

The logo consists of three nested, red, L-shaped geometric forms that resemble a stylized 'M' or a series of nested corners, creating a sense of depth and perspective.

# **MagiCAD Create**

User Guide

# MagiCAD Create – User guide

MagiCAD Create is an easy-to-use tool for advanced modelling of MEP products and components. This user guide describes the main functions of the modelling tool.

With MagiCAD Create, MagiCAD users can create tailored databases, model completely new products and modify existing ones by editing product properties, dimensions and technical data.

All databases and products created with MagiCAD Create are supported by MagiCAD for AutoCAD and MagiCAD for Revit from the version 2014.11 onwards.

MagiCAD Create can be downloaded and installed either from the Tools section of the MagiCAD Download Portal: <https://portal.magicad.com/Download/GetProductCategoryList?categoryId=6> or by using PluginManager in MagiCAD for AutoCAD and MagiCAD for Revit. Once MagiCAD Create is installed, it will automatically checks for new version when it is started.

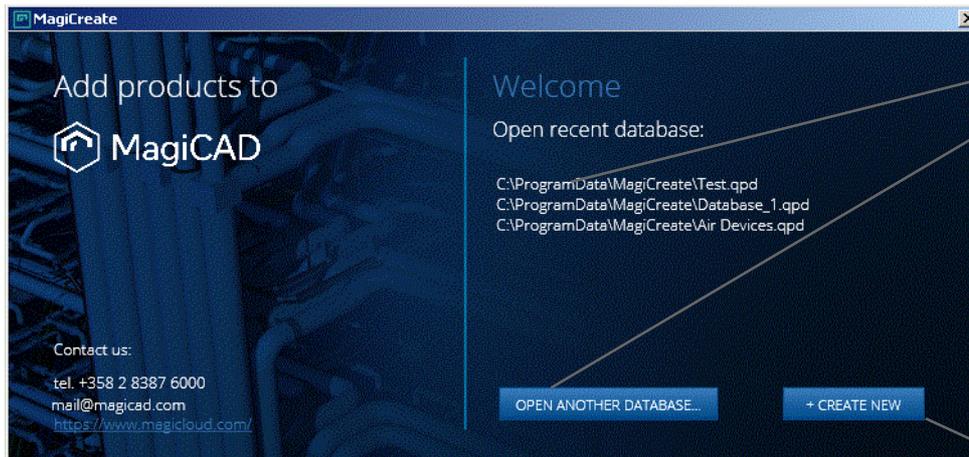
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## Starting MagiCAD Create

When starting MagiCAD Create, you can select one of the following two options:

1. Create a new database by clicking the **CREATE NEW** button.
2. Open an existing, previously-edited database by selecting one of the quick links displayed in the *Open recent database* list, or browse for another database by clicking the **OPEN ANOTHER DATABASE** button.

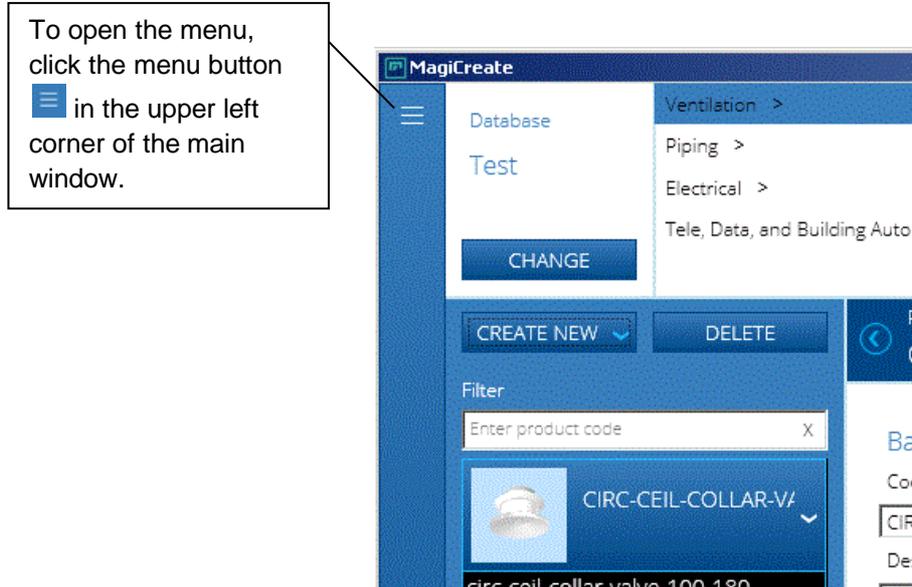


2. Select an existing database using the quick links, or browse for another one by clicking the **OPEN ANOTHER DATABASE** button.

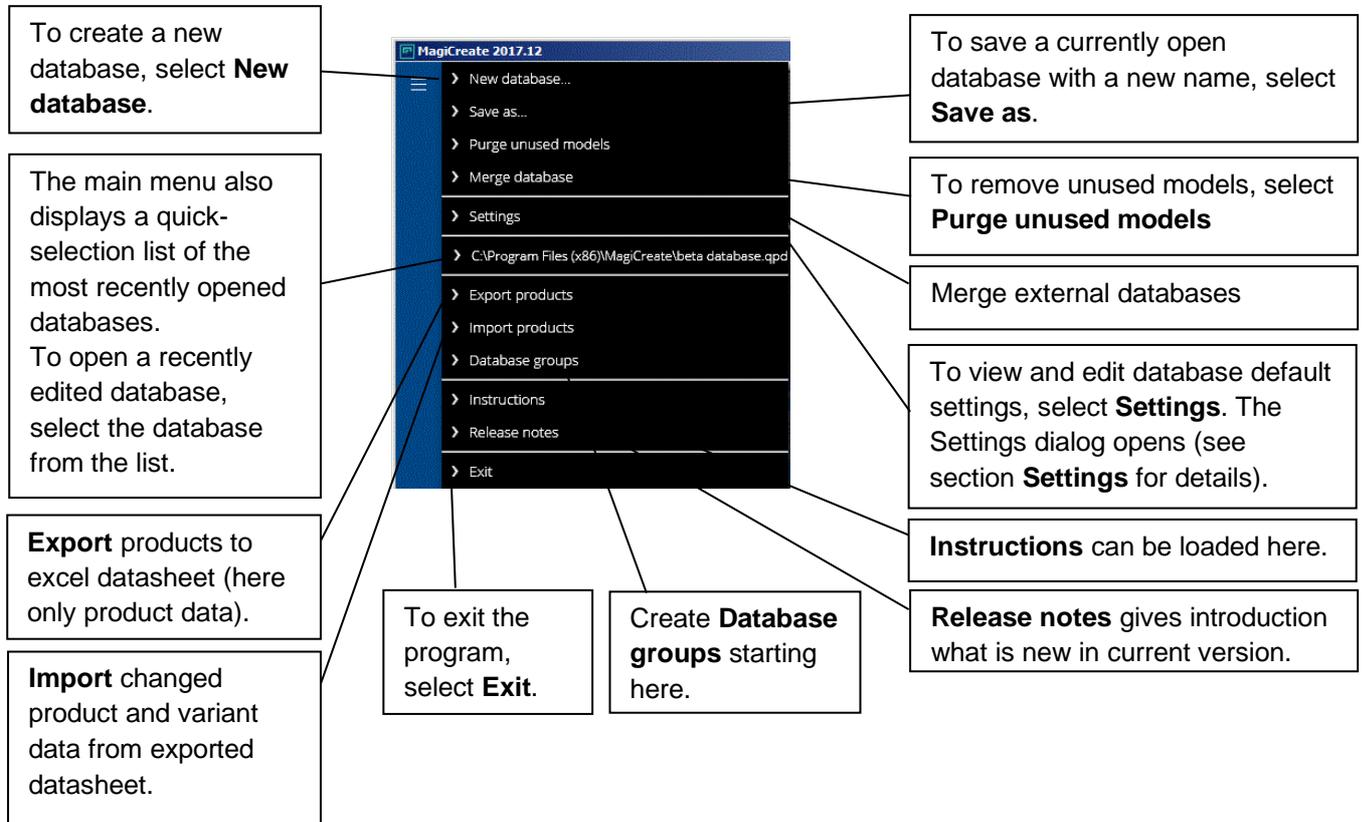
1. Click the **CREATE NEW** button to create a new database.

## MagiCAD Create menu

This section describes the items and functionality of the MagiCAD Create main menu.



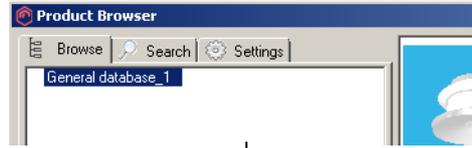
The main menu displays the following options.



- To create a new database, select **New database**.
- To save a currently open database with a new name, select **Save as**.
- The main menu also displays a quick-selection list of the most recently opened databases. To open a recently edited database, select the database from the list.
- To remove unused models, select **Purge unused models**
- Export products to excel datasheet (here only product data).
- Merge external databases
- Import** changed product and variant data from exported datasheet.
- To view and edit database default settings, select **Settings**. The Settings dialog opens (see section **Settings** for details).
- To exit the program, select **Exit**.
- Create **Database groups** starting here.
- Instructions** can be loaded here.
- Release notes** gives introduction what is new in current version.

## Settings

In the **Settings** dialog, the user can view and edit general database properties and make changes to database default settings.

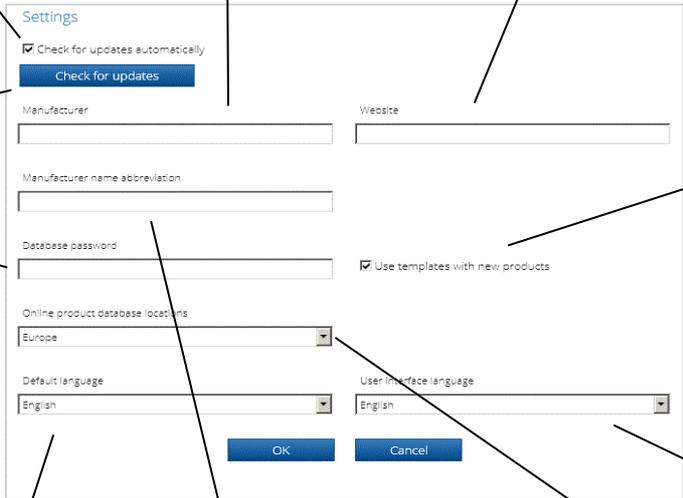


Unselect The **Automatically check for updates** checkbox if not wanted to check updates when program starts.

The **Manufacturer** field defines the name of the database (e.g. manufacturer brand name or company name). The database will catalogued under this name in the MagiCAD Product Browser, Bills of Materials, etc.

The **Website** field defines a web address (e.g. company website) from which the user viewing the manufacturer's product database in the MagiCAD Product Browser can find additional product information and contact details.

Press **Check for updates** button to check if there is new version in MagiCAD Download Portal.



The **Use templates with new products** checkbox must be selected if you want to use generic products as templates for new products. Deselect this option if you want to create a new product based on existing 3D geometry.

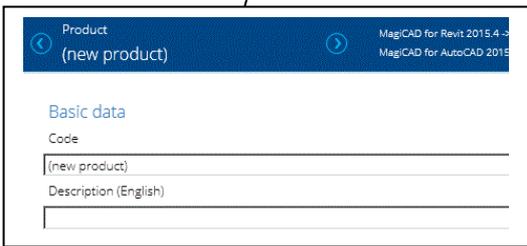
The **Password** field allows you to protect the database from modifications and further editing using a password.

The **User interface language** control defines the language of the MagiCAD Create user interface.

The **Default language** control selects the default language for displaying user-defined product description texts when multiple language versions have been defined.  
  
This default language selection is always visible on the *Description* field of products and variants (see below).

**Manufacturer name abbreviation.**  
Give max. 3 mark to field.

Select the **Online product database locations.**  
Database opens faster with the closest location.

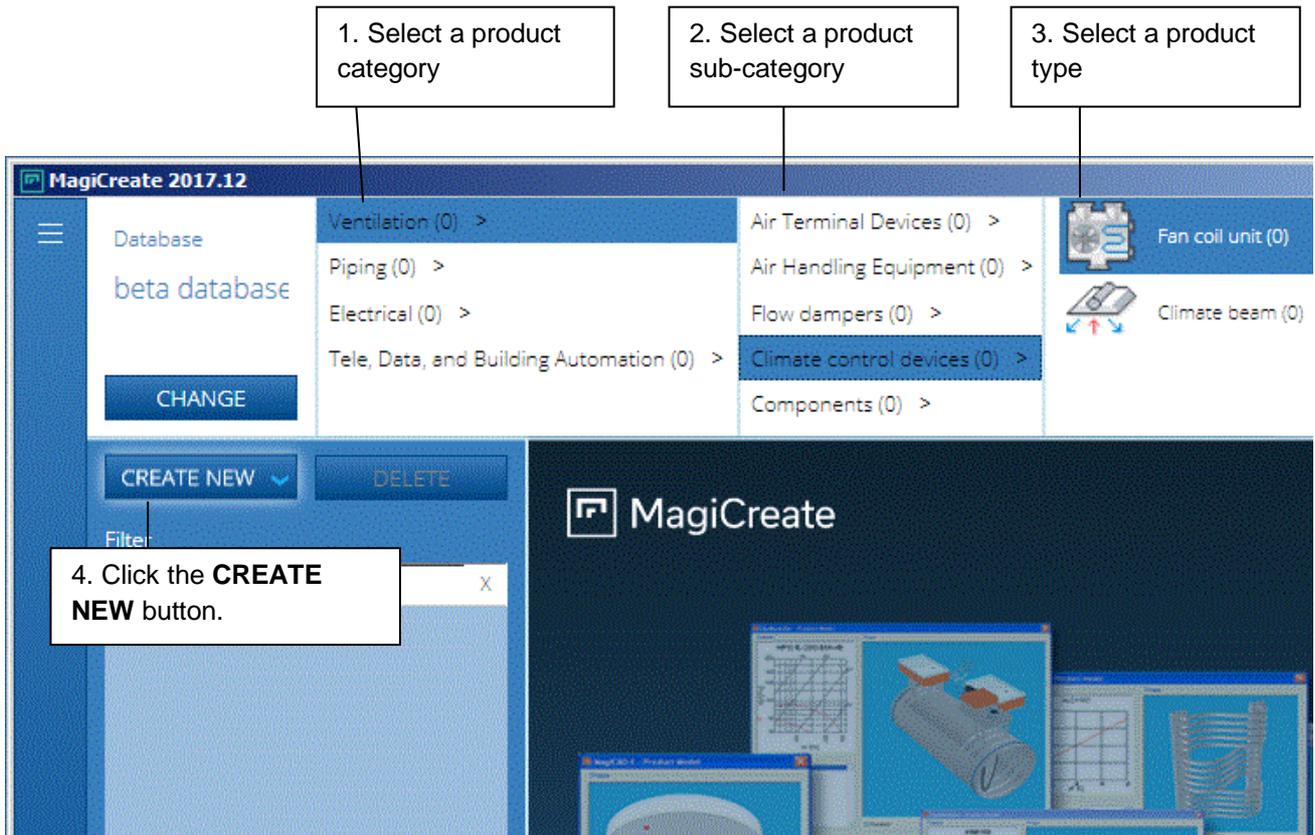


## Adding new products to a selected database

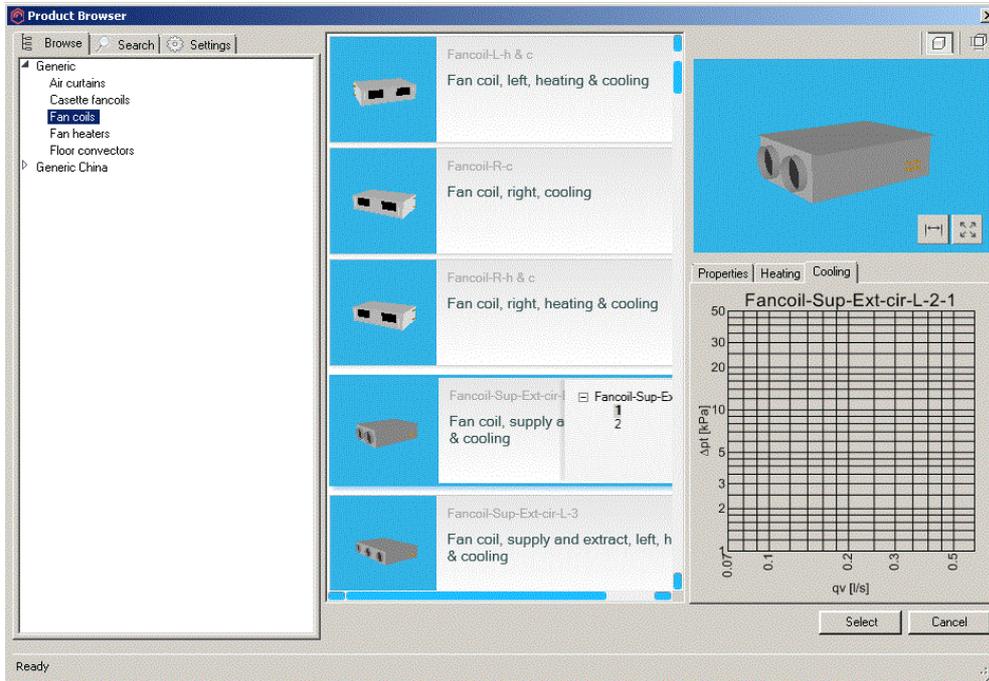
Creating a new product to a selected database requires you to carry out the following three steps:

1. First select a product category (e.g. **Ventilation** etc.)
2. Then select a product sub-category (e.g. **Indoor climate devices** etc.)
3. Next select the product type (e.g. **Fan coil units** etc.)
4. And finally click the **CREATE NEW** button.

A new product is added to the database.

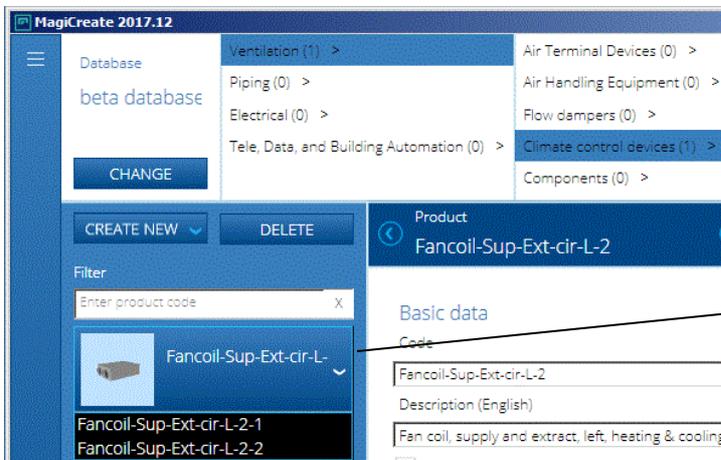


After clicking the **CREATE NEW** button, the Product Browser window will open. In the Product Browser window, you can select an existing generic product as a template for the new product.



You can select which content and product variants you want to include in the product template. You can also leave out all variants by not selecting any. After selecting the content to be included in the template, click **OK**.

Clicking **OK** adds the product and the selected variants into the database.

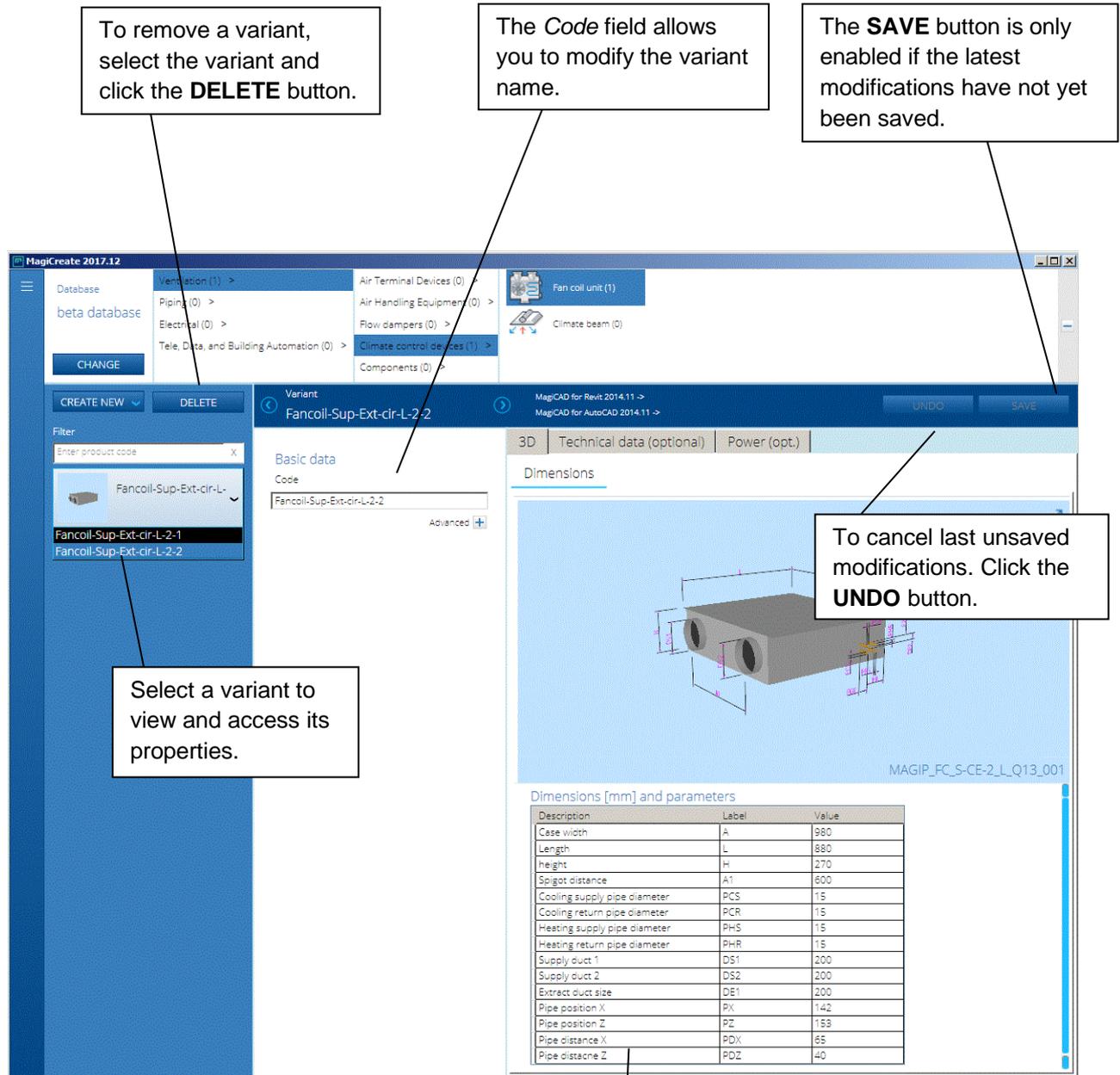


The product is added to the database with the selected variants.

Please note that if no variants were included in the product template, MagiCAD Create automatically adds one variant using

## Viewing and modifying existing products

To view and edit a product, select the product or one of its variants. Most of the technical data is variant-specific and can only be accessed by selecting the variant.



To remove a variant, select the variant and click the **DELETE** button.

The *Code* field allows you to modify the variant name.

The **SAVE** button is only enabled if the latest modifications have not yet been saved.

Select a variant to view and access its properties.

To cancel last unsaved modifications. Click the **UNDO** button.

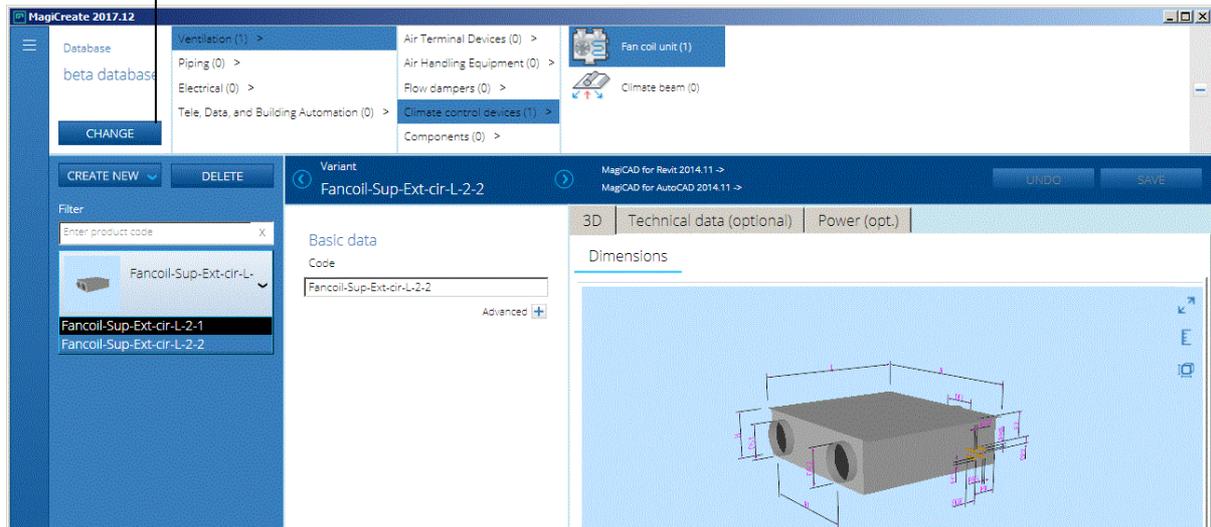
Dimensions [mm] and parameters		
Description	Label	Value
Ceiling width	A	980
Length	L	880
height	H	270
Spigot distance	A1	600
Cooling supply pipe diameter	PCS	15
Cooling return pipe diameter	PCR	15
Heating supply pipe diameter	PHS	15
Heating return pipe diameter	PHR	15
Supply duct 1	DS1	200
Supply duct 2	DS2	200
Extract duct size	DE1	200
Pipe position X	PX	142
Pipe position Z	PZ	153
Pipe distance X	PDX	65
Pipe distance Z	PDZ	40

The dimensions of the variant can be modified by editing the values in this table. For optional and more advanced technical data modifications, please see section **Advanced variant-specific data**.

## Switching to another database

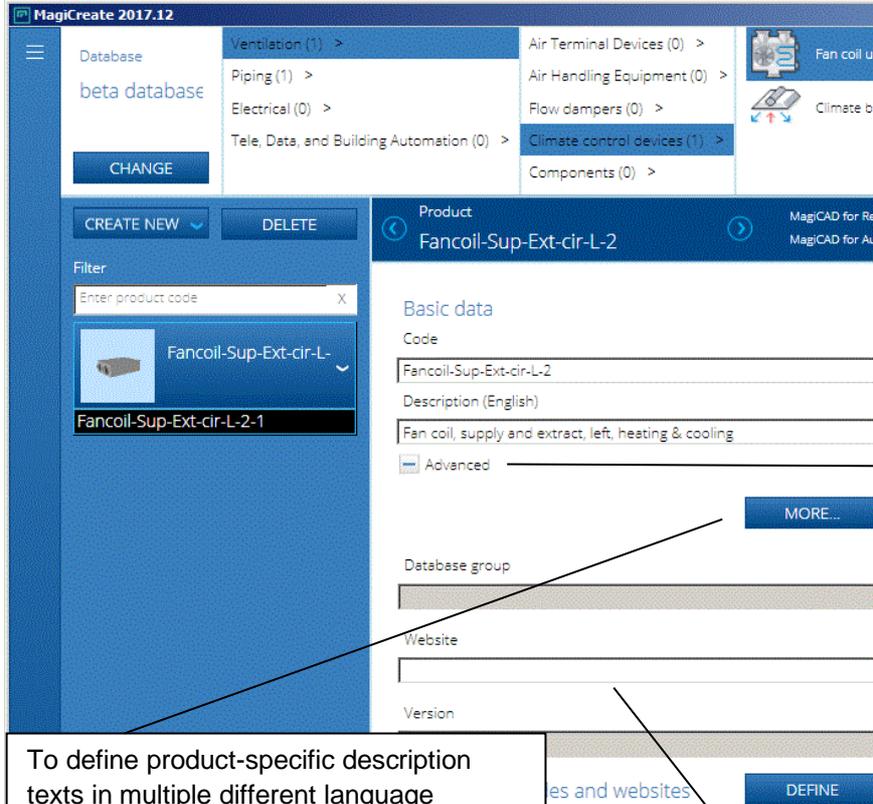
You can switch to another database without closing the program.

Click the **CHANGE** button and select another database.



## Advanced product-specific data

On the product level, a product has certain general properties which are shared by all of the product's variants.



To access advanced product-specific data, click the +/- button.

To define product-specific description texts in multiple different language versions, click the **MORE** button to open the *Descriptions* dialog.

Descriptions	
Language	Description
English	Fan coil, supply and extract, left, heating & cooling
German	
French	
Russian	
Chinese	

Click the link **Market area codes and websites** to define different product codes and websites for different market areas.

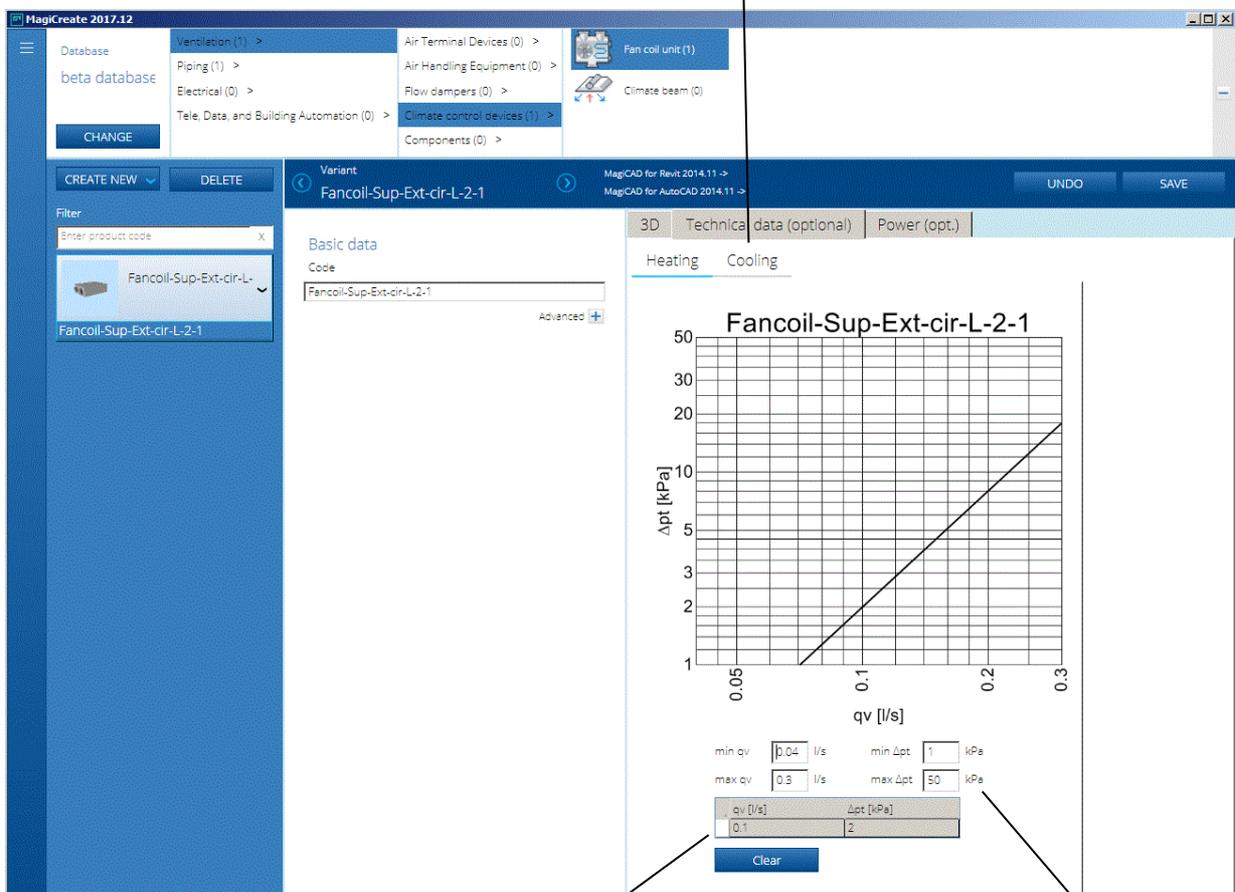
Market area codes and websites			
Market area	Website	Code	Available
Great Britain			<input type="checkbox"/>
Finland			<input type="checkbox"/>
Sweden			<input type="checkbox"/>
Germany			<input type="checkbox"/>
Norway			<input type="checkbox"/>
France			<input type="checkbox"/>
Spain			<input type="checkbox"/>
Italy			<input type="checkbox"/>
Poland			<input type="checkbox"/>
Denmark			<input type="checkbox"/>

## Advanced variant-specific data

Most of the technical data is variant-specific and can only be defined and modified on the variant level. The optional technical data varies between different product types.

Below you can see an example of the technical data contained by a fan coil variant.

The selected fan coil variant has both heating and cooling properties. By selecting the relevant tab, you can edit the variant's heating and cooling properties.



The screenshot shows the MagiCAD software interface. On the left is a database browser with a filter for 'Fancoil-Sup-Ext-cir-L-2-1'. The main area shows the variant 'Fancoil-Sup-Ext-cir-L-2-1' with tabs for '3D', 'Technical data (optional)', and 'Power (opt.)'. Under 'Technical data (optional)', there are 'Heating' and 'Cooling' tabs. A graph titled 'Fancoil-Sup-Ext-cir-L-2-1' plots pressure drop  $\Delta p_t$  [kPa] on the y-axis (log scale from 1 to 50) against air flow  $q_v$  [l/s] on the x-axis (log scale from 0.05 to 0.3). Below the graph are control fields for 'min  $q_v$ ', 'max  $q_v$ ', 'min  $\Delta p_t$ ', and 'max  $\Delta p_t$ '. A table below these fields shows the current values:  $q_v$  [l/s] = 0.1 and  $\Delta p_t$  [kPa] = 2. A 'Clear' button is at the bottom.

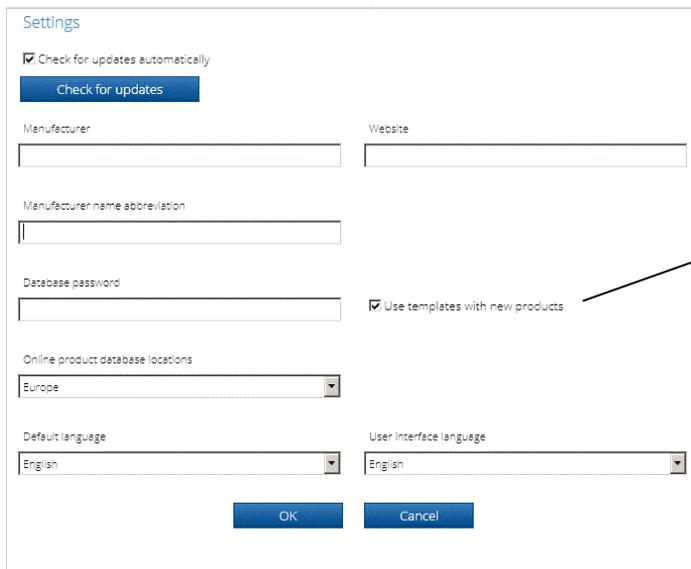
This control allows you to modify pressure drop data. The pressure drop curve in the diagram above will be updated accordingly.

These controls allow you to define maximum and minimum values for the diagram above.

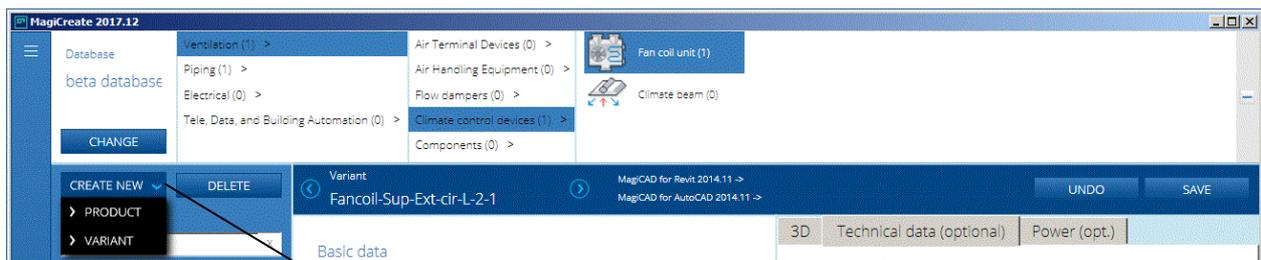
## Creating products without using templates

To create a new product without using an existing template as a basis, carry out the following three steps:

1. First deselect the **Use templates with new products** checkbox in the *Database defaults* dialog and click **OK**.
2. Then click the **CREATE NEW** button and select **PRODUCT** from the drop-down options.
3. And finally select a suitable 3D geometry from the list of 3D geometries found in the current database.

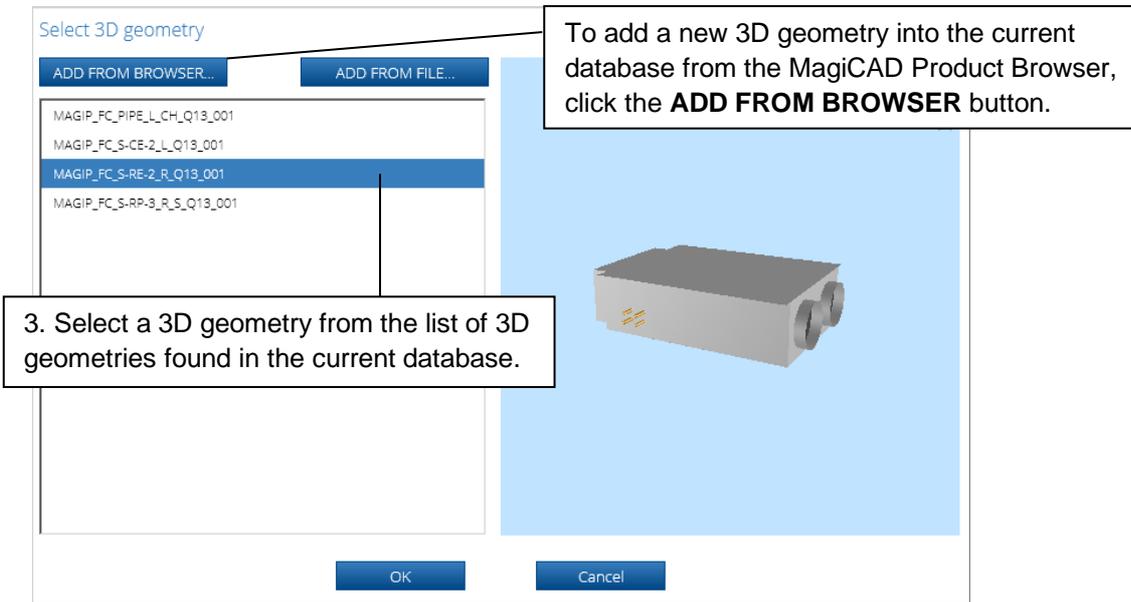


1. Deselect the **Use templates with new products** checkbox to create a new product based on existing 3D geometry. Click **OK**.



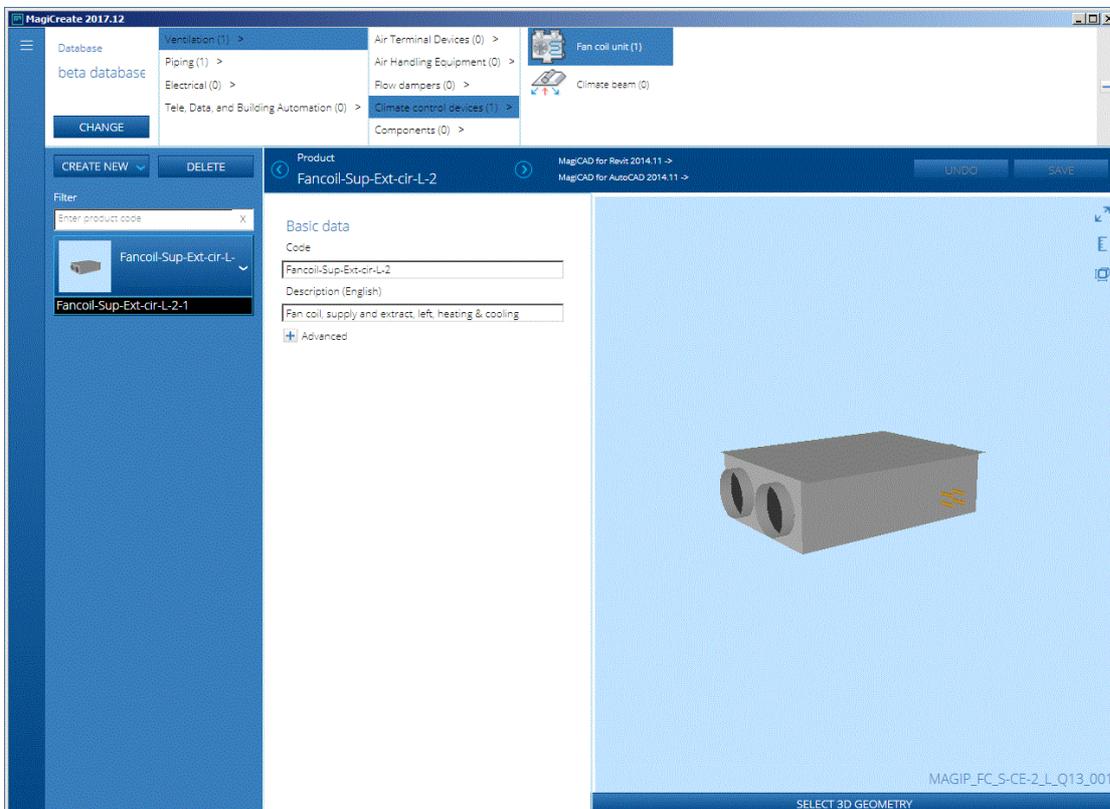
2. Click the **CREATE NEW** button and select **PRODUCT** from the drop-down options.

When **PRODUCT** is selected from the **CREATE NEW** drop-down options, the *Select 3D geometry* window opens.



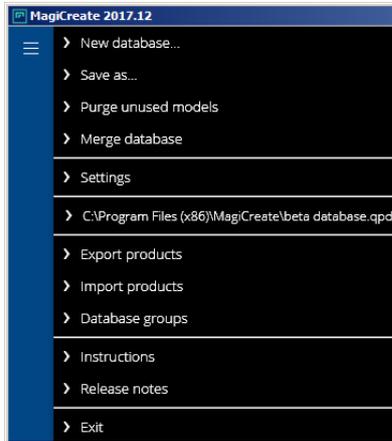
Select a suitable 3D geometry and click **OK**.

MagiCAD Create displays the new product with one automatically created variant. Since only the 3D geometry data exists, the user must enter all other relevant product and variant-specific data manually.



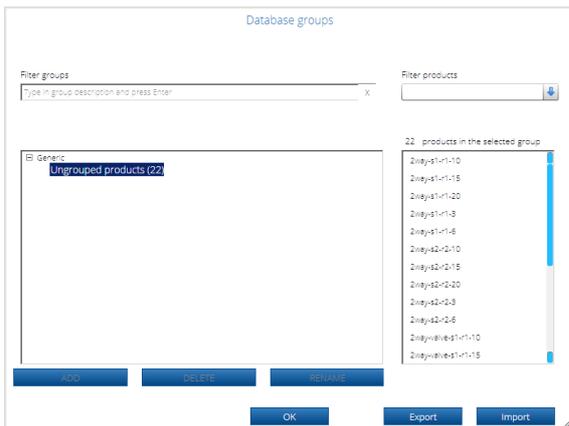
## Database groups

Database grouping makes finding the products easier in the MagiCAD product selection window.

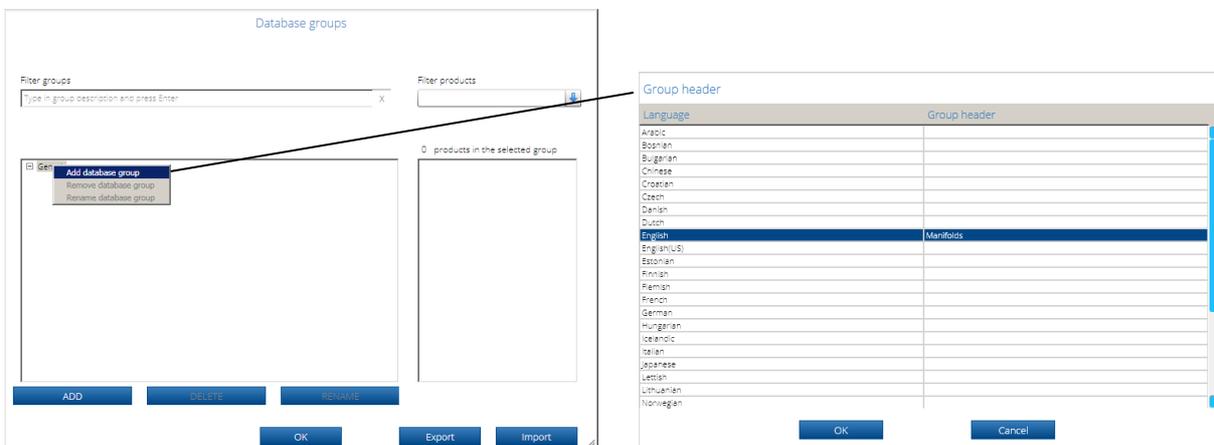


Open **Database Groups** dialog in main menu.

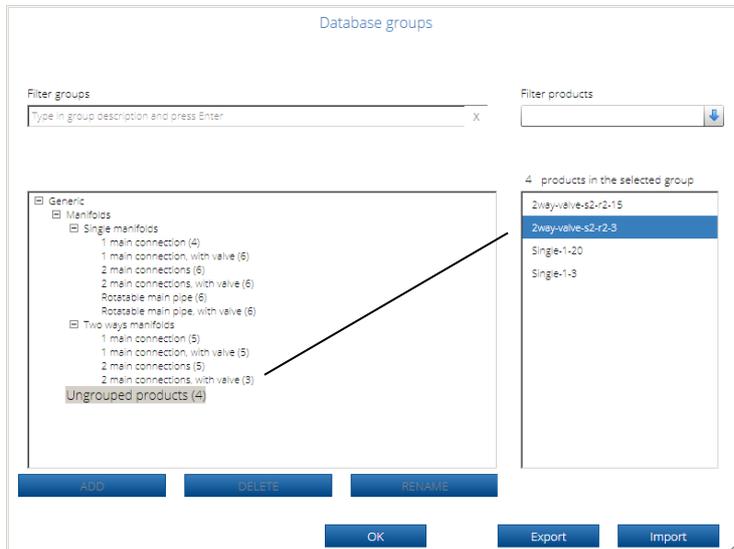
1. In the beginning, every product is listed under *Ungrouped Products*.



2. To add a new database group, click right mouse button on the root directory and select **Add database** group, or alternatively press the **ADD** button. Define the group name in the *Group header* dialog.

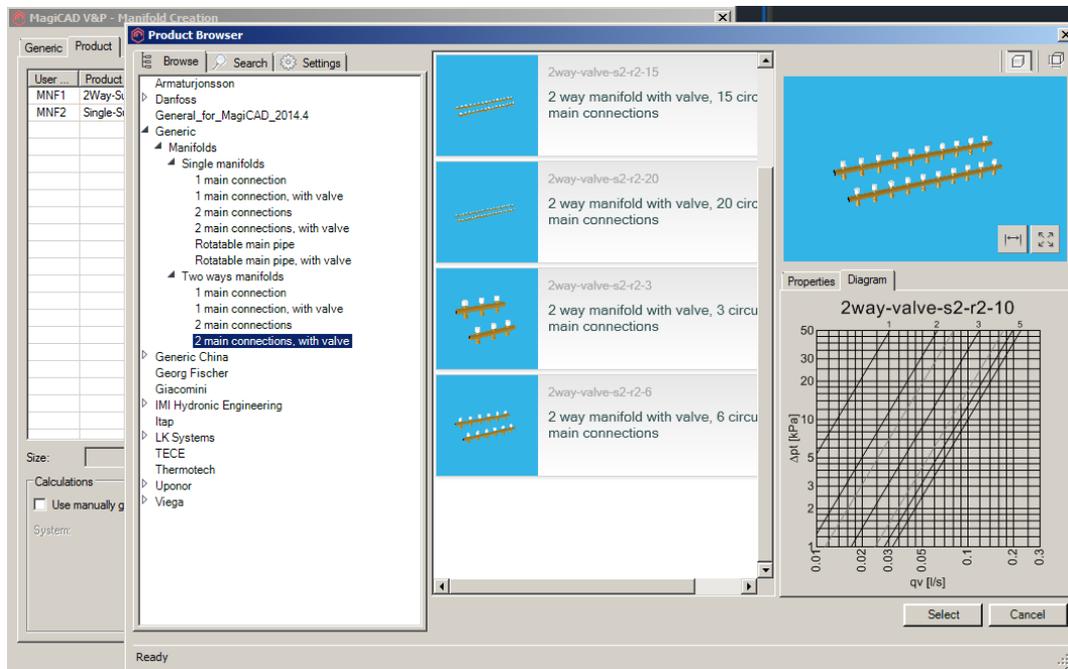


3. Add all the needed database groups and then drag & drop products to the created groups.



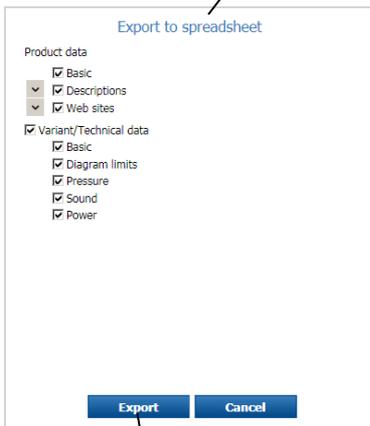
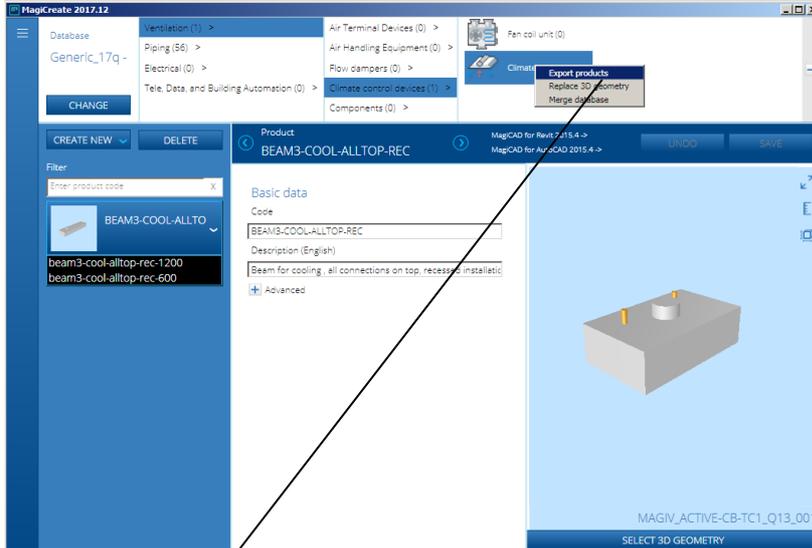
Note that products can be added only into the lowest level groups and groups can be created only within groups that do not contain products.

Database group will look exactly the same in MagiCAD, making it easier to select products.



## Export products to spreadsheet

When exporting selected product class or selected products, the technical data can be exported in spreadsheet format. The example below illustrates product class export.

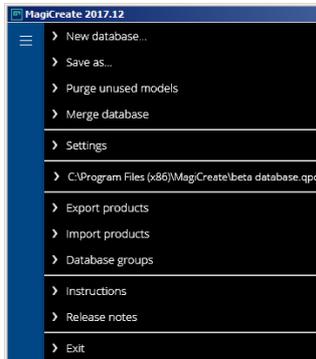


Select the properties to be exported. After the export process is completed, the contents of the Excel file can be viewed and modified. Remember to save the Excel file if you modify the values.

Product code	Dimensions and parameters	Weight	Manufacturer article number	Electrical data					Diagram limits				Diagram limits (heating)					
				Phase	Voltage	Power	Current	cos(phi)	min qv	max qv	min dpt	max dpt	QvMin	QvMax	DpMin	DpMax		
beam3-cool-alltop-rec-1200	PCS=20,PCR=20,D=100,S			3	400	1000	3	80	0	100	1	100						
beam3-cool-alltop-rec-600	PCS=20,PCR=20,D=100,S								10	100	1	100						

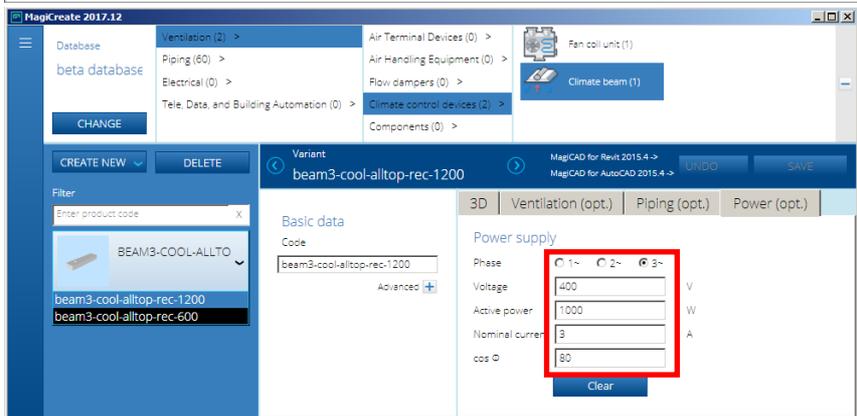
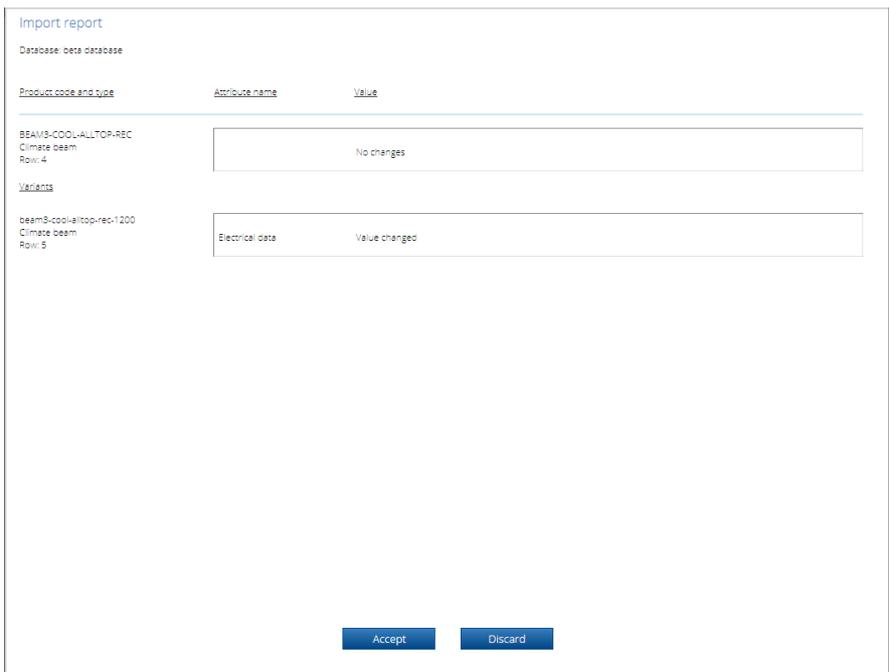
## Import products from spreadsheet

After adding or modifying data in the spreadsheet, the spreadsheet can be imported back to the database.



Click **Import products** in the main menu and select the Excel file to be imported.

When the import process begins, the *Import report* dialog opens. In the dialog, the user can check and **Accept** or **Discard** changes. If accepted, the product(s) will be saved with the accepted changes.



## Keyboard shortcuts

You can access some of the most commonly used MagiCAD Create functions using the following shortcuts:

<b>CTRL+O</b>	Open database
<b>CTRL+S</b>	Save changes
<b>CTRL+Z</b>	Undo the latest changes
<b>CTRL+N</b>	Create a new product
<b>CTRL+B</b>	Create a new variant
<b>CTRL+R</b>	Remove the current product/variant
<b>CTRL+F</b>	Move the cursor to the Filter field