VENTIAIR

Operation instructions

Design Software VentiAir

WWW.VENTIAIR.COM

Contact:

VentiAir s.r.o.
Adolfovice 512
790 01 Bělá pod Pradědem
CZ-Czech Republic
IČ: 06935320 DIČ: CZ06935320
E-mail: obchod@ventiair.com; technical@ventiair.com
Phone: +420 602 500 287

The device has been manufactured in accordance with the EU standards EN1886, EN13053.

This documentation must always be handed over to the user!

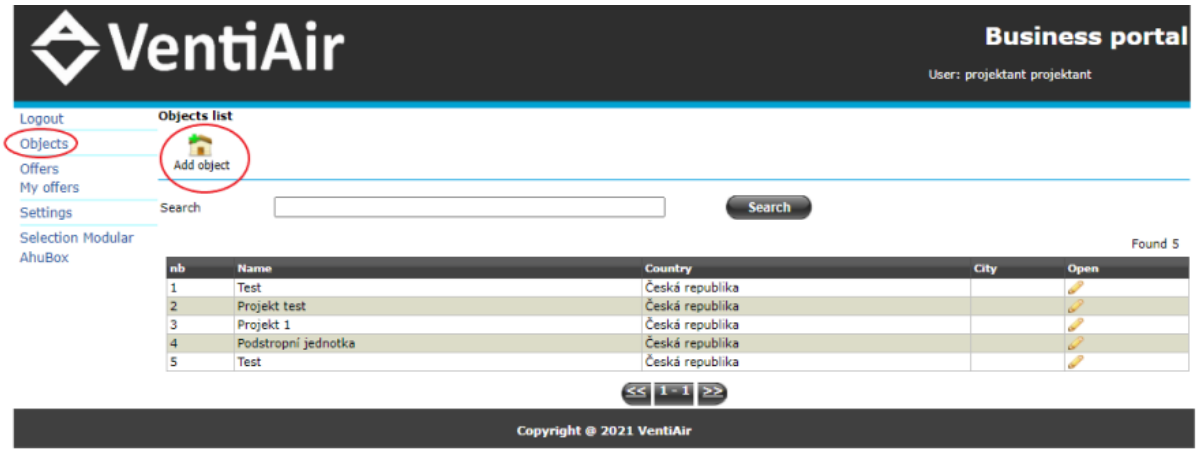
In case of non-compliance with the warranty conditions listed below in the documentation, VentiAir s.r.o. reserves the right to refuse warranty.

Version 03/2021

1 CONTENTS

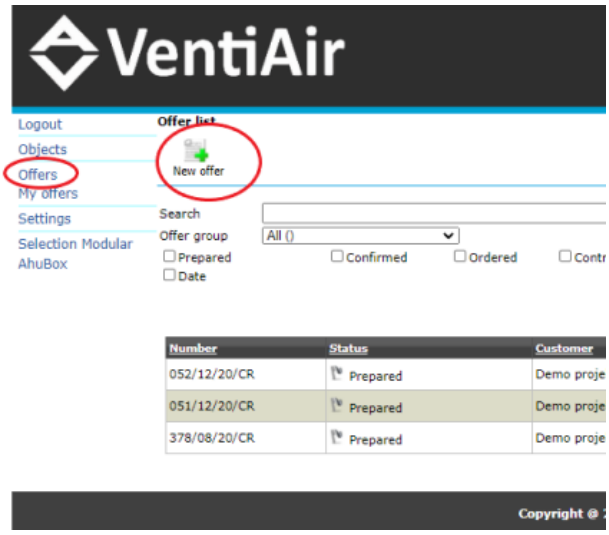
2 ENTERING NEW OBJECT - PROJECT

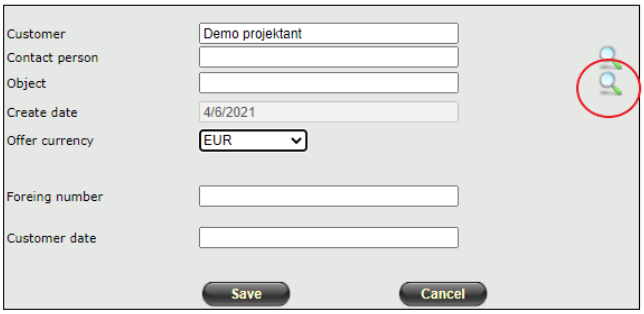
In the bookmark "Objects" on the left, enter a new object / project using the "Insert object" button and fill in the data. There is no need to fill in everything. Choose the lines for your best orientation possible.



3 ENTERING NEW QUOTATION – LIST OF EQUIPMENT

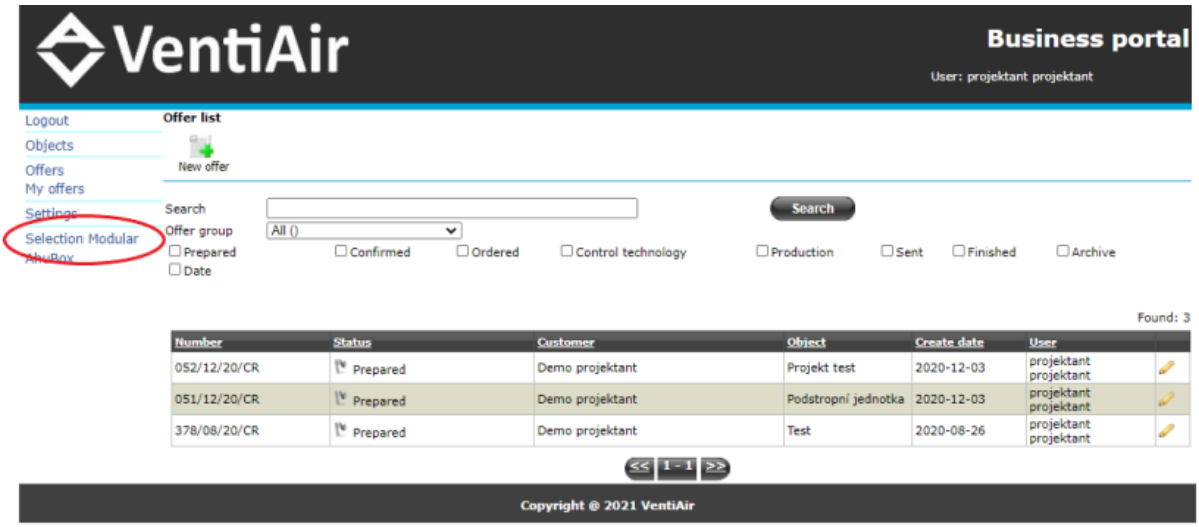
In the bookmark "Offers", select the "New quotation" option and fill in the data about the object via the magnifying glass icon. This offer will get a unique number.



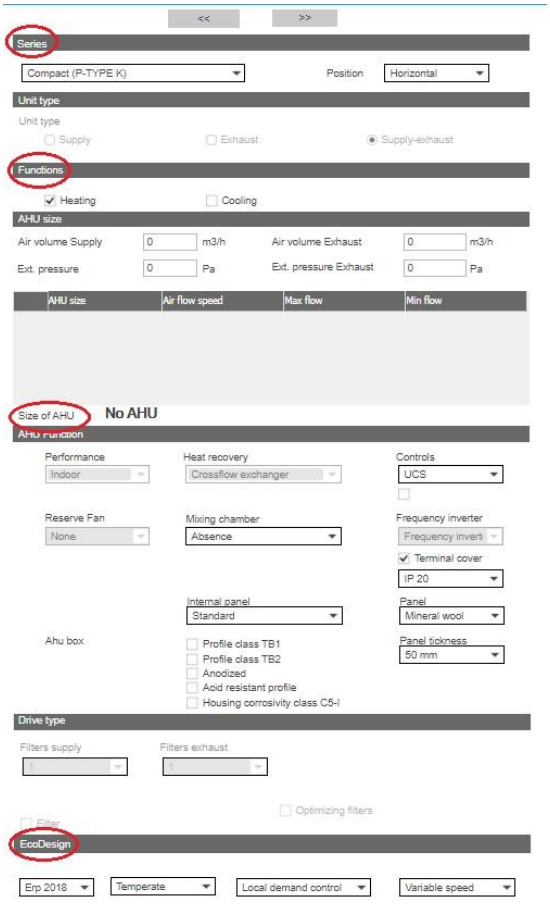


4 DESIGN OF SPECIFIC EQUIPMENT

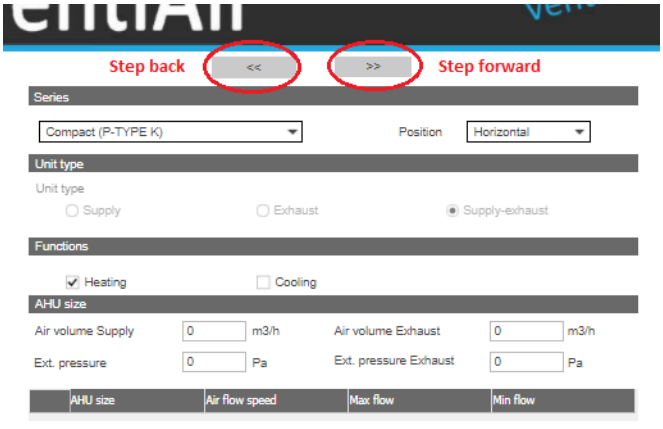
Selecting the "Selection Modular" option you will be redirected to the initial screen of the VentiAir design program.



Enter the required data here: series, functions, flow rates, pressure losses, select unit size, components, control and other project requirements. Before clicking on the double arrow to the right below the header, which shows the next step forward, check the entered parameters.

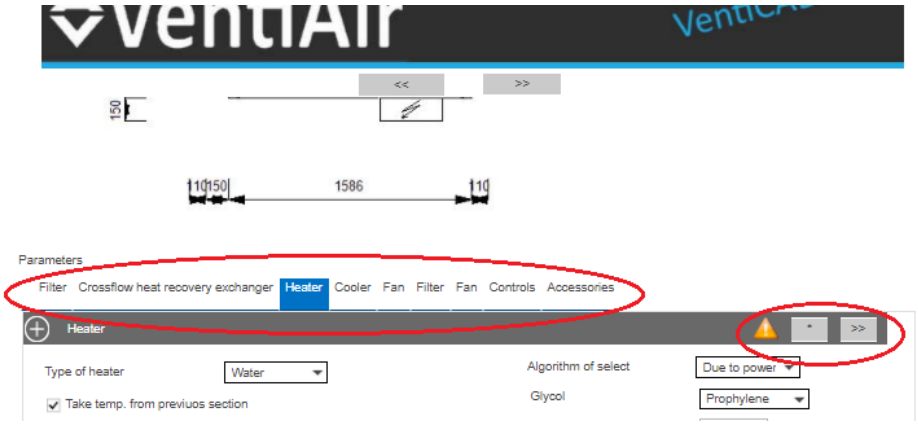


If you made a wrong choice, you will be able to make the change by clicking on the double arrow to the left below the header. It makes a step back.



5 ENTERING REQUIREMENTS ACC. TO THE PROJECT

After selecting the service side of the air handling unit version with the appropriate pictogram, there are several bookmarks named on the screen below, which are listed individually below. Enter the parameters from the project there. We recommend to choose the fans as the last, as they are affected by the pressure drop of other components used. The orange triangle signals the need to calculate the entered values. The calculation is made by pressing the asterisk located immediately on the right of the orange triangle. Next to the right is a double arrow to display all applicable variants and then you can make your own selection.

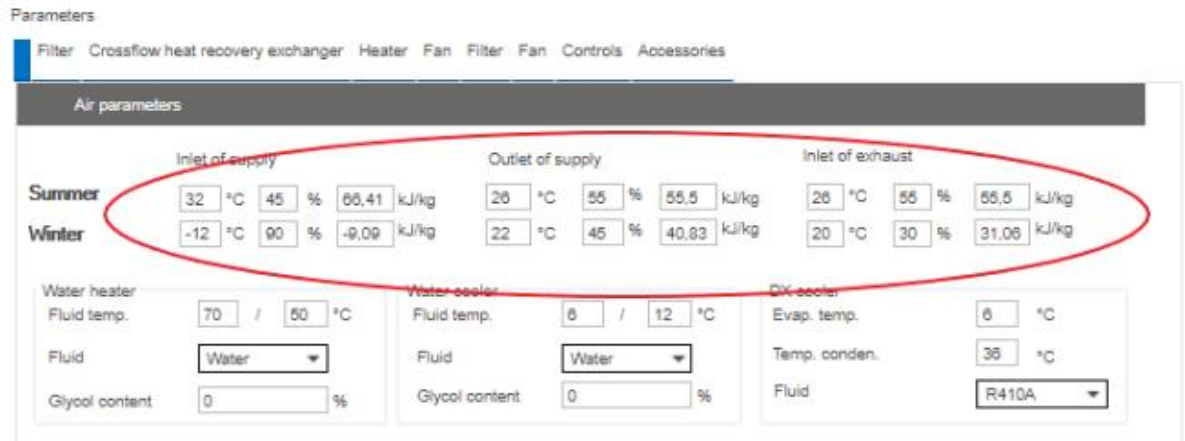


Note: If the program is not able to calculate the entered values (e.g. with heater or cooler), it is possible to go back (using the double arrow showing to the left located at the top under the header) to the initial design of the device and select a different unit size.

After clicking on the next step, a double arrow showing to the right will display a summary of parameters and information about the designed device, and in the next step, you can save it.

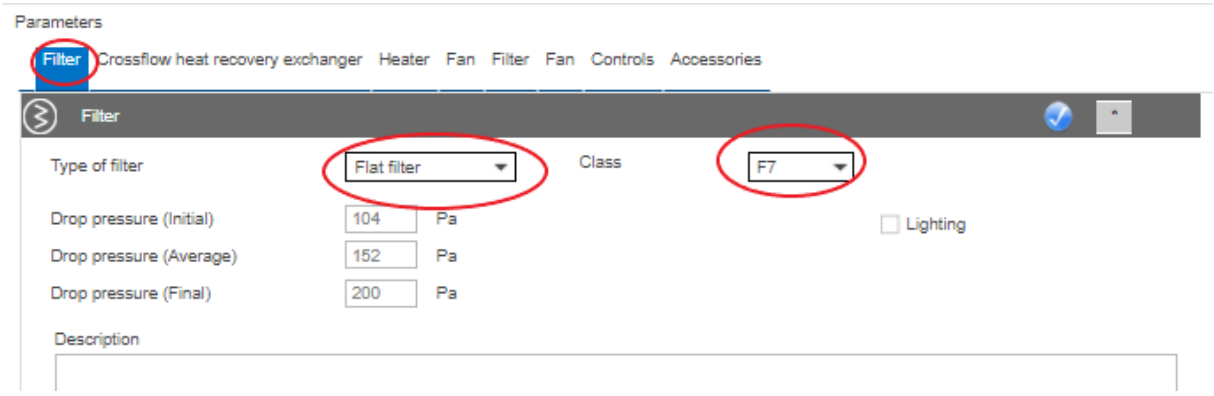
5.1 AIR PARAMETERS

We enter the parameters of the outdoor and indoor environment. We do not have to enter the data about the heater and the cooler / direct evaporator, there are separate bookmarks for this purpose.



5.2 AND CLASS OF EXTRACT FILTER

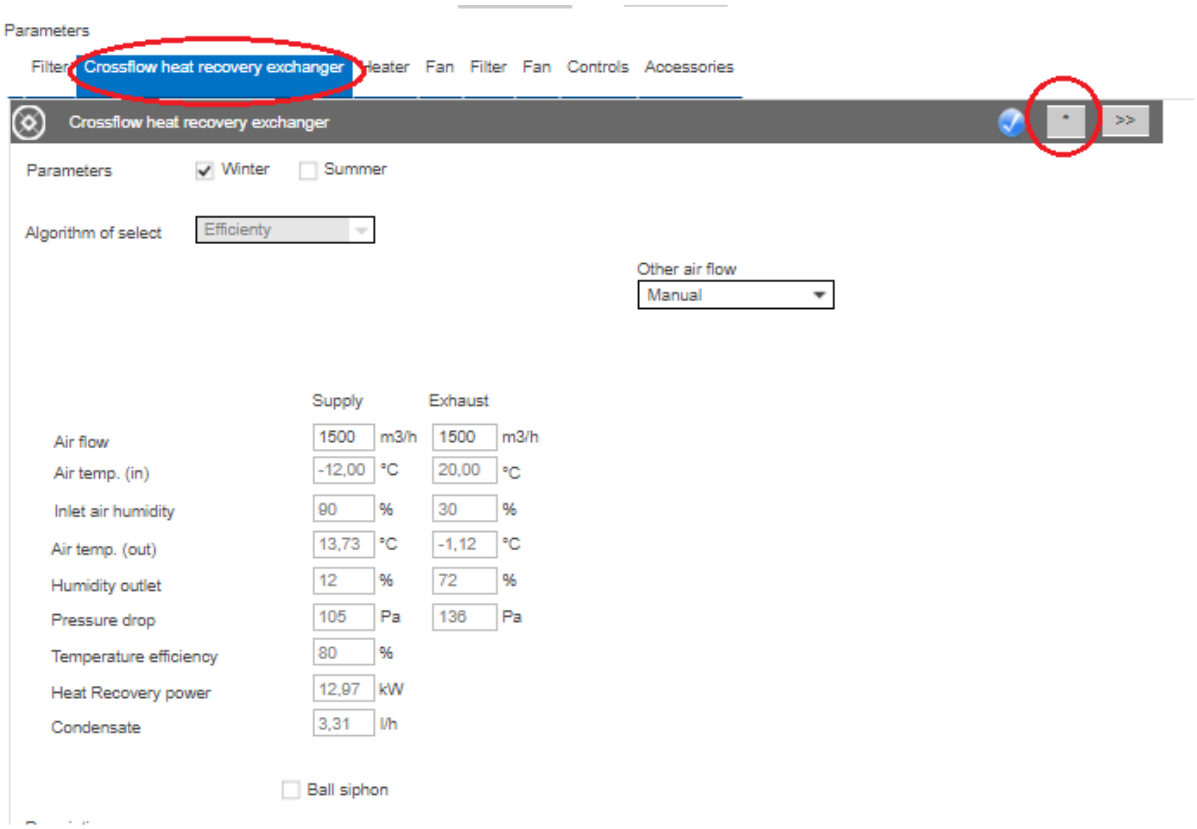
Choose required type and class of filtration.



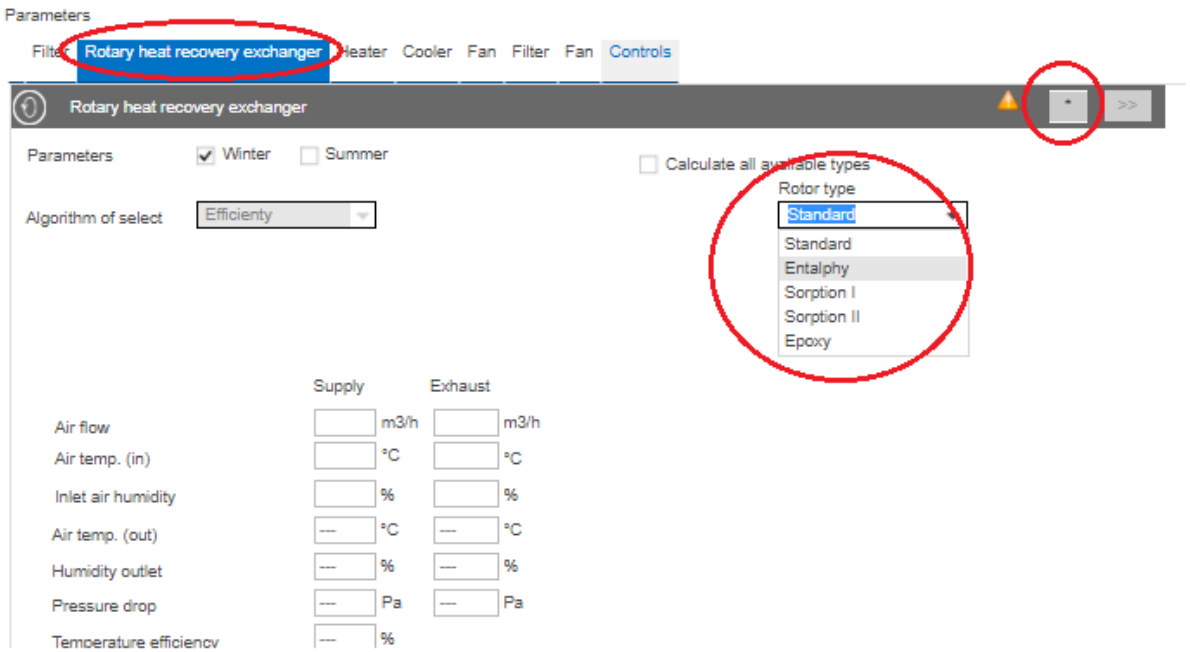
Note: If the orange triangle on the right does not change to a blue circle with a white sign, click on the star next to the triangle (written in the article No. 6 Entering requirements according to the project)

5.3 RECUPERATION HEAT EXCHANGER

For a plate heat exchanger, we start calculating the values by clicking on asterisk.



For a rotary heat exchanger, we also proceed via the asterisk, but only after specifying more the type of recuperator.

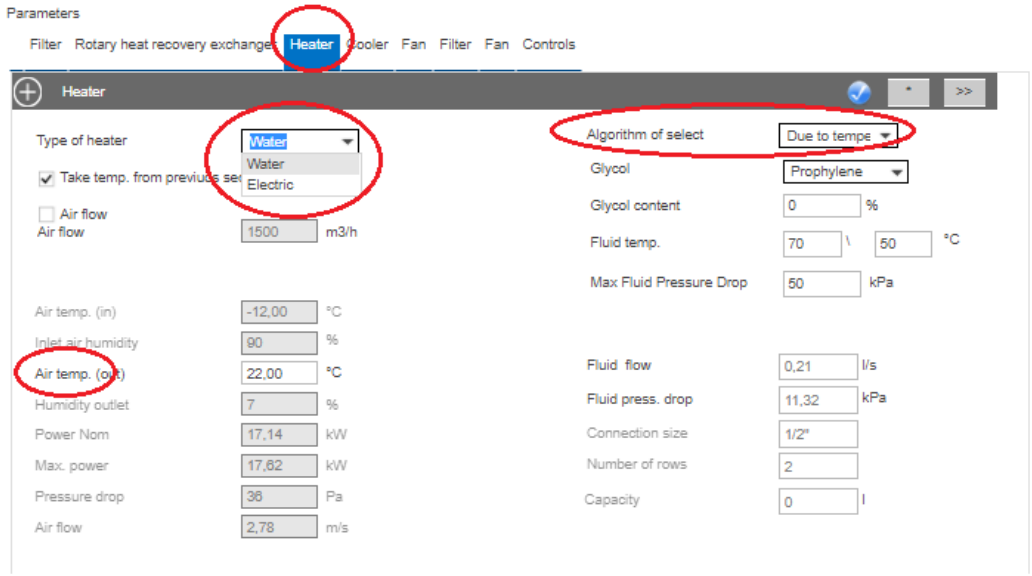


5.4 HEATER

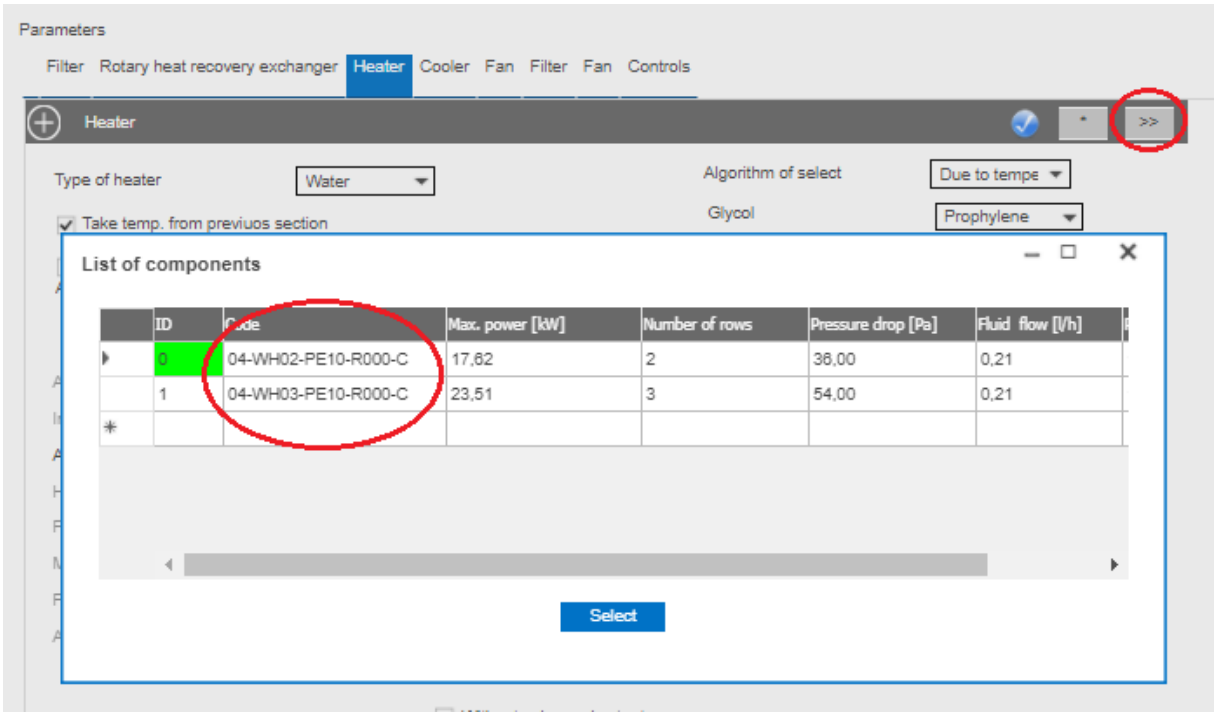
After clicking on the "Heater" option, we choose between the water and electric model. The design algorithm also offers two options:

a) Based on the temperature when we enter the required value in °C into the field “Air outlet temp.”

b) The second option is based on the power, where we enter the required value in kW into the field " Nominal power".

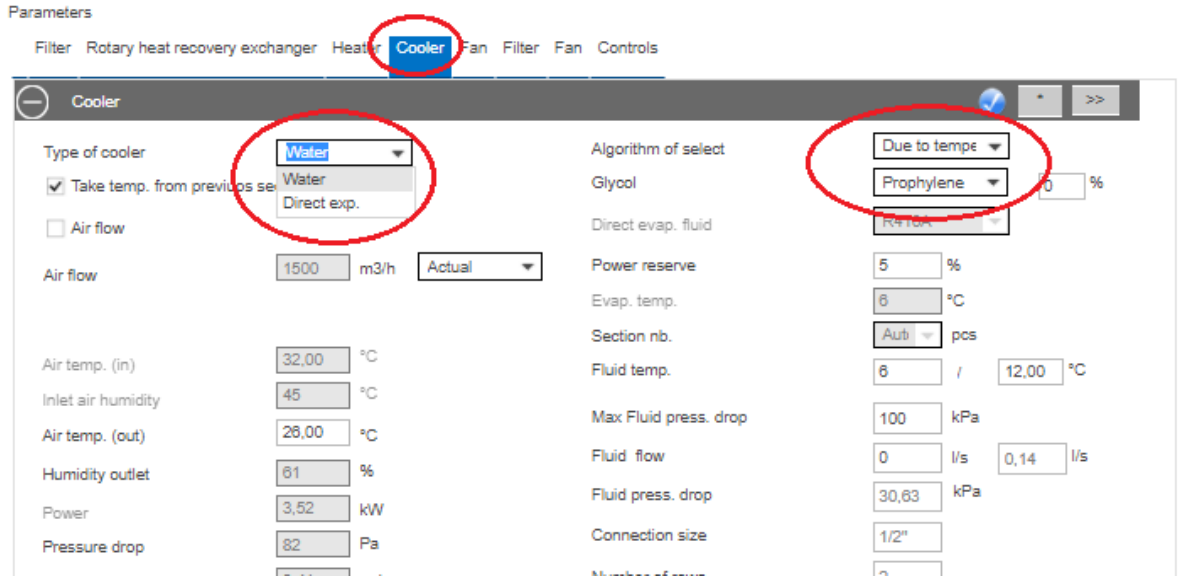


If more than one type of heater is available, we can specify the selection in more detail by clicking on the double arrow next to the asterisk

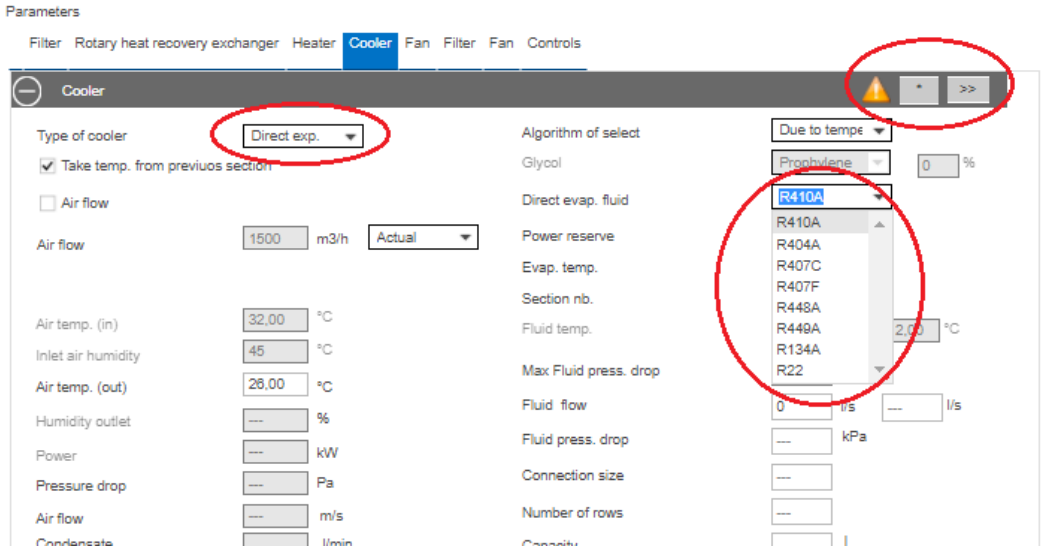


5.5 COOLER

Here we select the option of water cooling or of direct evaporator and we also enter the required value from the design algorithm, which we got acquainted with in the Heater bookmark. We also choose the type of glycol for the water cooler.



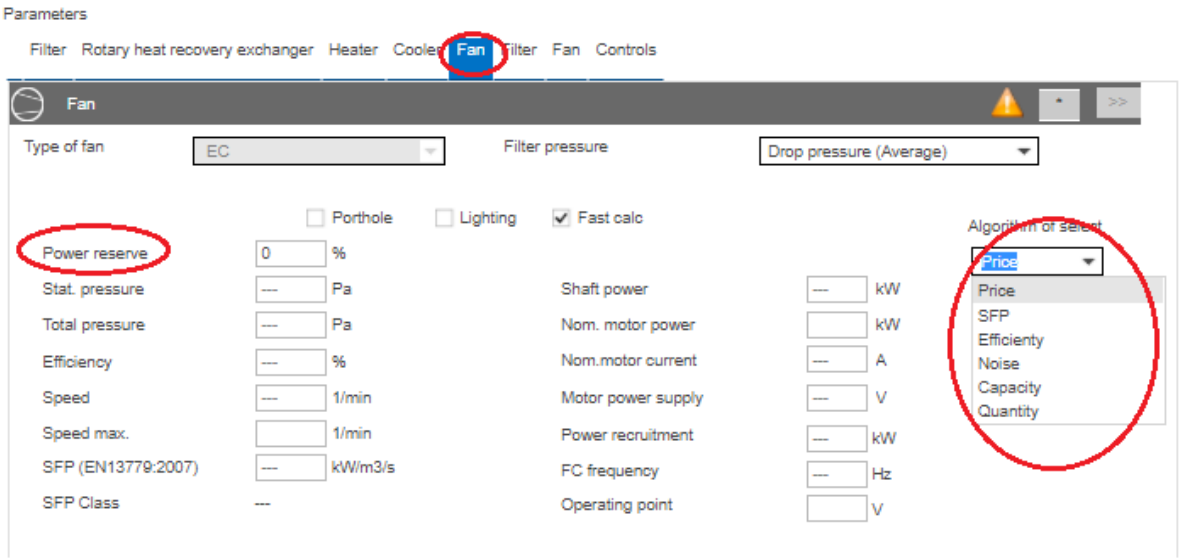
The direct evaporator offers us different types of refrigerant. Here we select one option, continue with an asterisk and possibly with a double arrow to select a more specific model.



5.6 SUPPLY FAN

In the Fan bookmark, we enter the power reserve, and we can select a sight glass and lighting from the optional accessories. The selection in the design algorithm determines how all usable fan variants will be sorted after clicking on the double arrow next to the already well-known asterisk.
This specifies all parameters of the supply branch.

<u>WARNING</u>: If we decide to change any parameter in the already entered bookmarks, we must then return here and click on the asterisk again to recalculate the fan values. Without this step, the device will not be able to be designed for us.



Note: There may be a situation where the program will not be able to offer us any fans. The situation can arise, for example, with a large pressure loss, when the fans will not have a sufficiently strong air pressure - in this case we will be prompted to select a different unit size with an error message.

5.7 TYPE AND CLASS OF EXTRACT FILTER

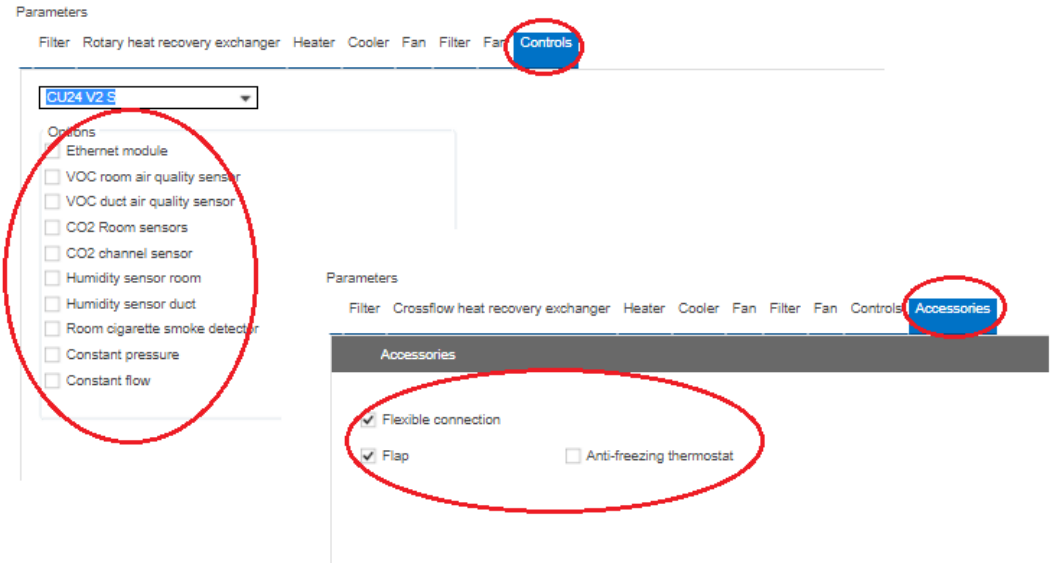
This bookmark is the same as the filter bookmark on the inlet/supply. Select the type and class of filtering and continue with an asterisk.

5.8 EXTRACT FAN

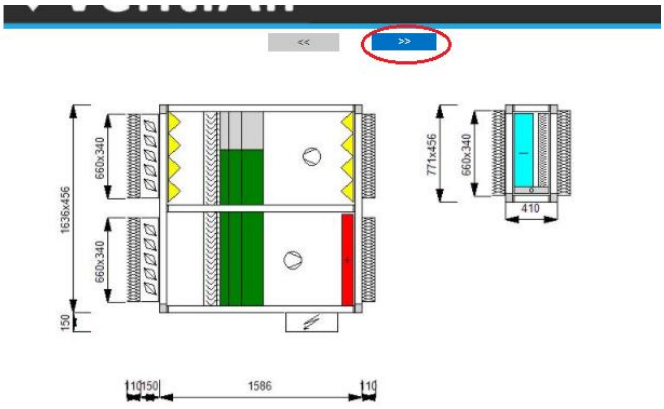
This bookmark is the same as the supply fan bookmark. We enter the requirements and continue with an asterisk. There is also a warning that if we change any parameter in the bookmark relevant to the extract branch, we will have to return here and click on the asterisk again.

5.9 PARAMETERS OF REGULATION AND ACCESSORY

Check the required components and proceed to the selection of accessories, where we choose sleeves, dampers and antifreeze capillary.

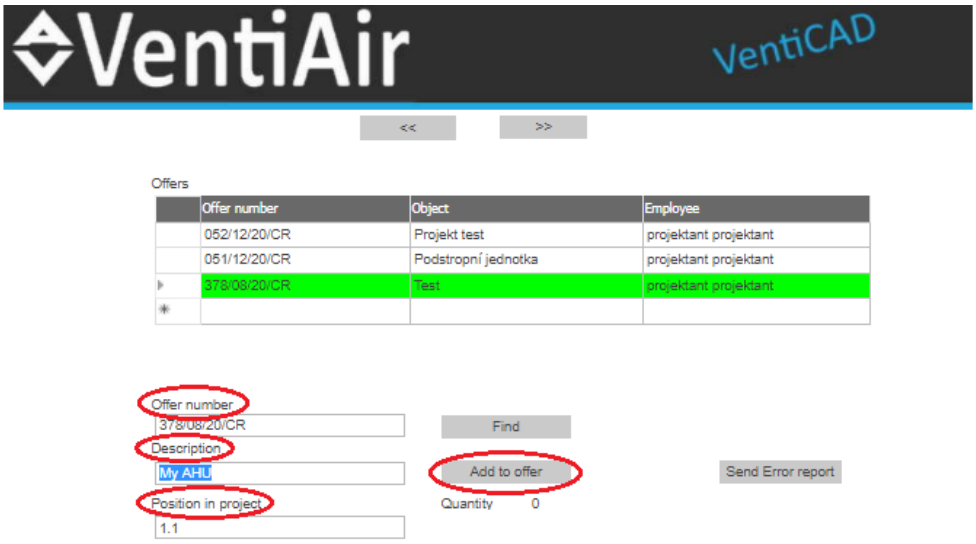


After clicking on the double arrow showing to the right, we get to the summary report. Here we can click between the individual bookmarks and check the entered values. In case we need to change certain values, we can do so by clicking on the double arrow showing to the left and adjust them. When everything is in order and the summary agrees, we click on the double arrow showing to the right to save the proposed device.



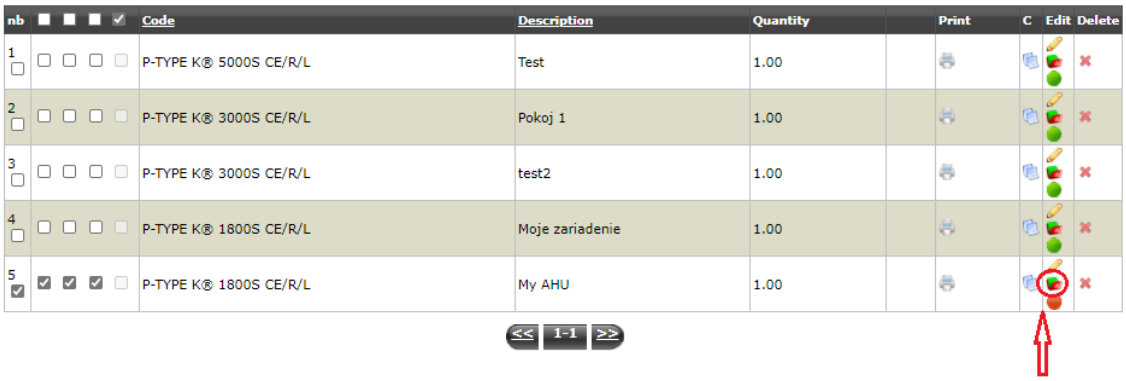
6 SAVING THE EQUIPMENT

Select the quotation number to save. We recommend also to fill in the "Description" field, which will also be stated in the technical sheet on the first page. After saving with the "Add to offer" button and after returning to the application when opening a specific quotation, the designed device is saved.



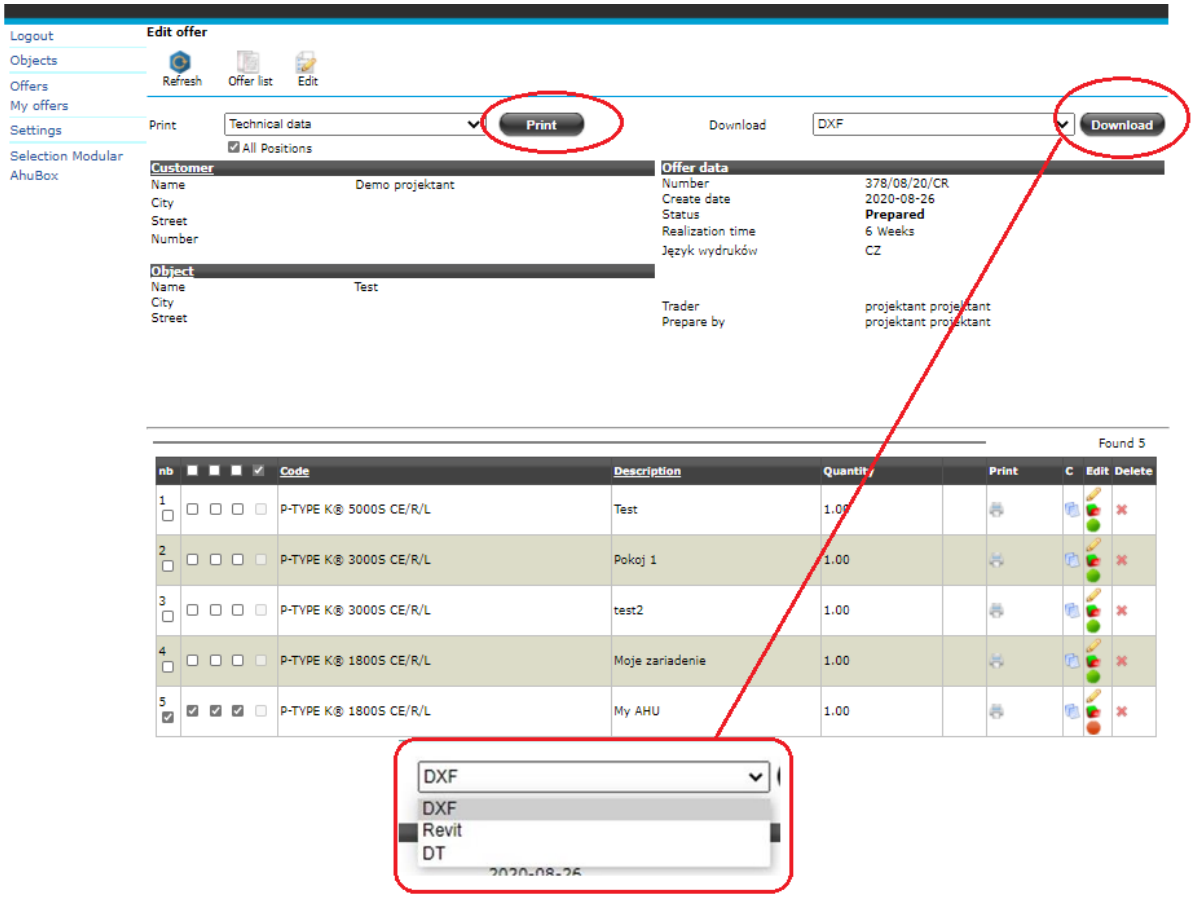
7 EDITING THE EQUIPMENT

If you only need to modify the equipment, you can copy it using the button and save the changes as a completely new equipment. After clicking on the button, you will be redirected to the initial screen of the design program. Edit your entry here and continue as above to save your device.



8 TECHNICAL SHEET OF THE EQUIPMENT

Download the technical sheet by specifically selecting the desired option in the upper section of the screen, or by clicking on the printer icon in the line directly at the designed device. We recommend that you make this option with a shorter time delay, because the program completes the Revit model and may not be displayed correctly. This is indicated by a colour-changing circle on the right of the printer icon, and green indicates the end of the process.


Logout
Objects
Offers
My offers
Settings
Selection Modular AhuBox
Edit offer
Refresh
Offer list
Edit
Print
Technical data
Print
All Positions
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3 P-TYPE K® 3000S CE/R/L test2 1.00
4 P-TYPE K® 1800S CE/R/L Moje zariadenie 1.00
5 P-TYPE K® 1800S CE/R/L My AHU 1.00
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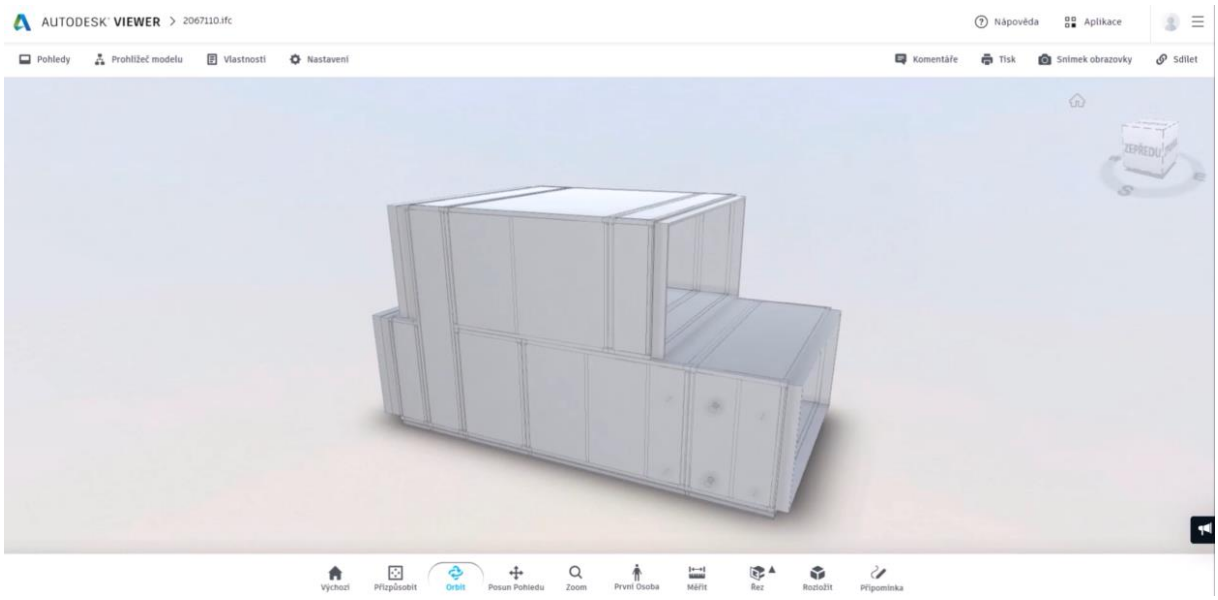
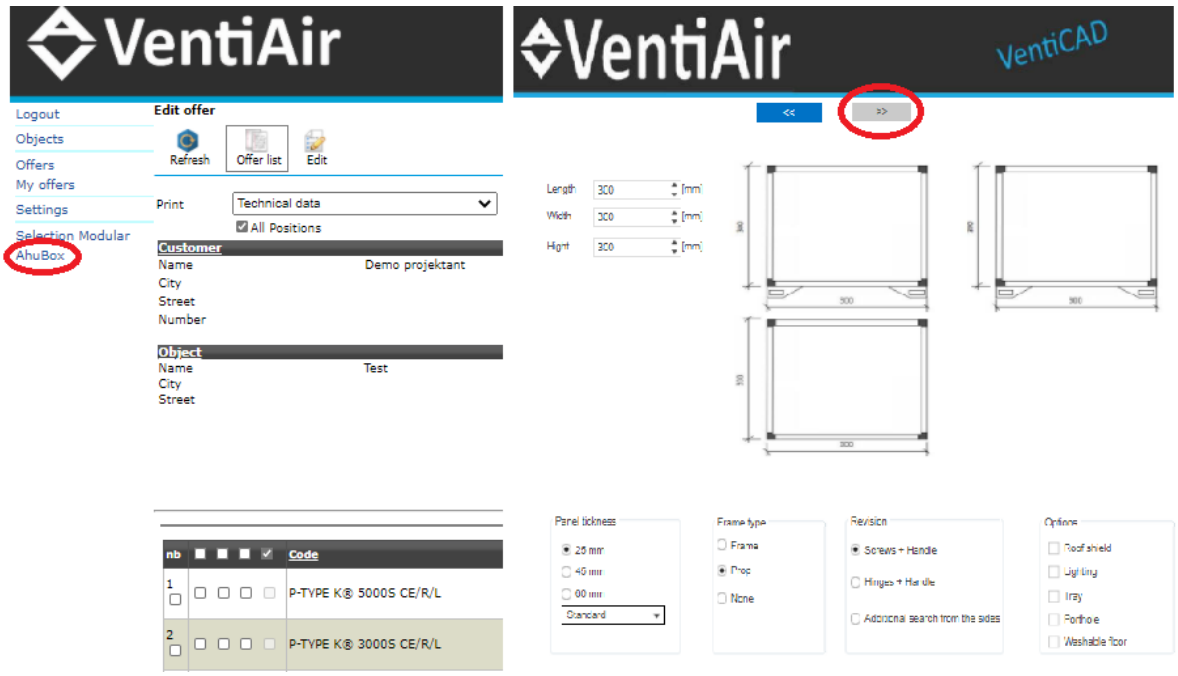

AUTODESK VIEWER
2067110.ifc
Nápověda
Aplikace
Pohledy
Prohlížeč modelu
Vlastnosti
Nastavení
Komentáře
Tisk
Snímek obrazovky
Sdílet
ZEPŘEDU
Výchozí
Přizpůsobit
Orbit
Posun Pohledu
Zoom
První Osoba
Měřit
Řez
Rozložit
Připomínka

9 INDIVIDUAL BOX DESIGN

Selecting the "AhuBox" option will redirect you to the VentiAir design program. This selected option is used to design only the box itself. After entering the parameters and requirements, clicking on the double arrow showing to the right below the header will take you to the option of saving the designed box to the quotation. Storage and subsequent processing are described in detail in separate chapters 6 and 8.



You will find the video instructions to the design program VentiAir on our youtube channel VentiAir - YouTube, video https://www.youtube.com/watch?v=05OEkofryRQ&t=4s