

UBIFLUX VIGOR

W450 MVHR Unit



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Features and benefits

- Energy-efficient unit with very high thermal efficiency
- Most accurate constant-flow 2.0 = guaranteed same amount of supply and exhaust
- Display TFT touchscreen with clear menu structure including handy wizards for installation and maintenance
- Practical maintenance and minimum service parts
- Including ball siphon

Energy-efficient and flexible

The Ubiflux Vigor W450 is energy-efficient and ideal for installation in large houses. It is available in both left-hand and right-hand versions, each featuring four top connections. For additional connection possibilities, an optional Plus board is available for each unit.



Technical specifications	
Ventilation capacity at 200Pa [m³/h]	50-450
Thermal efficiency	86% => 450m³/h
Channel connection	4x ø200
Max power [W]	2x 145
Dimensions [mm]	850 x 800 x 661
Filter class	G4 ISO Coarse 60%
Constant-flow	Vane-Anemometer (highly accurate)
Condensation drain [mm]	ø32
SPI	0,20 Wh/m³/h
Weight [kg]	53
Frost protection	Intelligent frost control with pre-heater



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Modern communication			
		Basis	Plus
1x RJ12-connector	control via 4-position switch; RF receiver connection	x	x
1x E-bus	connection of clock module, zone ventilation, Ubiflux Home (app), CO2 sensor or additional pre- or post-heater	x	x
1x 24v signal output	programming of an error and filtersignal	x	x
1x 24v food	CO2 sensor connection (up to 4 E-bus)	x	x
1x print connection	moisture sensor connection	x	x
1x Modbus/Brinkbus	Easy connection to building management system; plus-print connection; cascade	x	x
1x (W)LAN	direct (wireless) connection Ubiflux Home environment (app)		x
2x analogue input 0-10v	connection of external sensors (CO2, RH, VOC, I/O module)		x
2x contact input	programmable input closed or open contact (9 pre-programmed action options)		x
2x relay output 0-24v	connection for ground heat exchanger; relay 2 can also be activated at contact input		x
2x analogue output 0-10v	connection for ground heat exchanger		x
1x 10K NTC resistor	Outdoor temperature sensor connection necessary for ground heat exchanger		x

Reduction factor

In determining the E-level, heat losses from ventilation are adjusted using a reduction factor. To minimise these ventilation losses, a demand-controlled ventilation system can be employed. This system regulates airflow based on the actual need for ventilation, which can be controlled by monitoring factors such as the presence of people, humidity levels, or CO₂ concentrations.

Reduction factor			
Type of detection in dry room	type of dry room supply control	Reduction factor	Ubbink system
CO ₂ room: one or more sensors in each dry room	2 (day/night) or more zones	0.49	Kit 0121178
CO ₂ semi-local: one or more sensors in the main living spaces and in the main bedroom	2 (day/night) or more zones	0.53	Kit 0888342
CO ₂ room: one or more sensors in each dry room	Central	0.61	Kit 0121179
CO ₂ semi-local: one or more sensors in the main living space and the main bedroom	Central	0.87	Kit 0121180



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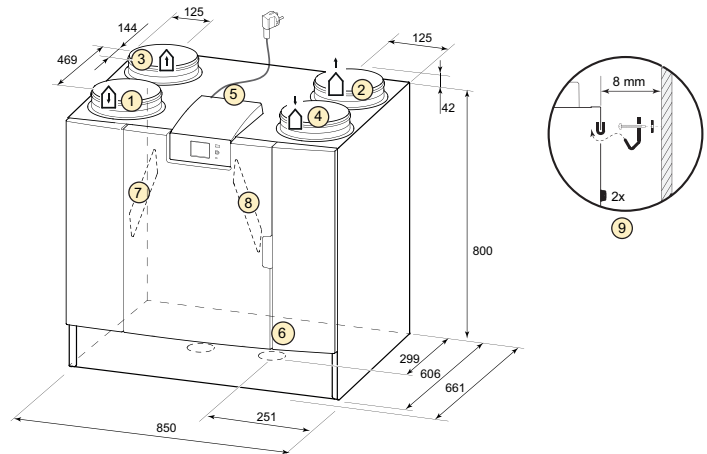
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Connections

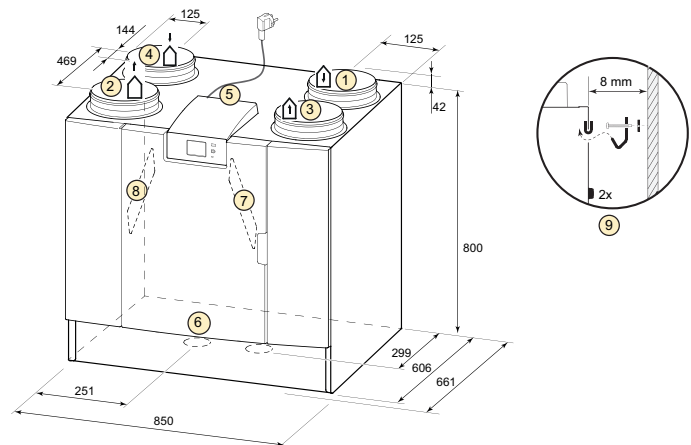
The Ubiflux Vigor W450 is available in a left-hand or right-hand version. With a left-hand version, the "warm" connections (from home 3 and to home 1) are on the left side of the unit and the siphon is then installed in the right opening beneath the appliance. On a right-hand version, the "warm" connections (1 & 3) are on the right-hand side of the unit.

1		To residence
2		Outside
3		From home
4		From outside
5		Electrical connection
6		Siphon connection
7		Exhaust air filter
8		Supply air filter
9		Suspension

All sizes in millimetres.
Drill ring diameter is 200mm.



Left-hand version 4/0



Right-hand version 4/0



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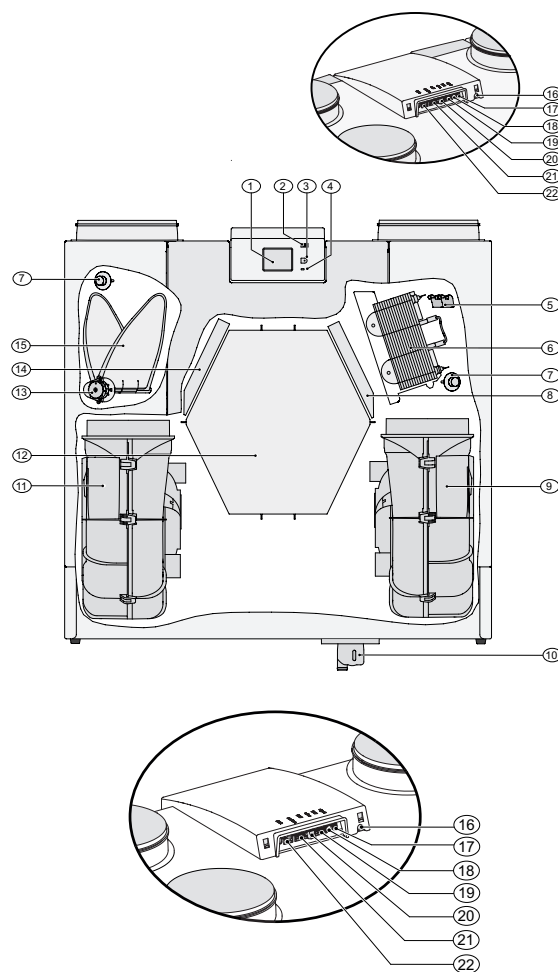


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Components

The unit pictured below is a left-hand version; on the right-hand version, the pre-heater, bypass valve and siphon connections are mirrored.

1	Touchscreen
2	USB connector (x13)
3	Service connection
4	Indication LED
5	Maximum pre-heater protection
6	Pre-heater
7	Temperature sensor
8	Inlet filter
9	Extractor fan
10	Siphon connection
11	Supply fan
12	Heat exchanger
13	Motor bypass valve
14	Drain filter
15	Bypass valve
16	Mains cable 230 volts
17	Relay output (x19)
18	24-volt connection (x16)
19	E-bus connection (x17)
20	24 volt connection (x16)
21	Modbus/bus connection (x15)
22	Position switch connection (x14)



Ecodesign	
Average climate zone	
Manual	A
Clock control	A
Central control with 1 sensor	A+
Local control with or more sensors combined with min. 2-zone flow control	A+



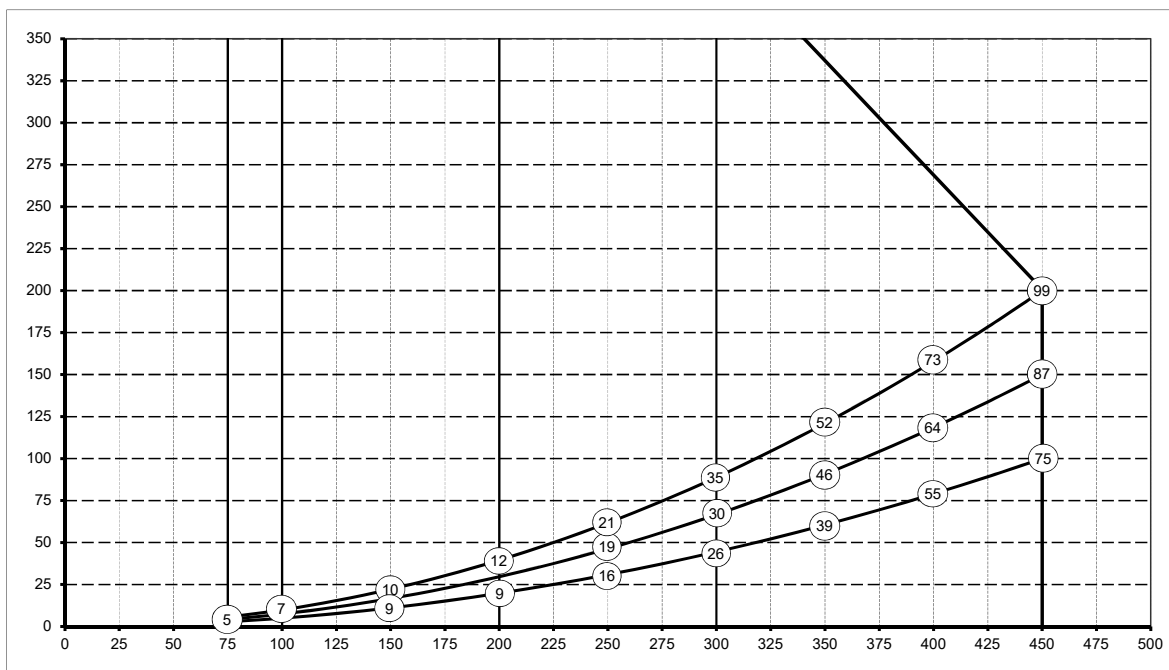
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Fan chart



Note that the values circled in the graph are the power used (Watts per fan)

	Fan symbol		1		2		3		max	
Flow rate [m³/h] *	75		100		200		300		450	
Pst [Pa]	3	6	5	10	20	40	44	89	100	200
Pel [W]	10.4	10.8	12.4	13.2	17.6	23.8	51.9	69.3	149.5	198.8
I [A]	0.17	0.17	0.19	0.19	0.20	0.27	0.53	0.69	1.32	1.68
cos phi	0.271	0.274	0.291	0.295	0.378	0.383	0.425	0.437	0.492	0.514

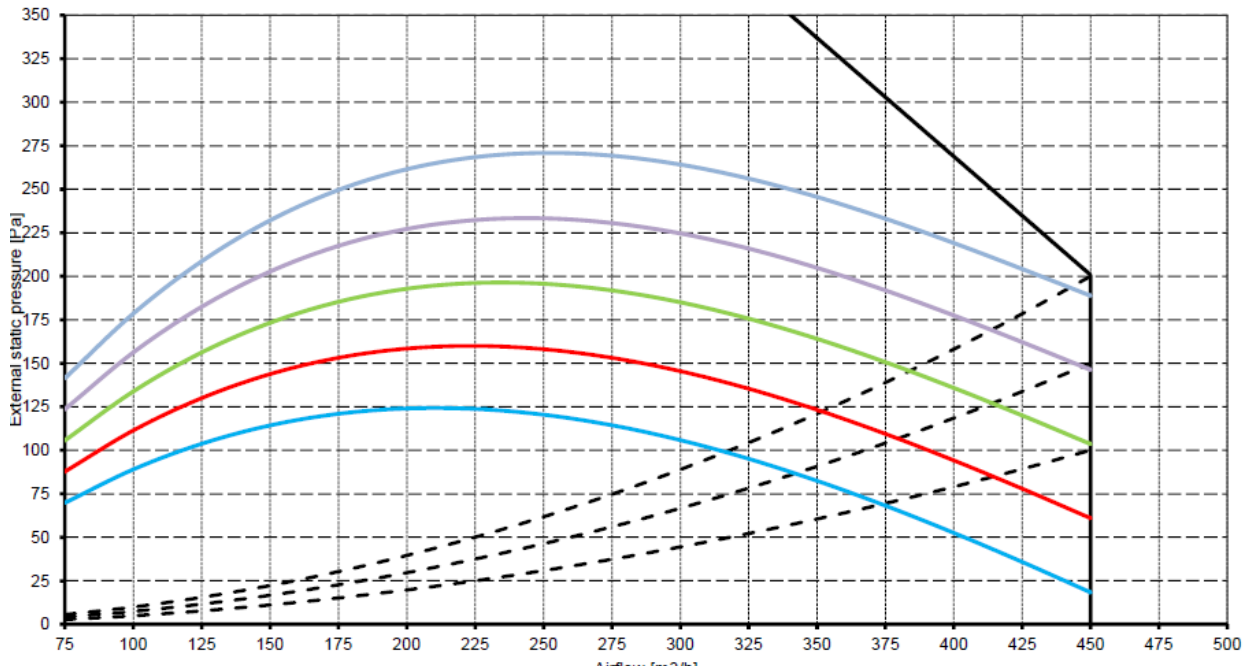
Max. current consumption (incl. preheater switched on) [A] = 5.2

*1 = Supply fan



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Note: values shown are SPI values 2x fan 145 Watt.

