WolterVA
User Manual



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1 General Hints

1.1 Registration

In order to use our "WolterVA" program, you must first log in to our

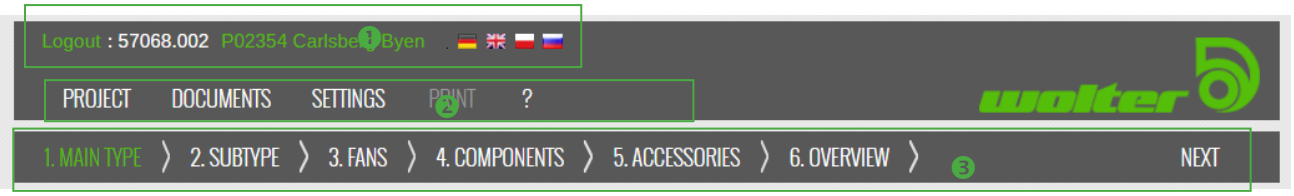
Registration page **https://select.wolterfans.de/configurator/Registration.aspx**

You will receive an e-mail with your personal access data.

1.2 System Requirements Browser

- WolterVA is optimized for Microsoft Edge and Google Chrome from 2023 onwards. Other modern browsers such as Firefox, Opera and Safari can also be used.
- Activate Javascript in the browser.
- If you want to create offers, disable the pop-up blocker and add our page to the intranet zone.

1.3 General Page Structure / Navigation



❹ AEQ/ADQ AER/ADR AEQ/ADQ EC AXGxxr AXVxxr BXV DB DKH DK/DKS DKN EC DKN/DKNS DRM EA EB EK/EKS EK/EKS EC EKN EC EKN/EKNS ERM GAB/HRZ GAB/TRZ GAES EC HN HRE HRES HRZ HRZ-P HRZS KAF KAT KB/HRZ KB/TRZ KBPF RFE/RF RH RH Ex RK RK EC RS RS EC RV RV EC RV Ex RVH RVS RVS EC RVS Ex RXV SDB SDB EC TN TRE TRZ ZGK ZGT

❶ User Menu

Logout	Logs the user out of the system
57068.002	User name
P1234 Carlsberg Byen	Link to the active project
Flags	Language selection

❷ Main Menu

Project (chapter 4)	
New	Creates a new project.
New position	Starts the configurator from anew.

Open / Delete	Opens / deletes a project.
Save extern	Saves a project to your computer as an XML file.
Import	Adds a project saved in XML format to a project.
Refresh discounts	If discount rates have been changed, this function applies the new discount rates to the project.
Refresh prices	If prices have been changed, this function applies the new prices to the project.

Documents	Erp directives, certificates of conformity for smoke extraction operation, data protection

Settings	Search- and other options (chapter 2)

Print	
Technical data sheet	Creates a technical data sheet.
Create quotation	Creates a quote for the current configuration or project in RTF format.

?	About WolterVA, help and manual

❸ **Navigation Menu / Progress Bar**

The navigation menu guides you through the steps of your configuration.

❹ **Quick Launch Bar**

At the bottom of the browser window is the Quick Launch Bar. Use the quick start links to select a fan type and you will be taken directly to the second configuration step.

1.4 Customer Sessions

During the login process at WolterVA, after entering the user and the correct password, a so-called session ID will be created for you. This is used to temporarily store your entries. User data and configuration data are stored for a maximum of 30 minutes when being idle. By clicking on the "Logout" button in the submenu, this session ID becomes invalid. To save configurations permanently, use **projects** - details in chapters 4 and 5.

If you are inactive on our server for more than 30 minutes, you will be redirected to the start page, where you can start a new configuration.

2 Fan Selection Step by Step

2.1 Selection of the Fan Design

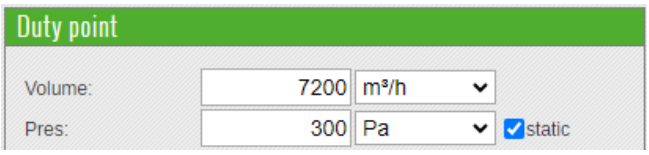
First, select the desired fan design ❶ in the upper part. At the bottom of the display you can then choose between the fan types ❷, which are of this type of construction. Confirm your choice by clicking on the ">>Next" button ❸ or click on the corresponding image ❹.



2.2 Search Criteria / Input Data

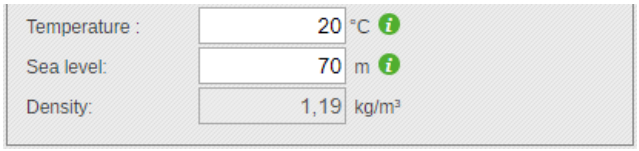
2.2.1 Duty Point

The operating point is specified by entering the volume flow, pressure and selecting the corresponding units. The output is in m³/h. Selecting the "static" checkbox means that this should only be the static portion of the pressure generated by the fan.



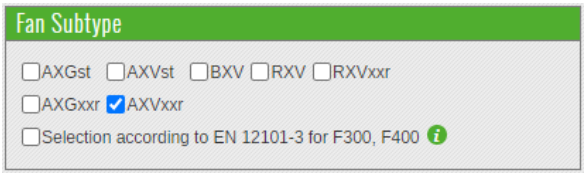
2.2.2 Air Density

The density is calculated as a function of temperature and sea level. The temperature field shows the ambient temperature, NOT the engine temperature! For operating temperatures below -20 ºC and above 40 ºC, please contact Wolter's technical staff.



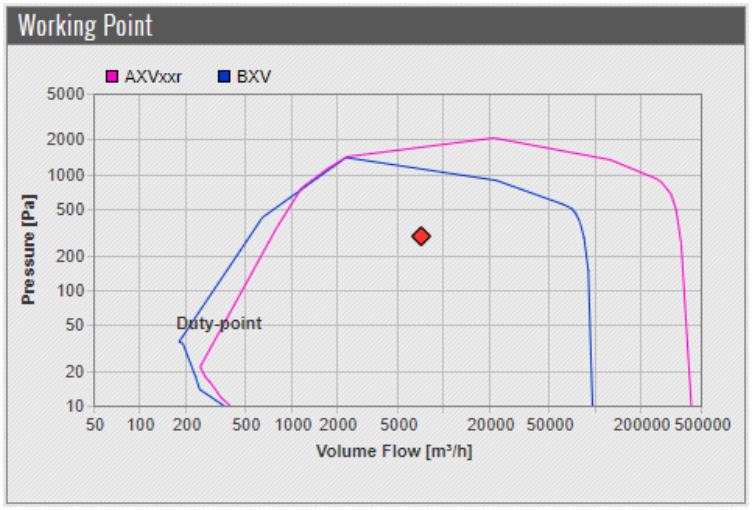
2.2.3 Fan Subtype

Here you can select one or more fan types in which you want to search for a suitable fan. For axial fans, you can also select whether the search should be carried out in accordance with EN 12101-3 for smoke extract fans for temperature classes F300 and F400.



2.2.4 Working Point

Volume flow-pressure diagram with operating point entered. When selecting a fan type, a line appears here that represents the approximate limits of the volume-pressure range covered by this fan type. If the operating point is outside this range, no suitable fan will be found. (depending on the settings in chapter 3.1).



2.2.5 Start the search for a fan

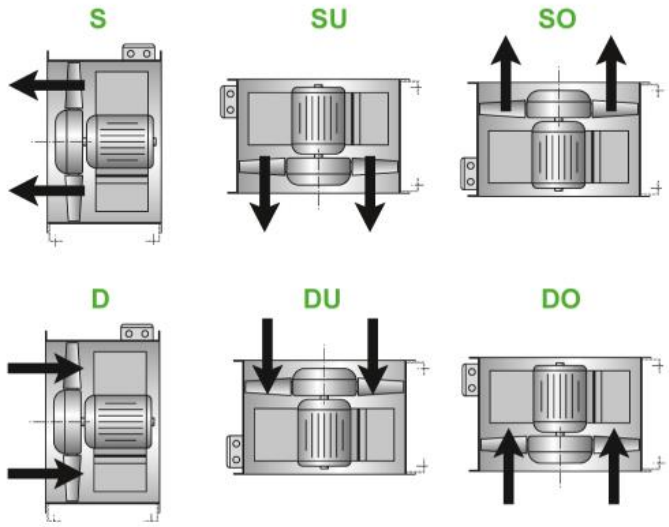
Start your search by clicking on the "Fans" ❶ button or by clicking on "Next" ❷, after you have made all your entries on the "Subtype" page.



2.2.6 Suchkriterien Axialventilatoren

Efficiency class	Erp-conform --: most favourable motor IE1: motor with at least efficiency class IE1 IE2: motor with at least efficiency class IE2 IE3: motor with at least efficiency class IE3
Motor types	Standard (40°C) Fire gas (300°C, 400°C) div. explosion proof Types Frequency: 50 Hz or 60 Hz Voltage: 400 V, at 60 Hz additionally 380 V Number of poles: 2, 4, 6, 8 For electr. speed control: In some cases, lower efficiencies are allowed by the Erp if a fan is operated with an electr. speed control.
Housing types	LH: Long shaft housing SH: Short shaft housing The enclosure with inspection door can be selected via the accessory part "inspection door" accessories page.
Form of Running	S, SU, SO, D, DU, DO: S stands for "sucking over the engine", D stands for "pushing over the engine". U stands for "blowing down", O stands for "blowing up". Without second letter stands for "blowing horizontally".

Form of Running:



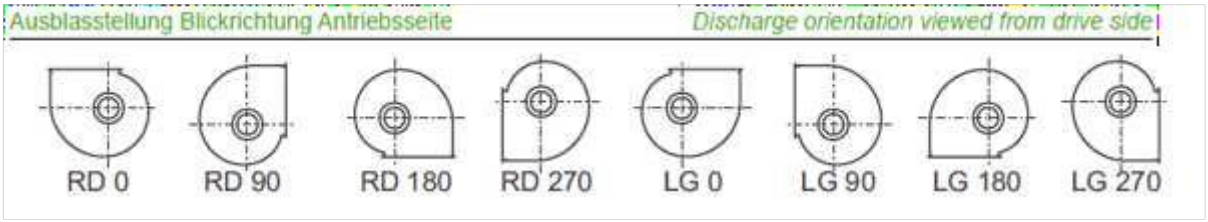
In most cases, installation type S should be selected. The installation type has no significance for AXG and RXV.

2.2.7 Search Criteria Centrifugal Fans With Standard Motor (HN/TN)

Effiziency class	Erp-conform --: most favourable motor IE1: motor with at least efficiency class IE1 IE2: motor with at least efficiency class IE2 IE3: motor with at least efficiency class IE3
Rotating direction	RD: clockwise LG: anticlockwise
Discharge orientation	0°, 90°, 180°, 270°
Casing types	F: Foot version with flange motor Q: Rectangular version

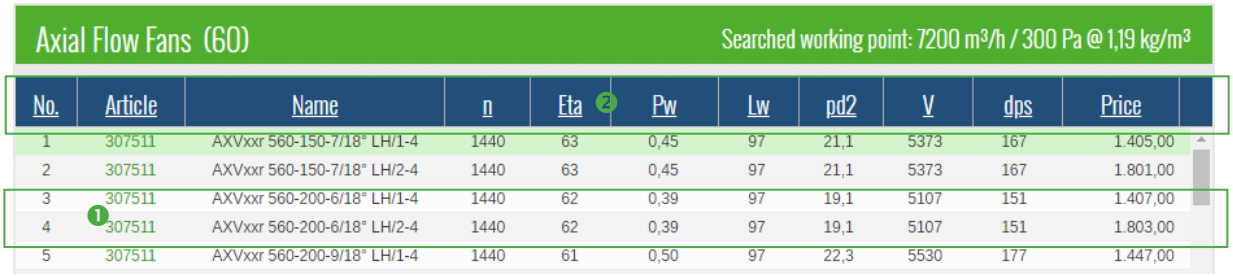
Motor types	Standard (40°C) div. explosion-proof types Frequency: 50 Hz or 60 Hz Voltage: 400 V, at 60 Hz additionally 380 V Number of poles: is calculated automatically for this type. For electr. speed control: In some cases, lower efficiencies are allowed by the Erp if a fan is operated with an electr. speed control.

The discharge position and the direction of impeller rotation are defined from the drive side.



2.3 Fan Selection

After the search, a list with the types found is displayed. You can adjust the number or accuracy of the operating point in the settings (chapter 3.1). Select a fan type by marking the item number in the hit list ❶. Confirm your selection with the "Next" button. Sort the list by clicking a column head ❷.

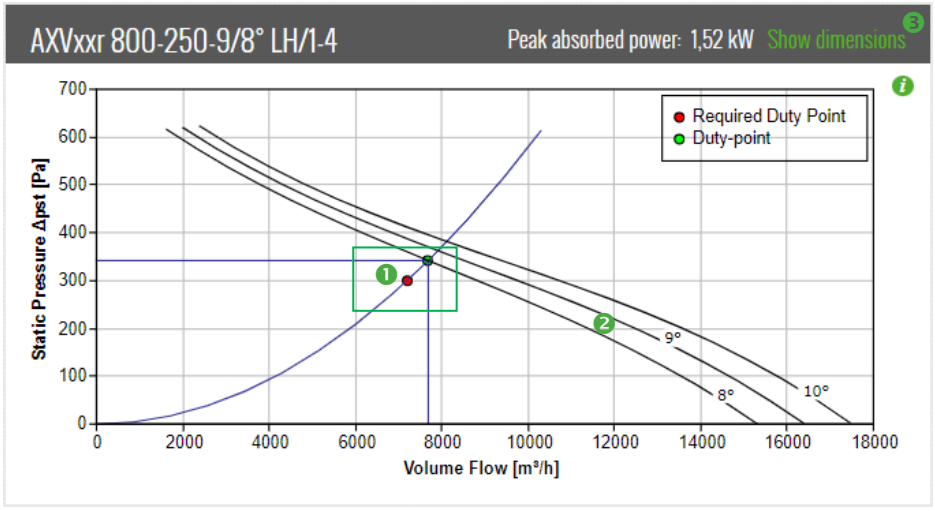


No.	Article	Name	n	Eta	Pw	Lw	pd2	V	dps	Price
1	307511	AXVxxr 560-150-7/18° LH/1-4	1440	63	0,45	97	21,1	5373	167	1.405,00
2	307511	AXVxxr 560-150-7/18° LH/2-4	1440	63	0,45	97	21,1	5373	167	1.801,00
3	307511	AXVxxr 560-200-6/18° LH/1-4	1440	62	0,39	97	19,1	5107	151	1.407,00
4	307511	AXVxxr 560-200-6/18° LH/2-4	1440	62	0,39	97	19,1	5107	151	1.803,00
5	307511	AXVxxr 560-200-9/18° LH/1-4	1440	61	0,50	97	22,3	5530	177	1.447,00

2.3.1 Abbreviations and Units of the Technical Data on the Fan Page

n	Fan speed [1/min]
Eta	Efficiency of the fan [%]
Pw	Fan shaft power [kW]
L_W	Total sound power level [dB]
L_{WA} [dB(A)]	A-weighted sound power level
L_{WA2} [dB(A)]	Sound power level to the surroundings
L_{WA3} [dB(A)]	Intake duct sound power level
L_{WA4} [dB(A)]	Outlet duct sound power level
L_{WA5} [dB(A)]	Free suction sound power level
L_{WA6} [dB(A)]	Free blowing sound power level
pd2	Dynamic pressure at the fan outlet [Pa]
V	Volume flow [m³/h]
dps	Static pressure difference [Pa]
Price	Price in Euro without discount, without VAT. Depending on the type, the price for the engine will be added.

2.3.2 Characteristic Curve Diagram



In the graph you can see the target operating point in red and the current operating point in green ❶. The system characteristic curve is shown in blue and the fan characteristic curves in black.

Click on a point in the graphic on the currently selected characteristic curve ❷, the current operating point will change. The data in the table is immediately recalculated for the selected fan.

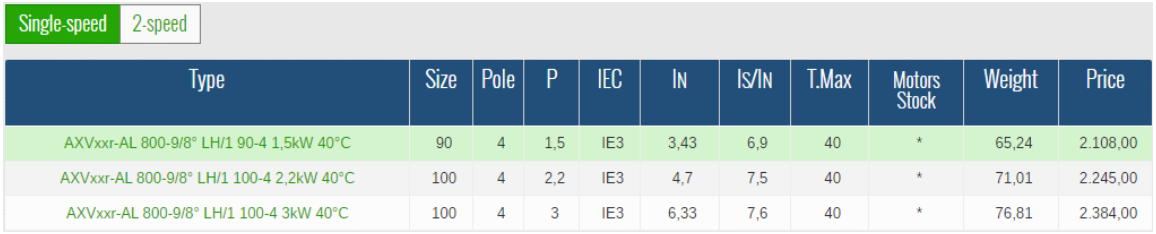
Click on "Show dimensions" ❸ to see a dimensioned picture of the fan.

2.4 Components

For the fan types

- Axial fans
- Centrifugal fans with standard motor
- Duct fans with standard motor
- Belt driven centrifugal fans
- Various other types

the motor can usually be selected variably. Use the buttons "Single-speed / 2-speed" above the motor table to determine your motor type and then select the motor in the motor table by clicking on its designation. Then click on "Next".



Type	Size	Pole	P	IEC	IN	Is/IN	T.Max	Motors Stock	Weight	Price
AXVxxr-AL 800-9/8° LH/1 90-4 1,5kW 40°C	90	4	1,5	IE3	3,43	6,9	40	*	65,24	2.108,00
AXVxxr-AL 800-9/8° LH/1 100-4 2,2kW 40°C	100	4	2,2	IE3	4,7	7,5	40	*	71,01	2.245,00
AXVxxr-AL 800-9/8° LH/1 100-4 3kW 40°C	100	4	3	IE3	6,33	7,6	40	*	76,81	2.384,00

2.4.1 Abbreviations and Units of the Technical Data on the Component Page

Size	Size [mm]
Pole	Number of poles
P	Rated power [kW]
I_N	Rated current [A]
I_S/I_N	Ratio of starting current to rated current
T.Max	Maximum permissible temperature [°C] (ambient)
U	Voltage [V]
F	Frequency [Hz]
Phase	1 ~ or 3 ~ phased
Motors stock	Number of motors of this type in stock
Weight	Weight [kg]
Price	Price of the fan incl. motor in Euro, without discount, without VAT.

2.5 Accessories and Number of Fans

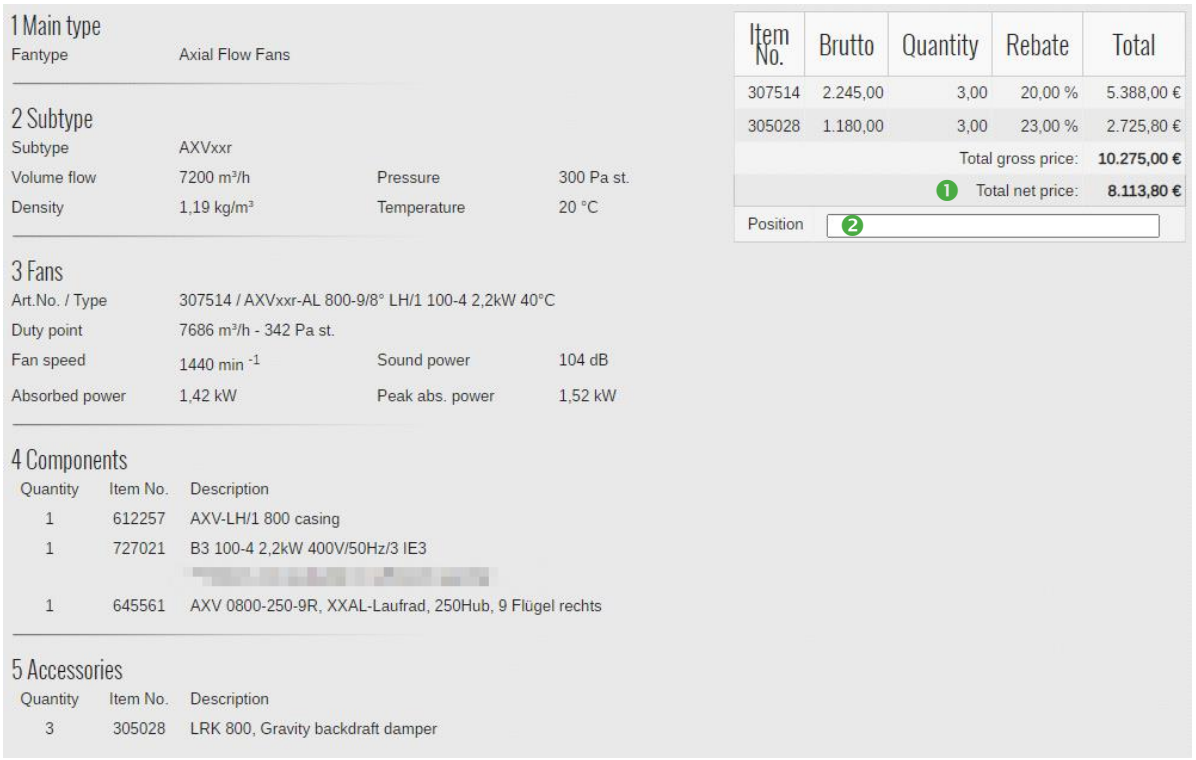
Here you can determine the number of fans of this type ❶ as well as the accessories. Only accessories that match the fan appear in the list. The number of items can be adjusted via the + and - fields ❷ or directly in the "Quantity" field ❸.

The accessory item quantities refer to the total number of fans! Example: For 2 silenced fans you need 2 silencer accessories.



2.6 Overview

At the end of the configuration you will receive an overview with the selected fan and accessories. Predefined discounts are included in the net total price ❶. Here you can also assign an item designation ❷ which then will be used in the project.



1 Main type

Fantype	Axial Flow Fans

2 Subtype

Subtype	AXVxxr		
Volume flow	7200 m³/h	Pressure	300 Pa st.
Density	1,19 kg/m³	Temperature	20 °C

3 Fans

Art.No. / Type	307514 / AXVxxr-AL 800-9/8° LH/1 100-4 2,2kW 40°C		
Duty point	7686 m³/h - 342 Pa st.		
Fan speed	1440 min -1	Sound power	104 dB
Absorbed power	1,42 kW	Peak abs. power	1,52 kW

4 Components

Quantity	Item No.	Description
1	612257	AXV-LH/1 800 casing
1	727021	B3 100-4 2,2kW 400V/50Hz/3 IE3
1	645561	AXV 0800-250-9R, XXAL-Laufrad, 250Hub, 9 Flügel rechts

5 Accessories

Quantity	Item No.	Description
3	305028	LRK 800, Gravity backdraft damper

Item No.	Brutto	Quantity	Rebate	Total
307514	2.245,00	3,00	20,00 %	5.388,00 €
305028	1.180,00	3,00	23,00 %	2.725,80 €
			Total gross price:	10.275,00 €
		❶	Total net price:	8.113,80 €

Position ❷

2.6.1 Print

Technical data sheet	This option exports the technical data of your current selection into an HTML document.
Create quotation	This option exports the selected contents to a document in RTF format. You can select different languages. You can also get special templates on request.

2.6.2. To Project

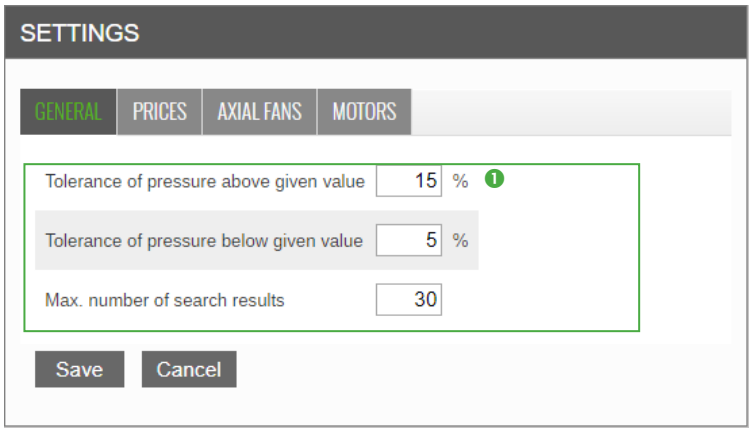
Pressing "To Project" ❶ adds the current configuration to the current project. Further notes on the project can be found in chapters 4 and 5.



3 Settings

3.1 General

In the settings, the number of fans / alternatives found can be limited ❶. By default, a maximum of 20 fan types are output. You can define the accuracy of the results via the "Pressure deviation upper limit or lower limit". The deviation refers to your selected pressure in % static or total.

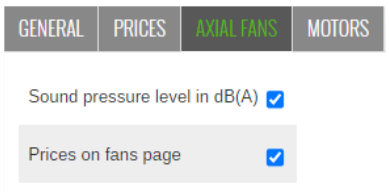


3.2 Prices

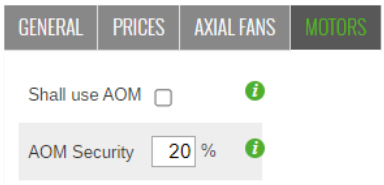
At some times you can select which price list to use.

3.3 Special Settings for Axial Fans

Set how the sound power is to be calculated and whether prices for axials are to be shown on the fan side.



Under **Motors**, you define whether AOM should be used and how high the safety factor should be.



3.3.1 Shall use AOM

If ticked, AOM (Air Over Motor) values for motors are considered. This means that in certain cases, if the speed of the air over the motor is high enough, the maximum power of the motor is increased.

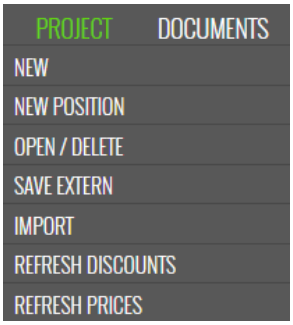
- AOM values are only used for axial fans and only if the installation type is S, SO or SU.
- AOM values are only used for 300°C or 400°C engines.
- If a motor has been selected for its AOM values, you must ensure that there is always sufficient air speed above the motor. This velocity is shown on the technical data sheet at vminAom.

3.3.2 AOM Security

There is some inaccuracy in calculating the speed of the air above the engine. To be sure, the calculated speed is reduced by a factor of as many percent as you specify here

4 Manage Projects

Create a project to be able to combine several configurations into one offer and store it. The "Project" menu provides you with various functions for this purpose.



To create a new project

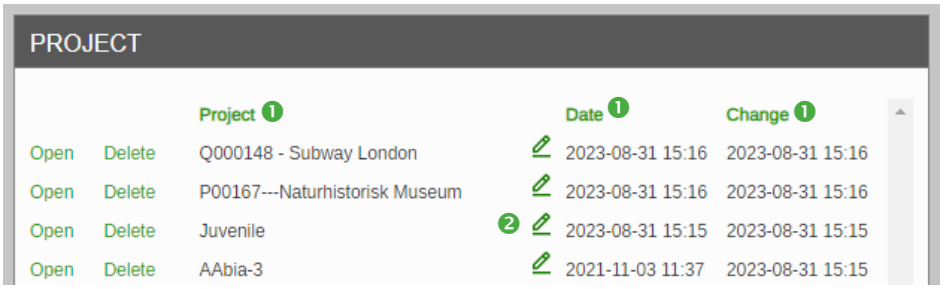
Go to "NEW" in the project menu and enter a project name. The name should not contain any special characters. Characters such as "_" (underscore) , "-" (hyphen) as well as numbers are allowed as long as they are not in the first position. Minimum length for project names: 4



To open / delete / rename a project

To open an existing project, go to "OPEN / DELETE" in the project menu. In the following dialogue, click on "Open" for the desired project. You can switch back and forth between different projects as you wish.

To delete a project, click on "OPEN / DELETE" in the project menu and in the following dialogue on "Delete" at the project to be deleted. The project is permanently deleted and can no longer be restored.



Sort the project list forwards or backwards by clicking on one of the column headers ❶.
To rename a project, click on the edit button ❷ in the project dialogue.

To add an item to the project

When you are on the project page, press "New position" to create a new configuration.

When the configuration is complete, it can be added to the project. Configure a fan and add it to the current project via the "ADD TO PROJECT" button on the overview page. The position is stored in our database and can be called up again at any time.

Each user is allocated a certain amount of memory. The current utilisation of your storage space is displayed on the project page. Free employees and representatives have unlimited capacity. If you belong to this group and need more storage space for quoting, send an email with your customer number to our technical support **support@wolter.eu.**

Wolter GmbH reserves the right to delete data after a period of time has expired and accepts no liability whatsoever for stored data.

To save a project on your computer

With "SAVE EXTERNAL" you can save a project with all project positions into an XML file on your PC.

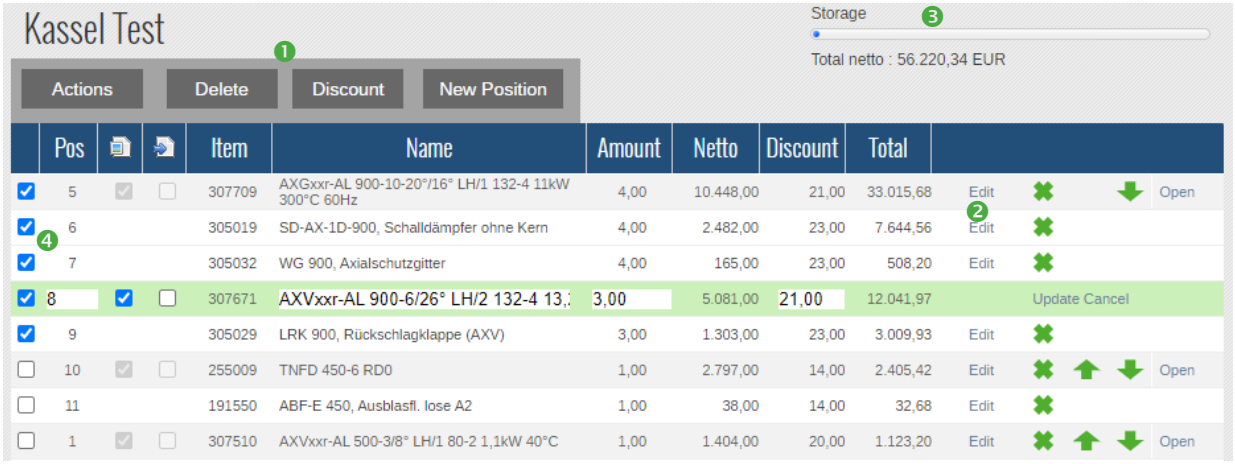
If you have exceeded the storage space in our database, we offer you another possibility to save your projects with this export function.

To load a project from an XML file into our system

Projects that you have saved as XML files can be loaded back into the system. (Provided you have enough free memory.) Select "IMPORT" in the project menu, select the XML file and start the import with the Upload button. This adds all the project items in the XML file to the current project.

5 Project Overview

The bar ❸ abov the total price shows your free or used memory in our database. The total price is calculated from the active project items. Active project items are those that are ticked in the leftmost column ❹. If ⚠ is displayed instead of a price, either no project position is active or there are positions in the project whose price you can get on request.



5.1 Operating Elements of the Project Overview

5.1.1 Actions Menu

Above the project table you will find the actions menu ❶. Actions refer to all active project positions.

Actions	
Technical data sheet	Activates / Deactivates the technical data sheet in the printed offer.
As subposition	Accessories are combined into one position in the printed offer.
Numbering	Renumbers entire project.
Translate	Translates the item description in the project items.
Delete	CAUTION. Deletes all ticked items of the current page from the project.
Discount	Change discount rate for active positions in the project.
New Position	Go to start to configure a new position.

5.1.2 Edit Project Item

Use the "Edit" function ❷ to activate the editing mode of an item. In this mode, the project position can be edited directly. Confirm your changes with "Update".

Position name	Change the name of the project item.
Technical data sheet	Technical data sheet in the offer is printed.
As subposition	Accessories are combined into one position in the printed offer.
Product name	Change the item name.
Amount	Change the quantity. Note chapter 2.5.
Discount	Change the discount rate.

5.1.3 Delete, move, open a position

✖	Delete the project item.
⬆ ⬇	Moves the project position up or down.
Open	Opens this configuration on the overview page.

5.1.4 Activate, Deactivate and Change Pages

At the foot of the project items you will find

- An information ❶ about which project page you are currently on.
- Buttons ❷ to change the current page.
- Buttons to activate all positions on the page ❸, deactivate all positions on the page ❹, activate all positions in the project ❺ or deactivate all positions in the project ❻.

