

# VALLOX 125 MV

A novel solution for the energy refurbishment of ventilation systems

Vallox 125 MV  
replaces dozens of old  
ventilation unit models



**VALLOX**  
HOME *of* FRESH AIR

# AN ENERGY-EFFICIENT AND MODERN REFURBISHMENT SOLUTION

# MyVALLOX

## 125 MV

The Vallox 125 MV ventilation unit will revolutionise ventilation refurbishment. Its different models can quickly and easily replace dozens of old ventilation unit models to achieve energy-efficient ventilation with modern features.

The new Vallox 125 MV ventilation unit comes in several models, with the duct outlet being the only difference between them. The duct outlets of the models are located similarly as in the old ventilation unit models or they require only minor changes to the ducts. This means an easier and faster ventilation renovation, which also saves money.

For instance, the new Vallox 125 MV ventilation unit can replace MUH Ilmava, Vallox Digit SE, Ilto 440 and dozens of other old ventilation units.

The letter in the name of the unit indicates the model, that is, the order and locations of the duct outlets. See the tables to find a suitable model to replace the old unit. For instance, the duct outlets of model 125A are located similarly as those of the MUH Ilmava 100, MUH Ilmava 120 and Vallox 121 SE/MC units. Therefore, they can be replaced with Vallox 125A MV without any changes to the location of the ducts.

### TECHNICAL SPECIFICATIONS

<b>Product title</b>	Vallox 125 MV R Vallox 125 MV L	<b>Indicative maximum floor area of the apartment**</b>	180 m <sup>2</sup>
<b>Air volumes</b> Supply air Extract air	111 dm <sup>3</sup> /s, 100 Pa 127 dm <sup>3</sup> /s, 100 Pa	<b>Fans</b> Supply air Extract air	0.165 kW 1.35 A EC 0.165 kW 1.35 A EC
<b>Post-heating</b>	Electrical resistor, 900 W	<b>Electrical connection</b>	230 V, 50 Hz 9.3 A power plug
<b>Pre-heating</b>	–	<b>Enclosure protection class</b>	IP 34
<b>Additional heating</b>	Electrical resistor, 900 W	<b>Heat recovery bypass</b>	Automatic
<b>Filters</b> Supply air Extract air	ISO Coarse > 75% + ISO ePM <sub>1</sub> ≥ 50% ISO Coarse > 75%		
<b>Specific energy consumption (SEC)</b> in a cold climate in a temperate climate	A+ A	<b>Operating efficiencies*</b> Annual efficiency Supply air efficiency Specific Fan Power (SFP)	75% 76% 1.52 kW/m <sup>3</sup> /s (77 dm <sup>3</sup> /s)
<b>Dimensions (w x h x d)</b>	598 x 525 x 601 mm	<b>Weight</b>	66 kg

\*Working point defined in the Ecodesign Directive (2009/125/EC), Southern Finland, Helsinki-Vantaa TRY year 2020.

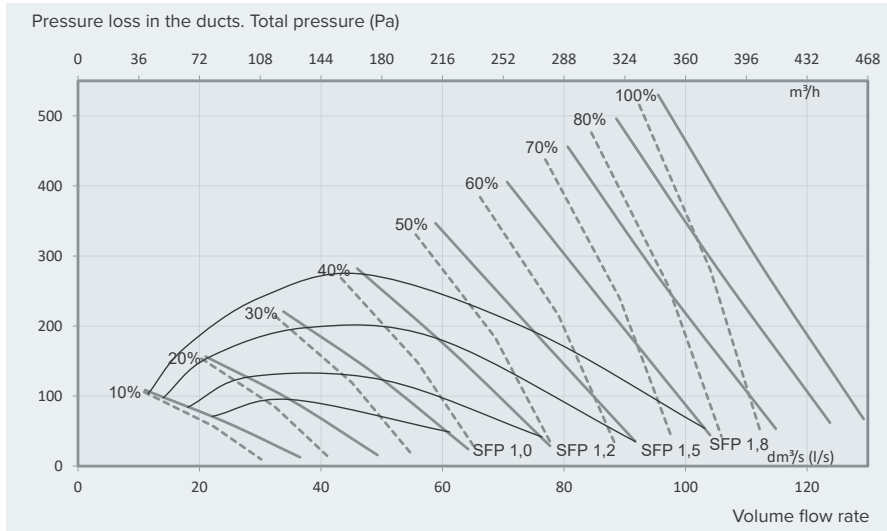
\*\*The area provided is indicative. The dimensioning must be based on a ventilation plan designed by an experienced professional.

Watch the video of the installation of the Vallox 125 MV ventilation unit.

<https://www.vallox.com/en/vallox-125-mv/>



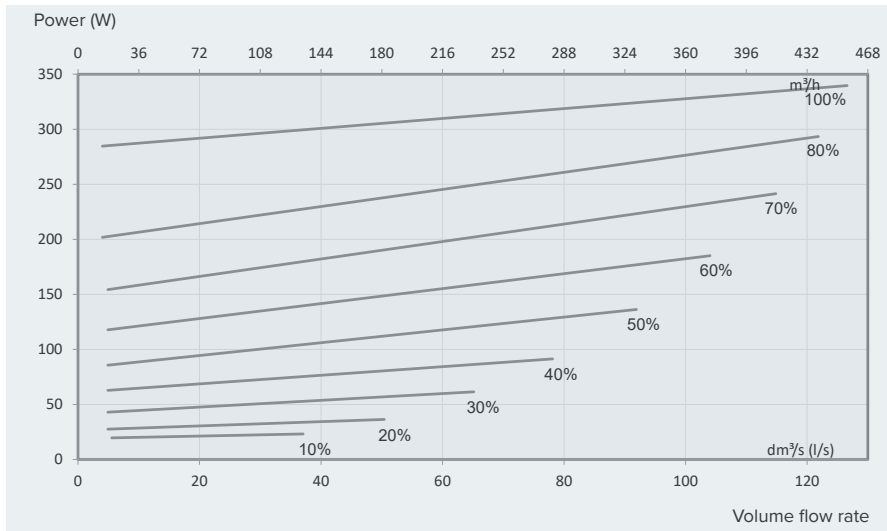
## The fan's supply and extract air volumes and specific electricity consumption



$$SFP = \frac{\text{Input power (total) (W)}}{\text{Air flow (max) (dm}^3\text{/s)}}$$

SFP rate (Specific Fan Power)  
recommended value <1.8 (kW m<sup>3</sup>/s)

## Input power of the fan

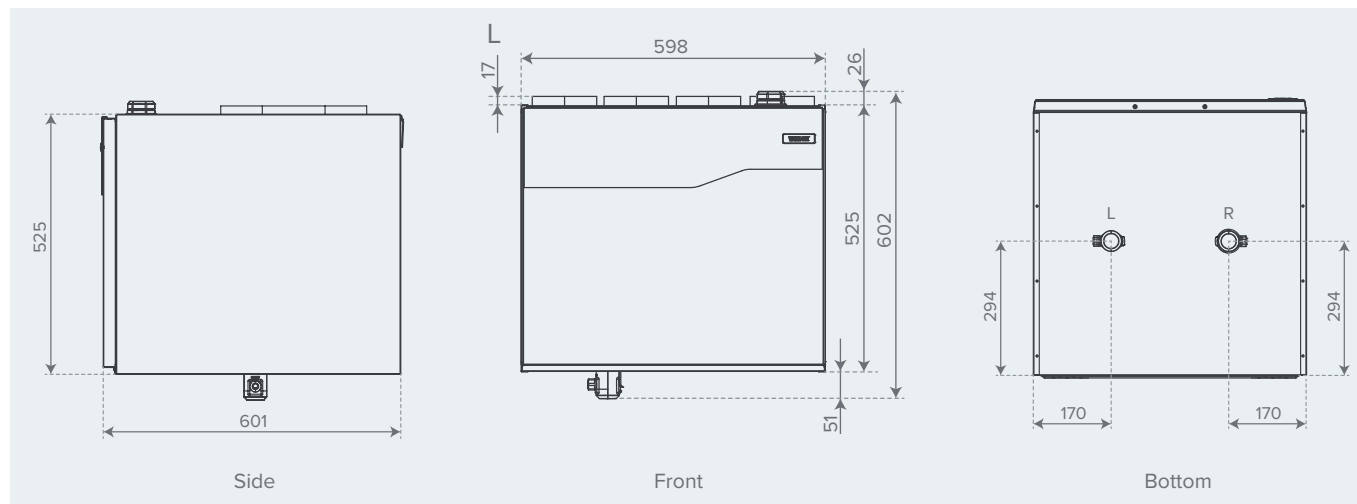


## SOUND VALUES

Adjustment position (%)		Sound power level in the supply air duct (one duct) by octave band L <sub>w</sub> , dB									Sound power level in the extract air duct (one duct) by octave band L <sub>w</sub> , dB								
		Adjustment position									Adjustment position								
		10	20	30	40	50	60	70	80	100	10	20	30	40	50	60	70	80	100
Medium frequency of the octave band Hz	63	61	65	68	73	73	79	80	81	84	56	61	66	69	74	78	79	81	82
	125	57	61	64	65	68	71	72	74	81	48	53	58	62	64	67	69	72	78
	250	57	64	71	65	67	69	71	73	74	46	50	55	58	61	64	66	67	68
	500	43	48	58	63	60	62	64	70	76	30	36	43	46	49	56	52	54	56
	1000	43	49	54	58	61	64	67	67	70	24	30	35	39	42	45	47	48	50
	2000	33	41	47	51	54	57	59	62	64	16	21	27	32	35	39	41	43	44
	4000	23	32	40	45	49	53	55	57	59	16	17	20	24	28	31	34	36	37
	8000	21	24	32	38	43	47	50	53	55	20	20	20	21	23	25	28	30	32
L <sub>w</sub> , dB		64	69	73	75	76	81	81	82	87	57	62	67	70	75	78	80	82	84
L <sub>WA</sub> , dB(A)		51	57	64	64	65	68	70	72	76	40	44	49	53	56	59	60	62	65
Sound pressure level coming through the envelope of the unit in the room in which it is installed (10m <sup>2</sup> sound absorption)																			
Adjustment position																			
Adjustment position (%)		10	20	30	40	50	60	70	80	100									
L <sub>PA</sub> , dB (A)		26	30	36	41	43	44	45	47	47									

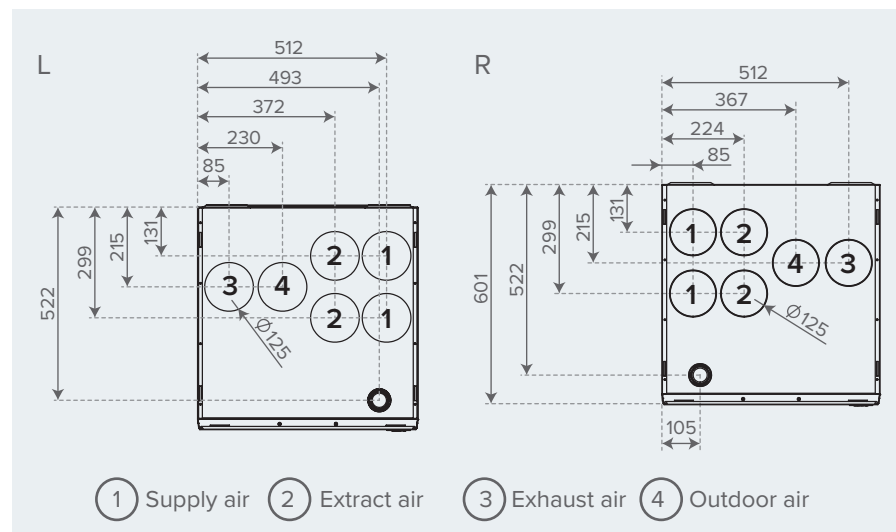
You can calculate the sound values for each operating point with the Vallox MySelecta software.

### Vallox 125 MV | The dimensions of the frame are the same for all models



### Vallox 125A MV | Dimensions and duct outlets

A



The Vallox 125A MV model replaces the following ventilation unit models:

#### Duct outlets

##### in the same places

##### Type code

MUH Ilmava	3461, 3462, 3463
MUH Ilmava OK	3462, 3463, 3464, B3462, B3463, B3464
MUH Ilmava VKL	3463
MUH Ilmava VKL OK	3464
MUH Ilmava 100	3461, 3462, 3463, B3461, B3462, B3463, B3464
MUH Ilmava 100 OK	3462, B3462, B3463, B3464
MUH Ilmava 100 VKL	3463, B3463
MUH Ilmava 100 VKL OK	3464, B3464
MUH Ilmava 120	3461, 3462, 3463, B3461, B3462, B3463, B3464
MUH Ilmava 120 VKL	3463, B3463
Vallox 121 MC	3561
Vallox 121 SE	3560, A3560

#### Minor changes in duct outlets

Onnline 100 *
Onnline 120 *
Deekax Talteri DIVK 290 Mounting Kit 2 *
Deekax Talteri DIVK 290 DEM Mounting Kit 2 *
Ilto 300 *
Ilto 350 *
Ilto 400 *
Haato LTO 11 *
Haato LTO 21 *
Haato LTO 25 *

\* Moves a few millimetres.

#### More significant changes in duct outlets

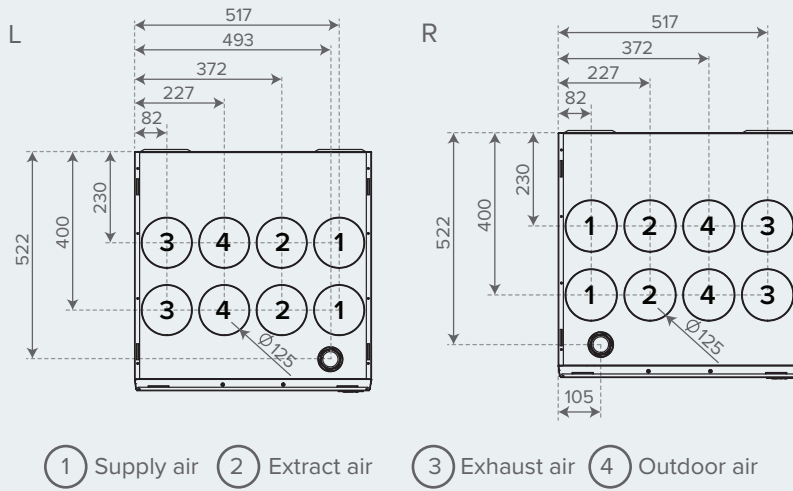
Deekax Talteri DIVK 280 (model1994-2002) **
Deekax Talteri DIVK 290 Mounting Kit 1 **
Deekax Talteri DIVK 290 DEM Mounting Kit 1 **
Deekax Talteri DIVK 400 **
Parmair ExSO ***
Parmair ExVO ***
Parmair ExS kt ***
Parmair ExV kt ***

\*\* The place of the extract air duct moves about 80 mm.

\*\*\* Only the rearmost supply air duct will be used.



## Vallox 125B MV | Dimensions and duct outlets



The Vallox 125B MV model replaces the following ventilation unit models:

Duct outlets  
in the same places *Type code*

Ilmava Digit 3465

Ilmava Digit VKL 3465

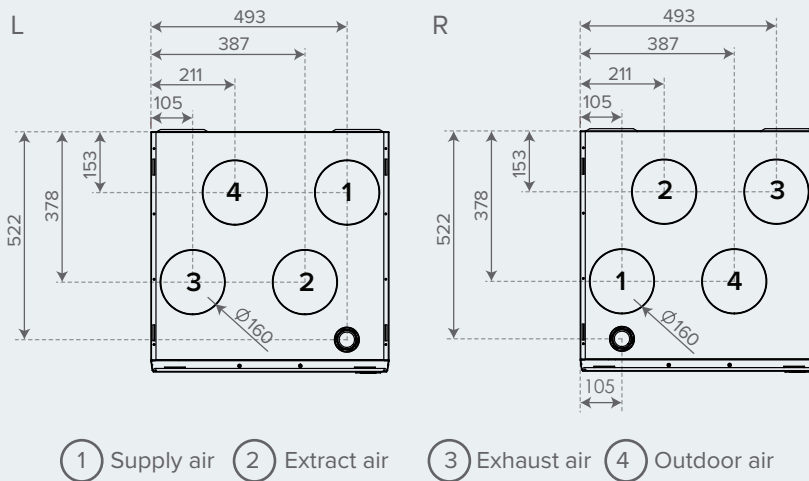
Ilmava Digit S 3465 S

Ilmava Digit S VKL 3465 S

Ilmava 130 3465

Ilmava 130 VKL 3465

## Vallox 125C MV | Dimensions and duct outlets



The Vallox 125C MV model replaces the following ventilation unit models:

Duct outlets  
in the same places *Type code*

Vallox Digit SE 3500 SE, A3500 SE, B3500 SE

Vallox 130 E 3500 E

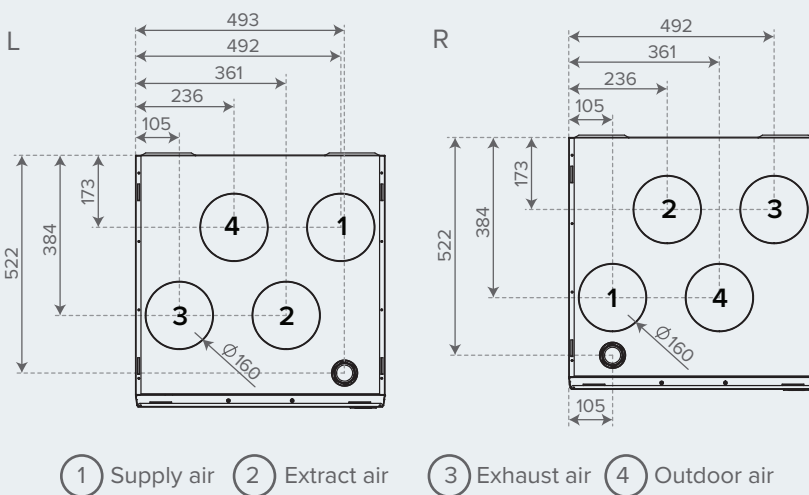
Uponor Vent SE 3500 SE, A3500 SE, B3500 SE

Minor changes in duct outlets

Mer-Air 21C \*

\* Moves a few millimetres.

## Vallox 125D MV | Dimensions and duct outlets



The Vallox 125D MV model replaces the following ventilation unit models:

Duct outlets  
in the same places *Type code*

Vallox Digit2 SE 3550 SE, A3550 SE

Vallox Digit2 SE VKL 3550 SE, A3550 SE

Vallox Digit2 SE MLV 3550 SE, A3550 SE

Vallox Digit2 SE MLV VKL 3550 SE, A3550 SE

Vallox 132 E 3550 E, A3550 E

Vallox 132 E VKL 3550 E, A3550 E

Minor changes in duct outlets

Deekax Talteri DIVK 430 \*

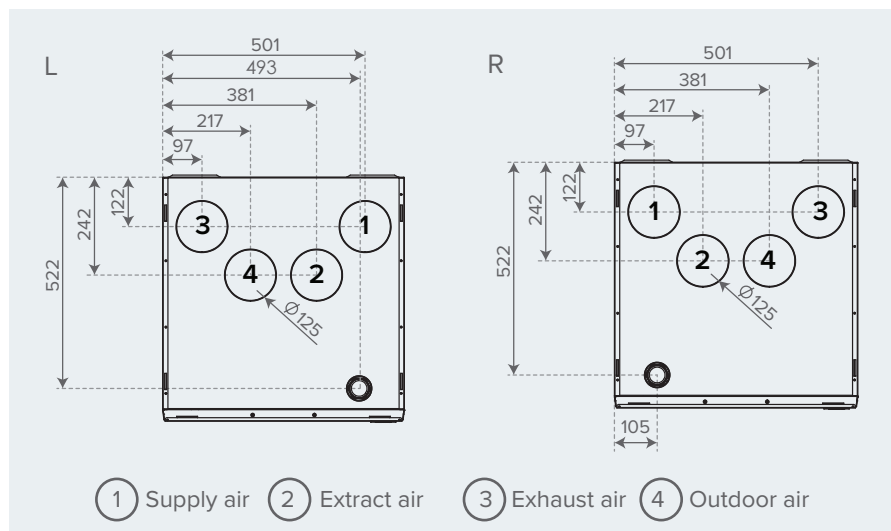
Deekax Talteri DIVK 435 \*

Deekax Talteri DIVK 440 \*

\* Moves a few millimetres.

### Vallox 125E MV | Dimensions and duct outlets

E



The Vallox 125E MV model replaces the following ventilation unit models:

Duct outlets in the same places *Type code*

Vallox 75	3510
Vallox 75 Silent	3510
Vallox 95	3510
Vallox 95 Silent	3510
Vallox 95 EC	3512
Vallox 95 EC VKL	3512

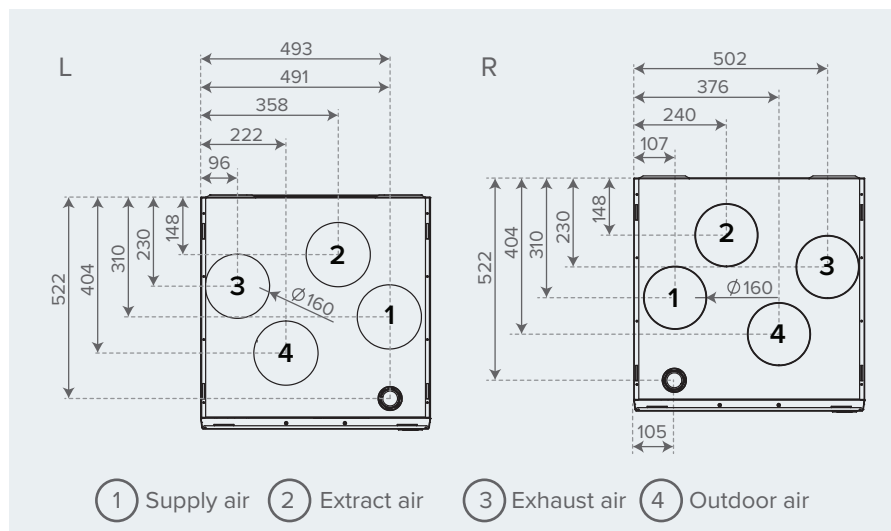
Minor changes in duct outlets

Online 105 \*

\* Moves a few millimetres.

### Vallox 125F MV | Dimensions and duct outlets

F



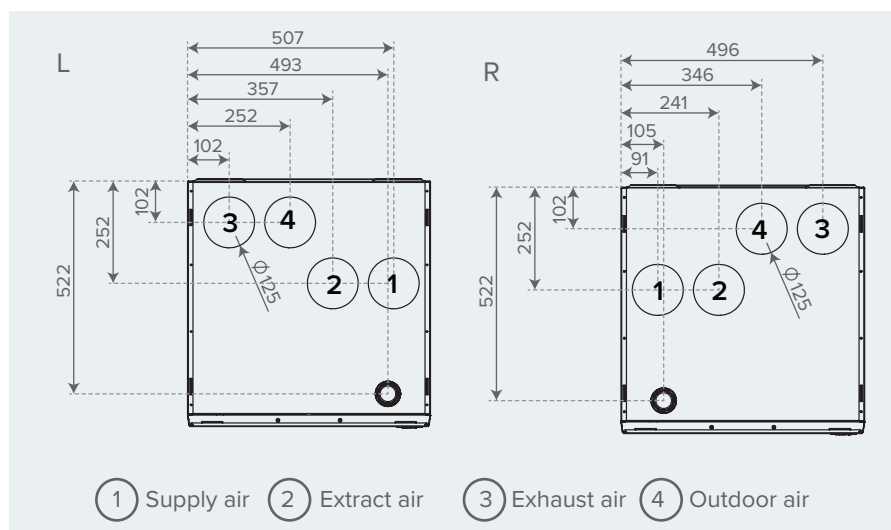
The Vallox 125F MV model replaces the following ventilation unit models:

Duct outlets in the same places

Ilto 430
Ilto 440 Control
Ilto 440 Premium
Online 130

### Vallox 125G MV | Dimensions and duct outlets

G



The Vallox 125G MV model replaces the following ventilation unit models:

Duct outlets in the same places

Ilto 270
Ilto 280
Ilto 290

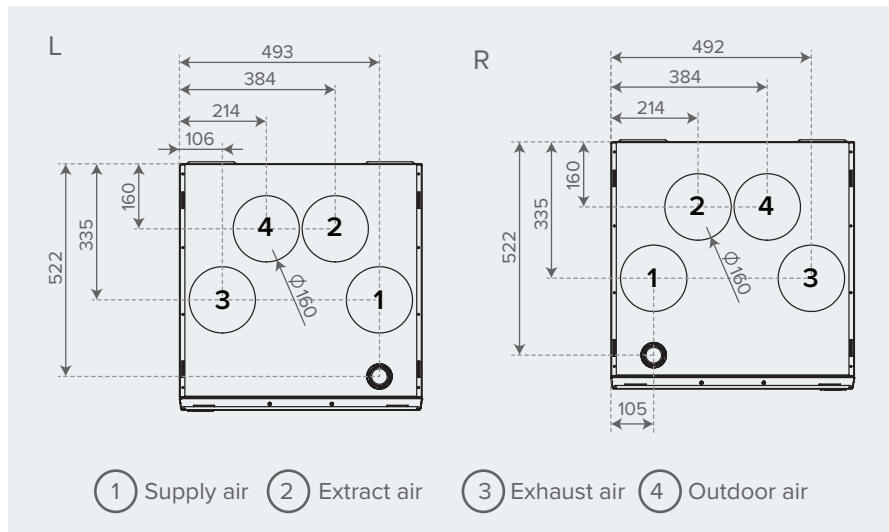
Minor changes in duct outlets

Ilto 250 \*

Ilto 260 \*

\* Moves a few millimetres.

## Vallox 125H MV | Dimensions and duct outlets



The Vallox 125H MV model replaces the following ventilation unit models:

Duct outlets  
in the same places

Iloxair Mosaik (4 x 160 mm duct outlets)

## Product numbers and LVI numbers of Vallox 125 MV models

Item	Product number	HVAC code	Item	Product number	HVAC code
Vallox 125A MV RA12	4116009	7912183	Vallox 125E MV RA12	4122437	7912191
Vallox 125A MV LA12	4121042	7912184	Vallox 125E MV LA12	4122442	7912192
Vallox 125B MV RA12	4122434	7912185	Vallox 125F MV RA12	4122438	7912193
Vallox 125B MV LA12	4122439	7912186	Vallox 125F MV LA12	4122443	7912194
Vallox 125C MV RA12	4122435	7912187	Vallox 125G MV RA12	4123698	7912215
Vallox 125C MV LA12	4122440	7912188	Vallox 125G MV LA12	4123699	7912216
Vallox 125D MV RA12	4122436	7912189	Vallox 125H MV RA12	4124912	7912222
Vallox 125D MV LA12	4122441	7912190	Vallox 125H MV LA12	4124914	7912223

The four-character code (e.g. RA12) following the unit model (e.g. 125A MV) consists of the following information:

HANDEDNESS	HR CELL	CONTROL PANEL	RESISTOR
R = Right L = Left	A = Aluminium P = Plastic E = Enthalpy	0 = does not include the control panel 1 = includes the control panel	0 = no resistors 1 = post-heating resistor 2 = post- and additional heating resistor 3 = pre-heating resistor

## ACCESSORIES THAT FIT ALL THE MODELS

The delivery of a Vallox 125 MV ventilation unit includes a MyVallox Touch control panel, a Vallox Silent Klick water seal and a wall mounting plate.

The following accessories are available for all MyVallox units: additional control panels MyVallox Touch and MyVallox Control, the external sensors MyVallox carbon dioxide sensor, MyVallox humidity sensor and MyVallox VOC sensor, and the MyVallox KNX bus converter.

Original Vallox filters are available for Vallox 125 MV units. The same filter size fits all the Vallox 125 MV models. Filter package no. 35 includes all the filters needed for one filter replacement.

All Vallox 125 MV models	Product No.	LVI number
Wall mounting plate (included in delivery)	3080750	7912214
Vallox SilentKlick water seal (included in delivery)	3494701	7911603
MyVallox Touch additional control panel (included in delivery)	949090	7912155
MyVallox Control additional control panel	949033	7911483
MyVallox carbon dioxide sensor	949111	7911481
MyVallox humidity sensor	946149	7911480
MyVallox VOC sensor	949112	7912140
MyVallox KNX bus converter	4101420	7911490
Filter package 35	4122005	7912213

## MODEL-SPECIFIC ACCESSORIES

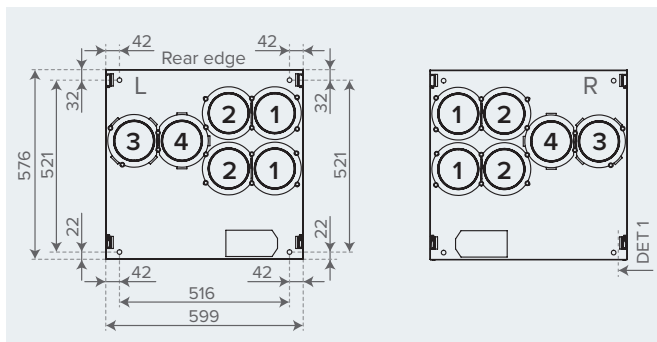
### Ceiling mounting plate

The ceiling mounting plate makes the installation of ventilation ducts easier, ensuring that the ducts are exactly in the correct places.

The ceiling mounting plate allows the installation of the ventilation ducts at an early stage during construction, even if the ventilation unit is not yet being installed. Each duct outlet in the ceiling mounting plate is located to match the ventilation unit, which makes the later installation of the unit convenient and easy.

Vallox 125A MV	Product No.	LVI number
Ceiling mounting plate Vallox 125A MV R	4121369	7912195
Ceiling mounting plate Vallox 125A MV L	4122638	7912196
Insulated attic floor penetration plate Vallox 125A MV R/L	4122063	7912203

Dimensions and duct outlets of the ceiling mounting plate



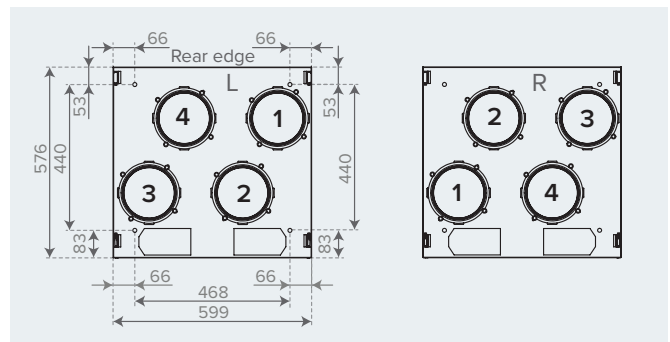
### Attic floor penetration plate

The attic floor penetration plate is intended for sealing the duct installation of the ventilation unit. When the vapour barrier of the building enclosure is penetrated by ventilation ducts, the penetrations must be sealed to keep the indoor air humidity out of the insulation layers. The penetration plate provides a convenient way of sealing.

*Please note! The ceiling mounting plate and insulated attic floor penetration plate are not available for the Vallox 125B MV model.*

Vallox 125C MV	Product No.	LVI number
Ceiling mounting plate Vallox 125C MV R/L	4122647	7912197
Insulated attic floor penetration plate Vallox 125C MV R/L	4122660	7912205

Dimensions and duct outlets of the ceiling mounting plate

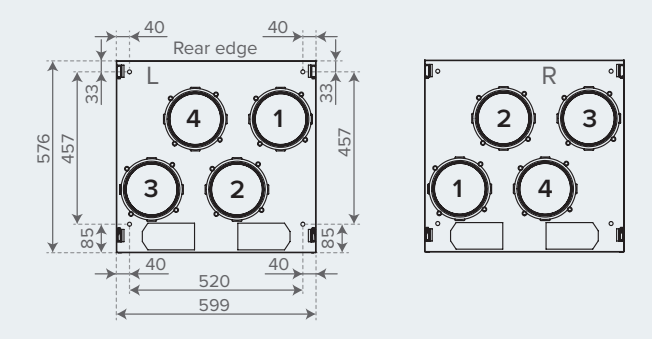




### Vallox 125D MV

	Product No.	LVI number
Ceiling mounting plate Vallox 125D MV R/L	4122651	7912199
Insulated attic floor penetration plate Vallox 125D MV R/L	4122664	7912207

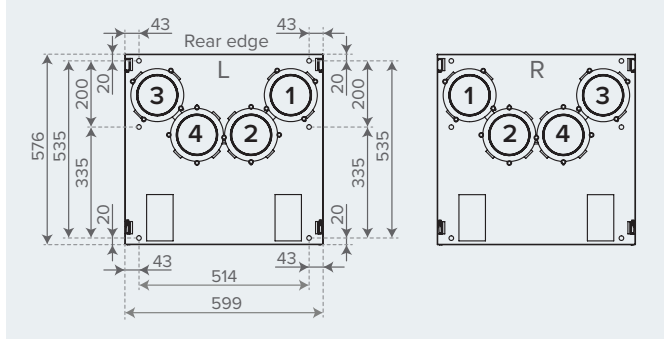
#### Dimensions and duct outlets of the ceiling mounting plate



### Vallox 125E MV

	Product No.	LVI number
Ceiling mounting plate Vallox 125E MV R/L	4122456	7912201
Insulated attic floor penetration plate Vallox 125E MV R/L	4122566	7912209

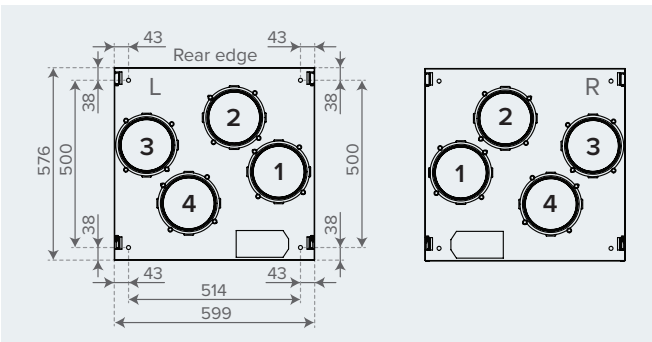
#### Dimensions and duct outlets of the ceiling mounting plate



### Vallox 125F MV

	Product No.	LVI number
Ceiling mounting plate Vallox 125F MV R	4122643	7912202
Ceiling mounting plate Vallox 125F MV L	4122789	7912211
Insulated attic floor penetration plate Vallox 125F MV R	4122656	7912210
Insulated attic floor penetration plate Vallox 125F MV L	4122791	7912212

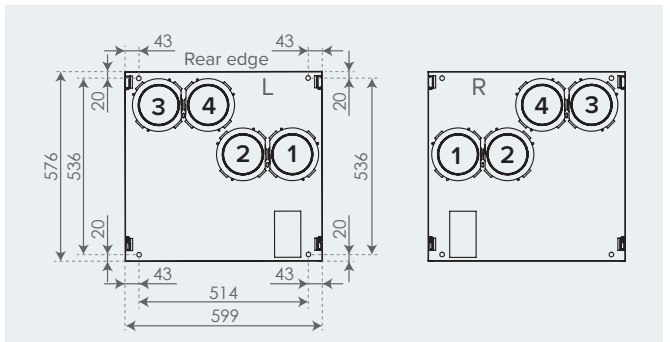
#### Dimensions and duct outlets of the ceiling mounting plate



### Vallox 125G MV

	Product No.	LVI number
Ceiling mounting plate Vallox 125G MV R	4123868	7912217
Ceiling mounting plate Vallox 125G MV L	4123884	7912218
Insulated attic floor penetration plate Vallox 125G MV R	4123896	7912219
Insulated attic floor penetration plate Vallox 125G MV L	4123914	7912220

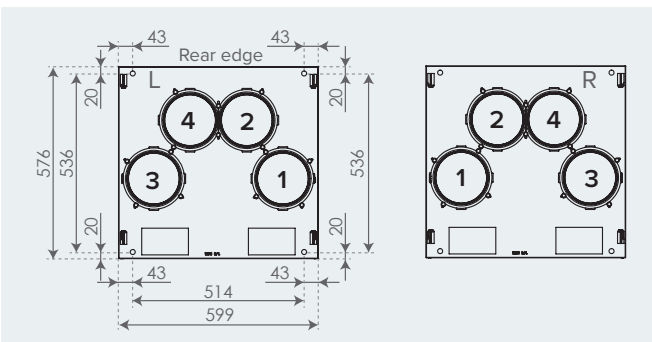
#### Dimensions and duct outlets of the ceiling mounting plate



### Vallox 125H MV

	Product No.	LVI number
Ceiling mounting plate Vallox 125H MV R/L	4124372	7912224
Insulated attic floor penetration plate Vallox 125H MV R/L	4125051	7912225

#### Dimensions and duct outlets of the ceiling mounting plate



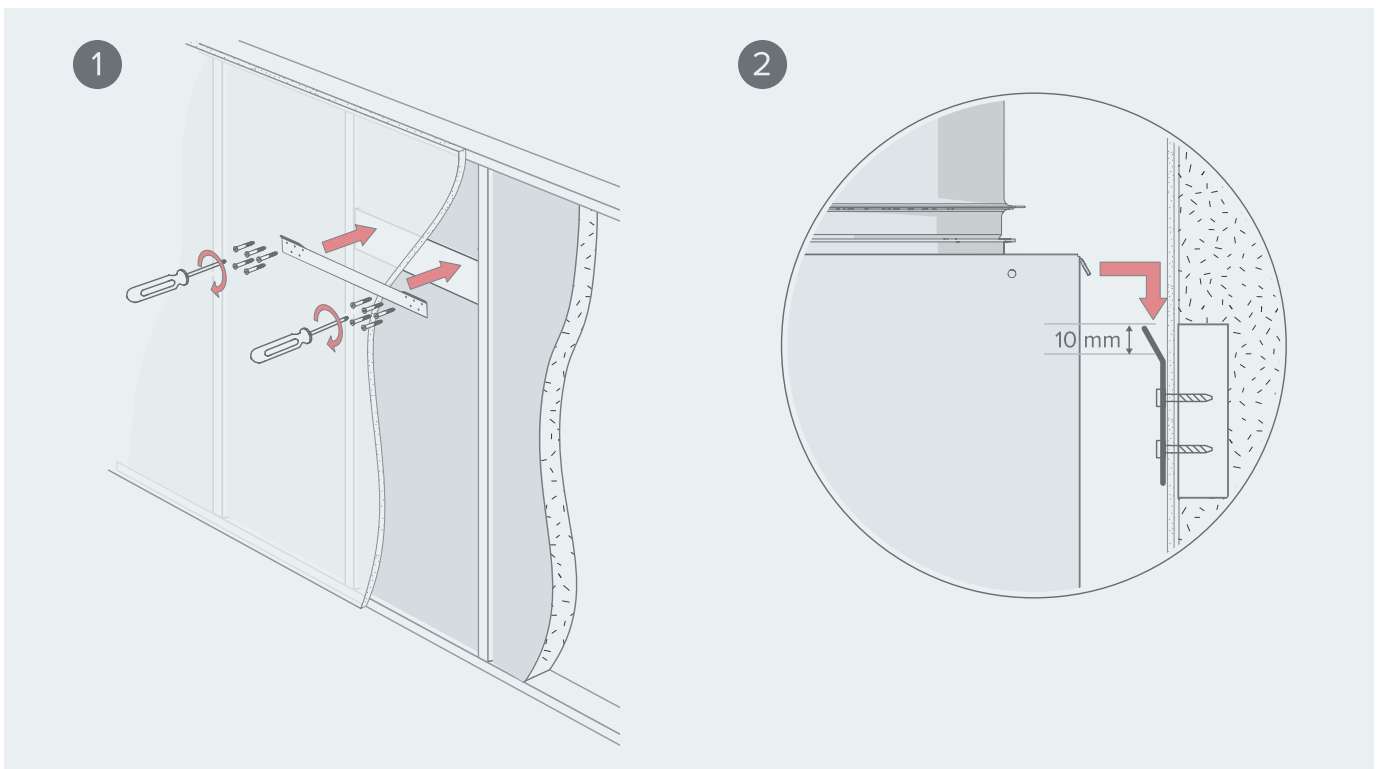
## MOUNTING ON THE WALL

The minimum distance between the top of the unit and the finished ceiling surface is 30 mm. Note that during mounting, the unit rises 10 mm higher than the final height.

Mount the ventilation unit on the wall with a mounting plate, as shown in the figures below. Make sure that the unit is horizontally level after mounting.

Avoid mounting the unit on a hollow, echoing partition wall or on a bedroom wall, or prevent the conduction of sound.

When installing the unit, reserve a space of at least 500 mm in front of the unit for servicing purposes.



## MOUNTING ON THE CEILING

### Installing the ventilation unit to the ceiling mounting plate

The Vallox 125 MV units (excluding model B) can be equipped with an optional ceiling mounting plate.

1. Check that the condensate insulation rings are in place in the outlet collars below the ceiling mounting plate.
2. Pull the operating levers (A) out and lock them by turning them towards the outer sides of the unit.
3. Remove the door before installing the ventilation unit to the ceiling mounting plate.
4. Lift the ventilation unit close to the ceiling mounting plate and feed the cables and the connection box through the hole in the ceiling mounting plate on top of the ceiling.

Alternatively, the cables can be fed between the ceiling mounting plate and the ventilation unit to the rear wall.

5. Lift the ventilation unit up against the ceiling mounting plate by releasing the locking of the levers (A) by turning them towards the center of the unit; the levers will lock the unit to the ceiling mounting plate. Where needed, guide the mounting hooks on the ceiling mounting plate (B) to the grooves on the side panels of the ventilation unit. In the locked position, the levers are at the same level as the front edge of the ceiling mounting plate.
6. Where required, the unit can be detached from the ceiling mounting plate. Remove the door of the unit, lift the unit slightly upwards, pull out both operating levers (A) and lock them (see section 2).

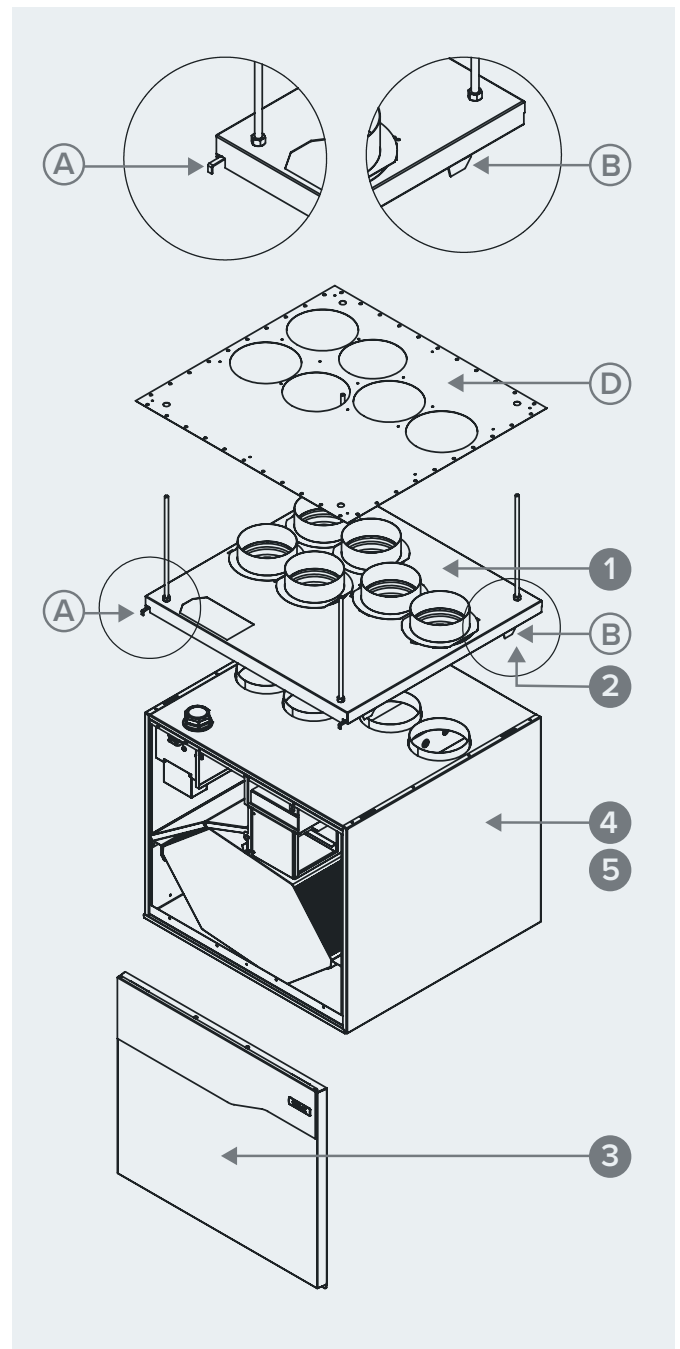
### Attic floor penetration plate

The attic floor penetration plate (D) is optional. When an insulated attic floor penetration plate is used, the airtightness of the vapour barrier must be ensured.

The attic floor penetration plate is installed at the same level as the rear wall of the ventilation unit. The minimum distance of the attic floor penetration plate from the rear wall is 10 mm, and the width varies depending on the model. Follow the model-specific instructions on the penetration plate.

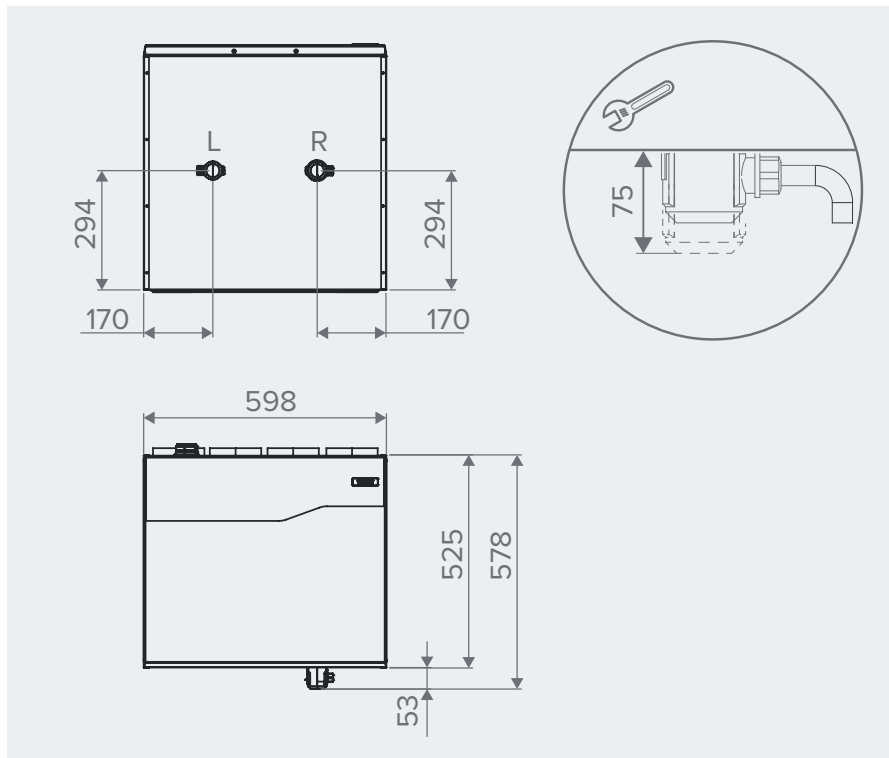
The ventilation unit is very heavy. Do not perform this procedure alone. Use appropriate lifting equipment, where necessary.

Remember to make a service door in the ceiling so that the cables and the connection box can be accessed. The distance between the service door and the ceiling mounting plate must be around 500 mm.

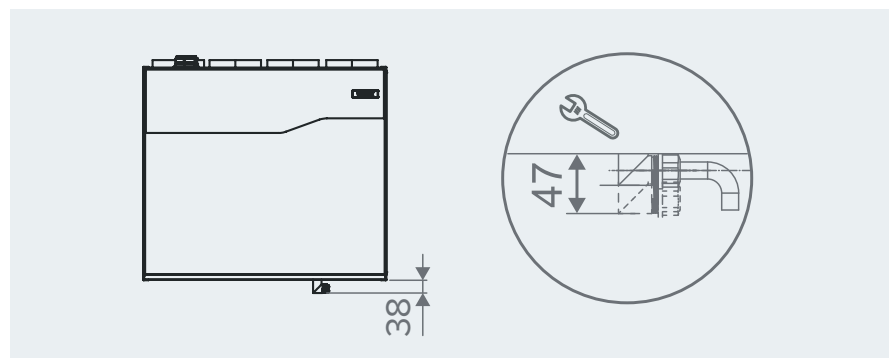


## REMOVAL OF CONDENSING WATER

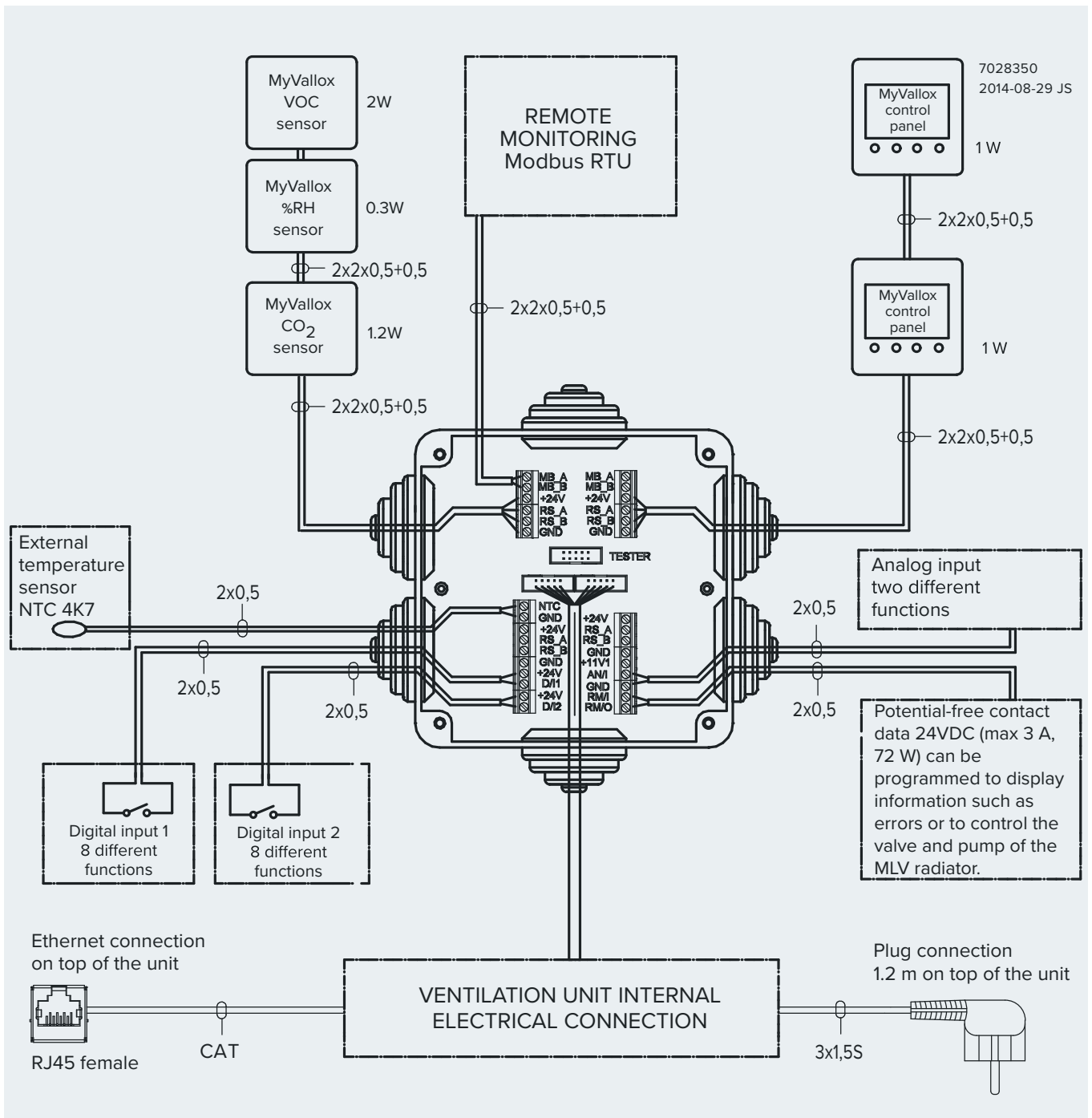
Dimensioning figure and space required for installation of the Vallox Silent Klick water seal



Space required by the alternative Vallox Silent Klick water seal installation method (elbow)



# EXTERNAL ELECTRICAL CONNECTION



## POWER SUPPLY

Maximum	≤6W	MB_A	External Modbus A signal	D/I2	Digital input 2
MyVallox Control	1 W	MB_B	External Modbus B signal	11V1	11.1 V operating voltage
MyVallox Touch	0.5 W.	+24V	+24V voltage (DC)	AN/I	Analog input 0-10VDC
%RH sensor	0.3W	GND	Digital and analog ground potential	RM/I	24V relay input
CO <sub>2</sub> sensor	1.2W	RS_A	Local hardware Modbus A signal	RM/O	24V relay output
VOC sensor	2W	RS_B	Local hardware Modbus B signal		
External actuator or damper motor of the unit that receives feed from the relay		NTC	External temperature sensor connector		
Voltage	24 VDC	D/I1	Digital input 1		



## Points to consider in a ventilation renovation and the choice of the correct Vallox 125 MV model.

### Ensure adequate air volumes

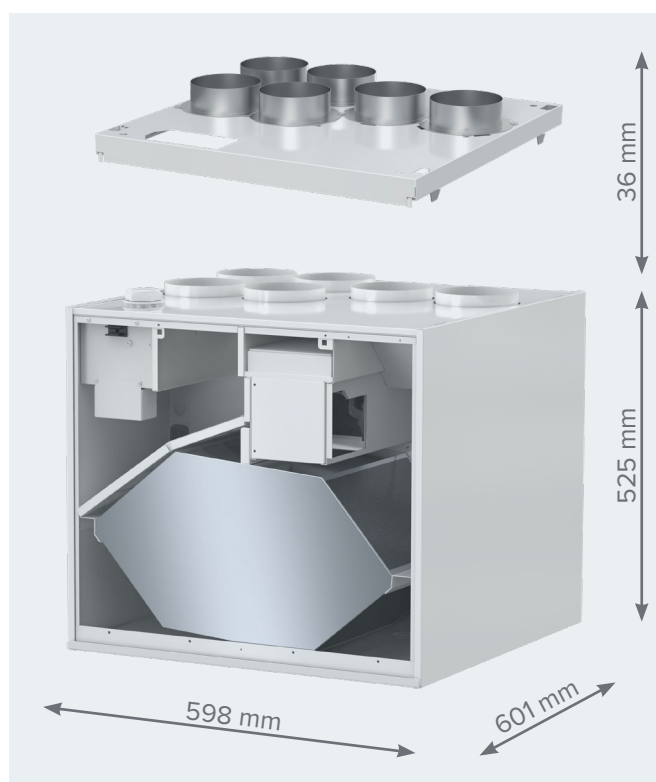
You may use the air volumes of the old unit as a starting point, but you should also check a few things:

- Were the air volumes of the old unit correctly designed? For instance, in the 1980s, the unit and/or ducts could be undersized, particularly with respect to today's needs.
- Have extensions been built to the house or have wet rooms been added, so that the air volumes of the old unit are no longer adequate?
- Keep in mind that if only the ventilation unit is replaced, there is no obligation to fulfil the current air volume guidelines. If work subject to a building license is carried out in connection with the renovation, it is possible that the ventilation system must also meet the current requirements.
- To determine the suitable air volumes, it is advisable to use the services of a ventilation professional. Remember that a professional must readjust the air volumes also after the replacement of the ventilation unit.

### Check the duct outlets and the dimensions of the frame of the unit.

- Check the handedness of the unit, the number of duct outlets as well as the diameter and locations of the ducts in the unit's duct outlet or ceiling part.
- If the old unit has outlet collars with rubber seal rings (male), a duct connector is needed for the duct outlets to connect the ducts to the unit.
- Duct connectors are also needed for connecting the ceiling mounting plate to the ducts.
- The external dimensions of the new unit may differ from those of the old one. Ensure that there is enough room for installation!
- Check whether the vertical space allows the use of a ceiling mounting plate that makes the installation easier.

The service space in front of the ventilation unit must be at least 500 mm.



## Improve the insulation and sound attenuation of the ducts if necessary

Even though the duct outlets are located similarly as the duct outlets of the old unit, it is advisable to check the condition of the insulation of the duct when replacing the unit:

- Remember that the exhaust air duct must have condensate insulation over the entire length inside the vapour barrier.
- If the exhaust air duct is difficult to insulate, a wall-mounted air blow-out is worth considering.

When replacing a ventilation unit, consider whether you need better sound-dampening:

- If the noise from the valves is disturbing, replacing the unit will not solve the problem. Instead, silencers should be installed in the ducts or old silencers replaced with ones that dampen the noise of the new unit more efficiently.
- The DC fans of the Vallox 125 MV models have a different sound than the old AC fans, which means that different frequency bands are emphasised. The type of the silencer must correspond to the fan noise by frequency band. This is not necessarily the case with old silencers, even long ones.

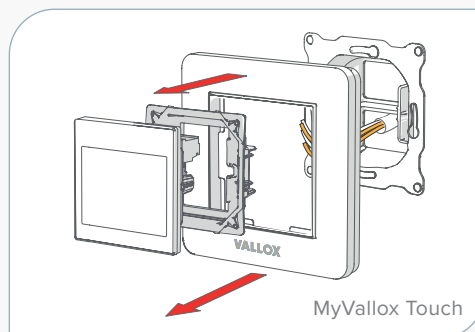
An example of fan noise into the supply air duct by frequency band (Vallox 125 MV, 40 l/s, 75 Pa)

	63	125	250	500	1000	2000	4000	8000	Hz	Total dB	Total dB (A)
Supply air duct	66	62	66	52	51	43	35	27	dB	70	59

You can calculate the sound values for each operating point with the Vallox MySelecta software.

## Also take other differences into account

- The Vallox 125 MV unit has no liquid circulation post-heating radiator, as modern heat recovery cells heat the supply air efficiently enough, so that post-heating is not needed, except during the coldest hours of the year.
- The Vallox 125 MV unit does not have a pre-heating/cooling radiator to be connected to the geothermal heat collection circuit (cf. Digit 2 MLV), but it can be used to control a separate Vallox MLV duct radiator.
- If a so-called circulating air duct has been connected to an old ventilation unit (from above the fireplace, for instance), it must be plugged or connected to the supply air duct.
- **MyVallox Touch** control panel is included in the delivery of the Vallox 125 MV unit. A NOMAK cable must be installed between the control panel and the unit.
- The Vallox 125 MV unit can also be controlled with a cooker hood (Vallox X-Line PTXP MC, Vallox X-Line PTXPA MC or Vallox Delico PTD EC), in which case air exits the cooker hood through the ventilation unit. In connection with the replacement of the ventilation unit, it is also possible to install a separate cooker hood that will remove cooking smells more efficiently directly out of the house. In this case, a general extraction valve must be installed in the kitchen.



# VALLOX

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