

How to use software WPOedit

WPOedit is a tool to edit the database of WP-OPT.

1. Installation

You can download WPOedit for any 32-Bit-Windows platform from our homepage www.wp-opt.de (click menu item *Kunden-Info*). After you've clicked the link *Download WPOedit (english)*, select *Execute* or *Open*. This will download the installation package and start the installation.

If you prefer to save the installation package only, you have to start the installation manually (you find the installation package *wposetupediteng.exe* in your download folder).

After starting the installation you are guided through the process. If a restart of your computer is necessary at the end of the installation, you have to restart it before you first use WPOedit.

After a successful installation you'll find a new start folder under *Start / All programs* and a link on your desktop *WP-OPT edit*. To start the program double-click the link or select *Start / All programs / WP-OPTedit / WP-OPT edit*.

2. Check existing heat pumps

If we send you a separate file *wpodaten.bib*, please close WPOedit (if active at the moment) and copy the file into the installation folder of WPOedit (you have to overwrite the existing file). If you accepted the suggested folder in the installation process, this folder is *C:\Documents and Settings\<YourName>\My Documents\WPOptEdit*.

The file *wpodaten.bib* contains all the heat pumps which are already in the database of WP-OPT. And all your data entered in WPOedit are also saved to this file.

After starting WPOedit select menu item *Master data / Heat pumps*. You can display and edit the data of all the heat pumps already in the database.

If you find heat pumps which you no longer provide to customers, please do not delete them! Because users of the software WP-OPT may have used them in old projects, their data are necessary to re-open these projects in WP-OPT.

To prevent WP-OPT from displaying those heat pumps for new projects, unselect the option *Use this heat pump for designing new heating systems* on the second data page (menu item *Master data / Heat pumps*).

Please check the performance data and also the data of the auxiliary aggregates for all the heat pumps already in the database.

To change performance data please click *Edit table*. Then navigate to the cell you want to change (by left-clicking with the mouse or by using the arrow keys). The heat extraction power and the C.O.P. are calculated by WPOedit, that's why you cannot enter these values.

If you are ready with editing the performance data, click *Save table*. This stores the new values to file *wpodaten.bib*. If you want to cancel the changes, click button *Cancel edit*.

Special case: Brine-water heat pump with intermediate heat exchanger for heat source water

Brine-water heat pumps, which are able to use the heat source water (via an intermediate heat exchanger), should be copied using button *Copy*). Then change the heat source of the copy to *Water-water* and extend the name of the heat pump with an „ with IHE“.

You'll find further explanations in section 3.

3. Adding new heat pumps

To add a new heat pump to the database, click menu item *Master data / Add heat pump*. In the following dialog enter the name of the heat pump and click *OK* button.

Please consider the following note when building the heat pump names:
WP-OPT recognizes the heat pump manufacturer by the first 5 letters of the heat pump name.
That's why all the heat pumps from a manufacturer should start with the same 5 letters.

When you've entered the name, the program displays the heat pump data pages. Please enter the performance data and also the data of the auxiliary aggregates for the new heat pump.
The heat extraction power and the C.O.P. are calculated by WPOedit, that's why you cannot enter these values.

If you want to change the performance data of a heat pump, you must press the *Edit table* button. Then click on the cell whose contents are to be changed. In order to change other cells, click on them with the mouse or move to them using the arrow keys. The changes are only stored if you press the *Save table* button. Pressing *Cancel edit* will drop all changes.

Only a period is allowed as the decimal separator.

Each row of the table refers to a source temperature. It doesn't matter which source temperatures you enter, but you must take into account:

- Maximum 8 data records (= 8 different source temperatures) are possible.
- Only source temperatures between -20°C and $+60^{\circ}\text{C}$ are allowed.
- One has to enter performance data measured at two different flow temperatures per every source temperature (means per row).
The first flow temperature is fixed at 35°C . The associated performance data (heating, cooling and electric power) must be entered into column 2 to 5.
The second flow temperature you can choose on your own: Input the desired value into the 6th column (it is possible to use different values for each source temperature). The performance data for this flow temperature are entered in column 7 to 10.
- The right-most column holds the value of the maximum flow temperature (according to the source temperature of the row).

Very important: If a data row contains the value 0 in any cell, then the entire row is ignored by the computation algorithm of the program.

There must be at least 2 rows completely filled to use these data for calculations (only then the necessary calculation of values in between is possible).

The following base values for heat and electric wattage are colored for faster orientation (values as source temperature/flow temperature):

- for brine systems: 0/35°C
- for direct evaporation systems: 0/35°C
- for air systems: 2/35°C
- for water systems: 10/35°C

Please don't forget to check the second data page too.

The user of WP-OPT can change the power consumption of the auxiliary aggregates for every project, and also the temperature difference at the evaporator. Your task is to give values that are recommended by you or the values of the pumps your heat pump contains.

If you want to re-use the data of a heat pump, because another one has almost the same, use the small button labeled *C* (like Copy) that is at the right side of the heat pump drop down list. You are asked for the name of the new heat pump, and then it is created with the same data as the heat pump currently shown (and displayed immediately).

Another note: WPOedit covers data for all functions of WP-OPT. Also existing special versions for some manufacturers. If you do not use these function you can ignore the following input fields:

- brine-water heat pumps: maximum allowed pressure loss (page 1)
- water-water heat pumps: intermediate heat exchanger data (page 1)
- temperature for hot water production in summer (page 2)
- product no., pic file, price (page 2)

4. Send your data to WPsoft GbR

If you are ready with all inputs, please close the program WPOedit.

Look for the file *wpodaten.bib* in the installation folder of WPOedit and send it by email to info@wp-opt.de.

Additionally we are interested in the following informations:

- Which heat pumps are also tested by an independent company/institute? Are there differences between the test results of this company/institute and yours because of technical improvements or changes?
- Are there any special things to consider with one of the heat pumps you entered? (Maybe the maximum forward temperature is only reached with special technical equipment.)

5. Problem solving

- a) No heat pumps are displayed, but you know that the file *wpodaten.bib* contains some and it is in the right place.
Do this: Click menu item ? / *About WP-OPT...* and then button *Further information*. In the dialog shown you can see at the top (*User database*) which file WPOedit uses. Please check, if this is the file we sent.
- b) After you clicked button *Edit table* a message appears „*The coefficients...*“. This is only an information to you. The data for the C.O.P. and the heat extraction power are calculated by WPOedit. You cannot enter these.

WPOedit is delivered with the comprehensive help file of WP-OPT. Please use key *F1* or the *Help* buttons in the program or menu item ? / *Help* to view the help file. There you'll find further detailed explanations.

6. Further informations

The measurements of performance data should be done according to DIN EN 255 or DIN EN 14511. This is considered with the temperature difference given on data page 2.

Missing performance data (in one row) are calculated by the program. E.g. if you enter only COP and heating power, the electrical power is calculated.