

# MVHR and MEV Product selector guide

**zehnder**

always the  
best climate

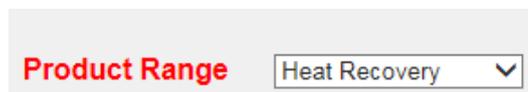
The Zehnder product selector is a simple and easy way to find which of our units is suitable for your project. The search is simple to do and provides you with comprehensive information on the units you need. All results are specifically tailored to your requirements and PDF copies can be saved and emailed easily.

This guide on how to use the product selector will provide information on the following:

- Performing a search
- The results
- More (product) information
- Creating a datasheet
- Creating a project

## Performing a search

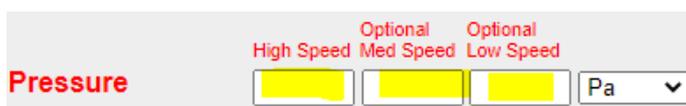
Step 1: First select the Product Range you wish to search for using the drop down menu. The options are:



Product Range

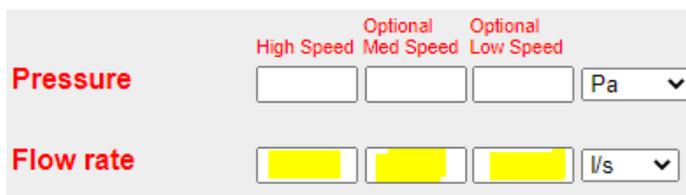
- Heat Recovery
- Mechanical Extract
- ComfoCool Q600

Step 2: Input the system pressure you wish to search. This can be in Pa or mmwg dependent on your requirement. Input this figure into the box below the text "High Speed". This is the maximum system pressure you wish to search. An "Optional Low Speed" pressure drop or "Optional Med Speed" can also be entered if you wish to view multiple sets of technical information for the unit on the same search.



Pressure    Pa

Step 3: Input the total system flow rate you wish to search. This can be in l/s or m<sup>3</sup>/hr dependent on your requirement. Input this figure into the box below the text "High Speed". This is the maximum total system flow rate you wish to search. An "Optional Low Speed" flow rate or "Optional Med Speed" can also be entered if you wish to view multiple sets of technical information for the unit on the same search.



Pressure    Pa

Flow rate    l/s

Step 4: Select the mounting preference of the unit. The default is "Any" which will display all units irrespective of the mounting preference. However if you wish to narrow your search then the following options are available:

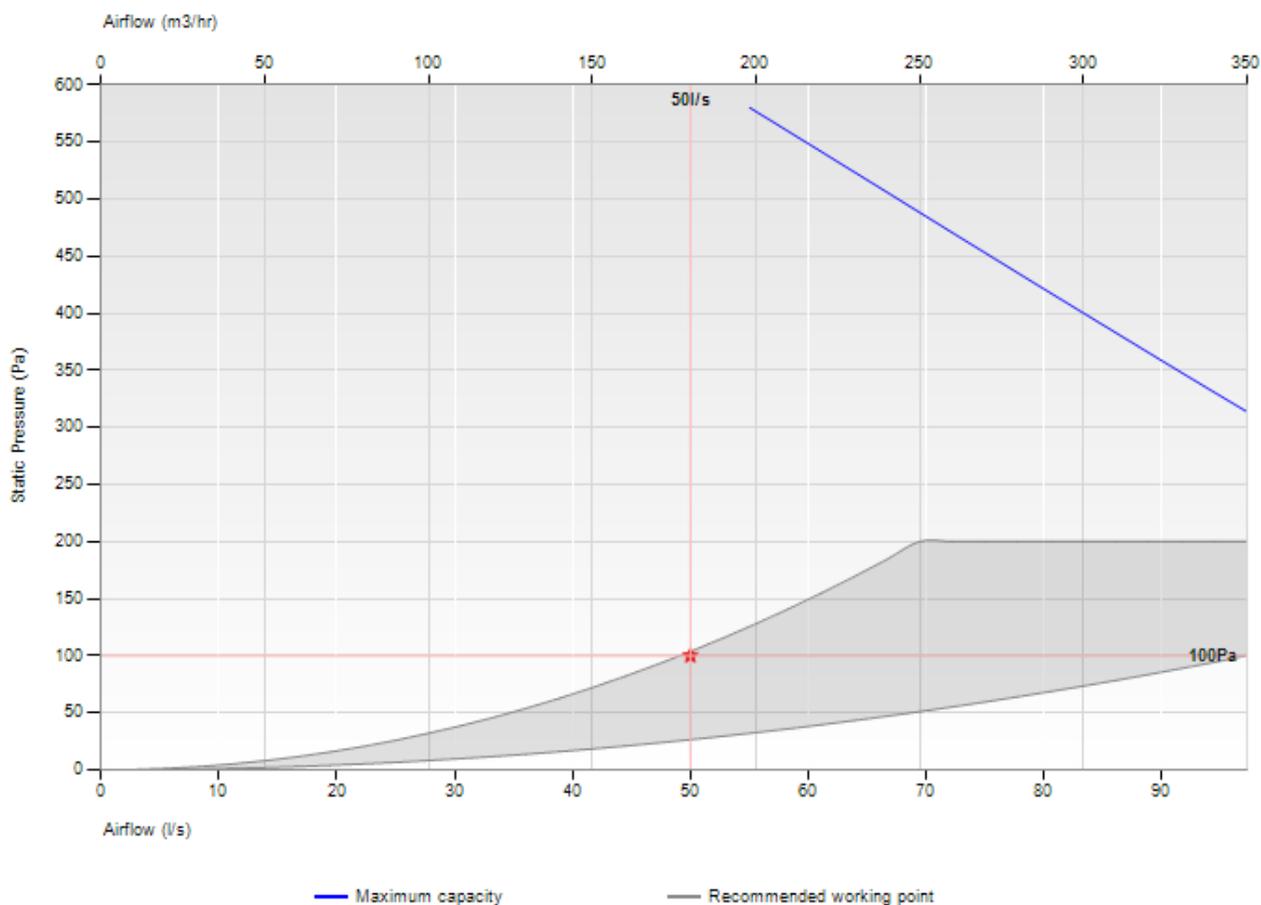
- Any
- Wall
- Ceiling
- Floor

Step 5: Finally you have the option to refine the search by selecting or deselecting the following two tick boxes under “Other information”

Preferred product selection results to exceed flow rate

- The search results will exceed the flow rate/pressure drop input if the exact test result isn't available Performance within product optimal operation flow rates
- The ComfoAir Q units have a recommended working point shown in dark grey below. If selected then only results within this working point will be displayed; if it is unchecked then results outside of this area will be displayed.

### Pressure curve



When you're happy with your selections simply click search for results



## The results

The results are shown to the right of the data you have just input with the pressure drop and airflow input displayed at the top of the table.

The table displays various information for all of the units captured within the search as shown below:

**Estimated Results - Requested Pressure 100Pa, Airflow 100l/s**  
 Click on a model to display the full product specification

Model	Description	Motor Speed	Pressure Pa	Flow l/s	Power (Watts)	SFP W/l/s	dB(A) @ 3m	Airflow vs Request	Datasheet	Zip files
<a href="#">CA350</a>	 Zehnder ComfoAir 350	85%	100	100.7	185	1.84	39	101%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">BIM file</a> <a href="#">Guides</a>
<a href="#">CAQ450</a>	 Zehnder ComfoAir Q450	61%	100	101.9	92	0.90	25	102%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">Guides</a>
<a href="#">CAQ600</a>	 Zehnder ComfoAir Q600	51%	100	101.0	93	0.92	27	101%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">Guides</a>

To download the entire AutoCAD DWG library of our units click [HERE](#)  
 To download the entire AutoDesk Revit BIM library of our units in RFA format click [HERE](#)  
 For further information and downloads on our units and associated ductwork ancillaries and cooling options please click [HERE](#)

**Annotations:**

- Product description:** Points to the 'Description' column.
- Product image:** Points to the 'Model' column.
- Model type:** Points to the 'Model' column.
- The motor speed at the selected flow rate and pressure drop is displayed as a %:** Points to the 'Motor Speed' column.
- The Specific Fan Power (w/l/s) is displayed for each unit along with the case breakout dB(A) @ 3m for this test point.** Points to the 'SFP W/l/s' and 'dB(A) @ 3m' columns.
- Open / save or e-mail bespoke PDF:** Points to the 'Datasheet' column.
- Downloads for corresponding AutoCAD DWG, AutoDesk Revit RFA or intallation/user guides:** Points to the 'Zip files' column.
- The closest test point for the requested pressure drop and flow rate are displayed here. These may not match the desired results 100% which is why Airflow vs Request is show if the test points don't match 100%. E.g. 100Pa @ 100 l/s for the CAQ600 is 1 l/s more than the requested 100 l/s so is 1% above the requested rates.** Points to the 'Airflow vs Request' column.

The list is ordered based on the Model name; however it can also be ordered differently by pressing the corresponding column heading e.g By pressing "SFP W/l/s" the table is now ordered from lowest SFP to highest SFP.

**Estimated Results - Requested Pressure 100Pa, Airflow 20l/s**  
 Click on a model to display the full product specification

Model	Description	Motor Speed	Pressure Pa	Flow l/s	Power (Watts)	SFP W/l/s	dB(A) @ 3m	Airflow vs Request	Datasheet	Zip files
<a href="#">CAQ600</a>	 Zehnder ComfoAir Q600	29%	100	22.0	20	0.92	17	110%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">Guides</a>
<a href="#">CAQ450</a>	 Zehnder ComfoAir Q450	32%	100	21.7	20	0.93	15	109%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">Guides</a>
<a href="#">CA350</a>	 Zehnder ComfoAir 350	41%	100	22.5	23	1.03	19	113%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">BIM file</a> <a href="#">Guides</a>
<a href="#">CAQ350</a>	 Zehnder ComfoAir Q350	34%	100	20.6	23	1.10	13	103%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">Guides</a>

## More information

To open more information on a specific unit, simply click on the model name and a summary sheet will be displayed to the right.

**Estimated Results - Requested Pressure 100Pa, Airflow 20l/s**

Click on a model to display the full product specification

Model	Description	Motor Speed	Pressure Pa	Flow l/s	Power (Watts)	SFP W/l/s	dB(A) @ 3m	Airflow vs Request	Datasheet	Zip files
<a href="#">CAQ600</a>	Zehnder ComfoAir Q600	29%	100	22.0	20	0.92	17	110%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">BIM file</a> <a href="#">Guides</a>
<a href="#">CAQ450</a>	Zehnder ComfoAir Q450	32%	100	21.7	20	0.93	15	109%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">BIM file</a> <a href="#">Guides</a>
<a href="#">CA350</a>	Zehnder ComfoAir 350	41%	100	22.5	23	1.03	19	113%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">BIM file</a> <a href="#">Guides</a>
<a href="#">CAQ350</a>	Zehnder ComfoAir Q350	34%	100	20.6	23	1.10	13	103%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">BIM file</a> <a href="#">Guides</a>

**Zehnder ComfoAir Q 600**

**General**

The Zehnder ComfoAir Q is the NEW generation of heat recovery ventilation units with state of the art design and intelligent technology, regardless of whether you are working on a new build or an old building, with Zehnder comfortable ventilation you have an innovative, tried and tested complete system. It contains features such as its automatic modulating true summer by-pass, world class heat recovery efficiency and integrated humidity sensor to provide a comfortable, healthy and energy-efficient indoor climate.



**SAP PCDB Test Results**

	SFP (W/l/s)		Efficiency (%)	
	2009	2012	2009	2012
K+1	-	0.83	-	96%
K+2	0.80	0.53	96%	95%
K+3	0.57	0.53	95%	94%
K+4	0.57	0.71	95%	94%
K+5	0.91	0.79	94%	93%
K+6	0.87	0.91	94%	93%
K+7	0.75	1.08	94%	93%

**Passive House certification**

	Standard heat exchanger	Enthalpy heat exchanger
Air flow range	10-4000l/s	10-4000l/s
Heat recovery rate	nHR = 87%	nHR = 90%
Specific electric power	Pat spec = 0.24 W/m <sup>3</sup>	Pat spec = 0.22 W/m <sup>3</sup>
Humidity recovery	9x = 95%	9x = 95%



This information is displayed over 4 different tabs, “General”, “Pressure curve”, “Sound data” and “Consultants specification”. Clicking on the corresponding tab will display different information.

General
Pressure Curve
Sound Data
Consultants specification

## Zehnder ComfoAir Q 350

**General**

The Zehnder ComfoAir Q is the NEW generation of heat recovery ventilation units, with state of the art design and intelligent technology, regardless of whether you are working on a new build or an old building, with Zehnder comfortable ventilation you have an innovative, tried and tested complete system. It contains features such as its automatic modulating true summer by-pass, world class

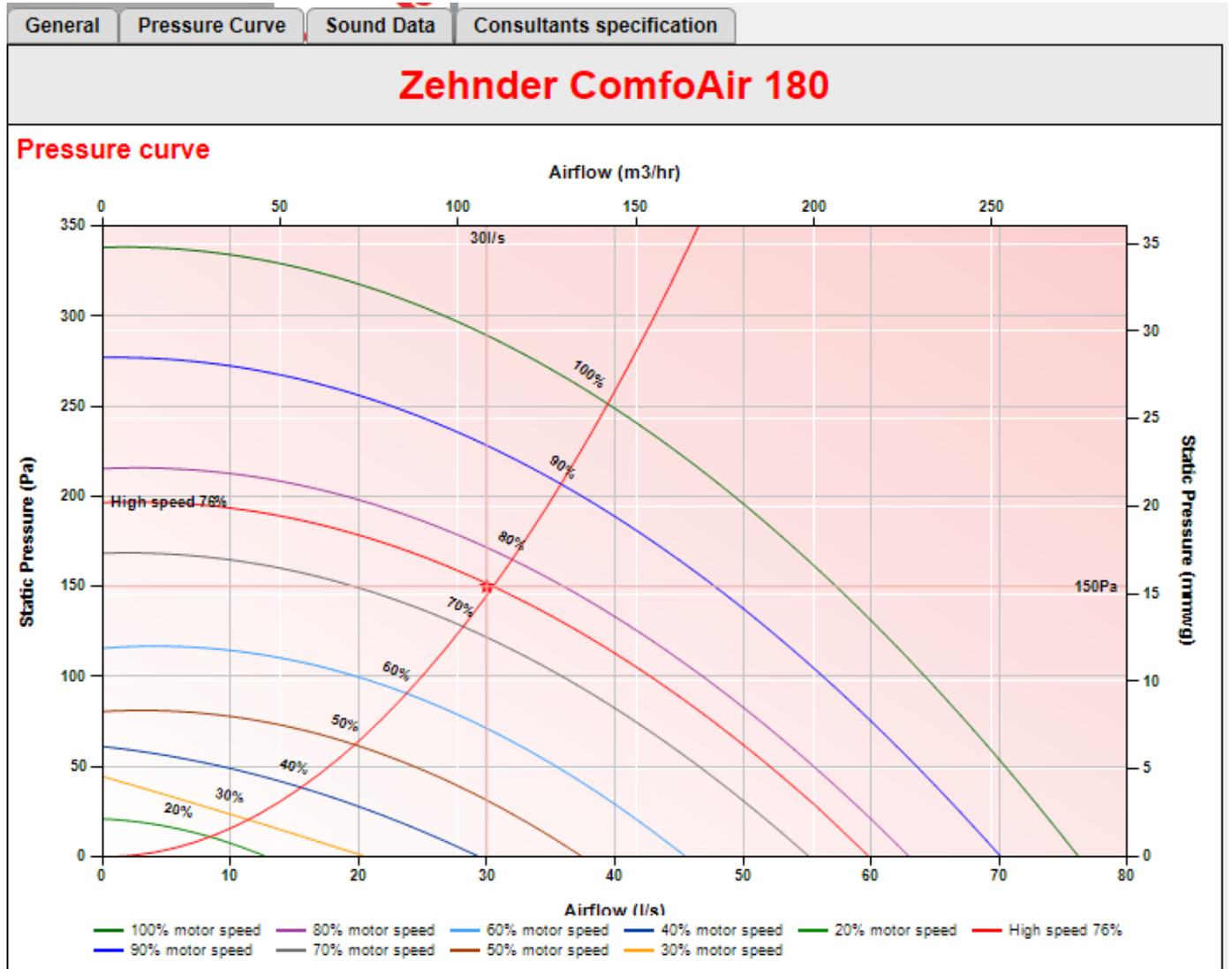
**SAP PCDB Test Results**

	SFP (W/l/s)		Efficiency (%)	
	2009	2012	2009	2012
K+1	-	0.80	-	96%
K+2	0.80	0.53	96%	95%
K+3	0.51	0.57	95%	94%

The General tab contains general information about the unit including key benefits, article numbers, technical specification, dimensions and design performance specific to the required flow rate and pressure drop as shown below.

Design performance	
Motor speed	29%
Specified static pressure	100 Pa
Actual airflow (Required airflow)	22.0 l/s ( 20 l/s ) 110%
Power consumption excluding pre-heater	20 W
Specific Fan Power	0.92 W/l/s
Casing dB(A) @ 3m	17 dB(A)

The **Pressure Curve** tab shows where on the unit's pressure curve the required duty is.



The **Sound Data** tab shows the unit's sound data in 20% increments for the units casing, supply and extract terminals in addition to the extrapolated test data for the required duty.

Finally the specification text for the unit can be found on the Consultants specification tab.

General	Pressure Curve	Sound Data	Consultants specification							
<b>Zehnder ComfoAir 180</b>										
<b>Sound data</b>										
Speed	Test area	Octave Band (Hz) Sound Power Level, dB								dB(A) @ 3m
		63	125	250	500	1000	2000	4000	8000	
20%	Casing	38.3	29.0	30.6	21.1	15.2	11.7	16.1	24.3	10.0
	Supply	63.1	48.1	38.4	27.0	26.8	13.8	14.3	24.0	
	Extract	61.5	45.0	34.1	21.9	19.3	9.1	13.4	23.9	
40%	Casing	39.9	33.4	36.4	31.2	24.0	16.4	16.3	24.4	15.2
	Supply	67.2	57.4	49.2	39.5	38.3	29.2	23.1	24.6	
	Extract	63.1	49.7	42.1	33.0	29.8	16.3	17.5	24.3	
60%	Casing	43.9	41.0	45.0	36.1	31.8	22.6	17.7	24.4	21.9
	Supply	71.4	65.3	58.2	49.8	47.6	41.4	32.2	28.5	
	Extract	64.8	54.9	49.9	43.0	39.0	24.2	22.1	24.7	
Low speed 76%	Casing	46.8	45.4	49.7	41.1	36.6	27.0	20.7	25.3	26.3
	Supply	74.7	70.4	63.8	56.1	53.1	48.3	39.4	33.9	
	Extract	66.1	58.8	54.9	48.8	44.0	30.2	25.5	25.0	
80%	Casing	46.2	47.0	51.0	43.7	37.7	29.2	22.6	25.2	28.2
	Supply	75.8	71.7	65.2	57.7	54.6	50.0	41.6	36.0	
	Extract	66.4	60.0	56.2	50.2	45.1	31.9	26.5	25.0	
100%	Casing	52.0	51.4	55.5	47.6	41.8	33.8	27.7	27.7	32.5
	Supply	79.7	76.0	69.6	62.4	58.5	54.3	50.1	45.9	
	Extract	68.0	64.7	61.1	54.6	48.4	39.2	30.6	25.4	

Casing tested according to ISO 3741:2010. Supply and Extract tested according to ISO 5135:1997 showing induct sound power level corrected for end duct reflection according EN13053:2006. Casing dB(A) @ 3m given as hemispherical. Bespoke figures extrapolated from these tests.

## Creating a datasheet

If you would like to create a bespoke PDF datasheet for the unit containing all of the information in these tabs and more then you can do this using one of 3 options.

Estimated Results - Requested Pressure 100Pa, Airflow 20l/s											
Click on a model to display the full product specification											
Model		Description	Motor Speed	Pressure Pa	Flow l/s	Power (Watts)	SFP W/l/s ▲	dB(A) @ 3m	Airflow vs Request	Datasheet	Zip files
<a href="#">CAQ600</a>		Zehnder ComfoAir Q600	29%	100	22.0	20	0.92	17	110%	<a href="#">Open PDF</a> <a href="#">Save PDF</a> <a href="#">eMail PDF</a>	<a href="#">DWG file</a> <a href="#">Guides</a>

### Open PDF

Click Open PDF and complete the details, click the Continue button and the PDF will open up and then can be saved.

### Save PDF

Click Save PDF and complete the details, click the Continue button and the PDF can then be saved.

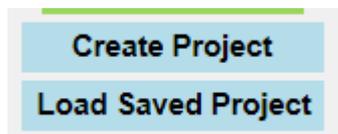
## eMail PDF

Click eMail PDF and complete the details, click the Continue button and the PDF will be emailed to you.

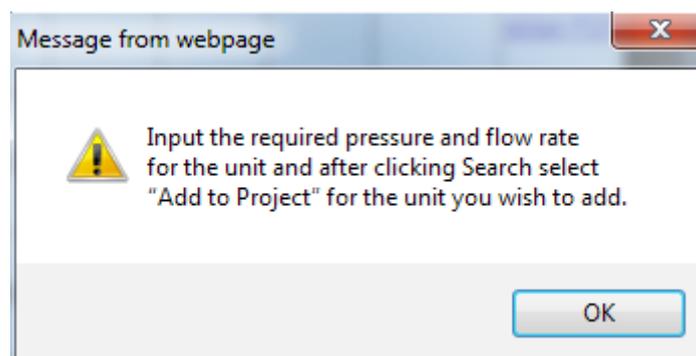
For an overview of all the MVHR products or MEV products, simply click the “overview of all MEV Products” or “Overview of all MVHR products” button to display the table.

## Creating a project

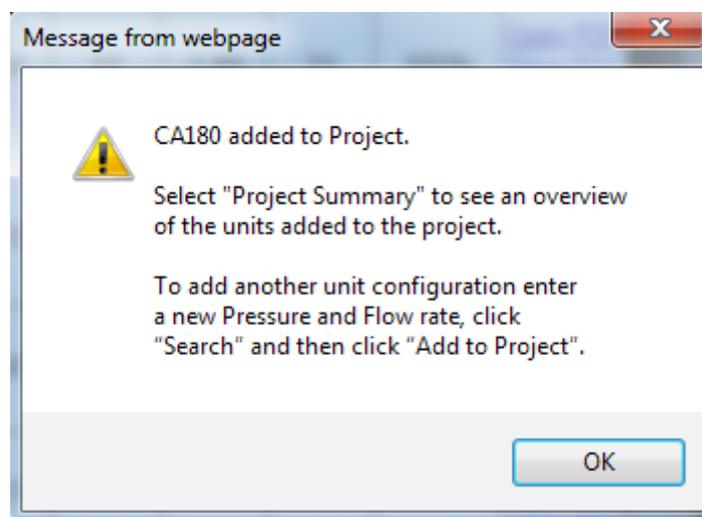
If you would like to combine multiple unit searches into a single project and PDF datasheet then you can create a project by clicking the “Create Project” button.



Once you have input the Pressure and Flow rate of the system you're searching for, press the Create Project button.

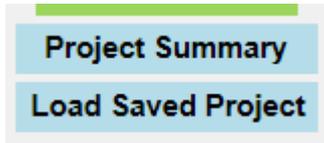


A new option below the model number will now be shown stating “Add to Project”. By clicking on the text 'add to Project' located below the corresponding unit you would like to add, that unit and its configuration will be added to the Project Summary.



You can continue to process new searches by inputting different Pressure and Flow rates and then clicking Search and adding as many units from the Heat Recovery or Mechanical Extract Product Range you wish.

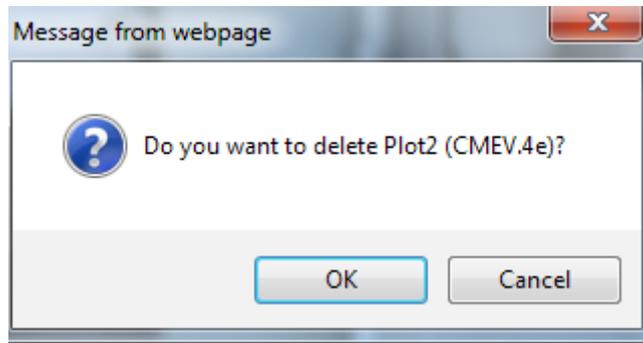
When you have completed all of your searches you can click on “Project Summary” to display all of the units you have added. You can assign Plot Type names by inputting the name for each one under “Plot Type”.



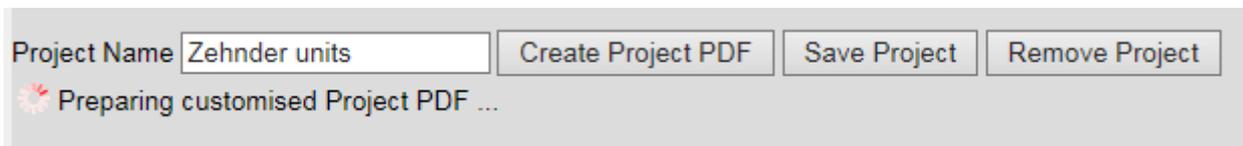
	Plot Type	Range	Model	Description	Pressure High	Pressure Low	Pressure Units	Flow Rate High	Flow Rate Low	Flow Rate Units	Mounting
Delete	Plot1	Heat Recovery	CA180	Zehnder ComfoAir 180	100		Pa	20		l/s	Any
Delete	Plot2	Mechanical Extract	CMEV.4e	Centair MEV.4e	100		Pa	20		l/s	Any
Delete	Plot3	Mechanical Extract	CMEV.4eHT	Centair MEV.4eHT	150		Pa	30		l/s	Any
Delete	Plot4	Heat Recovery	HR155WM	Vireo HR155 for wall or cupboard mounting with SMART™ technology	150		Pa	30		l/s	Any
Delete	Plot5	Heat Recovery	CAQ350	Zehnder ComfoAir Q350	150		Pa	30		l/s	Any

Project Name

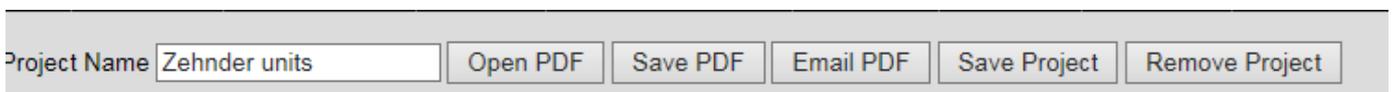
You can also delete any units added in error by pressing “Delete” next to the unit you wish to remove.



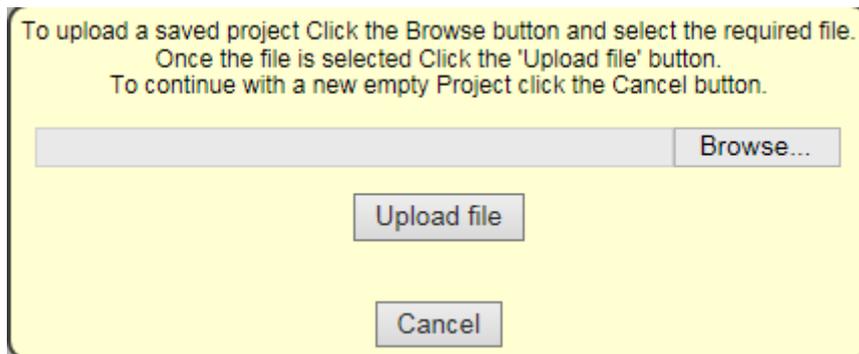
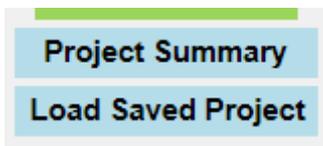
To create the project datasheet, simply enter the Project Name and click on “Create Project PDF”  
Preparing customised Project PDF will be displayed whilst the PDF is being created.



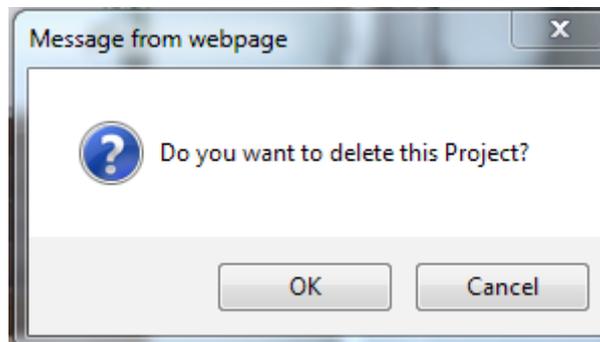
When complete, the option buttons will change to give you the option to Open / Save or Email the PDF.



If you want to save the project for later you can download the XML file by clicking “Save Project”. You can then load it by pressing “Load Saved Project”, browsing for the file and clicking the “upload file” button.



If you wish to remove the project and start again you can simple click “Remove Project”



If you're returning to the site having already started a project or having not removed the project then the buttons "New Project", "Continue Project" and "Load Saved Project" will appear. To create a new project simply click "New Project" however if you wish to continue with your existing project then click "Continue Project".



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always the  
best climate