

MYVALLOX 99 CFI

A quiet and low ventilation unit
that keeps air flows always in balance



VALLOX
HOME *of* FRESH AIR

MyVALLOX

99 CFi

The MyVallox 99 CFi ventilation unit with constant flow fans can compensate for pressure differences, keeping air flows constant in any circumstances.

The taller the building or windier the location, the greater the pressure difference caused by factors such as wind and temperature differences. Pressure changes in the apartment can cause various problems for the residents and the building.

The constant flow fans of the MyVallox 99 CFi ventilation unit keep air flows in balance in windy conditions. The air flows remain constant also during the defrosting of the heat recovery cell and regardless of the heat recovery bypass status. A ventilation unit equipped with a constant flow fan enables precise compensation for separate extractions.

Quick to install and set up

MyVallox CFi ventilation units are easy to set up. The constant flow feature allows the air flows to be adjusted by litre directly from the control panel or by connecting the ventilation unit to a computer.


If the unit is set up on a computer, the setup settings can be saved to the computer and used later for the setup of ventilation units in similar locations. A PDF file summarising the settings can also be downloaded and attached to the measurement log.

The constant flow feature is integrated into the fan of the unit and no additional installation work on the duct system is needed. When

the anemometer measuring the air flow is in the fan, there is no fear of blocked measuring tubes either.

The ceiling mounting plate (optional) enables installing the duct system even before the ventilation unit is brought to the site. The white-painted ceiling mounting plate finishes off the installation without the need for covering strips.

The air flows remain constant, regardless of changes in pressure losses caused by wind, dirty filters or valves, the condensation or freezing of the HR cell and the defrost cycles.



MyVallox 99 CFi is an excellent ventilation solution for apartments in tall buildings. Regardless of windy conditions, the constant flow fans always keep the air flows at the set level.

A low and quiet unit suits small apartments

In small apartments, in particular, it is often difficult to find a place for the ventilation unit. However, residents often want a place for a wash tower in the bathroom of the apartment. MyVallox 99 CFI is a low ventilation unit, so it can be installed above a wash tower.

MyVallox 99 CFI is so quiet that no additional soundproofing around the unit is needed even in demanding locations. The careful optimisation of air flows, carefully selected components and excellent soundproofing of the frame ensure the proven* quietness of the unit.

With MyVallox 99 CFI units, the sound pressure level remains below 38 dB even when the air flow is above 70 l/s (LpA dB(A) 10 m²). For this reason, it can be installed in larger apartments than other ventilation units with similar air volumes. Being able to

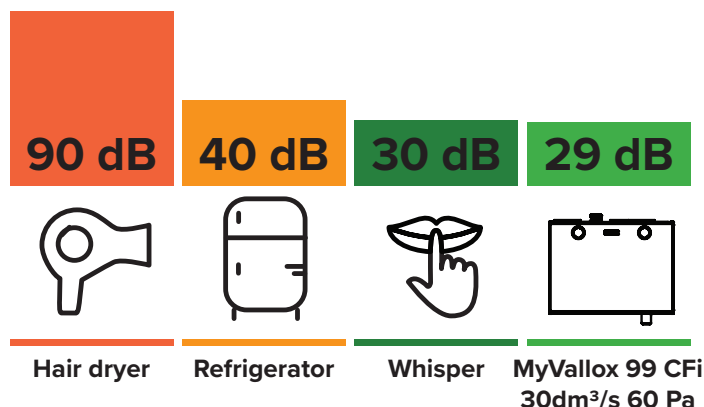
install the same ventilation unit in all the apartments of a building, regardless of their size, enables easier ventilation design, procurement, maintenance and user instruction.

All modern MyVallox features

The MyVallox 99 CFI ventilation unit is controlled by using the method that suits the location best, e.g. by using an apartment-specific control panel or from the cooker hood. The unit can also be connected to a cloud service or building automation.

The ventilation can also be set to be partly or fully controlled by the integrated air quality sensors. With the carbon dioxide and humidity sensors, ventilation is boosted automatically and energy-efficiently based on the need.

The unit's efficient heat recovery system ensures high energy efficiency. In addition, the partial bypassing of the heat recovery cell keeps the supply air temperature even also in spring and autumn.



* The noise levels have been tested in accordance with the ISO 5135:1997 and ISO 3741:2010 standards.

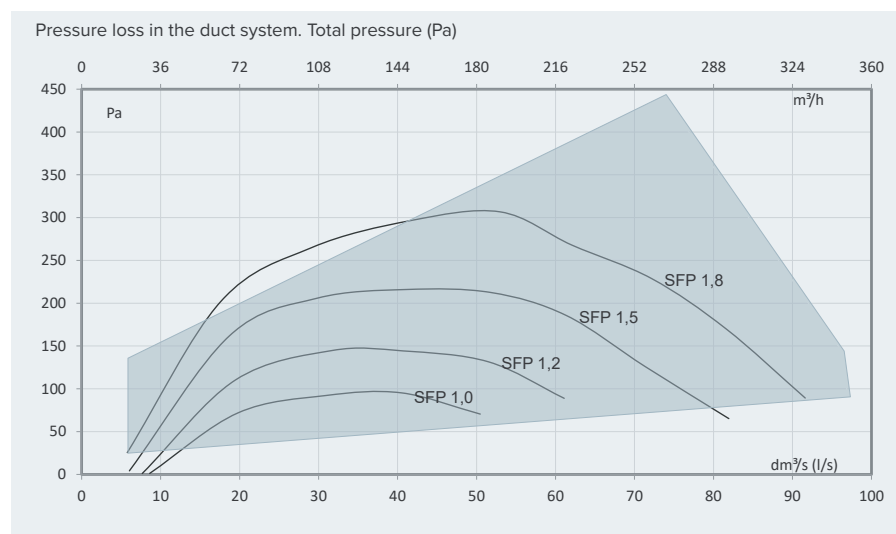
MyVallox 99 CFI is quieter than a whisper. The low noise level is enabled by the air technical design by Vallox.

TECHNICAL SPECIFICATIONS			
Product title	MyVallox 99 CFI		
Product number	RA12 4128104 LA12 4128105	Heat recovery bypass	Automatic
HVAC code	RA12 7912255 LA12 7912256	Post-heating	Electrical resistor, 900 W
Air volumes	Supply air 97 dm ³ /s, 100 Pa Extract air 98 dm ³ /s, 100 Pa	Pre-heating	–
Fans	Supply air 0.1kW, 1.0A EC Extract air 0.1kW, 1.0A EC	Additional heating	Electrical resistor, 900 W
Electrical connection	230 V, 50 Hz, 8.6 A (power plug)	Enclosure protection class	IP 34
Efficiencies*	Annual efficiency 77% Supply air efficiency 82% Specific Fan Power (SFP) 1.15 kW/m ³ /s (68 dm ³ /s)	Filters	Supply air ISO Coarse > 75 % + ISO ePM ₁ ≥ 60 % Extract air ISO Coarse > 75 %
Specific energy consumption (SEC)	cold climate A+ average climate A	Dimensions (w x h x d)	598 x 442 x 625 mm
		Weight	62 kg

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

MyVallox 99 CFi

Fan's supply and extract air volumes and specific electricity consumption



SFP rate (Specific Fan Power) recommended value <1.8 ($\text{kW}/\text{m}^3/\text{s}$). When a lower total pressure is used, also the SFP of the speed is lowered.

INPUT POWER OF THE FAN

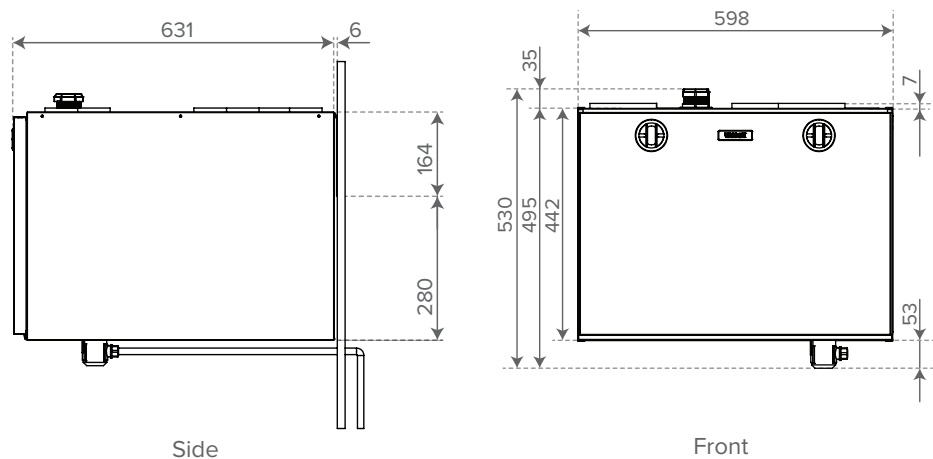
	l/s	m^3/h	Pa	W
Min	5	20	57	13
Mid	52	188	175	71
Max	96	346	144	198

SOUND VALUES

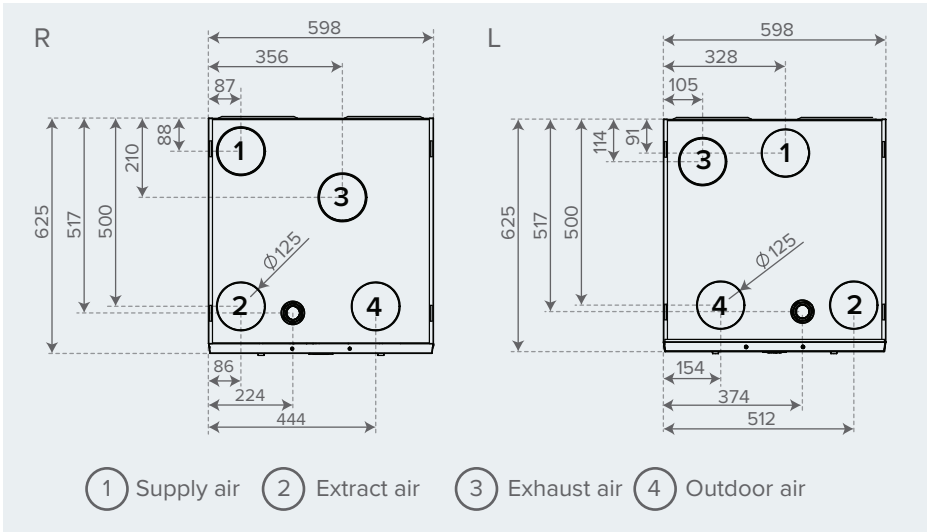
		Sound power level in the supply air ducts by octave band L_w , dB									Sound power level in the extract air ducts by octave band L_w , dB								
Air flow l/s		10	20	30	40	50	60	70	80	95	10	20	30	40	50	60	70	80	95
Medium frequency of the octave band Hz	63	62	63	67	69	73	81	80	83	82	55	56	56	63	69	74	78	82	83
	125	53	54	58	61	63	66	68	69	70	41	46	47	51	54	57	61	66	68
	250	52	54	61	64	66	68	70	72	72	32	35	43	48	50	51	54	56	58
	500	45	49	55	60	63	67	72	72	72	23	26	32	37	42	46	49	51	52
	1000	37	42	49	55	58	62	65	68	69	16	21	27	32	37	40	43	46	48
	2000	25	31	41	48	53	57	60	63	64	13	13	17	23	28	32	35	39	41
	4000	18	21	32	40	45	50	54	57	58	16	16	17	17	19	22	26	29	32
	8000	22	22	23	28	35	41	46	50	51	21	22	21	22	22	22	22	23	25
L_w , dB		63	64	69	71	75	82	81	84	84	55	57	57	64	69	74	78	82	83
L_{WA} , dB(A)		47	50	57	61	64	68	72	73	74	32	35	38	43	47	51	55	58	59
Sound pressure level coming through the envelope of the unit in the room in which it is installed (10m^2 sound absorption)																			
Air flow l/s		10	20	30	40	50	60	70	80	95	10	20	30	40	50	60	70	80	95
L_{pA} , dB (A)		22	26	27	30	34	37	39	42	42	22	26	27	30	34	37	39	42	42

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

MyVallox 99 CFi | Dimensions



MyVallox 99 CFi | Dimensions and duct outlets



MOUNTING ON THE WALL

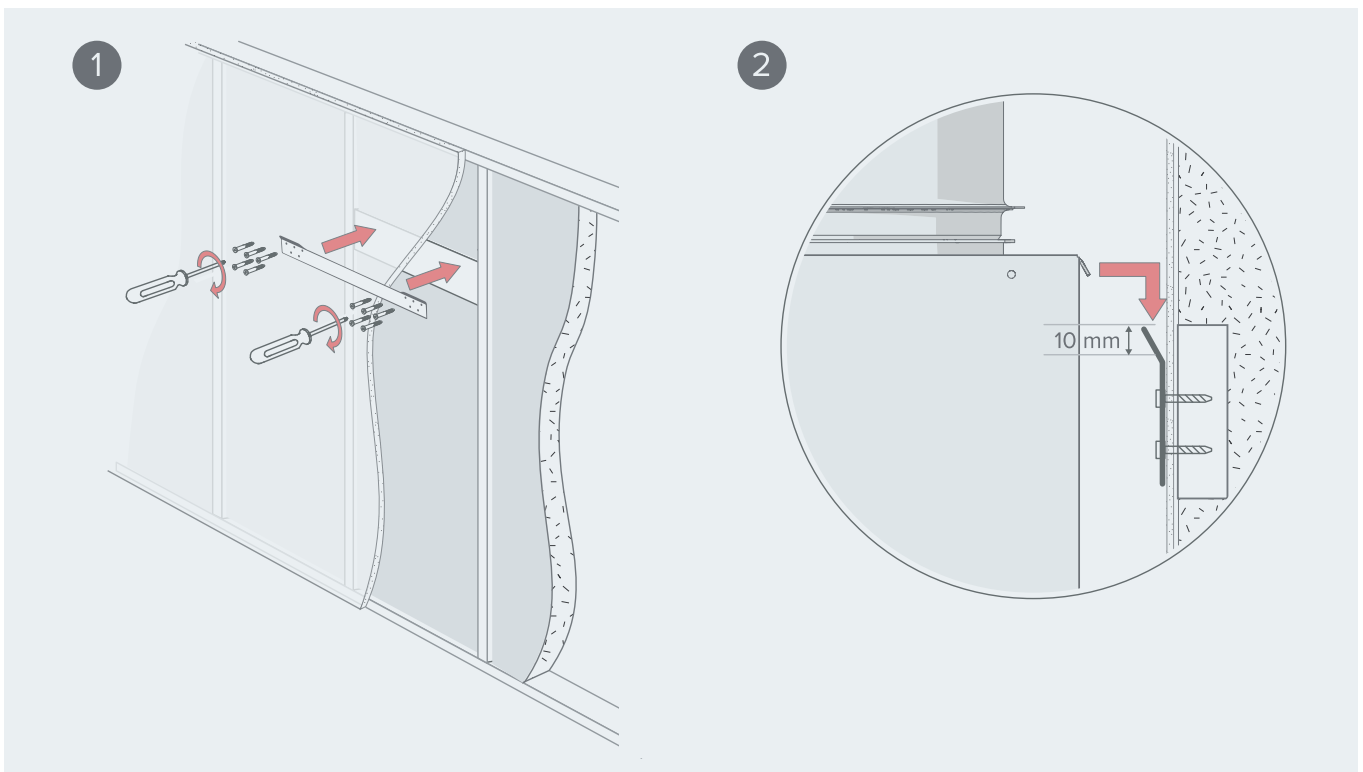
The minimum distance between the top of the unit and the finished ceiling surface is 30 mm. Please note that when using the wall bracket, the unit rises 10 mm higher than the final height.

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 330 mm in front of the unit for servicing purposes.

The socket may be no further than 500 mm from the unit's right-hand top edge.



MOUNTING ON THE CEILING

Installing the ventilation unit to the ceiling mounting plate

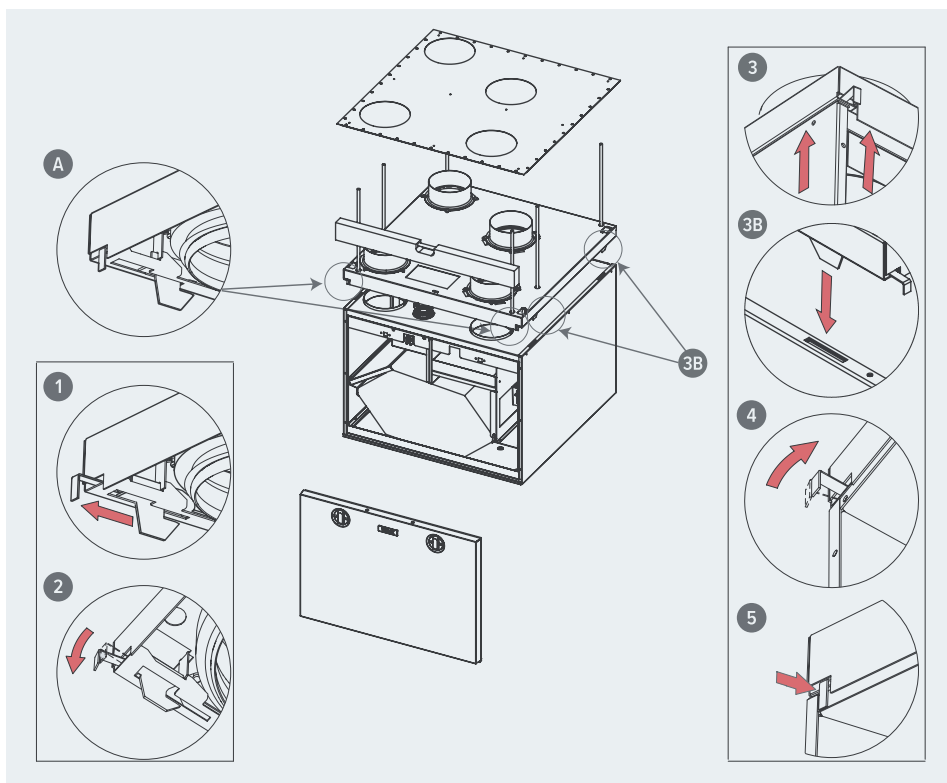
MyVallox 99 CFi can be equipped with an optional ceiling mounting plate.

1. Fasten the M8 thread bars on the rafter frames or other frame structure and fasten the nuts onto the bars.
2. Lift the ceiling mounting plate in place.
3. Push a rubber damper and a washer to each thread bar.
4. Adjust the nuts so that the ceiling mounting plate is level.
5. Check that the condensate insulation rings (at least exhaust air and outdoor air duct) are in place in the outlet collars below the ceiling mounting plate.
6. Pull out the operating levers (A) (Figure 1) and turn them towards the outer sides of the plate so that they are secured in the open position (Figure 2).
7. Remove the ventilation unit's door before installing the ventilation unit to the ceiling mounting plate.
8. 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.
9. Lift the ventilation unit against the ceiling mounting plate (Figure 3). Where needed, guide the mounting hooks on the ceiling mounting plate (3B) to the grooves on the side panels of the ventilation unit. Turn the operating levers back to the closed position (Figure 4). The levers will lock the unit to the ceiling mounting plate (Figure 5). When the operating levers are in the closed position and the unit has been secured to the ceiling mounting plate, the levers should be level with the front edge of the ceiling mounting plate.
10. Where required, the unit can be detached from the ceiling mounting plate. Remove the unit door and lift the unit slightly upwards. Pull out both operating levers (A) (Figure 1) and turn them towards the outer sides of the plate so that they are secured in the open position (Figure 2).

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

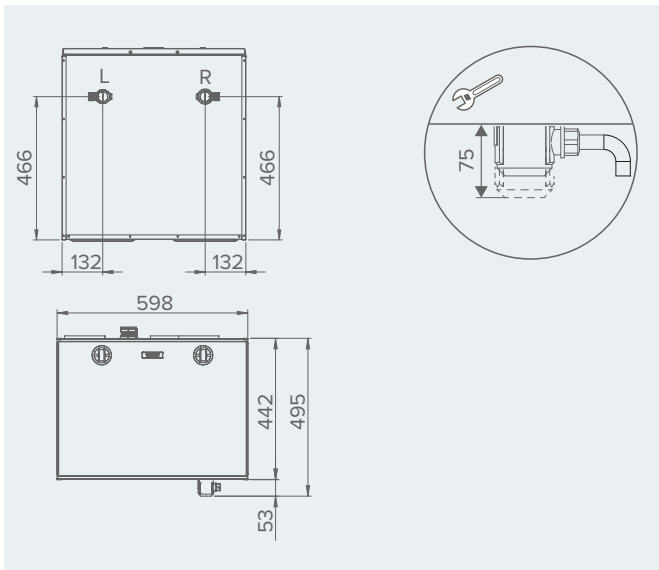
The end of the thread bars must be 5 mm or less below the fastening nut.

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

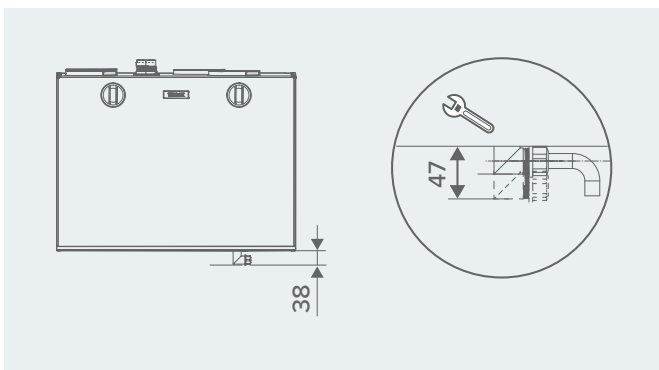


REMOVAL OF CONDENSING WATER

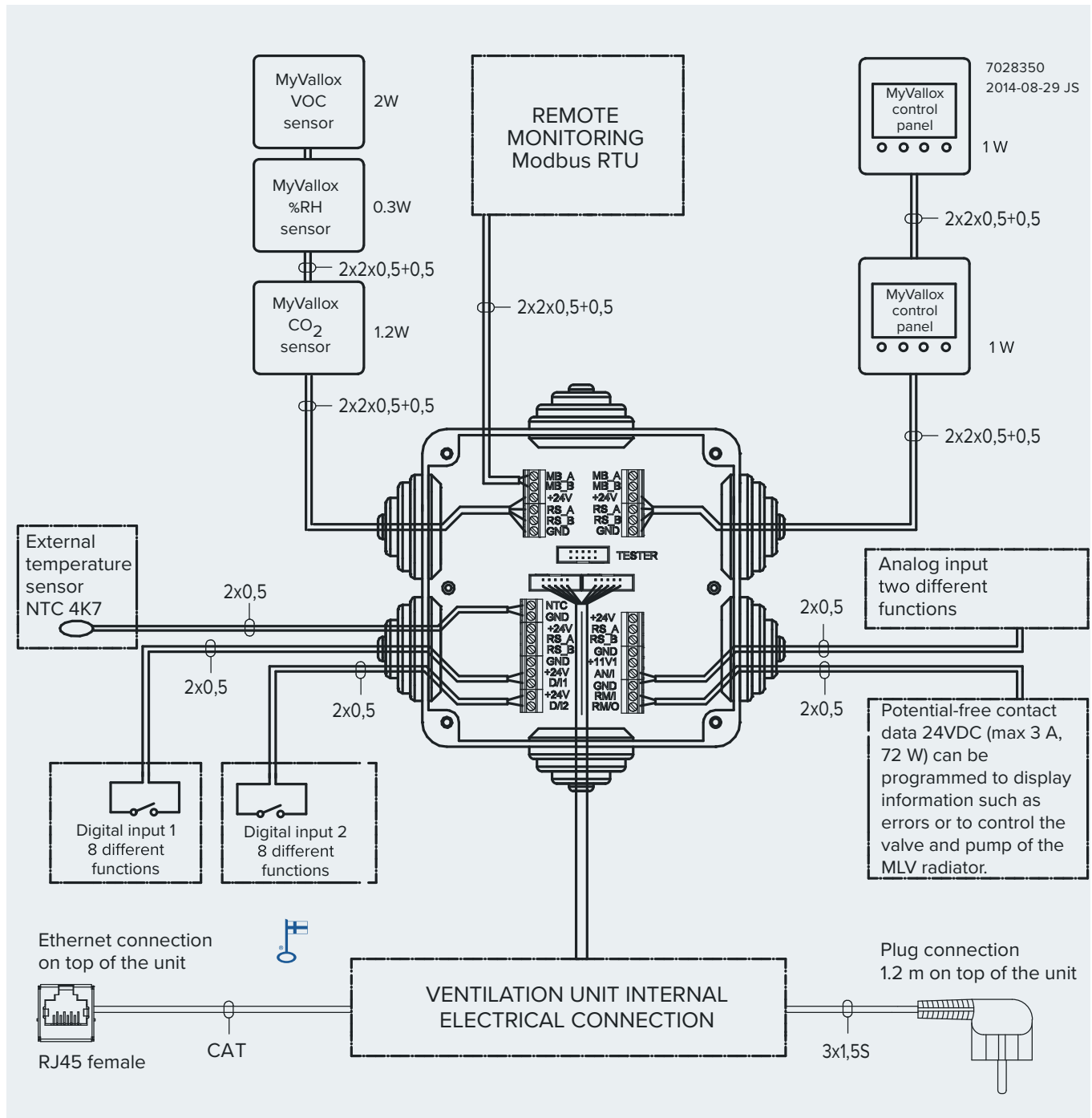
Dimensioning figure and space required for the installation of the Vallox Silent Klick siphon



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



EXTERNAL ELECTRICAL CONNECTION



POWER SUPPLY

Maximum	≤6W
MyVallox Control	1W
MyVallox Touch	0.5 W
%RH sensor	0.3 W
CO ₂ sensor	1.2 W
VOC sensor	2 W
External actuator or damper motor of the unit that receives feed from the relay	
Voltage	24 VDC

MB_A	External Modbus A signal
MB_B	External Modbus B signal
+24 V	+24 V voltage (DC)
GND	Digital and analog ground potential
RS_A	Local hardware Modbus A signal
RS_B	Local hardware Modbus B signal
NTC	External temperature sensor connector
D/I1	Digital input 1

D/I2	Digital input 2
11V1	11.1 V operating voltage
AN/I	Analog input 0–10 VDC
RM/I	24V relay input
RM/O	24 V relay output

VALLOX

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