

PROJECT complete

Planning and marking software

PHOENIX CONTACT
INSPIRING INNOVATIONS

From initial planning to the finished control cabinet

With intuitive configuration, intelligent functions, and a customizable user interface, the PROJECT complete software is the most innovative solution for the simple planning of terminal strips and the straightforward creation of corresponding markings.



Video: Control cabinet manufacturing with the PROJECT complete planning and marking software



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Process innovations for control cabinet manufacturing

The PROJECT complete planning and marking software guides you through all the phases of planning terminal strips. The software provides you with individual and convenient process support, from electrical plans to supplying your finished product.



Perfect CAE integration
PROJECT complete comes equipped with optimized interfaces to all common CAE programs. With just a mouse click, the software imports the electronic's planning data and automatically designs the corresponding terminal strip.

Intuitive software operation
PROJECT complete provides a new user interface with a configurable search function and dynamic task bars. Intelligent functions automate many planning steps and ensure significant time savings.

COMPLETE **line**

The new standard for the control cabinet. More information on pages 36 to 39.



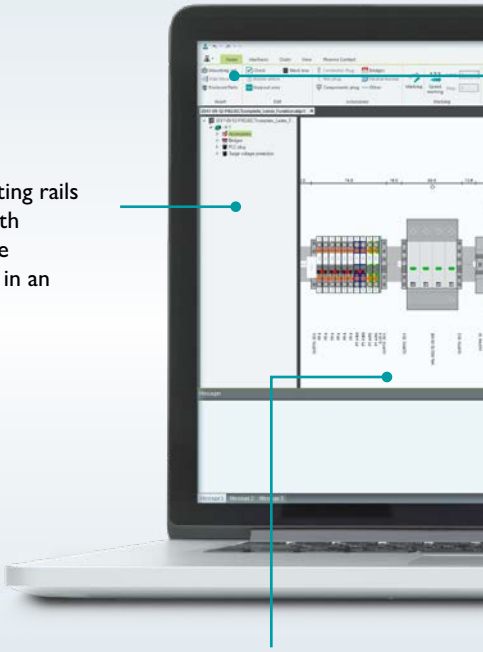
Order in real time
PROJECT complete places the order for your projects directly.* Bills of material are transmitted to Phoenix Contact online. You immediately receive a price calculation and information on the availability of the products.

* Ordering process currently available only in Germany.

PROJECT complete software interface overview

The graphical operating concept of PROJECT complete is based on dynamic ribbon technology. Functional areas are clearly summarized on tabs. Depending on the application, functions are arranged dynamically in the task bar and displayed only when needed.

Project tree
The configured mounting rails that are associated with a project, including the accessories, are listed in an overview.



Planning space
Work area where the graphical terminal strip planning is carried out.

Tabs
The dynamic task bar contains a summary of the functions in tabs. Certain functions only show up in their own tabs in the task bar when they are needed.

Insertion Center
Products can be found by entering the order number, order designation, or user product number, and then inserted into the project. The Live Search suggests products as the input progresses.



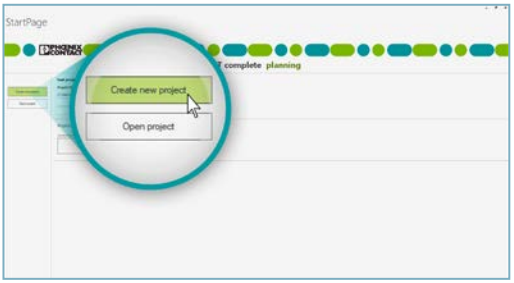
Product information
Information on the product selected is displayed here: order number, order designation, brief description, product image, functional wiring diagram, and the online link for creating data sheets.

Creating a project

As soon as the PROJECT complete software has started, you can open an existing project or create a new one.

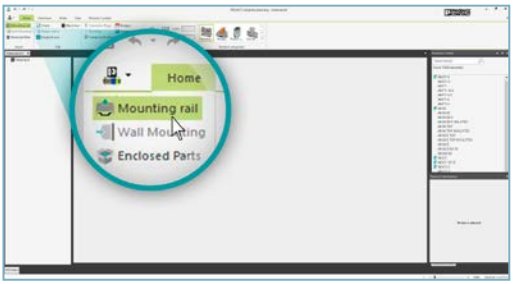
With just three clicks, you can create a project with a predefined mounting rail and start placing products right away.

1. Creating your project



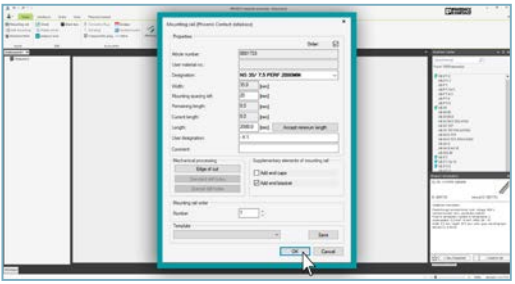
- To open the workspace, click on “Create new project”.
- To edit an existing project, click on “Open project”.

2. Placing a mounting rail



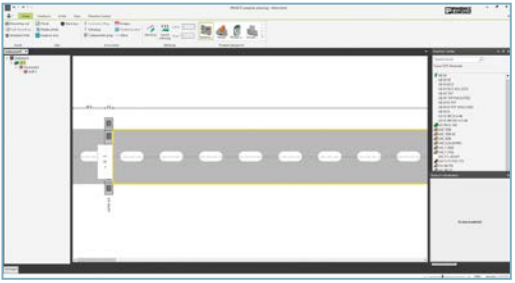
- Click on the button “Mounting rail” to define a mounting rail to be placed in the planning space.

3. Defining a mounting rail



- Select a mounting rail in the pop-up window.
- Specify the length of the mounting rail.
- Specify the mounting spacings here as well.
- Click “OK” to confirm the placement of the defined mounting rail.

4. Your project has been created



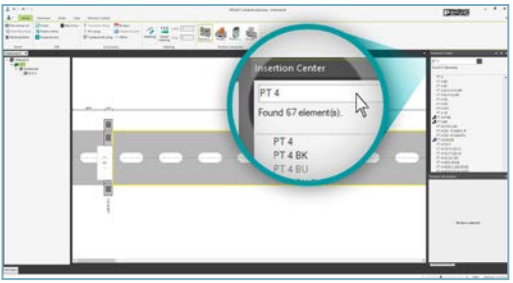
- You can now begin configuring your terminal strips, including accessories and markings.

Searching for products

Locate your desired products quickly with the aid of Live Search. As you input an order number, order designation, or user product number in the search field, product suggestions are displayed in the Insertion Center.

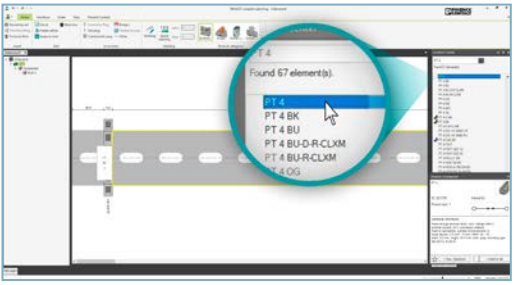
Information on the product selected is provided: order number, order designation, brief description, product image, functional wiring diagram, and the online link for creating data sheets.

1. Finding the product you want



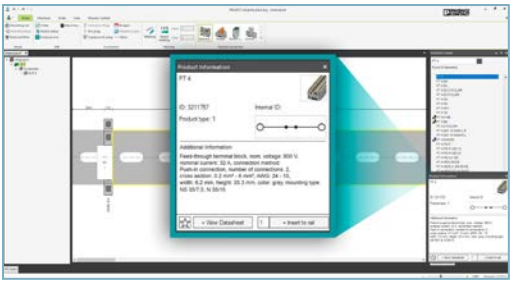
- To find the product you want, enter the entire order number, order designation, or user product number (or part of it) in the search field.
- The corresponding products are displayed in the selection window.

2. Selecting the product



- Single-clicking on the order designation in the Insertion Center selects the product you have chosen.

3. Information on the selected product

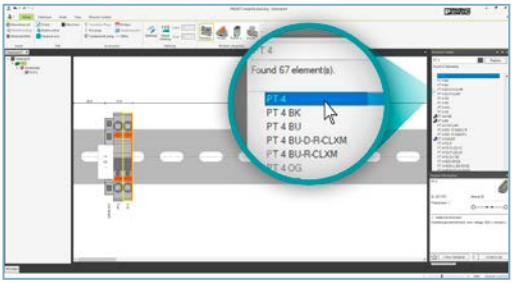


- The “Product Information” area contains comprehensive information on the product: order number, order designation, brief description, product image, functional wiring diagram, and the online link for creating the data sheet.

Placing products

Double-clicking on the order designation places the product on the mounting rail. You can make multiple placements of the selected product in the workspace from the Product Information area. You can also easily switch out any already placed products.

1. Placing the product on the mounting rail



- Double-clicking on the order designation in the Insertion Center places the product on the mounting rail.
- You can also simply drag and drop the product from the Insertion Center onto the mounting rail.

2. Placing multiple products on the mounting rail

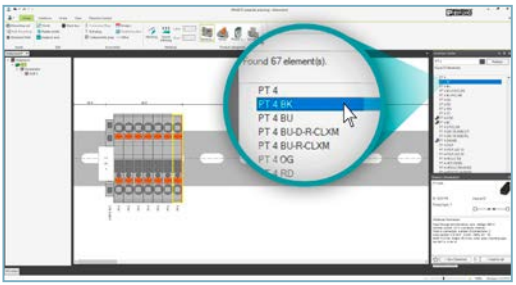


- Enter the quantity of the selected item under “Insert to rail” in the “Product Information” area.
- Clicking on the button “Insert to rail” places the indicated number of the products on the mounting rail.

3. Replacing the product placed on the mounting rail



- Select the products to be replaced by clicking on them or drawing a box around them with the mouse.



- Search for the new product type in the Insertion Center.
- Select the new product by single-clicking on the order designation.

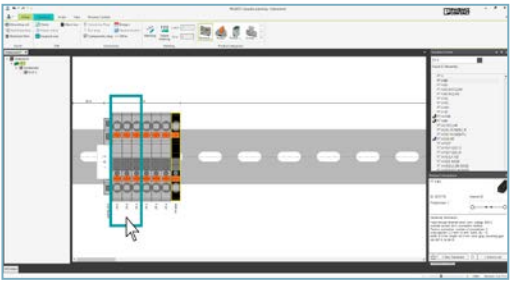


- To replace the selected products with the newly selected ones, click on the button “Replace”.

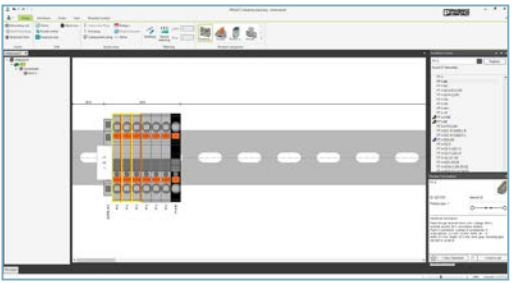
Placing bridges

The Bridge Wizard helps you place the right bridges. After selecting the products to interconnect, the Bridge Wizard shows the suitable bridges in the Insertion Center. Place the bridge by selecting the bridge shaft on the selected products.

1. Selecting products for bridging

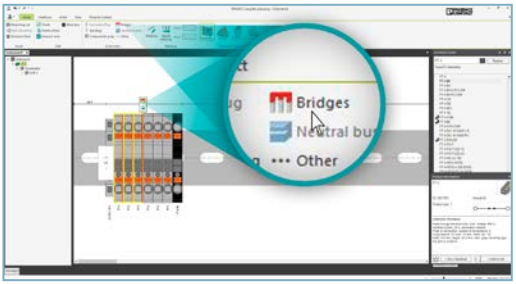


- Individual products are selected by pressing the “Ctrl” key and the left mouse button over the product.
- You can also select products by drawing a box around the products while holding down the left mouse button.



- The selected products are highlighted with a yellow box.

2. Activating the Bridge Wizard

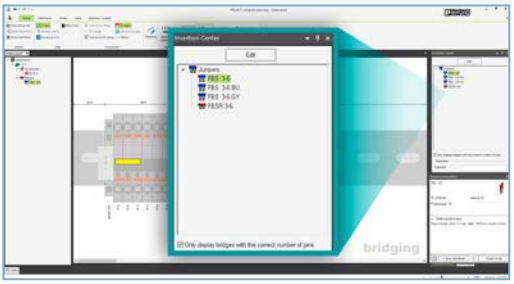


- The Bridge Wizard is activated via the glow menu or the “Bridges” button in the task bar.

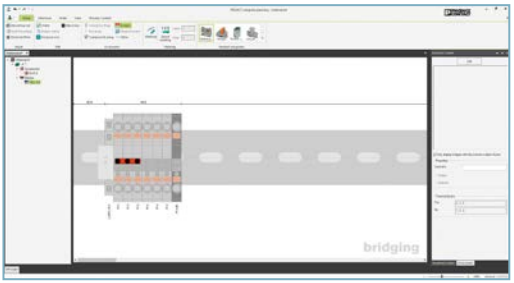


- When the Bridge Wizard is activated, the screen view changes to “Bridging” mode.
- Bridge insertion points appear on the selected products.

3. Placing a bridge

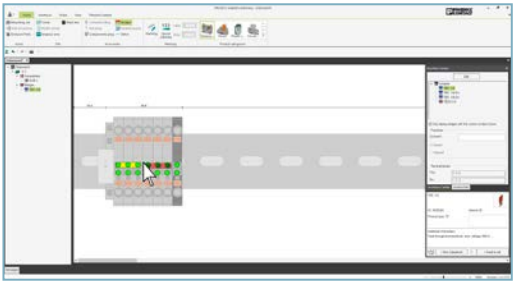


- Left-clicking on a green bridge insertion point defines which bridge shaft the bridge will be placed in. The bridge is shown in yellow when placed.
- The bridge can be selected in the Insertion Center before being placed.



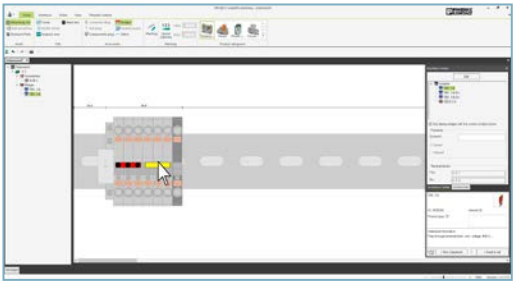
- If no bridge is selected, the system automatically places the first bridge on the Insertion Center list.

4. Moving a placed bridge

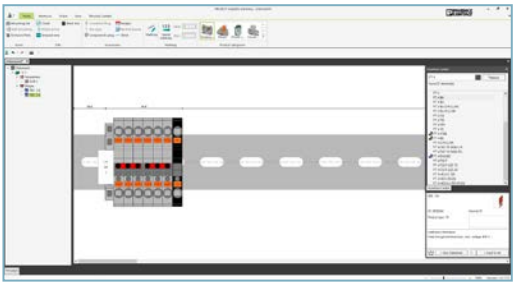


- Use the left mouse button to select the placed bridge you want to move.
- While holding the mouse button, move the bridge to another position.

5. Duplicating a placed bridge



- Use the left mouse button to select the bridge to be duplicated.
- By holding the left mouse button and the “Ctrl” key, you can duplicate the bridge and drag and drop it to the desired location.



Press the “Esc” key to deactivate the Bridge Wizard.

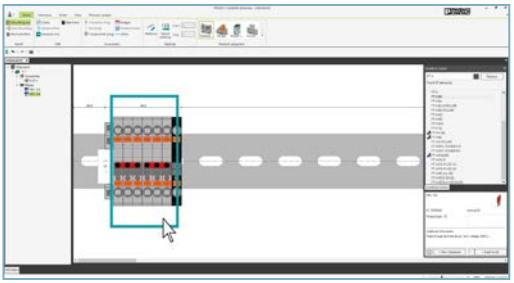
Creating markings

You have two marking wizards available for product marking:
- Speed Marking
- Marking

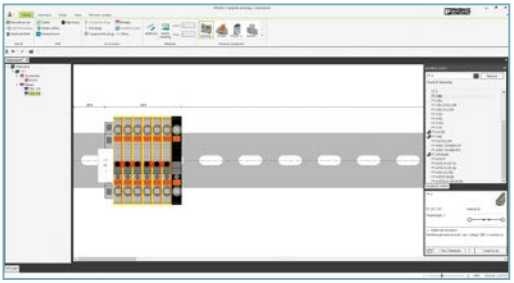
The Speed Marking Wizard can be used to place sequential marking on the selected products with just a few clicks.
The Marking Wizard gives you a wide range of marking options such as font size, text position, rotation, color of marking material, start value, step size, prefix, and suffix.

Speed Marking Wizard

1. Select the products to be marked

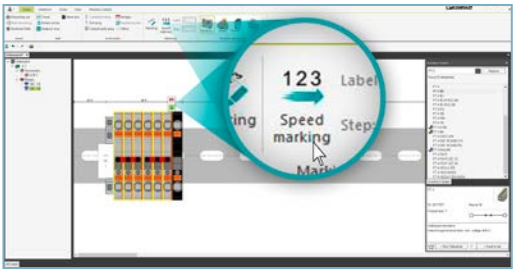


- Individual products are selected by pressing the “Ctrl” key while holding the left mouse button.
- You can also select products by drawing a box around the product while holding down the left mouse button.

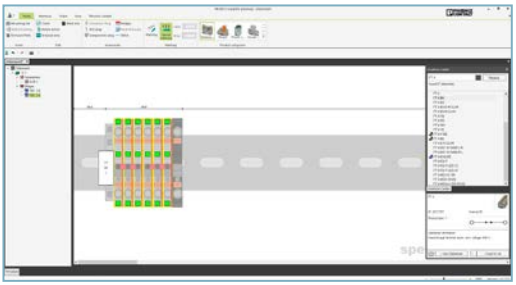


- The marked products are highlighted with a yellow box.

2. Activating the Speed Marking Wizard

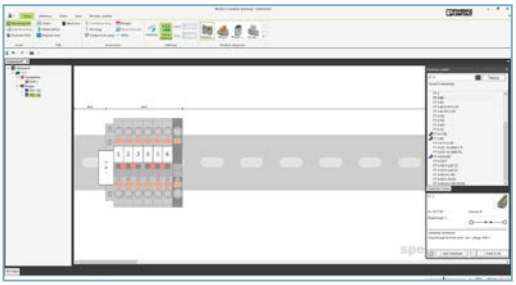


- Activate the Speed Marking Wizard via the glow menu or the "Speed Marking" button in the task bar.



- Clicking on the Speed Marking wizard switches the screen view to "Speed Marking" mode.
- Marking locations appear on the selected products.

3. Placing the marking



- Clicking on a marking location places the marking in the desired position.

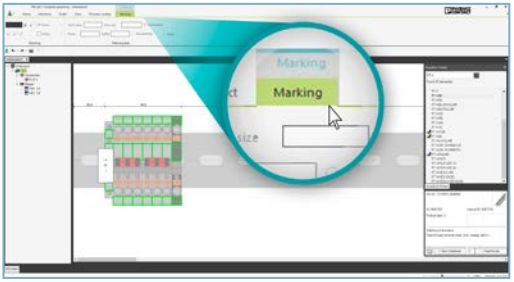
Use the "Esc" key to deactivate the Speed Marking wizard.

Marking Wizard

1. Activating the Marking Wizard

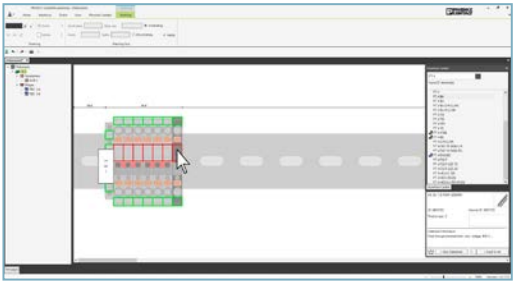


- Click on the “Marking” button in the task bar to activate the Marking Wizard.



- The “Marking” tab will appear in the dynamic task bar.
- The screen view will switch to “Marking” mode.
- The marking areas on the products appear in green.

2. Selecting the marking area



- Left-click on the spaces you want to mark.
- You can also select marking areas by drawing a box while holding the left mouse button down.

3. Creating the marking



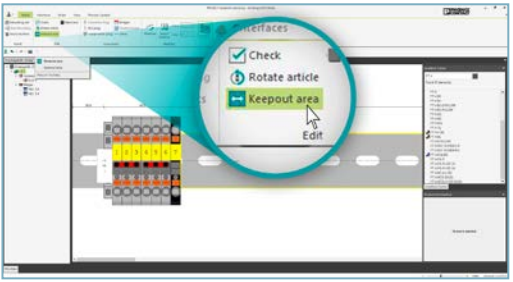
- The marking rules are defined on the marking tab: font size, text position, rotation, color of marking material, start value, step size, prefix, and suffix.
- Clicking on the “Apply” button creates the defined marking on the selected marking plate.
- The created markings can be adjusted later.

Use the “Esc” key to deactivate the Marking Wizard.

Defining keepout areas

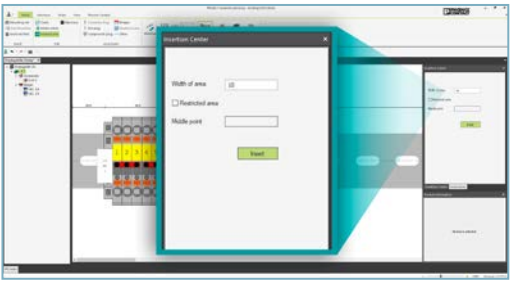
You can use the Keepout Area Wizard to define “keepout” or restricted areas among the products on the mounting rail. No products can be placed in the restricted areas.

1. Activating the Keepout Area Wizard

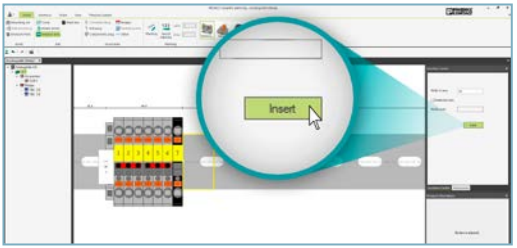


- Click on the mounting rail to select the area where you want to insert a keepout area.
- Start the Keepout Area Wizard by clicking the “Keepout area” button in the task bar.

2. Inserting a keepout area on the mounting rail

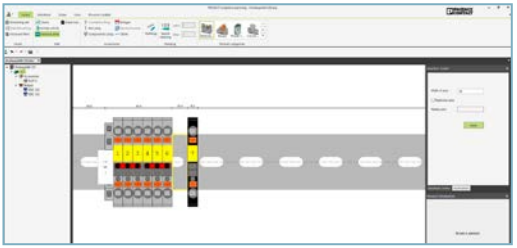


- Define the width of the keepout area in the Insertion Center.



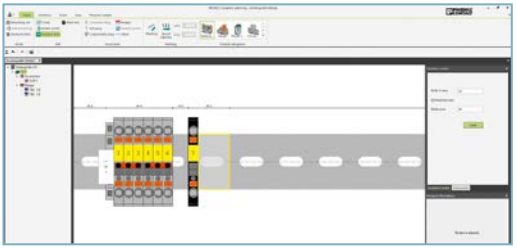
- Click on the “Insert” button to insert the keepout area on the mounting rail. The inserted keepout area is bordered in yellow.

3. Inserting a keepout area between the products



- Mark the product after which you want to insert the keepout area.
- Enter the desired spacing in the “Width of area” input field in the Insertion Center.
- Click on the “Insert” button to insert the keepout area on the mounting rail between the products.

4. Inserting a restricted area that cannot be populated

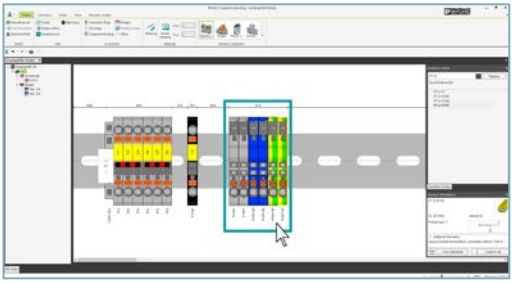


- Define the width of the restricted area in the Insertion Center.
- Check the “Restricted area” check box.
- Enter the middle point of the restricted area on the mounting rail in the “Middle point” field.
- Click on the “Insert” button to insert the restricted area on the mounting rail.

Placing connector plugs

Use the Connector Plug Wizard to place connector plugs on the terminals. You can place multipolar standard connector plugs or user-specific connector plugs. User-specific plugs are placed automatically based on the terminal colors.

1. Selecting the terminals to place the connector plug on



- Individual products are selected by pressing the “Ctrl” key and clicking the left mouse button over the product.
- You can also select products by drawing a box around the products while holding down the left mouse button.

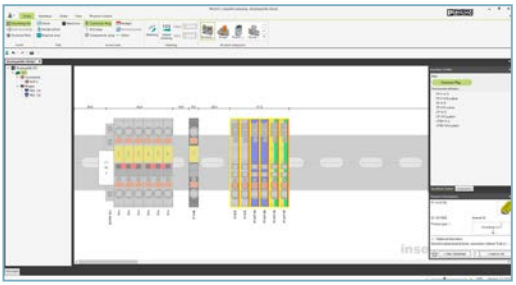


- The marked products are highlighted with a yellow box.

2. Activating the Connector Plug Wizard

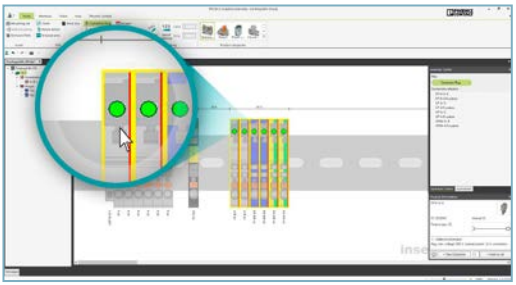


- Click on the “Connector Plug” button in the task bar to activate the Connector Plug Wizard.

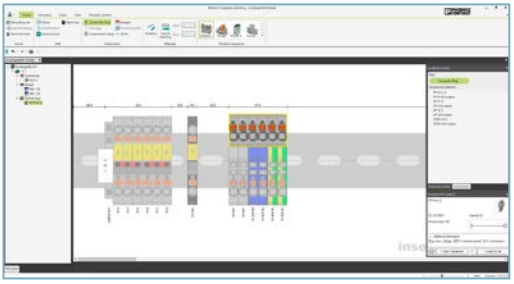


- The screen will switch to “Inserting plugs” mode.
- The suitable standard connector plugs and user-specific plugs will then be displayed in the Insertion Center.

3. Placing standard plugs



- Selecting standard connector plugs (plugs without the abbreviation “CUS” for “customized” in their order designation) in the Insertion Center activates insertion points on the terminals.



- Clicking on one of the insertion points places the selected plug.

4. Placing user-specific connector plugs



- Select the terminals you want to place user-specific connector plugs on.
- Select the user-specific plugs (plugs that have “CUS” for “customized” in their order designation) in the Insertion Center.
- Clicking on one of the insertion points places the user-specific connector plugs in the colors of the terminals.

Press the “Esc” key to disable the Connector Plug Wizard.

Creating a black box

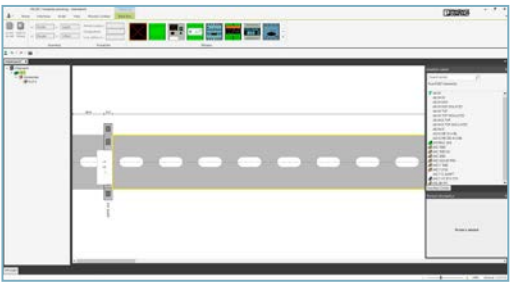
You can use the Black Box Wizard to create your own products and to perform configuration. The products you create can be saved in the local database to be re-used later.

1. Start the Black Box Wizard



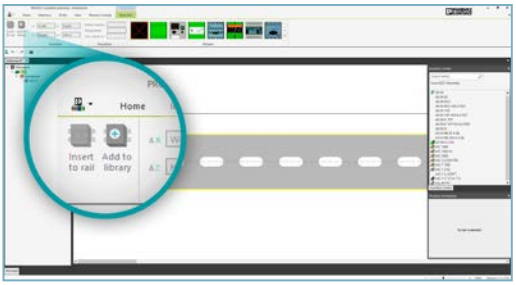
- Click on the “Black box” button in the task bar to start the Black Box Wizard.
- A dynamic tab appears for the Black Box Wizard.

2. Creating a black box

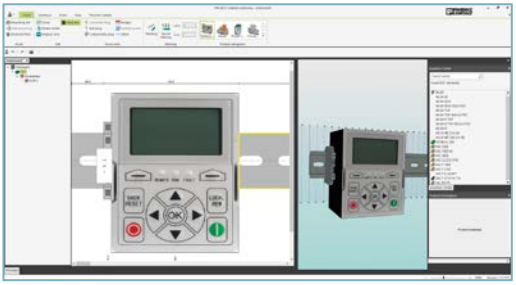


- Enter the dimensions of the black box in the task bar: width, depth, height, and orientation of the product on the mounting rail (Offset value).
- The order number and order designation can also be entered.
- Selection of the black box front view must be carried out using:
  - Templates
  - By defining a few graphics using the browser

3. Placing and saving your black box



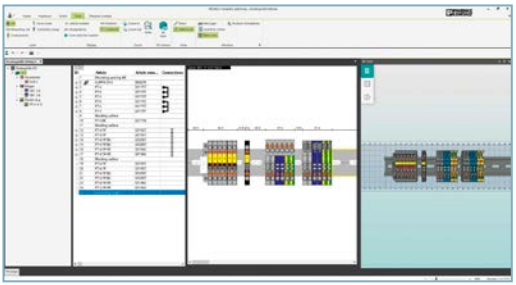
- Clicking on the button “Insert to rail” places the black box you created on the mounting rail.
- Clicking on the button “Add to library” saves the black box you have created to the local database.



- To save your black box for re-use, enter the order number or the order designation of the black box in the Insertion Center.

Use the “Esc” key to disable the Black Box Wizard.

Adjusting the view

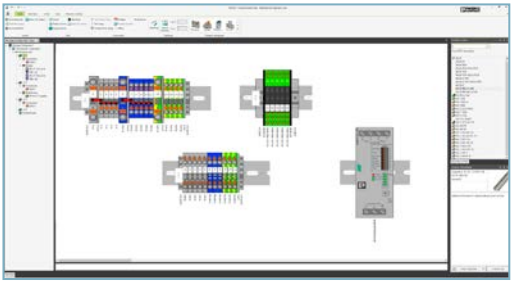


- In addition to the 2D view, you can also enable the 3D and table views in the task bar under the “View” tab.

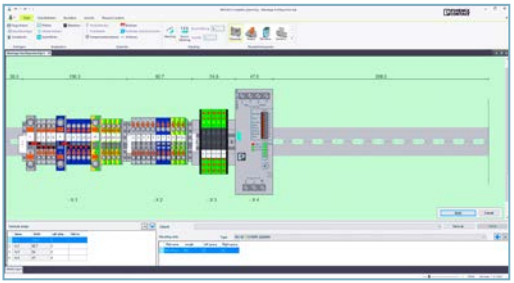
Positioning products

You can use the Product Positioning Wizard to perform the actual assembly of the mounting rails for the control cabinet with equipment and terminal strips.

1. Activating the Product Positioning Wizard

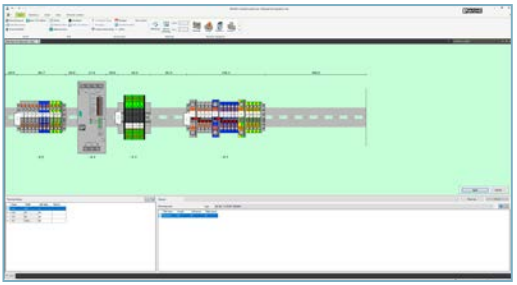


- To activate the Product Positioning Wizard, select the individual terminal strips in the Project Tree.
- Click on the “Product positioning” button in the task bar to activate the Product Positioning Wizard.

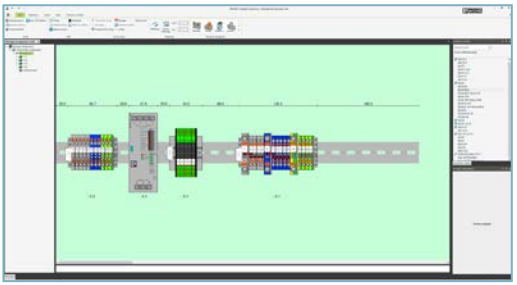


- Activating the Product Positioning Wizard places all terminal strips and equipment on one mounting rail.

2. Positioning terminal strips and equipment on the mounting rail



- Use the mouse to select terminal strips and equipment and to position them where you want on the mounting rail.



- After positioning the terminal strips and equipment, confirm the assembly by clicking on the “Apply” button. This also deactivates the Product Positioning Wizard at the same time.

3. You can revise positions and terminal strips

- Double-clicking on “Product positioning” allows you to change the positioning.
- You can edit the terminal strips or equipment individually by double-clicking on them.

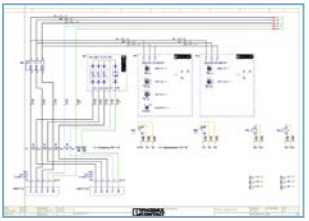
CAE interfaces

PROJECT complete comes equipped with optimized bidirectional interfaces to all CAE programs currently on the market. You can exchange data on the terminal strips directly between the systems with a few simple mouse clicks. Moreover, you can send assembled mounting rails with all their products from the 3D planning systems to PROJECT complete.

Bidirectional interface to CAE programs
The bidirectional interface allows you to send terminal strips from CAE programs to PROJECT complete.

You can make the following changes to your terminal strips in PROJECT complete:
1. Replace terminals
2. Add accessories
3. Replace wire bridges with jumpers

After the terminal strips have been edited, the changes are exported to the CAE programs.



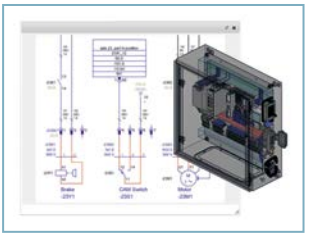
CAE program



PROJECT complete

Interface to 3D planning systems for control cabinets

This interface allows you to send all of your assembled mounting rails from the 3D planning systems with all their products to PROJECT complete.



3D planning systems



PROJECT complete



Manual mounting rail assembly



Automatic mounting rail assembly

The data imported into PROJECT complete can be used as a manufacturing basis for arranging the control cabinet and marking the components.

Exporting the assembly data from PROJECT complete in AutomationML format allows you to directly control the automatic assembly of your mounting rails.

Software overview

The PROJECT complete planning and marking software is available to you for download free of charge. Experience the intuitive approach to implementing your project!

Link to software download:
phoenixcontact.com/PROJECT_complete

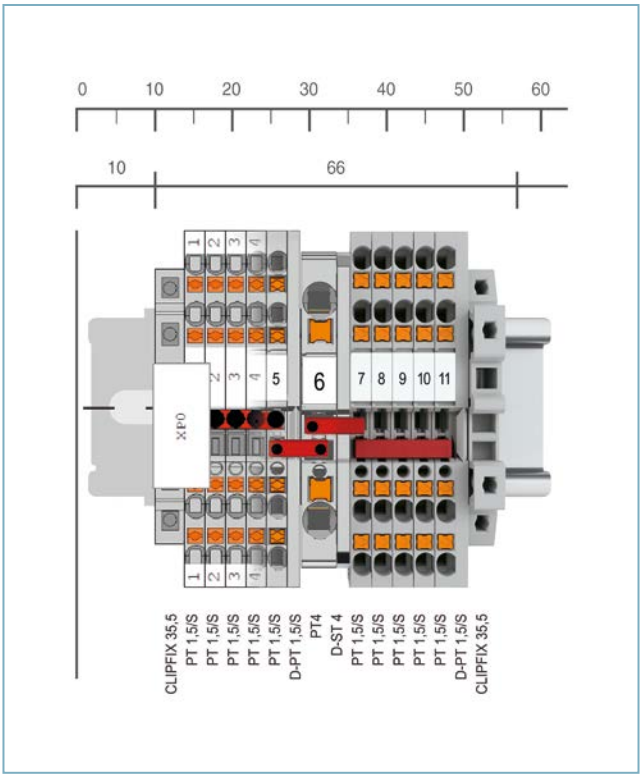
Link to software tutorials:
phoenixcontact.com/Software_Tutorials



Website:
PROJECT complete – Process innovations for control cabinet manufacturing

Your advantages

- ☑ Intuitive, easy-to-use interface with dynamic ribbon technology
- ☑ Efficiently designed editing experience – create a project with just three clicks!
- ☑ Locate products easily with the Live Search function
- ☑ Terminal strip configuration is simplified with intelligent functions
- ☑ Perfect integration with optimized interfaces to all currently available CAE programs and spreadsheets
- ☑ End-to-end process support, from planning to completely assembled mounting rail



PROJECT complete
Order no. 1050453

CPU:
1 GHz or faster

Main memory:
2 GB RAM

Hard disk space:
10 GB available memory

Screen resolution:
Recommended minimum resolution 1,366 x 768 pixels

Imaging devices:
All functions are available via the mouse and keyboard

Operating systems:
Windows 10, Windows 11

COMPLETE line – The comprehensive solution for your control cabinet

COMPLETE line is a system of technologically leading and coordinated hardware and software products, consulting services, and system solutions that help you optimize your processes in control cabinet manufacturing. Engineering, purchasing, installation, and operation become significantly easier for you.





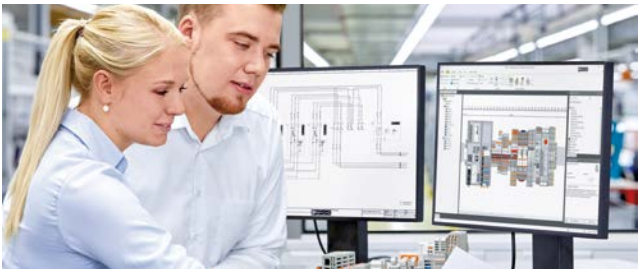
Your advantages in detail:



Comprehensive product portfolio
With COMPLETE line, we offer a complete product portfolio of technologically leading products.



Intuitive handling
The simple, intuitive handling of coordinated hardware components will save you time during installation, startup, and maintenance.



Save time throughout the entire engineering process
The PROJECT complete planning and marking software supports the entire process of control cabinet manufacturing.



Reduced logistics costs
Reduced variety of parts, with standardized marking, bridging, and testing accessories.



Optimized processes in control cabinet manufacturing
COMPLETE line supports you, from engineering through manufacturing, in designing your control cabinet production as efficiently as possible.

COMPLETE **line**

The new standard for the control cabinet
Discover the extensive COMPLETE line product portfolio and find out more about COMPLETE line and our comprehensive solutions for the control cabinet.

Visit our website:
phoenixcontact.com/completeline



Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented products and solutions for the electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network reaching across more than 100 countries with over 20,000 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide range of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. This especially applies to the target markets of energy, infrastructure, industry, and mobility.

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phoenixcontact.com

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