

# PC | Automation<sup>TM</sup>

Electrical CAD software  
– All modules included

# Automation projects – and much more...

PCSCHMATIC Automation is an advanced electrical CAD software that sets you free to focus on your professional challenges, while the software handles the practical details. Automation has an intuitive workflow, which allows you to get started right away – well supported by the free tutorials on the PCSCHMATIC YouTube channel.

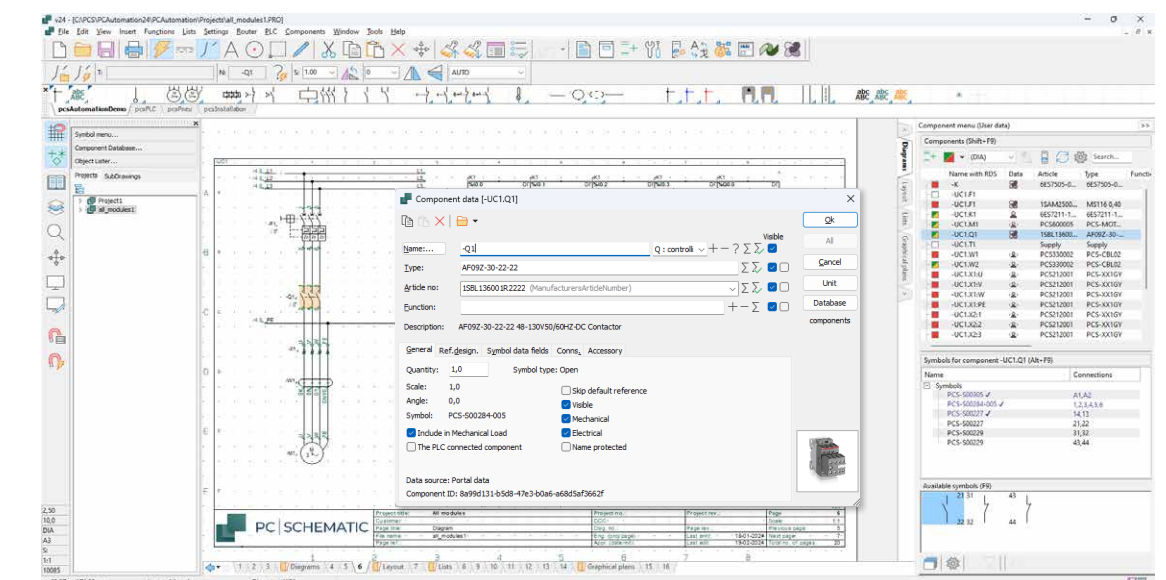
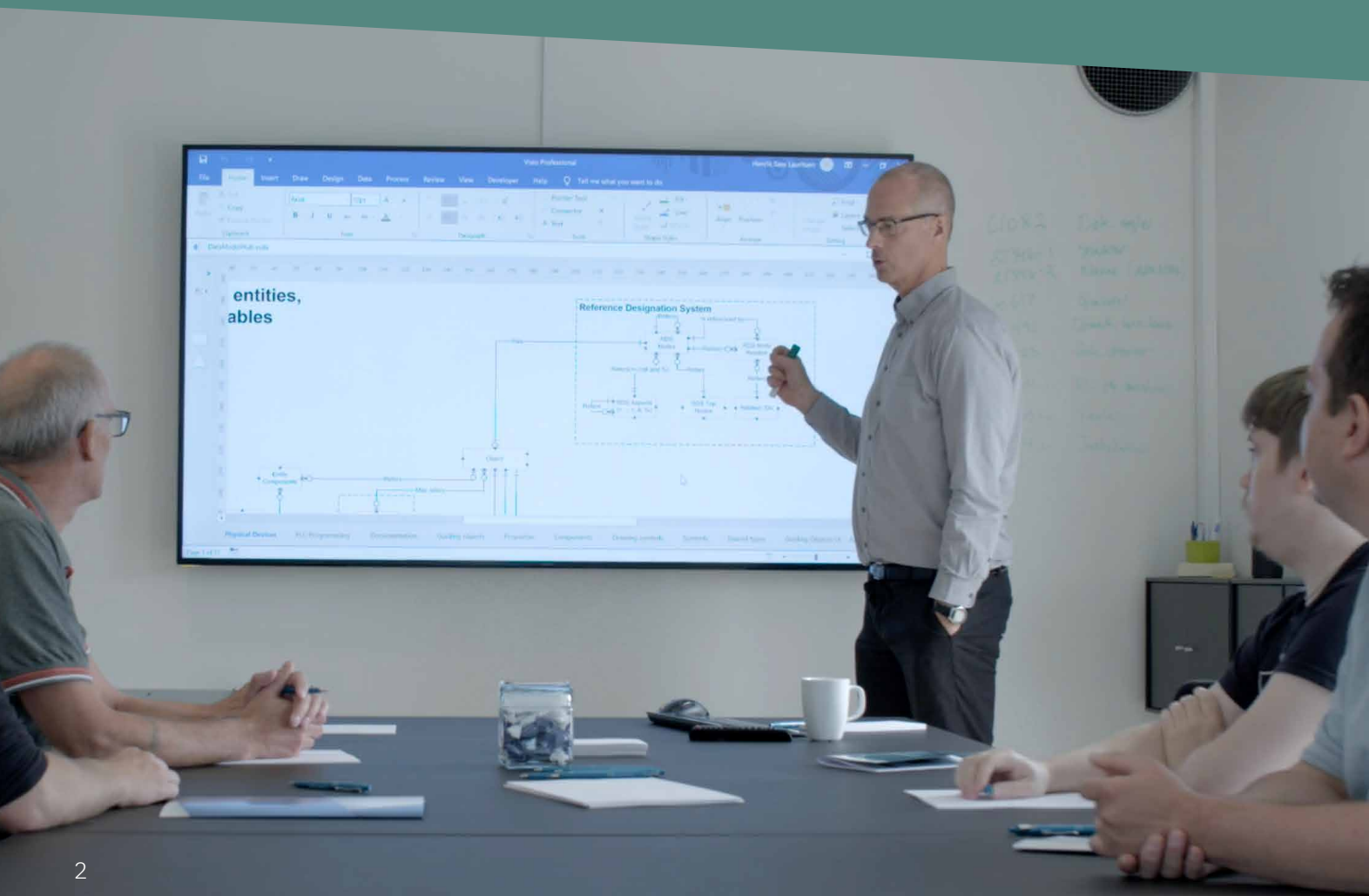
The software handles reference designations intelligently according to IEC/ISO 81346, and includes symbols for automation, PLCs, topology / bus connections, single line diagrams, pneumatics/hydraulics, house installation and more.

This brochure describes selected functions in the Automation software in bullets. All of the functions are available in any variant of Automation, because all variants of the software contains full functionality and includes all available modules.

For more detailed information about the software, please refer to the Automation whitepaper.

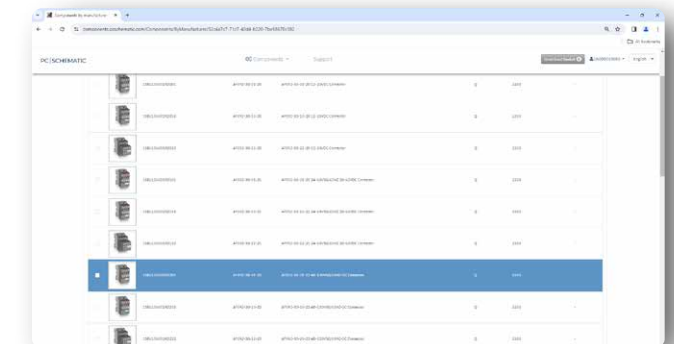
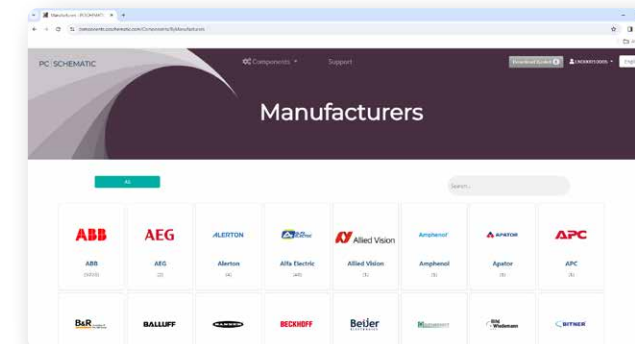
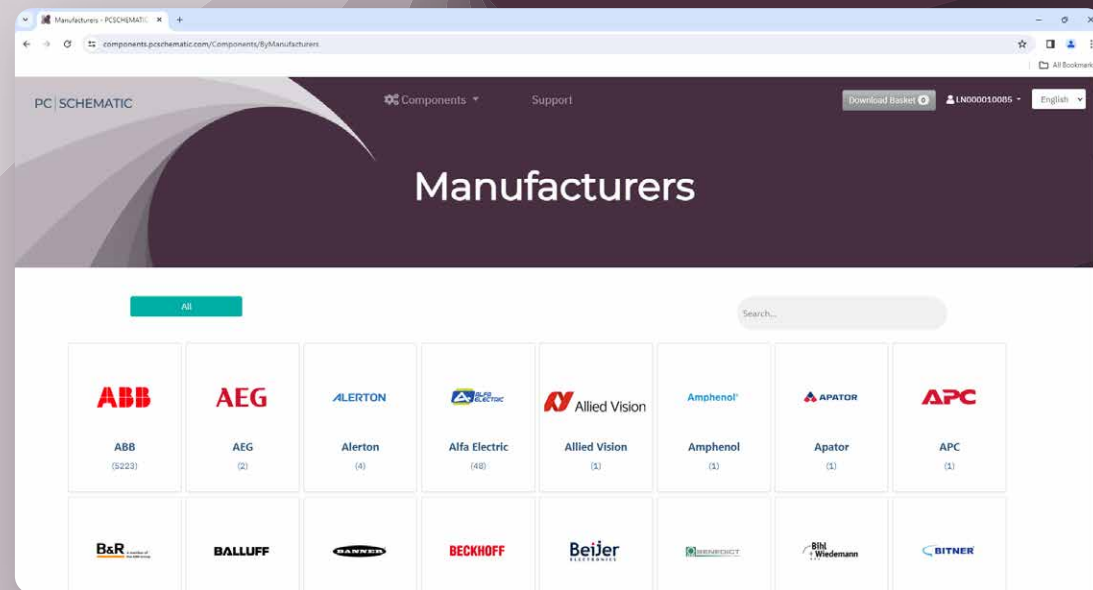
# Component based workflow

- Automation includes a comprehensive & advanced component database: Electrical & mechanical symbols are attached to all components
- Automation has a unique component based workflow: Select a component in the database & get all of its electrical symbols automatically. Place the symbols in the diagrams & component data is attached automatically
- When you copy symbols, areas or pages, article data are also attached to the pasted symbols - with intelligent renaming
- Show available and/or used symbols for all project components
- Flexibility: You can also work with symbols without attached data
- Specific intelligent symbol properties due to component type
- Expand the component database easily: Wizard for fast creation of components with attached symbols and data or download individual or a “basket” of components directly from the online ComponentPortal
- Comprehensive IEC symbol libraries



- Retrieve the desired component in the database
- Place in the diagram
- If there are more symbols for the component, these can be inserted where they are to be used
- All data can be used to generate automatic lists

# Get updated components directly into your project

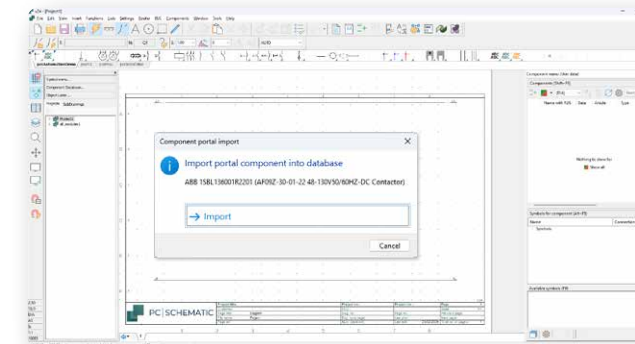


1 Choose your component from hundreds of manufacturers and over 50,000 updated components.

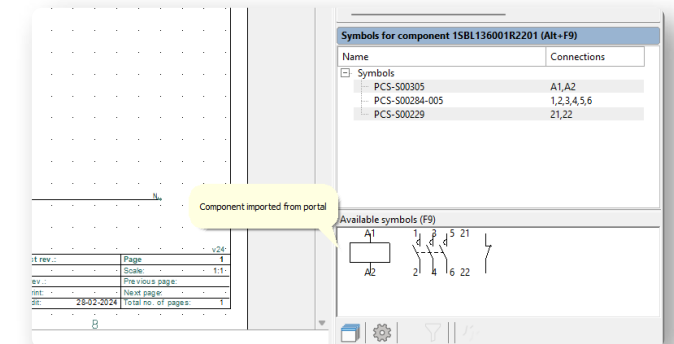
2 Search for exactly the component you are missing and drag it directly into your Automation project, or select several and download together to your database.

## Component Portal

- Online component portal with hundreds of manufacturers and more than 50,000 components
- Select a single component or a basket of components you will use in your project
- Drag individual components directly into the project in Automation, and thus also into the database. A basket of components is downloaded to the database and from here they must be selected for use in your project
- Get the components that you downloaded from the portal updated. This is done automatically with a single click in the Automation menu
- A component includes an image, updated symbols and descriptions in different languages
- The symbol library is continuously updated in the background as the symbols are edited or changed in the Component Portal
- The component portal can obviously be used in the same way as your local component database. You can drag one component to the project at a time, and this will always be updated
- The maintenance agreement for Automation gives access to the Component Portal and the option to create your own components on the portal. You just have to send information about the desired components/series and we will create it for you



3 All components are created with images, updated symbols and descriptions that are all included in your project in Automation.



4 When the component is imported from the portal, you get access to its various symbols that can be used in the project

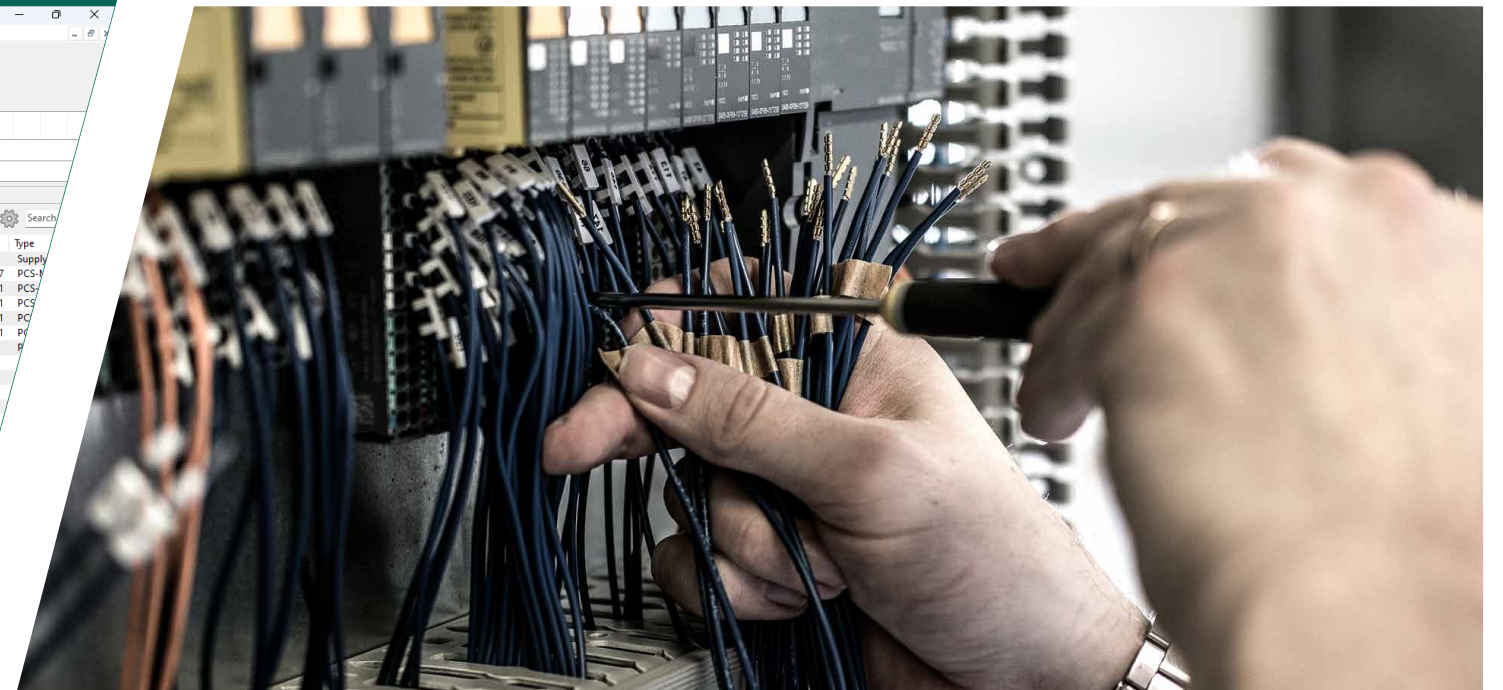
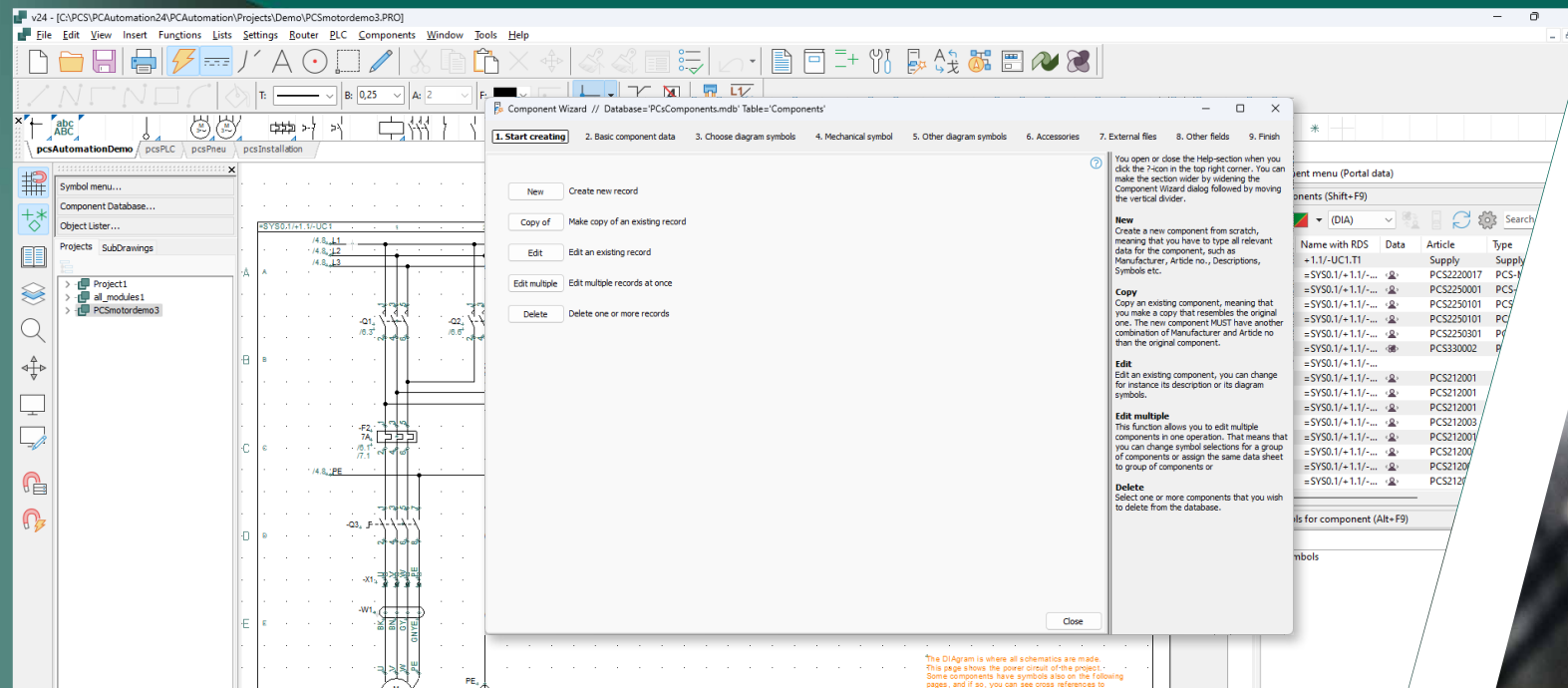


On our YouTube channel you can find small guides for working with the Component Portal



# Component Wizard

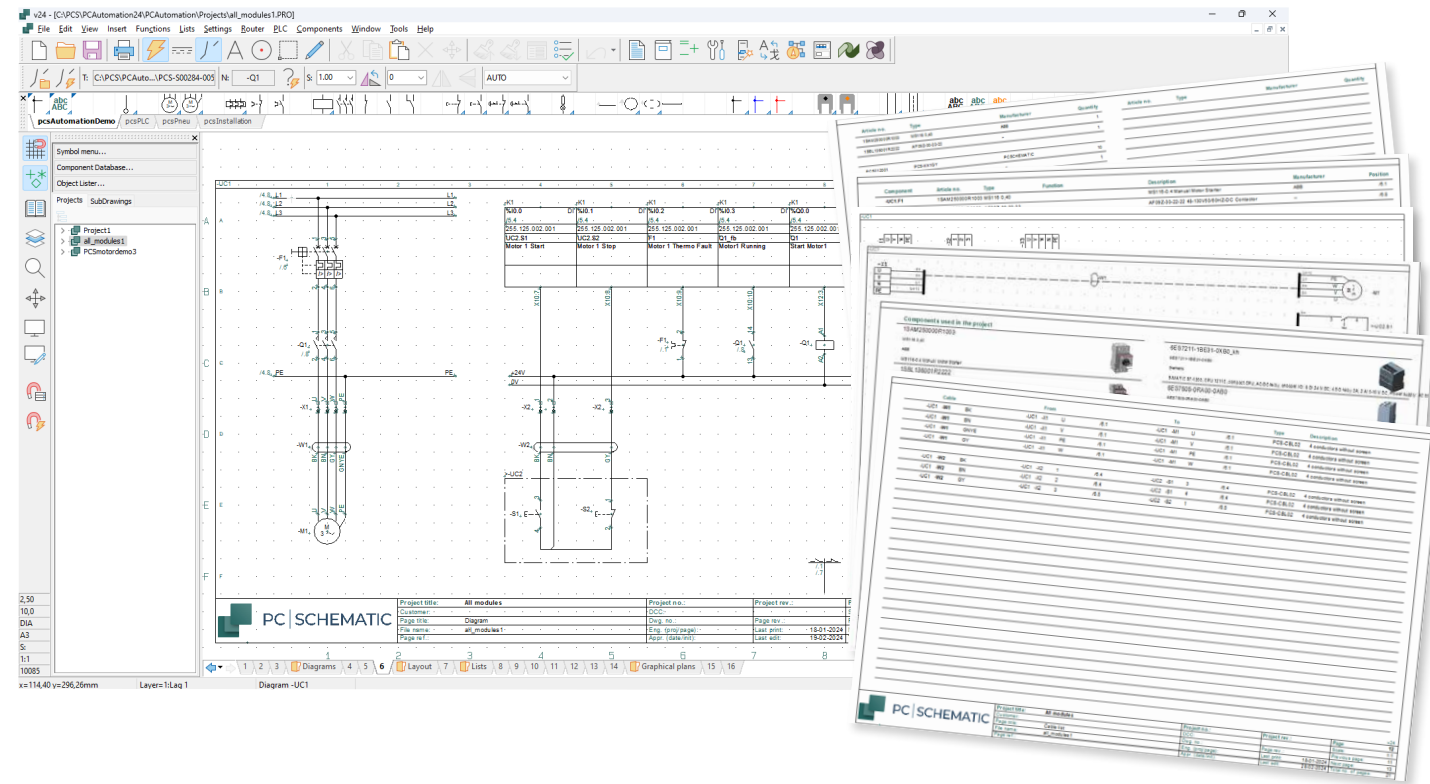
# Panel router and Mechanical layouts



- The component wizard helps you through the creation of components - both simple and complex
- The component wizard gives ensures a structured process where you start by specifying item numbers and types and then choose diagram symbols and mechanical symbols. Any accessories are added as well as pictures and descriptions. All necessary information is stored on the component and stored in your local database
- Self-created components are stored in the same database as components retrieved from the Component Portal, which are all created in the same way/structure, to ensure that a uniformly high quality
- The component wizard is a guide that helps you through all steps in the process
- The component wizard is adapted to different types of components such as PLC, cables, relays etc.

- Mechanical layout (General arrangement):  
Get mechanical symbols with correct dimensions for the used components automatically – from the database
- Panelrouter for automatic routing of wires in panels:  
Based on the electrical connections in the diagrams, the Panelrouter finds the shortest wire paths. Easy tools for redirection included
- Links from wires on mechanical layouts to the corresponding wires in the electrical diagrams
- Output of wire lengths
- Check for capacity in wire trays and conduits
- Check of jumper link dimensions etc.
- Export to cutting machines with the right length and correct marking etc.

# Automatic Lists and Graphical reports



- All list types included: Tables of contents, parts lists (BOM), component lists, terminal lists, cable lists, connection lists, label lists, plc lists etc. (all user definable)
- Lists updated automatically – based on the data attached to the symbols in the diagrams
- Lists on page, chapter & project level – and by reference designations
- Export all lists as files – wire number files, connection list files etc.
- Graphical Cable, Terminal and Connection reports generated automatically – just specify the settings & click Generate
- Symbol documentation (legend) generated automatically
- Interfaces to relevant 3<sup>rd</sup> party softwares

# Net Navigator and Intuitive project navigation

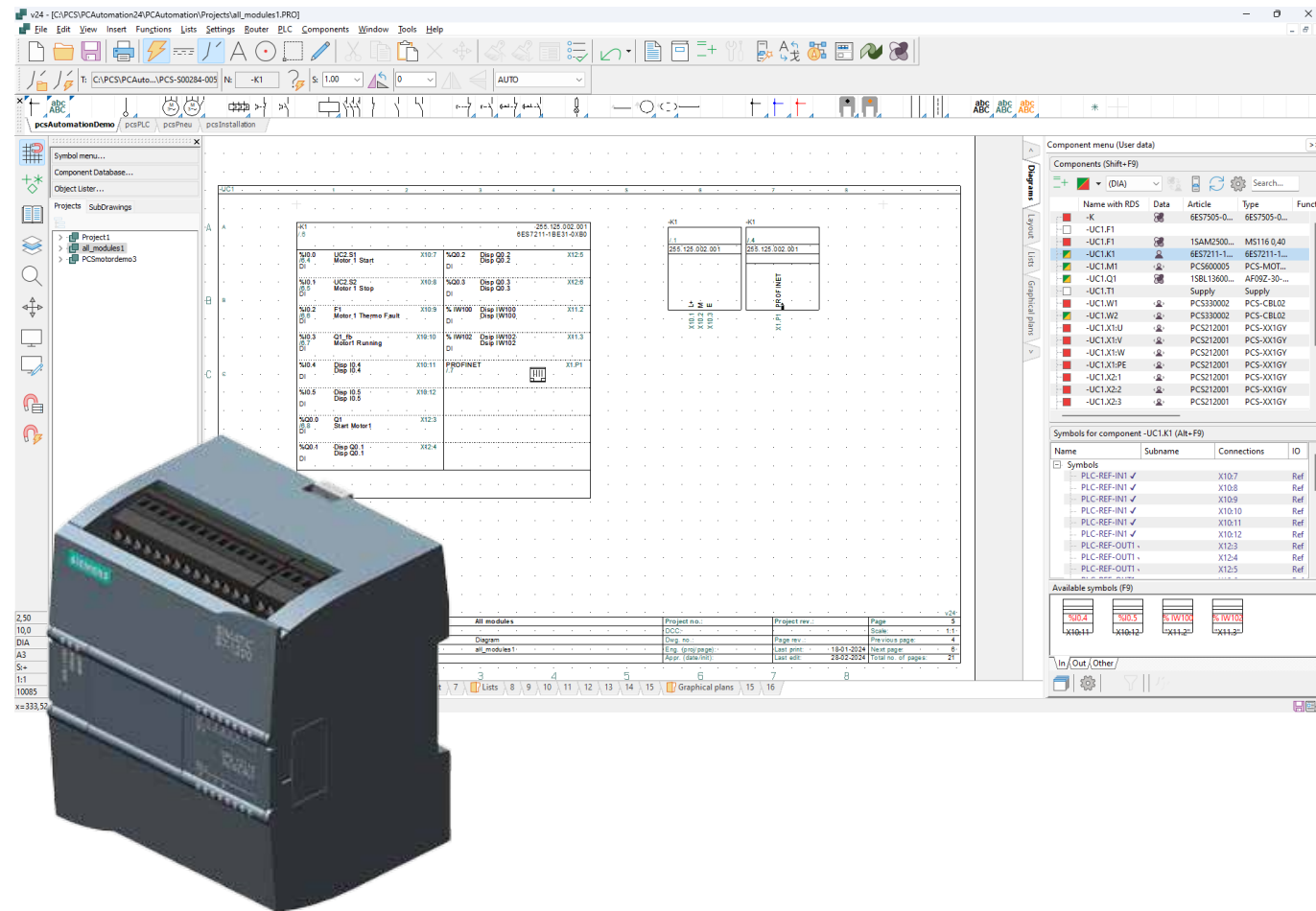


- Multiple possibilities for intuitive navigation in projects
- Net Navigator for easy navigation through electrical potentials
- Cross references created & updated automatically for components: Click and jump between all symbols for a component – or click in lists and jump directly to the component in the diagram
- Explorer window for locating chapters, pages, components, symbols and reference designations
- Object Lister for easy identification and editing of any object
- Design check – such as check for short circuits and missing connections
- Fast navigation when finding errors



# Advanced handling of PLCs

# Reference designations



- Place PLC symbols directly from the database – just place the symbols and component data is attached
- Flexibility: Draw your I/O functions first – let Automation support you in selecting the right hardware configuration
- Automatic PLC card overview (PLC reference symbols)
- Automatic PLC I/O addressing
- Automatically updated cross references between PLC symbols
- User-definable channel settings & support of complex analogue PLCs
- Wizard for easy creation of PLCs in database with symbols attached – including reference symbols and symbols for I/O, supply & bus structure
- Import/export PLC I/O files to/from diagrams – e.g. via Excel

- Flexible software: Apply a product approach & start drawing diagrams without defining a general structure – or apply a solution approach & start by defining reference designations.
- Creation and handling of reference designations at component, area, page and project level (function, location and product aspects) – according to IEC/ISO 81346, RDS/PP, KKS or user defined standards
- Reference designations handled intelligently when changing, copying and merging areas, pages and projects
- Use reference designations to easily generate documentation variants, based on which options your customers select





## Mounting assistant based on circuit diagrams

- Mounting Assistant: Presents all connections in the electrical diagrams in mounting order – e.g. by reference designation, power potential, component or page
- Keep track of the mounting process easily: Overview over and control of mounted wires and components
- Quality assurance: Every action is logged with user name and time stamp
- Project changes are easily transferred to the workshop
- Easy sharing of mounting status information



The Mounting assistant functionality is an included feature in all variants of Automation. PCSchematic Automation Production is a separate license designed for the daily work assignments for maintenance and repair as well as for assembly and production workshops. Read more at [www.pcschematic.com/en/products/pcschematic-automation-service](http://www.pcschematic.com/en/products/pcschematic-automation-service)



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# Project generation, sub drawings and templates



- Intelligent reuse of data – e.g. intelligent copying of areas and pages
- Project, page and list templates
- Circuit diagram macros (sub drawings)
- Variants on sub drawings – use the same drawings for different hardware configurations
- Generate projects by just dragging in templates and sub drawings
- Project Generator: Generate full projects automatically from Excel file
- Customizable text and page setup for individual customers

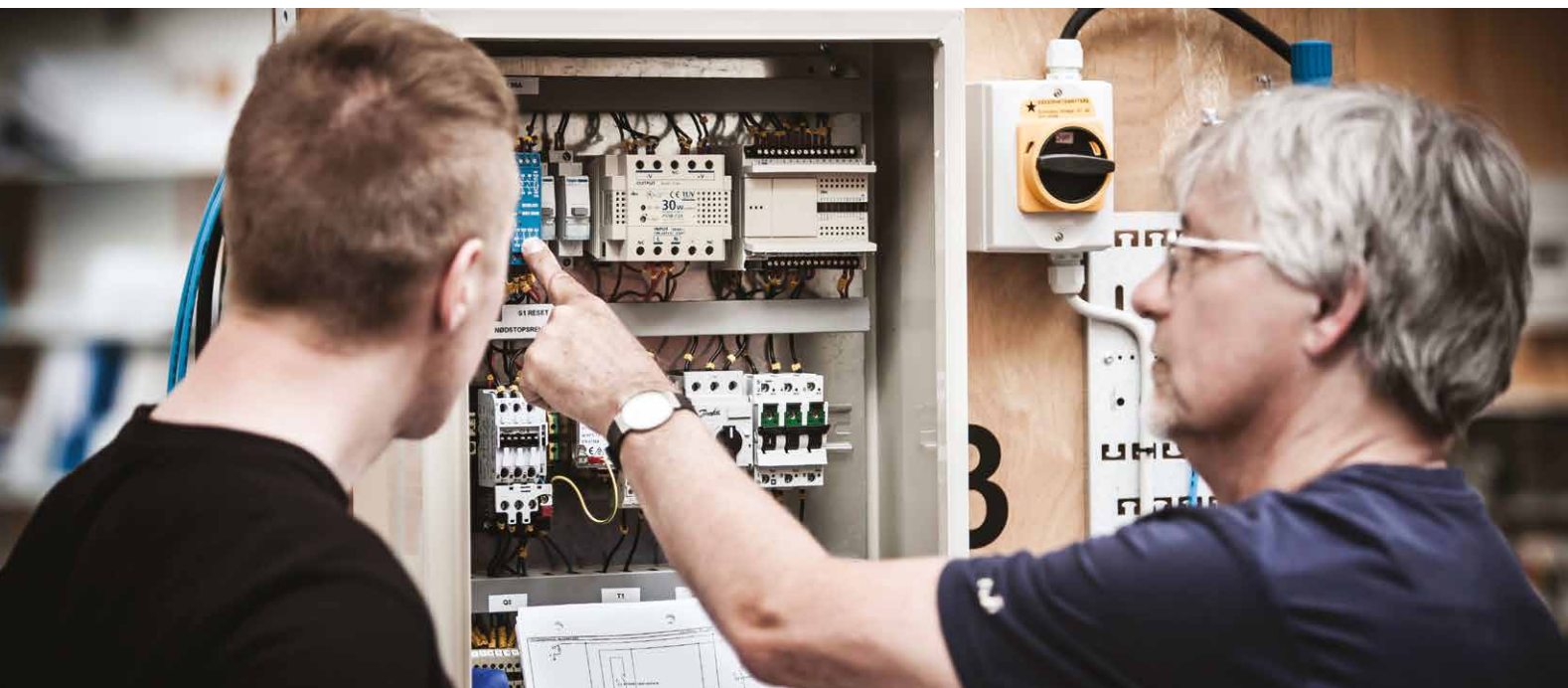
# Intelligent PDF files



- Intelligent export to PDF
- Component and line data available in PDF file
- Links between symbols for the same component in PDF file
- Links from the component in the lists to the component in the diagram
- Links from tables of contents to project chapters
- Easy way of delivering non-editable documentation to customers

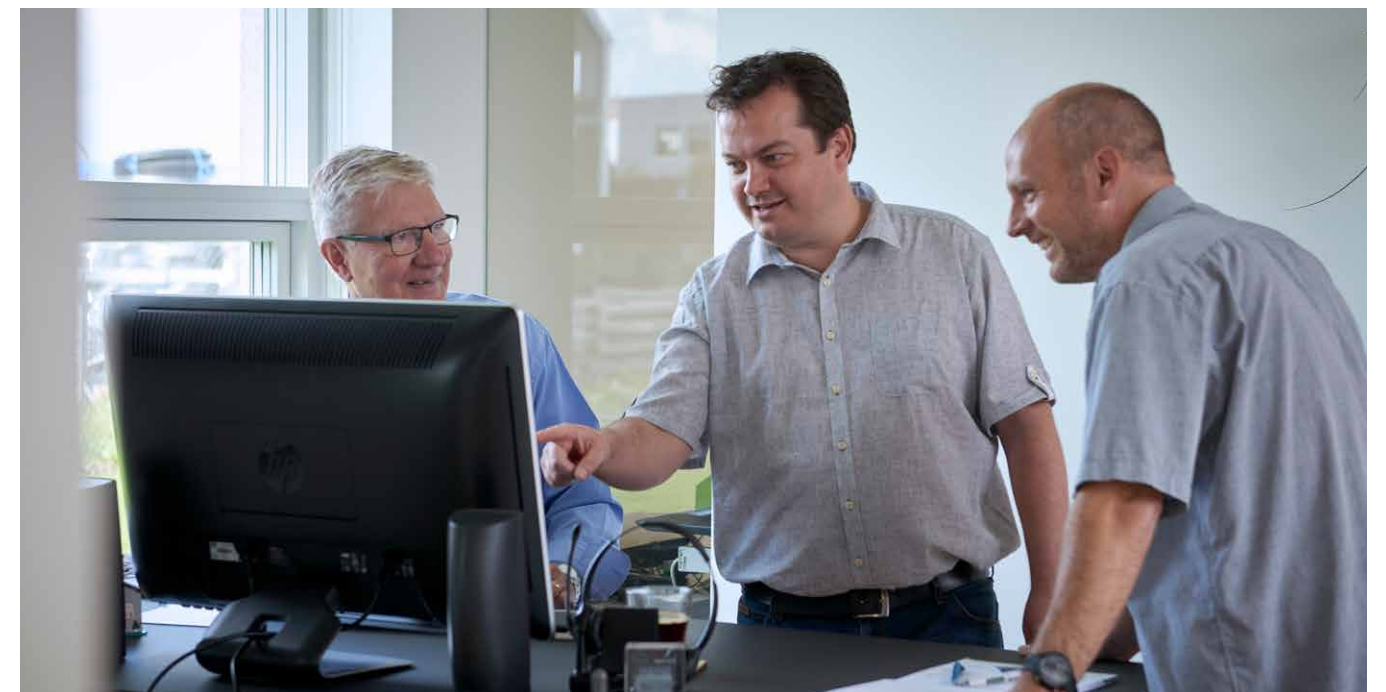


# Panel Builder and House installation



- Panel Builder included for automatic documentation of small panels
- Select the components and the panel layout is generated automatically
- Single line diagrams are drawn automatically based on the panel design
- The Panel Builder creates full documentation for small switchboards and panels according to EN 61349-1 and 3 concerning power dissipation calculation and more – labels for CE marking included
- House installation: Place different installation types on separate layers
- Individual components and parts lists according to layers
- Drawing in elevation
- Cable lengths calculated
- Import/export of DWG/DXF files

# API, modules, networks and licenses



- Create your own modules and scripts for Automation
- Full documentation of open API interface included
- Administrator program for customizing user access
- Server installation and workstations
- Network licenses
- Available in many languages

## Other products



### Optimize and streamline the work with cables and guideways in all phases of your construction projects.

With Cablemanager you get control of all parts of the cable routing in construction projects. That applies both during the initial planning, during the installation phase and during subsequent maintenance.

Cablemanager has an integration to Autodesk Revit, which allows the user to quickly and easily get data on guideways from the 3D modeling program transferred to Cablemanager. In Cablemanager, you can route your cables according to current regulations and then send updated data on the routing paths back to Autodesk Revit.

Cablemanager is thus a great support when planning and documenting, and the program will help you to get a much better basis from which to calculate the price, as well as a very detailed documentation. You can also reduce cable waste and achieve better utilization of the guideways capacity.



Visit our website and learn more about Cablemanager:  
[www.pcschematic.com/en/products/pcschematic-cablemanager](http://www.pcschematic.com/en/products/pcschematic-cablemanager)

**Get 4 hours of free Automation training videos at**  
**[www.youtube.com/pcschematic](http://www.youtube.com/pcschematic)**



## Maintenance agreement

When you choose PCSCHEMATIC Automation, you can purchase a maintenance agreement, which includes:

- Telephone, e-mail & remote support
- Program upgrades (new versions)
- Program updates

In countries with a PCSCHEMATIC distributor, please contact your local PCSCHEMATIC distributor for a maintenance agreement. In other countries, please make the arrangements with PCSCHEMATIC A/S.