CADMATIC Electrical

Release notes | 2022T2

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Contents

Release notes

The release notes for CADMATIC Electrical version 2022T2 are described in this document.

The following conventions apply to these release notes:

- Filenames, pathnames and environment variables are in *italics*.
- Commands, options, dialog names, and menu choices shown in the user interface are in **bold**.

Cabinet Layout

New and improved features

Application levels	Electrical application levels have been renamed: • Electrical Standard is now Electrical Basic. • Electrical Pro is now Electrical Premium.
Drawings handling	The deletion of revision marks has been changed. You can now select the revision marks you want to delete in the **Delete revision markings** dialog.

Bug fixes

- When editing a distribution board, canceling symbol selection resulted in an error.
- When editing device's size information, the ID attribute (E_ID) was randomly moved.

Distribution Board

New and improved features

Application levels	Electrical application levels have been renamed: • Electrical Standard is now Electrical Basic. • Electrical Pro is now Electrical Premium. Furthermore, Electrical Basic is now available in English.
Schema drawings/sheets handling	The deletion of revision marks has been changed. You can now select the revision marks you want to delete in the **Delete revision markings** dialog.

Layout

New and improved features

Application levels	Electrical application levels have been renamed: • Electrical Standard is now Electrical Basic. • Electrical Pro is now Electrical Premium. Furthermore, Electrical Basic is now available in English.
Distribution boards and groups	Distribution boards and groups have been completely renewed. • Earlier, distribution boards and locations were handled in separate user interfaces. Now all the information can be entered in the same user interface, to which new data fields have also been added. In addition, you can edit busbar information. Changes are automatically updated to Layout and Schematics drawings. • One of the most essential changes is the new object type **Feeder**. Feeders can be defined as outgoing or incoming for distribution boards. One group can have several feeders, with their own cables and protective devices. Therefore, you can have main circuits and control circuits with their own information in the same electrical

	group. Groups and feeders as well as their cables and protective devices can be managed in one dialog. Objects and fields are also available in the database which helps mass editing.
Drawing handling	The deletion of revision marks has been changed. You can now select the revision marks you want to delete in the **Delete revision markings** dialog.
Wiring	Rise symbols have been changed as follows: • A rise symbol is no longer removed when removing the wiring related to it. • If you end wiring to a rise symbol with a different wiring at the other end, you will be notified and you can choose to change the wiring to the one you just drew. • There is a new function, **Draw wiring connected to reference**, in the context menu of an empty rise symbol, with which you can draw the other end for a wiring.
Symbols	The following changes have been made to the symbol functions: • The symbol standards **IEC, Sweden**, **IEC, Estonia** and **IEC, Finland** have been added. • The ANSI (American National Standards Institute) and GB/T standards and their symbols are now available. • By selecting **Custom** from the **Standard/locale** field in project settings, the application symbol menus can be replaced with user's own menus. • When the IEC standard is in use, the **Plug sockets** button opens the **IEC plug socket symbols** menu and the **Switches** button opens the **IEC switches** menu. • **Symbols, Sweden** has been removed from the **Symbols** menu because the same functions are now available in the basic menus. In addition, the telephone and door phone symbols are now in the same menu.
Hole functions	The following changes have been made to the hole functions:

<table>
<tr><td></td><td>

The hole edit button previously located on top of the basepoint has been moved to another location. Therefore, it is now easy to move the hole using the basepoint.
With the new Modify hole size function, you can change the size shown in 2D for the selected hole with your mouse.
When defining or editing holes, it is now possible to define the elevation to the top, center or bottom part of the hole. In editing, the default is Top elevation.
3D reservation is now taken into account when copying holes.

</td></tr>
<tr><td>Space functions</td><td>In heat loss reports, spaces were previously listed in the order they were created. Now, they are listed according to the space number.</td></tr>
<tr><td>3D drawing functions</td><td>The new Move 3D symbol (2D symbol also moves) function in the right-click menu of a 3D symbol allows you to move a symbol so that the 2D symbol moves with it.</td></tr>
<tr><td>Plant Modeller integration</td><td>The following changes have been made to the integration:

The integration now supports multiple COS versions as follows:
<table>
<tr><th>Electrical version</th><th>Supported COS version</th></tr>
<tr><td>2021T3</td><td>2021T2, 2021T3, 2022T1</td></tr>
<tr><td>2022T2</td><td>2022T1, 2022T2</td></tr>
</table>

The Project information / settings dialog shows the Plant Modeller project information below the project directory.

</td></tr>
</table>

Bug fixes

- The project tree did not update when a cable was deleted in the wiring set edit dialog.
- When changing the drawing label, print frame disappeared.
- When drawing floor heating, the thermostat and sensor became occurrences of the same device, causing problems with 3D symbols.
- A vertical raceway to another storey did not work correctly if the angle was something else than 0.

- Consecutive numbering did not work correctly.
- Editing an additional info boundary resulted in an error in saving.
- Changes made to additional information added for a cable did not update from the database to the drawing.
- Updating coordinate locations from Plant Modeller to Electrical did not work.
- The Fix command did not work as should when a group mark had more than one occurrence.
- When using your own additional information, plate texts were not shown correctly.
- When updating IFC files via the project tree, information was read from the wrong drawing file.
- When a product model included additional information related to 3D symbol rotation, 3D generation needed to be done twice.
- The distribution board symbol was incorrectly mirrored with size value 1.0 or smaller.
- In the **Fill drawing label** dialog, the number of characters allowed in fields was restricted.

Schematics

New and improved features

Application levels	Electrical application levels have been renamed: • Electrical Standard is now Electrical Basic. • Electrical Pro is now Electrical Premium. Furthermore, Electrical Basic is now available in English.
Symbol functions	The following changes have been made to the symbol functions: • By selecting **Custom** from the **Standard/locale** field in project settings, the application symbol menus can be replaced with user's own menus. • The GB/T standard and its symbols are now available. • New symbols have been added to the following symbol menus: ◦ **Protective devices** ◦ **Motors** ◦ **Contacts** ◦ **Contactors** ◦ **Thermal relays**
Project tree (Premium)	Copying functions have been added to the project tree right-click menus: • In the **Devices (location)** and **I/Os (location)** trees, you can copy a location with the **Copy location** function. With this function, you can also choose to copy the devices from that location. • In the **Devices (circuit)** and **I/Os (circuit)** trees, you can copy a circuit with the **Copy circuit** function. With this function, you can also choose to copy the devices from that circuit. • In the **I/Os (location**, **I/Os (circuit)**, **Devices (location)** and **Devices (circuit)** trees, you can copy an I/O with the **Copy I/O** function. • In the **Devices (location)** tree, you can copy a terminal strip and a terminal block with the **Copy device** function.

Schema drawings/sheets handling	The deletion of revision marks has been changed. You can now select the revision marks you want to delete in the **Delete revision markings** dialog.
Wiring	The following changes have been made to the wiring functions: • Using the wiring functions is now easier on the Premium level: ◦ Before, functions were available in the **Wiring functions** and the **Electrical DB -database** toolbars. Now, all the functions are available in the **Wiring functions** toolbar. ◦ It is now possible to create and draw wiring sets. The user is allowed to create a wiring set in Schematics and then draw it in an arrangement drawing, for example – when cables are edited, the changes are updated to both occurrences. ◦ Wires, cables and wiring sets are drawn using the new **Wiring** window. The new user interface makes drawing easier as you can now, for example, add cable and wire marking as you draw. ◦ Clicking or double-clicking a wire or a cable opens the **Wiring** window for editing. • The **Draw busbars** function has been improved: ◦ The **ID** drop-down menu lists all devices with device type **Power Busbars**. The default is **<SUPPLY>**. ◦ The device type of the new power busbar device will be **Power Busbar** (instead of **Unknown**). ◦ The text will be inserted in the drawing as a device symbol. • In the **Assign cables and wires in drawing to this cable** dialog, the **Select wire** drop-down menu shows whether the wire has occurrences in the drawing. • The **Connect and mark cable and its wires** function now checks the signal information from the wires and the pins: when a pin at either end of the selected wiring matches with the signal information of a wire, they are automatically connected.
Wiring references	The following changes have been made to the wiring reference functions: • Defining a wiring reference to another sheet has been made easier:

	◦ Previously, it was necessary to know the target sheet when wiring to another sheet or to another document. Now, you can move from the current sheet to the next or the previous sheet with the arrow buttons in order to find the correct sheet. The sheet is changed in the background according to your selection. ◦ The **Continue on sheet** drop-down menu only lists the sheets that are actually available. ◦ The start sheet is shown between the arrow buttons. Furthermore, the **Reference to another sheet** dialog has been renamed to **Wiring reference**. • You can now select several unpaired wiring references from the drawing, and then pair them with the new **Select reference pair from drawing (one by one)** and **Select reference pair from drawing (several)** functions, available in the right-click menu. • The **Insert a wiring reference** function has been added to wire's right-click menu. ◦ The direction for the reference arrow is entered in the command line. ◦ If there is a wiring point at both ends of the line, the function is not available. ◦ If there is no wiring point at either end of the line, the reference will be placed to the end closest to the point from where the function was started. ◦ If there is a wiring point at the other end of the line, the reference will be closed to the end with no wiring point. • The **Wiring references from terminal strips to devices and from devices to devices** function searches for the other end of wiring from the occurrences of the whole project. Furthermore, the wires deleted during the session are no longer taken into account. • There are new options in project's wiring settings: ◦ The following new options have been added to the **Show remote-end connection** setting for both wires and cables: ■ **Show Customer ID + Pin** ■ **Show Customer ID (no Pin)**

<table>
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Show Electrical pos. + Customer ID + Pin
Show Electrical pos. + Customer ID (no Pin)

When customer ID has been set to be shown in drawings, references are shown according to the customer ID.

New settings, Wire: Remote-end description and Cable: Remote-end description, are now available. If some other option besides Free text has been selected, the reference pair description fields are disabled in the Wiring reference dialog.

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<tr><td>CAD lists</td><td>A new option, No location, has been added to the location list in device list creation, allowing you to include devices without a location to the list.</td></tr>
<tr><td>Plant Modeller integration</td><td>The following changes have been made to the integration:

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The Project information / settings dialog shows the Plant Modeller project information below the project directory.

</td></tr>
</table>

Bug fixes

- Drawing a sub-device device boundary inside the parent device's boundary created a new device.
- Wiring reference did not show correctly for a terminal strip when there were two terminal strip occurrences from the same terminal block (device, number and part number matched).
- When multiple objects were selected, the type (e.g. paired or unpaired reference) was not checked. Therefore, functions were missing from the context menu and wrong functions were available.
- In cable combing, the cable line followed wiring reference settings for wires instead of cables.
- If an I/O did not have occurrences, it was not saved.
- When inserting a customized I/O symbol, the symbol was unnecessarily scaled.

- When an I/O had two occurrences and the tag name was edited for one of them in the **I/O properties** dialog, the name was changed for both occurrences.
- The **Save customer drawings** function crashed the application.
- There were problems in reversing wires.
- Drawing a busbar did not work as should.
- Additional information of type **I/O** was changed to type **Undefined** when added to a product model or when copying a product model.
- The application crashed after cable combining.
- When adding an I/O symbol to a product model, the option to add it to all the channels was not available.
- Updating coordinate locations from Plant Modeller to Electrical did not work.
- Adding a new sheet was slow.
- When all I/O card channels were inserted from the project tree with the **Insert all card's channels into drawing** function, they became occurrences of the first channel.
- When combining objects in Electrical DB, CADMATIC Draw crashed when the objects had occurrences, the username included more than eight characters and the *storeysettings.xml* and *storeydefinitions.xml* files existed in the *TEMP* directory.
- After opening the **Device properties** dialog from the project tree and clicking the **Delete** button in it, the application crashed.
- When inserting device connectors, part numbers did not work correctly with source pins.
- In Excel generation, links were not created correctly when the attribute already had a link.
- With big Excel files, the **Generate drawings based on template drawings and an Excel worksheets** function started slowly.
- If the symbol type was **Represents multiple device parts**, pins were not updated from the database to the drawing.
- Some I/O card pins had 0 as the part number, causing problems when inserted to a drawing.
- When a product model with an empty pin value was assigned to a terminal block with a pin value already defined, the empty value replaced the defined pin value.
- When using the **Create a new terminal block from product model and insert its symbol** function, the product model was not assigned to the inserted device.
- After adding channels for an I/O card in the **Device properties** dialog, the project tree was not updated accordingly.
- Removing more than one I/O channel in the **Device properties** dialog resulted in an error.

- After deleting a sheet with terminal blocks, it was not possible to delete the respective terminal strip even if there were no occurrences left.
- In the **Wiring reference** dialog, clicking in the **Reference pair ID** field resulted in an error.
- The **Generate drawings based on template drawings and an Excel worksheet** function did not change channel numbers in the template drawing according to the columns in Excel if row numbers were used.

Electrical DB (Premium)

New and improved features

Managing projects	The following changes have made to project management functions:
	• You can open a project
	  ◦ By dragging and dropping it from File Explorer to DB's **File** tab
	  ◦ By right-clicking the database file and selecting **Open with**
	• You can create a new project by copying the open project via the project tree. The subdirectories used by the application are also copied.
	• With the new clean-up option, **Additional informations that already exist in the cable type and have the same value**, you can remove overlapping additional information from cable types.

Locations	The following changes have been made to location properties:
	• Two new location types, **Location** and **Other**, have been added. **Location** is used whenever the user cannot impact the creation of location.
	• The location properties dialog has been improved:
	  ◦ The name of the dialog now depends on the location type. If the location type is **Distribution Board**, for example, the dialog name is **Distribution Board properties**.
	  ◦ The fields have been reorganized to follow the same order as in the **Device properties** dialog.
	  ◦ The **Location text 1–4** fields have been added.
	  ◦ The **Size and position** section is now available.

	◦ The new **Symbol** tab shows all the symbols in the location. ◦ When the location type is **Distribution Board**, the new **Busbars** tab shows the busbar devices in this location.
Devices	The following changes have been made to device properties: • When the device type is **Power busbar**, the **Feeders** tab is available in the **Device properties** dialog. • The **Device properties** dialog opens faster, even in large projects and when used remotely.
Cables	The following changes have been made to cables: • In the **Cable properties** dialog, you can now easily select the wiring set for the cable from the **Wiring set** drop-down menu. You can also proceed to add wiring sets, if necessary. • In the **Cables** grid, it is now possible to edit the item code with the **Edit rows in Excel** function. When the rows are imported back to the DB tool, the application checks whether it is possible to change the cable type. If not, the old type remains in the grid.
Terminal blocks	In the **Terminal block** grid, the right-click functions have been improved to show only the functions available for the selected item. In addition, it is now possible to create a new terminal block from the terminal strip right-click menu.
Documents	On the **Documents** tab, the following changes have been made: • You can update the selected reports with the **Update reports** function. The selected document/label rows need to be of type Excel or PDF. • The constant attribute E_DRW_REVDATE is shown in the **Revision date** column.
Customer IDs	The following changes have been made to customer IDs: • Space data is now available in Customer ID creator for cables and devices. The information available is **Flat**, **Number text**, **Space name**, **Space number**, and **Space status**. • It is now possible to create the customer ID based on additional

	information added by the user.
Product model management	In the **Product model management** dialog, new additional information columns **Manufacturer**, **Series** and **Card I/O type** are available.
Clipboard projects	Searching for locations and circuits is now easier in the temporary project import dialog: you can select the desired location/circuit with the ... button.
Reports	Excel report templates are now available in Lithuanian.

Bug fixes

- Opening project settings when project path had not been set resulted in an error.
- Saving wiring connections was slow.
- On the I/O tab, undocked additional grids crashed the application.
- Different users were able to create product models using the same name.
- When deleting files, a lot of unnecessary files were also added to Windows' Recycle bin.
- Copying large database structures to clipboard was slow.
- The plate text size did not accept decimal numbers when Windows language was different from the application language.
- In SQL project management, processes were running even after closing the related dialogs.
- In the Terminal blocks grid, sorting and filtering did not work as should.
- The global filter set on the Home tab was ignored when changing the selection in the project tree.
- Opening a project resulted in errors.
- Adding terminal blocks and terminal strips sometimes created duplicates.
- When creating a new I/O card in the I/O properties dialog, it was not possible to select it for the I/O before closing the dialog first.
- In the Cables grid when selecting rows as a mass to be edited in Excel, the order of rows did not follow the grid order.
- Modifying the item code in product information also left the unmodified version to the project.
- Project clean up did not remove invalid hierarchy binding guids from circuits and locations.
- When saving a new I/O with a name identical to an existing one, a wrong error message about a missing tag name was shown.

- When copying a terminal strip, an additional device was created.
- The **Cable wiring connections** function did not find device pins unless refreshed.
- Importing cables from an Excel file resulted in an error.
- The **Import from another project** function did not import information from the I/O tab.
- In the report function, the selected grouping column was sometimes shown double.
- In SQL Server project management, the **Clean** function did not work properly.
- Canceling the creation of a new cable with the **Delete** button resulted in an error.
- On the **Pins** tab in the **Device properties** dialog, clicking **Delete** in the sub grid (wires) resulted in an error.
- The clean-up comparison dialog did not show deleted references.
- Instead of opening the application, an error message about the configuration system failing was shown.
- Loading distribution boards from the database was slow.
- The I/O, I/O card and I/O card channel reports did not include additional information for product information.
- Deleting additional information from the default database resulted in an error.
- The **Edit rows in Excel** function could not return IDs if they had already existed in the grid, even if there were no duplicates.
- When a picking list value was copied, the application pasted the value description instead of the value.
- When changes were made and then rejected in the **Device properties** dialog, the grid was not updated correctly.
- It was possible to remove an I/O even when it had occurrences.
- After importing from a temporary project and synching the changes from the database, deleting a drawing from the project crashed the program.
- Cable type's additional information was not updated to the project correctly.
- If a cable type had lots of wires, it was not possible to change the cable type.
- Even if pins had been removed, the **From Pin GUID** and **To Pin GUID** values were shown in the grid.
- When importing a clipboard project, device's full IDs were not updated when changing circuit or location.
- Copying a terminal block did not work as should.

- When multiple documents were removed from DM, they were not removed from the Electrical database.
- Plate definitions did not show additional information for projects.
- If the symbol type was **Represents multiple device parts**, pins were not updated from the database to the drawing.
- When a cable type was moved from the project to the default project, additional information was lost.
- In Reports, adding a dot to the file name excluded the part after the dot.
- When changing the cable type in the database, cable information was not updated correctly.
- In Product information management, Cable type management and Wiring set definition management, canceling editing did not work as should.
- Picking list not working properly with wire/wirepacking selection
- If something else than integers had been entered in the **Sheets** field in Sheet management, it was shown as 0 in DB and that was then updated to the drawing as well. The 0 values are no longer updated from the database to the drawing.
- When updating a report with groupings, the groupings were no longer taken into account.
- After editing the terminal block number, the terminal block order in the terminal strip changed.
- The cleaning function froze, and the application had to be closed to recover.
- The options defined in the **Wiring connections** dialog randomly changed.
- When a label was removed from a drawing, it did not update to the **Documents** tab.
- There were problems with copying and deleting wiring sets.
- Cable wires were not listed in the order of the wire number.
- In modular generation, user's own symbols disappeared from product models.
- When importing data from Excel, error messages were not shown for invalid I/O device IDs.
- It was possible to create two database connections to the same SQL database.
- The clean-up function deleted devices that were in use.
- In SQL, importing a new database to the shared databases resulted in an error.