

Model	Document
Vallox Exxeo 150	Vallox Exxeo 2000
Vallox Exxeo 150 DS	Vallox Exxeo 2000 DS
Vallox Exxeo 150 DPC	Vallox Exxeo 2000 DPC
Vallox Exxeo 300	Vallox Exxeo 2500
Vallox Exxeo 300 DS	Vallox Exxeo 2500 DS
Vallox Exxeo 300 DPC	Vallox Exxeo 2500 DPC
Vallox Exxeo 700	Vallox Exxeo 4100
Vallox Exxeo 700 DS	Vallox Exxeo 4100 DS
Vallox Exxeo 700 DPC	Vallox Exxeo 4100 DPC
Vallox Exxeo 1400	
Vallox Exxeo 1400 DS	
Vallox Exxeo 1400 DPC	

### Manual

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Roof fans

## SAFETY

Safe and appropriate handling requires knowledge of basic-level safety regulations and the planned use of the ventilation system. Read this instruction manual before the installation, setup and maintenance of the roof fan, and keep it for reference. If you lose the manual, you can download it from our website.

This instruction manual includes all of the information needed for safe use of the system. Everyone who operates or maintains the ventilation system must follow the instructions provided in this manual. In addition, any local regulations aiming to prevent accidents must be followed.



### NOTE

More information at [www.vallox.com](http://www.vallox.com)

## Installation

Electrical installations and connections may only be carried out by an authorised person in compliance with the local regulations.



### WARNING

The unit must not be used by children under 8 years of age or by persons with reduced sensory, physical or mental capabilities, or whose lack of knowledge and experience cannot ensure safe operation of the unit.

Such persons may use the unit under supervision, or by following the instructions of someone who is responsible for their safety.

Children must be supervised and they must not be allowed to play with the device.

## WARRANTY

The warranty and the manufacturer's liability do not cover damage resulting from:

- Inappropriate use of the ventilation system or control unit
- Incorrect or inappropriate installation, setup or use
- Negligence of instructions concerning transport, installation, use or maintenance
- Changes made to the unit's structure or electrification or the software

## DISPOSAL OF THE ROOF FAN

Do not dispose of electrical devices with household waste. Follow local laws and regulations on the safe and ecological disposal of the product.

Ensure that the components are separated and sorted according to the material type. Read the roof fan recycling instructions at [www.vallox.com](http://www.vallox.com).



## SAFETY SIGNS USED IN THE INSTRUCTIONS



### DANGER

A danger that leads to death or serious injury, if not avoided.



### WARNING

A danger that may lead to death or serious injury, if not avoided.



### CAUTION

A danger that may lead to mild or moderate injury, if not avoided.



### IMPORTANT

A danger that may lead to property damage or loss of data, if not avoided.



### NOTE

Essential information about the product.



### TIP

More information about the use of the product and its advantages.

## TRANSPORT AND STORAGE

Check the roof fan for any transport damage immediately after receiving it. If you detect damage caused during transport, contact the transporter immediately. The product must be transported with due care and it must be handled correctly. The transport equipment must be suitable for the weight and package of the product. The products must be loaded according to instructions.

When storing fans, the storage conditions must be appropriate and the products must be stored in their original packages. The storage environment must be dry and dust-free, the relative humidity of air must not exceed 70% and the storage temperature must be -25°C...+60°C.

## SCOPE OF APPLICATION - INTENDED USE

Vallox Exxeo roof fans are intended as fans for extract air ventilation systems. The maximum temperature of air extracted by the roof fans is +40°C. The structure of Vallox Exxeo roof fans is designed so that water is led out without ending up in the duct system.

Vallox Exxeo roof fans may be mounted on top of a Vallox Exxeo roof penetration part or a penetration made on site. When required, the mounting frame included in the standard delivery can be used.

Vallox Exxeo roof fans come in seven different sizes 150...4100 (0.15...4.1 m<sup>3</sup>/s, ps = 150 Pa)

Three different models are available for each size:

- Basic model, equipped with a control panel
  - model marking, e.g. Vallox Exxeo 4100 (air volume 4,100 dm<sup>3</sup>/s, ps = 150 Pa)
- DPC model, equipped with a control panel + pressure control
  - model marking, e.g. Vallox Exxeo 4100 DPC (air volume 4,100 dm<sup>3</sup>/s, ps = 150 Pa)
- DS model, equipped with a dual speed converter. The model can replace a 2-speed 3-phase AC roof fan. The control requires an existing cable with 7 poles (2x3-phase supply + PE).
  - model marking, e.g. Vallox Exxeo 4100 DS (air volume 4,100 dm<sup>3</sup>/s, ps = 150 Pa)



### NOTE

If the roof fan is used as an extract fan for a kitchen/grease duct, grease removal prior to the fan must be ensured as well as not exceeding the maximum temperature of extract air.



### NOTE

Before setup, the roof fan instruction manual must be read thoroughly. The installation must be made according to the instructions, and all of the necessary safety equipment must be installed.

## TECHNICAL DATA

- Upward-blowing
- Plastic fan wheel with EC motor
- Controls integrated into the frame
- Enclosure soundproofed on the inside
- Roof fan's metal parts meet the C4 requirements (EN ISO 12944-2)
- Enclosure protection class of electrical equipment IP54
- All models come with a connected safety switch
  - Basic and DPC models: Katko KSM 416 U (100x128x56)
  - DS model: Katko TKM 616 U (97x131x106)
- Multiple control options (see the technical specifications table)
- All models are equipped with air flow measuring tubes
- All models are tiltable, and the structure is easy to open for maintenance
- The enclosure is made of magnesium-zinc coated sheet metal Can be painted to order with RAL tones
- CE marking

### TECHNICAL SPECIFICATIONS

Model	Weight kg	Electrical connection	Power taken from the network P1 kW	Power (A)	Fan enclosure protection class	Control
Vallox Exxeo 150	20	1~ 230 VAC, 50 Hz	0.085	0.7	IP54	2-speed or 0–10 V control and Modbus connection
Vallox Exxeo 150 DS	23	1~ 230 VAC, 50 Hz	0.085	0.7	IP54	Similar to an old AC dual speed roof fan
Vallox Exxeo 150 DPC	20	1~ 230 VAC, 50 Hz	0.085	0.7	IP54	2-speed or 0–10 V control, pressure and air volume control and Modbus connection
Vallox Exxeo 300	29	1~ 230 VAC, 50 Hz	0.170	1.4	IP54	2-speed or 0–10 V control and Modbus connection
Vallox Exxeo 300 DS	32	1~ 230 VAC, 50 Hz	0.170	1.4	IP54	Similar to an old AC dual speed roof fan
Vallox Exxeo 300 DPC	29	1~ 230 VAC, 50 Hz	0.170	1.4	IP54	2-speed or 0–10 V control, pressure and air volume control and Modbus connection
Vallox Exxeo 700	32	1~ 230 VAC, 50 Hz	0.440	2.2	IP54	2-speed or 0–10 V control and Modbus connection
Vallox Exxeo 700 DS	35	1~ 230 VAC, 50 Hz	0.440	2.2	IP54	Similar to an old AC dual speed roof fan
Vallox Exxeo 700 DPC	32	1~ 230 VAC, 50 Hz	0.440	2.2	IP54	2-speed or 0–10 V control, pressure and air volume control and Modbus connection
Vallox Exxeo 1400	68	1~ 230 VAC, 50 Hz	0.800	4.0	IP54	2-speed or 0–10 V control and Modbus connection
Vallox Exxeo 1400 DS	70	1~ 230 VAC, 50 Hz	0.800	4.0	IP54	Similar to an old AC dual speed roof fan
Vallox Exxeo 1400 DPC	68	1~ 230 VAC, 50 Hz	0.800	4.0	IP54	2-speed or 0–10 V control, pressure and air volume control and Modbus connection
Vallox Exxeo 2000	73	3~ 400 VAC, 50 Hz	1.100	1.8	IP55	2-speed or 0–10 V control and Modbus connection
Vallox Exxeo 2000 DS	75	3~ 400 VAC, 50 Hz	1.100	1.8	IP55	Similar to an old AC dual speed roof fan
Vallox Exxeo 2000 DPC	73	3~ 400 VAC, 50 Hz	1.100	1.8	IP55	2-speed or 0–10 V control, pressure and air volume control and Modbus connection
Vallox Exxeo 2500	99	3~ 400 VAC, 50 Hz	1.100	1.85	IP55	2-speed or 0–10 V control and Modbus connection
Vallox Exxeo 2500 DS	101	3~ 400 VAC, 50 Hz	1.100	1.85	IP55	Similar to an old AC dual speed roof fan
Vallox Exxeo 2500 DPC	99	3~ 400 VAC, 50 Hz	1.100	1.85	IP55	2-speed or 0–10 V control, pressure and air volume control and Modbus connection
Vallox Exxeo 4100	107	3~ 400 VAC, 50 Hz	3.500	5.6	IP55	2-point or 0–10 V control and Modbus connection
Vallox Exxeo 4100 DS	109	3~ 400 VAC, 50 Hz	3.500	5.6	IP55	Similar to an old AC dual speed roof fan
Vallox Exxeo 4100 DPC	107	3~ 400 VAC, 50 Hz	3.500	5.6	IP55	2-speed or 0–10 V control, pressure and air volume control and Modbus connection

### QUICK SELECTION TABLE

	Volume flow rate, qv (m³/s) the penetration part in place in the roof fan   Static pressure difference (Pa)														
Static pressure difference (Pa)	50	75	100	125	150	175	200	225	250	300	350	400	500	600	800
Vallox Exxeo 150	0.204	0.192	0.180	0.170	0.160	0.147	0.137	0.126	0.113	0.085	0.058	0.035			
Vallox Exxeo 300	0.366	0.357	0.347	0.337	0.327	0.315	0.302	0.288	0.273	0.243	0.213	0.182	0.130		
Vallox Exxeo 700	0.767	0.756	0.744	0.731	0.719	0.704	0.689	0.675	0.659	0.624	0.581	0.534	0.409		
Vallox Exxeo 1400	1.503	1.482	1.458	1.435	1.412	1.389	1.367	1.345	1.322	1.263	1.196	1.128	0.986	0.76	
Vallox Exxeo 2000	2.281	2.233	2.184	2.134	2.08	2.03	1.983	1.92	1.856	1.725	1.565				
Vallox Exxeo 2500	2.935	2.849	2.742	2.648	2.565	2.466	2.356	2.235	2.098	1.734	1.003	0.599			
Vallox Exxeo 4100	4.417	4.357	4.299	4.247	4.187	4.121	4.058	3.995	3.932	3.804	3.663	3.513	3.196	2.793	1.125

### The following must be observed when choosing the roof fan:

- The static pressure indicated by the graph = pressure available for use in the ducts. The pressure was calculated at the bottom end of the penetration part. Air density = 1.20 kg/m³.



#### IMPORTANT

It is recommended to keep the fan on at all times, as water or snow could enter the structures. If the fan is switched off, it is recommended to use a damper to protect the duct system.

### SOUND PRESSURE LEVEL

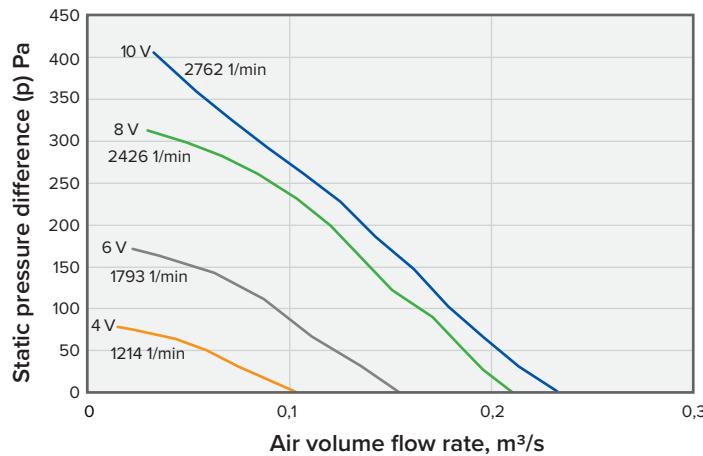
Sound pressure level L<sub>pA</sub> - at distance r, dB(A), roof fan installed on top of the flue

1 m	10 m	20 m	30 m	40 m	50 m
-11 dB	-31 dB	-37 dB	-41 dB	-43 dB	-45 dB

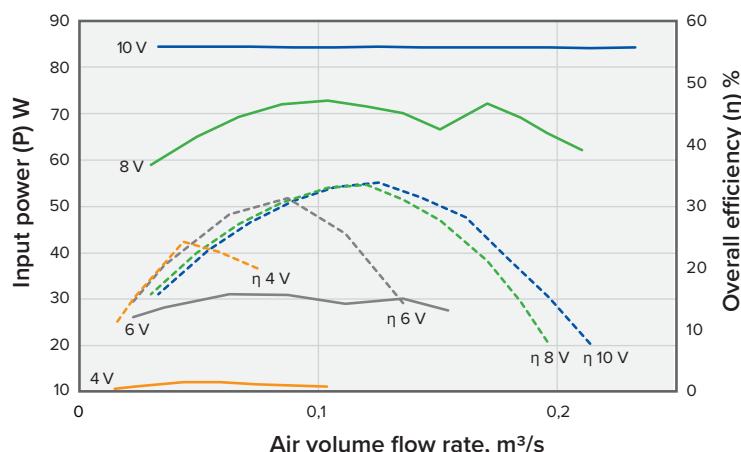
Adjustments to Vallox Exxeo's sound power level to the environment (LwA) to define the sound pressure level LpA.

## VALLOX EXXEO 150 | 150 DPC | 150 DS

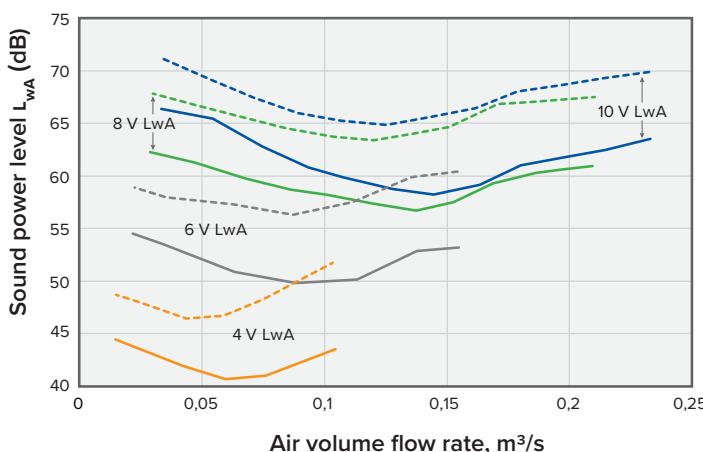
### Static pressure loss



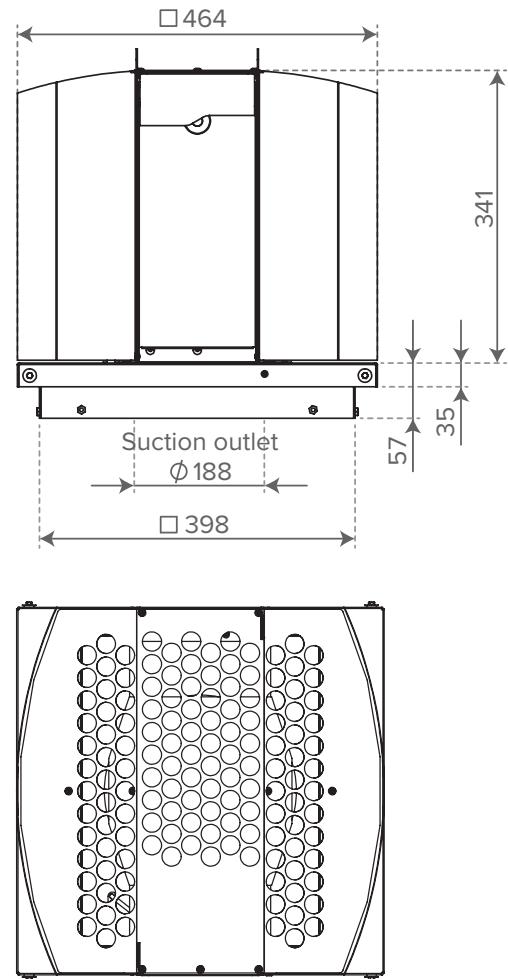
### Input power and efficiency



### Sound values



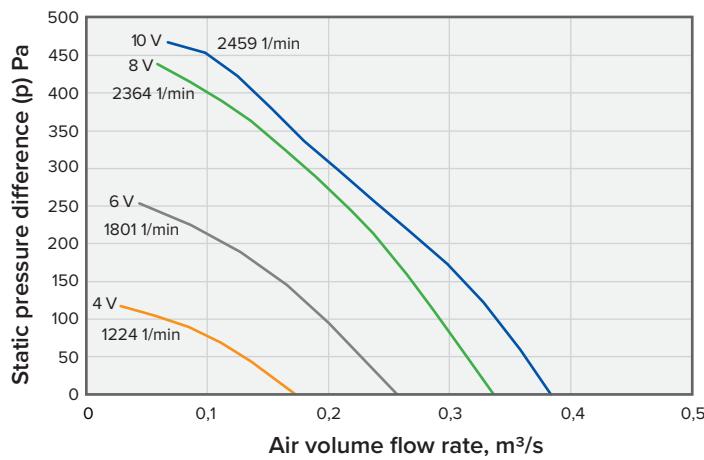
### Dimension diagrams



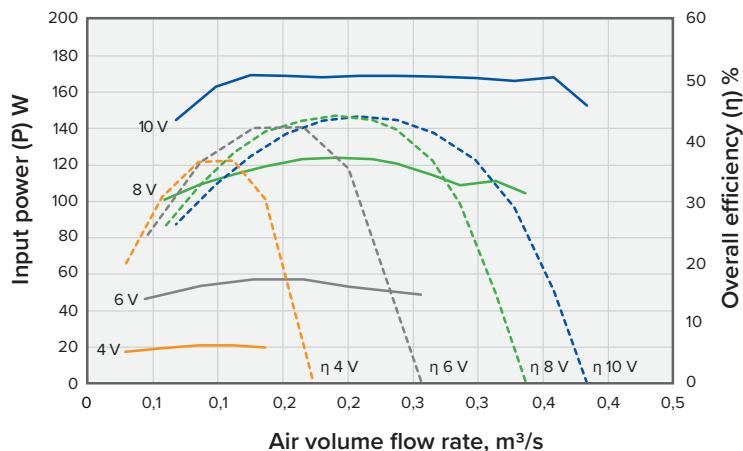
— Sound power level to the suction duct  
- - - Sound power level to the environment

## VALLOX EXXEO 300 | 300 DPC | 300 DS

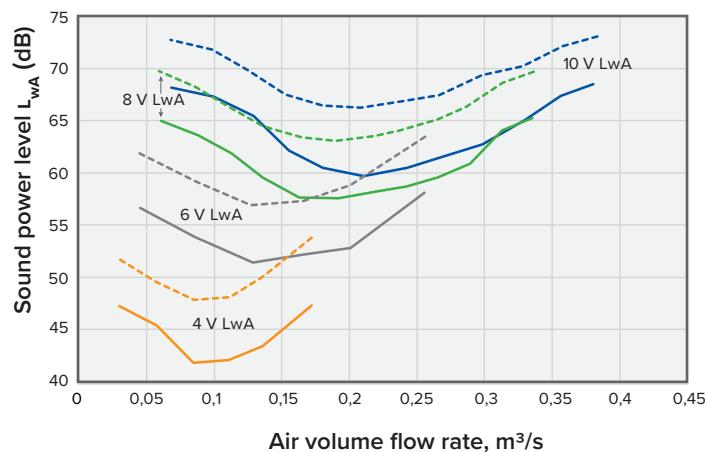
### Static pressure loss



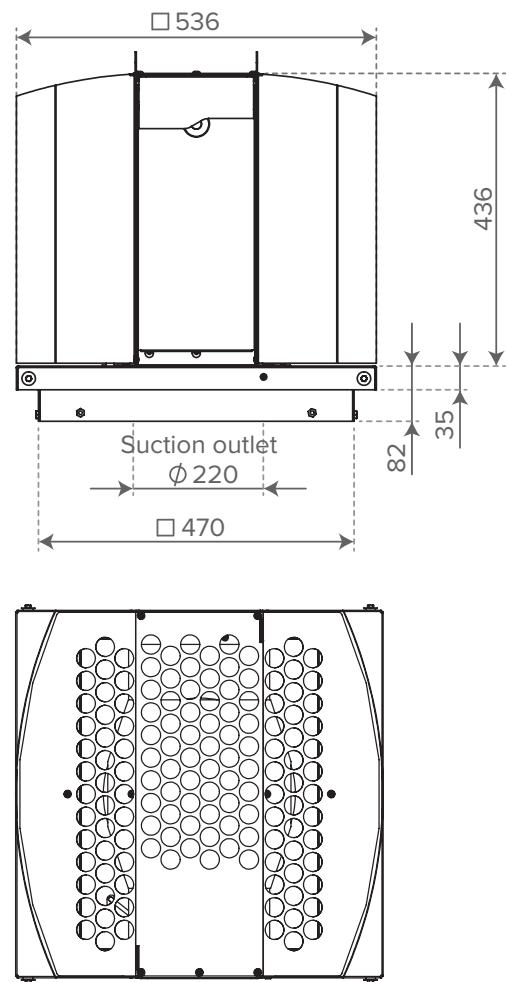
### Input power and efficiency



### Sound values



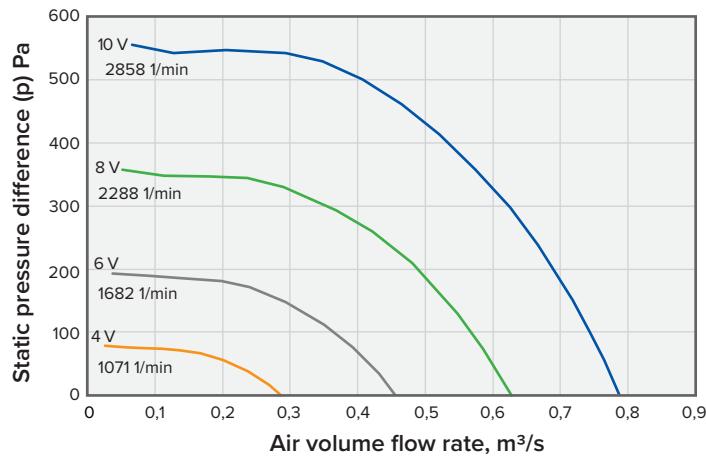
### Dimension diagrams



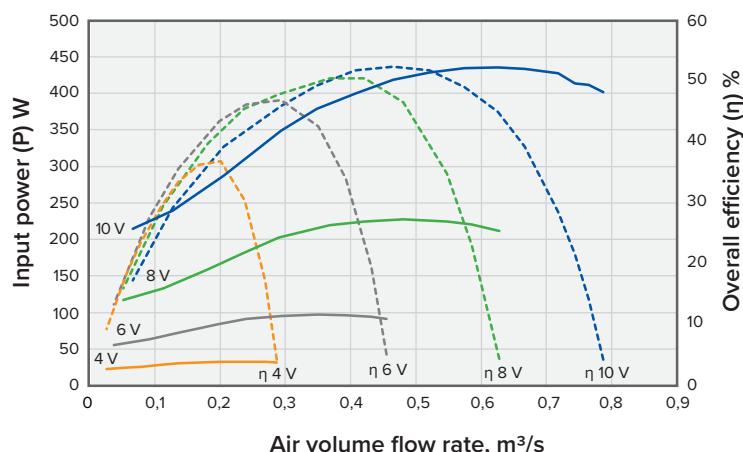
— Sound power level to the suction duct  
- - - Sound power level to the environment

## VALLOX EXXEO 700 | 700 DPC | 700 DS

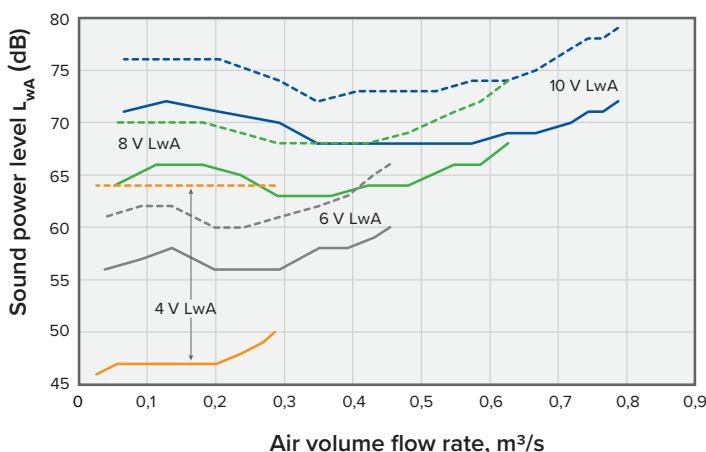
### Static pressure loss



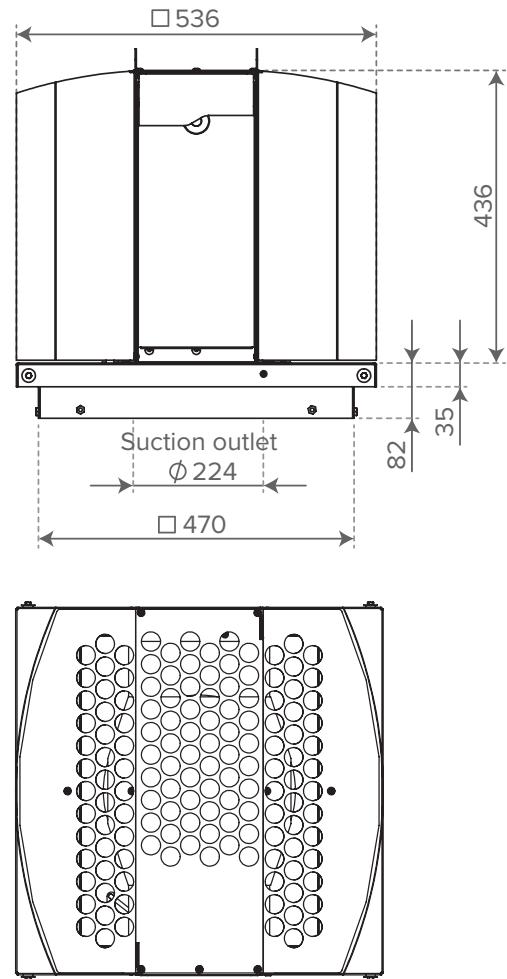
### Input power and efficiency



### Sound values



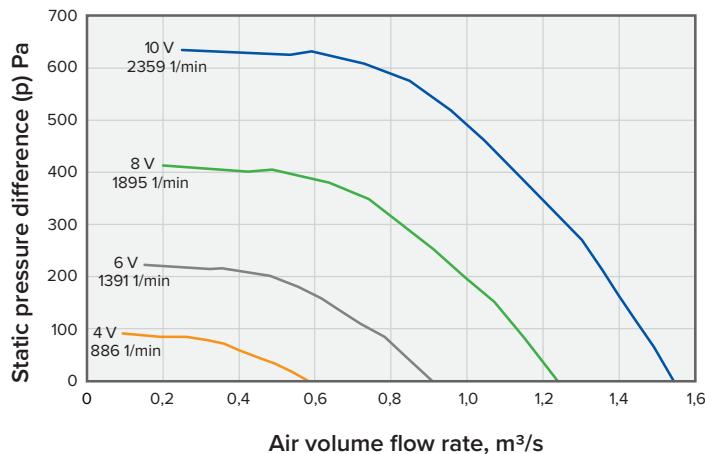
### Dimension diagrams



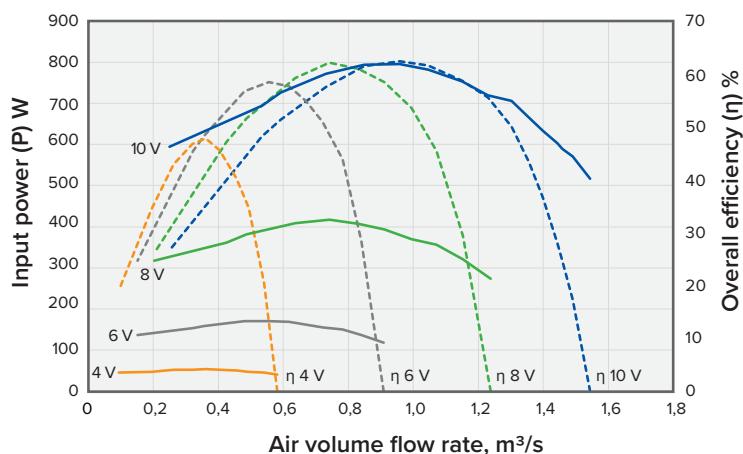
— Sound power level to the suction duct  
- - - Sound power level to the environment

## VALLOX EXXEO 1400 | 1400 DPC | 1400 DS

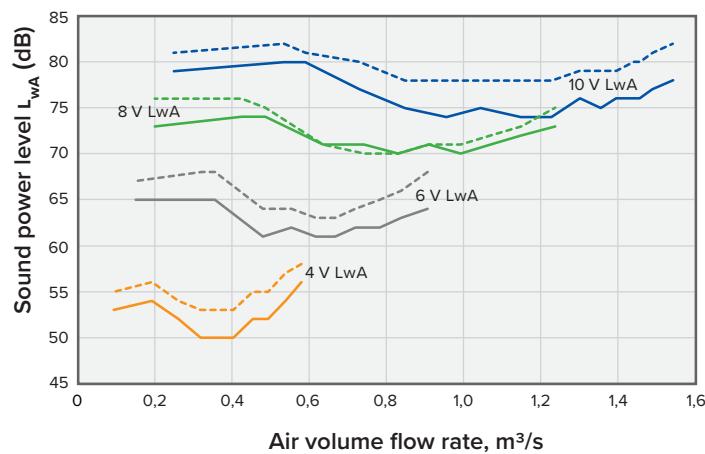
### Static pressure loss



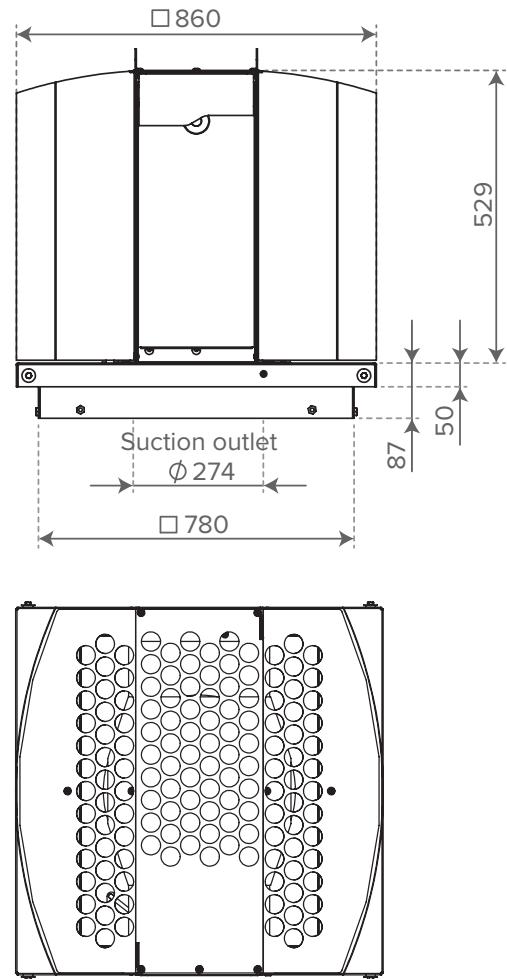
### Input power and efficiency



### Sound values



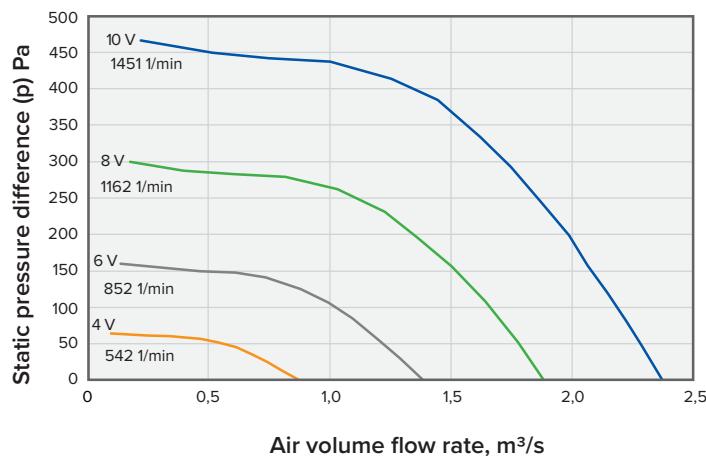
### Dimension diagrams



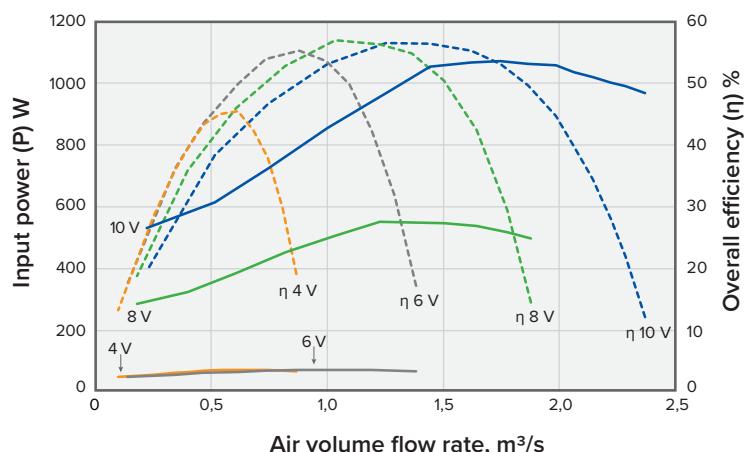
— Sound power level to the suction duct  
- - - Sound power level to the environment

## VALLOX EXXEO 2000 | 2000 DPC | 2000 DS

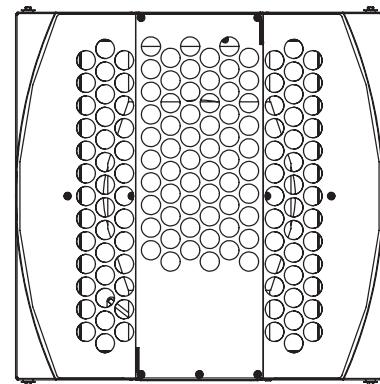
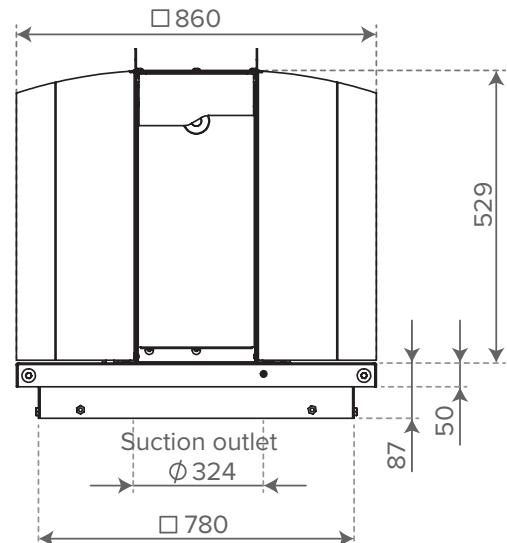
### Static pressure loss



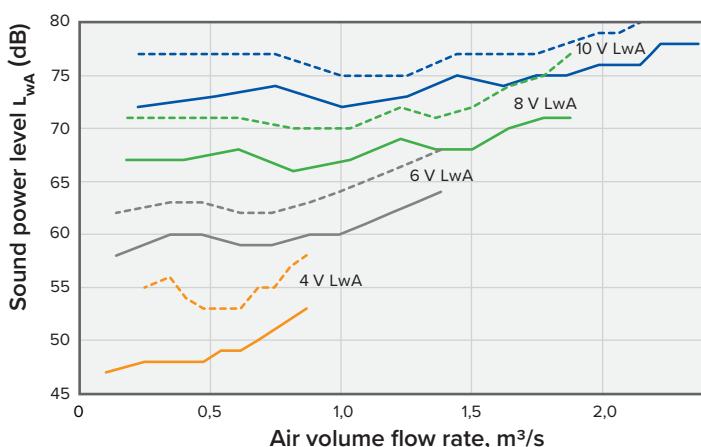
### Input power and efficiency



### Dimension diagrams



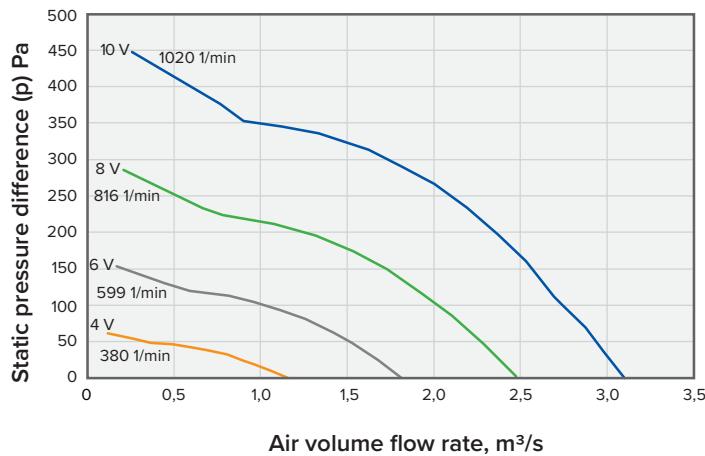
### Sound values



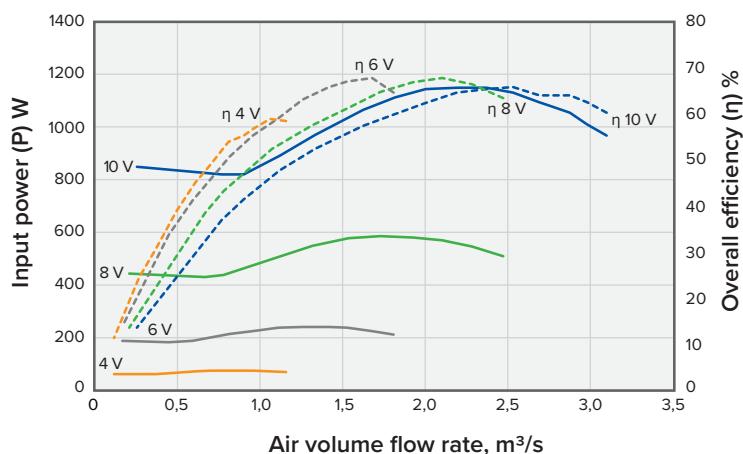
— Sound power level to the suction duct  
- - - Sound power level to the environment

## VALLOX EXXEO 2500 | 2500 DPC | 2500 DS

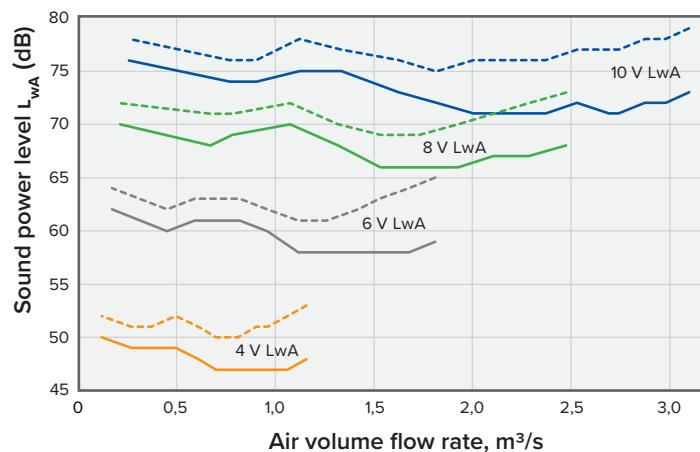
### Static pressure loss



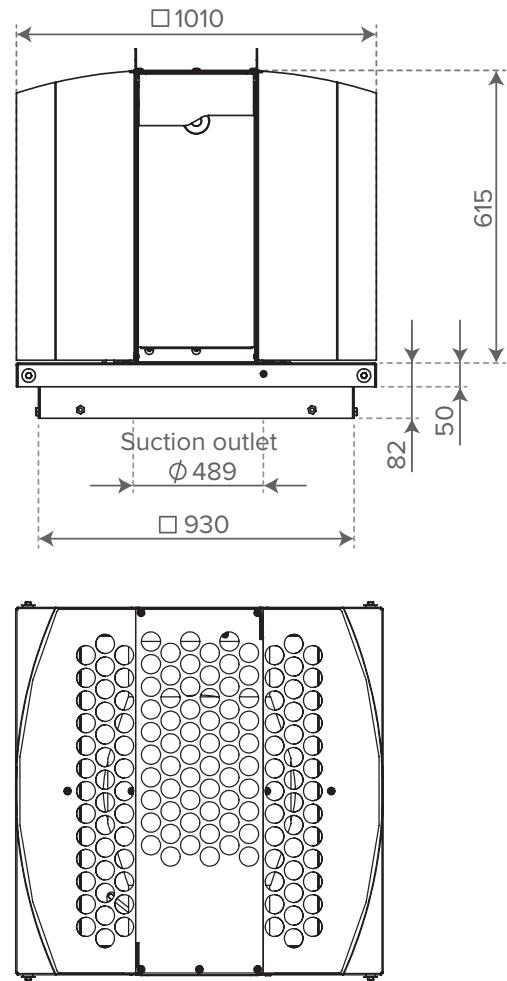
### Input power and efficiency



### Sound values



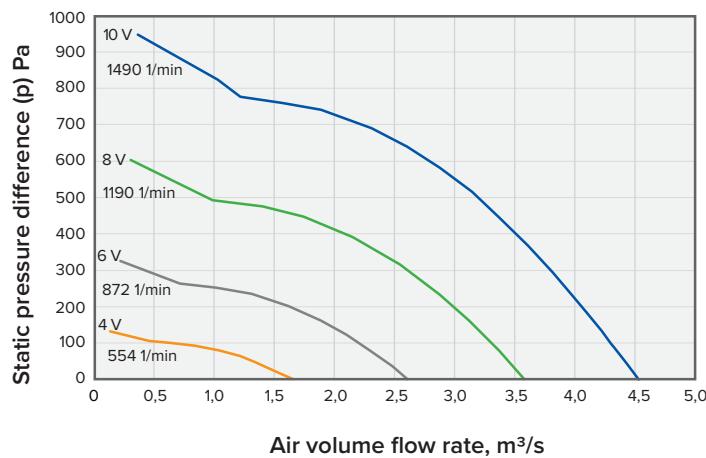
### Dimension diagrams



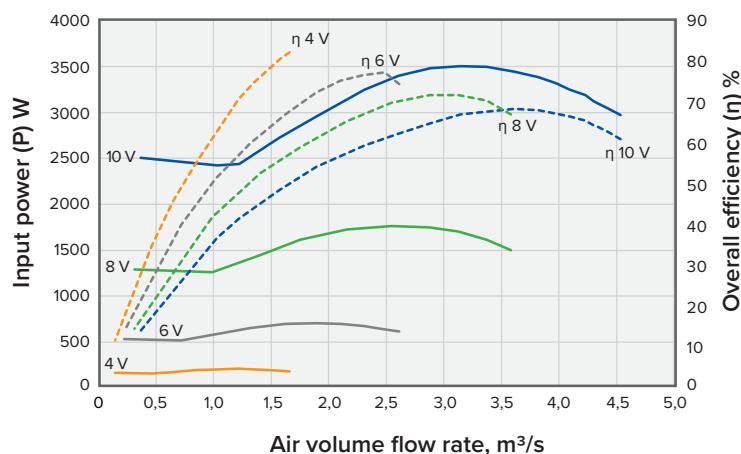
— Sound power level to the suction duct  
- - - Sound power level to the environment

## VALLOX EXXEO 4100 | 4100 DPC | 4100 DS

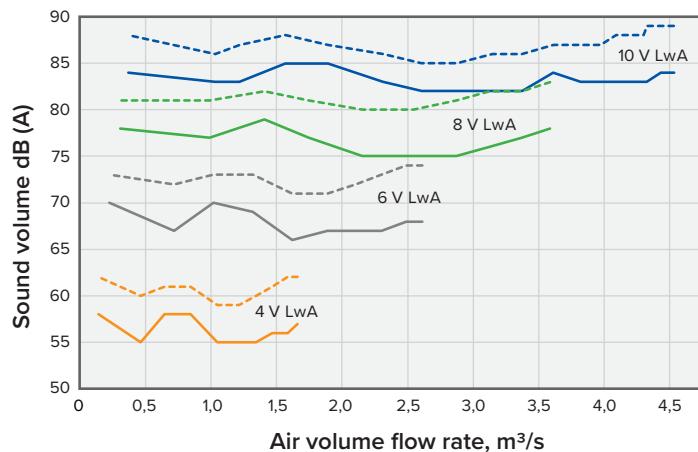
### Static pressure loss



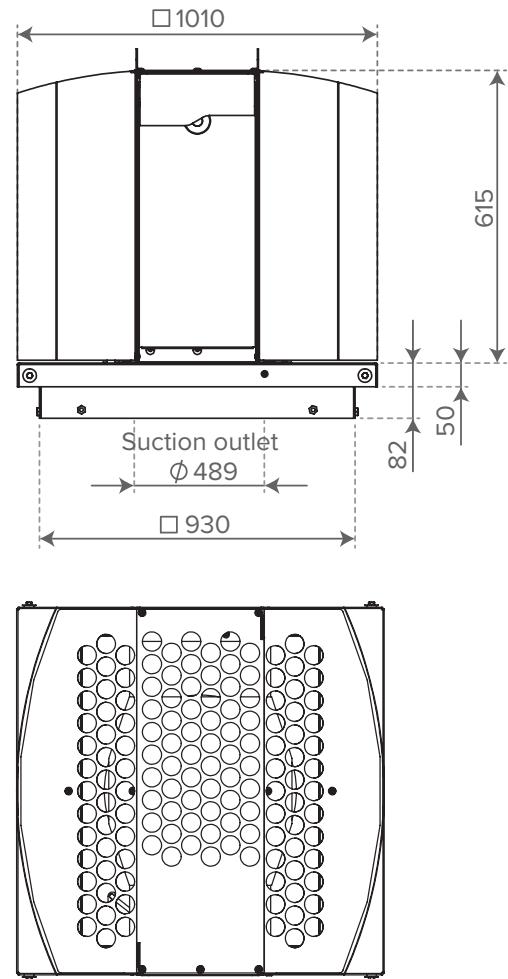
### Input power and efficiency



### Sound values



### Dimension diagrams



— Sound power level to the suction duct  
- - - Sound power level to the environment

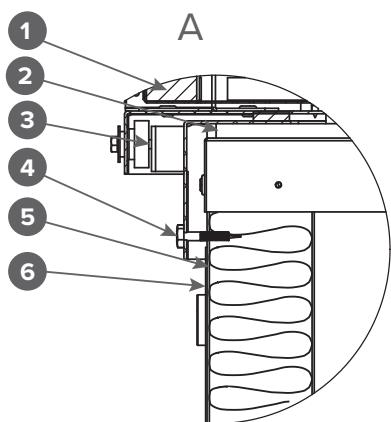
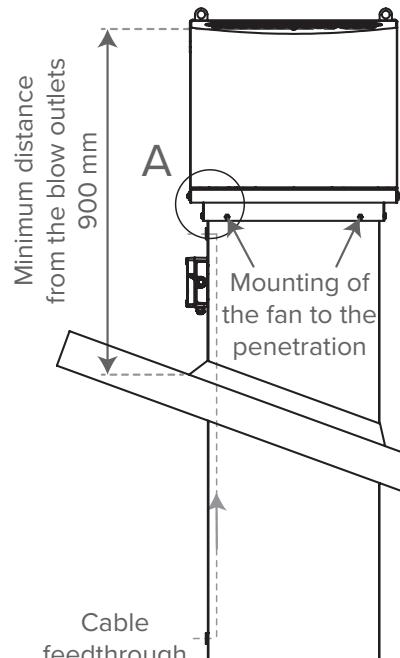
## INSTALLATION

Vallox Exxeo roof fans may be installed on top of a penetration made on site or by using the factory-made Vallox Exxeo roof penetration part. The tilting part attached to the fan is equipped with a seal that seals the fan against the roof penetration. The fan is fastened to the roof penetration with self-drilling screws. Below is an illustration of the installation of the fan.

Where necessary, the mounting frame delivered with the fan can be used for installing the fan on top of an existing flue or roof penetration part.

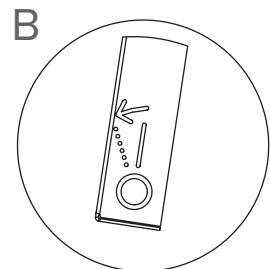
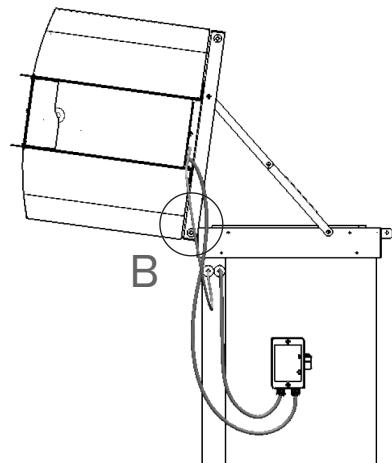
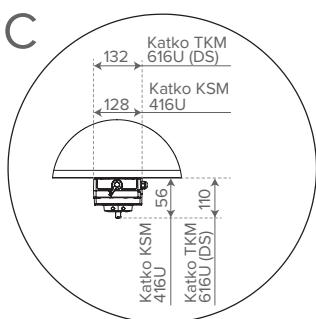
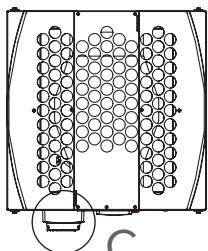


**IMPORTANT**  
When installing the safety switch, ensure that the fan can be tilted for cleaning.

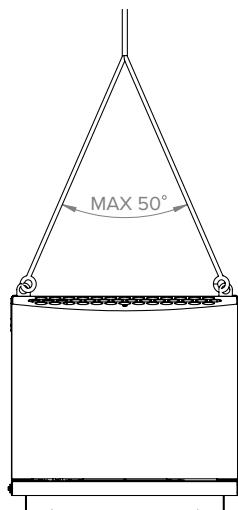


1. Roof fan
2. Seal
3. Tilting axis of the fan
4. Self-drilling screw 4.2x38 mm
5. Ceiling feed-through
6. Cladding board

Dimensions of the safety switch are marked in Figure C.



The pivot point is marked on the bottom plate of the fan as shown in Figure B.



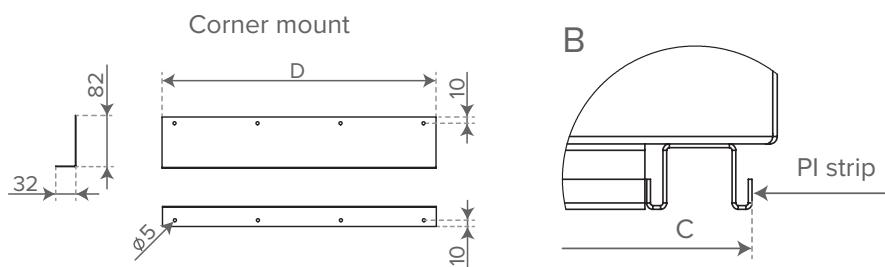
Lift the fan from the enclosure lugs. Pay attention to the lifting angle of the sling. The lifting angle of the slings should be less than 50°.

## Vallox Exxeo roof penetration part (optional)

The roof penetration part is made of galvanized sheet metal. Inside, there is a galvanized perforated plate and a 60 mm wool plate covered with mesh-reinforced black aluminum laminate. The fire rating of the insulation is (A2 - s1, d0), and it is intended for the fire insulation of rectangular air ducts up to fire rating EI60. The roof penetration part is delivered with corner mounts which can be used for fastening the roof penetration part to the roof structures. The roof penetration part includes a cable trough through which the feed and control cables can be led to the fan.

### DIMENSIONS

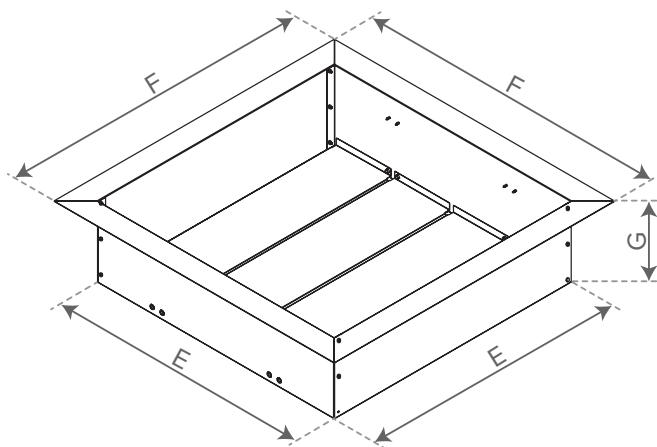
	A	B	C	D
Vallox Exxeo 150	380	255	370	240
Vallox Exxeo 300/700	450	325	440	308
Vallox Exxeo 1400/2000	760	635	750	620
Vallox Exxeo 2500/4100	920	795	910	770



## Vallox Exxeo underpressure damper (optional)

### DIMENSIONS

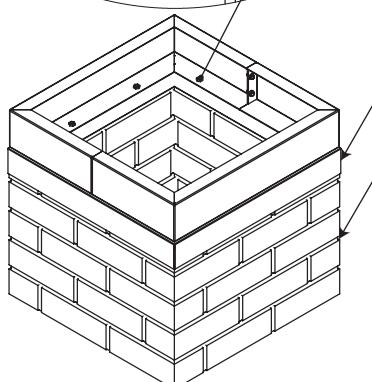
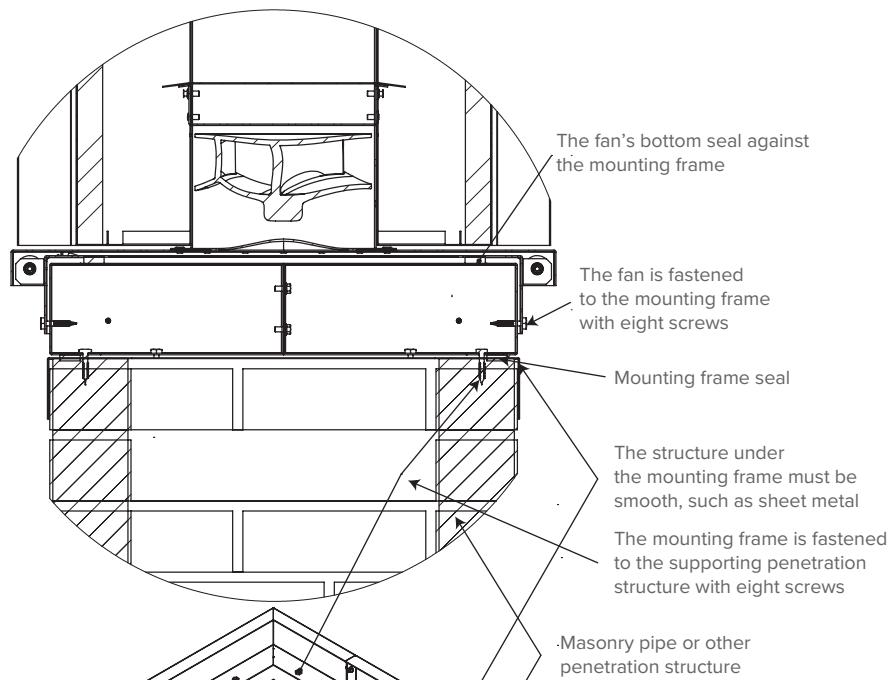
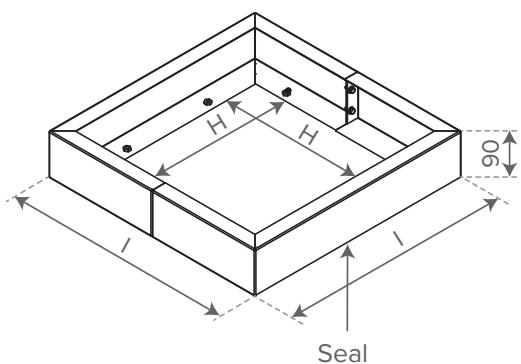
	E	F	G
Vallox Exxeo 150 underpressure damper	240	350	135
Vallox Exxeo 300/700 underpressure damper	308	420	166
Vallox Exxeo 1400/2000 underpressure damper	620	730	190
Vallox Exxeo 2500/4100 underpressure damper	770	870	230



## Vallox Exxeo mounting frame

### DIMENSIONS

	H	I
Vallox Exxeo 150	290	390
Vallox Exxeo 300/700	360	460
Vallox Exxeo 1400/2000	670	770
Vallox Exxeo 2500/4100	820	920



## SETUP

Before starting the fan, ensure that the fan wheel can rotate freely and that there are no loose or extra objects inside the duct system or the roof fan. Switch the fan on briefly to check its stable operation. If everything is OK, the roof fan can be started up.

An uninterrupted power supply to the roof fan (Vallox Exxeo 700–4100) is essential to ensure safe operation to the allowed minimum temperature of the environment. If the motor does not start although the power supply is working properly (no setting signal, mains connection via the activation circuit), heating of the motor is automatically switched on when the inside temperature of the control unit goes down to -19°C, and when the temperature has risen to -15°C, it is switched off again. Heating is implemented with a motor coil; the power is standardised so that it is not sufficient to run the motor (about five revolutions per hour). In this way, freezing of the rotor can be prevented.



### NOTE

There is a separate instruction manual for the control panel of the Vallox Exxeo basic and DPC models.



### NOTE

The control voltages of the Vallox Exxeo DS (dual speed converter) model can be adjusted, when necessary, from the potentiometers of the roof fan control panel (see the internal electrical connections of the DS model). The factory settings are 5 V and 10 V.

## K VALUES – AIR FLOW MEASUREMENT

Roof fans are equipped with measuring tubes. The pressure difference  $\Delta pm$  (Pa) measured from them can, together with the fan-specific k factor, be used to determine the air flow  $qv$  ( $dm^3/s$ ) of the roof fan. The measuring tubes are in the vertical bracket behind the protective cover of the fan's control unit. A manometer can be connected to them. The measuring tubes are marked with + and -. The k factors specified in the table apply to air density  $1.2 \text{ kg/m}^3$  ( $+20^\circ\text{C}$ ). The air flow can be calculated by using the following formula:

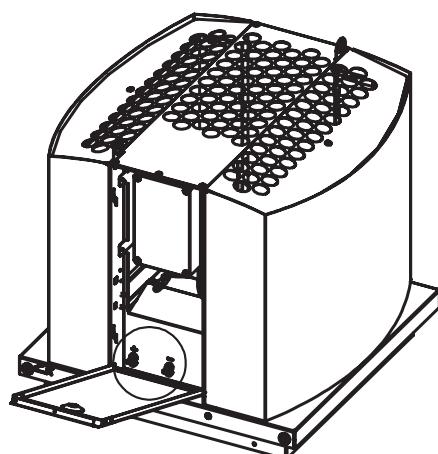
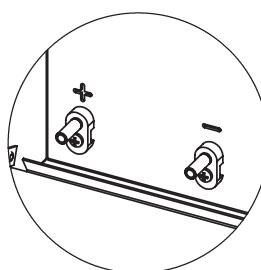
$$qv(\text{dm}^3/\text{s}) = k * \sqrt{\Delta pm}$$

If the temperature of the air to be extracted deviates from  $+20^\circ\text{C}$ , the air flow can be calculated by using the following formula:

$$qv(\text{dm}^3/\text{s}) = \sqrt{\frac{r_{20}}{r_{op}}} * k * \sqrt{\Delta pm}$$

$r_{20} = 1.2 \text{ kg/m}^3$ ,  $r_{op}$  = air density in the temperature of the air that is to be extracted

K VALUES	
	K value ( $r = 1.2 \text{ kg/m}^3$ )
Vallox Exxeo 150	12,5
Vallox Exxeo 300	16,7
Vallox Exxeo 700	22,2
Vallox Exxeo 1400	44,4
Vallox Exxeo 2100	66,7
Vallox Exxeo 2500	147,2
Vallox Exxeo 4100	147,2



## MAINTENANCE

In normal use, the roof fan does not require maintenance in addition to the annual inspection and cleaning described below:

- Checking the vibration and noise level
- Checking the condition and integrity of the fan wheel blades.
- Overall visual check of the fan
- Checking the free rotation of the fan wheel
- Cleaning the fan wheel
- Cleaning the motor
- General cleaning (insulations, roof plate, etc.)



### WARNING

The roof fan may endanger your life because of the rotating parts and the risk of electric shock. It contains capacitors that take time to discharge after the voltage is switched off. Before working with the components, make sure that there is no voltage. Wait at least five (5) minutes to ensure that the voltage of the capacitors is discharged to a safe level. Do not make any changes or additions to the product without Vallox's permission.

### Cleaning the fan wheel

Switch off the voltage by using the safety switch and wait until the fan has stopped.

- a. Undo the roof panel screws (8 screws) and remove it.
- b. Undo the screws of the rain cover (4) and remove it (not absolutely necessary).
- c. Lift and pull the side panels out.
- d. Clean the fan wheel with a cloth and soapy water. Take care not to detach the balancing elements. The fan wheel can also be cleaned from below by tilting the roof fan.
- e. Reassemble in reverse order.



### IMPORTANT

The roof fan delivery does not include protection against physical contact installed at the suction outlet. Protection against physical contact must be installed if the roof fan is installed so that the fan wheel can cause danger.



### NOTE

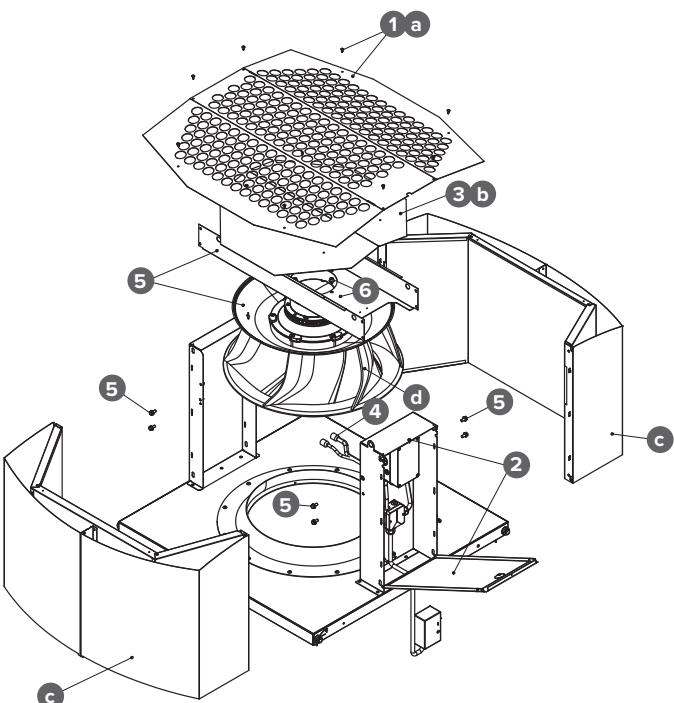
If used for the removal of very dirty exhaust air, the checking as well as the cleaning of the fan wheel and motor must be carried out more frequently.

Always follow local regulations on the cleaning of ventilation equipment.

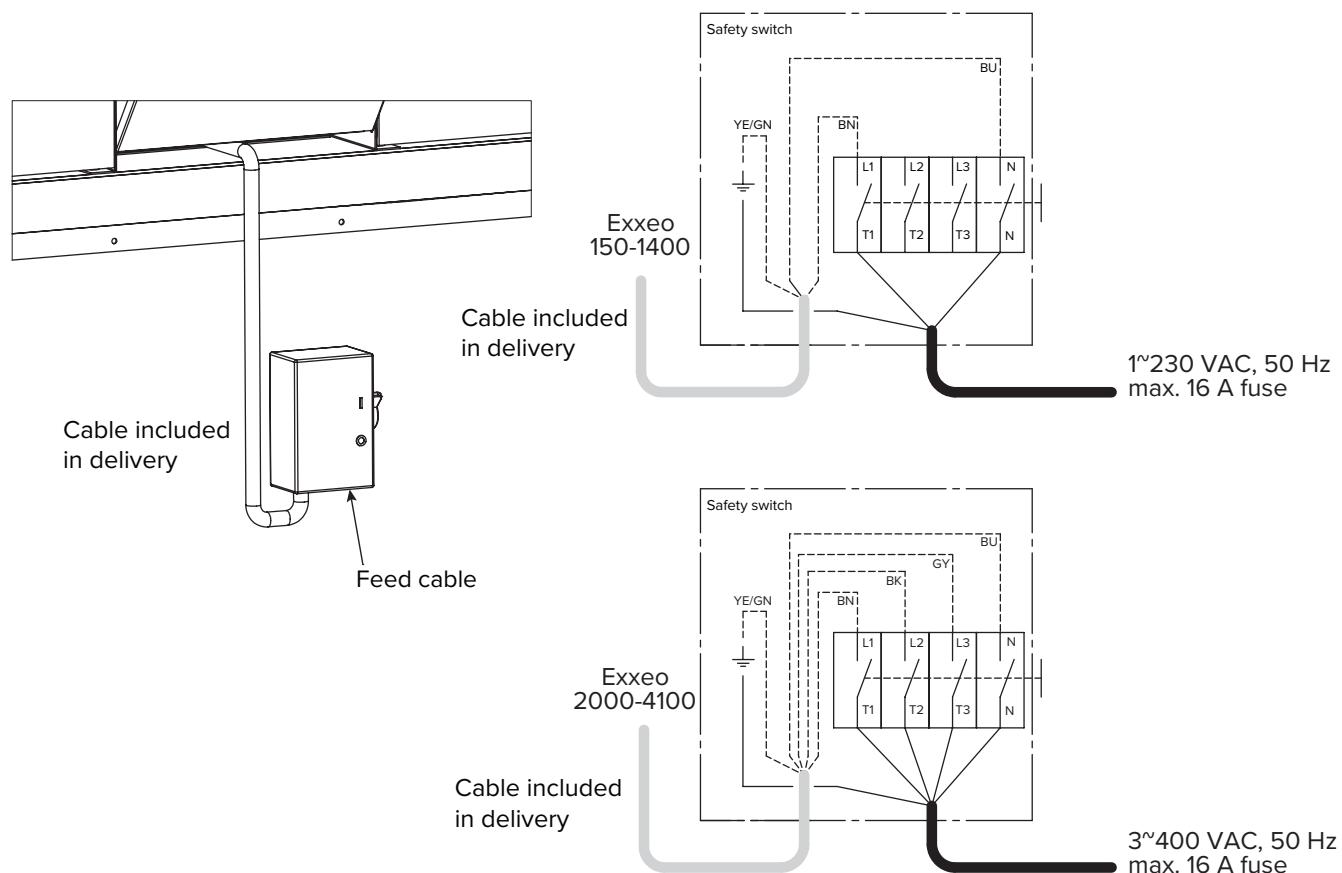
### Replacing the fan

Switch off the voltage by using the safety switch and wait at least five (5) minutes.

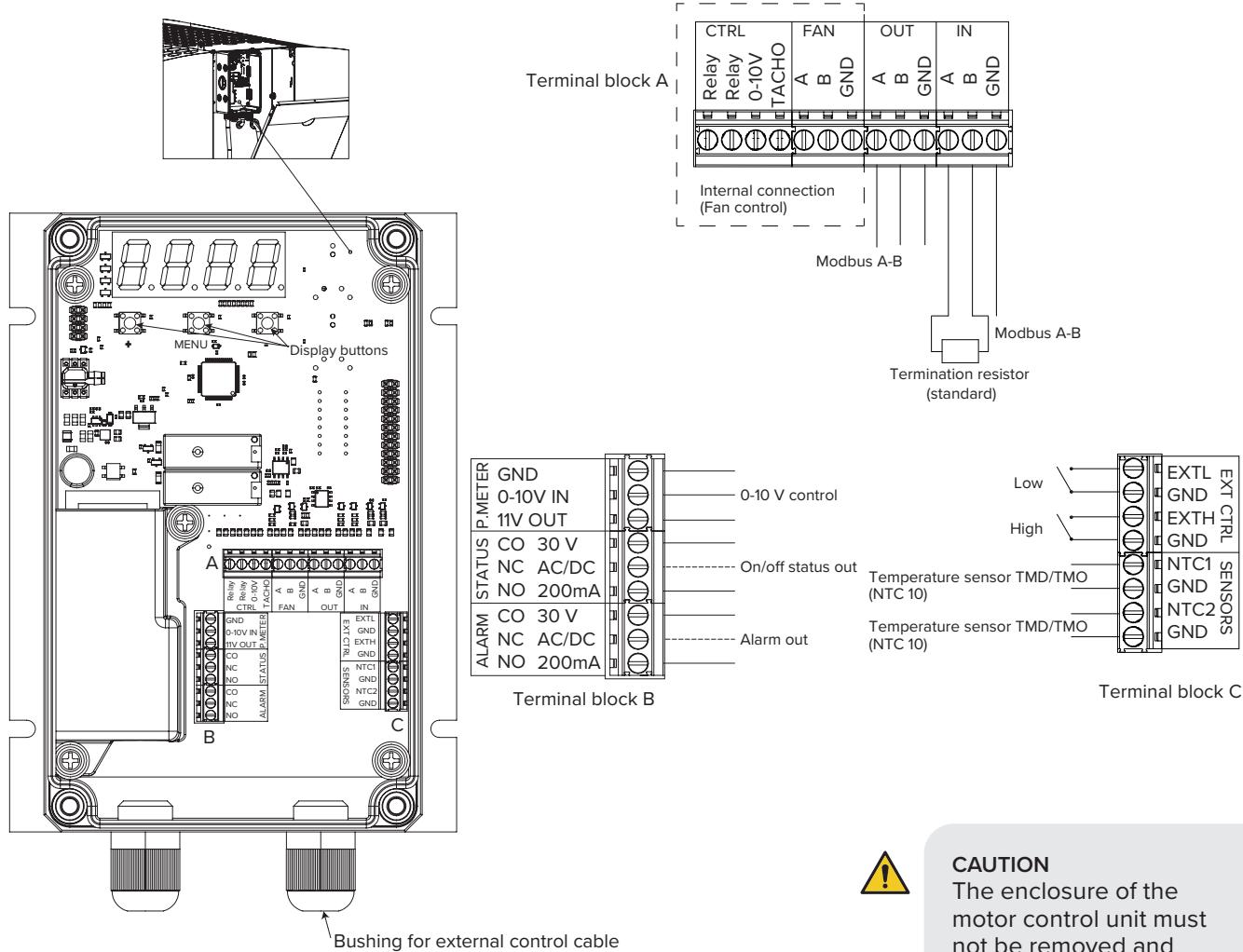
1. Undo the roof panel screws (8 screws) and remove it.
2. Undo the service door screw and open the door.
3. Undo the screws of the rain cover (4) and remove it.
4. Detach the fan cables from the fan motor (models 700–4100). Detach the fan cables from the control panel (models 150–300). Electrical connections must be carried out by authorised persons only.
5. Undo the bolts and screws (8) of the fan bracket and lift off the fan assembly.
6. Undo the mounting screws of the fan and lift the bracket off the fan.
7. Reassemble in reverse order.



## EXTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO AND VALLOX EXXEO DPC



## EXTERNAL CONTROL CONNECTION | VALLOX EXXEO AND VALLOX EXXEO DPC

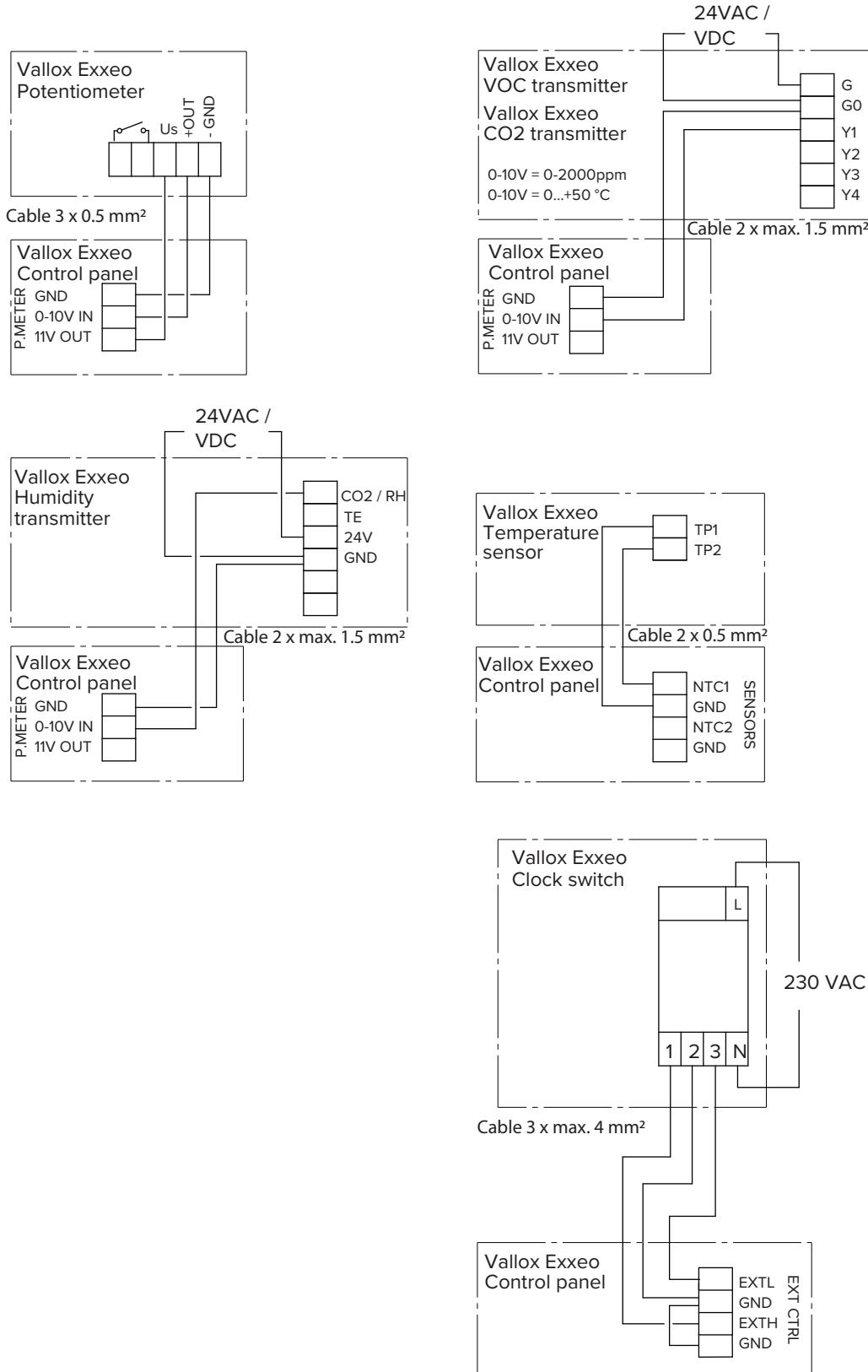


**CAUTION**  
The enclosure of the motor control unit must not be removed and opened until five (5) minutes after the unit has been disconnected from the mains.

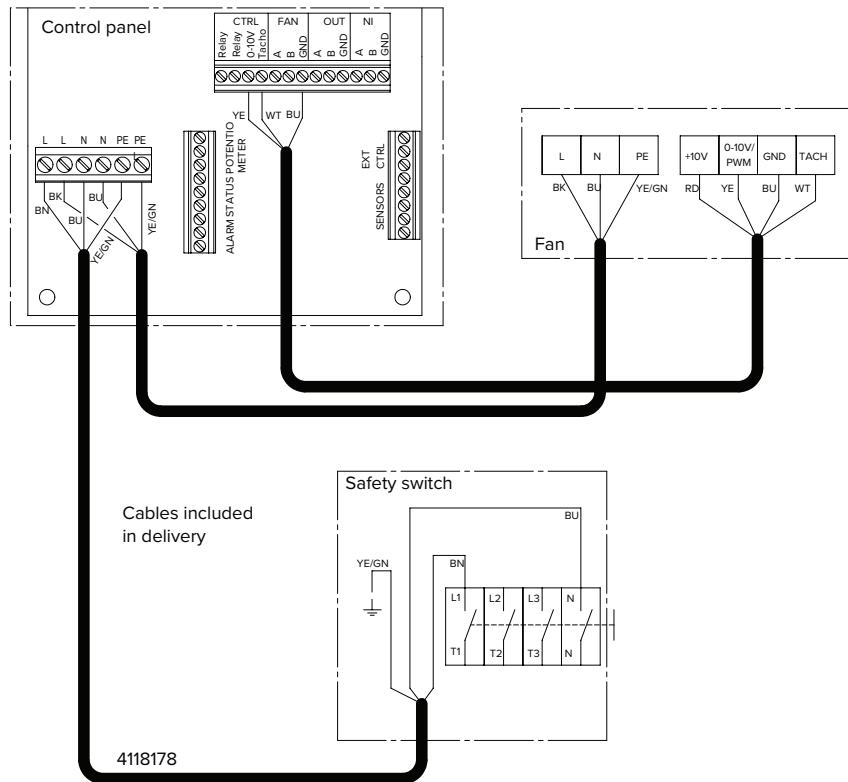


**WARNING**  
Electrical connections must be carried out by authorised persons only. Using the roof fan in a potentially explosive atmosphere for processing gas, mist, steam or mixes thereof is forbidden. The extracted air mix must not contain solid materials.

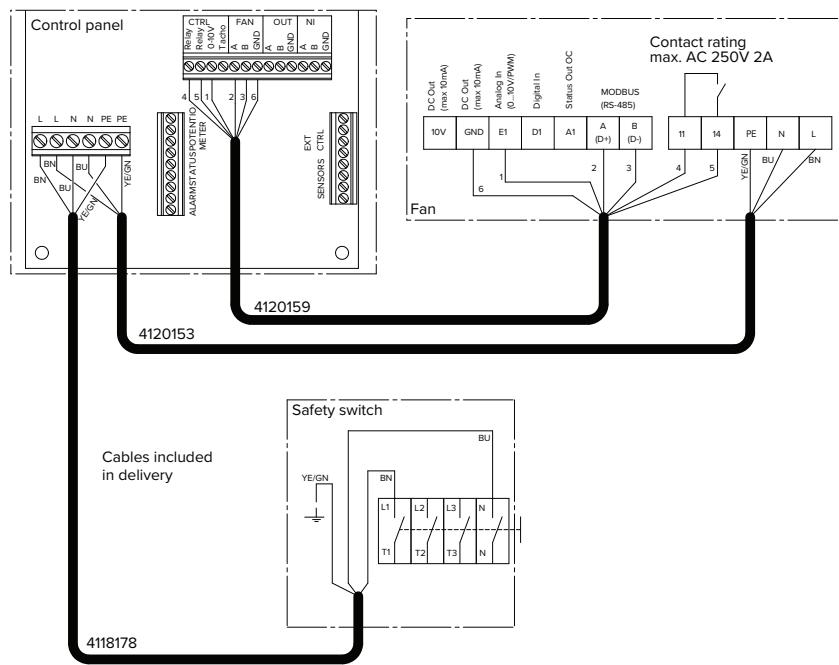
## CONNECTION OF SUPPLIES | VALLOX EXXEO AND VALLOX EXXEO DPC



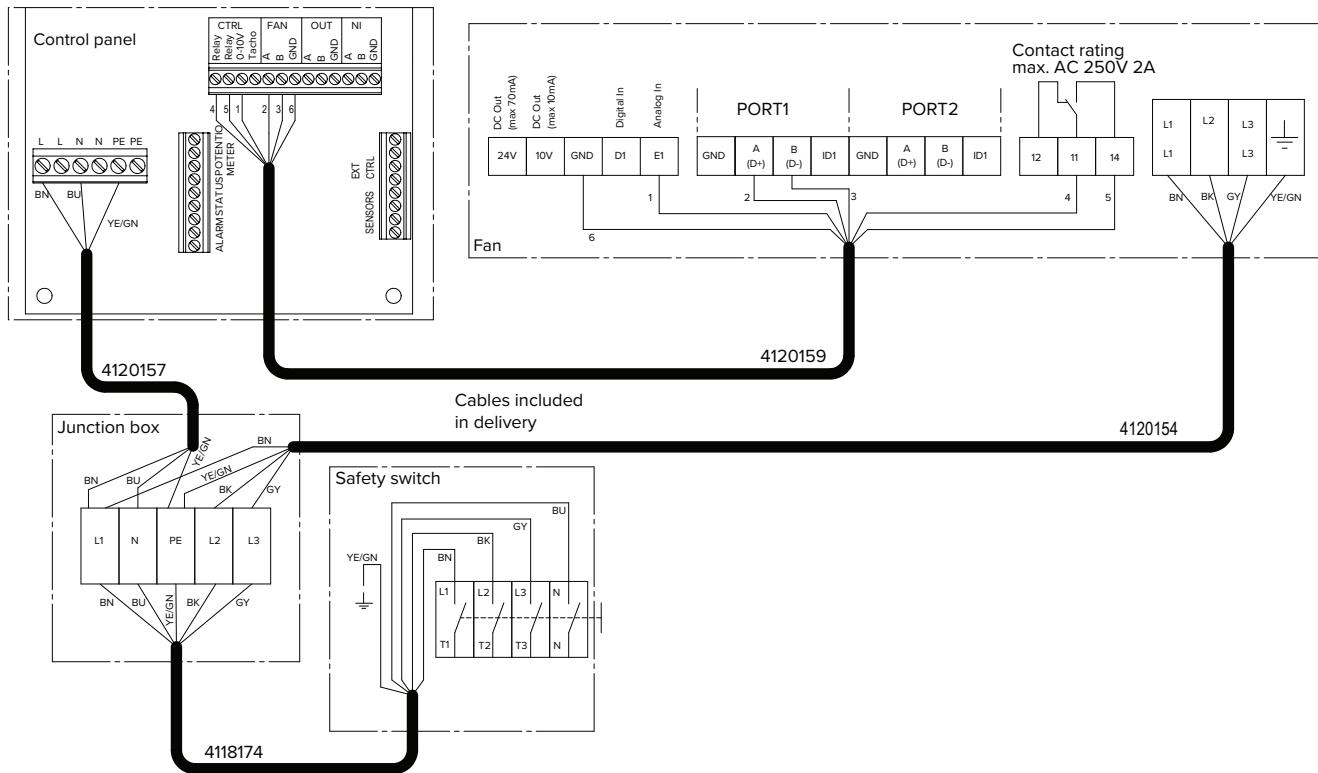
## INTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO 150 AND 300, VALLOX EXXEO 150 DPC AND 300 DPC



## INTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO 700 AND 1400, VALLOX EXXEO 700 DPC AND 1400 DPC



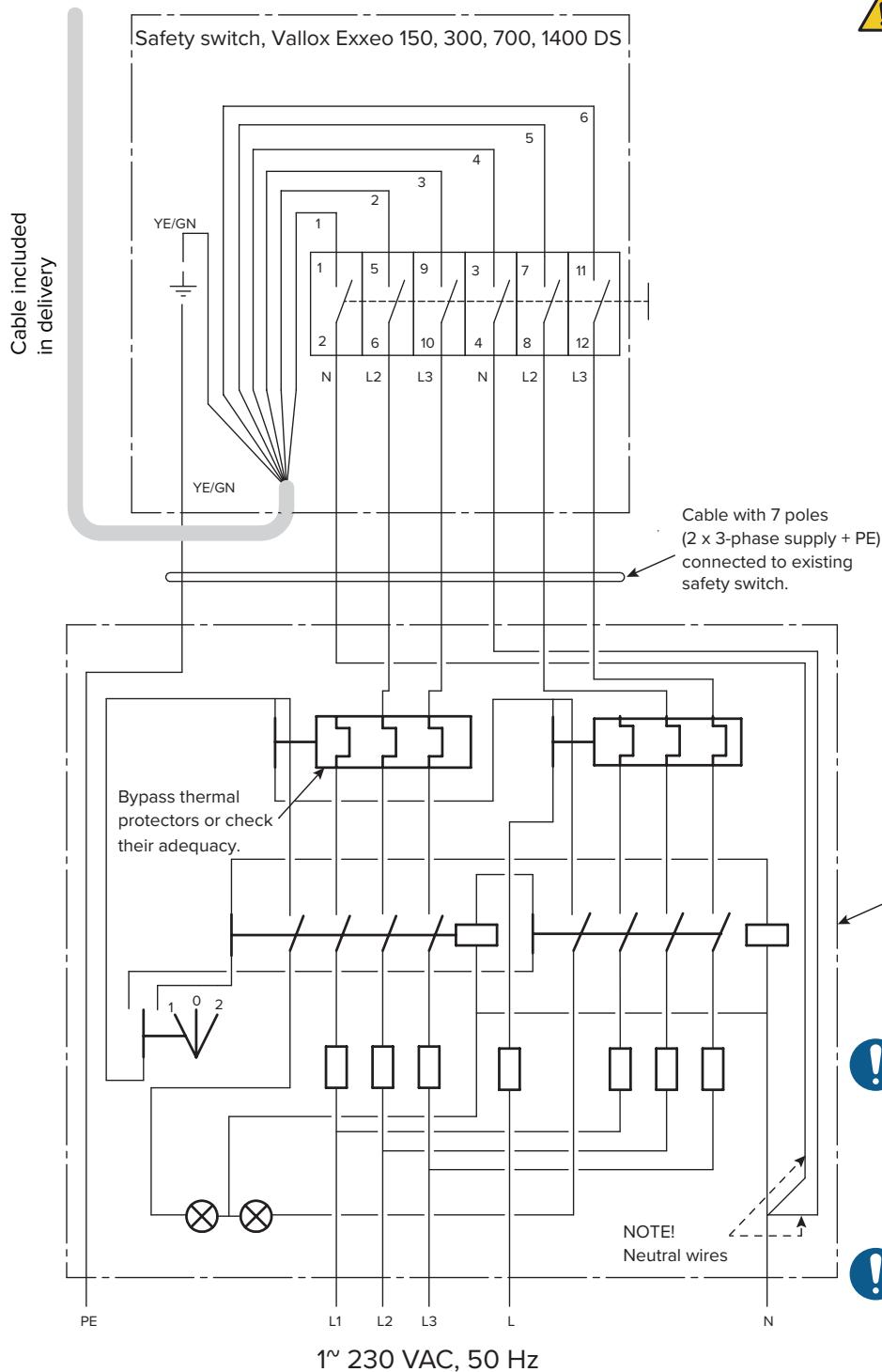
## INTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO 2000, 2500 AND 4100, VALLOX EXXEO 2000 DPC, 2500 DPC AND 4100 DPC



## EXTERNAL ELECTRICAL CONNECTION I

### VALLOX EXXEO 150 DS, 300 DS, 700 DS AND 1400 DS

Connection instructions for replacing a roof fan equipped with a 2-speed, 3-phase AC motor with a Vallox Exxeo 150 DS, 300 DS, 700 DS or 1400 DS roof fan.


**CAUTION**

The phase sequence of the power supply for contactor control and safety switch must be the same. The coil voltage of the contactors of Vallox Exxeo DS models is 400 V.


**IMPORTANT**

Make sure that the thermal protectors have been by-passed or that they are sufficient.

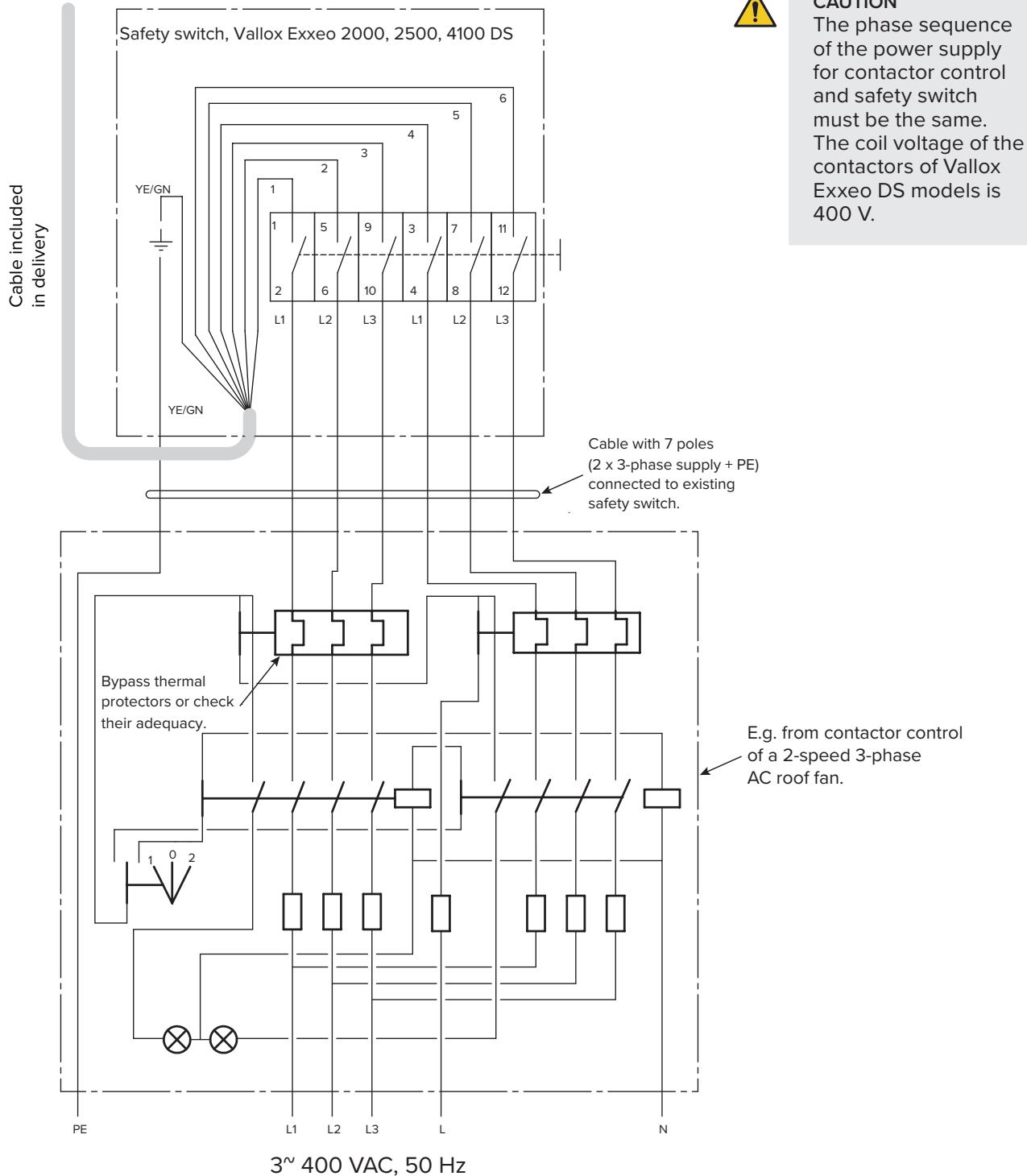

**IMPORTANT**

Ensure that the change of the neutral conductors has been made.

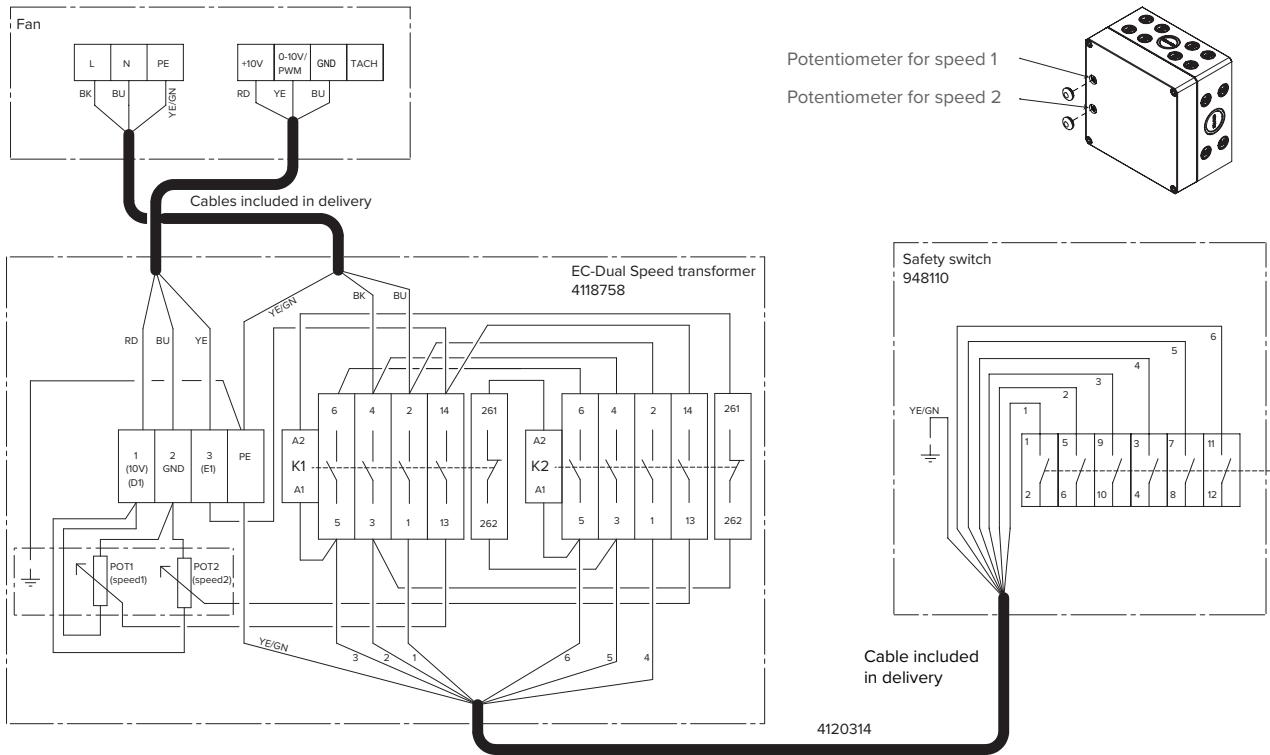
## EXTERNAL ELECTRICAL CONNECTION I

### VALLOX EXXEO 2000 DS, 2500 DS AND 4100 DS

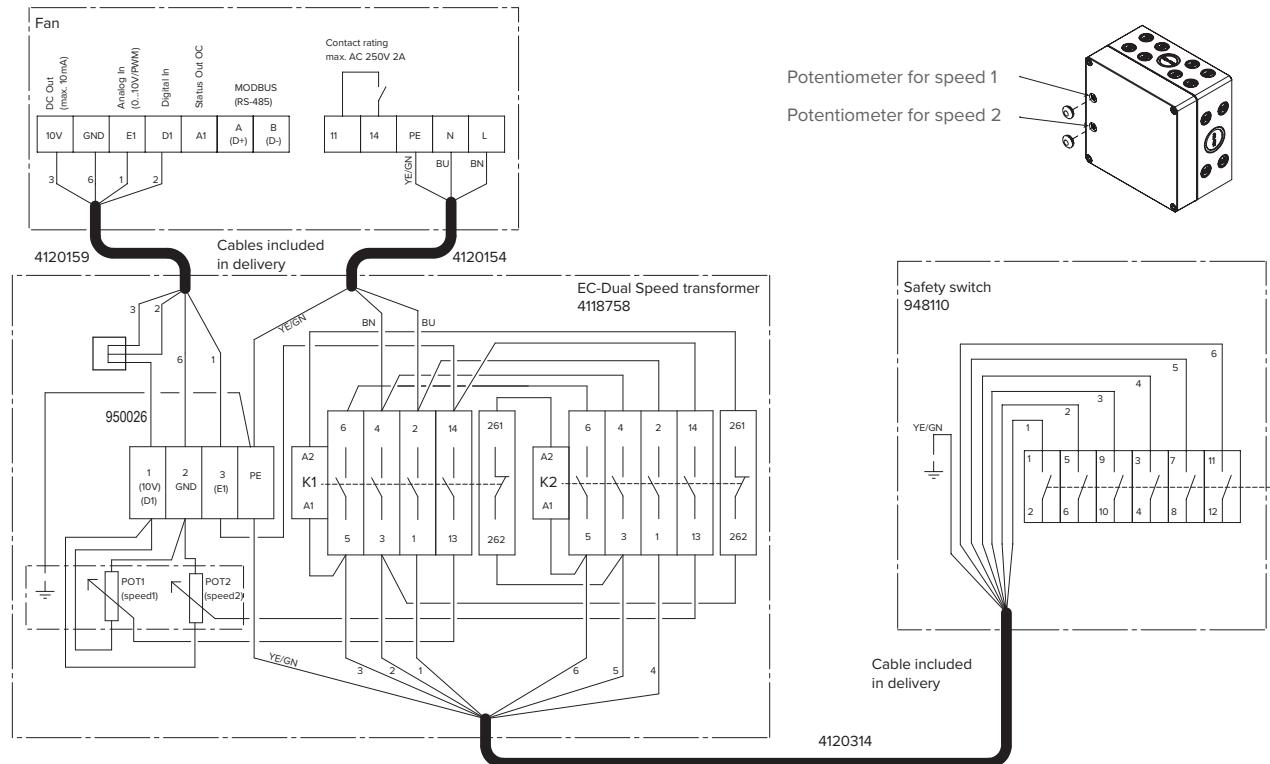
Connection instructions for replacing a roof fan equipped with a 2-speed, 3-phase AC motor with a Vallox Exxeo 2000 DS, 2500 DS or 4100 DS roof fan.



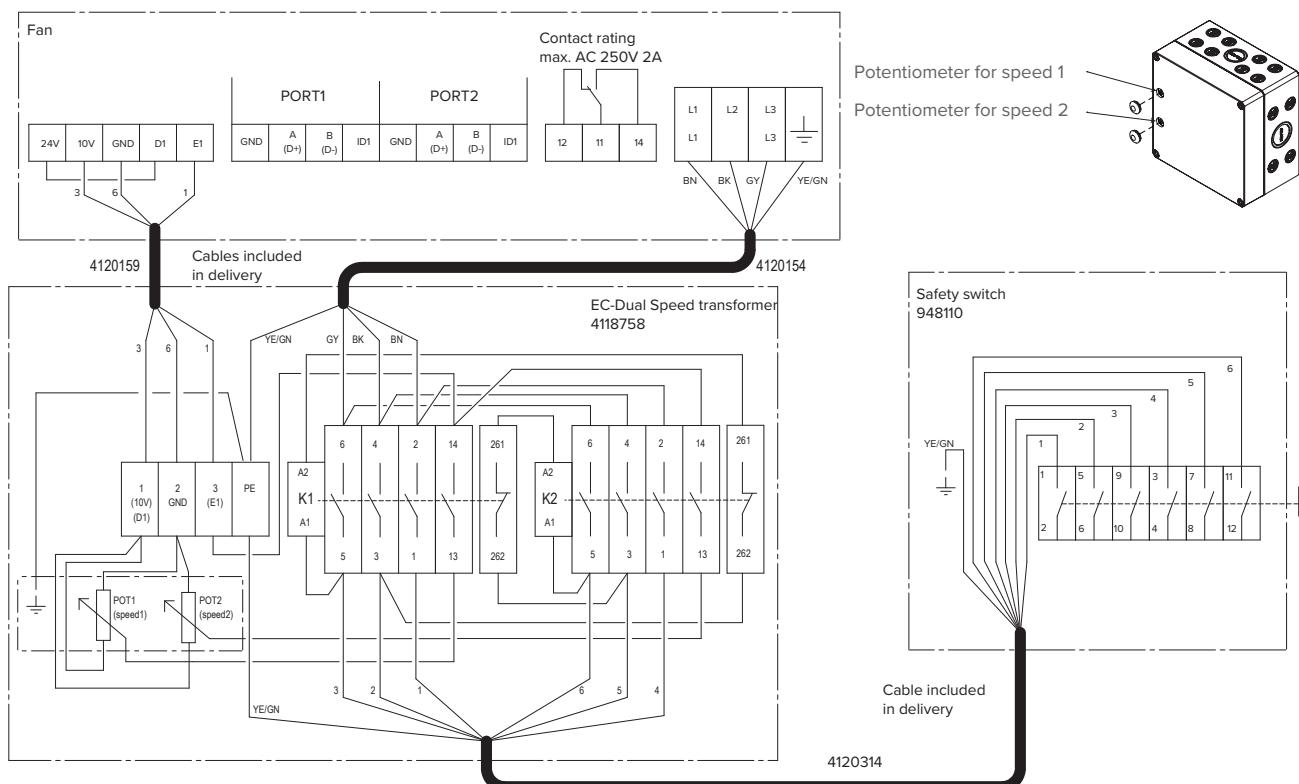
## INTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO 150 DS AND 300 DS



## INTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO 700 DS AND 1400 DS

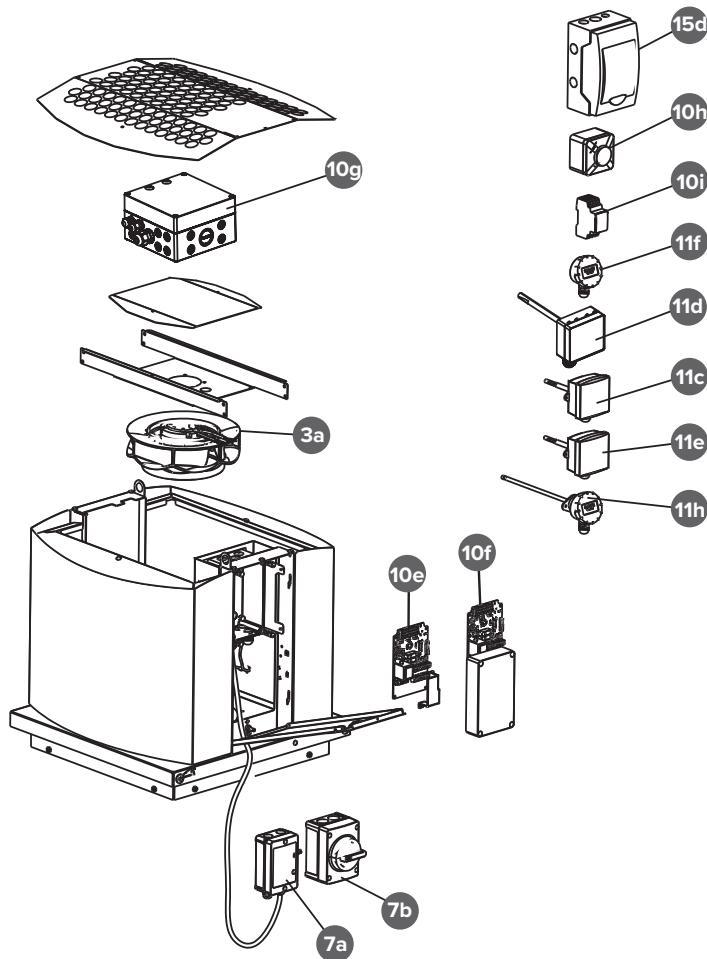


## INTERNAL ELECTRICAL CONNECTION | VALLOX EXXEO 2000 DS, 2500 DS AND 4100 DS



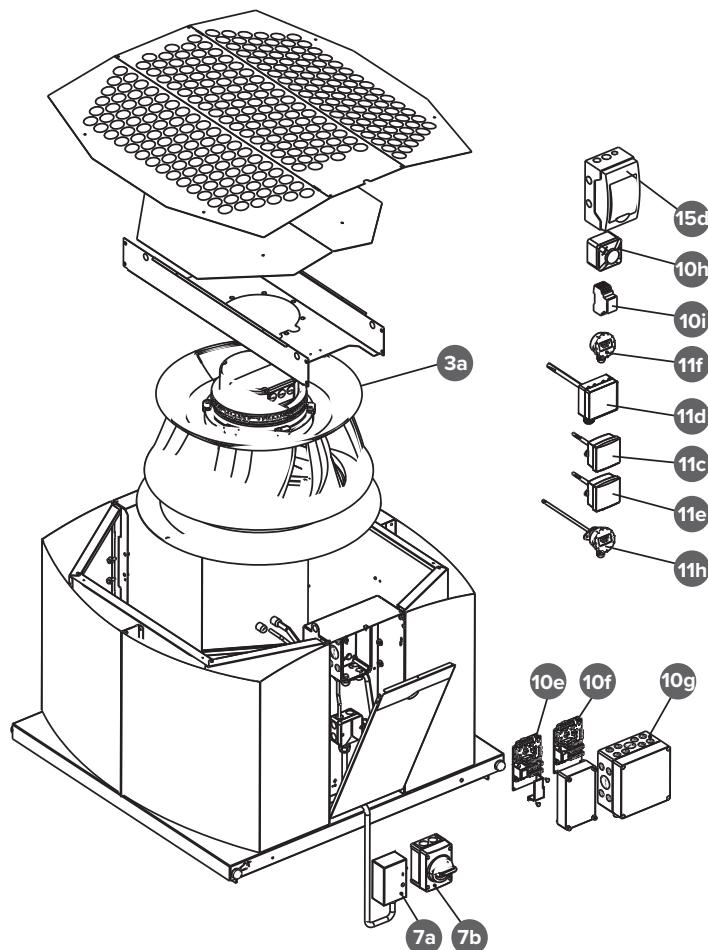
## EXPLODED VIEW AND SPARE PARTS LIST I

### VALLOX EXXEO 150, 300 AND 700



NO. PART	CODE	NO. PART	CODE	NO. PART	CODE
3a.	Fan, Vallox Exxeo 150 Fan, Vallox Exxeo 300 Fan, Vallox Exxeo 700	935590 935580 930760	10g.	Dual speed converter Vallox Exxeo DS	4118377
7a.	Safety switch	948180	10h.	Vallox Exxeo potentiometer	986010
7b.	Safety switch Vallox Exxeo DS	948999	10i.	Vallox Exxeo clock switch	986020
10e.	Control panel Vallox Exxeo	949150	11c.	Vallox Exxeo CO2 transmitter	949077
10f.	Control panel Vallox Exxeo DPC	949152	11d.	Vallox Exxeo humidity transmitter	986040
				15d.	Enclosure
					949078
				11f.	Vallox Exxeo temperature sensor for wall
				11h.	Vallox Exxeo duct temperature sensor
					986030
					998238
					986000

## EXPLODED VIEW AND SPARE PARTS LIST I VALLOX EXXEO 1400, 2000, 2500 AND 4100



NO. PART	CODE	NO. PART	CODE	NO. PART	CODE
3a.	Fan, Vallox Exxeo 1400 Fan, Vallox Exxeo 2000 Fan, Vallox Exxeo 2500 Fan, Vallox Exxeo 4100	930765 930770 930775 930780	10g.	Dual speed converter Vallox Exxeo DS	4118377
7a.	Safety switch	948180	10h.	Vallox Exxeo potentiometer	986010
7b.	Safety switch Vallox Exxeo DS	948999	10i.	Vallox Exxeo clock switch	986020
10e.	Control panel Vallox Exxeo	949150	11c.	Vallox Exxeo CO2 transmitter	949077
10f.	Control panel Vallox Exxeo DPC	949152	11d.	Vallox Exxeo humidity transmitter	986040
				11e.	Vallox Exxeo VOC transmitter
				11f.	Vallox Exxeo temperature sensor for wall
				11g.	Vallox Exxeo duct temperature sensor
				15d.	Enclosure

## SUPPLIES

CONTROL	CODE	INSTALLATION	CODE	OTHER	CODE
Vallox Exxeo clock switch	986020	Vallox Exxeo 150 roof penetration part	4121409	Vallox Exxeo RAL colour	
Vallox Exxeo potentiometer	986010	Vallox Exxeo 300/700 roof penetration part	4120165		
Vallox Exxeo humidity transmitter	986040	Vallox Exxeo 1400/2000 roof penetration part	4121527		
Vallox Exxeo VOC transmitter	949078	Vallox Exxeo 2500/4100 roof penetration part	4121535		
Vallox Exxeo CO2 transmitter	949077	Vallox Exxeo 150 underpressure damper	4121511		
Vallox Exxeo temperature sensor for wall	986030	Vallox Exxeo 300/700 underpressure damper	4121506		
Vallox Exxeo duct temperature sensor	998238	Vallox Exxeo 1400/2000 underpressure damper	4121486		
		Vallox Exxeo 2500/4100 underpressure damper	4121447		

### Vallox Exxeo clock switch

- Digital week clock switch for DIN rail Operating voltage 230 V AC.
- Enclosure protection class IP20.
- Operating temperature -10°C...+45°C.
- Week clock delivery includes the clock and enclosure (IP55).

### Vallox Exxeo potentiometer

- The roof fan control panel card provides an operating voltage of +11 V for 0-10 V stepless control of the potentiometer.
- Dimensions (w x h x d): 82 x 82 x 65 mm.
- The potentiometer can be immersed in the outlet box IP44 or mounted on the wall surface IP54.

### Vallox Exxeo humidity transmitter

- The humidity transmitter measures the relative humidity and temperature of the air in the ventilation duct.
- The humidity and temperature data are converted into linear analog messages. Operating voltage 24 V.
- Enclosure protection class (metering probe or cable feedthrough down): Transmitter part IP54, sensor IP20.
- Dimensions (w x h x d): 96 x 119 x 233 mm.

### Vallox Exxeo VOC transmitter

- VOC transmitters are designed to measure and adjust VOC content (VOC = Volatile Organic Compound) and temperature in ventilation ducts. Need-based ventilation can be efficiently controlled with VOC data.
- Operating voltage 24 V.
- Enclosure protection class (metering probe or cable feedthrough down): Transmitter part IP54, sensor IP20.
- Dimensions (w x h x d): 105 x 104 x 155 mm.

### Vallox Exxeo CO2 transmitter

- CO2 transmitters are designed to measure and adjust the carbon dioxide content and temperature in ventilation ducts.
- Operating voltage 24 V.
- Enclosure protection class (metering probe or cable feedthrough down): Transmitter part IP54, sensor IP20.
- Dimensions (w x h x d): 105 x 104 x 155 mm.

**Vallox Exxeo temperature sensor for wall**

- Temperature sensor for mounting on external walls of buildings for outdoor temperature compensation.
- Measuring element NTC 10.
- Protection class IP54.
- Bushing seal M16 x 1.5.
- Measuring range -50°C...+50°C.
- Time constant 10 min
- Materials: Box lid PC, base PBT, bushing seal PA

**Vallox Exxeo duct temperature sensor**

- Duct sensors are used for density adjustments.
- Measuring element NTC 10.
- Protection class IP54.
- Bushing seal M16 x 1.5.
- Measuring range -50°C...+50°C.
- Time constant 25 s
- Materials:
  - Box lid PC, base PBT, bushing seal PA
  - Conduit Ms, Ø 8 mm, length 250 mm
  - Flange PA

**Vallox Exxeo roof penetration part**

Roof penetration part is used for roof fan installation (see p. 15).

**Vallox Exxeo underpressure damper**

The underpressure damper closes the duct and prevents outdoor air from flowing back when the roof fan is switched off (see p. 15)

**Vallox Exxeo RAL colour**

Upon request, Vallox Exxeo roof fans are delivered painted with the chosen RAL tone.

### DECLARATION OF CONFORMITY

**Manufacturer** Vallox Oy

**Address** Myllykyläntie 9-11, FIN-32200 LOIMAA, FINLAND

**Telephone number** +358 10 7732 200

**Fax** +358 10 7732 201

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Email [petri.koivunen@vallox.com](mailto:petri.koivunen@vallox.com)

**Description of unit** Roof ventilator

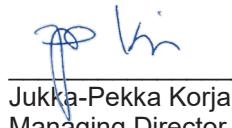
**Model** Vallox Exxeo 150, Vallox Exxeo 150 DPC, Vallox Exxeo 150 DS, Vallox Exxeo 300, Vallox Exxeo 300 DPC, Vallox Exxeo 300 DS, Vallox Exxeo 700, Vallox Exxeo 700 DPC, Vallox Exxeo 700 DS, Vallox Exxeo 1400, Vallox Exxeo 1400 DPC, Vallox Exxeo 1400 DS, Vallox Exxeo 2000, Vallox Exxeo 2000 DPC, Vallox Exxeo 2000 DS, Vallox Exxeo 2500, Vallox Exxeo 2500 DPC, Vallox Exxeo 2500 DS, Vallox Exxeo 4100, Vallox Exxeo 4100 DPC and Vallox Exxeo 4100 DS

Declares that the roof ventilator has been designed and manufactured to the following specifications:

1. EC Machinery Directive 2006/42/EC
2. Low Voltage Directive EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A2:2019 + A14:2019 + A15:2021, EN 60335-2-80:2003 + A1:2004 + A2:2009, EN 62233:2008
3. EMC Directive (2014/30/EU) – EN 61000-6-1:2007, EN 61000-3-3:2013, EN 61000-6-3:2007 + A1:2011+AC:2012
4. Ecodesign Directive (2009/125/EY) – Comission regulation 1253/2014 – EN 13141-7 Annex B, EN 308, EN 13141-7, ISO 3741, ISO 5135

This is the original Declaration of Conformity

Loimaa, 6<sup>th</sup> March 2024

  
\_\_\_\_\_  
Jukka-Pekka Korja  
Managing Director

# **VALLOX**

[www.vallox.com](http://www.vallox.com)

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D11341/19.08.2024