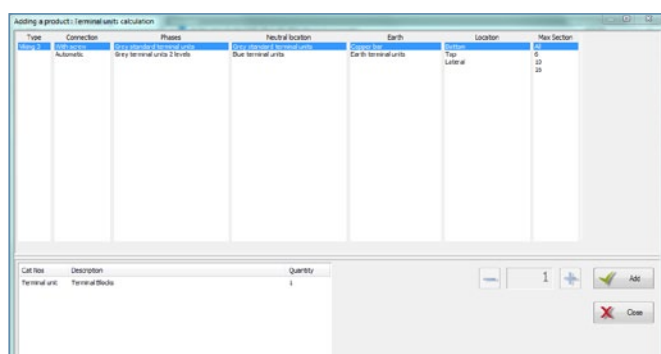


Remember to configure **Automatic backup** or remember to save regularly (see page 03)

D Selecting special products

1. Selecting terminals

Select **Terminal units calculation** in the **Cabling Products** family.



The terminals will be calculated automatically when the enclosure is chosen.

2. Selecting supply inverters (depending on the XL PRO version)

XL PRO³ can be used to create supply inverters with:

- Air circuit breakers and switches
- Moulded case circuit breakers and switches

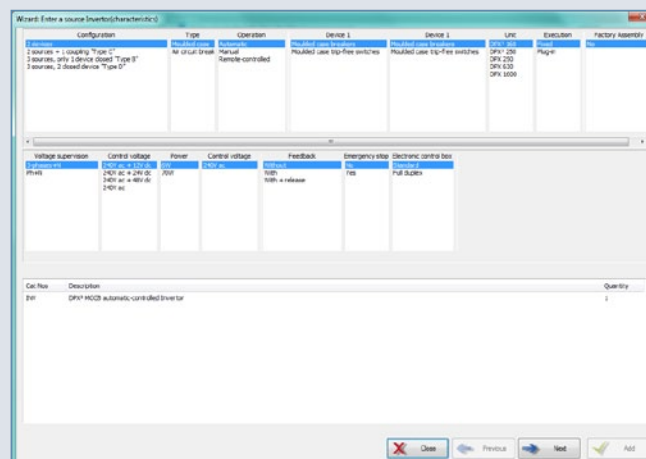
A supply inverter is added from the Parts list module, via the Protection/Power breaking family.

A. AIR SUPPLY INVERTERS

> Step 1: Configuration of the supply inverter

■ The first step is used to define the general characteristics of the supply inverter:

- Required supply inverter **Configuration**: by default 2 devices
- **Type**: Air
- **Operation**: automatic, manual or remote controlled
- **Normal device/Protected device**: the type of device for a normal circuit and for a protected circuit: circuit breaker or switch



■ Additional characteristics are available for automatic operation.

- **Voltage supervision**: by default this is measured on the normal circuit and the protected circuit in Ph/Ph



When you select Ph/N voltage supervision, you reduce the number of protection devices on the control circuit but the voltage displayed on the electronic control box is in Ph/N.

PARTS LIST MODULE

- **Control voltage**
- **Power of the protected supply**
- **Control voltage:** by default 240 V-



Each characteristic that is selected adds products to the list of catalogue numbers.

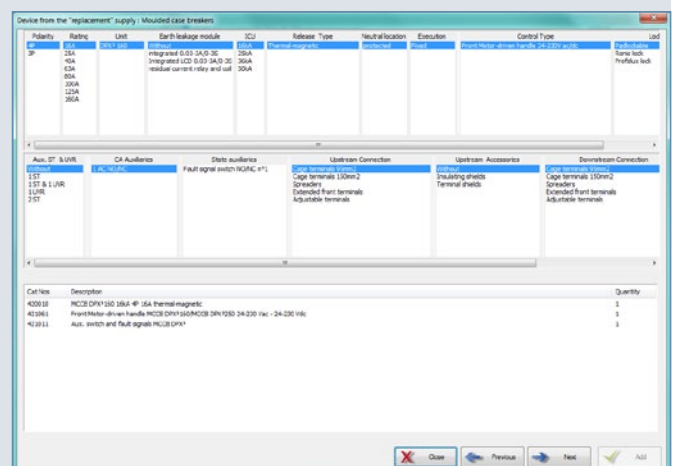
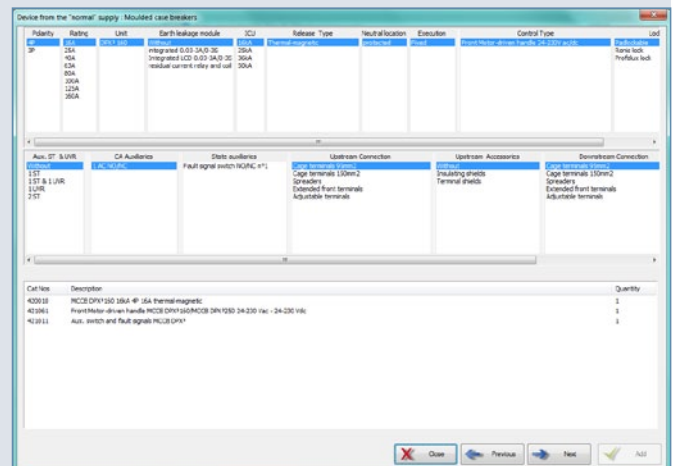
■ Various options are also possible, such as:

- **Emergency stop**, by default deselected
- **Feedback**: used to retrieve the status of the circuit breakers which make up the inverter

When all the options have been selected, click on the **Next** button.

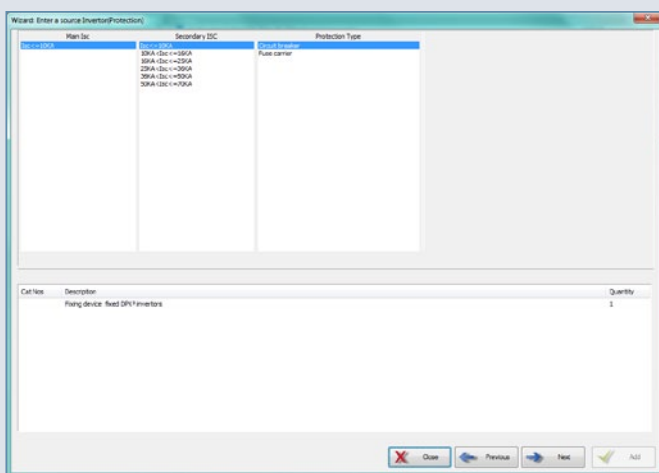
> Steps 2 and 3: "Normal" and "protected" devices

- These windows are used to select the characteristics of the devices themselves. The procedure is the same as for selecting an MCCB on its own, except that some options are forced according to the type of inverter defined in the previous step. To return to this selection, click on **Previous**.
- The list displays the catalogue number of the selected device and any associated auxiliaries and accessories, some of which are automatically required to control the inverter. To continue, click on **Next**.



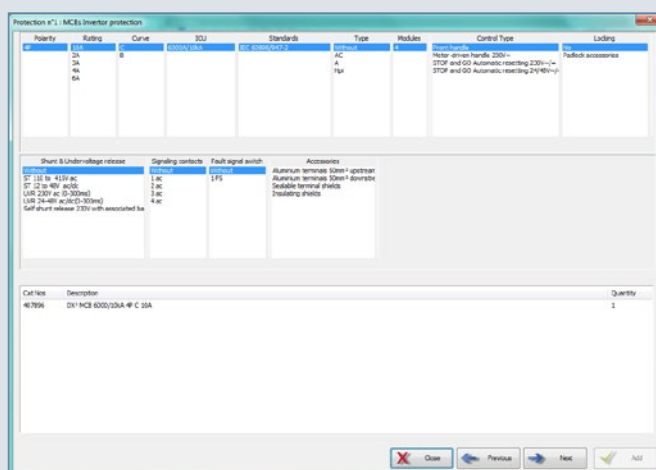
> Step 4: Protection devices (automatic inverters only)

- This window is used to determine the type of protection required for the control circuit of the inverter, and the prospective Isc for the protected power supply.
- The Isc of the normal power supply is that which you indicated for the panel (see page 09). The devices needed to protect the control devices are added to the list automatically.
- To continue, click on **Next**.

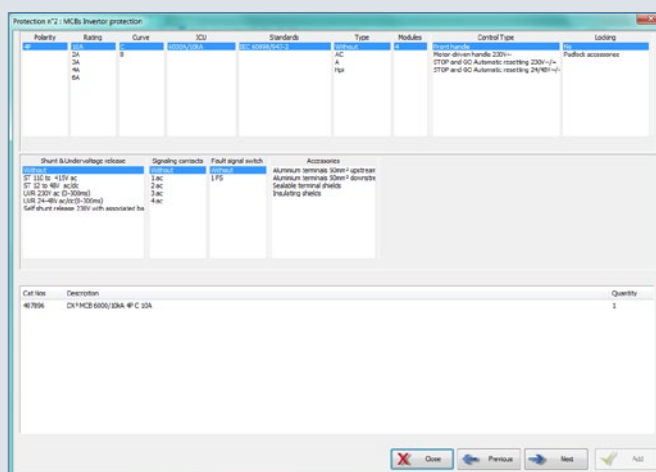


> Step 5: Choice of the protection devices for control circuits nos. 1 and 2

- These 2 windows which appear one after the other enable you to select the characteristics of your protection devices 1 and 2. To continue, click on **Next**.



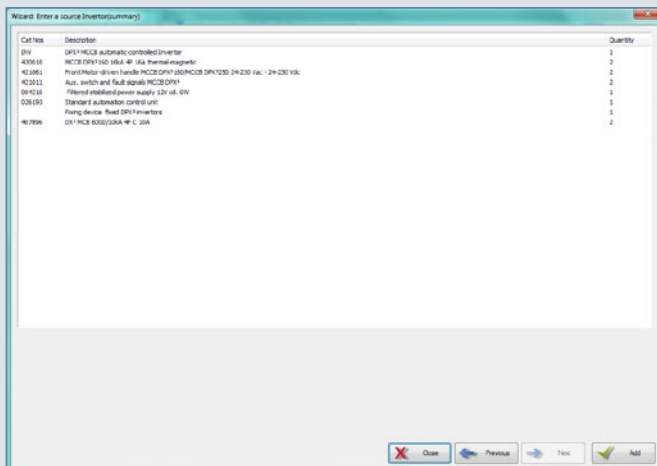
- Repeat the procedure for the second protection device then click on **Next**.



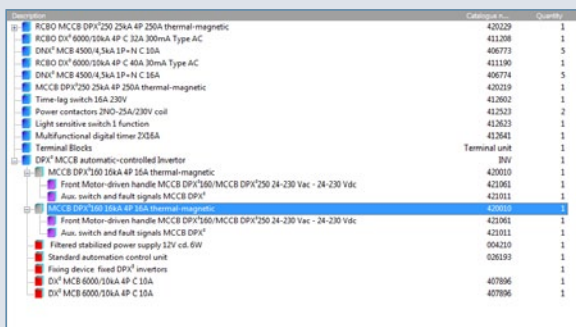
PARTS LIST MODULE

> Step 6: Summary

- This window displays the complete list of catalogue numbers for the supply inverter and its control circuit.
- If the panel has several identical inverters, adjust the quantity, then click on **Add**.



- In the active list in the **Parts list** module, all the connected products are grouped together under the catalogue number corresponding to the inverter.
- This part number includes the locking plate, the complete circuit breakers with any connection accessories and their auxiliaries, and for automatic inverters, motor-driven controls and the electronic control box.
- Other products for control of the inverter and for additional functions must be ordered separately.



B. MOULDED CASE SUPPLY INVERTERS

- Moulded case inverters are selected using the same principle as that for supply inverters.



Each case has a corresponding execution type.

When motorised operation is selected, unlike air MCBs, the motorisation will change the mounting in the enclosures.

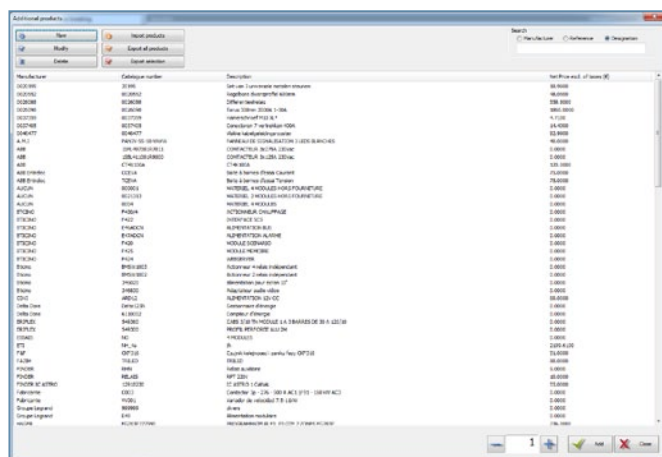
- > Step 1: Characteristics
- > Step 2: Normal device
- > Step 3: Protected device
- > Step 4: Protection (automatic inverter only)
- > Step 5: Summary

3. Selecting additional products

The **Additional products** family is used to add other manufacturers' products to the panel. The list of additional products is initially empty. Before a product can be added to the panel, it must first be created by describing a number of its characteristics. It can then be used in all future studies. You therefore build a personal library of products, which is automatically saved and always available, even after XL PRO³ has been updated.

A. CREATING AN ADDITIONAL PRODUCT

Select **Additional products** in the list of product families.



In the window which appears, click on the **New** button then fill in the various fields in the dialogue box.

The text entered in the **Description** field will be used in the **Parts list** module.

The **Short description** and **Abbreviated description** fields will be used in the **Arrangement** and **Circuit diagram** modules respectively.

Specify whether it is a power or management product. This information affects the automatic arrangement (see page 28).

It is essential to specify the number of modules for modular products, or the dimensions for other products, in order to define the enclosures correctly.

For non-modular devices, indicate the type of mounting: **Plate**, **Flush-mounted**, **Already planned**. If the **Already planned** option is selected, no additional fixing device will be added to the Parts list.

Information on estimated labour and the net price ex. tax is used by the **Summary** module (see page 91).

Type of identification (modify using the list of ID letters).

Symbols. One or more symbols corresponding to the additional product can be selected. The arrows are used to organise the order of the symbols. By default, additional products are represented in the diagram by a simple rectangle. It can be replaced by one of the symbols from the library by clicking on . This library will be enhanced in future upgrades.

B. ADDING AN ADDITIONAL PRODUCT

Select the product from the list of additional products, then adjust the quantity required and click on **Add**.

The product is automatically integrated into the circuit diagram of the panel.

In the **Preview** module, the product represented by a geometric shape (square or rectangle) keeps to the dimensions that have been assigned to it.

It behaves and moves in the same way as any other product.

C. MODIFYING AN ADDITIONAL PRODUCT

You can modify your additional product irrespective of the module you are in. Right-click, **Modify**.

You open its characteristics window just like for any other product.

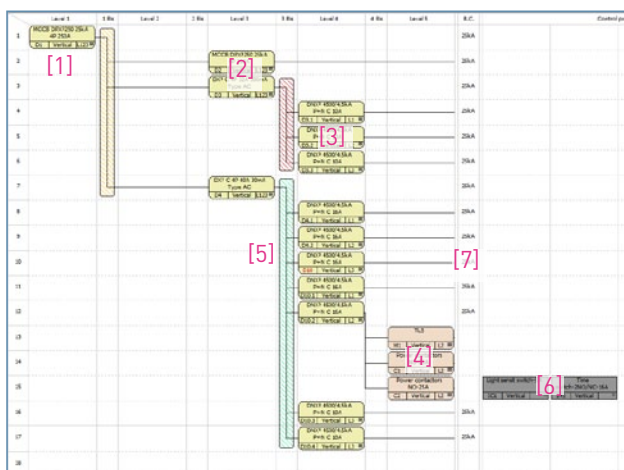
 The list of complementary products can be filtered by **Manufacturer**, **Reference** or **Name**.

ARRANGEMENT MODULE

The Arrangement window shows the electrical organisation of the panel in the form of a tree structure. The products are represented by tiles arranged in the boxes of a table.

A Introduction

- Each column in the arrangement represents one distribution level.
- XL PRO³ arranges the devices in the following way:
 - **Main devices [1]** at level 1
 - **Power devices and residual current protection devices [2]** at level 3
 - **Secondary protection devices [3]** at level 4
 - **Control devices [4]** at level 5
- No devices are placed at level 2, apart from supply inverters (see page 25).



- This column can be used, for example, to add an **additional product**. Moving devices from level 3 to level 2 only affects the appearance of the circuit diagram.
- The narrow columns between the levels are for **busbars** and **distribution blocks**.

- Each device is connected to the first device of the next level up which is located on the same line or above it. The root of the tree structure can be a breaking device (switch or MCB) or a distribution device (distribution block or busbar).
- The last columns are reserved for **management products [6]**, which are not generally **integrated** in the power circuits (programming, signalling, etc.). For example, XL PRO³ will automatically place a light sensitive switch in these columns (this type of device usually controls a contactor). If the device has to power a lighting circuit directly, move it to level 5. It then becomes a control product and is inserted automatically in the tree structure.
- The number of columns for management products can be adjusted according to requirements (from one to five) see page 33.
- The **B.C. [7]** column shows the breaking capacities resulting from joining devices to higher level devices if they exist. If there are no higher level devices, the breaking capacity of the device on its own is shown.

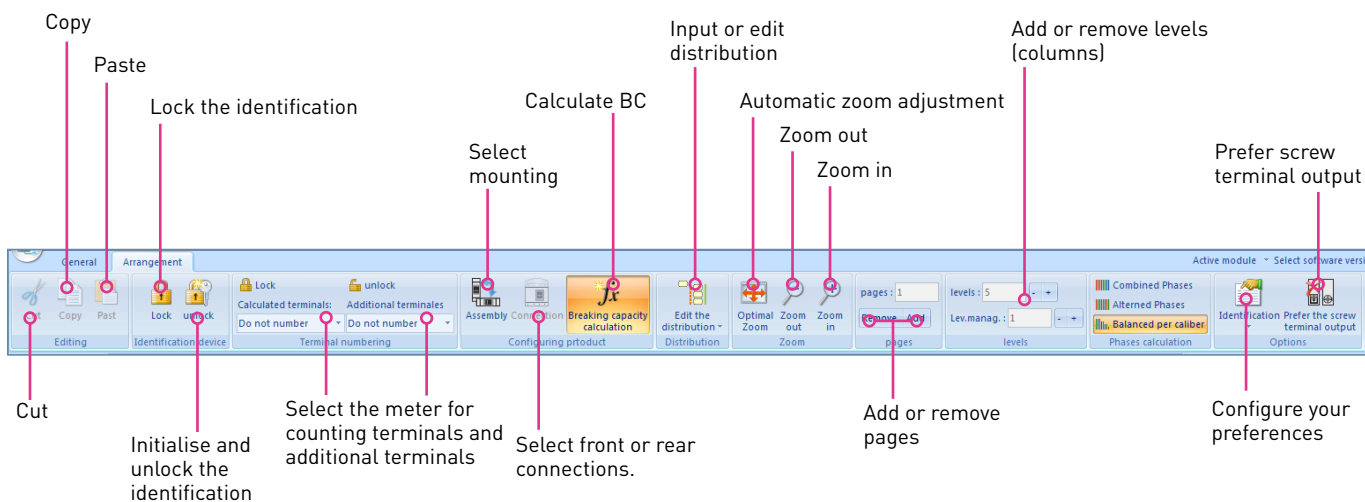



Automatically calculate distribution and break lines.

From here, the program automatically determines which products' optimised horizontal and vertical distribution are the most suitable for your study. It also plans the necessary break lines for the enclosure selected.

This data is always editable (see page 66 - Distribution/page 35 - break lines).

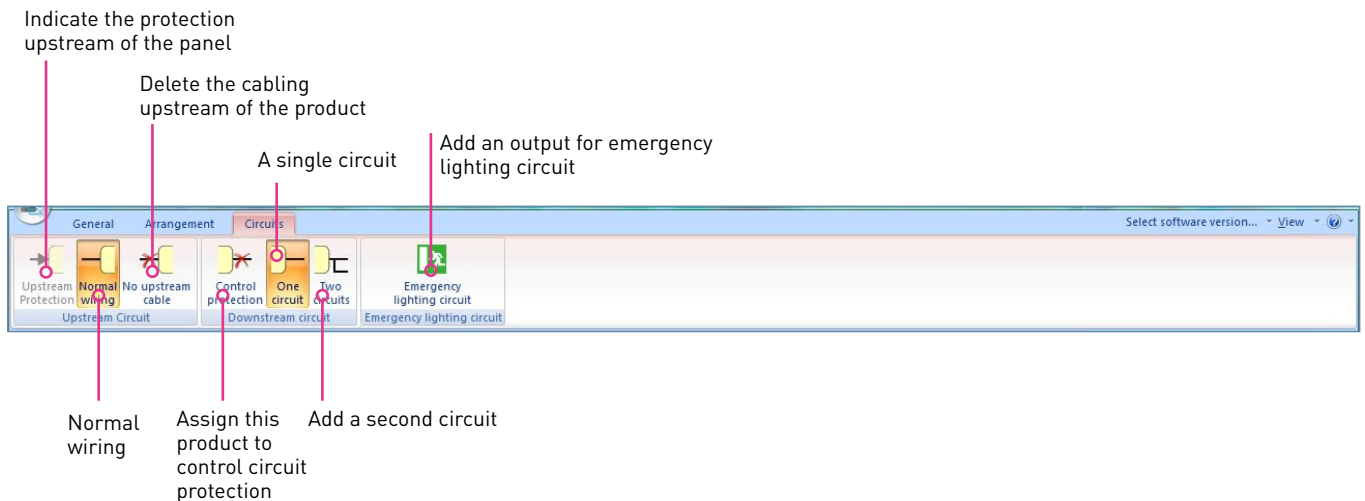
1. Arrangement tab



 The contents of the terminal and additional terminal meters may be modified in **Options**, in **Arrangement**.

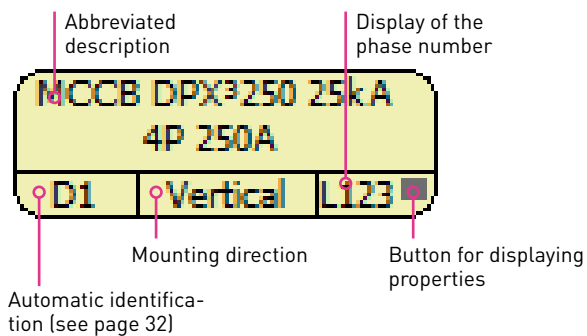
2. Circuits tab

Click on one of the product boxes in the arrangement module to bring up this menu.

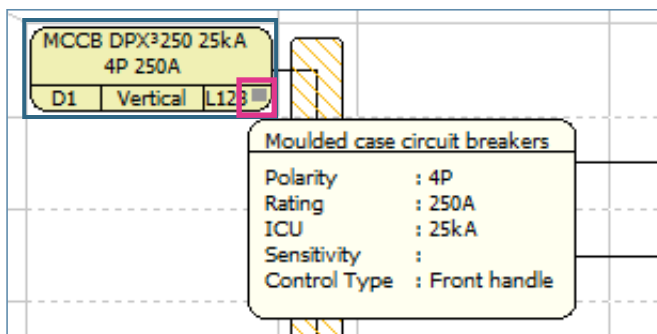


ARRANGEMENT MODULE

3. Representation of products



- The detailed characteristics of each product can be displayed by right-clicking and selecting the **Properties** option in the popup menu, or clicking on the small grey square at the bottom right of the product label.

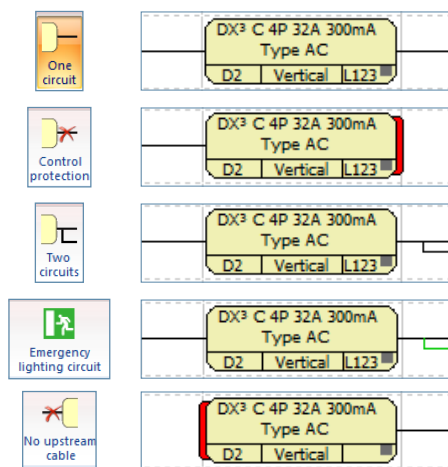


The colours and shapes of the product tiles help to identify the products:

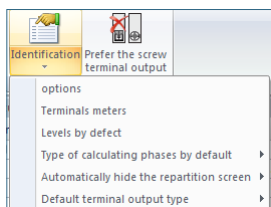
Breaking and protection devices	<div style="border: 1px solid black; padding: 5px;"> <p>MCCB DPX³250 25kA 4P 250A</p> <p>D1 Vertical L123 ■</p> </div>
Control devices	<div style="border: 1px solid black; padding: 5px;"> <p>Power contactors NO-25A</p> <p>C2 Vertical L2 ■</p> </div>
Management, signalling and measurement products	<div style="border: 1px solid black; padding: 5px;"> <p>Light sensit switch-5A</p> <p>IC1 Vertical ■</p> </div>
Power supply products	<div style="border: 1px solid black; padding: 5px;"> <p>Transf-40VA</p> <p>TR1 ■</p> </div>
Power sockets	<div style="border: 1px solid black; padding: 5px;"> <p>Hypra Socket 250V 2P+T 16A DOM</p> <p>PC1 L1 ■</p> </div>

4. Representation of circuits

- Circuits are shown by coloured lines:
 - Black: normal circuit
 - Green: emergency lighting circuit
- The icons in the **Circuits** tab on the ribbon bar are used to manage the circuits in your panel. Changes made using these tools are shown on the screen:



B Configure preferences



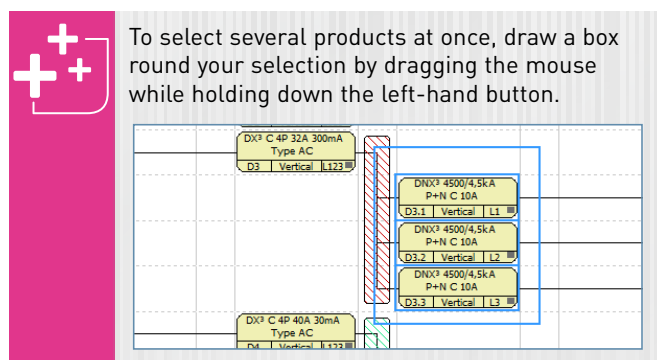
You can modify the options, terminal meters, default levels and the type of calculating phases by default.

You can choose to automatically hide the distribution screen and the default output terminal type.

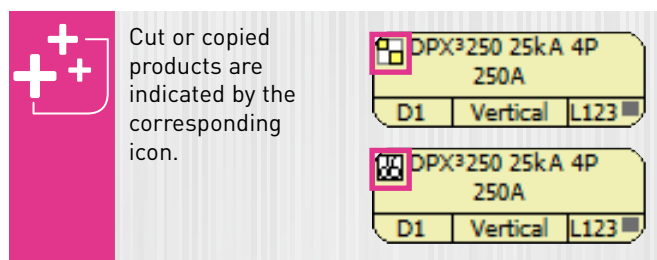
C Use

1. Arrangement menu

A. CUT, COPY, PASTE



- To access these three functions you must have selected at least one product.
- To **cut or copy one or more products**, make your selection then choose the operation in the menu or the toolbar: or .
- By default, when you **Paste** products, they are inserted on the last line of the arrangement.
- If you want to paste them to another location, right-click to select the required position then select **Paste** in the popup menu.



- To move a product see also page 34.

ARRANGEMENT MODULE

B. IDENTIFICATION



By default, the numbering applied to IDs follows the order in which the devices are arranged. When a device is moved, the IDs are automatically updated. This may be inconvenient if you want to make changes to a panel for which you have already created labels with IDs.

> Lock the identification

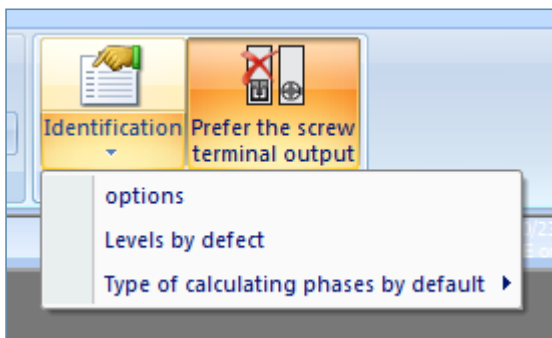
- Locking the identification enables you to maintain the validity of the labels by fixing the IDs of all the devices in the panel. It is also possible to lock the IDs individually for each device (see page 37).

> Initialise and unlock the identification

- There are two possible options:
 - **Default identification** immediately resets all the IDs according to the arrangement of the devices
 - **Unlock only** keeps the IDs as they are, provided that no changes are made to the arrangement

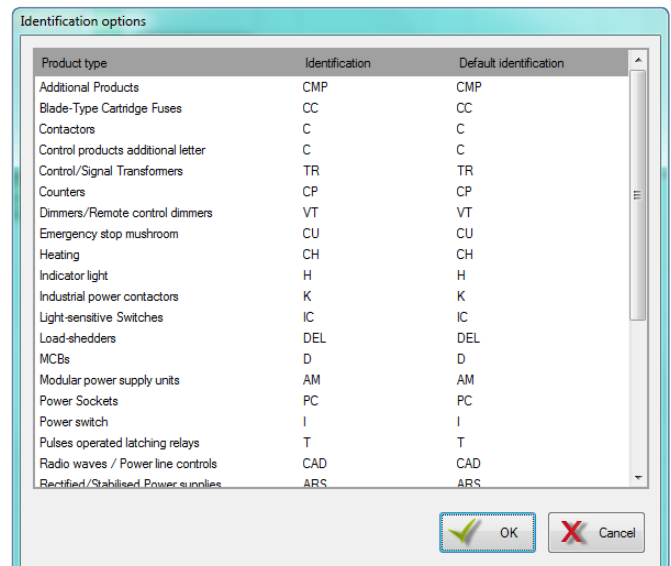
> Changing the identification

- Click on the icon for this option in the ribbon bar then select **Identification** in the **Preferences** menu.



The **Identification options** window opens.

Select the line you want to change then double-click in the required column to change the current identification or the default identification.



Click on **OK** to confirm your change.



It is also possible to customise the IDs individually for each device (see page 37).

C. CALCULATION OF THE BREAKING CAPACITY (BC)

- Displays the breaking capacities in the arrangement (see page 30).

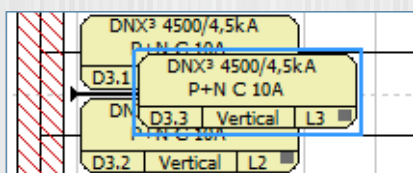


You can display or hide the breaking capacity by clicking on the **Breaking capacity calculation** icon in the **Arrangement** tab in the ribbon bar.



Automatic insertion without having previously created blank lines:

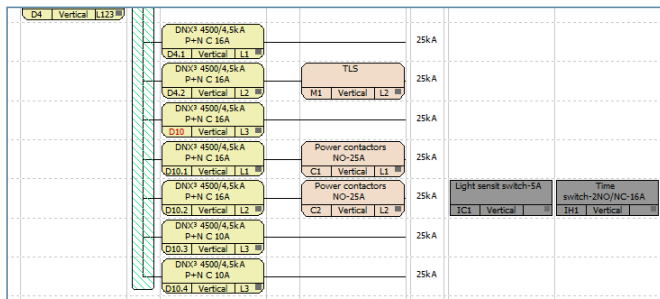
- Select the products to be moved
- Drag them to the required position with the mouse: an insertion mark shows where the products will be inserted



- Release the mouse button
 - The products located below this position move down automatically
- Items can only be automatically inserted between two boxes which are already occupied.

To complete the arrangement of the panel:

- Move up the timer and the 2 contactors so that they are opposite the lighting circuits
- Place the time switch and the light sensitive switch on the same line as the last contactor



C. BREAK LINES

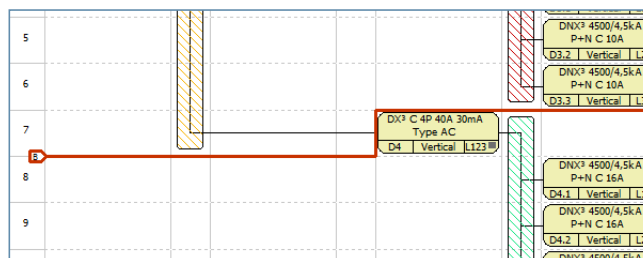
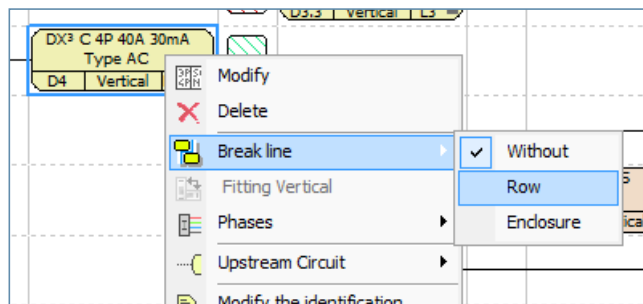
By default the products will be installed one after the other in the enclosure, in the order of the arrangement.

The program automatically calculates break lines according to the selected enclosure. However, it is possible to change them. With the **Break** option, force a device and all following devices to move to the next row down or into the next enclosure or cabinet.

A break line is symbolised in the arrangement by a horizontal line. To cancel it, select the **Without** option.

> Example

- Right-click on the **DX³ 40 A 30 mA**
- Select the **Break line** option, then **Row**



Break lines are only fully displayed in the **Preview** module (see page 52).

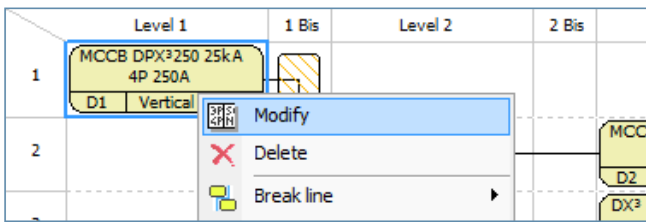
They do however affect the choice of enclosure.

ARRANGEMENT MODULE

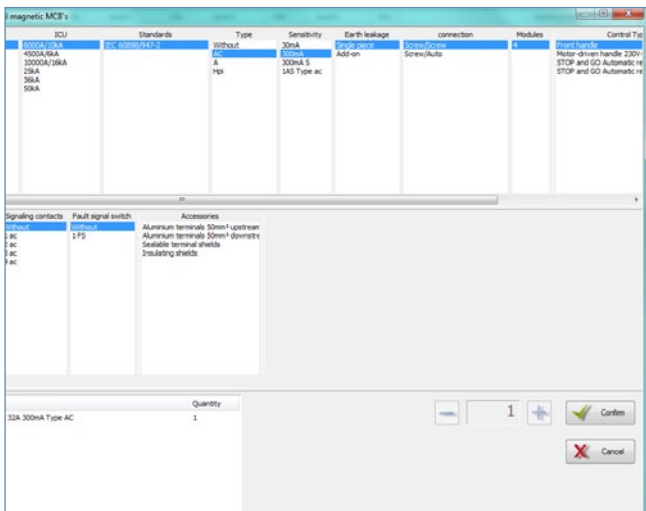
3. Modification and deletion

A. MODIFYING CHARACTERISTICS

To modify the characteristics of a product, select the **Modify** option in the popup menu which opens when you right-click on the product.

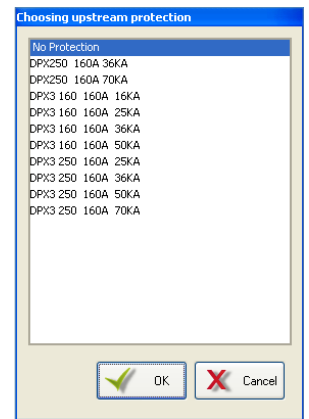


Changes are made in exactly the same way as in the **Parts list** module. However, they can only be made to the selected device, as adjustment of the quantity is locked.



B. UPSTREAM PROTECTION

This option is only active for a switch at the top of the tree structure. A popup list can be used to select the type of upstream protection device located in another panel. This is necessary so that XL PRO³ can calculate the resulting breaking capacities.



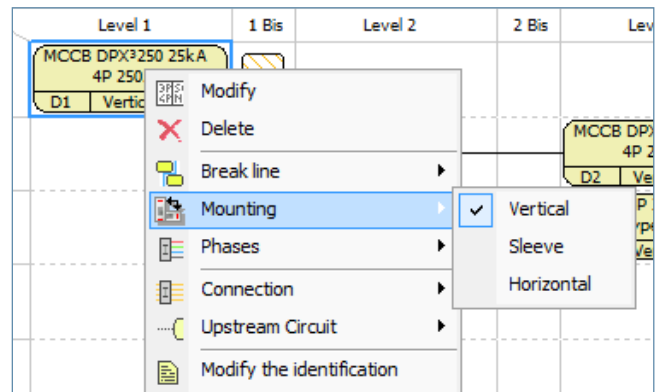
C. SELECTING THE MOUNTING OF THE DEVICES

The devices in the DPX³ range can be mounted both vertically and horizontally.

The default mounting direction is **Vertical**.

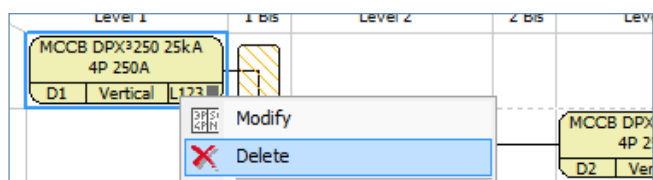
However, the **Mounting** option in the popup menu can be used to select horizontal mounting, and for certain devices, mounting in a **Sleeve**.

The mounting of devices affects the choice of enclosure.



D. DELETION

When the **Delete** option is selected in the popup menu, the product is immediately removed from the tree structure and the parts list for the panel, as are all the products associated with it.



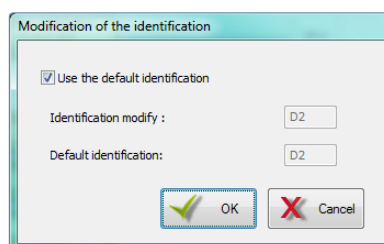
There is no undo function. If you delete a product accidentally, you will have to restart the adding a product procedure.

4. Device identification

A. MODIFYING THE IDENTIFICATION

XL PRO³ automatically identifies devices (see page 32), however the IDs for each device can be customised.

- Select **Modification of the identification** in the popup menu



- Deselect **Use the default identification**
- Enter your new ID in the **Identification modify** box, then click on **OK**

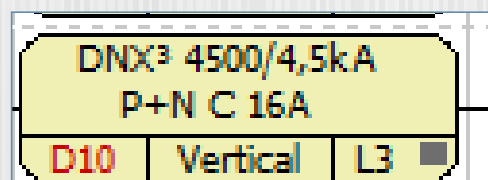
These customised IDs are not affected by changes to the arrangement.

B. LOCKING/UNLOCKING THE IDENTIFICATION

The popup menu also has an option for locking or unlocking the default identification of the device. Locked IDs will not be affected by changes to the arrangement.



When an identification has been locked, it appears in red in the product title block.

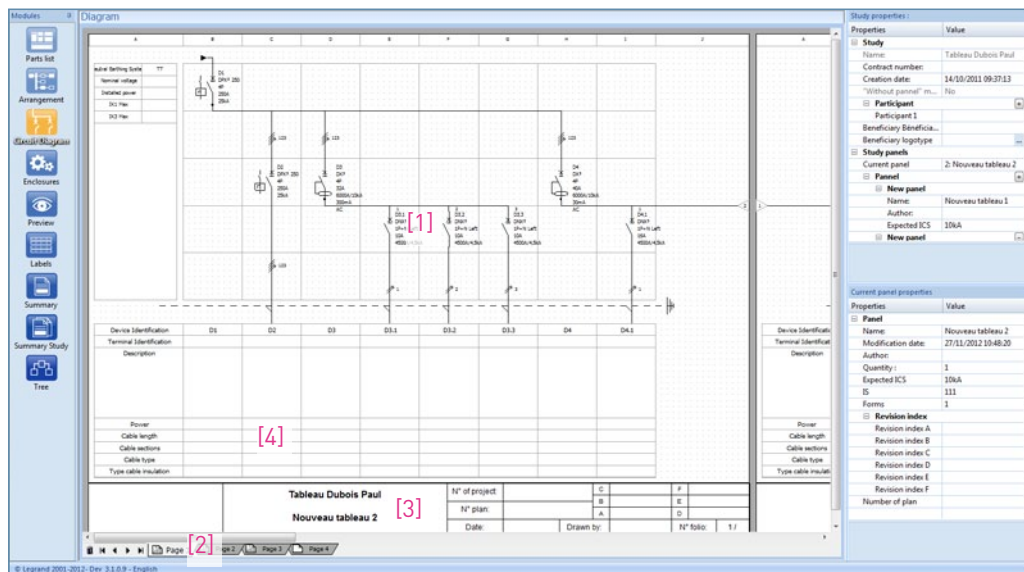


CIRCUIT DIAGRAM MODULE

If you have already selected your products in the Parts list module and organised the panel in the Arrangement module, XL PRO³ automatically draws the electrical distribution diagram for the panel in the Diagram window.

XL PRO³ also enables you to create your diagram directly using dedicated tools (symbols palette and drawing/wiring tools in the ribbon bar).

A Introduction



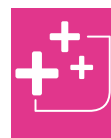
■ The diagram is directly connected to the tree structure of the **Arrangement** module. Each product occupies a box on a grid made up of 25 mm squares [1]. Its input is connected to the output of the first device on the next level up located to its left. XL PRO³ spreads the diagram over as many pages as necessary. The pages are numbered in sequence and can be accessed via the tabs below the diagram [2].

■ Each device is identified by its electrical symbol and a summary of its properties which can be customised (see page 40).

■ You can move these symbols by simply clicking on them and dragging them. First check that the destination location is empty. (To insert an empty column in the diagram, see page 41).

■ Each page has an information area [3] and a configurable title block [4], which are referred to as the folio, which can be configured via the **Folder management** tab which can be accessed via the **Start menu** (see page 04).

■ Products in the panel which are not directly part of the distribution tree structure (management products) are placed on a control page which is located at the end of the diagram (last page).

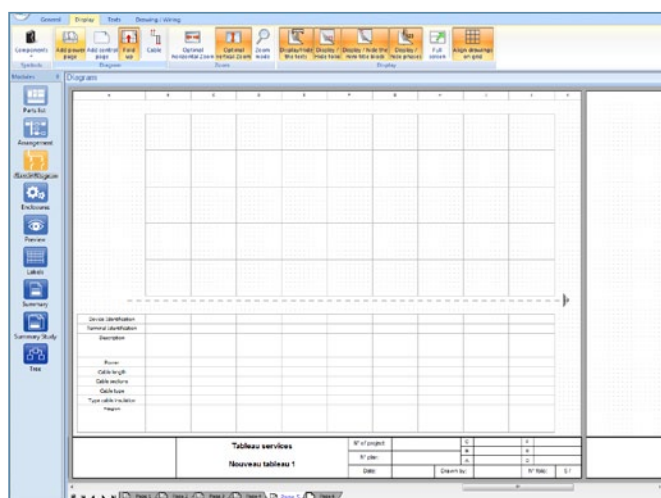


When a product is made up of several symbols (parents and children) you can move all the components by clicking on the parent product and dragging it.

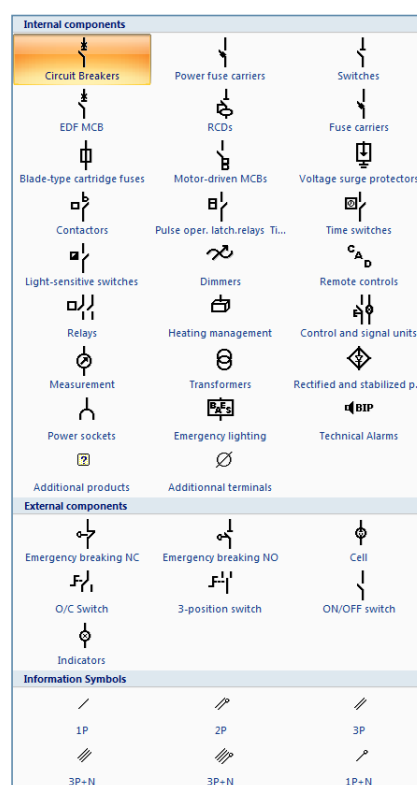
B Drawing your own circuit diagram

If you want, XL PRO³ also allows you to draw your circuit diagram yourself, without using the **Parts list** and **Arrangement** modules.

- To do this, start by opening a new study, then click directly on the icon representing the **Circuit diagram** module.
- A blank power page appears. The ribbon bar displays the **Display** tab (see details on page 47).




- Insert the products you need for your panel on the page using the **Components palette**.



The products are represented in the form of symbols which are divided into 3 categories: **Internal components**, **External components** and **Information Symbols**.

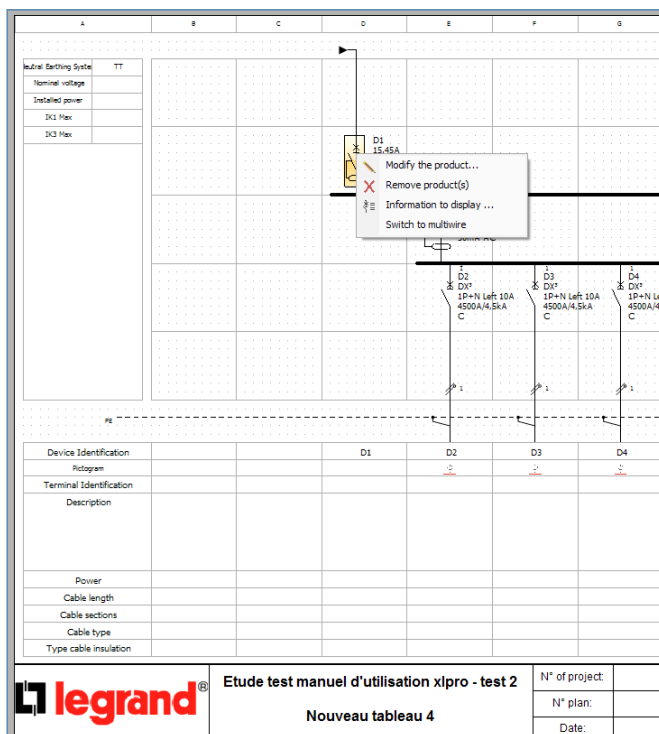
To insert them in you diagram, first click on the chosen symbol to select it, then click on the page in which you want to insert it in order to paste it.

- Then using the **Cable**  tools in the ribbon bar to draw your paths.
- Other drawing tools are also available in this module (see page 49).

CIRCUIT DIAGRAM MODULE

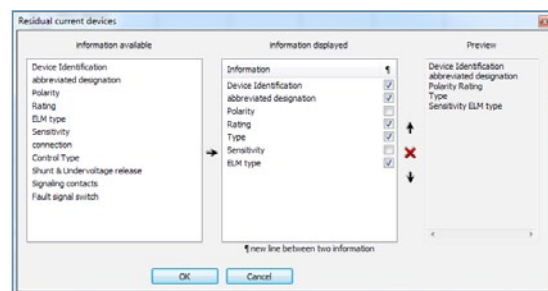
C Popup menus

1. Symbols popup menu

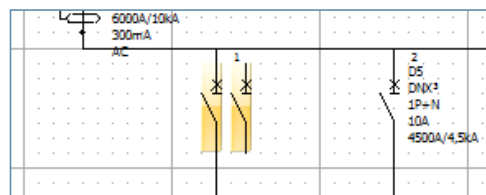


- This appears by right-clicking on the symbol of the selected product.
- Clicking on **Modify the product** opens a characteristics selection window identical to that in the Parts list module. Only the area for selecting the quantity is inactive (1 symbol = 1 product). Use the **Duplicate** icon to add an identical device. The new product will be added on the control page. You can then insert it in your diagram by simply clicking on it and dragging it.
- You can use the **Remove product(s)** icon to remove a product from the diagram. This deletion will be applied automatically to the other modules (modification of Parts list quantity, Arrangement, etc.)

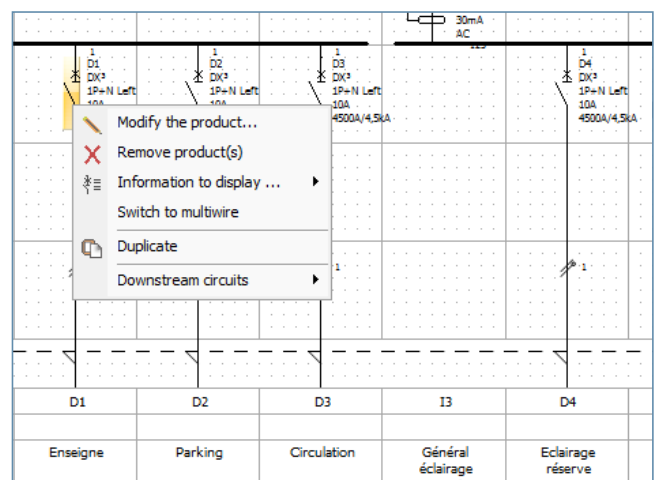
- To customise the properties display beside each symbol: select **Information to display** in the popup menu and select the characteristics you want. The properties are updated for all similar products.



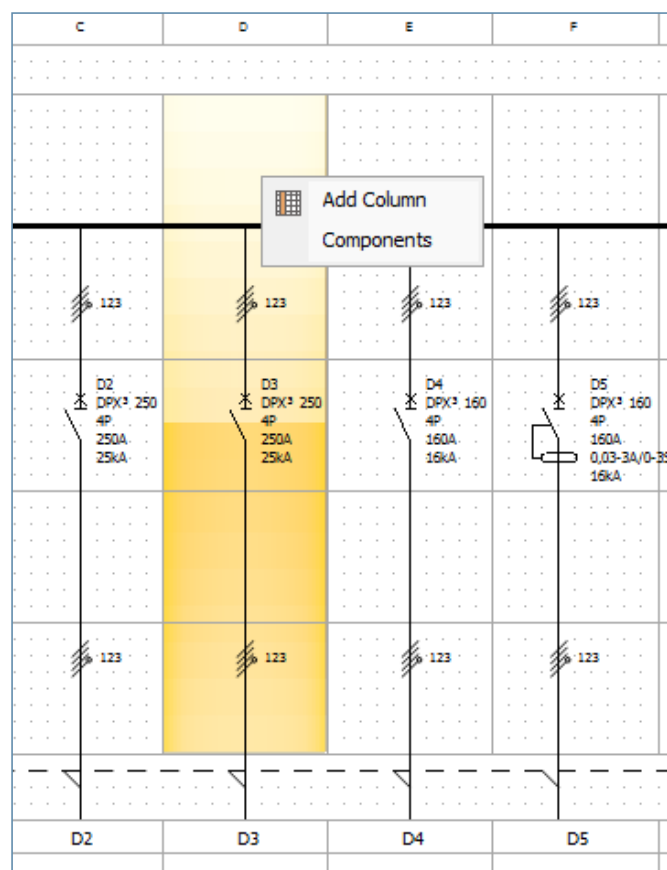
- You can also choose to **Switch to multiwire**. The product currently selected will be duplicated automatically as many times as necessary.



- In the **Downstream circuits** menu you can manage the circuits in your panel.

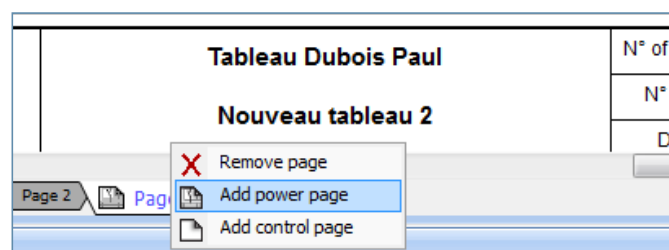


2. Columns popup menu



- Using the **Add Column** icon you can add an empty column to your diagram, for example in order to add a new product or move a product. The new column is inserted to the left of the selected column. If necessary, a page is added automatically.
- Clicking on **Components** automatically opens the Components palette (see page 41).

3. Pages popup menu



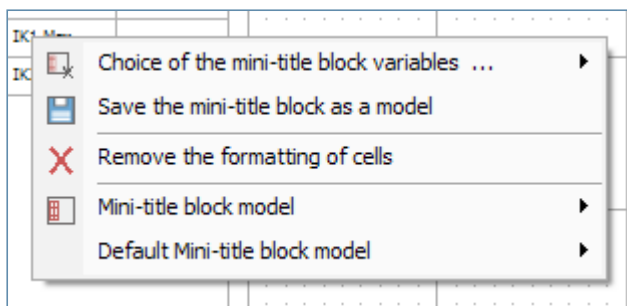
- Right-clicking on the tabs representing the various pages opens a popup menu in which you can: add a power or control page, or remove a page.



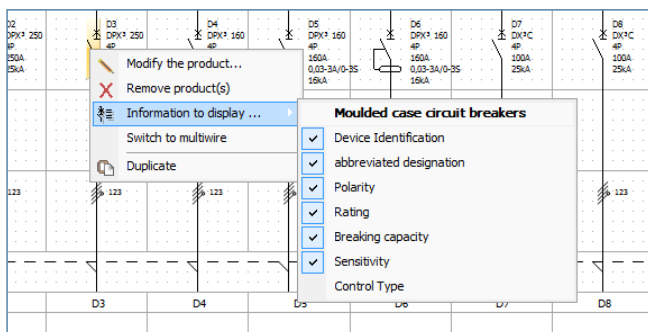
You can only remove a page if it is empty.

CIRCUIT DIAGRAM MODULE

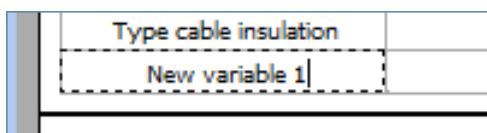
4. Mini-title block popup menu



- The **Choice of the mini-title block variables** icon enables you to select the information to be displayed.



- Clicking on **Add a new variable** also enables you to create the variable you want manually. It will be added to the previous selection list automatically.

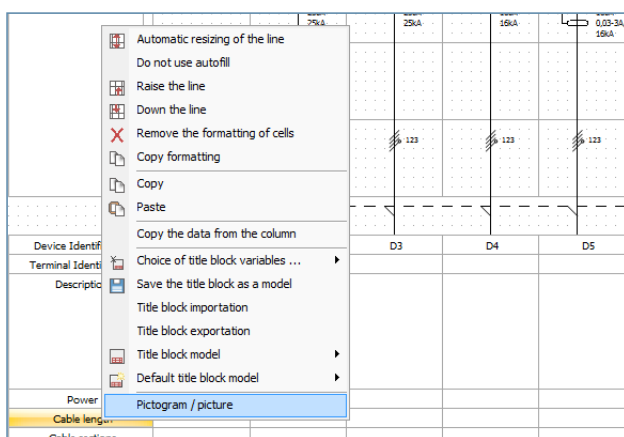


- After choosing the list of variables, you can change the order in which they appear using the **Raise the line** and **Down the line** commands.
- Then format the data (font, colour, etc.) using the tools in the **Text** tab in the ribbon bar (see page 46). You can use the **Remove the formatting of cells** icon to return to the default settings. **Copy formatting** enables you to automatically apply the changes made to other cells.
- When you have finished formatting your mini-title block, you can select **Save the mini-title block as a model** using the corresponding icon. You must give a name to each model (template) created this way.
- This model will then be available in the **Mini-title block model** menus, so that you can re-use it in other studies. You can also choose to select this as the **Default Mini-title block model**. This will then be applied to every new study.
- To enter the chosen variables: click on the line then type in your text. Finish by pressing **Ctrl+Enter** to confirm, then use the arrows on the keyboard to go to the next box. You can also click on the next line.
- You can insert an image or a pictogram in any box in the mini-title block by clicking on **Pictogram/picture**. You can then use the standard **Open** menu to select the image to insert.

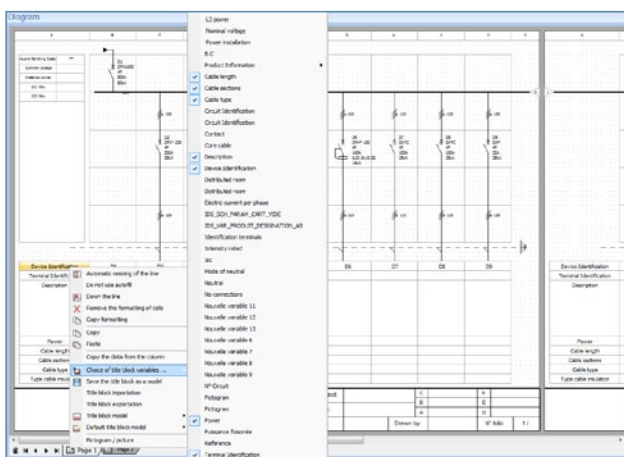


To fill in several mini-title block boxes identically: select a box, press **Ctrl+C** and then press **Ctrl+V** in the location where you want it to be copied.

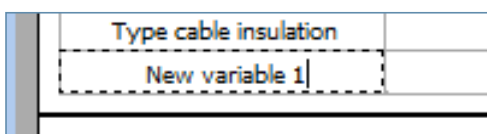
5. Title block popup menu



- The **Choice of the block variables** icon enables you to select the information to be displayed.



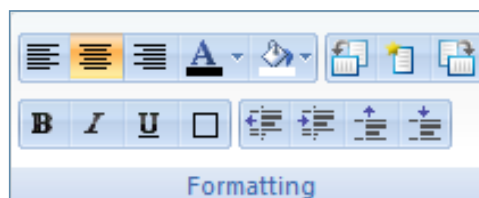
- Clicking on **Add a new variable** also enables you to create the variable you want manually. It will be added to the previous selection list automatically.



- After choosing the list of variables, you can change the order in which they appear using the **Raise the line** and **Down the line** commands. The **Automatic resizing of the line** icon will adapt the height of the line according to its contents.

Device Identification	I1	I2	D1	D2
Terminal Identification				
Description	Coupure Générale	Général éclairage extérieur	Enseigne	Parking
Power				
Cable length				
Cable sections				
Cable type				
Type cable insulation				
Pictogram				
Tableau services				

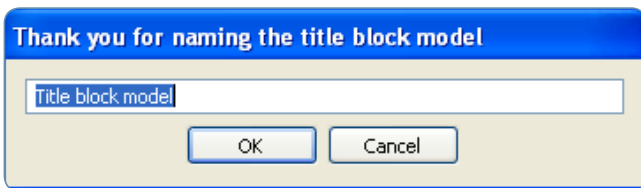
- Then format the data (font, colour, etc.) using the tools in the **Text** tab in the ribbon bar (see page 46). You can use the **Remove the formatting of cells** icon to return to the default settings. **Copy formatting** enables you to automatically apply the changes made to other cells.



- The **Copy** and **Paste** tools enable you to reproduce the content and formatting of a box.

CIRCUIT DIAGRAM MODULE

- When you have finished formatting your title block, you can select **Save the title block as a model** using the corresponding icon. You must give a name to each model (template) created this way.
- This model will then be available in the **Title block model** menus, so that you can re-use it in other studies. You can also choose to select this as the **Default title block model**. This will then be applied to every new study.



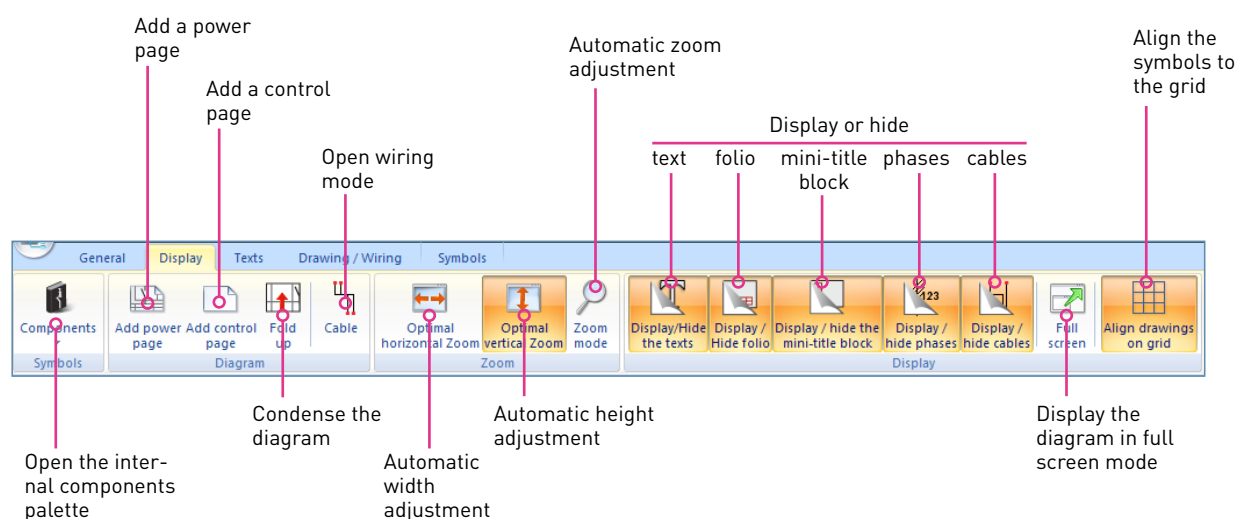
- To enter the chosen variables: click on the line then type in your text. Finish by pressing **Ctrl+Enter** to confirm, then use the arrows on the keyboard to go to the next box. You can also click on the next line.
- You can insert an image or a pictogram in any box in the title block by clicking on **Pictogram/picture**. You can then use the standard **Open** menu to select the image to insert.

Device Identification	I1	I2	I3	O2	O3	O3	O4	O5	O6
Terminal Identification									
Description	Coupons Général	Général échange extérieur	Échange	Parking	Circulation	Général échange intérieur	Échange interne	Échange interne	Échange voile-poutre
Équipement									
Cable length									
Cable sections									
Cable type									
Type cable insulation									
Material									

- You can also **Export** your title block, or **Import** one from another XL PRO³ study.

D Tabs in the ribbon bar

1. Display tab



- **Fold up:** is used to obtain a representation of the diagram that takes up fewer levels in order to give more space for the title block.
- **Cable:** to go to wiring mode (see details of using this on page 49).

! If your diagram has 7 lines it will be automatically condensed to 6 lines to fit the sheet. The **Fold up** button on the ribbon bar will therefore be inactive.

+ Several Folio models are available for modification in the **Folder Management** module (see page 104), accessible via the **Start** menu

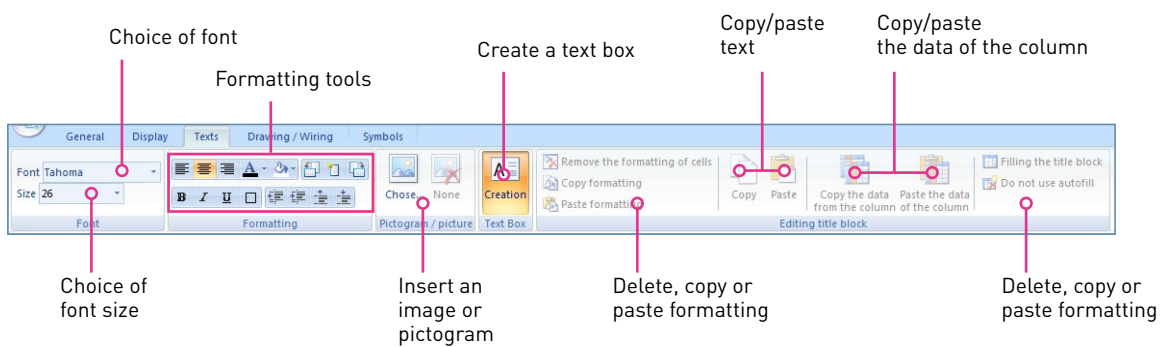
! Hidden text does not appear when a quick printout of a page is carried out.

+ To exit **Wiring** or **Zoom** mode: click again on the corresponding button in the ribbon bar or press the **Esc** key on your keyboard.

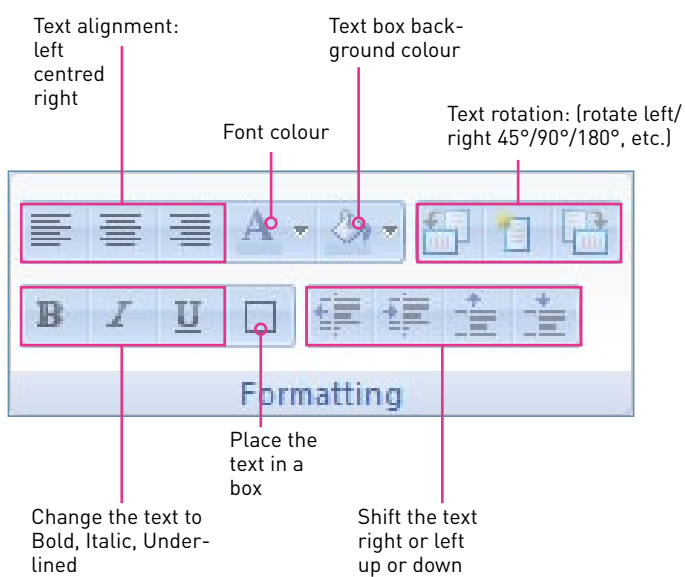
To exit **Full screen** mode: press the **Esc** key on your keyboard.

CIRCUIT DIAGRAM MODULE

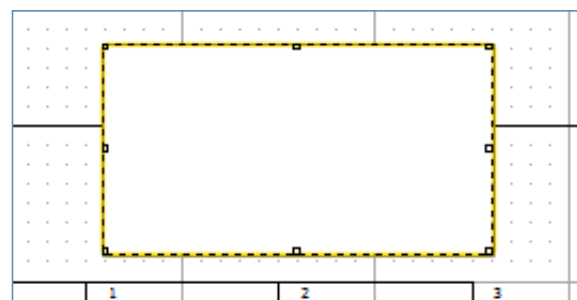
2. Text tab



FORMATTING TOOLS

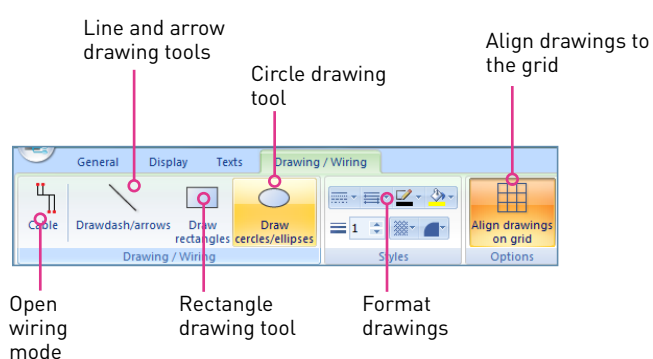


- To adjust the size of a text area, double-click on it then use the sizing handles at the each corner and the centre of each side.



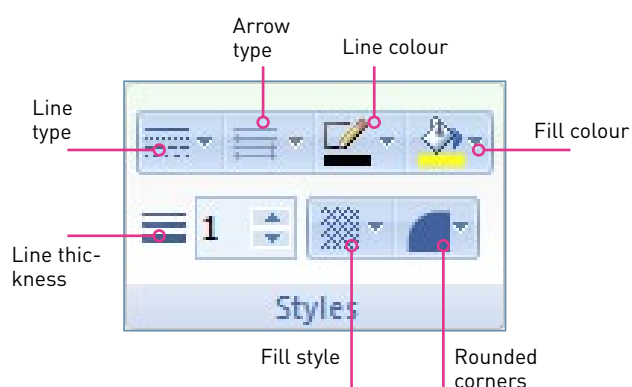
- To insert an image or a pictogram: create a text box then click on the **Choose** button in the ribbon bar. You can then select the folder containing the image to be imported in the **Open** window.

3. Drawing/Wiring tab



A DRAWING TOOLS

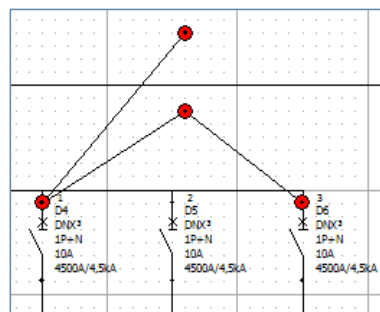
- The drawing tools, excluding wiring, are used to highlight certain elements by using boxes, arrows, etc.




- These tools are similar to those found in graphics applications and their use is intuitive.
- The graphic elements added to the diagram are automatically placed on a grid with 2.5 mm squares (Management grid) to facilitate their alignment.

B WIRING TOOL

- The **Wiring** tool provides automatic recognition of device inputs and outputs. The connection points appear in red and are therefore easier to see. They also adapt to the movement of symbols.
- You can also create a joining point. In **Wiring** mode, click on the power page. A black dot in a red circle appears. Then click on another joining point to link them. Create another point, etc.
- When your path is finished, press the **Enter** key on your keyboard.



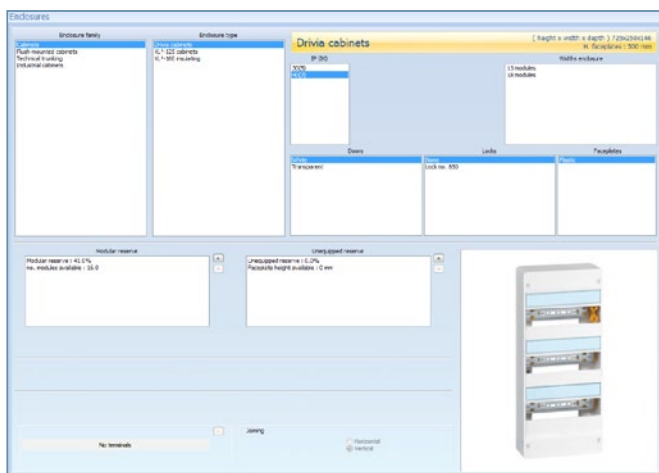
 The **Wiring** tool is also accessible in the **Display** tab in the ribbon bar (see page 45)

ENCLOSURES MODULE

When the Enclosures module is opened, XL PRO³ automatically calculates the enclosures with the capacity to house all the products selected in the parts list or the circuit diagram. This calculation takes into account the dimensions of the devices, their fixing mechanisms and the space required to connect them.

A Introduction

- The module window shows the choices available and can be used to select the characteristics and adjust the reserve.
- Depending on the type of enclosure chosen, XL PRO³ instantly calculates the overall dimensions and the total faceplate height used, while taking into account the number of enclosures required.
- This information is visible in the upper banner of the window.





The photo can be used to check the type of enclosure selected but is not an accurate reflection of the dimensions calculated.

B Selecting the enclosure




- Enclosures are grouped into six families: cabinets, miniature cabinets, strengthened cabinets, flush-mounted cabinets, technical trunking and industrial cabinets. Only enclosure families compatible with the current study are shown.
 - After choosing the family, select the required **Enclosure type**. **The information in the banner**, the dimensions and the faceplate height are updated automatically.
 - By default, the enclosure is automatically fitted with a door. For an enclosure without a door, select IP 30 index. These characteristics are saved when the plan is redrawn.
- You may modify your plan while saving the characteristics without risk of error. However, these characteristics are not saved when a new study is begun.
- Then select the **usable height**, the **width of the enclosure**, the **door**, the **lock** and the **type of plate** you require on your enclosure.

- In the usable height column, XL PRO³ calculates the optimum height, but you can choose the required height (XL PRO³ will then reinstall the products in the selected enclosures).

1. Reserve

- Enclosures are calculated with a reserve percentage that can be adjusted using the  and  buttons.

A. MODULAR RESERVE

The **Modular reserve** represents the unused space on symmetrical rails for modular devices. It is shown as a percentage and as a number of modules. By default XL PRO³ calculates the enclosure with a **modular reserve** of at least 20% which is accounted for by empty spaces, or even the addition of empty rails. The  and  buttons are used to increase or decrease this **modular reserve**. When the enclosure has no empty rails, the  button is deactivated.

B. UNEQUIPPED RESERVE

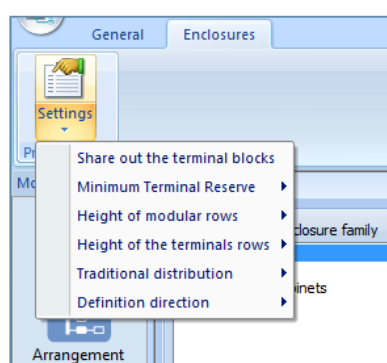
- These positions are automatically fitted with solid faceplates. The unequipped reserve is indicated as a percentage of the usable faceplate height. It is not taken into account when calculating the terminal block reserve.

2. Joining

- When the panel is made up of cabinets, they can be joined either horizontally or vertically. This choice will, of course, modify the dimensions shown in the banner.

As when choosing device characteristics, ensure that you follow the required order when making selections. Any change in a column results in the subsequent columns being reset to their default values.

3. Enclosures menu



A. SHARE OUT THE TERMINAL BLOCKS

- The software automatically calculates the space available for your terminals.

- There are two possible distribution methods:

- Either grouping all the terminals together in the same place, which is a quick operation
- Or distributing the terminals in the enclosures according to the products with which they are associated

B. MINIMUM TERMINAL RESERVE

- If the panel has an outgoing terminal block, a reserve can also be provided for the terminals. It is calculated as a percentage of the modular reserve on the basis of one output per available module. The minimum reserve percentage required can be adjusted using the **Enclosures menu > Settings > Minimum Terminal Reserve**. The default setting is 80%.

C. HEIGHT OF MODULAR ROWS

- For extendable enclosures and cabinets, the height of the modular rows used to calculate the enclosure can be selected in the **Enclosures menu > Settings > Height of modular rows**. The default height is always 150 mm.
- Any adjustment will affect all the rows. The height of each row can be adjusted individually in the **Preview** module (see page 50).
- "Ready-to-use" cabinets have a fixed row height of 150 mm.

D. HEIGHT OF THE TERMINAL ROWS

- Selection of the height of the rows of terminal blocks, chosen from the heights given in the popup menu.

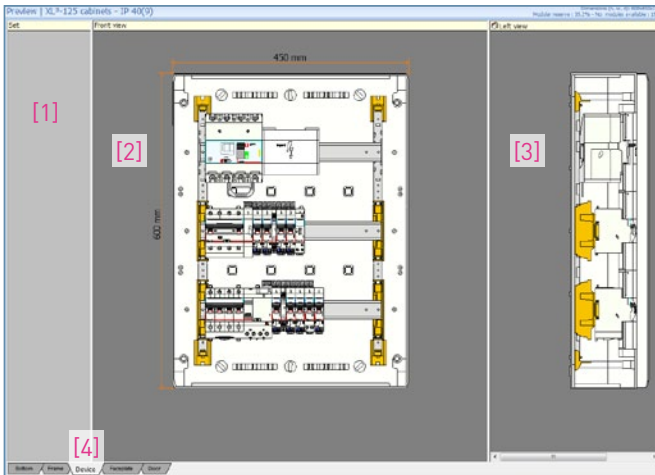
E. DEFINITION DIRECTION

- The devices will be installed in the enclosures either from top to bottom or from bottom to top.

PREVIEW MODULE

The preview module displays various views of the panel and can be used to make certain adjustments to it: dimensions of the enclosures and busbars, product layout, addition of accessories, etc.

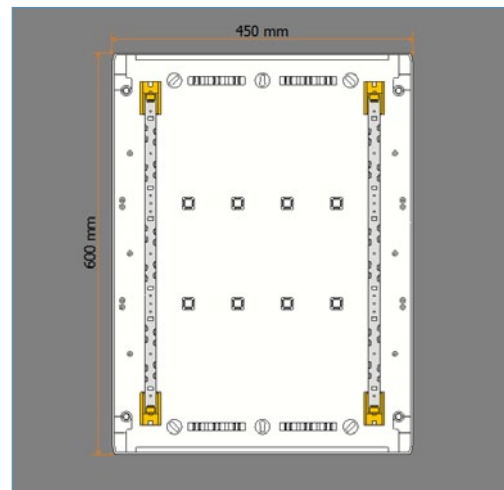
- By default the Preview module window is divided into 2 parts:
 - The workbench [1], for putting products down temporarily
 - The front view of the panel [2]
- A third pane [3] is available for displaying the side view of the panel. You can display or hide this using the **Display/ hide the side view** icon in the **Preview** tab in the ribbon bar (see page 58). When the panel has several enclosures, you can choose which one will be shown in side view.



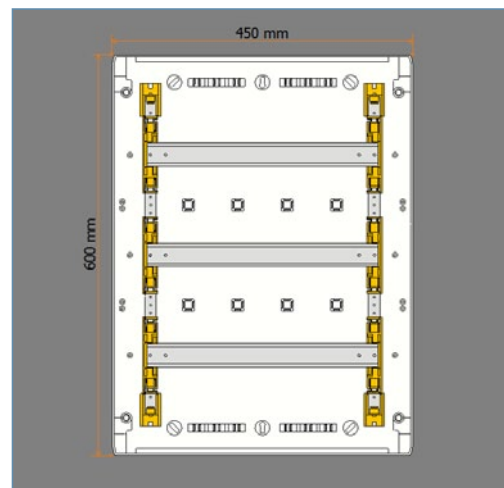
1. Tabs at the bottom of the screen

- There are five tabs [4], which are used for changing the display mode, represented by:
 - Bottom
 - Frame
 - Device
 - Faceplate
 - Door

A. BOTTOM VIEW



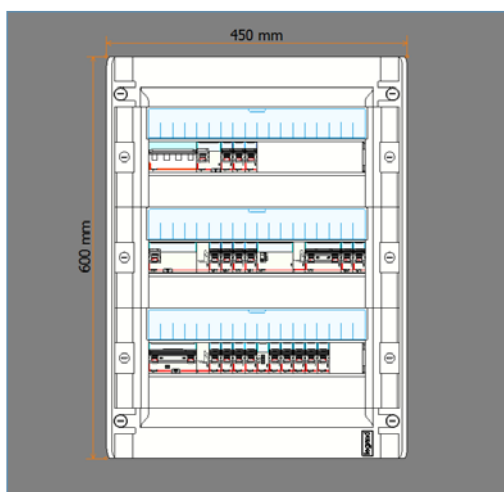
B. FRAME VIEW



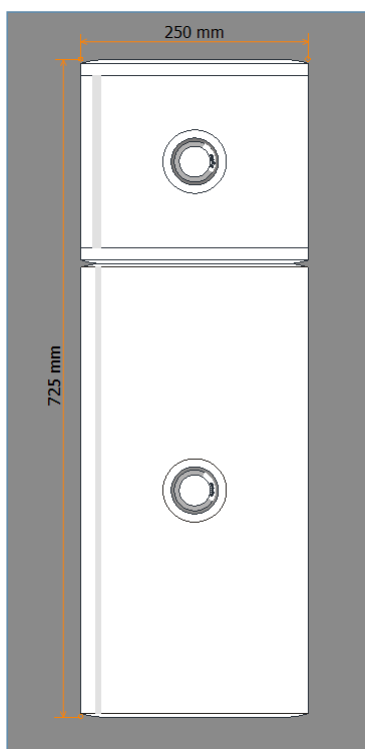
C. DEVICE VIEW

- This is the default tab displayed when the window opens (see image opposite).

D. FACEPLATE VIEW



E. DOOR VIEW



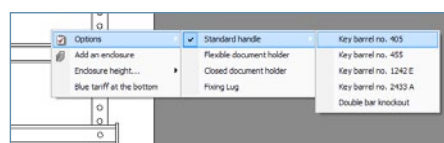
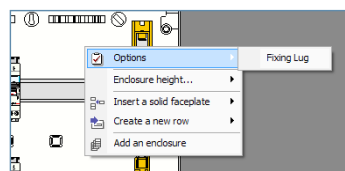
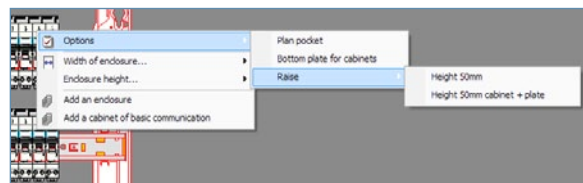
2. Popup menus

A. GENERAL POPUP MENU

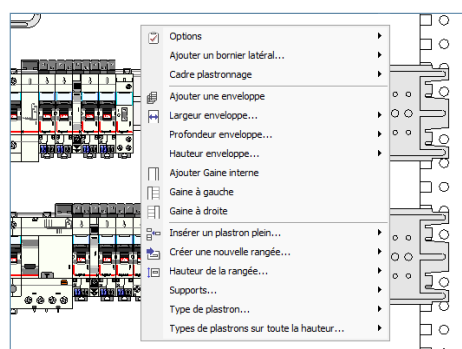
The content of this menu varies according to the type of enclosure selected in the previous module.

> For fully modular cabinets (Ekinoxe, Atlantic, Marina, Plexo, XL³ 160):

Modifications are limited to the choice of the height of the cabinet, the options specific to the model of cabinet and the movement of devices from one row to another.



> For XL³ extendable enclosures (XL³ 400, 800 and 4000):



PREVIEW MODULE

■ Inserting or deleting solid faceplates

The panel can be reorganised by inserting or deleting solid faceplates.

- Go to **Faceplate** preview mode
- Right-click on a faceplate
- Select **Insert a solid faceplate** in the popup menu
- Select the required height

The new faceplate is inserted above the faceplate you clicked on, shifting the other rows downwards (if this is a top to bottom installation). The rows of devices which no longer fit in the enclosure will be placed on the workbench.

To delete a faceplate, select it, then press the **Del** key on the keyboard.



XL PRO³ automatically fills any unequipped space at the bottom of enclosures (or at the top, depending on the installation direction selected) with solid faceplates. There is therefore no point in trying to delete these faceplates. It is also not possible to move solid faceplates in unequipped positions. Always use the insert/delete option to make any modifications.

■ Creating or deleting a row

You can create a row for modular devices or for terminal blocks:

- Right-click below the row to be inserted
- Select **Create a new row** in the popup menu
- Select the type of row required

The new row will be inserted above the faceplate you clicked on.

To delete a row, the row must be empty and placed on the workbench. Select the row, then press the **Del** key on the keyboard. You will always be asked to confirm the delete operation.

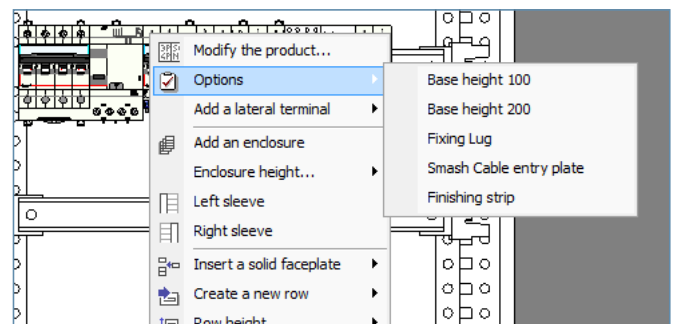


A row can also be created using a product placed on the workbench.



To move rows, go to Faceplate view and click on the faceplate. You can then move the devices, supports and faceplates. Check carefully that the faceplate is selected before moving.

■ Options



Specific equipment will appear, depending on your enclosure model and its configuration.

Simply click to select or deselect options.



The options you choose affect all the enclosures in the panel.

■ Enclosure displayed in side view

You can choose which enclosure you want to display in side view:

- Right-click on the chosen enclosure
- Select **Enclosure displayed in side view** in the popup menu

■ Adding, moving and deleting an enclosure

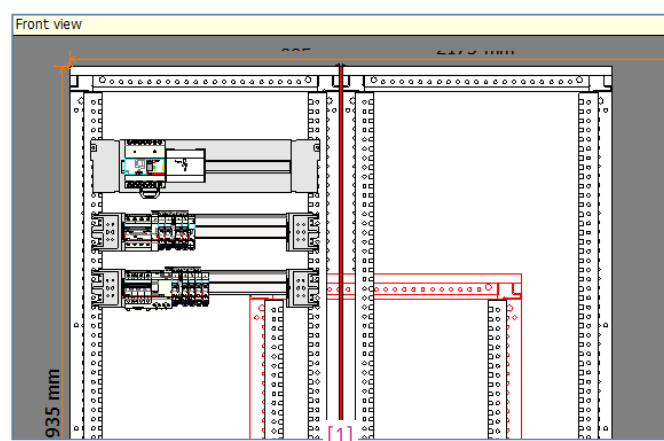
- Right-click on an enclosure
- Select **Add an enclosure**

An enclosure of the same type and with the same dimensions will be added. Enclosures are added to the right of the panel. Cabinets are added to the right or below, depending on the linking direction selected in the **Enclosures** module.

To move an enclosure:

- Left-click on the enclosure
- Drag it to the required location
- Release the mouse button

A red bar indicates where it will be inserted [1].



■ Adding new devices

To add devices, you must return to the **Parts list** module or the **Circuit Diagram** module, and follow the procedure described earlier. Then return directly to the **Preview** module. You will see that the new products have been placed on the workbench.

They can then be installed in the panel.

This procedure should be used for modular devices only. If you add power devices, they may be incompatible with the type of enclosure already defined, resulting in an invalid configuration. Any recalculation of the panel in the Enclosures module will result in all the changes already made in Preview being lost.

■ Enclosure height

The heights of all cabinets and enclosures can be changed in two ways:

- Using the corresponding option in the popup menu which gives all the available heights according to the type of enclosure
- Directly using the mouse by dragging the top or bottom of the enclosure

If the panel has several enclosures joined horizontally, they will all be changed simultaneously. However, the heights of cabinets that are joined vertically can be adjusted individually.

When the height is reduced, the rows of devices which no longer have sufficient space are automatically placed on the workbench. They must then be reinstalled in the panel manually.

■ **Security Index (SI) of enclosures** If your study includes multiple enclosures, these can have different SIs and configurations.

PREVIEW MODULE

■ Left/right sleeve

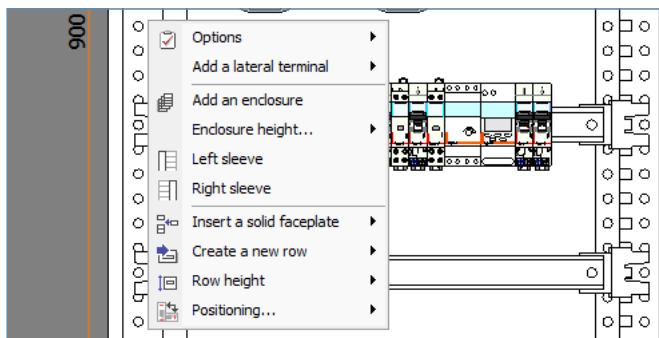
You can create or delete a sleeve to the left or right by selecting or deselecting this.



The sleeve must be empty for it to be deleted. You must delete the equipment first before performing this operation.

B. DPX ROW POPUP MENU DEVICE VIEW/FACEPLATE VIEW

When you right-click on a DPX, an additional submenu appears which is specific to DPX rows.



> Positioning

By default the positioning of your DPX is vertical. It can be deselected to obtain horizontal positioning or in a sleeve.

When positioning in a sleeve is selected, your row is moved by default into a left sleeve if there is one already present, otherwise the row is placed on the workbench.

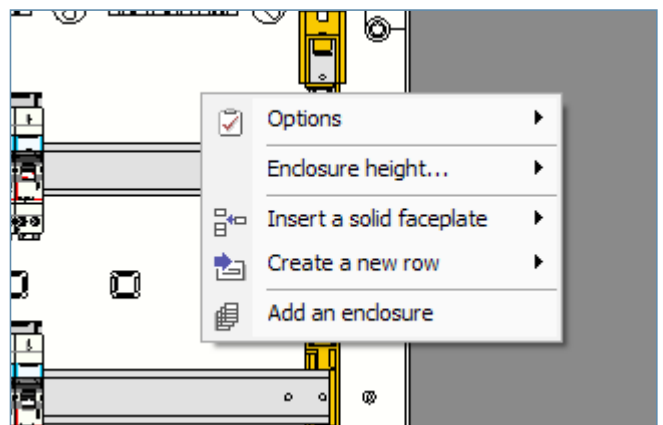


You can also modify the positioning of the devices in the Arrangement module (see page 30).



If you have selected horizontal positioning, it will not be possible to place your DPX row in a sleeve. You must return to vertical positioning in order to perform this operation.

C. MODULAR ROW POPUP MENU DEVICE VIEW/FACEPLATE VIEW



> Row height

The default height of modular rows is set in the **Enclosures** module (see page 48). This height can be changed for each row individually. Go to **Faceplate** preview mode, then right-click on the row to be modified and select the required height in the **Row height** option.

> Positioning

Only vertical positioning (selected by default) or in a sleeve is available.



When moving a modular row in a sleeve, any surplus devices (max. sleeve capacity: 9 modules) will be placed on the workbench.



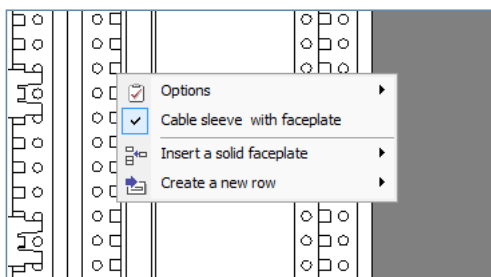
If you select **Positioning > Sleeve** when you have not created any sleeves or you have only created a right sleeve, your product will be placed on the workbench.

> Support

The default support in an XL³ 400 is a metal rail. You can replace it with an adjustable aluminium rail by selecting this option.

In XL³ 800 and 4000 enclosures, the support must be an adjustable aluminium rail.

D. SLEEVES POPUP MENU DEVICE VIEW/FACEPLATE VIEW



> Insert a solid faceplate

Select the required faceplate height.

> Create a new row

Select the type of row: **Modular, Lighting kit, Terminal block.**

> Cable sleeve with faceplate

This is active by default and can be used to remove the faceplate from the cable sleeve to fit flush-mounted products on the sleeve doors.



To deselect this option the products must first be deleted from the sleeve.

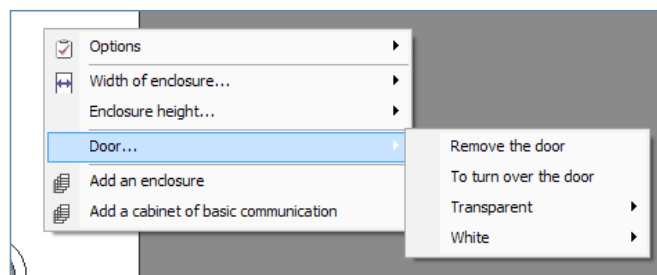
E. DOOR VIEW POPUP MENU

> Options

Here you will find specific options such as handles and document holders.



The locks were chosen in the **Enclosures** module. A new lock can only be chosen for the current door.



> Door

Depending on the IP chosen at the start of your panel, this submenu will optionally offer you a door and the various available options.



The grey banner in this module displays the selected IP. You can therefore check that it matches your requirements.


F. MODIFYING PRODUCTS

To modify your products, right-click to open the the popup menu: **Modify**. As in the **Parts list** module, the product characteristics window will appear.

PREVIEW MODULE


G. MOVING

> Moving devices

In **Devices** preview mode, devices can be moved by simply clicking and dragging. The  sign indicates locations where you cannot place the device.

Modular devices can be freely moved along their row or from one row to another, provided there is sufficient space. This space can be temporarily freed up by moving devices to the workbench (left-hand pane of the preview window) or by creating a new row.

It is possible to move a power device, provided that a compatible position is available and that the support and faceplate are absolutely identical. It is also possible to create a new row for this device (see page 55).

If there are a number of enclosures, to move several devices in one row to another enclosure you must press the **Shift**  key on your keyboard at the same time as you move them. If you do not do this, you will move the whole enclosure.


> Moving rows of devices

Using the same procedure as for moving devices, whole rows can be moved within an enclosure or from one enclosure to another.

To do this, select **Faceplates** preview mode. Click on the faceplate of the row to be moved and drag it.



To avoid moving products accidentally, make sure you select the faceplate and not the devices below it.

If there are a number of enclosures and several products are to be moved, ensure you press the **Shift**  key before you make your selection.



To send a row or a device directly to the workbench, the **Del** key can be used without any risk of accidentally deleting them. Everything shown on the workbench belongs to the panel and appears in the overall parts list.

A coloured bar indicates where the row will be inserted. The sign indicates that the row cannot be inserted at that point. To free space up temporarily, rows can be placed on the workbench. When a row is moved, the other rows of devices and the solid faceplates are readjusted automatically. When moving rows from one enclosure to another, if there is insufficient space available, the surplus row(s) are placed on the workbench.



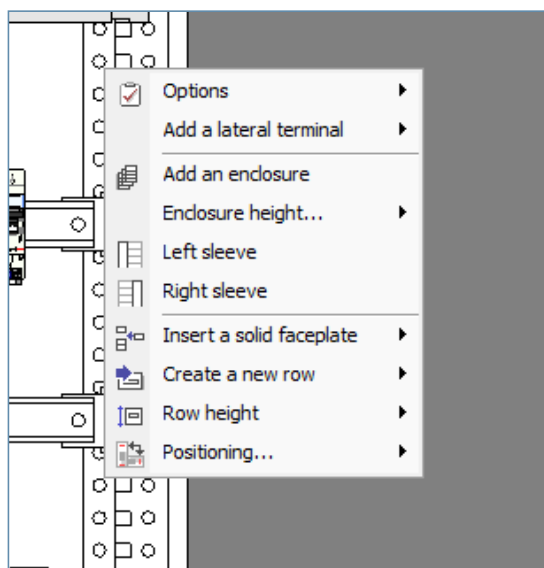
> Moving to a sleeve

There are a number of ways for moving the row from your DPX to a sleeve:

- By creating a new sleeve (see page 59) then dragging the whole row to it
- By changing the positioning of your row to "in a sleeve"
- Using the **Arrangement** module (see page 30).

H. POPUP MENUS: XL³ 800 AND XL³ 4000

The popup menus provide some specific options for XL³ 800 and 4000 enclosures.



> Type of faceplate

This enables you to select the faceplate type you want for the selected faceplate (1/4 turn or screw closing).

> Types of faceplates on all the height

Same as before, but over the entire height of the selected enclosure.

> Width of enclosure

By default your enclosure is configured to take 24 modules. You can however modify this to obtain more space with 36 modules (when this is permitted by the products).

This option does not appear when the enclosure contains an internal sleeve as the total width is already 36 modules (the 36 module option can also be selected in the Enclosures module).

> Add internal sleeve

This option is only available for 24 module enclosures.

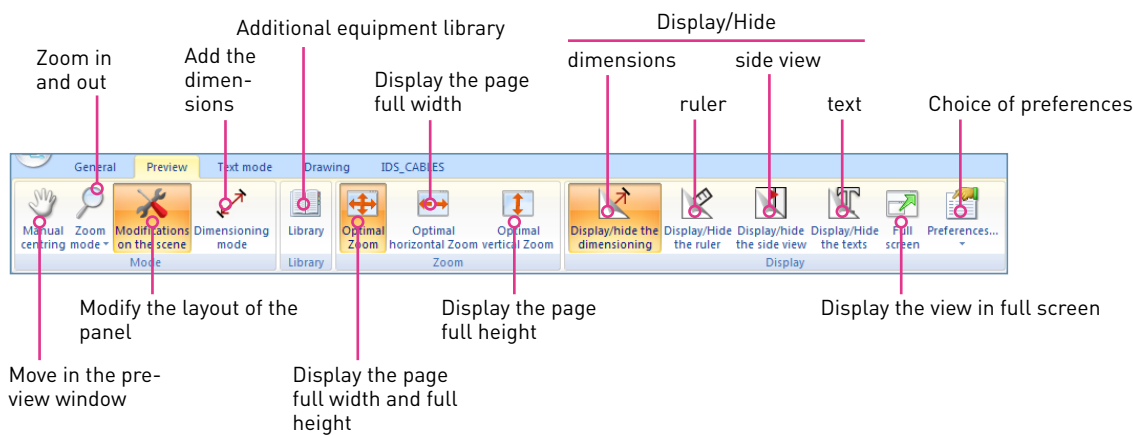
There is also a menu for reversing the internal sleeve (positioned on the right by default).

> Internal sleeves and external sleeves

Depending on the type of enclosure, the popup menu provides the necessary options for adding or deleting an internal sleeve (inserted to the right) or external sleeves (joined to the right and/or left). Deletion is not possible when the sleeve is occupied by a busbar, a device or a side terminal block.

PREVIEW MODULE

3. Preview tab



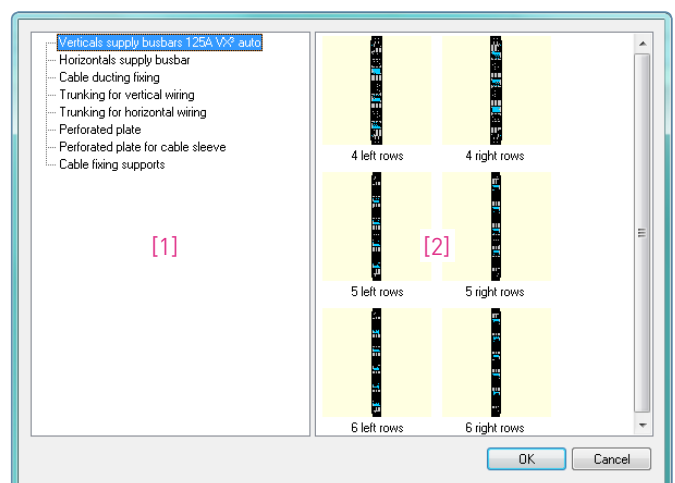
Additional equipment is available in the **Library**. This equipment varies according to the enclosure selected: Lina trunking, perforated plates, cable fixing supports, etc.

- Open the library by clicking on the icon in the ribbon bar
- Select the equipment type in pane [1]
- Select the model in pane [2]
- Confirm by clicking on **OK**

The product is temporarily placed on the workbench. To place it in the enclosure, drag it to the required location in the preview.

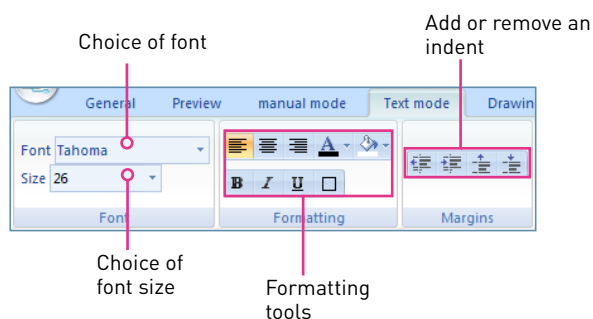
For Lina trunking, you must adjust the length in the same way as for busbars (see page 80).

The catalogue numbers and quantities required are automatically added to the equipment list.

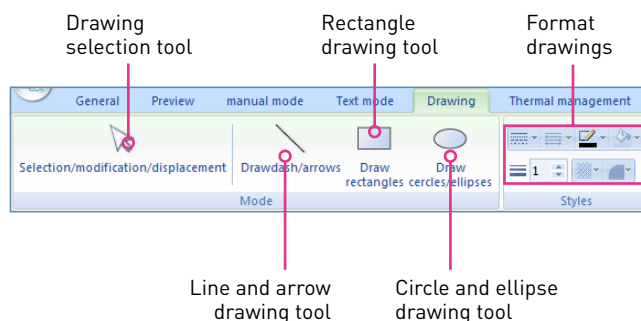


A piece of equipment that has already been positioned can be duplicated using a simple operation: right-click + "duplicate object" menu

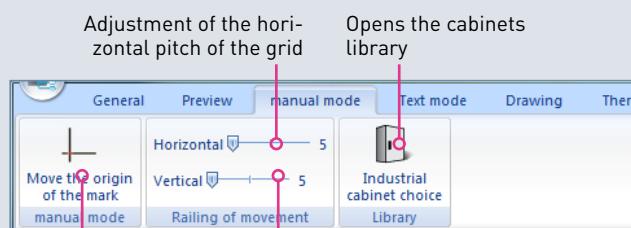
4. Text Mode tab



6. Drawing tab



5. Industrial Cabinets tab (present depending on XL PRO version)



Move the origin of the mark to establish the dimensions and prepare the drill holes

Adjustment of the vertical pitch of the grid

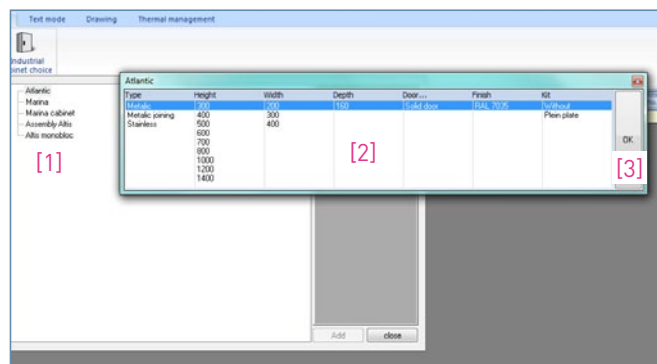
■ This tab in the ribbon bar is only available if you have already selected an industrial cabinet in the **Enclosures** module.

■ It enables you to select an empty cabinet or to create a combined unit.



Products are not positioned automatically.

■ Go to the **Preview** module: a selection window opens automatically for selecting the required enclosure family [1].

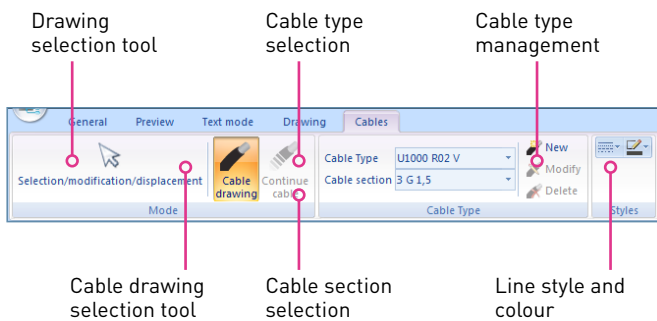


■ Then select the required characteristics [2]. Confirm your selections by clicking on **OK** [3].

■ The empty enclosure appears in the **Device** view windows (see page 52).

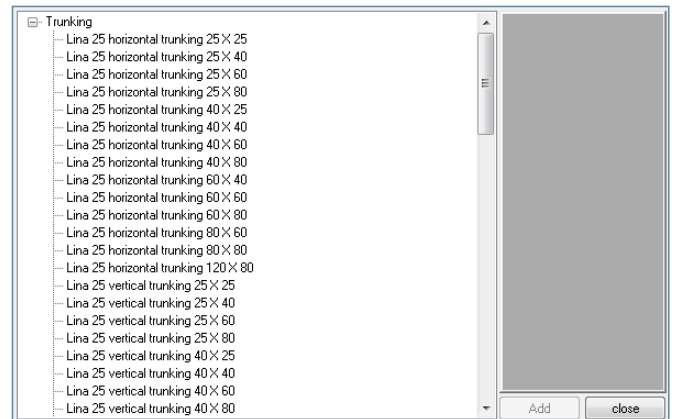
PREVIEW MODULE

7. The Cables tab

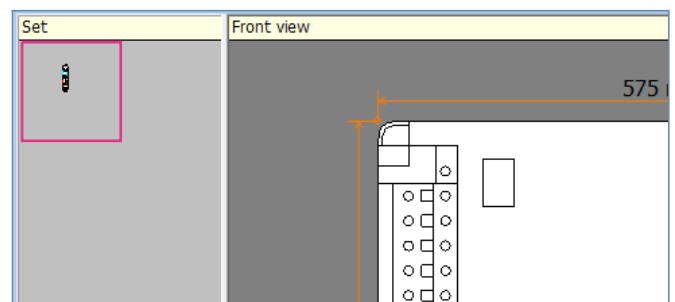


Use the **Shift** key on your keyboard for free placement of control points, then the **Esc** key to terminate the cable.

- You can add products to the enclosure either by right-clicking on the enclosure and selecting **Add equipment** in the popup menu, or by going to the **Parts list** module (see page 18).



- If you use the popup menu, the selected products appear in the current view. You must then position them in the enclosure manually using your mouse.
- If you use the **Parts list** module to add new equipment to the enclosure, they will appear in the **Workbench** pane of the **Preview** module and you must position them in the enclosure manually using your mouse.



8. Thermal Management tab (present depending on XL PRO version)

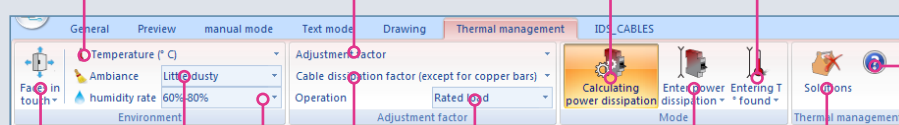
Selection of the temperature:
internal, external and
required internal

Adjustment of the
adjustment variables

Automatic calculation
of the dissipated power

Manual entry of the
measured temperature
for each space

Help with interpreting the colour codes



Choice of the type
of environment

Adjustment of
the dissipation
coefficient

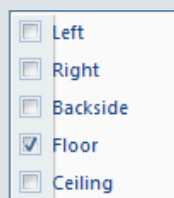
Manual entry of the
dissipated power for and
choice of solutions
each space

Define the
positions of the
walls in relation to
the cabinet

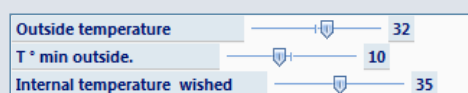
Choice of
humidity level

Choice of type of
operation

- This tab in the ribbon bar is only available for industrial cabinets.
- Firstly select the sides of the enclosure that are in contact with a surface (wall, floor, ceiling, etc.)



- Adjust the measured and required temperature levels using the cursors.



- Then specify the type of environment and humidity level by selecting from the options in the dropdown menus.

- If necessary, adjust the adjustment variables using the cursors.



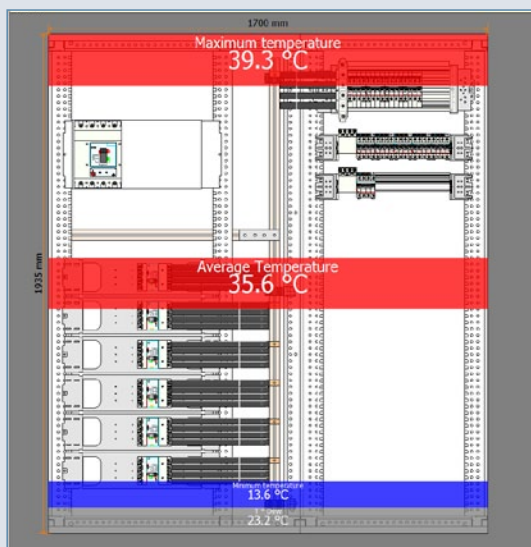
- If necessary, adjust the dissipation coefficient using the cursor.
- Specify the type of operation using the dropdown menu.



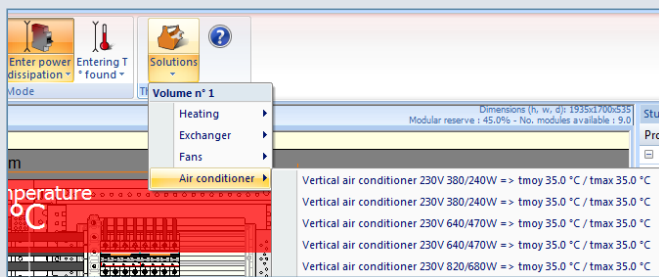
Information windows providing additional details appear automatically as the mouse is moved over the various commands in the ribbon bar.

PREVIEW MODULE

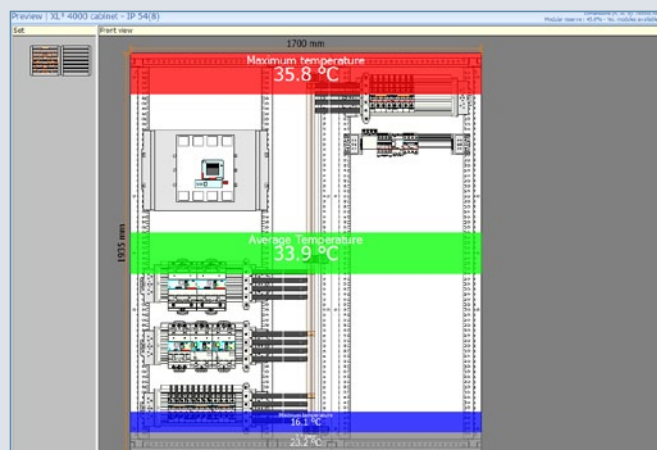
- Enter the dissipated power according to your chosen method: automatic calculation by the software according to the products installed in the cabinet, or manual entry of the value you have calculated, or simply by entering the measured temperature.
- All the data entered appears in the view. The colour code indicates any risks of excessive temperature rise or condensation.



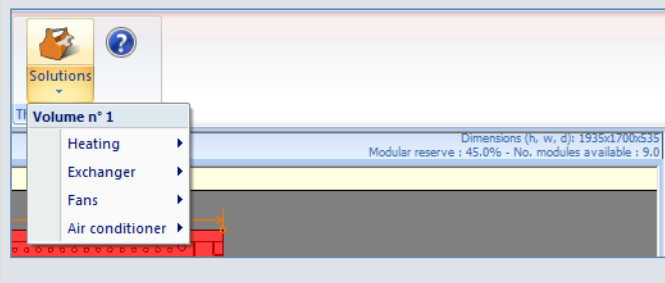
- Once all these parameters have been established, the **Solutions** dropdown menu automatically offers the most suitable thermal management products.



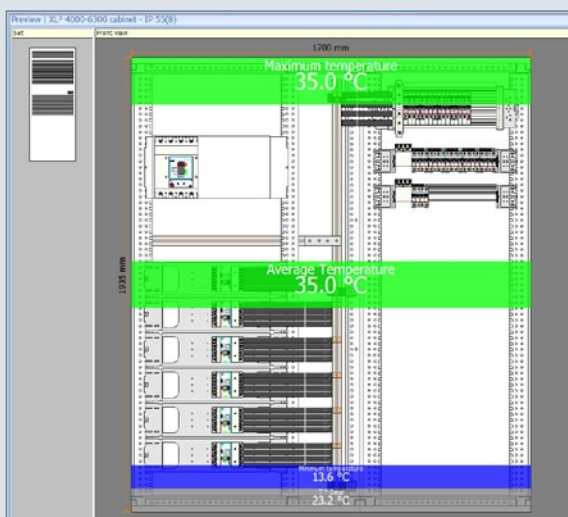
- The selected products appear on the workbench.
- The view is automatically updated and the coloured banner indicating the average temperature changes to green.



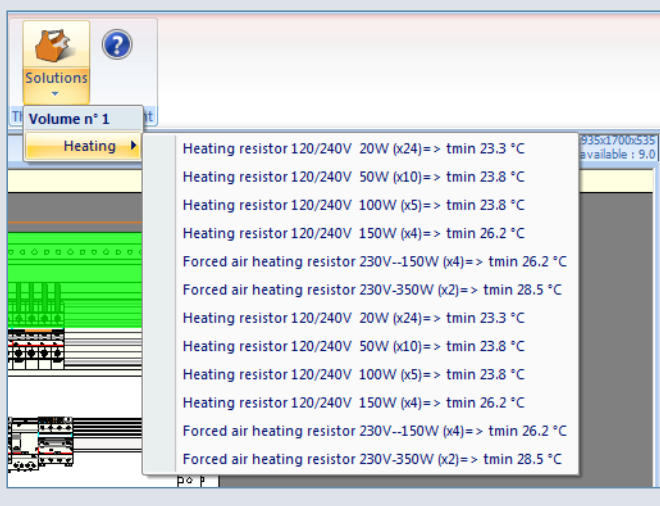
- To lower the average temperature at the top of the cabinet, you must install an air circulation kit. XL PRO³ automatically offers the appropriate product(s) for the enclosure.



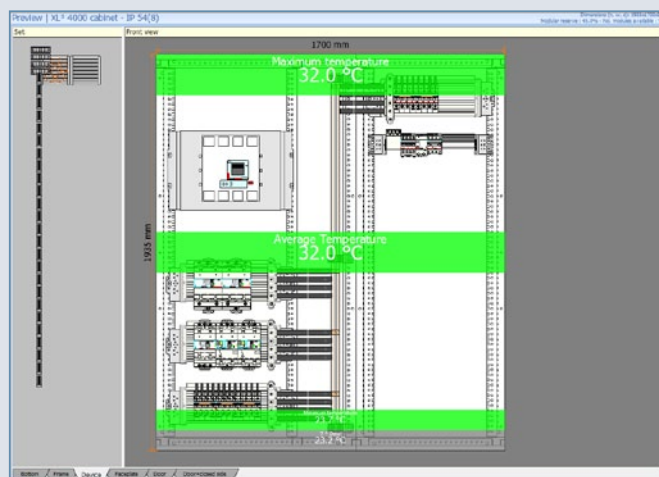
- The selected air circulation kit appears on the workbench.
- The view is automatically updated and the coloured banner indicating the maximum temperature at the top of the cabinet changes to green.



- To avoid condensation at the bottom of the cabinet the temperature must be kept above the dewpoint. To do this XL PRO³ automatically offers heating resistors suitable for the enclosure.



- Select the required device. It then appears on the workbench.
- The view is automatically updated and the coloured banner indicating the minimum temperature at the bottom of the cabinet changes to green. It is now above the dewpoint temperature.

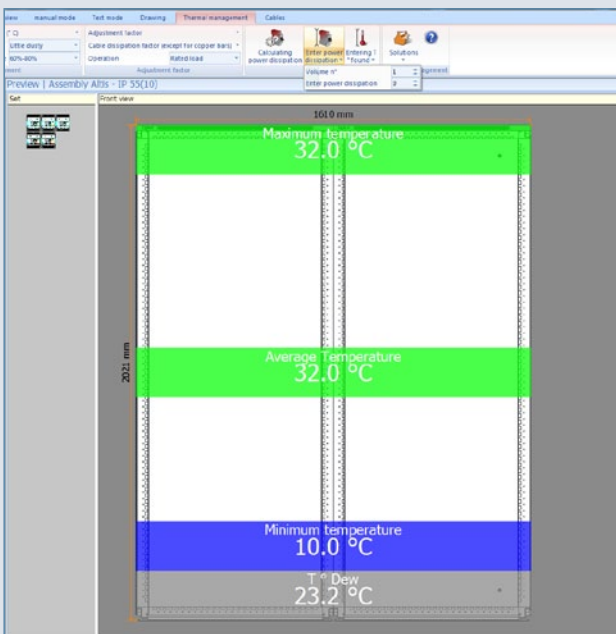
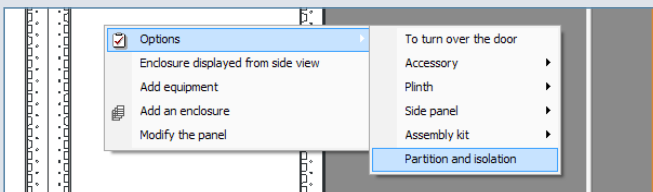


- You can now position the products waiting on the workbench in the cabinet.

PREVIEW MODULE



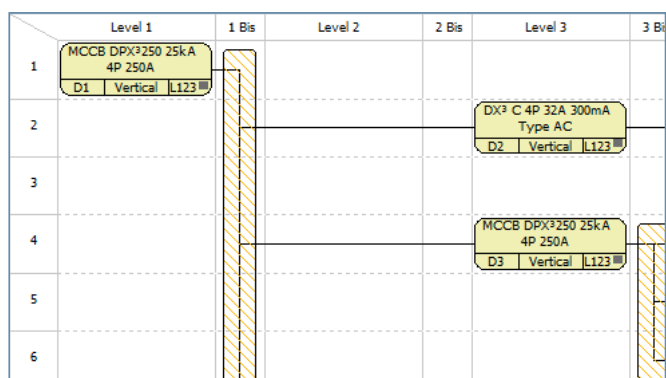
If your cabinet has several spaces, you can add separation and insulation dividers (right-click on the cabinet, select **Options** then **Separation and insulation dividers**) to handle the thermal management of each space individually.



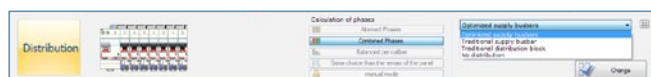
DISTRIBUTION

A Principle

- The entire distribution system is managed from the arrangement table. XL PRO³ automatically detects the product tree structure and the areas in which distribution products will therefore be recommended.
- These areas are represented by cross-hatched coloured bars.



- Click on one of these cross-hatched areas: the distribution solutions corresponding to the products attached to the area appear at the bottom of the screen in a dropdown menu.

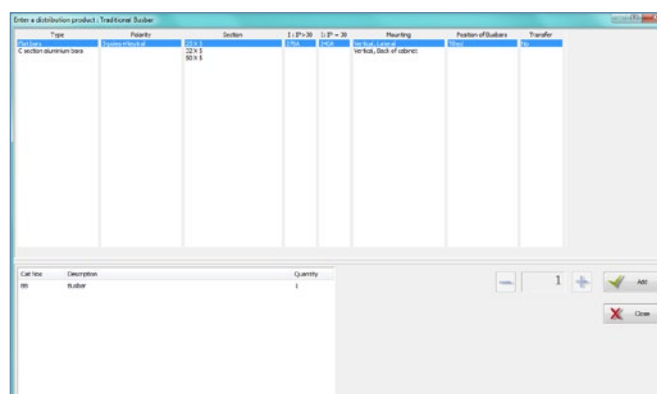


- Select the solution you require then click on **Add**.

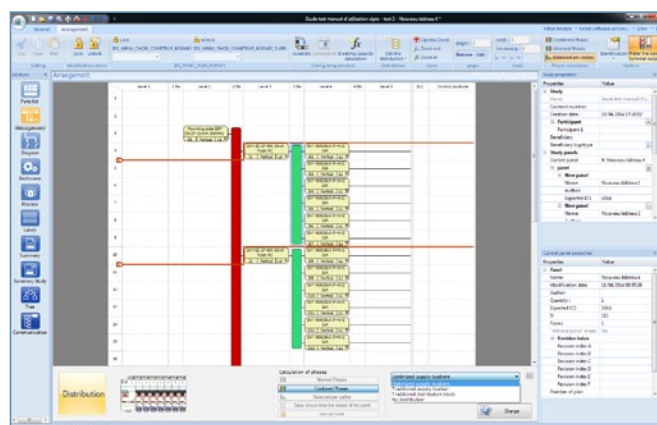


The distribution solutions provided automatically by the software can vary according to the XL PRO version.

- Depending on the solution chosen, you may have to select various options. For example, if you have selected a traditional distribution block.



- When you have confirmed your chosen distribution product, the cross-hatched bar becomes a solid bar.



- You can change your chosen distribution product at any time by clicking on the **Change** **Modify** button in the **Distribution** display area.

DISTRIBUTION

! At this stage the type of distribution product is taken into account but is not yet effective. It will become effective when you have chosen the enclosure and confirmed the preview.

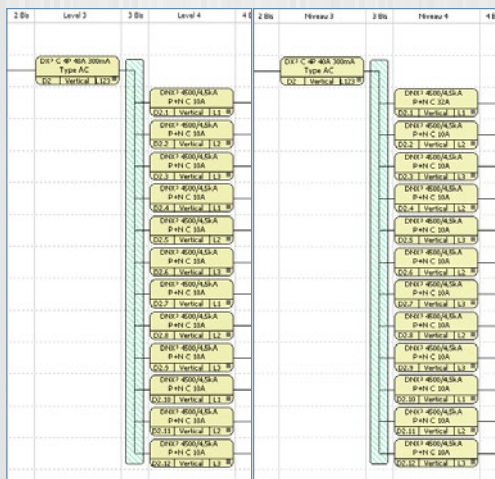
B Distribution methods

1. 4-pole distribution up to 63 A

! In the various 4-pole distribution systems, the numbering of the phases on all the single phase outputs must be managed.

By default, if there is no specific distribution product, XL PRO³ balances the phases according to the ratings.

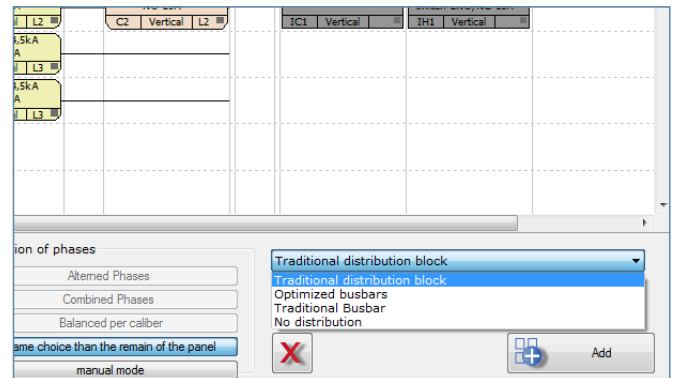
Example:



■ The various distribution solutions depend on the device at the head of the group and the outgoing devices.

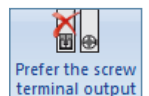
A. EXAMPLE : IF THE MAIN DEVICE IS A 4P 32 A DX³ RCD AND THE OUTGOING DEVICES ARE PH+N DX³:

> Selection of an optimised supply busbar with alternate phases



■ After confirming this selection the connections of the devices are modified automatically. The main device changes to Screw/Auto and the outgoing devices to Auto/Auto or Auto/Screw.

■ If you have selected DX³ Ph+N 4500/4.5 kA and you do not want to use Auto connections at the outputs of the outgoing devices, click first on the **Prefer the screw terminal output** icon in the ribbon bar.



■ It is possible to choose the correct connections directly in the **Parts list**. The type of distribution can then be chosen more quickly.

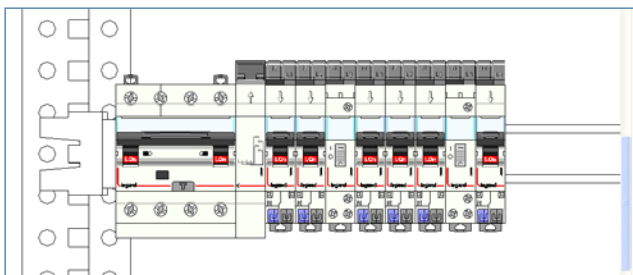
■ For your distribution to be effective you must select the enclosure then open the **Preview** module.

■ After validation, each system is shown in a different colour:

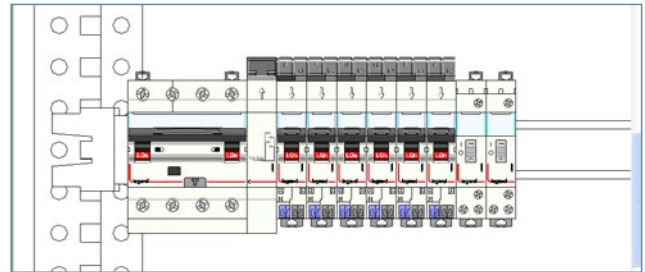
- Blue: HX³ 80/125 A, Plug,
- Green: Distribution of 250/400A rows,
- Purple: HX³ 125 auto,
- Red: 63 A connection device

+ To optimize the determination, you can rearrange the products thanks to color codes.

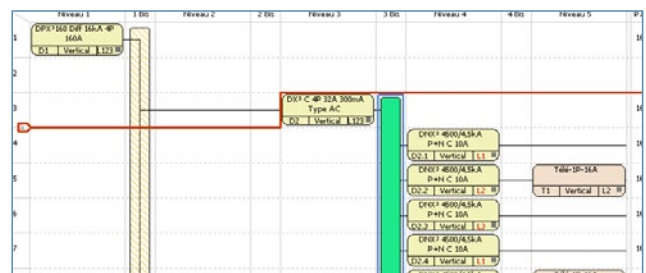
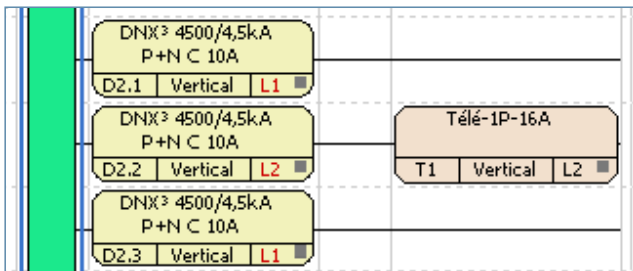
- Phase numbering is automatically updated in the **Arrangement** module and is printed in red.



- The products are at the end of the row and the phases are moved up in the **Arrangement** module.

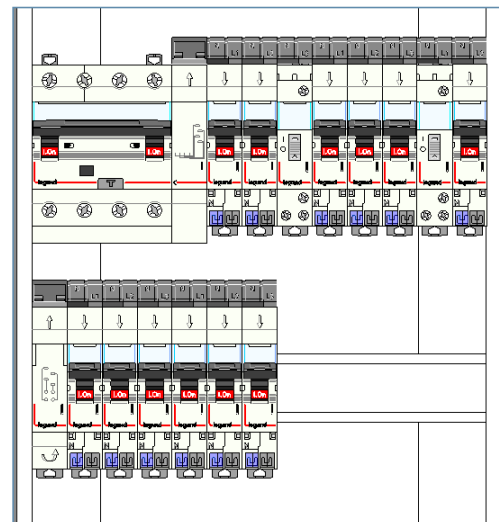
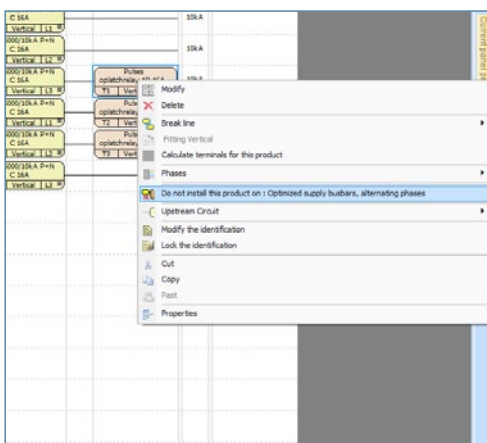


- Remote control switch T1 takes the place of phase 3 below the supply busbar, therefore the 3rd outgoing device changes to L1.



- If there is a large number of outgoing devices which cannot be mounted on a single row, XL PRO³ automatically incorporates a power supply on the following row(s).

- It is however possible not to keep the busbar-compatible devices below the supply busbars (remote control switches, contactors, etc.). To do this, right-click on T1.



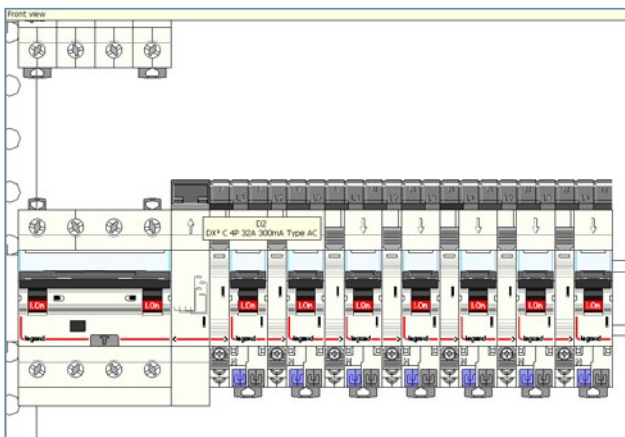
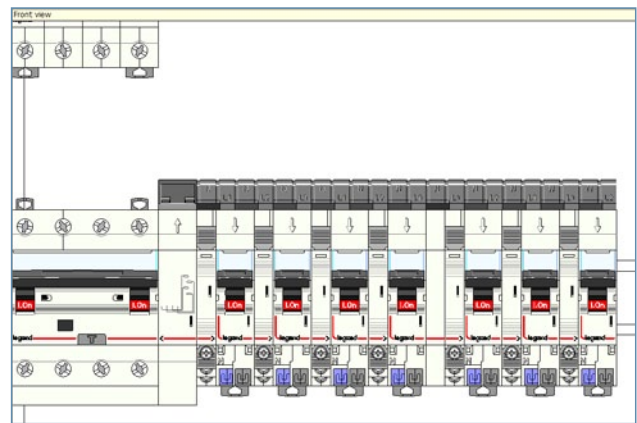
DISTRIBUTION

■ Products that are not busbar-compatible (do not permit the insertion of the supply busbar) are sent automatically to the end of the row.

> **Special cases:**

■ **1:** If the outgoing devices are all DX³ Ph+N with 1 auxiliary contact, the optimised supply busbar system with alternate phases does not permit phase no. 2.

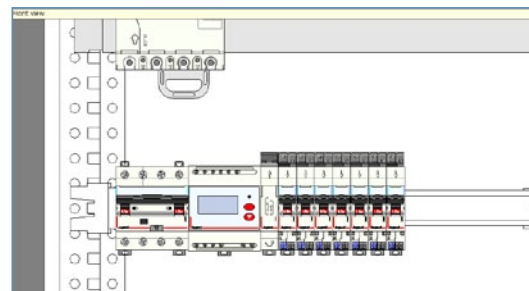
In the **Parts list** module, **Cabling products** family, select **Modular accessories** then the 0.5 module **Spacing unit** and insert it between 2 outgoing devices.



■ **2:** If the product at the head of the group does not have an Auto output or if another measurement type product is placed below the head of the group, XL PRO³ does not give the "optimised supply busbar with alternate phases" option.

It is possible to force the option by adding a **63 A maximum** power supply module.

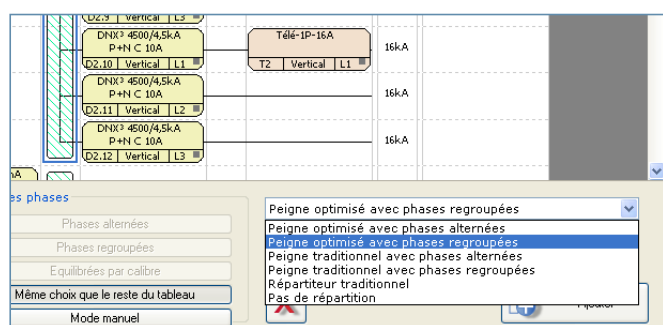
In the **Parts list** module, **Cabling products** family, select a **4P auto power supply module**.



Row	1.00	1.00	2.00	2.00	4.00	1.00	1.00	Product position
1	DX3 C 4P 32A 300mA Type AC	4P auto power supply module	DX3 C 4P 32A 300mA Type AC	DX3 C 4P 32A 300mA Type AC	DX3 C 4P 32A 300mA Type AC	DX3 C 4P 32A 300mA Type AC	DX3 C 4P 32A 300mA Type AC	100
2								101
3								102
4								103
5								104
6								105
7								106
8								107
9								108
10								109
11								110
12								111
13								112
14								113
15								114
16								115
17								116
18								117
19								118
20								119
21								120
22								121
23								122
24								123
25								124
26								125
27								126
28								127
29								128
30								129
31								130
32								131
33								132
34								133
35								134
36								135
37								136
38								137
39								138
40								139
41								140
42								141
43								142
44								143
45								144
46								145
47								146
48								147
49								148
50								149
51								150
52								151
53								152
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99								198
100								199

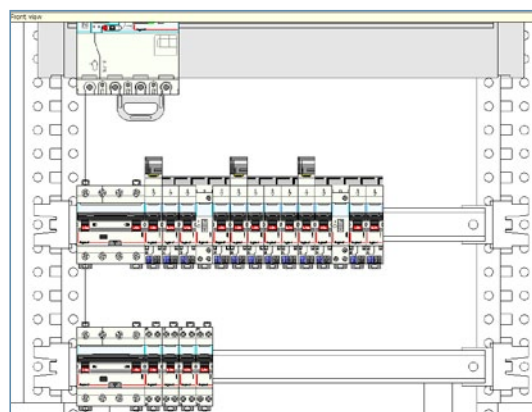
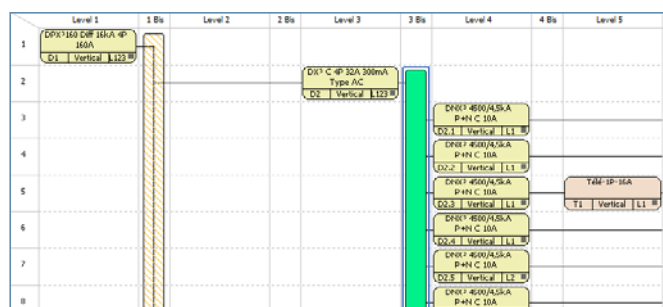
It is therefore necessary to add a spacing unit.

B. SELECTING AN OPTIMISED SUPPLY BUSBAR WITH GROUPED PHASES

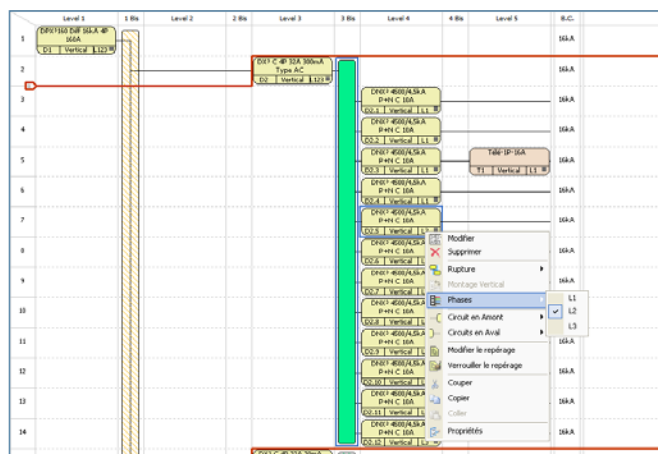


■ After confirming this selection the connections of the devices are modified automatically. The main device stays as Screw/Screw and the outgoing devices change to Auto/Auto or Auto/Screw.

■ XL PRO³ has automatically grouped the phases together.

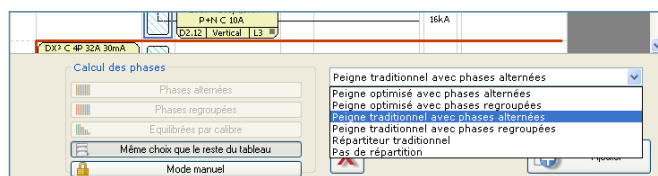


■ The phase assignment can be changed.

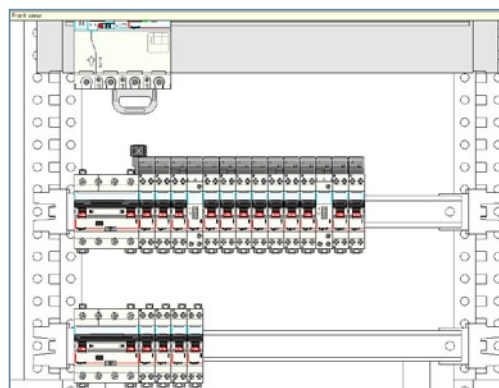


■ But care must be taken to ensure the phases are still grouped together.

C. SELECTING A TRADITIONAL SUPPLY BUSBAR WITH ALTERNATE PHASES

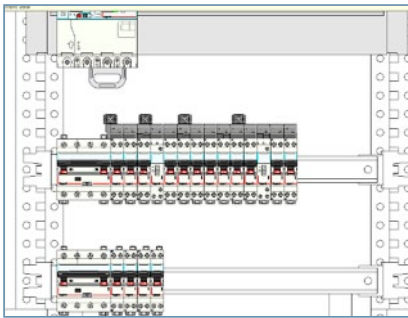


■ The connections of the devices are Screw/Screw.

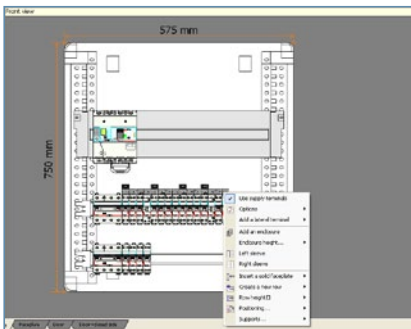


DISTRIBUTION

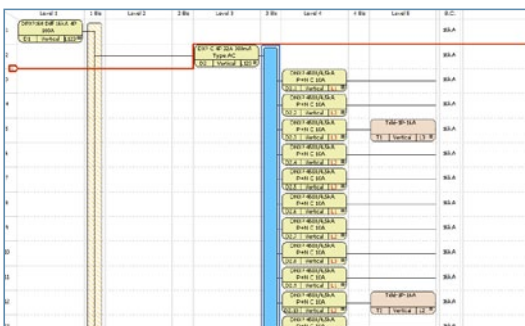
- The incoming terminals are added automatically on the preview. They appear superimposed on one another. They must therefore be arranged manually.



- It is also possible to delete them by right-clicking on the supply busbar then deselecting the **Use supply terminals** option.



- After switching to the **Enclosure** module, the phase numbering is updated automatically in the **Arrangement** module.

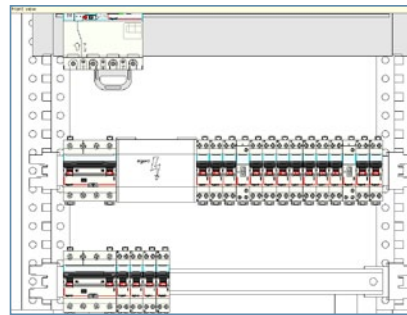


D. SELECTING A TRADITIONAL SUPPLY BUSBAR WITH GROUPED PHASES



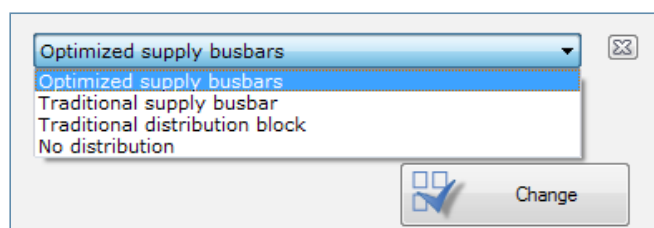
- Select the supply busbar in the **Arrangement** module then click on **Confirm**.
- Select the **Enclosure** then go to **Preview** for your selection to be effective.

E. SELECTING A TRADITIONAL DISTRIBUTION BLOCK

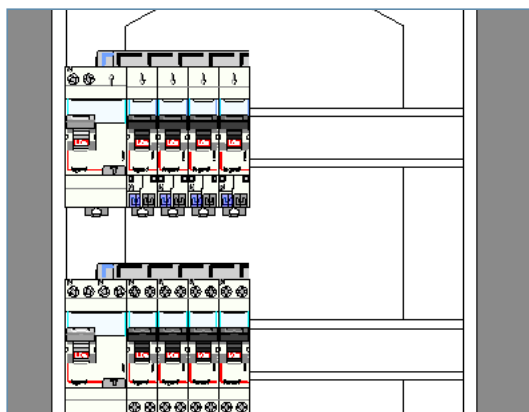


- Select **Traditional distribution block** in the **Distribution** dropdown menu in the **Arrangement** module.
- A selection window opens automatically in which you can select the required characteristics. Click on **Add** then select the **Enclosure** and go to **Preview** for your selection to be effective.

2. Single phase distribution up to 63 A



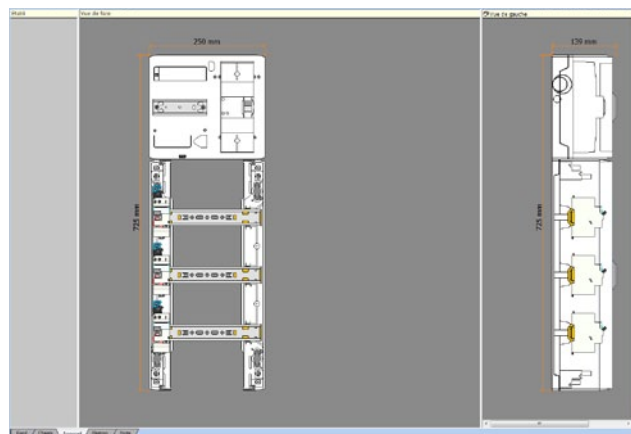
- Select the required distribution in the **Distribution** dropdown menu (supply busbar, traditional distribution block, etc.) in the Arrangement module then click on **Confirm**.



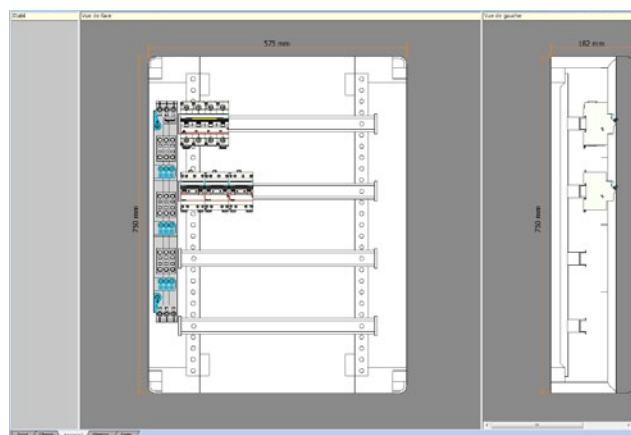
- Select the **Enclosure** then go to **Preview** for your selection to be effective.

3. Vertical distribution

- Select the desired distribution in the **Distribution** dropdown menu (63A mono vertical comb, five-pole comb, etc.) in the Arrangement module; then, click **Add**.



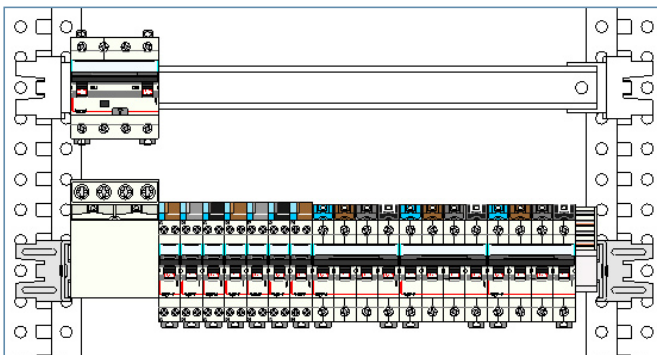
- For your distribution to be effective you must select the enclosure then open the **Preview** module



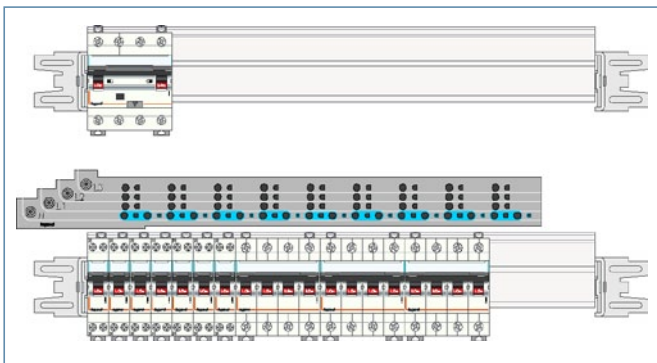
DISTRIBUTION

4. Horizontal distribution

- 125 plug-in optimised distribution block



- 125 auto optimised distribution block



- You can choose the distributor length by clicking directly on it, then selecting full row or 1/2 row.

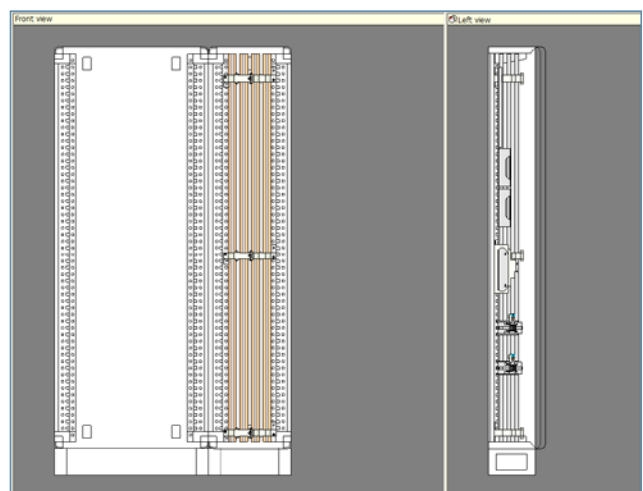
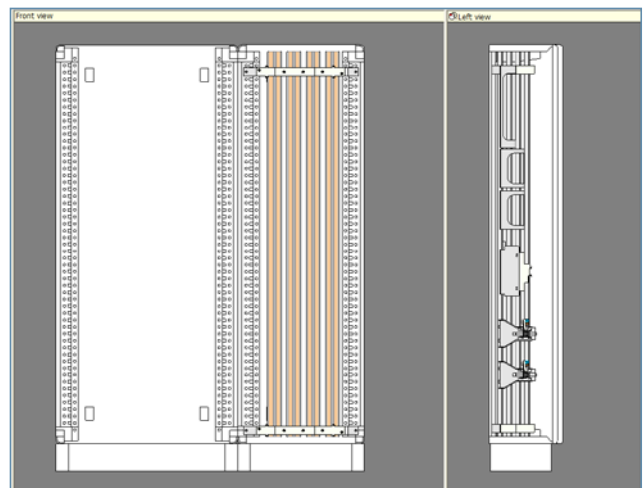
C Power distribution

1. Busbars

A. ALUMINIUM C-SECTION BUSBARS

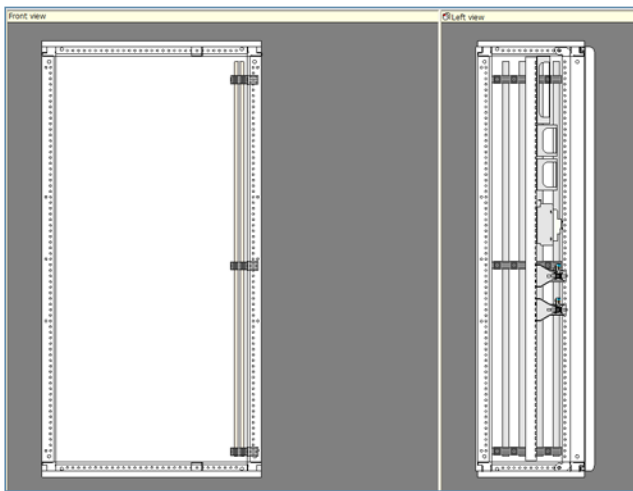
> Side vertical – flat

For mounting in XL³ 400 and XL³ 800 external sleeve



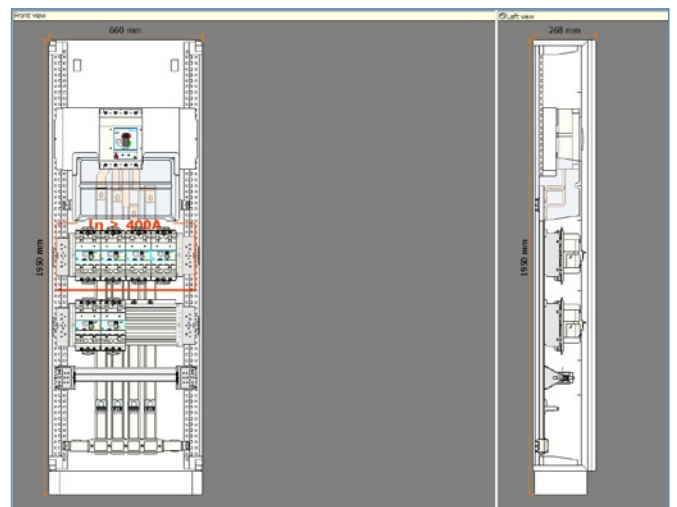
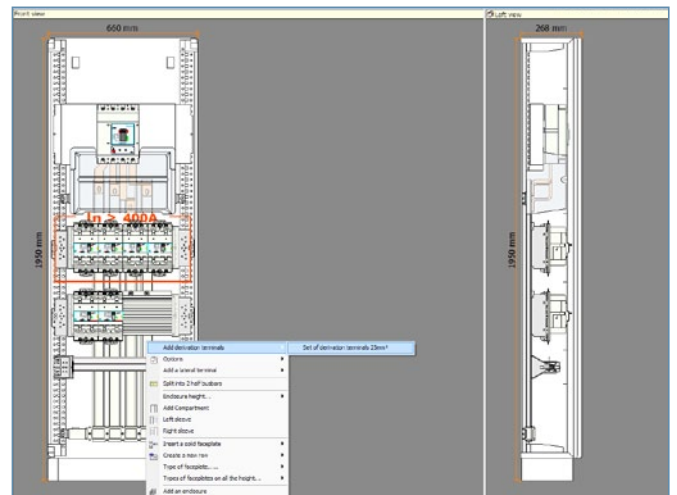
> Side vertical – aligned edgewise

For mounting in XL³4000 internal/external cable sleeve

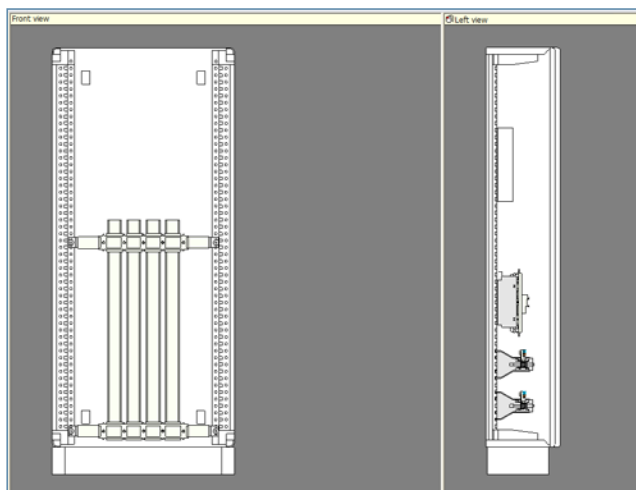
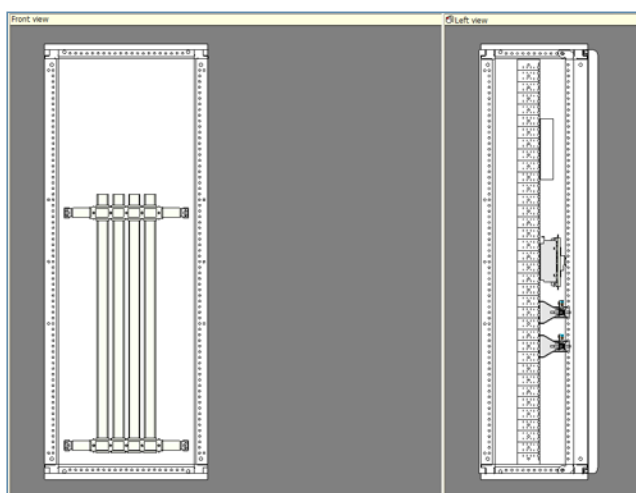


> Vertical at the back of the enclosure – flat

Can be mounted on the back of XL³ 400/800 or between the uprights in XL³ 4000, depending on the rating.



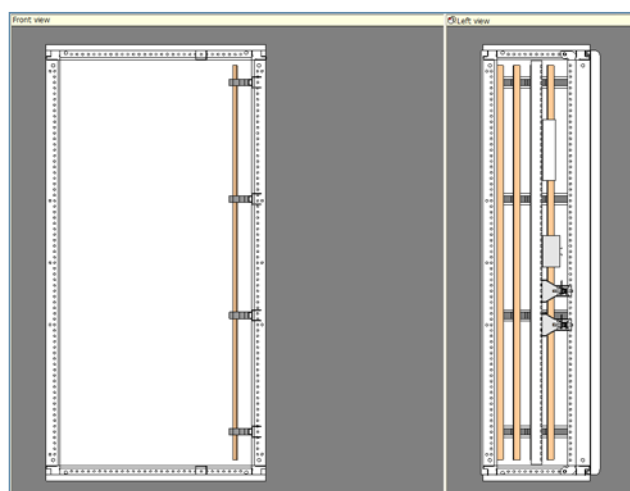
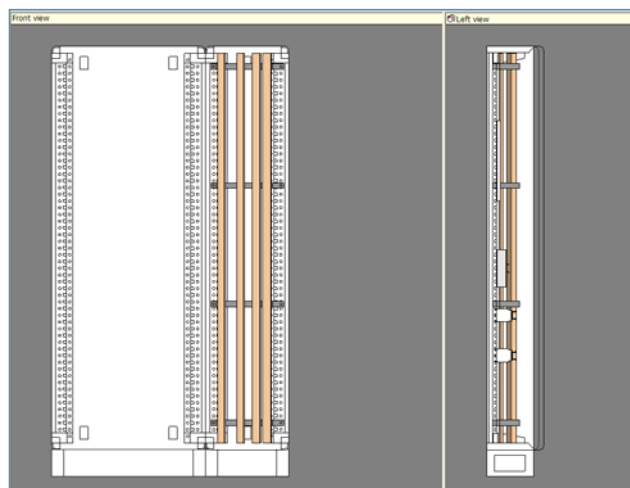
DISTRIBUTION

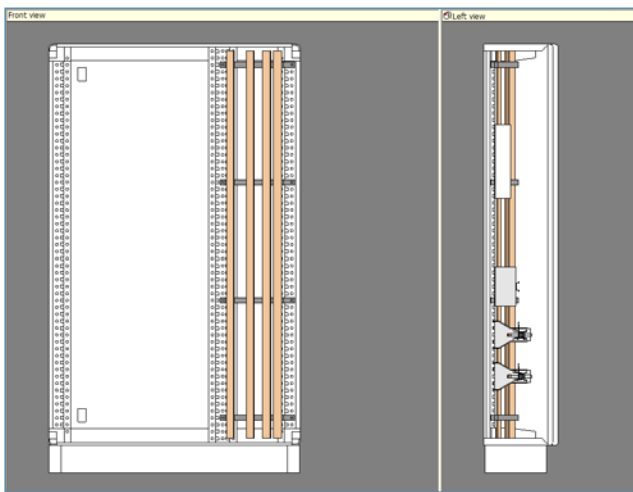


B. FLAT COPPER BARS

> Side vertical – tilted

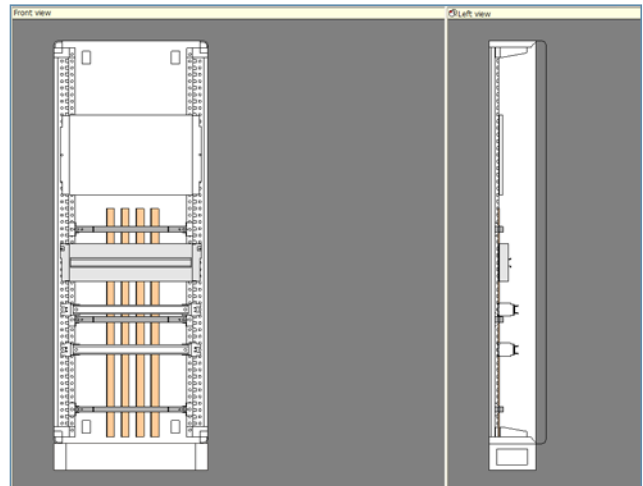
For mounting in XL³ 400 external sleeve and XL³ 800/4000 internal/external sleeve.





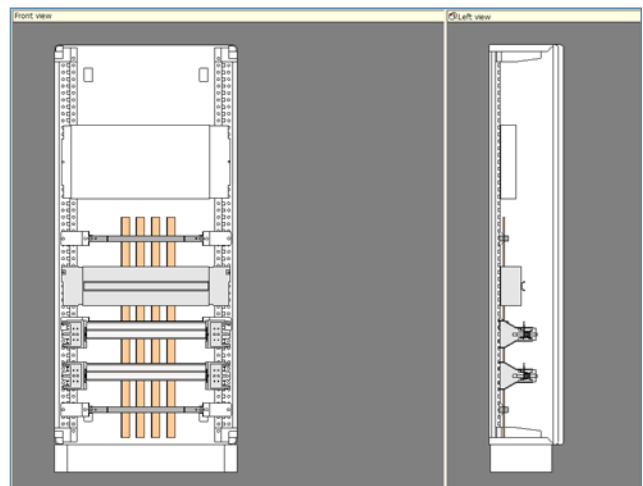
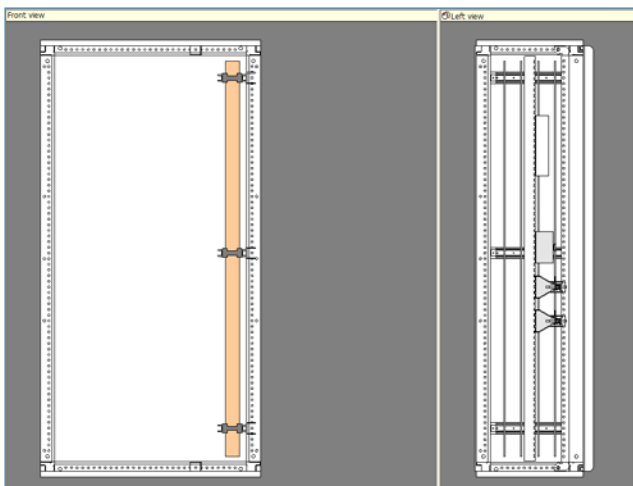
> Vertical at the back of the enclosure – flat

Max. 400 A
For fixing on XL³ 400/800/4000 uprights.

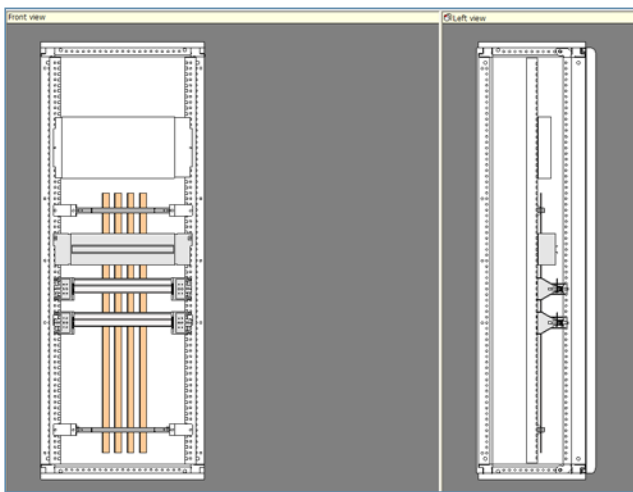


> Side vertical – aligned edgewise

For mounting in XL³ 4000 internal or external sleeve.

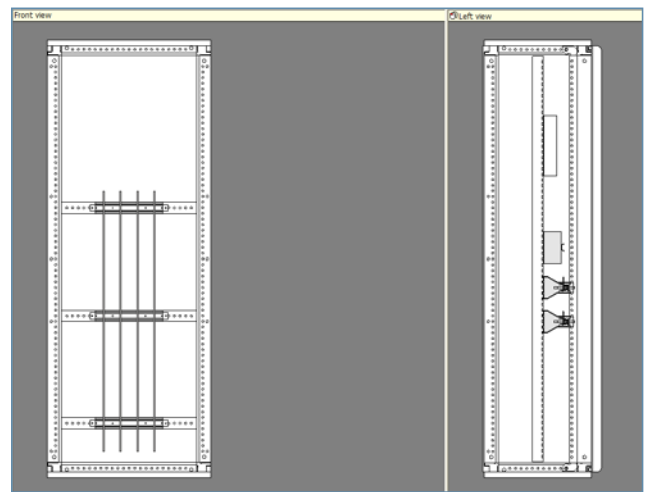


DISTRIBUTION



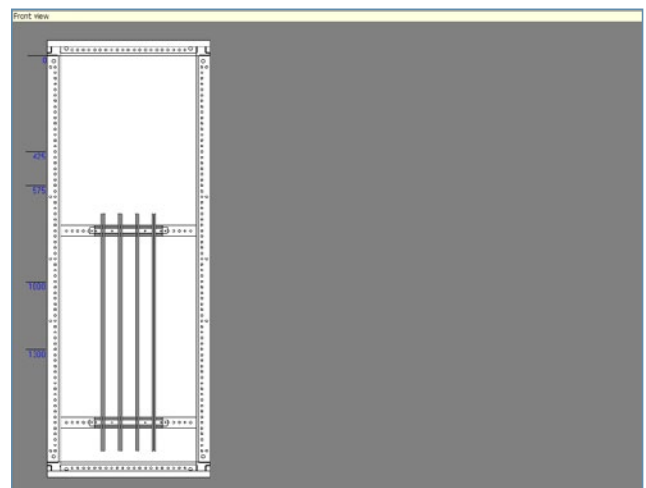
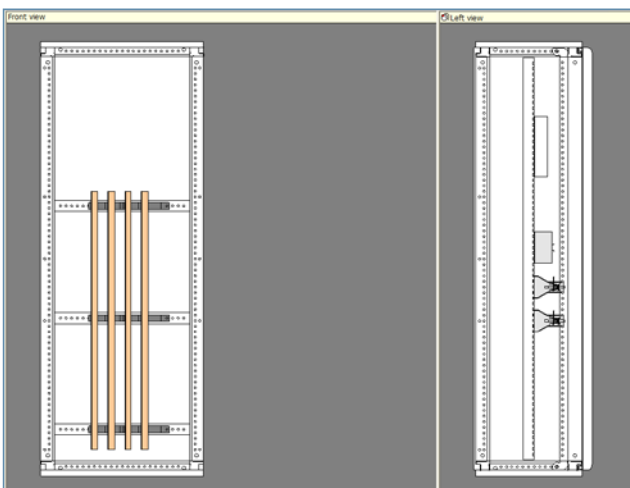
> Side vertical – tilted edgewise

Max. 800 A
For mounting in the back of XL³ 4000 enclosures.



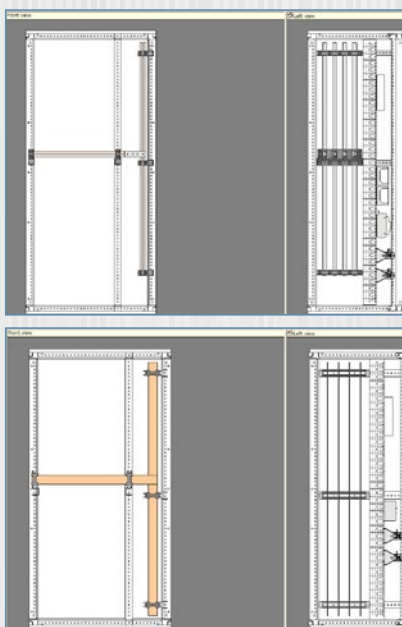
> Side vertical - aligned edgewise

Max. 1600 A
For mounting in the back of XL³ 4000 enclosures.

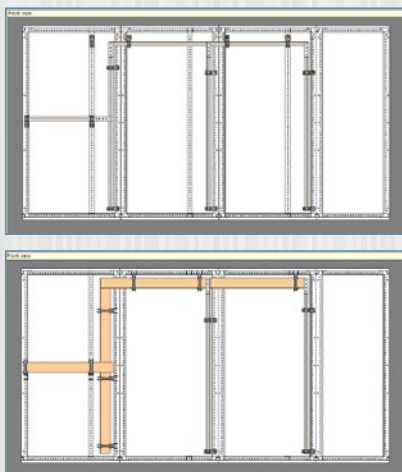




Aluminium and copper side vertical/aligned edgewise busbars can take a transfer busbar.



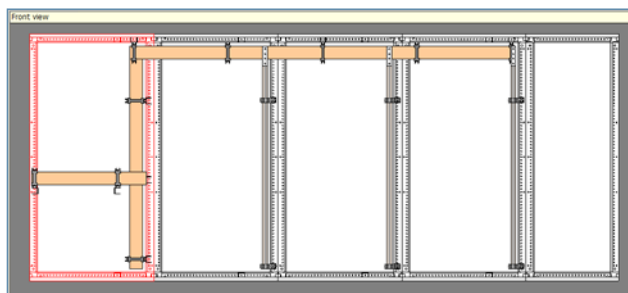
They adapt automatically to the number of cells.



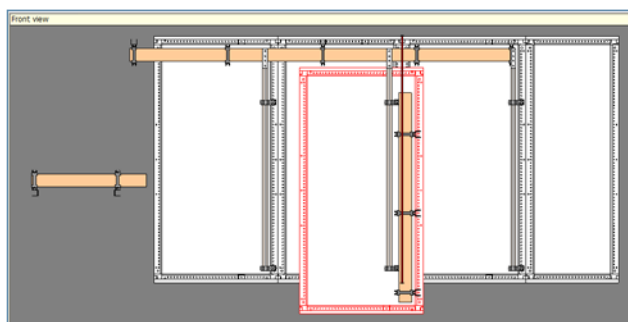
Cabling products must only be created and modified after the enclosure has been fully defined, as XL PRO³ resets your cabling products each time the enclosures are modified.

2. Modifying busbars

- XL3 enclosures allow you to mount your cabling products as you wish in your panel.
- Busbars can be adapted in the preview, for example : when the main device is located at the centre of the panel:
 - Select the enclosure in which the main device is located. The enclosure becomes red.



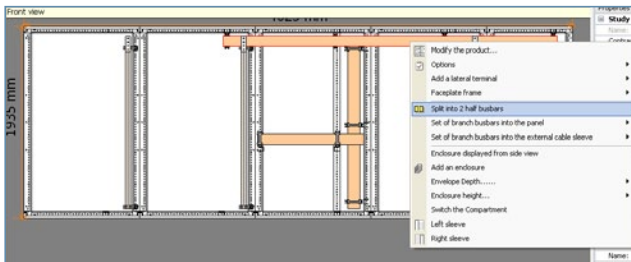
- Drag the enclosure between two others. A highlight appears at the insertion point.



DISTRIBUTION

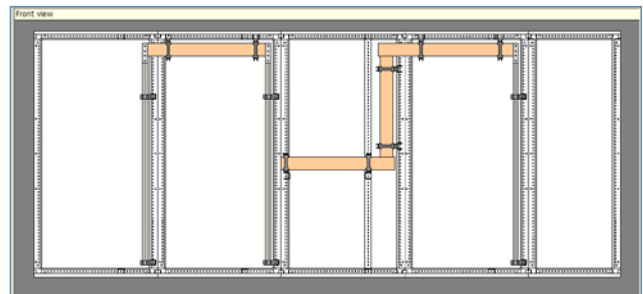
A. SPLITTING BUSBARS

- Busbars can be split in two using the relevant option in the popup menu. Each part can then be moved and adjusted independently of the other, which makes it possible, for example, to extend a main vertical busbar into an adjacent cabinet, or to change the position of a horizontal busbar between two enclosures (in the latter case, connect the two parts with a branch busbar). Once in place, each busbar can be split again.
- By splitting your busbar and adding a sleeve (see page 57) you can incorporate your split busbar.
- Likewise, to delete the busbar, select it. It becomes red. Then press the **Del** key on your keyboard: the busbar is placed on the workbench. If you want to delete it altogether, re-select it on the workbench and press **Del** again.



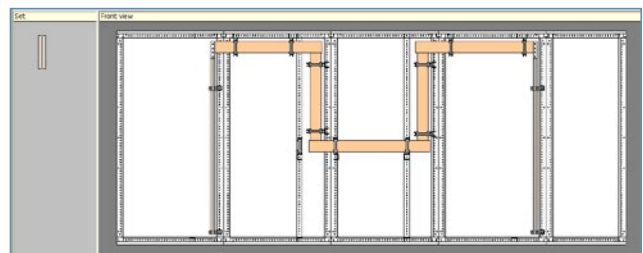
B. MOVING AND ADJUSTING THE LENGTH OF BUSBARS

- To adjust busbars, go to Frame or Device preview mode. The length of bars is changed by dragging their ends with the mouse. XL PRO³ then recalculates the length and defines the number of supports required. The spacing between the supports is calculated automatically according to the peak Isc.

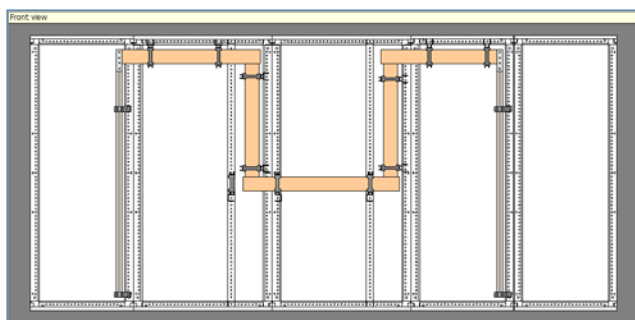


Each time an adjustment is made, the supports are recalculated automatically. Their distance depends on the IK calculated based on the presumed Isc and the device supplying the busbar.

- Busbars can be adjusted in any configuration.

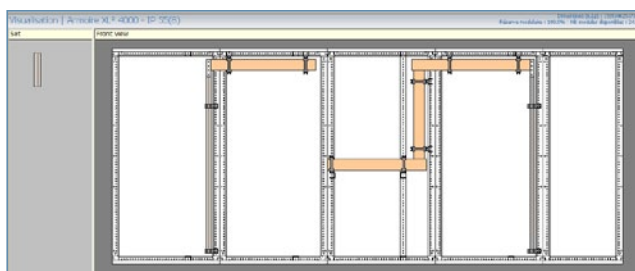


- An aluminium branch busbar can be moved behind the functional upright. But care must be taken to ensure it is accessible for connection.



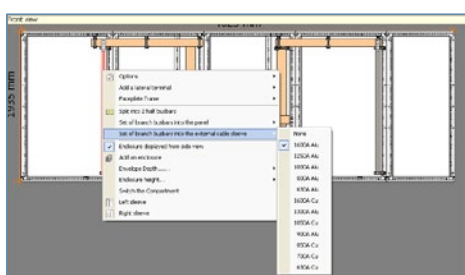
C. DELETING A BUSBAR

- A branch busbar can be deleted by clicking + **Del** key on your keyboard.



D. MODIFYING THE TYPE AND CROSS-SECTION OF A BUSBAR

- The metal (aluminium/copper) of branch busbars can be changed.



3. Optimised busbars

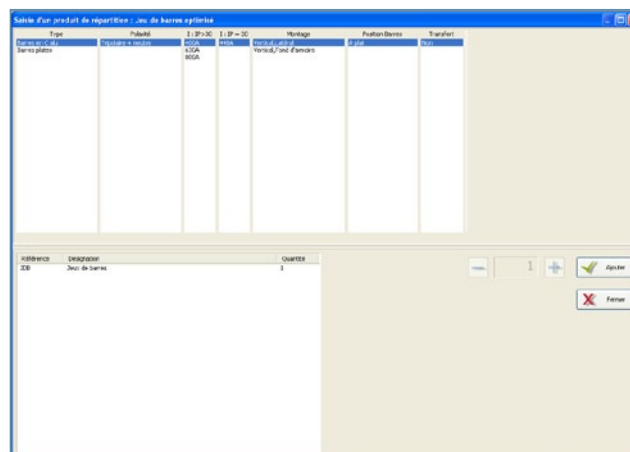
- When an optimised busbar is chosen, XL PRO³ automatically gives all the necessary connection systems for connecting products to the busbar.
- The connection systems are generally given for aluminium bars.

A. EXAMPLE 1

The following can be found behind a ≤ 400 A main device, by clicking on the distribution area in the arrangement table:

- Optimised busbars
- Traditional busbars
- Traditional distribution blocks
- No distribution

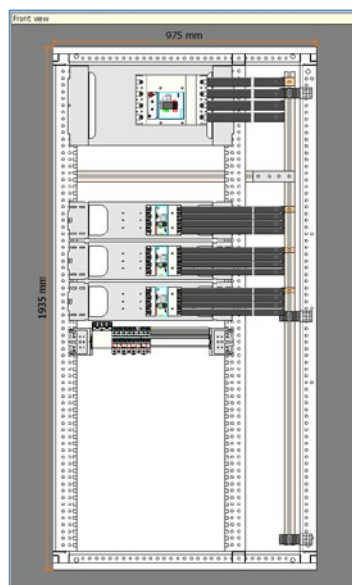
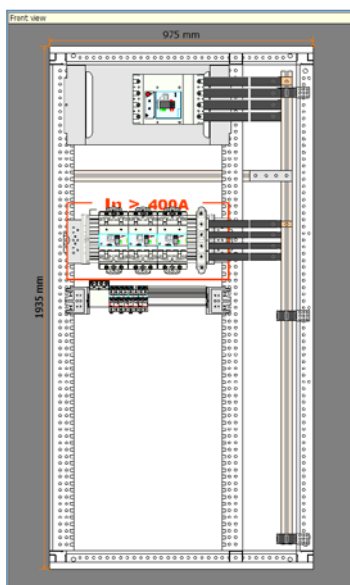
Select an optimised busbar, define its characteristics in the selection window, then click on **Add**.



By default the software gives "Aluminium C-section busbars" so that all the available connection systems can be used.

DISTRIBUTION

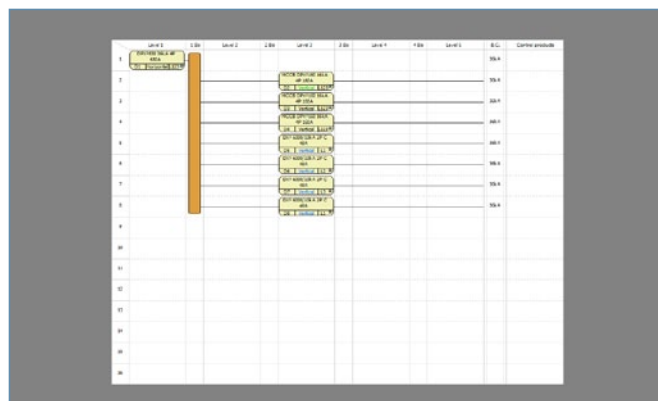
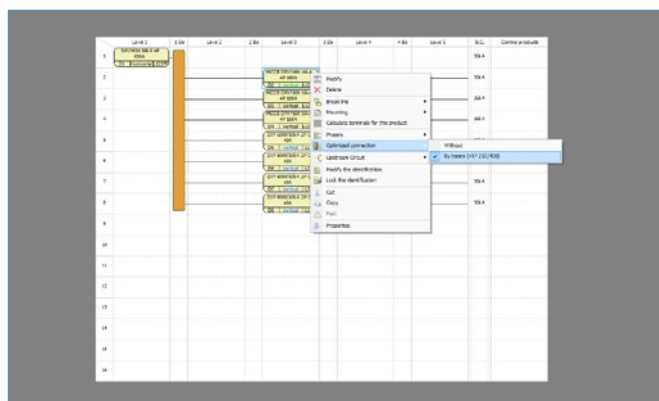
> If you select 400 A – side vertical



- DPX are mounted horizontally and connected to the busbars by connection kits.
- 1.5 module/pole DX³ are mounted on HX³ 250/400 distribution blocks
- 1 module/pole DX³ are mounted on HX³ 125 distribution blocks

DPX³ can be mounted on HX³ 250/400 distribution blocks.

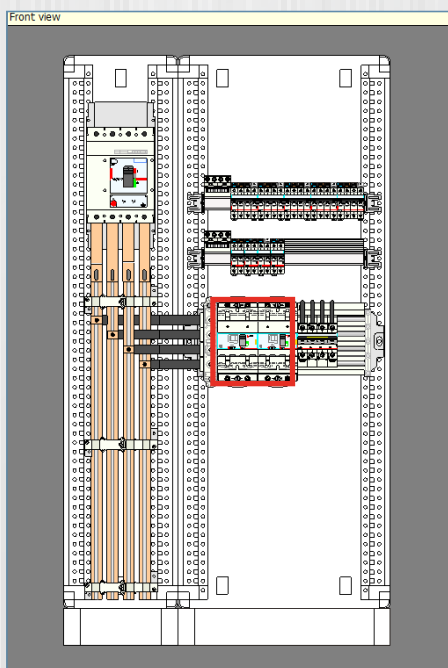
When products are connected via a connection base (use on HX³ 250/400 or HX³ 125) the mounting is displayed in green on the arrangement.



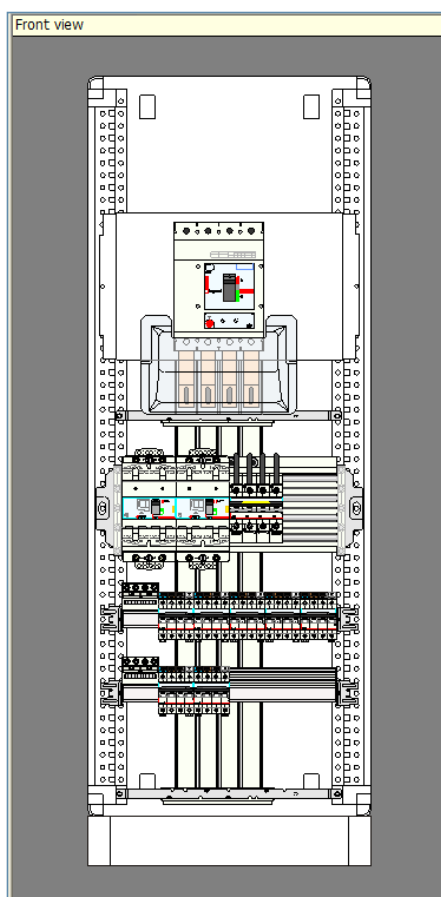


It is not necessary to indicate the horizontal or vertical mounting of products. XL PRO³ automatically gives the correct mounting according to the type of connection used.

However, it is possible to force mounting of the main device in a sleeve. In this case, the rows must be repositioned manually so that the connection kits are aligned with the bars. The modular rows are moved up.



> If you choose 400 A – vertical at back of enclosure



In this configuration the main device is mounted vertically.

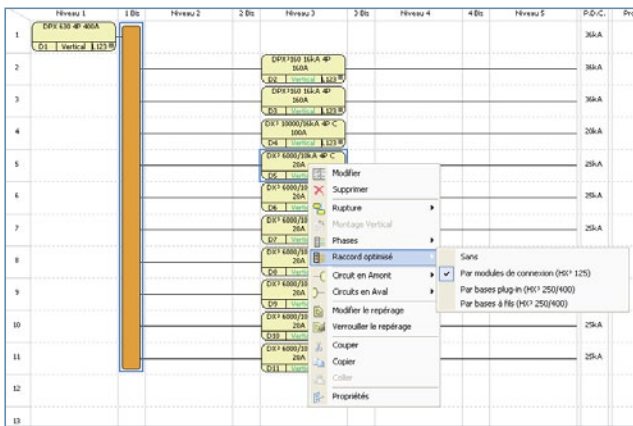
- 1.5 module/pole DPX³ and DX³ are mounted on HX³ 250/400 distribution blocks
- 1 module/pole DX³ are mounted on HX³ 125 distribution blocks



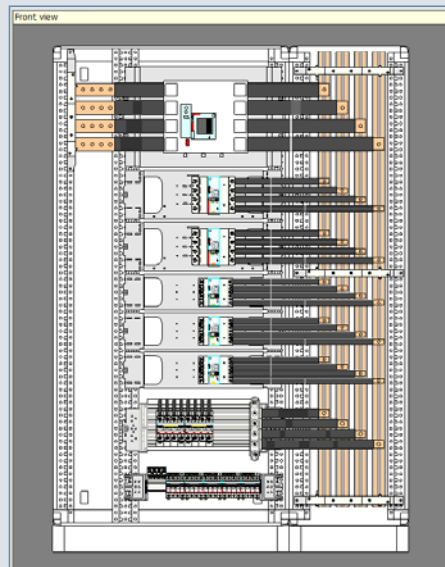
Another alert appears if the In value of the devices on the distributor is higher than the distributor's I_{max} value.

DISTRIBUTION

It is possible to move 1 module/pole DX³ from the HX³ 125 distribution block to the HX³ 250/400 distribution block. The choice must be made between wired base or plug-in base as appropriate.



> If you select 800 A – side vertical – flat

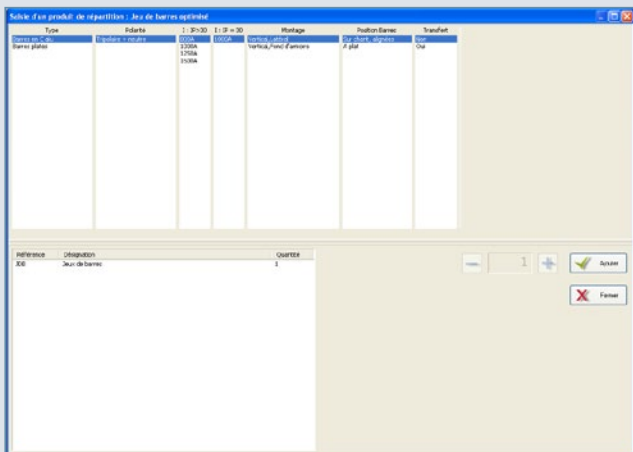


B. EXAMPLE 2

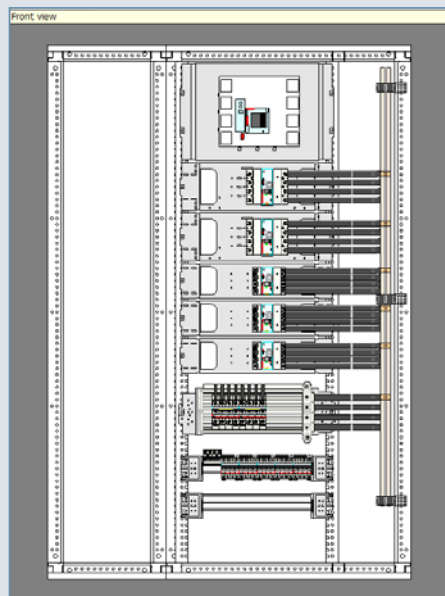
The following can be found behind a < 800 A main device, by clicking on the distribution area in the arrangement table:

- Optimised busbars
- Traditional busbars
- No distribution

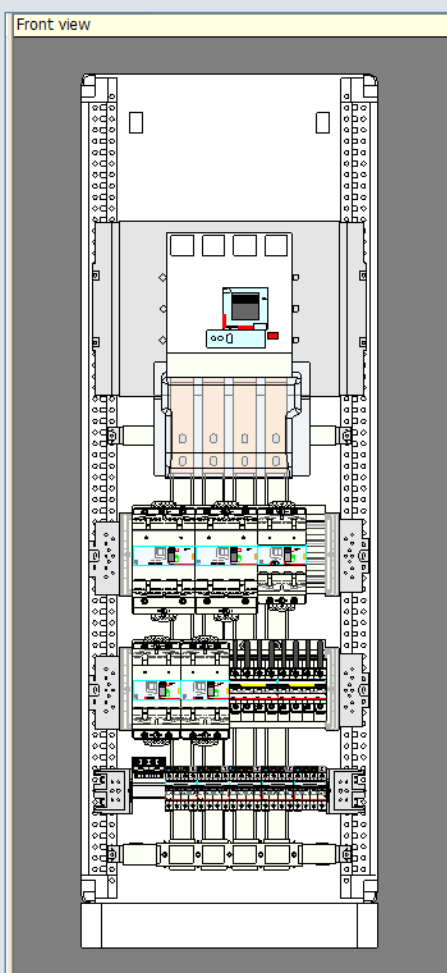
Select an optimised busbar, define its characteristics in the selection window, then click on **Add**.



> If you select 800 A – side vertical – aligned edgewise



> If you choose 800 A – vertical at back of enclosure – flat




C. EXAMPLE 3

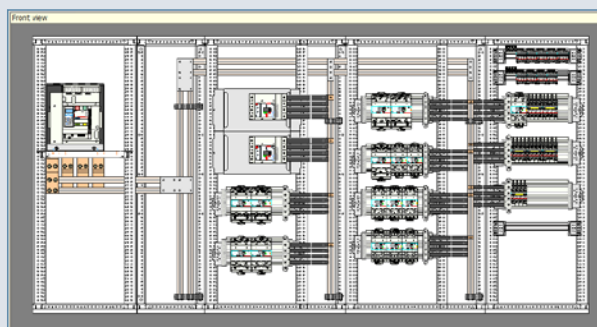
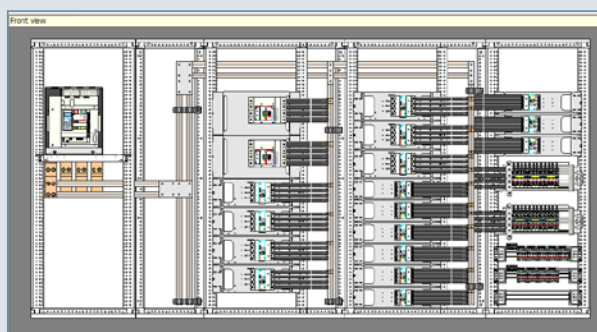
The following can be found behind a ≤ 3200 A main device, by clicking on the distribution area in the arrangement table:

- Traditional busbars
- No distribution

Select an optimised busbar, define its characteristics in the selection window, then click on **Add**.

> If you select 2500 A – side vertical – aligned edgewise with transfer

 The positions of the rows and bar supports must be adjusted manually in all configurations so that the kits can always connect together.



DISTRIBUTION

D Forms

- The form level is selected in the **Properties** of the current panel.

Properties	Value
Current panel properties	
Panel	
Name:	Répartition puissance...
Modification date:	02/04/2012 15:41:37
Author:	
Quantity:	1
Expected ICS	10kA
IS	111
Forms	2
Revision index	
Revision index A	
Revision index B	
Revision index C	
Revision index D	
Revision index E	
Revision index F	
Number of plan	

- A busbar must be chosen.
- XL PRO³ automatically calculates the partitions according to the types of product and the positions of the bars.



- All partitions are shown in yellow.

E Increased Safety (IS) (depending on the XL PRO version)

- The IS level is selected in the **Properties** index of the current panel.

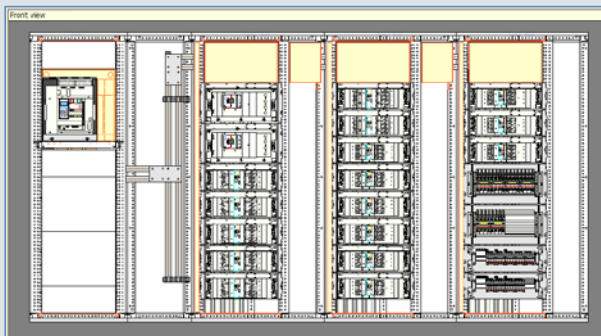
Properties	Value
Study properties :	
Study	
Name:	rtech
Contract number:	
Creation date:	06/03/2012 09:00:53
"Without pannel" m...	No
Participant	
Participant 1	
Beneficiary Bénéficia...	
Beneficiary logotype	
Study panels	
	111
Current panel	112
Pannel	
	121
New panel	
	122
Name:	123
Author:	131
Expected ICS	132
	133
New panel	
	211
	212
	213
	221
	222
	223

- Depending on the selected level, XL PRO³ goes to IS 223, 233 or 333. When an IS level is chosen, a separation form level is also selected:
 - IS 223 → form 3
 - IS 233 → form 3 or 4
 - IS 333 → form 3 or 4
- In the arrangement table, all products compatible with the IS chassis are shown outlined in green.

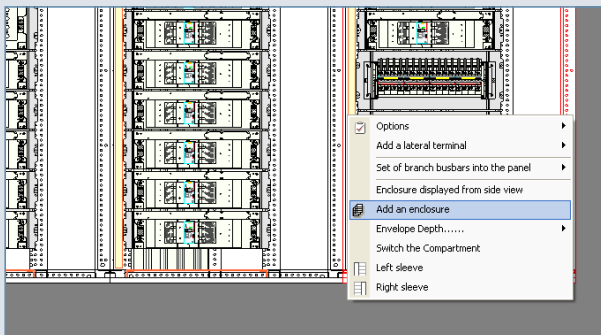
		DPX 630 4P 400A			
		D2 Vertical L123			
		DPX 630 4P 400A			
		D3 Vertical L123			
		DPX ³ 250 25kA 4P 250A			
		D4 Vertical L123			

■ An optimised busbar must be chosen. Then calculate the enclosure and go to the Preview module. The assembly is determined automatically.

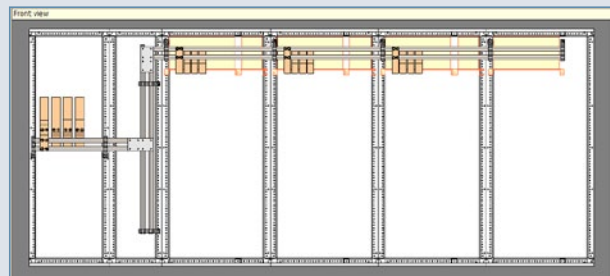
1. IS 223 – form 3



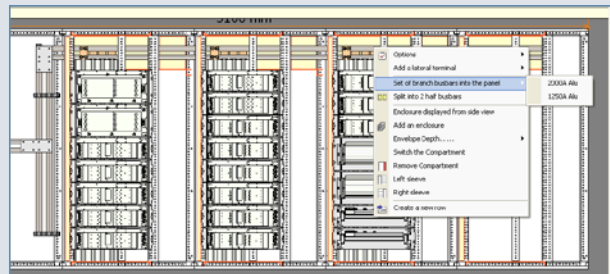
■ An IS chassis can be added for the necessary reserve. To do this, first add an enclosure.



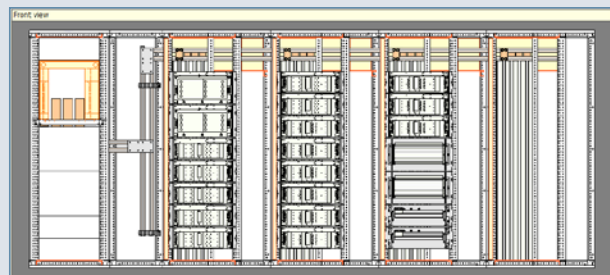
■ Extend the busbar into the added enclosure.



■ Add a busbar in the added enclosure.



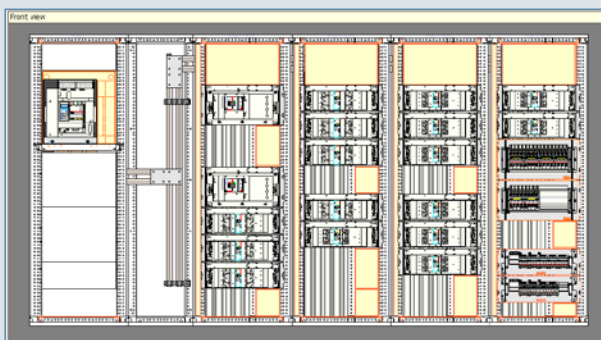
■ The IS chassis is created.



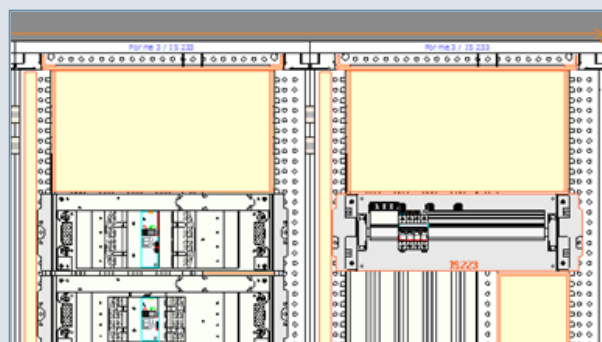
■ By default, DPX³ are mounted on a horizontal base. As for the optimised busbar, it is possible to mount them on HX³ 400 distribution blocks (IS 223 only)

DISTRIBUTION

2. IS 233 – form 3

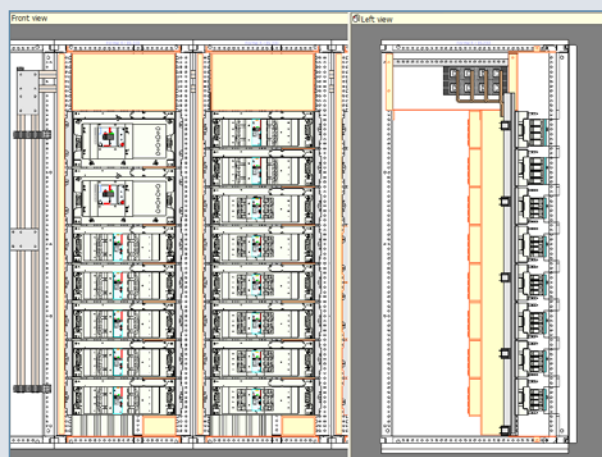
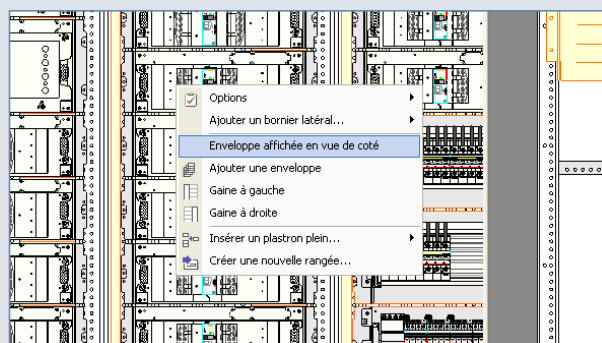
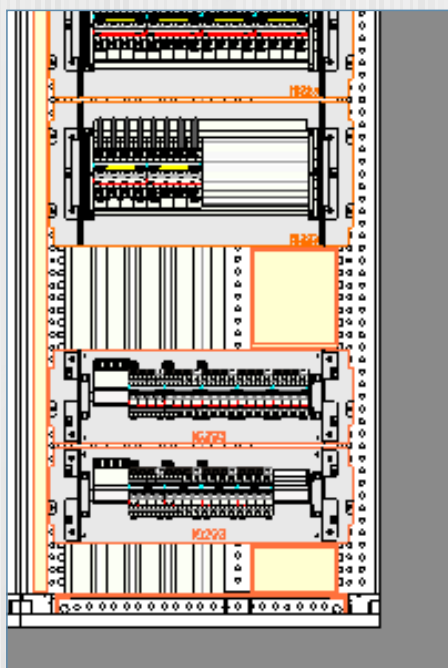


■ The form level and IS are indicated on each column of the main LV distribution board.

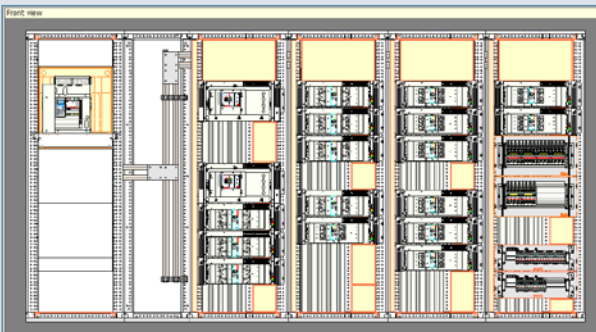


HX³ 400 and HX³ 125 distribution blocks are only IS 223. They are not prohibited on the IS 233 chassis, but the IS level is marked.

■ On the IS chassis, the difference between forms 3 and 4 can be seen when viewed from the side.



3. IS 333



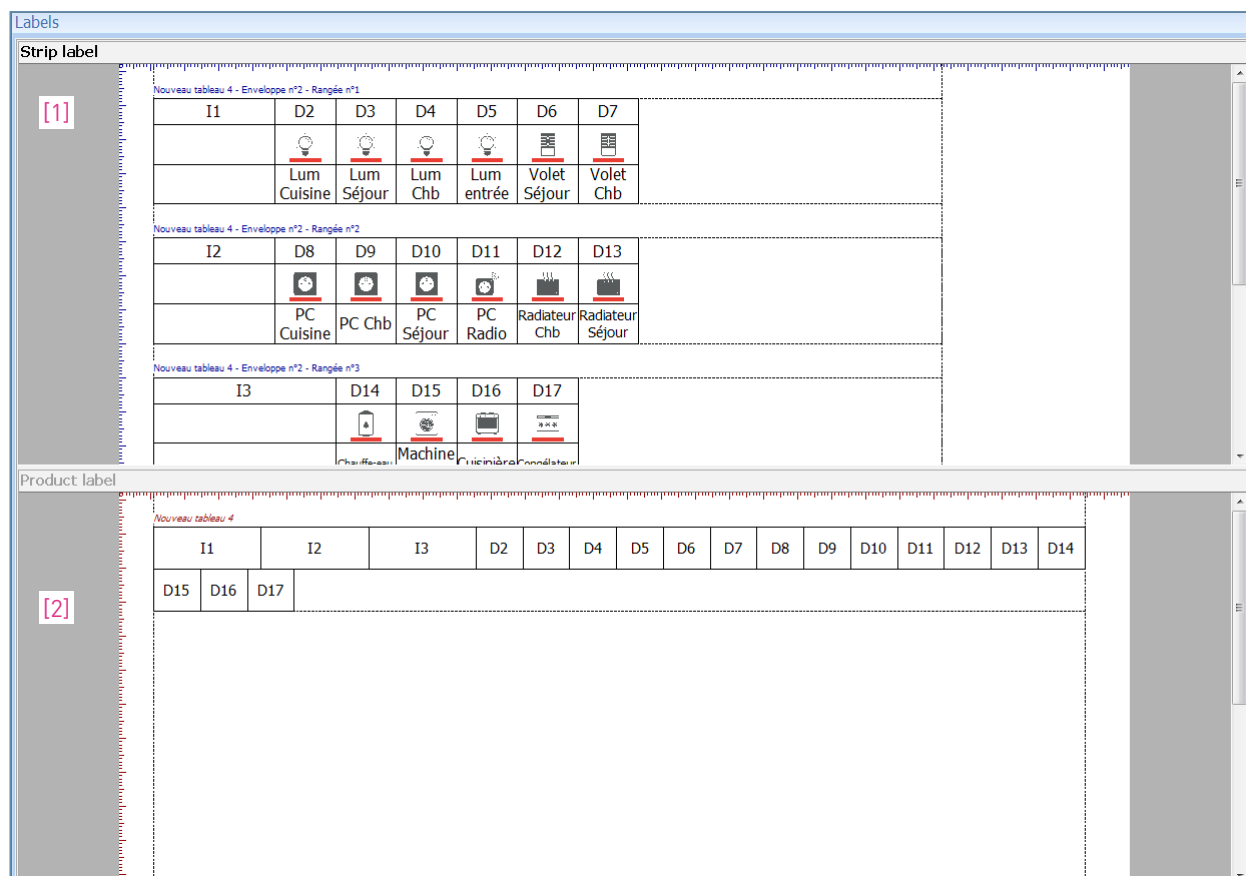
- As for IS 233, the HX³ 400 and HX³ 125 distribution blocks remain IS 223.
- To add the reserve that is essential for the principles of IS, as shown previously, if necessary add an IS chassis, then move the rows to make space, and then insert 200 or 300 mm high solid faceplates.



LABELS MODULE

XL PRO³ can be used to create labels for all devices that have a label-holder and for the strips in the table.

1. Interface



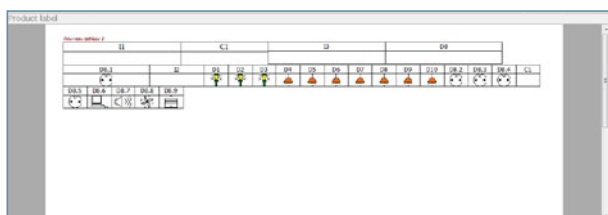
■ These two types of label appear in separate dedicated windows: Strip Label window [1] and Product Label window [2], that you can display or hide using the icons in the ribbon bar (**Labels** tab, see page 92).

■ The labels are in the form of printable sheets.

2. Label templates

- In area [2] all products that have a label-holder automatically generate a label. They are organised in decreasing size order.

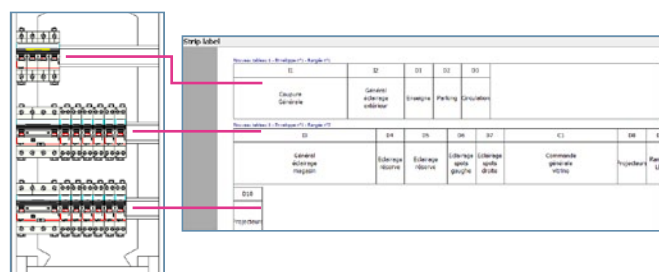
A. PRODUCT LABELS



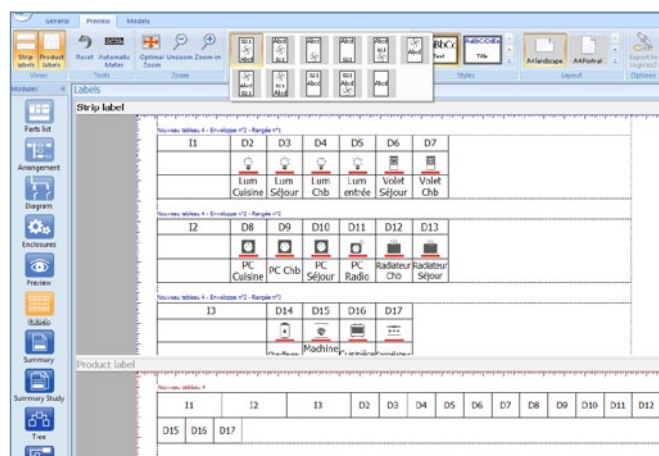
- Product labels can contain up to 3 items of information:
 - Device ID defined in the Arrangement table
 - Description entered in the diagram title block
 - Pictogram entered in the diagram title block
- To change template, click on the required template in the ribbon bar.

B. STRIP LABELS

- In area [1], the strips are created automatically. They depend on the layout of the **Preview** module.



- The contents of the strip labels are defined in the same way as those of the product labels.



The label contents may be entered directly now, without returning to the design module.

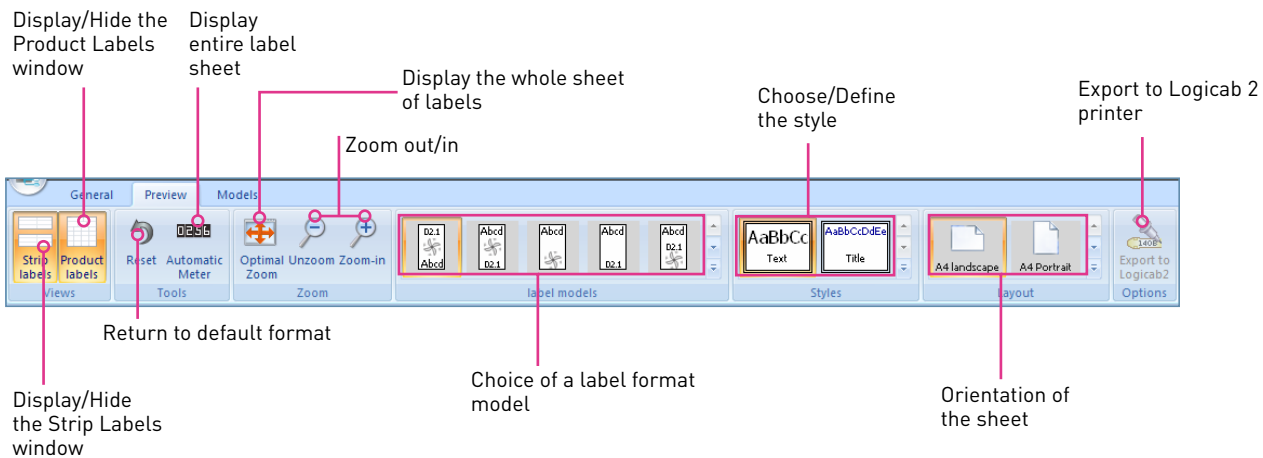
Double-click on the label to be completed to access its contents, then insert text or an image.

If you need to create several identical labels, use the copy-paste function, which you access by right-clicking.

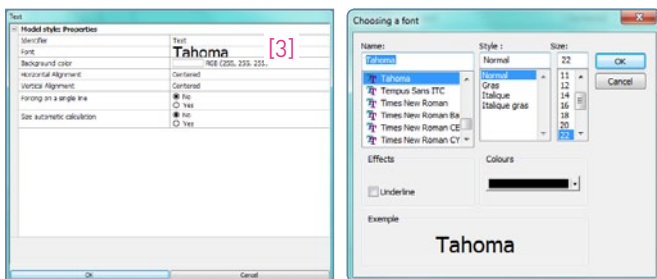
Easily change font with the ribbon tools.

LABELS MODULE

3. Labels tab in the ribbon bar



- Labels can be customised.
- Click on the **Text Styles** or **Title Styles** icon to open the customisation window in which you will be able to select the font, alignment, etc.
- The font, its size, colour, etc., are selected in a specific window which appears automatically by clicking on the preview of the style window [3].



- If you have a Logicab printer and XL PRO is installed on the same workstation, the **Export to Logicab 2** icon is activated automatically and you can export your labels directly.



By default the text entered in the diagram title block is automatically resized in the labels.

D2.2	D2.3
VMC	Eclairage de la zone emballage et expéditions

You can deactivate automatic size calculation.

Calcul de taille automatique Oui Non Oui

Caution: text that is too large will go beyond the label area and it will be necessary to reduce the font size.

Projecteurs	Rampes LED
Projecteurs	Rampes LED

Do not create PDFs as there will be a size problem.

SUMMARY AND SUMMARY STUDY MODULES

The **Summary and Summary Study** modules are used to draw up purchase orders and carry out the overall costing or costing per panel, based on your personal parameters.

A Summary

1. Introduction (depending on the XL PRO version)

The **Summary** module has several tabs which display various summaries, the costing and the purchase order for your current panel.



A. TABS

> Equipment List

This tab displays a complete list of the catalogue numbers contained in the panel.

All factory-assembled equipment is grouped together under one heading. To find out the specific composition of the product, click on in the left-hand column.

> Equipment Costing

The **Equipment Costing** tab can be made up of two windows:
 - One for **Legrand** equipment
 - A second for additional equipment, if used (see page 29)

The **Rate U.P.** column gives the unit price of each catalogue number based on the **Legrand** price list included in XL PRO³.

The **Net U.P.** column shows the unit price for each catalogue number after deduction of the discount which must be entered in the **Discount** field, below the table.

■ Each net price can also be modified individually by double-clicking on the corresponding line. Any prices changed in this way are shown in red. These changes can be cancelled by clicking on the **Return to default purchase order** button.

The **Net Total** of the **Legrand** equipment purchases is updated after each modification.

Reference	Description	Quantity	Rate U.P.	Net U.P.	Net Total
104739	Iron switch 1P-0/4A	1	50,000	49,750	50,000
40313	1U ¹ 125 cabinet 3 rows 18 in	1	140,000	138,400	138,400
40313	White door for 3 rows	1	42,000	39,420	39,420
204818	Energy Type supply module 13 devices 1P+N	1	2,400	2,328	2,400
407013	Terminal supply module 10 ¹ automatic connection 0/4 - 3 rows	1	50,000	49,500	49,500
407018	Automatic four-poles supply busbar 6 modules	2	11,800	11,430	23,640
407012	Automatic four-poles supply busbar 12 modules	1	28,500	27,975	27,975
100258	Automatic protection contact 1P	1	25,200	24,936	25,200
100012	Automatic connection module for ICD 40	1	15,150	14,895	14,895
400816	DI ¹ VCB 630/50A 1P+N C 10A auto/curve	7	19,400	17,460	136,220
400813	DI ¹ VCB 630/50A 1P+N C 10A auto/curve	11	19,400	17,460	192,060
400819	DI ¹ VCB 630/50A 4P C 20A auto/curve	1	180,000	176,580	176,580
411109	IC 30 DI ¹ 400V/10kV 4P C 12A 30mA Type AC 1-phase	1	90,000	88,350	88,350
411110	IC 30 DI ¹ 2P 20A 30mA Type AC 1-phase	1	84,000	81,120	81,120
411112	IC 30 DI ¹ 4P 20A 30mA Type AC 1-phase	1	207,000	201,810	201,810
112582	Power conductor 20A ² with manual control, no fuse	1	70,000	70,000	70,000
112513	Power conductor 40A ² 20A ² 250V	1	133,000	133,000	133,000
			total	1884,51 €	

SUMMARY AND SUMMARY STUDY MODULES

> Cabinet Price

Summary - Cabinet Price

EQUIPMENT

Discount: 0.00 %

Legend equipment purch. net price: 1864.61 €

Additional equipment net price: 0.00 €

Net equipment purchase: 1864.61 €

MARGINS

Cable supplies: 0.00 %

Net total material purchase: 1864.61 €

Gross Margin: 0.00 %

Net sale of Material: 1864.61 €

ESTIMATED LABOUR

Lab. units: 5.00

Labour unit rate: 3.30

Hourly Rate: 20.00 €

Labour costs: 66.00 €

Transport: 3.00 €

Cabinet net price excl. of taxes: 1795.41 €

The **Net price** of the enclosure is calculated according to your own criteria.

The **Discount** shown is that entered in the **Equipment Costing** tab, and can be modified.

The **Additional equipment net price** is calculated automatically using the prices you have entered for these devices (see page 29).

For **Cable supplies**, a percentage of the equipment net purchase price must be entered.

The **Gross Margin** must also be entered in order to calculate the equipment sale price, to which **Transport costs** may be added.

To estimate the labour, XL PRO³ uses a method based on **Labour Units** or Lab. Units.

One Lab. unit is equivalent to the time required for a 4 mm² connection, expressed in hundredths of an hour. This value is estimated on average at 5 hundredths of an hour, but it should be adjusted in accordance with your own experience.

XL PRO³ determines the number of Lab. units for each device, based on the number of poles and the rating. It then calculates the total labour cost in accordance with the hourly rate entered. **Examples:**

4P 16 A modular device = 4 Lab. units


4 P 160 A DPX MCB = 12 Lab. units



You can modify the default “Cable supplies” and “Estimated labour” data. Modified boxes are shown in red.

0.00 %

100 €

To return to the default values, click on .

> Purchase Order

Bilan - Bon de Commande

* Référence de la ligne pour voir le cours du futur. Merci de consulter votre agence régionale Legend ou le site internet Legend pour connaître le devis

Reference	Description	Quantité	P.U. Tarif	P.U. Net	Total Net
330501	Observateur 24 modules	2	7.3600	7.3600	14.72
330535	Coffret équilibré XL 400 métallique MK0	1	347.0000	347.0000	347.00
330536	Support « rail 24 modules » 30x	2	21.4000	21.4000	42.80
330541	Platine DPX 160/250	1	68.8000	68.8000	68.80
330543	Boite grille interne métal 1600	1	211.5000	211.5000	211.50
330550	Platine métal 24 modules H 250	2	40.3000	40.3000	80.60
330559	Platine métal 24 modules H 300	1	41.3000	41.3000	41.30
330541	Platine métal pour 1600	1	37.3000	37.3000	37.30
330542	Platine métal pour H 20	1	39.2000	39.2000	39.20
330529	Refusé pour module	1	29.2000	29.2000	29.20
330780	Kit de liaison de terre	1	15.5000	15.5000	15.50
331414 *	Banc cuivre épais 80x4	1	36.8000	36.8000	36.80
406773	Dig DPX 4 4000/430A SP-IN-C USA	3	13.8000	13.8000	41.40
406782	Dig DPX 4 4000/430A SP-IN-C USA auto-arrêt	2	13.8000	13.8000	27.60
406783	Dig DPX 4 4000/430A SP-IN-C USA auto-arrêt	3	13.8000	13.8000	41.40
411301	Dig 2P 10 6000/100A 4P C USA 300mA Type AC auto-arrêt	1	360.0000	360.0000	360.00
411304	Dig 2P 10 6000/100A 4P C USA 300mA Type AC	1	129.2000	129.2000	129.20
412543	Connecteur 2P 25A cote 220V	2	58.3000	58.3000	116.60
413017	Monture 16A 750V	1	52.7000	52.7000	52.70
413033	Kit organisation à fonction	1	130.0000	130.0000	130.00
413541	Kit fusible digi 2325A multi-fonction	1	207.0000	207.0000	207.00
430249	Dig DPX 250 250A SP 250A magnéto-thermique	2	1450.5000	1450.5000	2901.00
431018	Caractéristique DPX 2 3 émission courant 200-277V ac/dc	2	87.2000	87.2000	174.40
432001	Kit de 4 bornes à cages DPX 250	4	83.7000	83.7000	334.80
432002	Platine de fixation DPX 250 sur rail	2	13.5000	13.5000	27.00

Retour au bon de commande par défaut

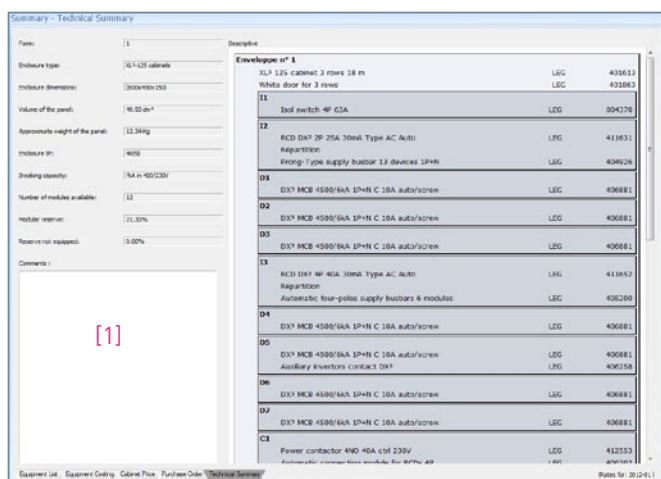
Total: 1795.52 €

The **Purchase Order** tab displays the costed list of the **Legrand** catalogue numbers used in the cabinet.

If you already have some of these products in stock, you can delete them or change the quantities to be ordered by double-clicking on the relevant line. The totals are then automatically recalculated.

To cancel these changes, click on the **Return to default purchase order** button.

> Technical Summary

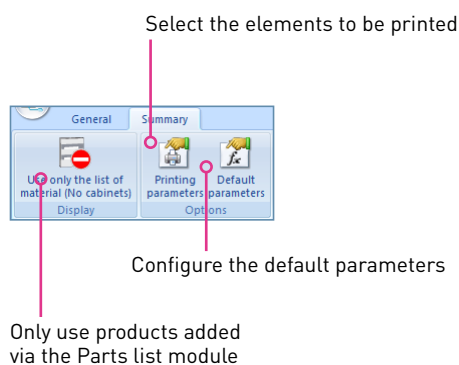


This page displays general technical information about the panel, together with a full description.

This is presented in the form of a descriptive list. It contains all the catalogue numbers classified by enclosure and by row.

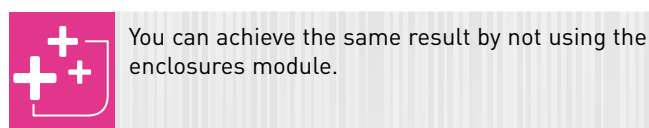
Comments can be added in the window next to it [1]. These comments can be printed out on the technical summary document.

B. SUMMARY TAB IN THE RIBBON BAR



> Only use the list of material (No cabinets)

This menu is very useful if you want to order products with no enclosure. The enclosure and products specific to the enclosure are thus removed from the summary.



C. SUMMARY PRINTING PARAMETERS

> Choice of columns for the panels

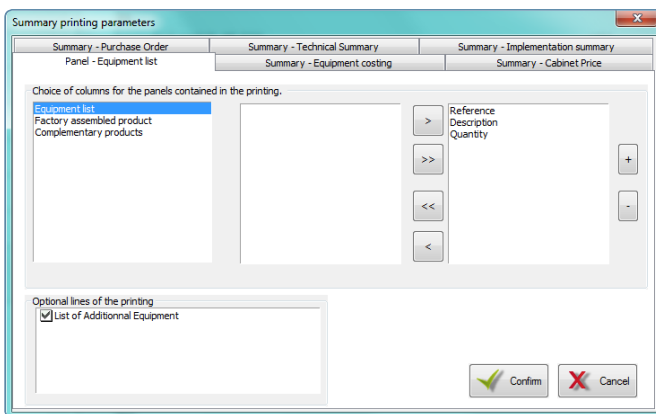
This window is used to select the data you want to show when printing all the tabs, and the order in which you want it to appear. The fields selected are located in the right-hand part of the window in the respective tabs.

Use the and buttons to move the fields from one side to the other. The and buttons move all the fields at once. The and buttons to the right of the window are used to change the order by moving the selected field up or down. Confirm the printing options by clicking on **Confirm**.

SUMMARY AND SUMMARY STUDY MODULES

> Optional lines of printing

Depending on the selected tab, these are used to select or not select a type of information for printing. This function enables you to make certain information public.



When you print your purchase order, the following will be produced:

- A purchase order for the Legrand equipment list
- A purchase order specific to your factory-assembled products
- A purchase order specific to the additional equipment

These two specific purchase orders are only produced if they have been selected in the printing parameters.



The **Summary** module can highlight a problem concerning your choice of enclosure. Click on the arrow to find out which panel(s) are affected so that you can make the necessary modifications.

There are several possible causes:

- You have left products on the workbench

(Some products are on the bench)

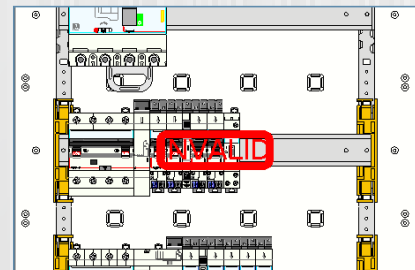
- You have not been to the Enclosures module
- Or XL PRO³ has not found an enclosure to house your products

(Unspecified cabinet, the display is not valid)

The banner indicates "the preview is invalid for certain panels". Click on the arrow to find out which cabinet is affected.

The preview is invalid for certain panels

In the **Preview** module a red "invalid" block indicates that your enclosure is invalid. You must go back to the **Enclosures** module to update the products.



D. DEFAULT PARAMETERS

Here you can set the parameters of the following variables for your current panel and for subsequent panels:

- Labour units
- Discount
- Hourly rate
- Cabling supplies
- Transport
- Access online catalogue
- Gross Margin

Inter reference	Description	Reference	Manufacturer	Net U.P.
BC_100X10	Copper bar 100x10 length 1750mm not supplied	To inform	To inform	0.000000 14.500000
BC_120X10	Copper bar 120x10 length 1750mm not supplied	To inform	To inform	0.000000 18.400000
BC_200X10	IDS_DESIGNATION_BARRES_CUIVRES_SPECIAL	To inform	To inform	0.000000 35.500000



You can configure additional copper bars when they are not available in the Legrand range.

Double-click on the various boxes in the table to fill in the information concerning these products (catalogue number, manufacturer, price, weight, etc.)



You can export all or part of your Summary Study from the **General** tab in the ribbon bar > **Export icon**

You can choose between text or CSV (Excel) format.

2. Access to the E-catalogue

If you are connected to the Internet or you have installed the **Legrand** E-catalogue on your computer, you can access the product database directly from all the lists in the **Summary**, **Summary Study** or **Parts list** modules.

Right-click on a line, then click on Display the technical data in the popup menu to open the corresponding product data sheet from the:

- Equipment List
- **Legrand** Equipment Costing
- Purchase Order

004886	Modular Distr. unit 4P 125A
026299	Spacer for modular products mounted on Din-rail
401613	XL ² 125 cabinet 3 rows 18 m
401863	White door for 3 rows
405200	Automatic four-poles supply bus
406258	Auxiliary invertors contact DX ²
406782	DNX ² MCB 4500/4.5kA 1P+N C 10A auto/auto

If you are not connected to the Internet or you have not performed a full installation of the E-catalogue, a message will appear asking you to insert the CD-ROM.

DISTRIBUTION CABINET XL3 125 - 3 ROWS - 54 MODULES - SURFACE MOUNTING

Unit price exc. tax: 111,00 €
 Pack (number of units): 1
 Volume (dm³): 39,28
 Weight (kg): 4,55

General characteristics:
 surface mounting cabinets XL² 125 - from 18 to 72 modules
 • IP 40 - IK 09 with door
 • IP 30 - IK 09 without door
 • Class I
 • Self extinguishing: resistance to incandescent wire 850°

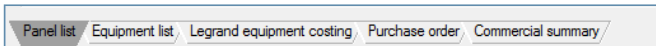
Product characteristics:
 Surface-mounting distribution cabinets
 • Capacity 50 modules per row
 • White RAL 9003
 • Fully reversible cabinet (base, door and faceplate)
 • Supplied with:

SUMMARY AND SUMMARY STUDY MODULES

B Summary Study

1. Introduction (depending on the XL PRO version)

The **Summary Study** module has several tabs which display various summaries, the costing and the purchase order for your current study.



A. TABS

> Panel list

This tab provides a dynamic summary of the variable data in the **Cabinet price** tab on page 92, in the form of vertical columns. Each horizontal line corresponds to one of the panels in your study. Only the coloured boxes can be modified directly in the panel. The variable data must be changed in the lower block. The modifications will only affect the panels in the current study.

In the transport block you can select either **Total Study** which adds together all the transport prices for each of the panels, or **Total Fixed Price** which will be a global sum allocated to transport. A **Time-phasing** box tells you the number of deliveries. You will also find this information in your commercial summary.

Summary Study

This study contains references whose price varies according to copper current price... Thank you to consult our regional agency/legrand or the exhibitor's site/legrand to know the last applicable price.

Panel	Qty	Rate Total	Net Purch. Equipment	Total Net Total	Net Total Material	Provision Wiring	Total Purchase Material	Margin Gross	Total Sale	Use Hours	Total Labour	Total Estimated	Net P.T. Cable
Regulation module	1	204.86	204.86	0.00	204.86	0.00	204.86	0.00	204.86	0.00	0.00	0.00	204.86
Regulation puissance 6kVA optimisée 3P	1	1395.47	1395.47	0.00	1395.47	0.00	1395.47	0.00	1395.47	0.00	0.00	0.00	1395.47
Regulation puissance 6kVA optimisée 3P	1	9020.53	9020.53	0.00	9020.53	0.00	9020.53	0.00	9020.53	0.00	0.00	0.00	9020.53
Regulation puissance 6kVA optimisée 3P	1	11337.51	11337.51	0.00	11337.51	0.00	11337.51	0.00	11337.51	0.00	0.00	0.00	11337.51
Regulation puissance 6kVA triphasé	1	5300.26	5300.26	0.00	5300.26	0.00	5300.26	0.00	5300.26	0.00	0.00	0.00	5300.26
Regulation puissance 6kVA optimisée 3P en 400V	1	27688.04	27688.04	0.00	27688.04	0.00	27688.04	0.00	27688.04	0.00	0.00	0.00	27688.04
Regulation puissance 6kVA optimisée 3P en 400V	1	27288.28	27288.28	0.00	27288.28	0.00	27288.28	0.00	27288.28	0.00	0.00	0.00	27288.28
Regulation puissance 6kVA optimisée 3P en 400V	1	26228.74	26228.74	0.00	26228.74	0.00	26228.74	0.00	26228.74	0.00	0.00	0.00	26228.74
Coque de Regulation puissance 6kVA optimisée 3P en 400V	1	87992.43	87992.43	0.00	87992.43	0.00	87992.43	0.00	87992.43	0.00	0.00	0.00	87992.43
Regulation puissance optimisée 400V	1	14833.94	14833.94	0.00	14833.94	0.00	14833.94	0.00	14833.94	0.00	0.00	0.00	14833.94
Total :		492348.49			492348.49			0.00%		2.89		6320.96	

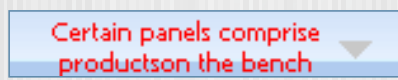
Variable data: Discount Legrand Equipment: 100.00 %; Wiring Supplies: 0.00 %; Gross margin: 0.00 %; Labour units (in 1/100 of an hour): 3.00; Hourly Rate (€): 20.00 €

Transport: Total Study: 0.00 €; Total fixed price: 0.00 €; Time-phasing: 1

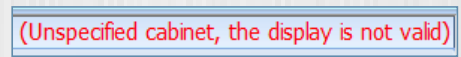
Net unit study excl. of taxes: 422468.59 €

The **Summary Study** module can highlight a problem concerning your choice of enclosure. Click on the arrow to find out which panel(s) are affected so that you can make the necessary modifications.

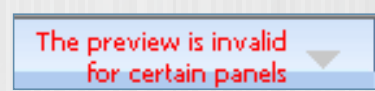
There are several possible causes:
- You have left products on the workbench



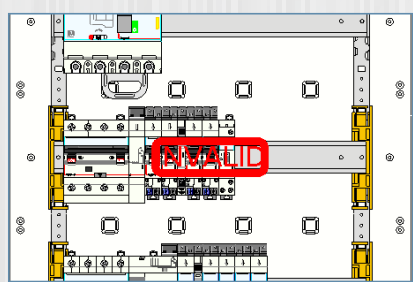
- You have not been to the Enclosures module
- Or XL PRO³ has not found an enclosure to house your products




The banner indicates "the preview is invalid for certain panels". Click on the arrow to find out which cabinet is affected.



In the **Preview** module a red "invalid" block indicates that your enclosure is invalid. You must go back to the **Enclosures** module to update the products.



> Equipment list

This tab gives you a summary of the complete list of products in your study. The total quantity of each product and its catalogue number are given. All factory-assembled equipment is grouped together under one heading. To find out the specific composition of the product, click on  in the left-hand column.

Reference	Quantity	Description
405211	10	Set of 3 connection modules 125A HP for IP-N devices
405286	2	Assembly inverter contact DV1
406773	9	DIN rail MCB 4500/4.5kA 1P+N-C 10A
406774	6	DIN rail MCB 4500/4.5kA 1P+N-C 16A
406782	4	DIN rail MCB 4500/4.5kA 1P+N-C 20A auto/zero
406783	3	DIN rail MCB 4500/4.5kA 1P+N-C 25A auto/zero
406794	1	DIN rail MCB 4500/4.5kA 1P+N-C 25A auto/zero
457716	1	DIN rail MCB 6000/10kA 1P+N-C 25A auto/zero
457908	12	DIN rail MCB 6000/10kA 4P-C 25A
457909	9	DIN rail MCB 6000/10kA 4P-C 32A
457920	3	DIN rail MCB 6000/10kA 4P-C 40A
493001	2	DIN rail MCB 6000/10kA 4P-C 200A
493977	9	DIN rail MCB 25kA 4P-C 20A
493978	3	DIN rail MCB 25kA 4P-C 32A
493982	4	DIN rail MCB 25kA 4P-C 40A
493984	12	DIN rail MCB 25kA 4P-C 100A
493985	3	Adjust in mod 25kA Type HP 40A for HP 4 mod.
411139	7	RCBO D1V 6000/10kA 4P-C 12A 200mA Type AC
411230	1	RCBO D1V 6000/10kA 4P-C 10A 300mA Type AC In/outs
411231	1	RCBO D1V 6000/10kA 4P-C 12A 200mA Type AC In/outs
412408	1	Pulses operated latching relay 1P 30A 250V
420817	18	MCB D1V 6000/10kA 1P 10A thermal-magnetic
420818	1	MCB D1V 6000/10kA 1P 16A thermal-magnetic
420819	1	MCB D1V 6000/10kA 1P 20A thermal-magnetic
420820	1	MCB D1V 6000/10kA 1P 25A thermal-magnetic
420821	1	MCB D1V 6000/10kA 1P 32A thermal-magnetic
420822	1	MCB D1V 6000/10kA 1P 40A thermal-magnetic
420823	1	MCB D1V 6000/10kA 1P 63A thermal-magnetic
420824	1	MCB D1V 6000/10kA 1P 80A thermal-magnetic
420825	1	MCB D1V 6000/10kA 1P 100A thermal-magnetic
420826	1	MCB D1V 6000/10kA 1P 125A thermal-magnetic
420827	1	MCB D1V 6000/10kA 1P 160A thermal-magnetic
420828	1	MCB D1V 6000/10kA 1P 200A thermal-magnetic
420829	1	MCB D1V 6000/10kA 1P 250A thermal-magnetic
420830	1	MCB D1V 6000/10kA 1P 320A thermal-magnetic
420831	1	MCB D1V 6000/10kA 1P 400A thermal-magnetic
420832	1	MCB D1V 6000/10kA 1P 500A thermal-magnetic
420833	1	MCB D1V 6000/10kA 1P 630A thermal-magnetic
420834	1	MCB D1V 6000/10kA 1P 800A thermal-magnetic
420835	1	MCB D1V 6000/10kA 1P 1000A thermal-magnetic
420836	1	MCB D1V 6000/10kA 1P 1250A thermal-magnetic
420837	1	MCB D1V 6000/10kA 1P 1600A thermal-magnetic
420838	1	MCB D1V 6000/10kA 1P 2000A thermal-magnetic
420839	1	MCB D1V 6000/10kA 1P 2500A thermal-magnetic
420840	1	MCB D1V 6000/10kA 1P 3200A thermal-magnetic
420841	1	MCB D1V 6000/10kA 1P 4000A thermal-magnetic
420842	1	MCB D1V 6000/10kA 1P 5000A thermal-magnetic
420843	1	MCB D1V 6000/10kA 1P 6300A thermal-magnetic
420844	1	MCB D1V 6000/10kA 1P 8000A thermal-magnetic
420845	1	MCB D1V 6000/10kA 1P 10000A thermal-magnetic
420846	1	MCB D1V 6000/10kA 1P 12500A thermal-magnetic
420847	1	MCB D1V 6000/10kA 1P 16000A thermal-magnetic
420848	1	MCB D1V 6000/10kA 1P 20000A thermal-magnetic
420849	1	MCB D1V 6000/10kA 1P 25000A thermal-magnetic
420850	1	MCB D1V 6000/10kA 1P 32000A thermal-magnetic
420851	1	MCB D1V 6000/10kA 1P 40000A thermal-magnetic
420852	1	MCB D1V 6000/10kA 1P 50000A thermal-magnetic
420853	1	MCB D1V 6000/10kA 1P 63000A thermal-magnetic
420854	1	MCB D1V 6000/10kA 1P 80000A thermal-magnetic
420855	1	MCB D1V 6000/10kA 1P 100000A thermal-magnetic

> Legrand equipment costing

The **Legrand equipment costing** tab gives a list of the equipment with the **Rate P.U.**, **Net P.** and the **Total Net.**

A separate block gives you the same information for your additional products.

Reference	Description	Quantity	Rate P.U.	Net P.	Total Net
405166	Blanking plates 3 modules white	1	1.6000	1.6000	1.60
304836	Modular Dist. unit 4P 125A	1	33.0000	33.0000	33.00
503651	Blanking plates 2P modules	13	7.2300	93.9900	79.83
403230	AT 500 distribution cabinet 1600	2	760.0000	1520.0000	280.00
503130	Cable sleeve 4500	2	532.0000	1064.0000	160.00
503141	Metal solid faceplate 150 for cable sleeve	1	25.3000	25.3000	25.30
503142	Metal solid faceplate 150 for cable sleeve	1	30.6000	30.6000	30.60
503143	Metal solid faceplate 150 for cable sleeve	1	23.0000	23.0000	23.00
503144	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503145	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503146	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503147	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503148	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503149	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503150	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503151	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503152	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503153	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503154	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503155	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503156	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503157	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503158	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503159	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503160	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503161	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503162	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503163	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503164	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503165	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503166	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503167	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503168	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503169	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503170	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503171	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503172	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503173	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503174	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503175	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503176	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503177	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503178	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503179	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503180	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503181	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503182	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503183	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503184	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503185	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503186	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503187	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503188	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503189	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503190	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503191	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503192	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503193	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503194	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503195	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503196	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503197	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503198	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503199	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503200	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503201	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503202	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503203	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503204	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503205	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503206	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503207	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503208	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503209	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503210	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503211	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503212	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503213	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503214	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503215	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503216	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503217	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503218	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503219	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503220	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503221	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503222	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503223	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503224	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503225	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503226	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503227	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503228	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00
503229	Metal solid faceplate 150 for cable sleeve	1	12.0000	12.0000	12.00
503230	Metal solid faceplate 150 for cable sleeve	1	17.0000	17.0000	17.00



You can also find out the technical composition of your product by right-clicking then choosing **Display the technical data**, which takes you to the E-catalogue (see page 97).

Reference	Description
305660	Blanking plates 3 modules white
304836	Modular Dist. unit 4P 125A
326299	Spacer for modular products mount
405817	MCB 4500/4.5kA 1P+N-C 10A
405818	White door for 3 lines
405200	Automatic four-poles supply busbar
405201	Automatic four-poles supply busbar
405202	Automatic four-poles supply busbar
405203	Automatic four-poles supply busbar
405204	Automatic four-poles supply busbar
405205	Automatic four-poles supply busbar
405206	Automatic four-poles supply busbar
405207	Automatic four-poles supply busbar
405208	Automatic four-poles supply busbar
405209	Automatic four-poles supply busbar
405210	Automatic four-poles supply busbar
405211	Automatic four-poles supply busbar
405212	Automatic four-poles supply busbar
405	

SUMMARY AND SUMMARY STUDY MODULES

> Commercial summary

This tab provides the whole of your study in the form of a simple summary (for viewing only).

Summary Study
This study comprises references whose price varies according to copper quoted price. Thank you to consult your regional agency Legrand or the extranet site Legrand to know the last applicable price.

Rate total	25200.69 €
Number of panels	7
Total Net Legrand Equipment	25200.69 €
Total Net Other Equipments	0.00 €
Total Equipment	25200.69 €
Total Wiring Supplies	0.00 €
Total Material Purchase	25200.69 €
Total Gross margin	0.00 €
Total Sale Equipment	25200.69 €
Total Hours	52.45
Total Estimated labour	1049.00 €
Total transport	0.00 €

Variable data

Discount Legrand Equipment	100 %
Wiring Supplies	0.00 %
Gross margin	0.00 %
Labour units (in 1/100 of an hour)	5.00
Hourly Rate	20.00 €

Net price study excl. of taxes: 26249.69 €

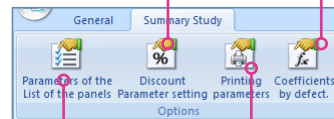
Panel list: Equipment list | Legrand equipment coating | Purchase order | **Commercial summary**

(Rates for : 2013-01)

B. SUMMARY STUDY TAB IN THE RIBBON BAR

Configure the discounts

Configure the default coefficients



Select the elements to be printed

Select the variables for the List of Panels

> Panel list parameters

Display or hide certain columns in the panel list by selecting or deselecting them.

Configuration of the List of the Panels

- Panel
- Qty
- Rate Total
- Net Purch. Equipment Leg Total
- Total Net. Equipment Complem.
- Net Total Matter
- Provides Wiring
- Total Purchase Materiel
- Margin Gross
- Sale Total Materiel
- Unit Labour
- Total Hours Estimated
- Total Labour Estimated
- Net P.T. Cable supplies

Confirm Cancel



You can export all or part of your Summary Study from the **General** tab in the ribbon bar > **Export** icon.

You can choose between text or CSV (Excel) format.

> Configuring discounts

By default XL PRO³ adopts a system of overall discounts. You can apply a discount per product family by deselecting the box in the configuration menu (depending on the XL PRO³ version).



2. Access to the E-catalogue

(see page 97).

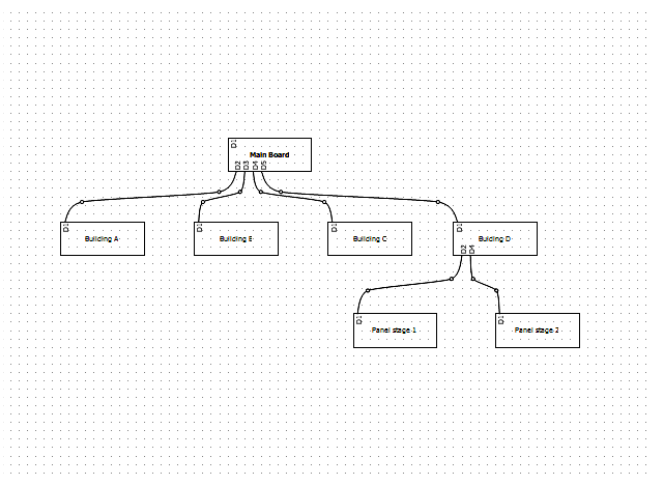
> Printing parameters (see page 95)

If you only have a few columns to select or deselect, right-click on one of the columns in **Panel list** mode to open a popup menu in which you can select or deselect the columns to printed or not printed.

> Default coefficients (see page 97)

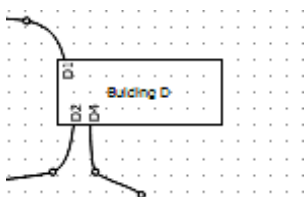
TREE MODULE

The tree module makes it easier to create and display: the links and the hierarchy between the various panels in your studies.



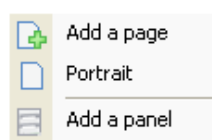
1. Work area

- The work area provides a page on which the various panels which make up your studies are shown.
- This schematic representation is organised vertically into levels in the same way as an organisation chart.
- Lines represent links between panels.
- The numbers of the products at the panel inputs and outputs are also shown.

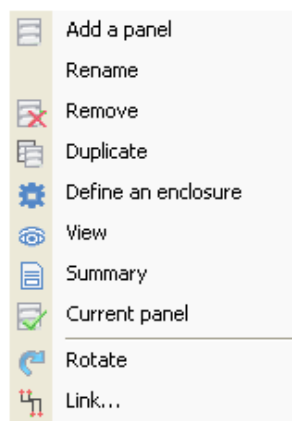


2. Popup menu

- Right-clicking in the work area opens a popup menu enabling you to change the Orientation of the page containing the circuit diagram, to **Add a page** or to **Add a new panel**.



- Right-clicking on one of the panels opens a popup menu enabling you to **Add, Rename, Delete** or **Duplicate** a panel.



The **View** command opens the **Preview** module (see page 52).

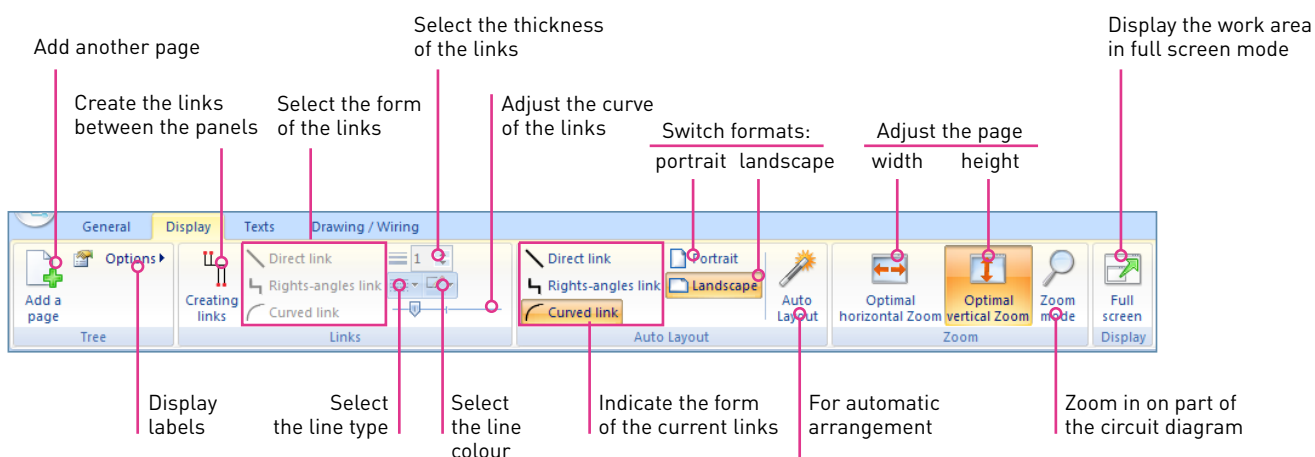
The **Summary** command opens the **Summary** module (see page 93).


The **Link** command enables you to select the linking products between the panels manually using a popup sub-menu, except for imports from XL PRO Calcul.

Product to connect
D2
D3
D4
D5

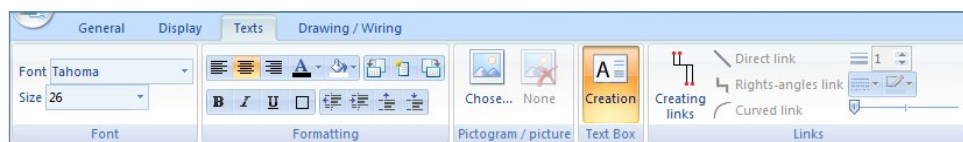
3. Ribbon bar

A. DISPLAY TAB

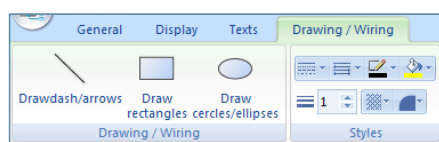


 To exit Full Screen mode press the **Esc** key on your keyboard.

B. TEXT TAB (see **Circuit Diagram** module, page 48)



C. DRAWING/WIRING TAB (see **Circuit Diagram** module, page 49)



FOLDER MANAGEMENT MODULE

The Folder management module enables grouped printing of the documents which make up the study.

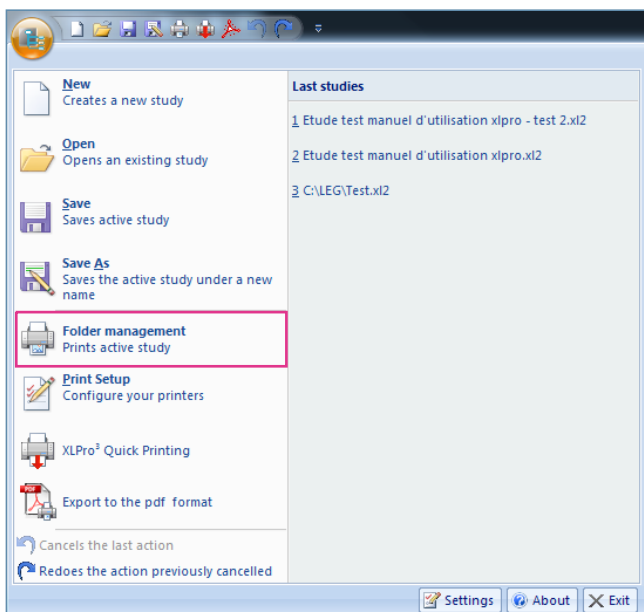
This tool enables you to generate your printouts as required:

- Quick, simple printing: Basic mode
- Customisable printing: Advanced mode



The **Print Setup** menu enables you to set the printing parameters of your printer but not to modify the page layout of your folder.

- This module is accessed from the start menu

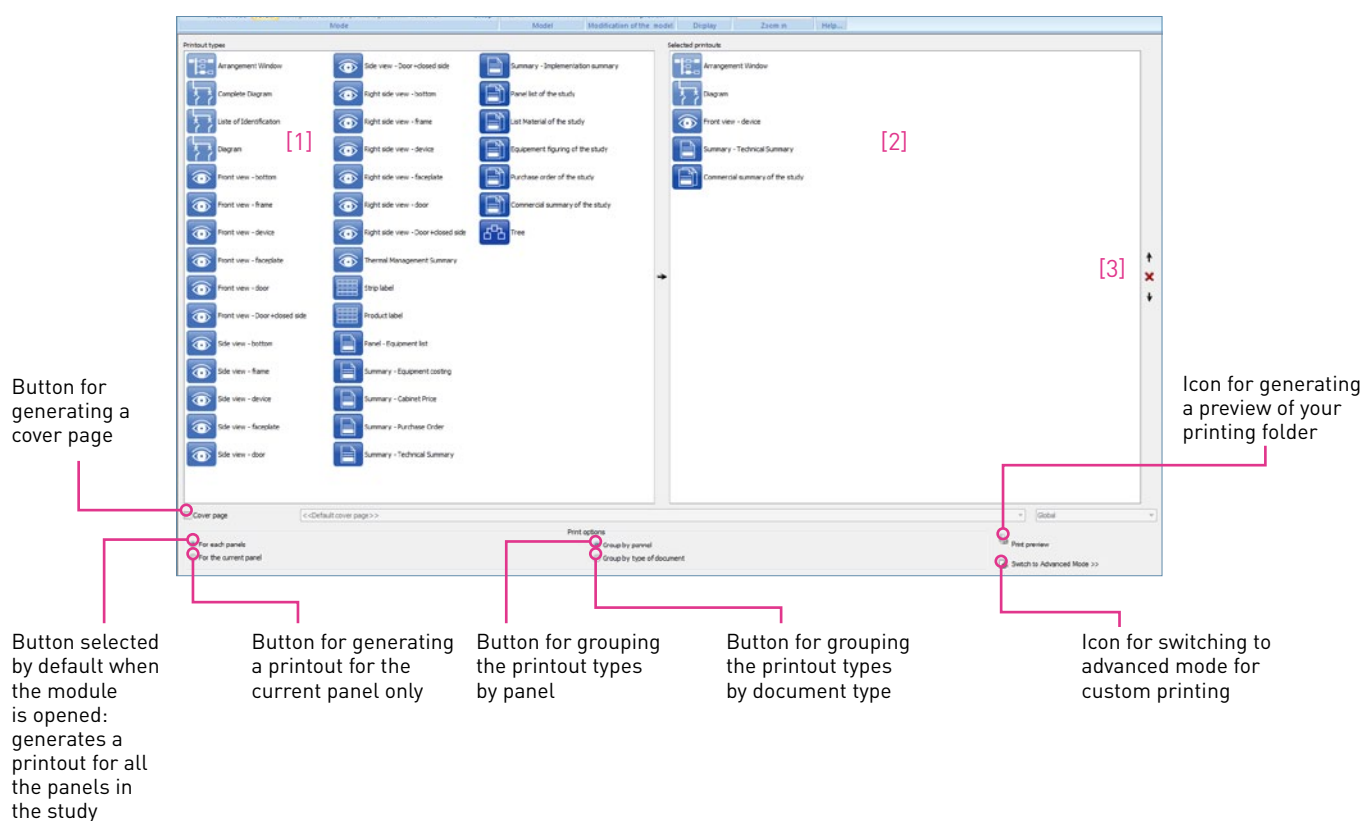


- To open this menu, click on the start button

- You can also insert a shortcut to this module in the **Quick Access** toolbar (see page 05) by clicking on the

A Basic mode

■ This mode enables you to select predefined layout models.



1. Selecting printout types

- Select the **Printout types** you want to print in the left-hand part of the screen, in the **Printout types** window [1].
- Then click on (or double-click on the selected icon).
- The selected Printout types then appear in the right-hand part of the screen, in the **Selected printouts** window [2].

- You can delete a printout type by clicking on or using the **Del** key on your keyboard.
- You can also sort the printout types into the required order using the arrows to the right of the the screen [3].

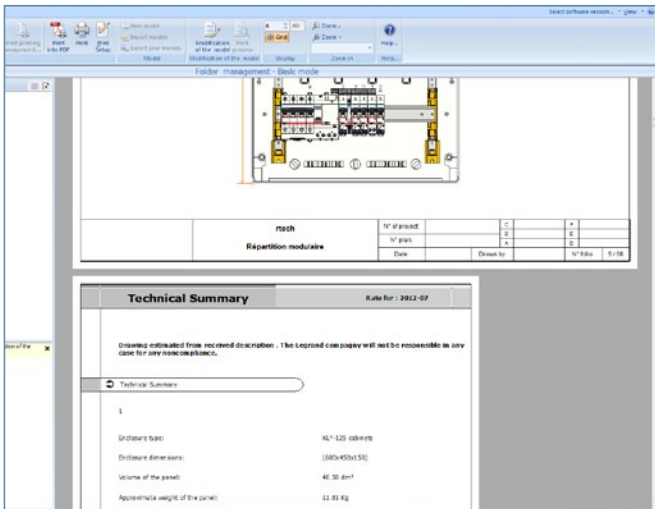
FOLDER MANAGEMENT MODULE

2. Choosing the cover page

- If you want to add a cover page to your printing folder, select the corresponding box then choose the orientation of the cover page (landscape or portrait) in the dropdown menu.
- The next dropdown menu enables you to define the required type of cover page (single for the whole study, one for each panel, or both).

3. Print preview


- Once you have selected your printout types and your appearance options, click on **Print preview** (at the bottom right of the screen) to display your printing folder.
- A window appears.





This preview mode gives you access to customisation options.



For modification/customisation of cover pages, see page 112.

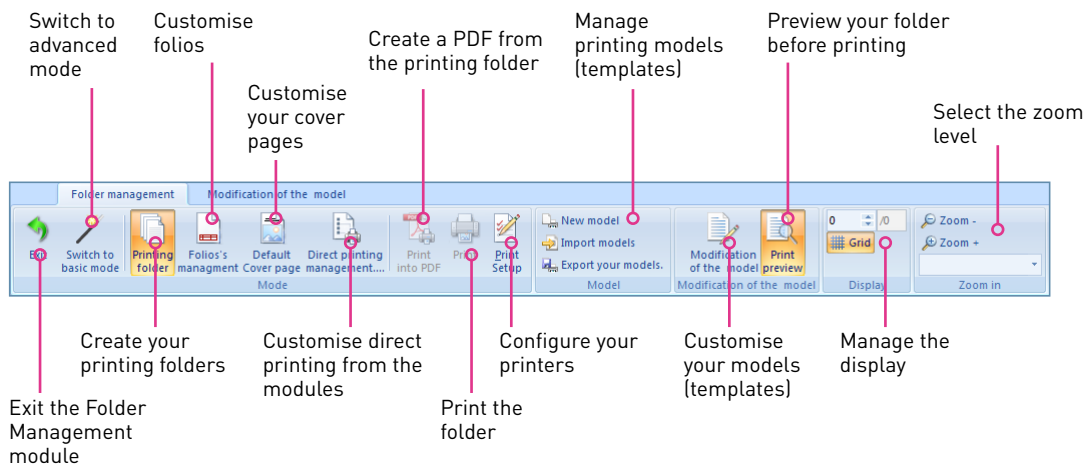
You can return to basic mode by clicking on .

4. Printing

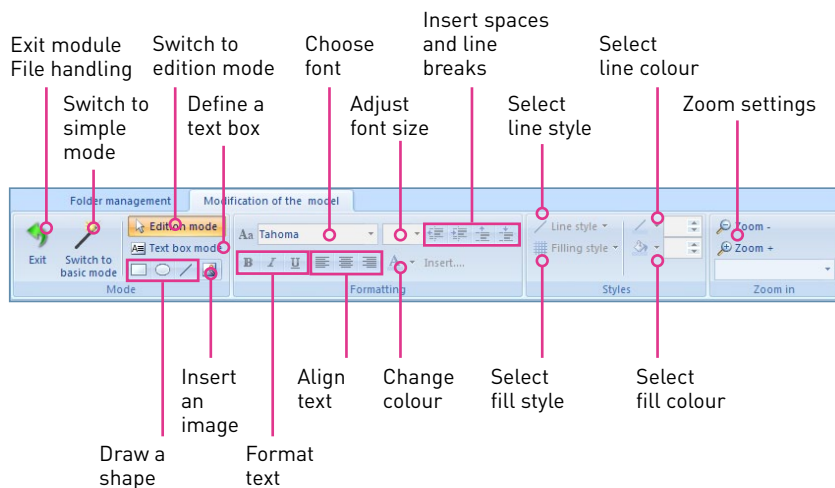
- When you have finished customising your folder, you can print it out directly or generate a PDF.
- In basic mode, click on **Print preview** (in the ribbon bar or at the bottom right of the screen).
- You are automatically taken to **Advanced mode** and the print button in the ribbon bar is now active. To start printing, click on .
- XLPRO³ adapts the printing to the paper format (A0, A3, etc.)
- To generate a PDF, click on .
- You then have an electronic file that you can easily send, for example by e-mail.

B Ribbon bar

A. FOLDER MANAGEMENT





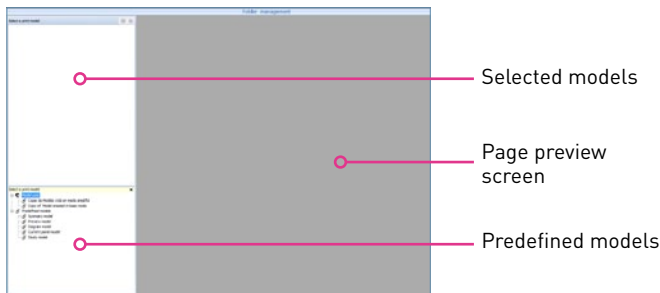
B. MODIFICATION OF THE MODEL



FOLDER MANAGEMENT MODULE

C Advanced mode

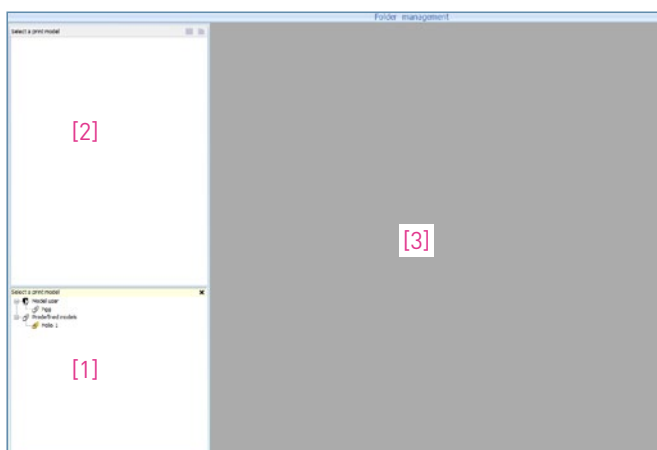
- To access advanced mode, click on the  icon in the ribbon bar.
To return to basic mode, click on the  icon.
Advanced mode enables you to customise your layout models (templates).



1. Folio management

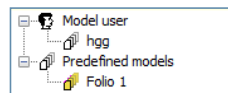


A. THE INTERFACE



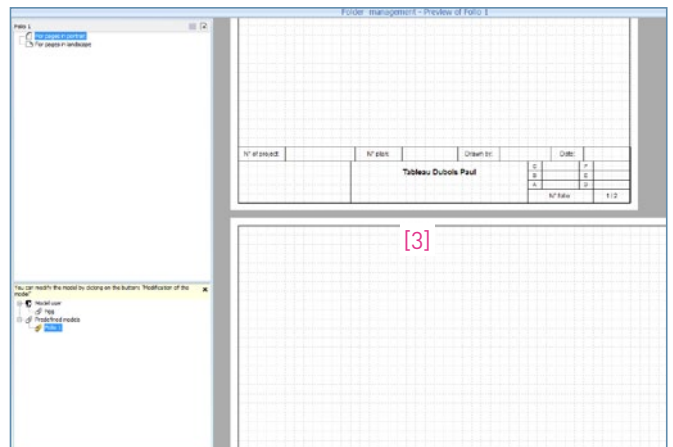
- In area [1] you can access existing models. These models are classified into 2 categories: user models (created by you) and predefined models (provided by XL PRO³)
- Area [2] gives the description of the contents of the models.
- Area [3] displays the models.


B. CREATING A NEW FOLIO MODEL



To create a new folio it is advisable to start with the predefined model called **Folio 1**.

- Double-click on **Folio 1**. The corresponding pages appear in area [3].



- You can now modify them. Click on the  **Modification of the model** icon.

XL PRO³ then asks you to create a copy of the current model, in order to keep the predefined model intact. Click on **Yes**.

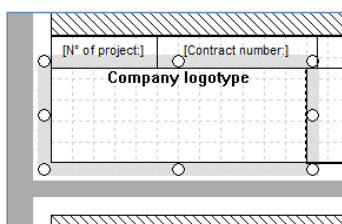
A new model is created in area [1] with the name **Copy of Folio 1**.

At this stage, it is recommended that you rename this new folio to make its name more explicit and make it easier to use in the future for other studies.

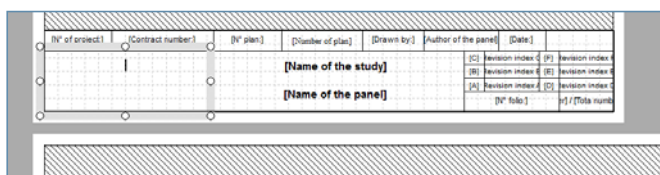
> **Example: changing the company logo to information on the company name.**

On the folio you are going to copy in order to modify it there is by default a block designed to contain your **Company Logo**. You can replace this with your **Company name**.

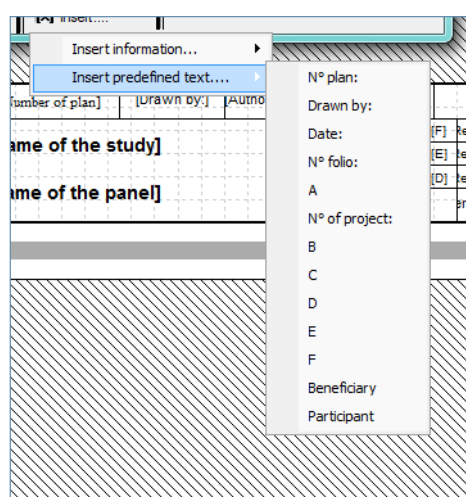
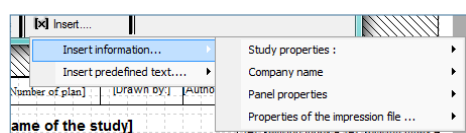
- Click in the Company logotype block to select it.



- Press the **Del** key on your keyboard to delete it.
- Using the text modification tools, draw a new text block in the available space, then click in this new block to make the text entry cursor appear.



- Now click on the tool **[X] Insert a variable**. This tool enables you to insert information or predefined text in a text block, as required.

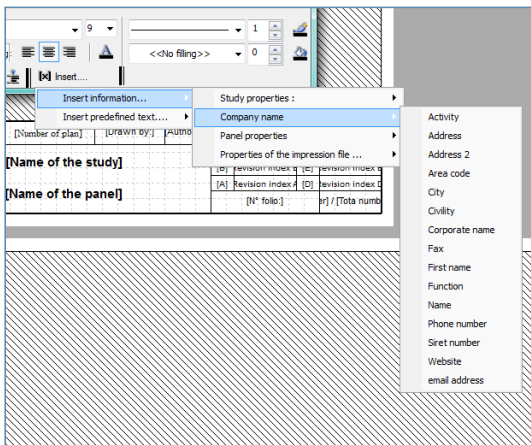


FOLDER MANAGEMENT MODULE

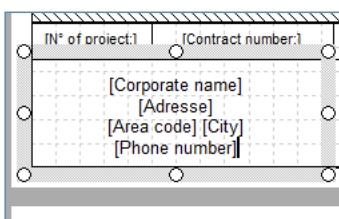


All the information inserted is dynamic: it is already managed in XL PRO³ and is displayed in square brackets [].

- Now insert the parts of your **Company name** that you want to appear.



- When the folio is printed, these fields will be replaced automatically with the corresponding information that you entered in the **Company name** software interface (see page 01), which you can modify at any time.
- In this example we will insert the **Corporate name** first. Press the **Enter** key on your keyboard to move to the next line, then insert the **Address** field in the same way, press **Enter**, then **Area code** followed by a space (space bar on your keyboard) and insert **City**. Press **Enter** and finally insert **Phone number**.

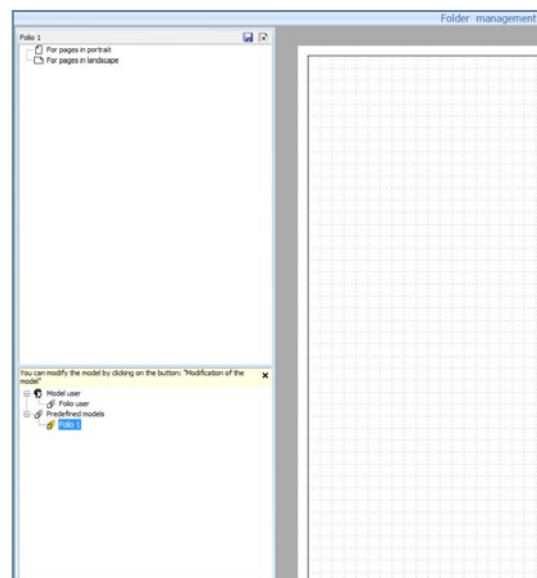


- If you wish, you can now format this new text.



Each folio generally exists in portrait and landscape format. Modifications made to one of these formats are not automatically applied to the other.

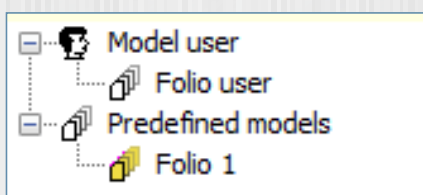
- You have just created a new folio model in portrait format. To apply the modifications you have just made to **Landscape** format, start by double-clicking on **Folio 1** in landscape format. The corresponding pages appear in area [3].
- As before, copy then give the new model a name.
- Then, using the **Tools for modifications of the model**, select then delete the **Company Logo** block, as seen previously.
- Go back to your page in portrait format then select your new **Company name** block. Right-click then select **Copy** in the popup menu.
- Go back to the landscape format folio and right-click, then select **Paste** in the popup menu.



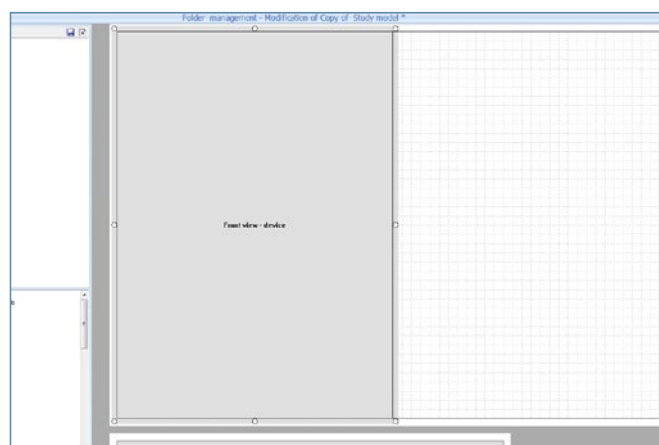
- At this stage it is recommended that you save by clicking on the icon at the top right of area [2].



If you want to use these new folio models systematically, right-click in area [1] on the new folio and select **Default Folio** in the popup menu. The icon to the left of the new folio turns yellow.

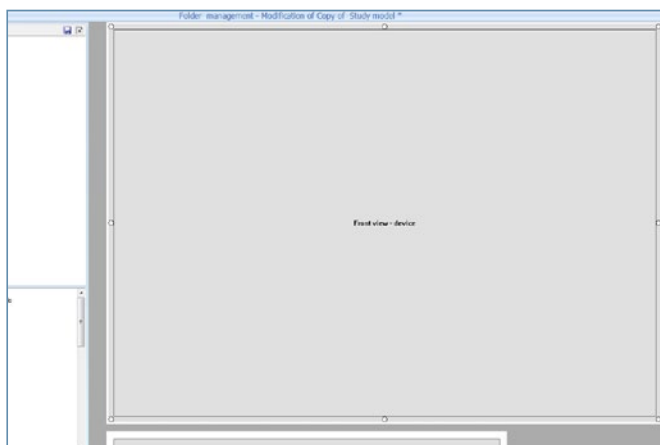


- Sizing handles (white circles) appear at the 4 corners and the centre of each side of the block.
- Click on the handle in the centre of the right hand side and drag it to the left, without releasing the mouse button, to halve the size of the block.

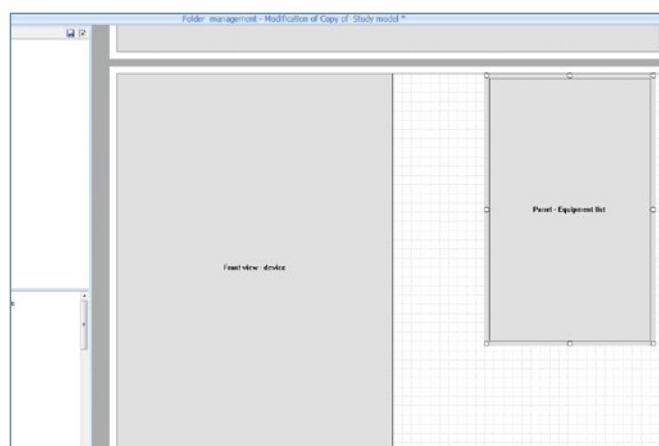


C. GROUPING TOGETHER SEVERAL PRINTOUT TYPES ON THE SAME PAGE


- For example, if you want to place the **Equipment list** on the same page as the **Front view - device**.
- First select and click on the **Front view - device** page.

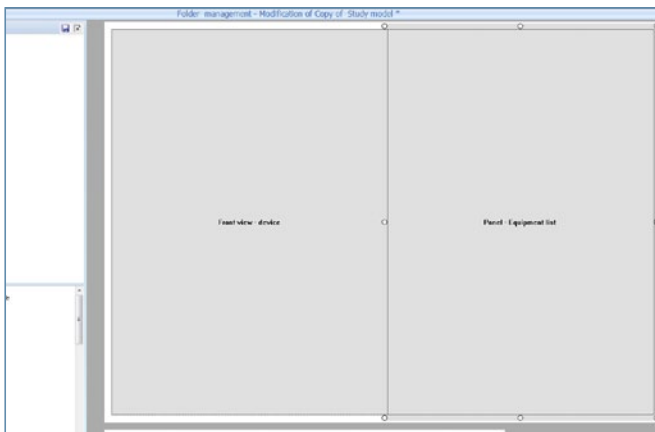


- Now select the **Equipment list** page and halve it in the same way.
- Select the reduced size **Equipment list** block by clicking on it, and drag it to beside the **Front view - device** block, which is also reduced, without releasing the mouse button.

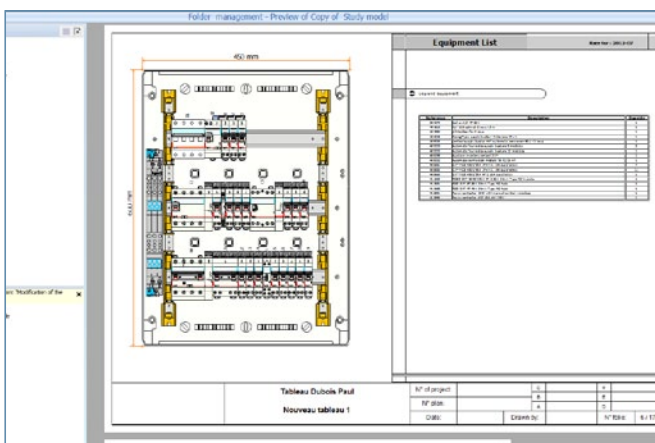



FOLDER MANAGEMENT MODULE

- Adjust the 2 blocks to the required size then save by clicking on the  icon at the top right of area [2].
- The **Equipment List** page is still visible in area [2].



- Return to **Print preview** mode to display your new page layout.





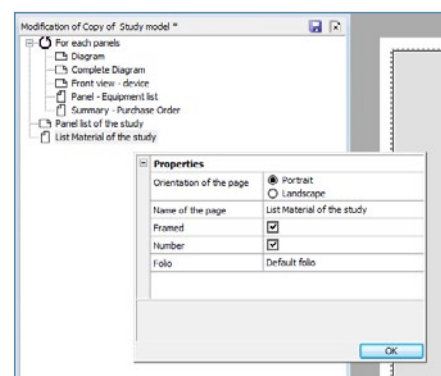
 This function is not recommended for the largest main LV distribution boards.

2. Managing cover pages

- The work areas are identical to those for **Folio management**.
- The modification tools are identical to those for **Folio management**.
- The modification process is identical to that for **Folio management**.

3. Managing the printing folder

- There are several options for creating a printing folder:
 - FOLDERS PREDEFINED BY XL PRO³**
 - These can be accessed by clicking on the  **Printing folder** icon in the ribbon bar.
 - Select the model you want in area [1].
 - CUSTOM FOLDERS**
 - In this case it is advisable to return to basic mode by clicking on the  icon in the ribbon bar.
 - Follow the steps described on page 103.
 - When you get to **Print preview** you automatically switch to **Advanced mode** and you can access the corresponding functions. (**Modification of the models**, etc.)
 - Right-click on the pages that appear in area [2] to access their **Properties**.



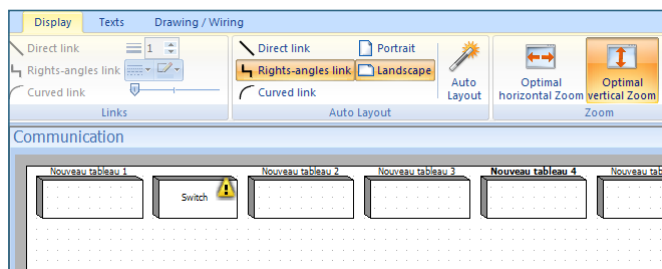
COMMUNICATION MODULE

Enables you to create the block diagram of your connected installation.

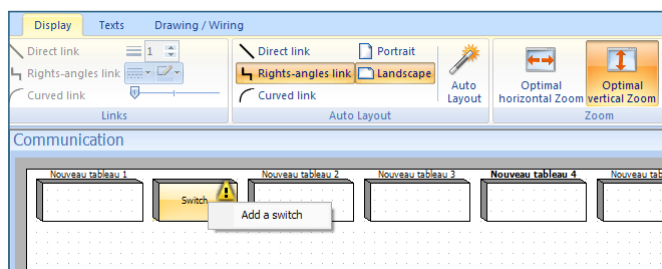
You can:

- visualise connected products,
- show links (BUS and IP network diagram),
- select new products to complete your connected installation.

- XL PRO³ verifies the completeness of the connected installation: an alert message appears if the installation is missing an element.



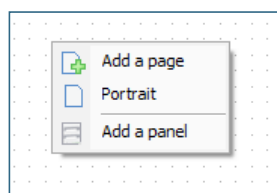
- XL PRO³ offers products suitable for your installation: by right-clicking or double-clicking, you can visualise the solution offers and integrate them into the installation.



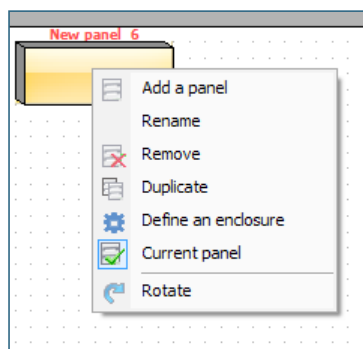
Beyond 32 points, XL PRO³ add a new converter.

1. Contextual menu

- Right-clicking in the workspace opens a contextual menu that enables you to change the orientation of the page containing the diagram, to **add a page** or to **add a new panel**.



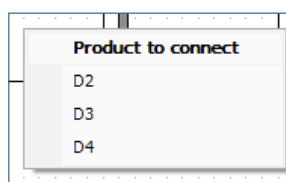
- Right-clicking on a table opens a contextual menu that enables you to **add, rename, delete or duplicate a panel**.



The **View** command opens the **Preview** module (see page 52).

The **Summary** Command opens the **Summary** module (see page 93).

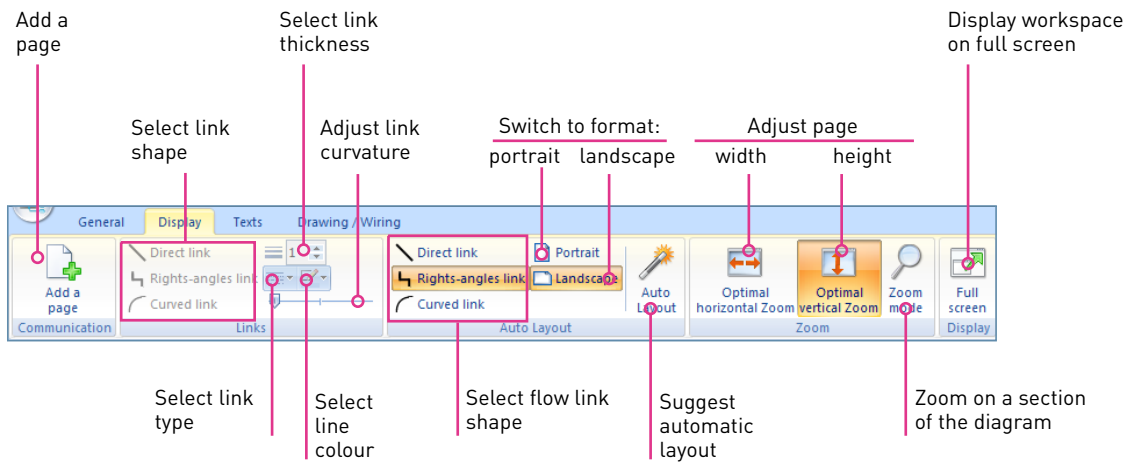
The **Link** command enables you to manually select products for connections between tables, via a contextual sub-menu, except in the case of a XL PRO Calcul import.



COMMUNICATION MODULE

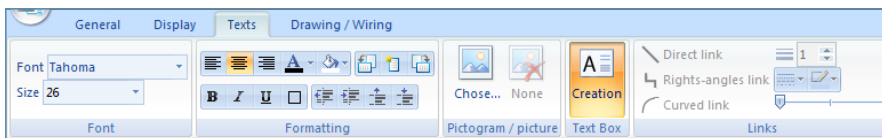
1. The ribbon

A. VIEW TAB

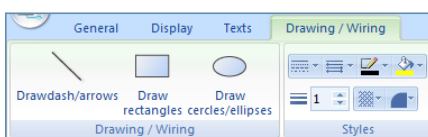


To exit Full screen mode, press the Esc key on your keyboard.

B. TEXT TAB (see **Diagram** module, page 48)



C. DRAWING/WIRING TAB (see **Diagram** module, page 49)







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