SEE Electrical V8R1 News

Copyright

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A   WHAT'S NEW IN *SEE ELECTRICAL*

A.1. *FROM VERSION 7 RELEASE 2 TO VERSION 8 RELEASE 1*

A.1.1. GENERAL IMPROVEMENTS

A.1.1.a.   CHANGES IN THE INSTALLATION FOLDERS

Basic

Because of changes in Microsoft's politics and their rules regarding the installation of software and storage of user data, the folder structure used by SEE Electrical has been changed:

Program Files	C:\Program Files (x86)\IGE+XAO\SEE Electrical V8R1\
Settings and temporary files (XML, OGL, etc.)	Users\Public\Documents\IGE+XAO\SEE Electrical\<V8R1>
User Files (Projects, Templates, Symbols)	Users\Public\Documents\IGE+XAO\SEE Electrical\V8R1\ ...\Projects Users\Public\Documents\IGE+XAO\SEE Electrical\V8R1\ ...\\Symbols Users\Public\Documents\IGE+XAO\SEE Electrical\V8R1\ ...\\Templates

A.1.1.b.   UNICODE SUPPORT

Basic

SEE Electrical supports Unicode in its projects. **When you open a workspace created with an older version of the software, a window appears where you have to select which language properties you used on computer where the workspace was created**. These settings are used to convert the characters in the file to Unicode. **Make a safety copy of your data before you convert!!!**

If you are using old workspace templates when creating a new workspace, open them in V8R1 and save them. This is valid also for type databases and translation databases from older versions.

Because of the Unicode support, the font used in *SEE Electrical* now is Arial and not Vector fonts anymore.

A.1.1.c.   FOLDER STRUCTURE INTRODUCED IN THE PROJECTS

Standard

With *SEE Electrical V8R1* it is possible to structure the diagrams within a workspace in folders and subfolders. The folder structure can be handy when you have large projects with a great number of diagrams.

You can use the folders the following ways:

- ✓ *Use the function name as a folder name to sort the diagrams by function;*

- ✓ *Use the page index as a folder name to sort the diagrams by page number;*

- ✓ *Use the location name as a folder name to sort the diagrams by location;*

- ✓ *Use a custom name as a folder name to sort the diagrams for your personal needs.*

It is possible to create, modify and delete folders with the help of a pop-up menu especialy developed for this purpose.

The *SEE Electrical* workspaces created in older versions of the software are automatically converted to the new structure. If the workspace is grouped by function, folders corresponding to this structure are automatically created.

There are several *SEE Electrical* rules that has to be observed when you create and use folders:

- ✓ *It is not possible to create folders for the Graphical and Database lists.*

- ✓ *It is possible to add a description to the folders.*

- ✓ *It is possible to use sub-folders.*

- ✓ *It is possible to use the same page number when a page is located in parallel folders or sub-folders.*

- ✓ *Folder names are not linked to the actual function/location of the diagram.*

- ✓ *Pages can be moved from folder to folder using the drag&drop functionality.*

- ✓ *Empty folders have to be deleted manually.*

- ✓ *If you are using cross references in workspaces created with versions of SEE Electrical older than V8R1, they have to be generated using the page function (and location) and page number.*

- ✓ *Cross references have to be created using book numbers (unique number for each page).*

- ✓ *If the folder name and the function/location of the page do not match, the cross references have to be created using book numbers.*

A.1.1.d.   USING BOOK NUMBERS

Basic

A unique number is automatically added to each page. This number cannot be changed manually but the numbers can be reordered with the help of the software.

A new page definition value has been added in the **System Settings** and in the **Circuit Diagram Properties** of *SEE Electrical* that allows you to choose if you want to use book number or not.

The book number can be displayed in the templates. It is also displayed in the Graphical and Database lists.

	Folder	Book Number	Page	Index	Cell	Function (=)	Location (+)	Product (-)
1	=ID	2	1		1	=ID		-Q1
2	=ID\+MC	3	2		1	=ID	+MC	-K1
3	=ID\+MC	3	2		2	=ID	+MC	-K2
4	=ID\+MC	4	3		1	=ID	+MC	-K3
5	=ID\+MC	4	3		2	=ID	+MC	-K4
6	=ID\+MC	4	3		3	=ID	+MC	-K5
7	=ID\+MC	4	3		4	=ID	+MC	-K6
8	=ID\+MC\+FB	5	4		1	=ID	+MC+FB	-M1
9	=ID\+MC\+FB	5	4		2	=ID	+MC+FB	-M2

A.1.1.e.   ENHANCEMENTS FOR PRINTING

Basic

Sometimes it is necessary to print parts of a page. The print result should be reproducible. Because of this need, *SEE Electrical* supports definition of print regions now.
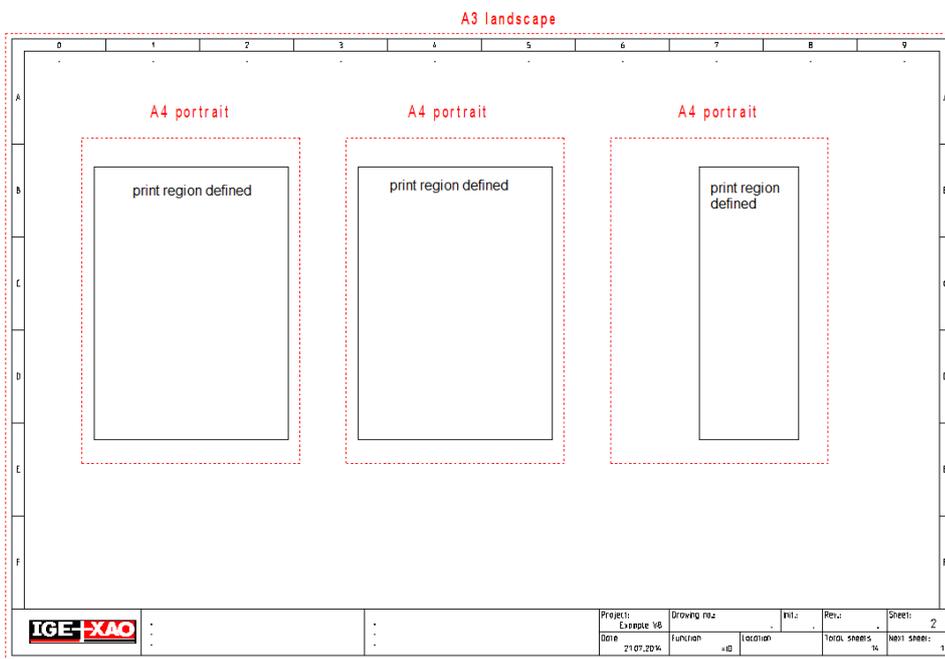
You can define a region in any size, but when printing the proportions will always be forced to the selected page format. This means that in case the proportion of the region does not suit the selected page format, you will see more content from the page than expected.

Print regions are defined by the **Define print regions** command.

When printing only the active page, you can select a print region inside the print dialogue:
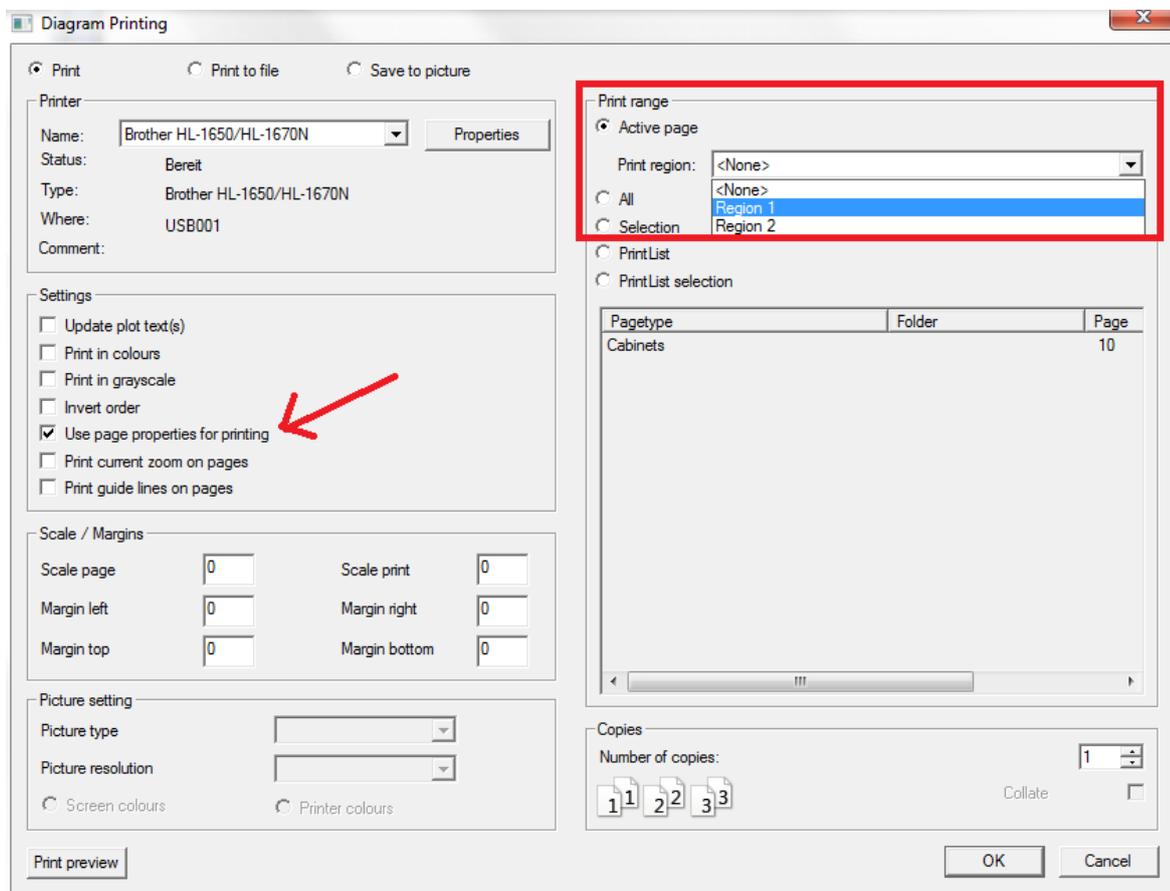
A.1.1.f. DRAWING OF LINES AT A CERTAIN DEGREE

Basic

SEE Electrical supports drawing of lines under 0, 45, 90, 135, 180 etc. degrees. Only lines matching these angles can be generated.

A.1.1.g.   ENHANCEMENTS IN THE LAYER MANAGER

Basic

Elements can be moved to new layer with the help of the layer manager

- If elements are selected when the layer manager is opened and the active layer is changed by typing a new number (or by double clicking on a layer), the elements are moved to the new current layer.

- If elements are selected and the user opens the layer manager and does not change the active layer, the elements stay on their layers. This gives possibility to change the colour of a layer etc.

A.1.2. ENHANCEMENTS IN THE PAGE TEMPLATES

Basic

The new text attributes "Drawing scale" and "Symbol scale" allow you to show the settings defined in page properties in the drawing now.

"Folder name" and Folder description" as well as "Book number" can be shown in the page templates.

A.1.3. ENHANCEMENTS IN THE TYPE DATABASE

Standard

The type database now has a completely new interface that allows you more efficient use of this feature:
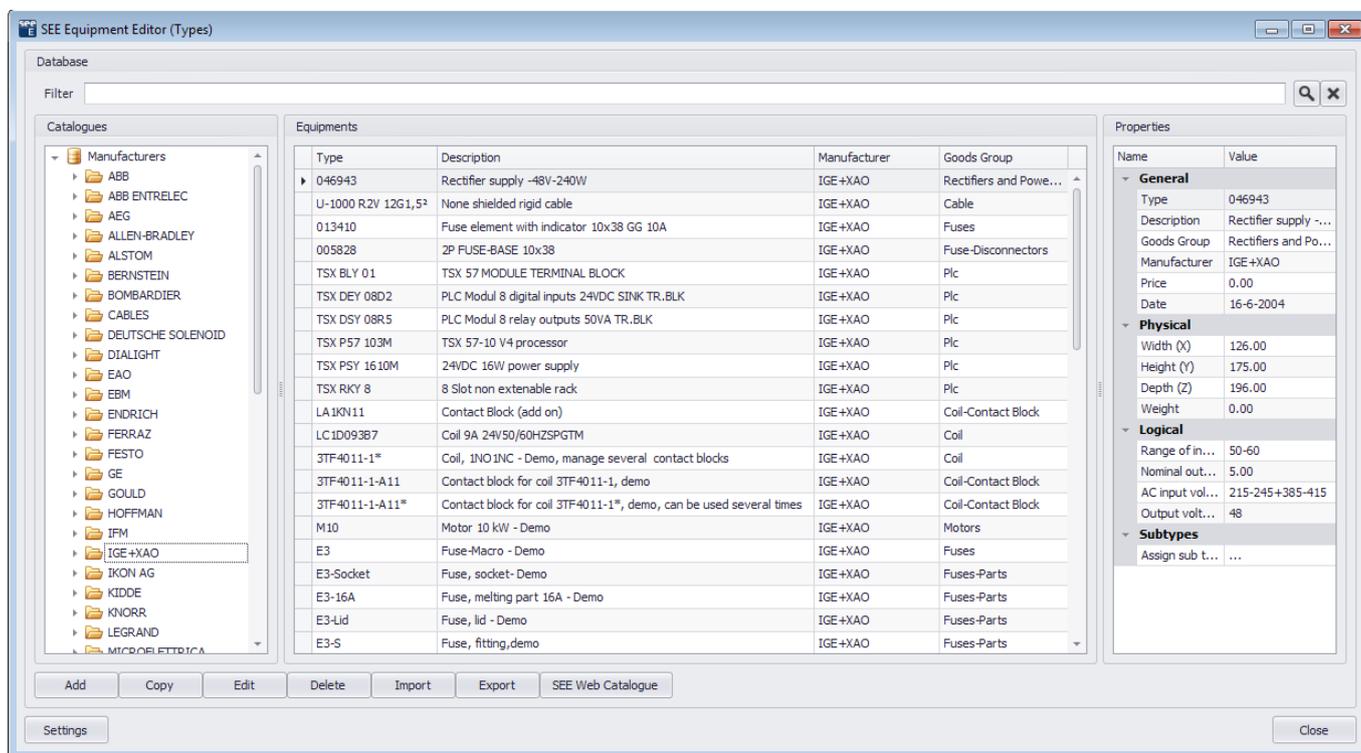
The search is now executed with the help of the "**Filter**" field and is done only for the selected manufacturer or goods group.

The **Catalogues** area lists the manufacturers or the goods groups available in the database. It is managed by a pop-up menu:
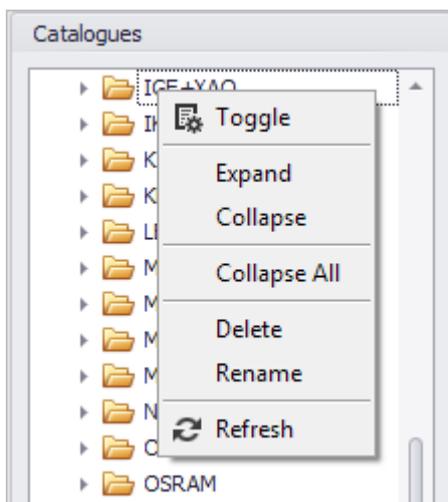
In the *Equipment* area you can manage the sorting of the available parts, always wit the help of a pop-up menu:
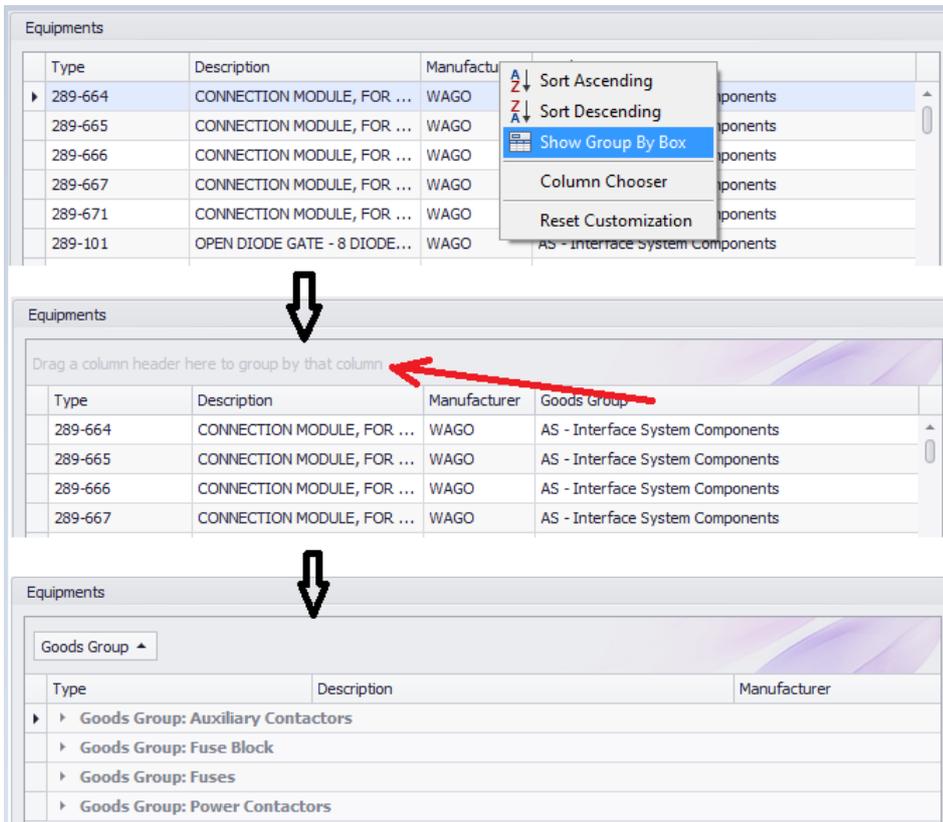
In the *Properties* area you can see the properties for the selected part.

A.1.3.a. MANAGING THE TYPE DATABASE

The different operations on the type database such as adding, modifying and deleting parts or manufacturers and good groups as well as properties are managed by a set of button available in the main window. With these buttons you can also import or export parts from/to XML files or you can import equipment from the IGE+XAO Web Catalogue.
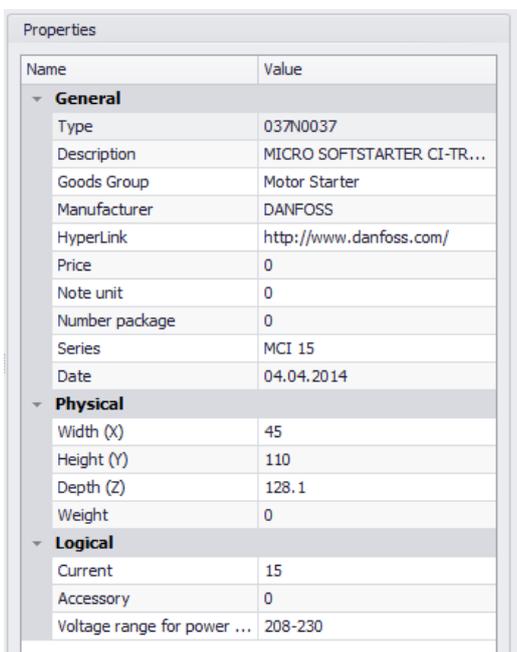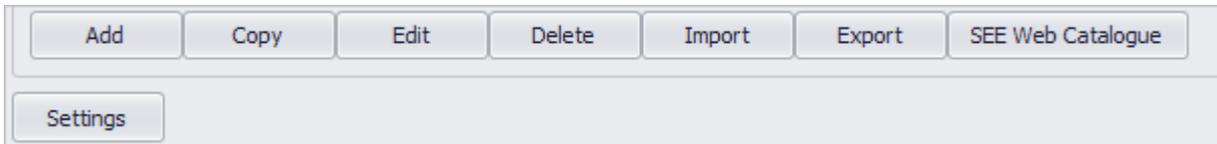
| Add | Copy | Edit | Delete | Import | Export | SEE Web Catalogue |

| Settings |

Several settings allow you to view a report of the import, skip or overwrite existing information, etc.

A.1.3.b. MERGING INFORMATION

When adding or editing equipment information, the **Merge** button allows you to select from which equipment to reuse data in a way similar to the channel definition.

A.1.4. ENHANCEMENTS IN THE COPY / MOVE PAGES FEATURE

Standard

The new folder management has influenced the copying of pages. With this, a new more advanced *Copy* feature has been introduced to *SEE Electrical V8R1*.

It is possible to select how to manage the components in the copied pages in the ***System Settings*** or ***Workspace Properties*** windows:

- ▪ Copying a page without changing the names of the components, terminals and cables.

- ▪ Adapt automatically the component names to the numbering of the target.

A.1.4.a. CHANGES IN THE POP-UP MENU OF THE WORKSPACE EXPLORER

Standard

A new **Paste** pop-up command has been added to the pop-up menu in the *Worspace Explorer*.

The **Copy** pop-up command has been enhanced and now offers more efficient dragging and dropping of copied pages.

Handling of cable names:

Copied cables do not show # in their names. They follow the settings defined for the copy functionality.
If, in the **Cable** tab of the **Circuit diagrams Properties** window, a rule is defined that allows automatic generation of cable names, the cables in the copied pages are renamed following the defined rule. It is necessary to tick the "**Renumber components according to target project settings**" option for the copy process.
If you want to use an automatism for component names and none for cables define the "Free" naming rule for the numbering of cables.

Handling of terminal strip names and terminal numbers:

Copied terminal strips do not do not show # in their names any more. They follow the settings defined for the copy functionality.

Strip names:

If, in the *Cable* tab of the *Circuit diagrams Properties* window a rule is defined that allows automatic generation of terminal strip names, the terminal strip names in the copied pages are renamed following the defined rule. It is necessary to tick the "*Renumber components according to target project settings*" option for the copy process.
If you want to keep the terminal strip names, choose the "Free" naming rule for the strips.

Terminal numbers:

Terminal numbers are always kept. If you must change them, just copy the pages and use the "*Terminal editor*" database list and, in there, the "**Renumber all shown terminal numbers**" option.

A.1.4.b. CHANGES IN THE MOVING OF PAGES FEATURE

Pages can be moved in the workspace with the help of the drag-and-drop function. This is useful if you want to move pages between folders.

A.1.5. IMPROVEMENTS IN CIRCUIT DIAGRAMS MODULE

A.1.5.a. CHANGING THE DESCRIPTION FOR MULTIPLE COMPONENTS IN ONE STEP

Basic

It is possible to change the description or the type for multiple components in one step in the **Properties** window.
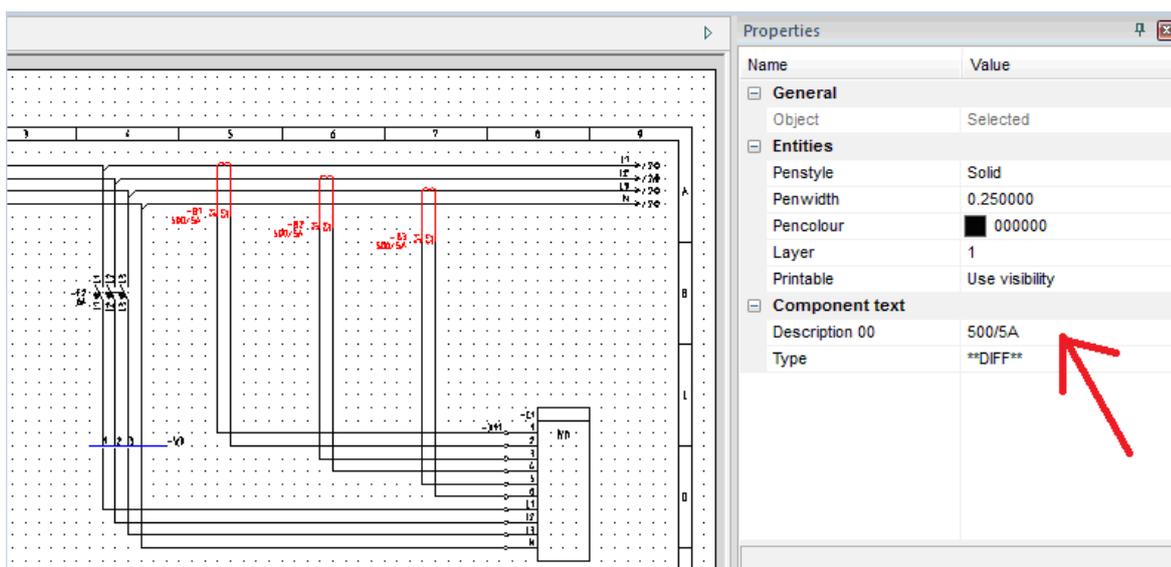
A.1.5.b. GENERATING CABLE NAMES

Basic

It is possible now to automatically generate cable names from the *Basic* level.

A.1.5.c. GENERATING TERMINAL STRIP NAMES

It is possible now to generate names for terminal strips semi automatically.
The new *Terminal Strips* tab in the *Circuit Diagram IEC Properties* window contains the setting for the "*Separator between strip and number*". It allows the definition of a numbering method for the terminal strips.
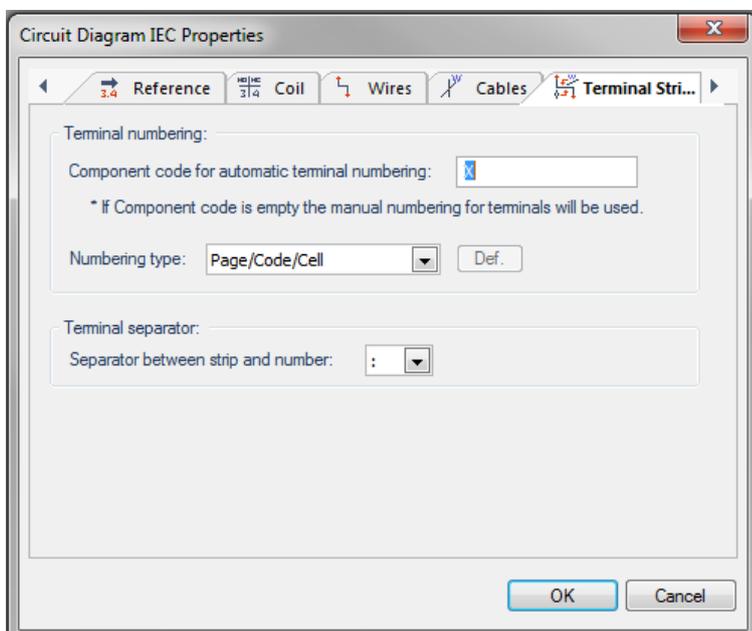
A.1.5.d. EXCHANGING THE REFERENCE SYMBOLS IN THE POTENTIALS

Basic

The **ReplacePotRef** command in command explorer allows you to exchange the reference symbol used in a potential.

A.1.5.e. ENHANCEMENTS IN THE RUBBERBAND FEATURE

Basic

Rubberband function for wires has been changed to optimize results:

- ✓ Wires selected (and because of this moved) are not affected by rubberband any more.

- ✓ Only wires not selected and connected to a moved wire or connection are extended.

A.1.5.f. USING THE CONNECTOR PINS SEVERAL TIMES

Basic

A new property in the **Workspace Properties** window allows you to define the use ot connector pins:
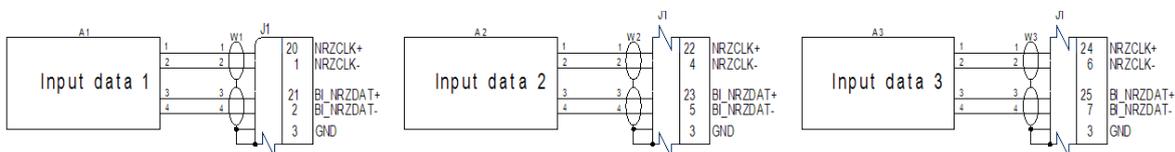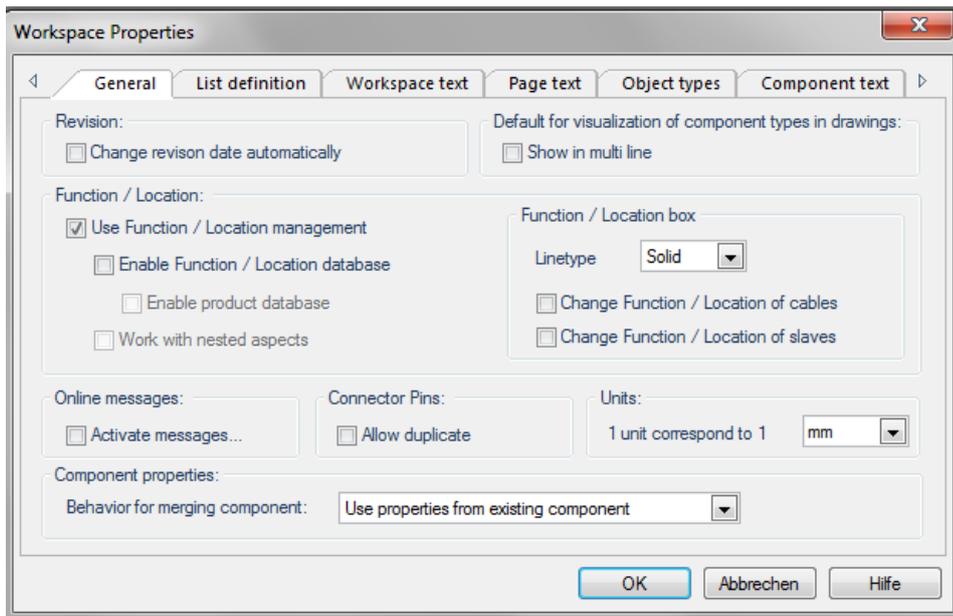
A.1.6. ENHANCEMENTS IN THE ASPECTS

Advanced

New buttons have been added to the **Components** section of the **Function/Location/Product manager** window to allow the transfer of only the selected aspect to the component.

If a component is selected, the **Select aspects in tree** pop-up command allows you to select/show the aspects used in this component in the aspect trees.

A.1.7. IMPROVEMENTS IN THE GRAPHICAL LISTS

A.1.7.a. DISPLAYING OF BOOK NUMBERS

Book numbers can be displayed in all simple graphical lists.

A.1.7.b. GROUPING BY FUNCTION IN THE TERMINAL LIST AND CABLE PLAN LIST

Standard

It is possible now to group the graphical list by function.

A.1.7.c. CALCULATING THE LENGTH OF WIRES IN THE WIRE PART LIST

Standard

In the graphical wire part list it is possible now to calculate the length of the wires with the same type.

A.1.7.d.   USING BOXES ARAOUND COMPONENTS IN THE TERMINAL PLAN, CONNECTOR PLAN, CABLE PLAN, CABLE TERMINAL ROW PLAN LISTS

Advanced

To avoid complex routing in the graphical plans where symbols can be shown as targets, a simplified view of the target symbol (symbol is shown in a box) can be used now.
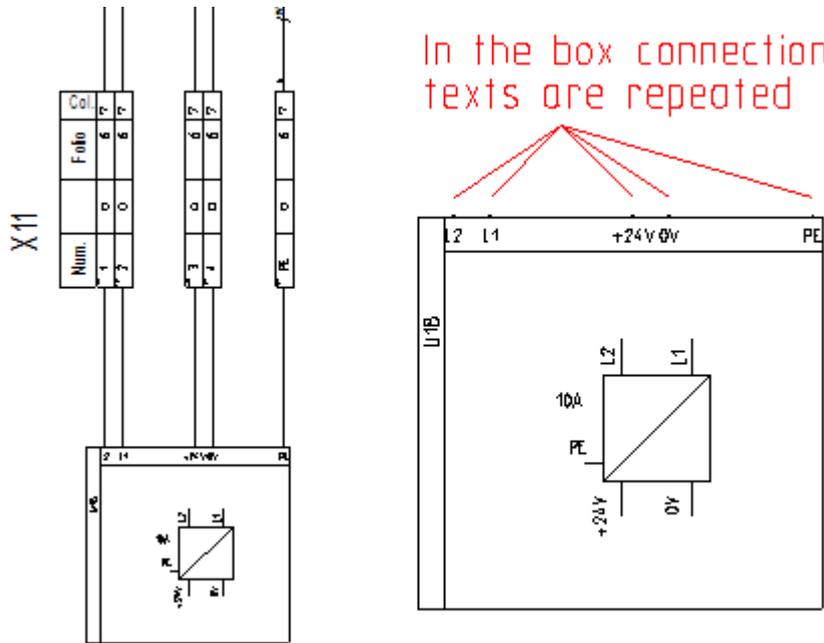
A.1.7.e.   HANDLING OF REVISION DATE IN THE GRAPHICAL LISTS

Basic

A placeholder can be added to the page template to toggle the visibility of the the revision date.

A.1.8. IMPROVEMENTS IN THE CABINETS MODULE

A.1.8.a. SORTING OF THE INDEX TABLE

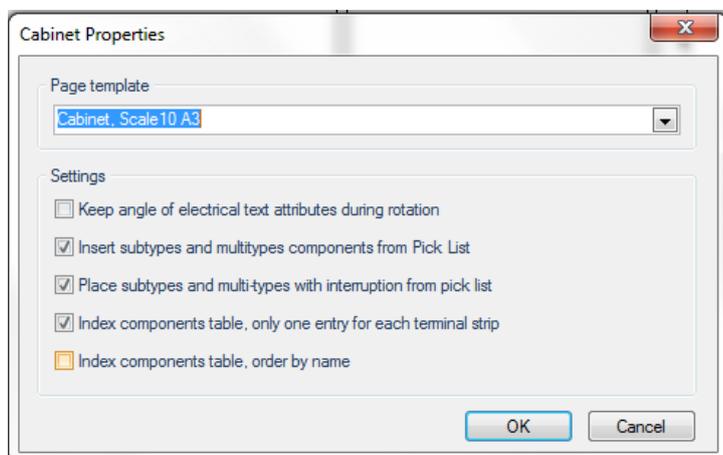The index table can be sorted by name and not only by X-/Y-coordinates. A new property has been introduced in the *Cabinet properties*.

A.1.8.b. REMOVING THE WHITE AREAS FROM THE BACKGROUND OF COMPONENTS

A new function called **Remove background** has been introduced to the **Cabinet** category that allows you to remove the automatically created area for the components. Instead of the automatically created area a manually made one could be added to the symbol.

A.1.8.c. PLACING MULTIPLE TYPES WITHOUT INTERRUPTION

Sometimes for components where more than one type is attached to or that are using subtypes it is possible to place all pieces automatically. In other cases it is necessary to place the pieces manually. The "**Place Subtypes and Multi-types with interruption from pick list**" option has been added to the *Cabinet Properties* to support both ways of working.

A.1.8.a. AUTOMATIC GENERATION OF DRILL HOLES

The **Drill holes** command allows the automatic generation of drill holes, if the holes are specified in type database

A.1.9. SWITCH CABINET MANUFACTURING FOR ELECTRICAL DISTRIBUTION SYSTEMS

Advanced

Switch cabinets for electrical distribution systems are built by using different drawers designed for the various tasks. One kind of drawer can be used once or multiple times in such a cabinet. It is possible now to design the drawers once only but calculate the correct number of parts for the whole cabinet according to the number of drawers used.

A.1.10. ENHANCEMENTS IN THE COMMANDS

A.1.10.a. ENHANCEMENTS IN THE COPYP COMMAND

The **Copy P** command allows you to copy pages and folders within the workspace or from one workspace to another.

The command allows you to:

▪ Copy an entire folder (and its subfolders). The functions / locations of the components are not changed.
▪ Copy all pages in a folder – the function / location must be changed in the copy.
▪ Copy pages from a circuit diagram and pages from a cabinet sheet together or separately.
▪ Copy several single pages
▪ Setup sort order for folders in the target workspace during the copy process. The folders and pages inside them must be copied in the right order.
▪ Copy pages with page index
▪ Copy pages with gaps in the page numbers
▪ Copy pages from the *Circuit Diagram* and pages from the *Cabinet* modules together or separately.

A.1.10.b. THE COPYMULTIFOLDER COMMAND

The **CopyMultiF** command is replaced by the **CopyMultiFolder** command, which copies the folders (and not the function groups) from multiple source workspaces to one target workspace.

A.1.10.c. ENHANCEMENTS IN THE ETINFO COMMAND

Basic

The new *"Show master without a slave"* option in the **ETInfo** command allows you to find the components that are spare or where names are not correctly assigned to master itself or some slaves.
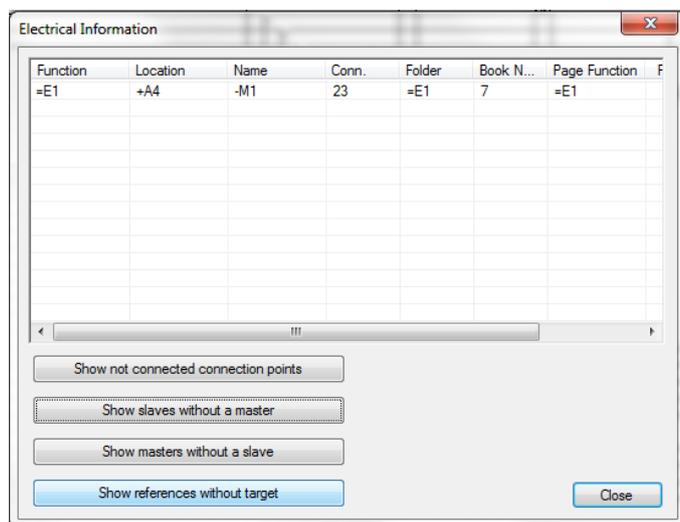

A.1.10.d. OPEN PUBLIC COMMAND

Basic

The **Open Public** command opens the *Windows explorer* in :
[PUBLICDOCUMENTS]\[Manufacturer]\[Product]\[Version] so the user can access the workspaces, templates and symbol libraries easily if they are stored in the folders used by *SEE Electrical* by default.

A.1.10.e.   TRANSFERRING THE DESCRIPTION FROM THE PRODUCT ASPECT TO THE DESCRIPTION 00 OF THE COMPONENT.

Advanced

If you are working with product aspect, it is possible now to transfer the description from the product aspect to the description 00 of the component. The transfer is done with the help of the **TransferAspectProductDesciption** command.
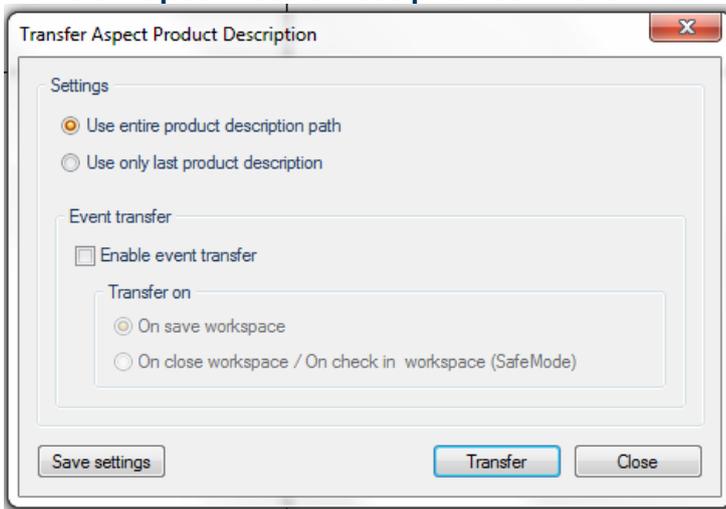
A.1.10.f.   COPYING OF SIGNAL DEFINITIONS

Advanced

It is possible to copy signal definitions between workspaces in which the "Use signal type" option is active. This is executed with the **CopySignalDef** command.

A.1.11. ADDITIONAL MODULES

A.1.11.a.   THE TRANSLATION MODULE

The **Translation** module offers the functionality to translate a workspace in the same way as known from the *Advanced* level of *SEE Electrical*.

A.1.11.b.   THE AUTODIAGRAM MODULE

The Autodiagram module contains the functions from the Autodiagram function found in the *Advanced* level of *Circuit diagrams IEC* module.

A.1.11.c.   THE SEE WEB CATALOGUE

The IGE+XAO Group has created a progressive catalogue available on the Internet for customers licensed to use it. It contains codes from various manufacturers. Each equipment code from this catalogue contains up to six details:

- ▪ Code: identification number of the manufacturer
- ▪ Description: equipment description
- ▪ Manufacturer name
- ▪ Serie: series name, range of product
- ▪ Product: equipment designation

Two services are available:

- ▪ "*SEE Web Catalogue*" allows the download of all the parts available in the web catalogue. Yearly subscription.

- ▪ "*SEE Parts Libraries*" includes the creation of new reference material, for a maximum of 10 references requested within a period of 5 days. This service is offered for 100 references during 18 months from the date of the subscription to the service.