



# **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.

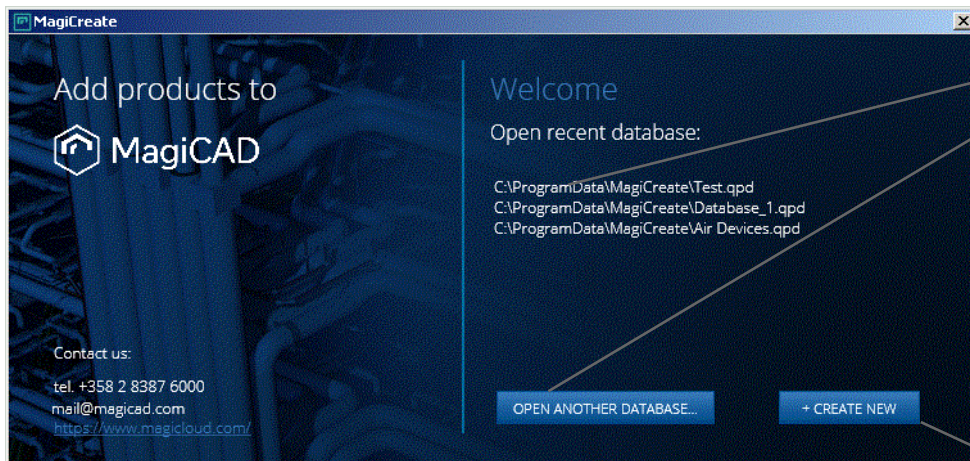
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## Starting MagiCAD Create

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.




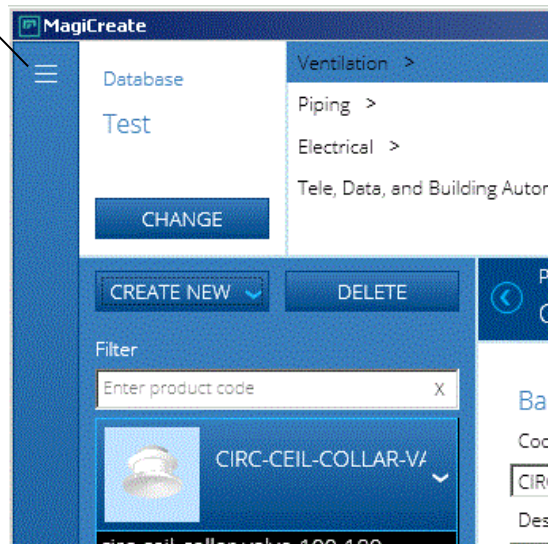
2. Select an existing database using the quick links, or browse for another one by clicking the **OPEN ANOTHER DATABASE** button.

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.

To open the menu, click the menu button  in the upper left corner of the main window.



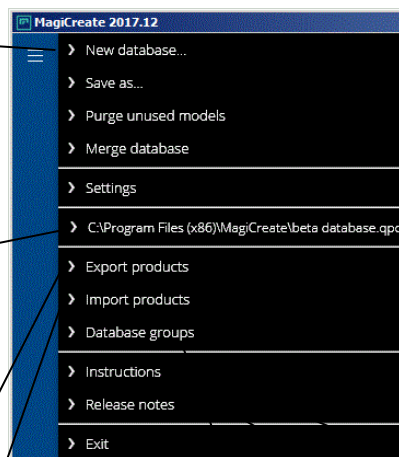
The main menu displays the following options.

To create a new database, select **New database**.

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.

**Export** products to excel datasheet (here only product data).

**Import** changed product and variant data from exported datasheet.



To exit the program, select **Exit**.

Create **Database groups** starting here.

To save a currently open database with a new name, select **Save as**.

To remove unused models, select **Purge unused models**

Merge external databases

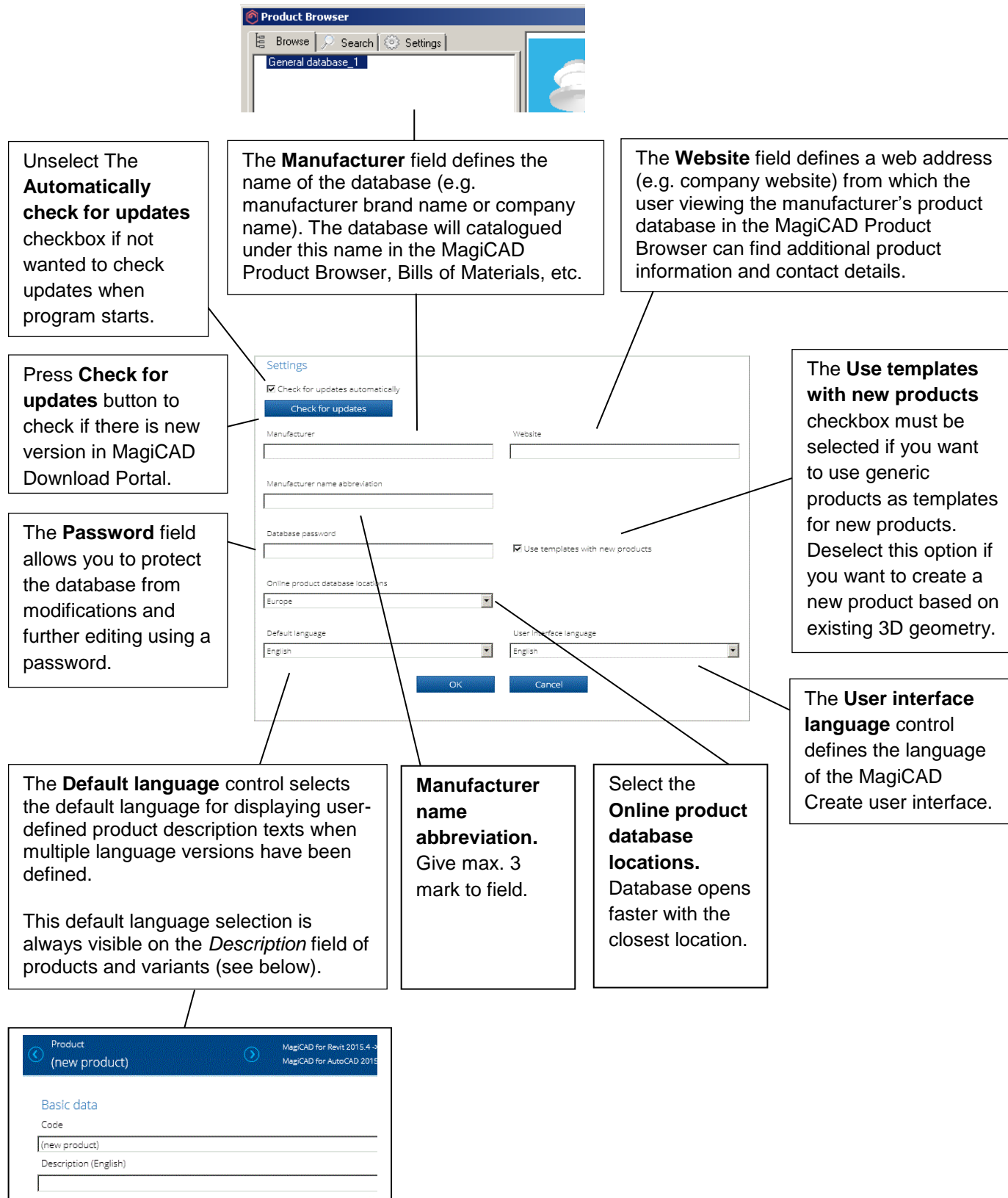
To view and edit database default settings, select **Settings**. The Settings dialog opens (see section **Settings** for details).

**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.



**Product Browser**

General database\_1

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

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

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.

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 **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.

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

**Settings**

☒ Check for updates automatically

Check for updates

Manufacturer

Website

Manufacturer name abbreviation

Database password

☒ Use templates with new products

Online product database locations

Europe

Default language

English

User interface language

English

OK

Cancel

Product (new product)

MagiCAD for Revit 2019.4.3

MagiCAD for AutoCAD 2019

Basic data

Code

(new product)

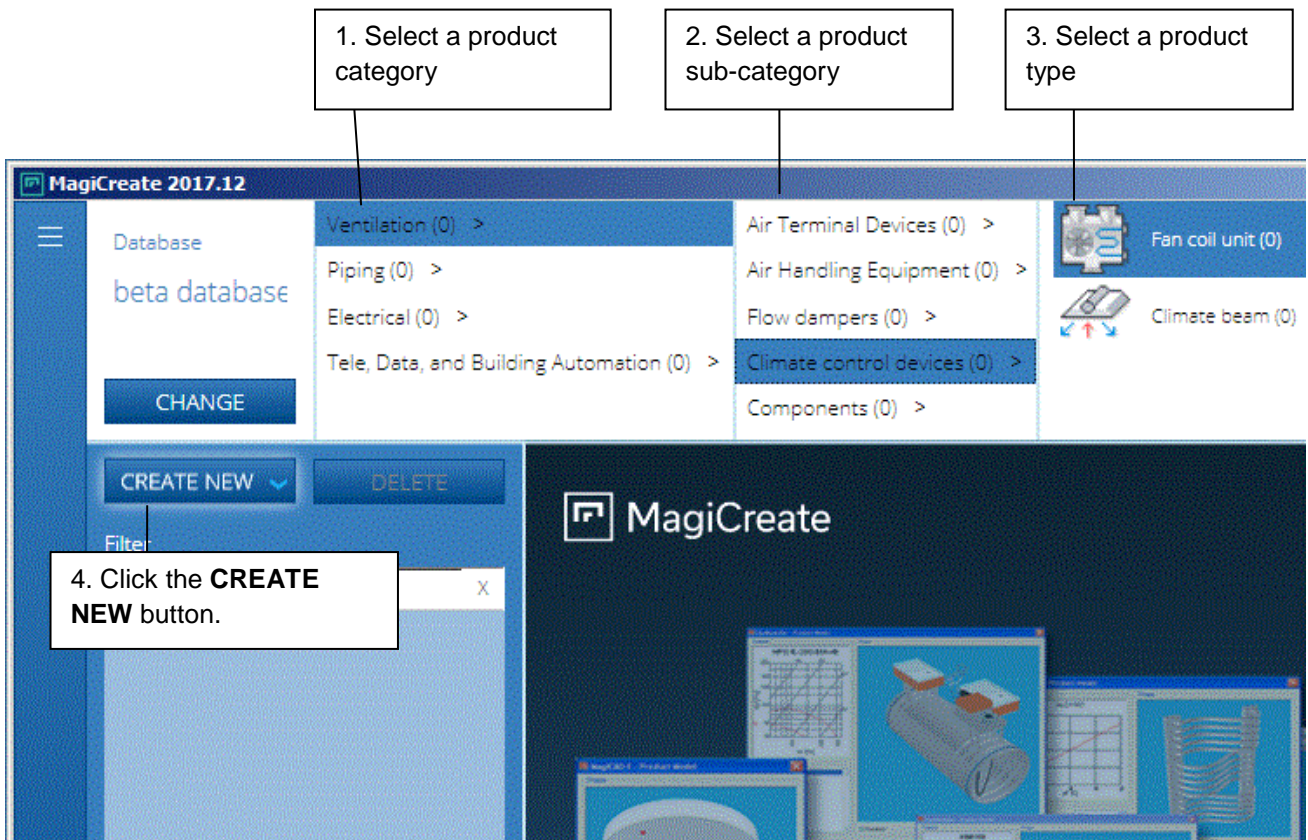
Description (English)

## Adding new products to a selected database

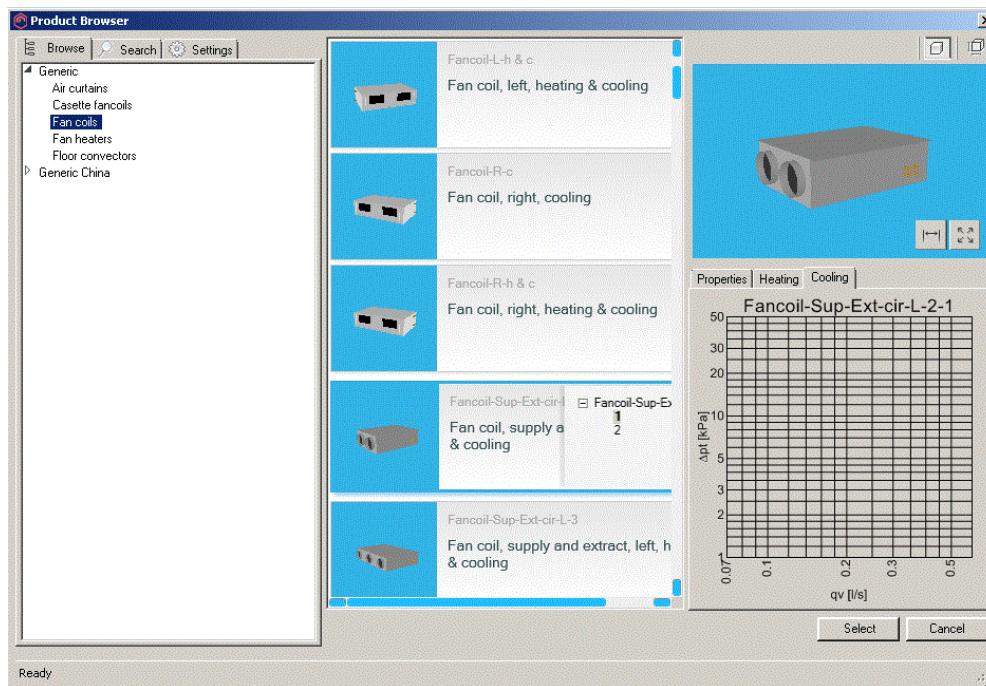
Creating a new product to a selected database requires you to carry out the following three steps:

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.

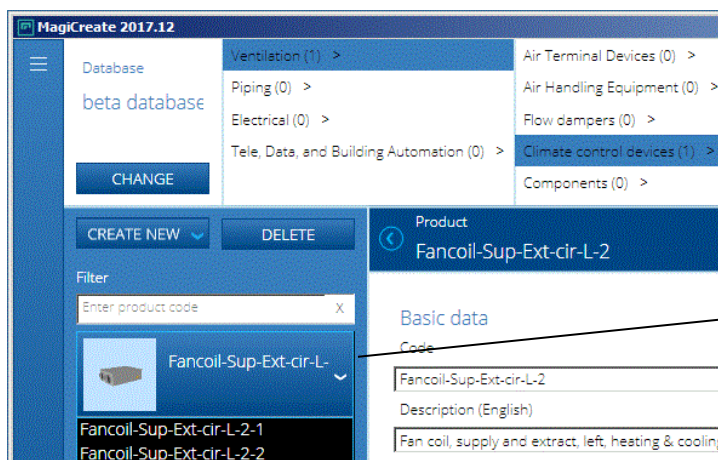


After clicking the **CREATE NEW** button, the Product Browser window will open. In the Product Browser window, you can select an existing generic product as a template for the new product.



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.

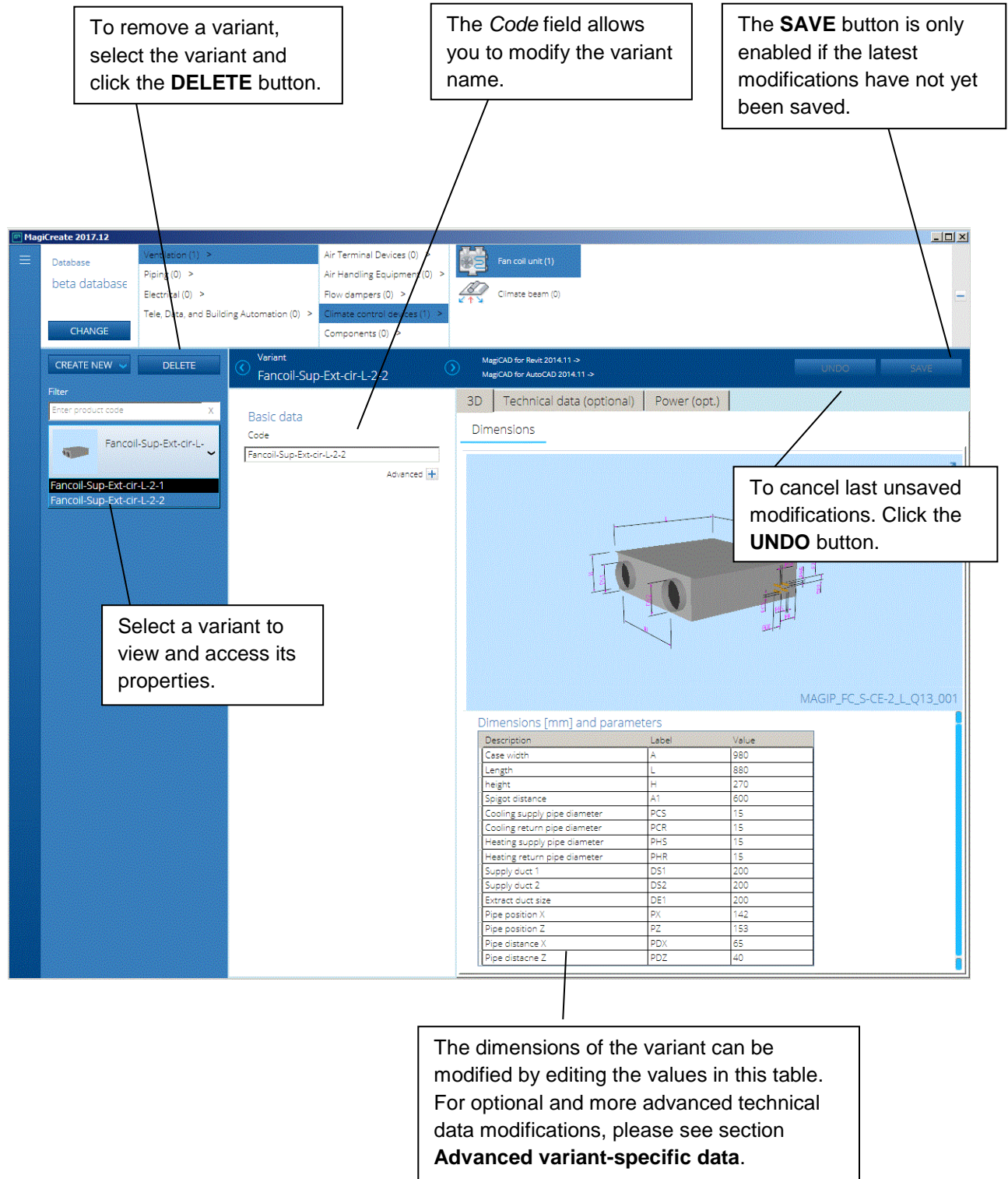


The product is added to the database with the selected variants.

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.

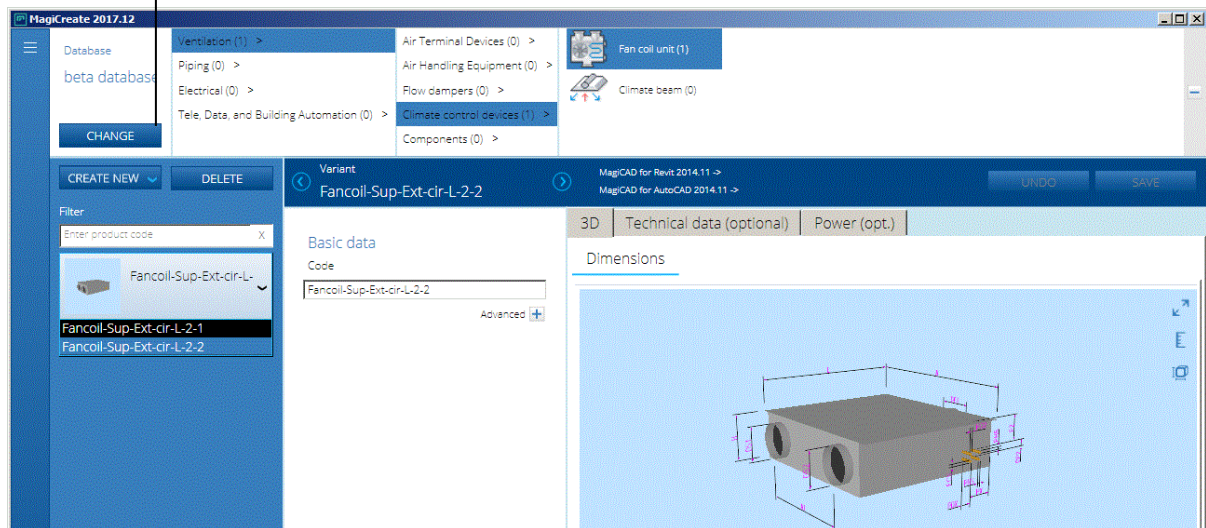
The dimensions of the variant can be modified by editing the values in this table. For optional and more advanced technical data modifications, please see section **Advanced variant-specific data**.

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

## Switching to another database

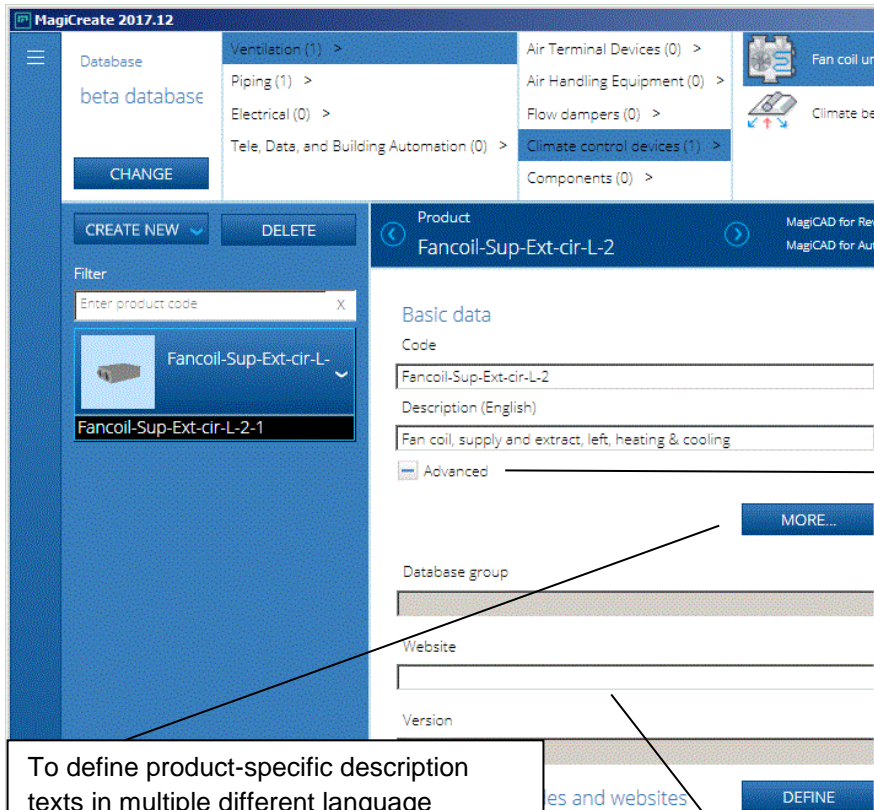
You can switch to another database without closing the program.

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.



Database  
beta database  
CHANGE

Ventilation (1) >  
Piping (1) >  
Electrical (0) >  
Tele, Data, and Building Automation (0) >

Air Terminal Devices (0) >  
Air Handling Equipment (0) >  
Flow dampers (0) >  
Climate control devices (1) >  
Components (0) >

CREATE NEW  
DELETE

Filter  
Enter product code X

Fancoil-Sup-Ext-cir-L-  
Fancoil-Sup-Ext-cir-L-2-1

Product  
Fancoil-Sup-Ext-cir-L-2

Basic data  
Code  
Fancoil-Sup-Ext-cir-L-2  
Description (English)  
Fan coil, supply and extract, left, heating & cooling  
Advanced  
MORE...

Database group  
Website  
Version

es and websites  
DEFINE

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

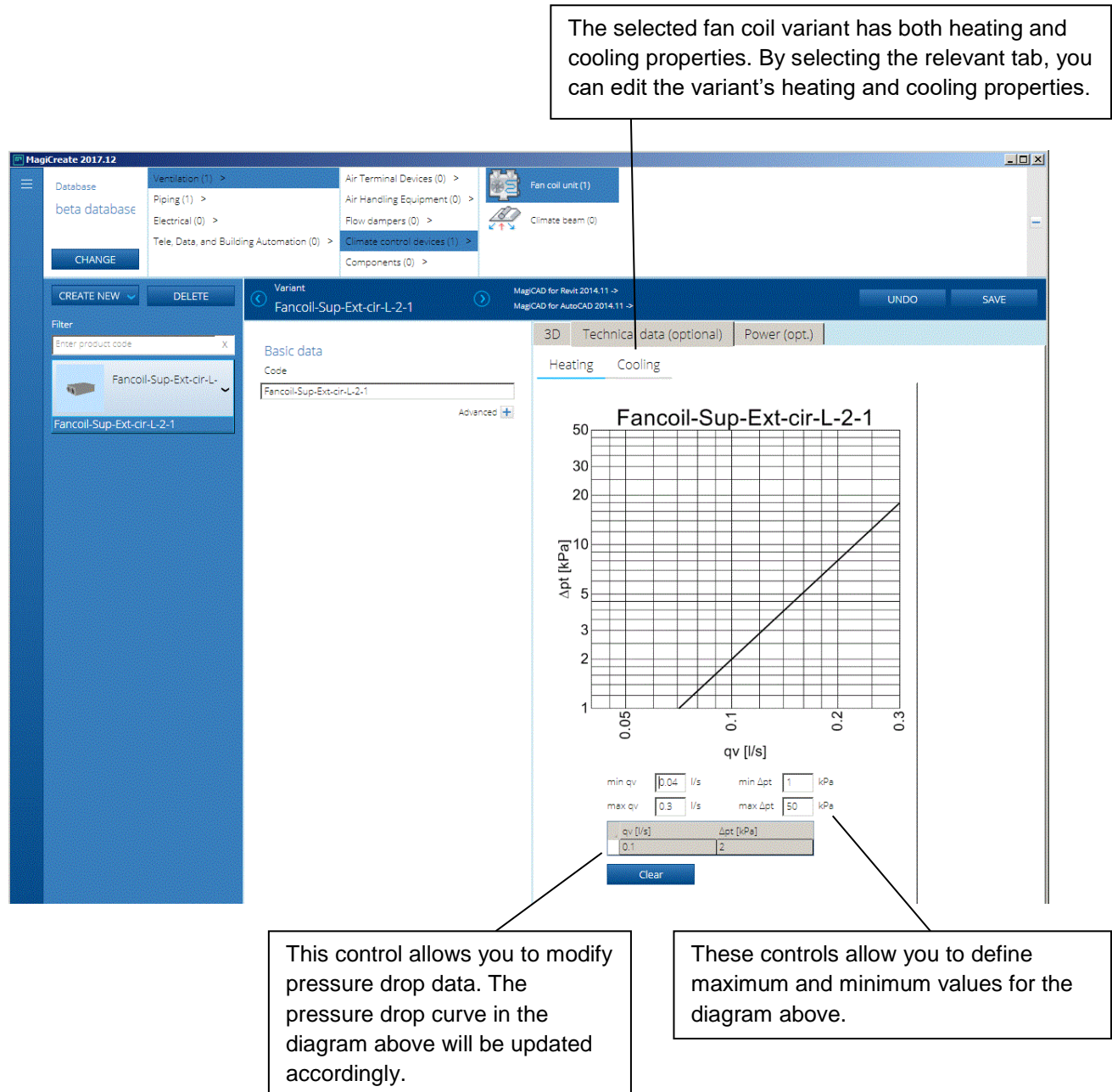
Market area	Website	Code	Available
Great Britain			<input type="checkbox"/>
Finland			<input type="checkbox"/>
Sweden			<input type="checkbox"/>
Germany			<input type="checkbox"/>
Norway			<input type="checkbox"/>
France			<input type="checkbox"/>
Spain			<input type="checkbox"/>
Italy			<input type="checkbox"/>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



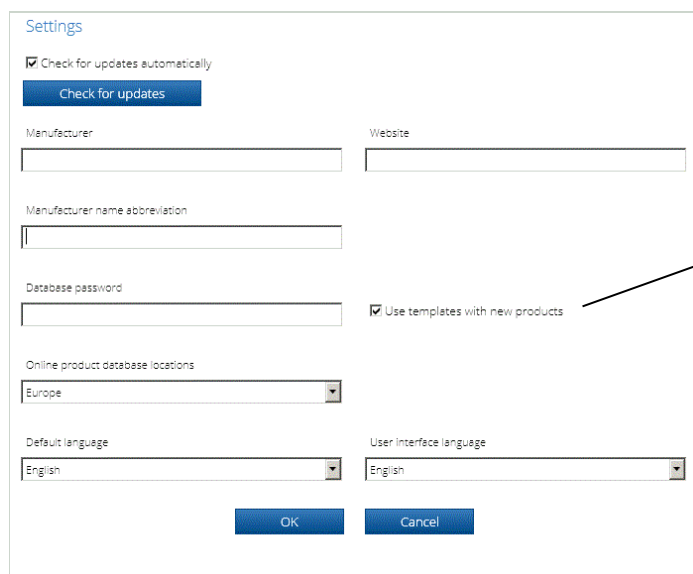
This control allows you to modify pressure drop data. The pressure drop curve in the diagram above will be updated accordingly.

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.



Settings

☒ Check for updates automatically

Check for updates

Manufacturer:

Website:

Manufacturer name abbreviation:

Database password:

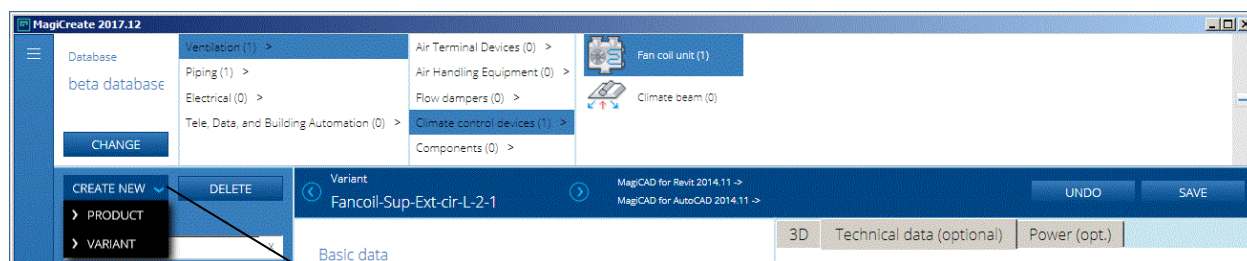
☒ Use templates with new products

Online product database locations:

Default language:

User interface language:

OK Cancel



Select 3D geometry

ADD FROM BROWSER... ADD FROM FILE...

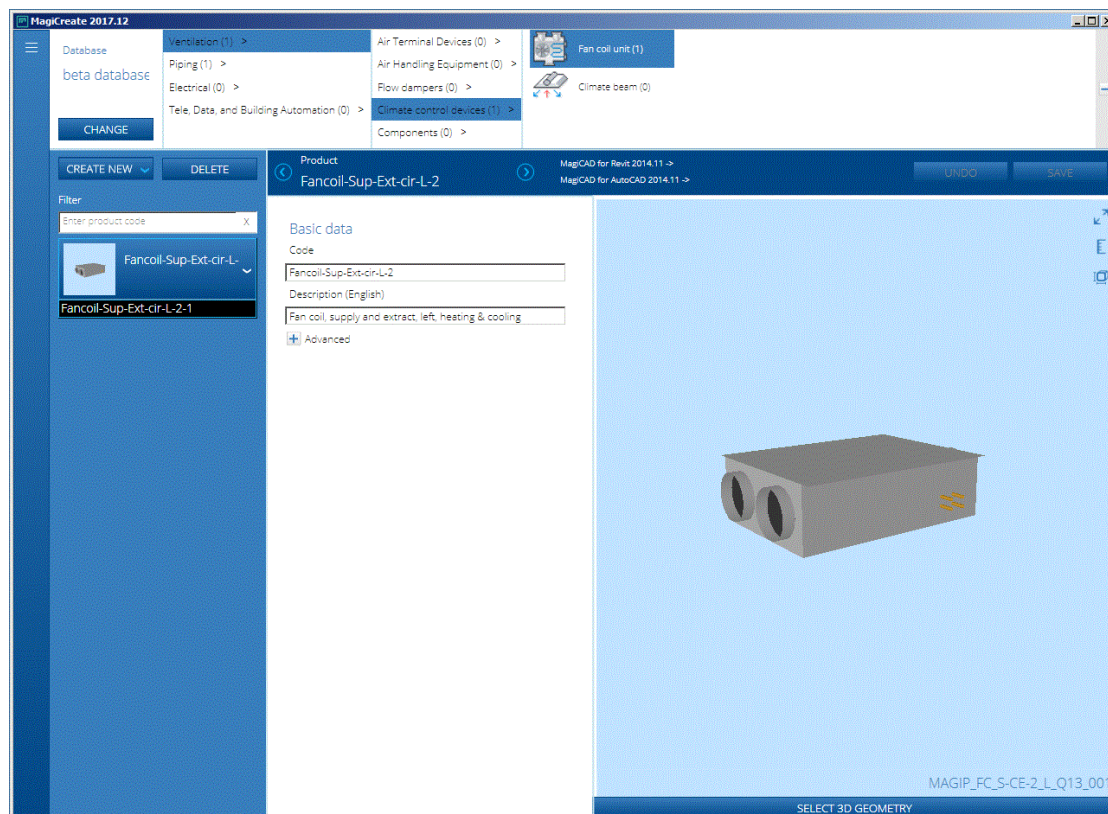
MAGIP\_FC\_PIPE\_L\_CH\_Q13\_001  
MAGIP\_FC\_S-CE-2\_L\_Q13\_001  
**MAGIP\_FC\_S-RE-2\_R\_Q13\_001**  
MAGIP\_FC\_S-RP-3\_R\_S\_Q13\_001

To add a new 3D geometry into the current database from the MagiCAD Product Browser, click the **ADD FROM BROWSER** button.

3. Select a 3D geometry from the list of 3D geometries found in the current database.

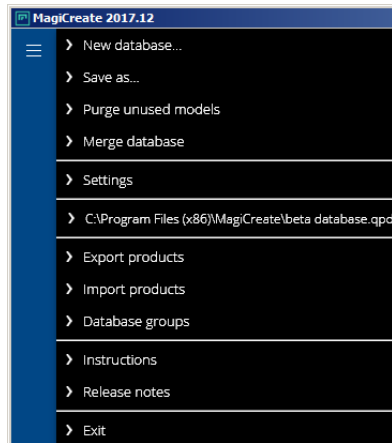
OK Cancel

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.



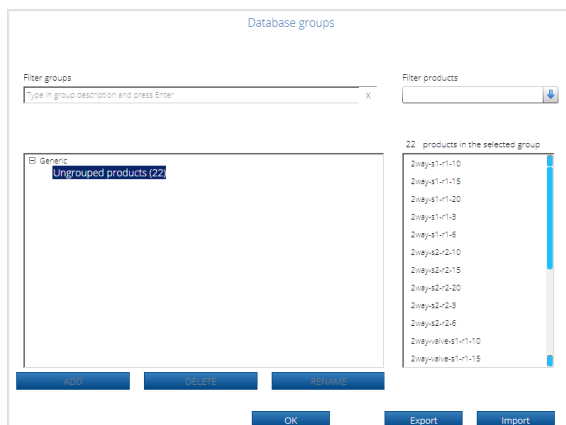
## Database groups

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

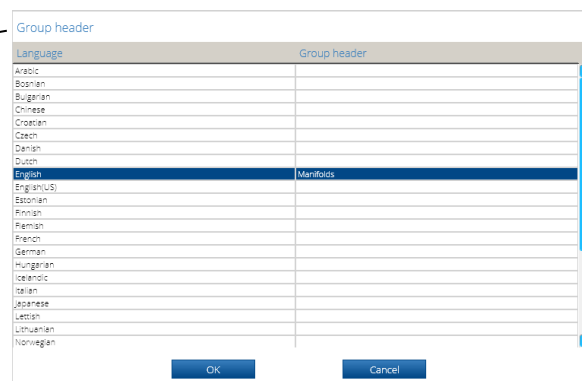
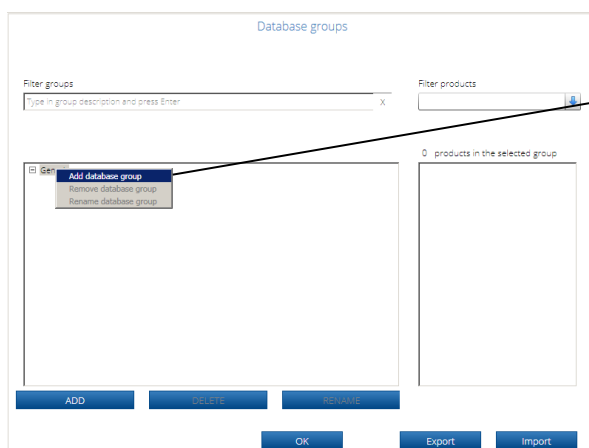


Open **Database Groups** dialog in main menu.

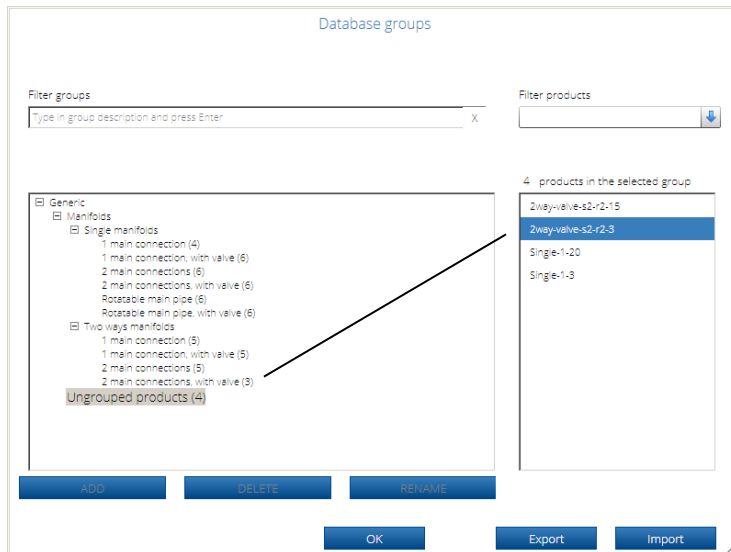
1. In the beginning, every product is listed under *Ungrouped Products*.



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.

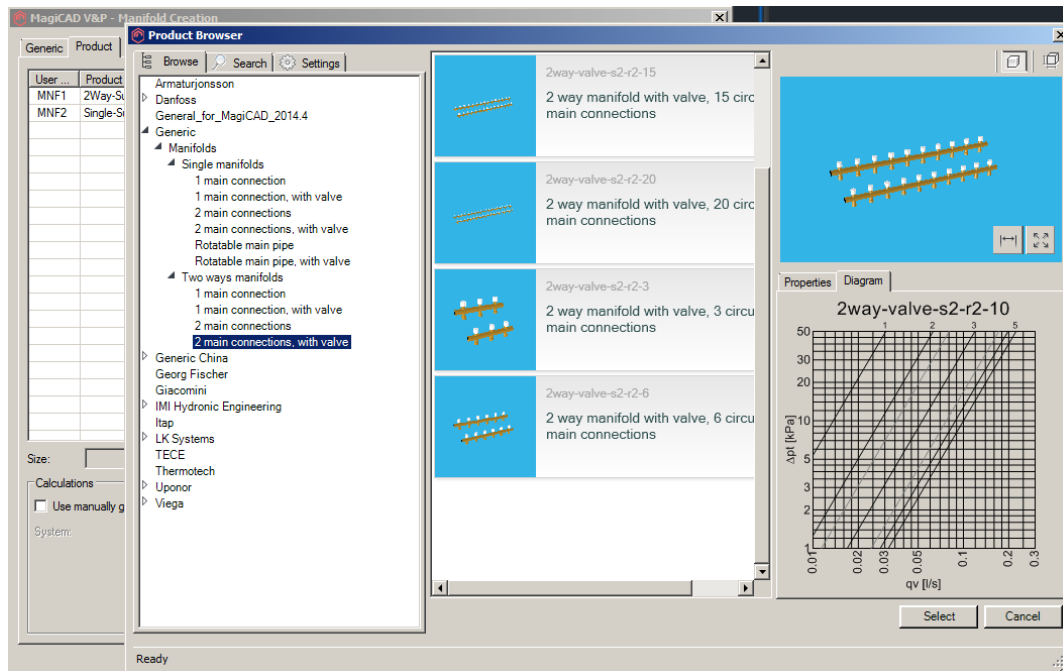


3. Add all the needed database groups and then drag & drop products to the created groups.



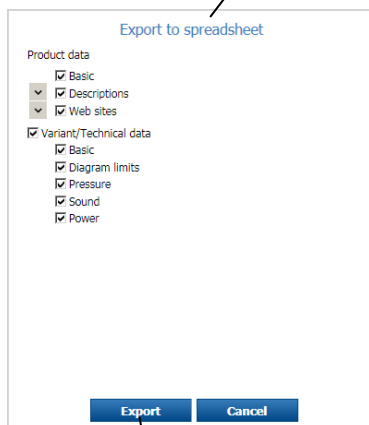
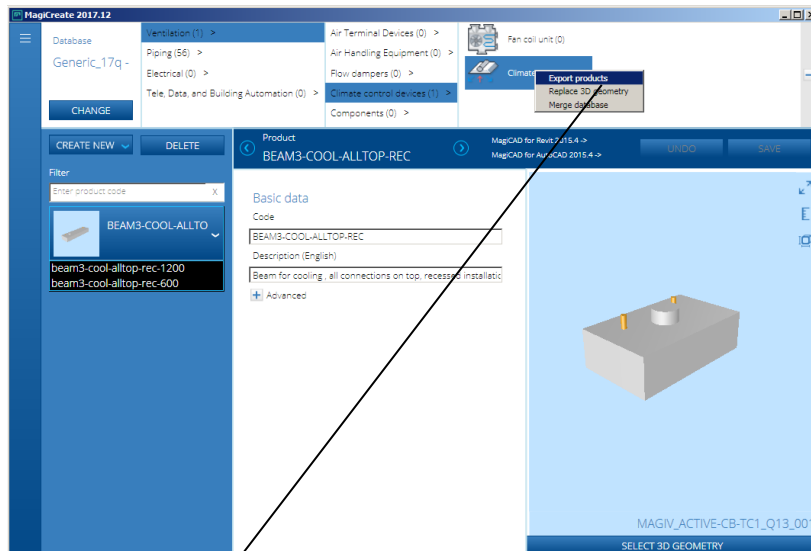
Note that products can be added only into the lowest level groups and groups can be created only within groups that do not contain products.

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

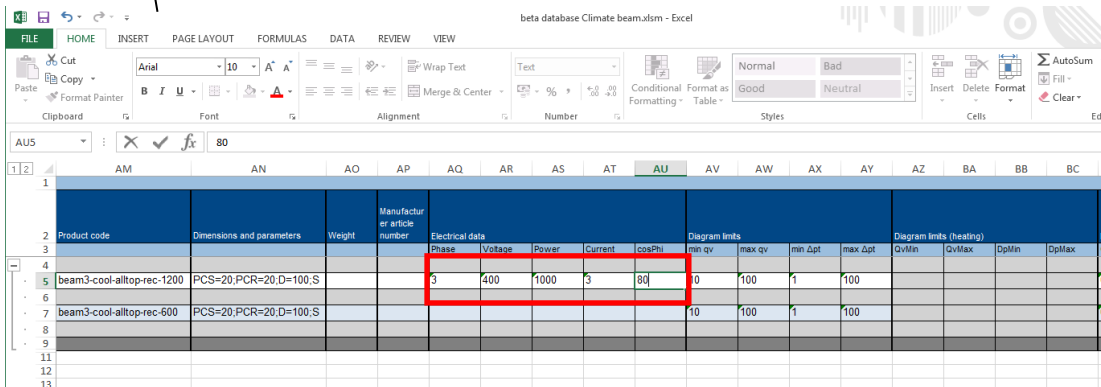


## Export products to spreadsheet

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.

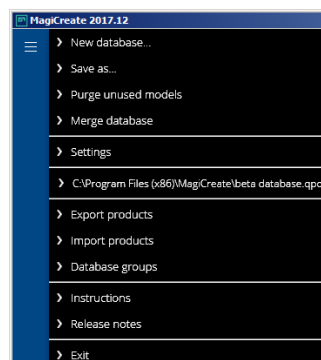


The screenshot shows the Excel spreadsheet titled 'beta database Climate beamulsm - Excel'. The data is organized into columns: Product code, Dimensions and parameters, Weight, Manufacturer article number, Electrical data (Phase, Voltage, Power, Current, cosPhi), and Diagram limits (min qv, max qv, min Δpt, max Δpt, QvMin, QvMax, DpMin, DpMax). The data for 'beam3-cool-alltop-rec-1200' and 'beam3-cool-alltop-rec-600' is shown.

Product code	Dimensions and parameters	Weight	Manufacturer article number	Electrical data	Diagram limits
				Phase Voltage Power Current cosPhi	min qv max qv min Δpt max Δpt QvMin QvMax DpMin DpMax
beam3-cool-alltop-rec-1200	PCS=20,PCR=20,D=100,S			3 400 1000 5 80	0 100 1 100
beam3-cool-alltop-rec-600	PCS=20,PCR=20,D=100,S				10 100 1 100

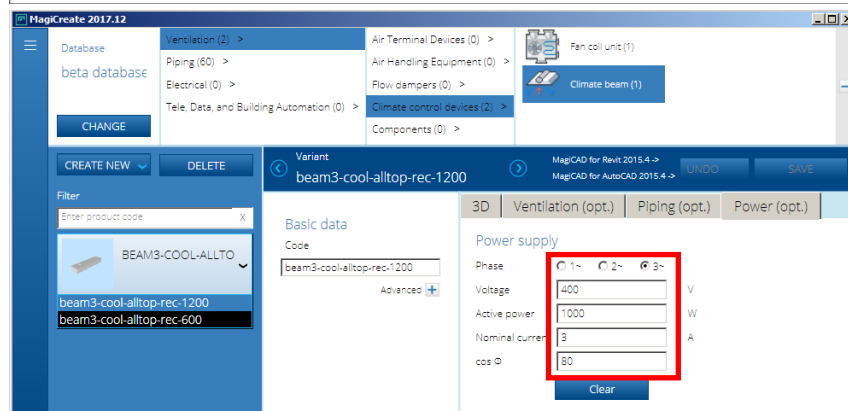
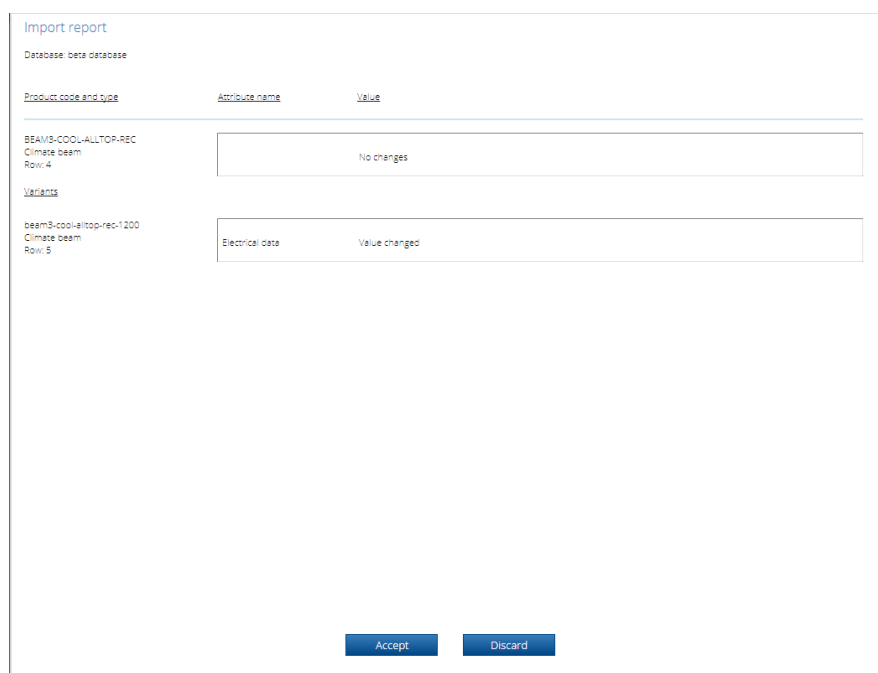
## Import products from spreadsheet

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