



CATALOGUE 2019







Single-room air ha	ndling units		Heat recovery sing	le-room units	
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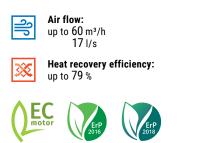
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SINGLE-ROOM AIR HANDLING UNITS

Features

- Heat recovery single-room air handling unit for supply and exhaust ventilation.
- Efficient energy-saving single-room ventilation of flats, houses, cottages, social and commercial premises.
- Ideal solution for simple and efficient ventilation of new or refurbished premises.
- Heat recovery minimises ventilation heat losses.
- Controllable air exchange creates individually set microclimate.





Design

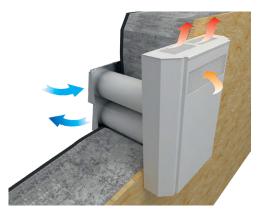
- The casing is made of polymer coated steel plates, internally filled with 15 mm thermal and sound insulation layer of PE foam.
- The hinged front panel of the casing ensures easy access to the internals for maintenance.
- The unit is powered via an integrated power pulser with a wide range supply voltage range from 100 to 240 V and frequency from 50 to 60 Hz.
- The unit is supplied with a power cord and a plug for connection to power supply.
- Compatible with round ϕ 125 mm air ducts.

Motors

- Axial fans with EC motors provide air supply and air extract.
- EC motor technologies meet the latest engineering demands for saving energy and for high-efficient ventilation.
- Low energy demand due to implemented EC technologies.
- The fan motors are equipped with a built-in thermal overheating protection and ball bearings for a long service life.

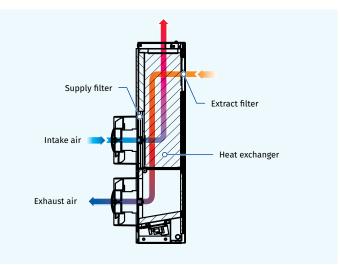
Mounting

- Install one FRESHBOX 60 unit in each room requiring ventilation.
- One unit is able to provide efficient ventilation in a premise with area up to 35 m².
- Surface wall mounting on an outside wall from inside the premise.
- Suitable for wall thickness from 100 up to 500 mm.
- The hole spacing for ϕ 125 mm air ducts with a master plate included into the delivery set.
- Install the **AH FRESHBOX 60** outer hood (separate order, ref. accessories) on the outer wall.



Heat recovery

- The unit is equipped with a plate counter-flow plastic heat exchanger with a large surface area and high heat recovery efficiency.
- Heat recovery efficiency reaches 79 %.
- The air flows are fully separated within the heat exchanger. Odours and contaminants contained in the extract air are not transferred to the supply air flow.
- Heat recovery is based on extract air heat recovery for warming up of suply air. Extract air transfers most of its heat to the intake air flow. Heat recovery reduces heat losses in cold seasons. In summer the heat exchanger performs reverse and transfers a part of the accumulated coolness from the cooled extract air for cooling down of the intake air. This contributes to better performance of the air conditioner in ventilated premises.
- The integrated freezing protection system switches the supply fan off in the cold season in case of a freezing danger communicated by the temperature sensor to enable warming of the heat exchanger with the warm extract air flow. When a freezing danger is over the supply fan turns on and the unit reverts to the standard operation mode.



Air filtration

- Supply and extract air cleaning with two G4 filters.
- The filters ensure fresh air supply, free of dust, insects and prevent contamination of the unit components.

Control

• The unit is operated with an external sensor speed switch that enables switching the unit on/off as well as setting low, medium or high speed mode.

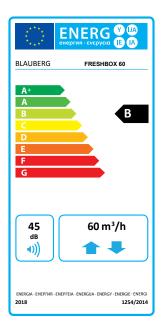


SINGLE-ROOM AIR HANDLING UNITS

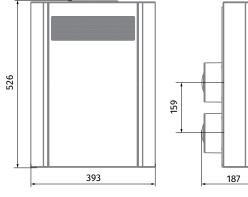
FRESHBOX 60

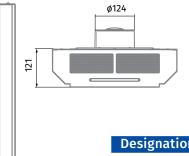
Technical data

Parameters		FRESHBOX 60	
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-240	
Power [W]	4.2	9.6	15.4
Current [A]	0.02	0.04	0.07
Maximum air flow [m³/h (l/s)]	30 (8)	45 (13)	60 (17)
RPM [min ⁻¹]	1165	1720	2685
Noise level [dBA]	22	25	29
Transported air temperature [°C]		-20+40	
Filter: extract/supply		G2	
Heat recovery efficiency [%]	79	74	70
Heat exchanger type		counter-flow	
Heat exchanger material		polystyrene	
SEC Class		В	
Weight [kg]		10.3	



Overall dimensions [mm]





Designation key

Model	Nominal air flow [m³/h]
Freshbox	60

Accessories

Name	Description
MS1 FRESHBOX 60	• cardboard master plate (2 items) • plastic Ø 125 mm, 500 mm long air duct (2 items)
MS2 FRESHBOX 60	 cardboard master plate (1 item) plastic Ø 125 mm, 500 mm long air duct (2 items) stainless steel outer hood
AH FRESHBOX 60	stainless steel outer hood
FP 216x147x10 G4	G4 supply cassette filter
FP 279x88x10 G4	G4 extract cassette filter



SINGLE-ROOM AIR HANDLING UNITS

Features

- Efficient solution for supply and exhaust ventilation of enclosed spaces.
- Electric preheater or reheater modification available for cold climate conditions.
 Heat exchanger with an enthalpy membrane modification
- available for humid and hot climate conditions.o Low-energy EC motors.
- Silent operation.
- Supply air purification ensured by two built-in G4 and F8 filters (optionally H13 filter).
- Upgradeable with an exhaust duct to provide air extraction from the bathroom.
- Easy installation.
- Compact size.
- Wi-Fi communication
- Controlled by Android or iOS smartphone or tablet over Wi-Fi.

Air flow: up to 100 m³/h Heat recovery efficiency: up to 96 %





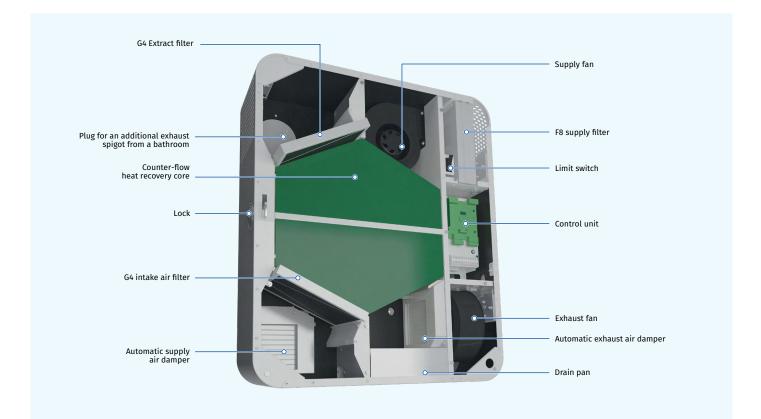
Design

- Polymer coated metal casing decorated with an acrylic front panel. Heat and noise insulation is ensured by a layer of 10 mm cellular synthetic rubber.
- The front panel provides convenient access for filter maintenance and has a lock for extra security.
- The unit has two Ø 100 mm pipes for fresh air intake and stale air extraction outside. The third Ø 100 mm pipe (included in the scope of delivery) can be additionally fitted to the unit to connect the exhaust air duct from the bathroom.

Motors

READ

- The units feature efficient electronically commutated (EC) motors with an external rotor and impellers with forward curved blades. These state-ofthe-art motors are the most advanced solution in energy efficiency today.
- EC motors are characterised with high performance and optimum control across the entire speed range. In addition to that the efficiency of electronically commutated motors reaches very impressive levels of up to 90 %.



Designation key

b conglitication noy				
Model	Heater	Nominal air flow [m³/h]	Heat exchanger core type	Control
Freshbox	.: no heater E: Preheating E1: reheating E2: Preheating and reheating	- 100	_: heat recovery ERV: energy recovery	WiFi: Sensor control panel and Wi-Fi communication



SINGLE-ROOM AIR HANDLING UNITS

Air dampers

• The unit is equipped with supply and exhaust air dampers which activate automatically to prevent drafts while the unit is off.

Air filtration

• Supply air cleaning is provided by the G4 and F8 filters. To meet more stringent air purity requirements the F8 filter can be replaced with an H13 Filter (purchased separately). Exhaust air is cleaned by the panel filter G4.

Operating principle

- The cold outdoor air passes through the filters and the heat exchanger and then is delivered to the serviced space by the supply centrifugal fan.
- Warm stale air from indoors passes through the filter and the heat exchanger and is discharged outdoors by the centrifugal fan.
- The supply and exhaust air flows are fully separated which helps eliminate the possibility of odour or microbial transfer between the streams.



for bathroom exhaust ventilation

Heat and energy recovery

- The **Freshbox 100 WiFi** units are equipped with a counter-flow heat recovery core with a polystyrene core.
 - In the cold season the exhaust air heat is captured and transferred to the supply air stream which reduces the ventilation-generated heat losses.
 - Some condensate may form during heat recovery. The condensate is collected in the drain pan and is removed from the exhaust air duct.
 - In the warm season the intake air heat is transferred to the extract air stream. This allows for a considerable reduction of the supply air temperature which, in turn, reduces the air conditioning load.
- The Freshbox 100 ERV WiFi units are equipped with a counter-flow energy recovery core with an enthalpy membrane at the core.
 - In the cold season the exhaust air heat and moisture are transferred to the supply air stream through the enthalpy membrane reducing the heat losses through ventilation.
 - In warm season the heat and humidity
 of the outdoor air is absorbed by extract air flow through the enthalpy membrane. This way the supply air temperature and humidity decreases and heat recovery reduces operation loads for the air conditioner.





Heaters

PREHEATING

• Freshbox E-100 WiFi. Freshbox E2-100 WiFi units are equipped with an electric preheater for freeze protection of the heat exchanger.

REHEATING

• Freshbox E1-100 WiFi. Freshbox E2-100 WiFi units feature an electric reheater to raise the supply air temperature as necessary.

Freeze protection

- Freshbox 100 WiFi features an exhaust air temperature sensor downstream of the heat exchanger which disables the supply fan to let the warm extract air warm up the heat exchanger. After that the supply fan is turned on and the unit reverts to the normal operation mode.
- Overheating protection for Freshbox E-100 WiFi and Freshbox E2-100 WiFi is implemented with a preheater.



SINGLE-ROOM AIR HANDLING UNITS

Control

- The unit is equipped with a control panel.
- The remote control is supplied as standard
- Wi-Fi communication.



AUTOMATIC FUNCTIONS

	Freshbox 100 WiFi Freshbox E-100 WiFi	Freshbox E1-100 WiFi Freshbox E2-100 WiFi
Speed selection	•	•
Filter replacement indication	•	•
Alarm indication	•	•
Speed setup	•	•
Timer	•	•
Week scheduler	•	•
Reheater enabled/disabled		•
Supply air temperature setup		•
Control with the mobile application Android / iOS	•	•







Download

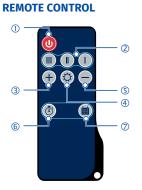
iOS application

Blauberg Freshbox

Download Andrioid application **Blauberg Freshbox**

Ecodesign parameters

Trade mark			BLAUE	BERG		
Model			FRESHBOX	100 WiF	i	
Specific energy consumption (SEC) [kWh/(m²/a)]	Cold		Average		War	m
Specific energy consumption (SEC) [kwii/(in-/a)]	-79.4	A+	-39.7	Α	-14.3	Е
Type of ventilation unit			Bidirec	tional		
Type of drive installed			Variable	speed		
Type of heat recovery system			Recupe	rative		
Thermal efficiency of heat recovery [%]			92	2		
Maximum flow rate [m³/h]			10	0		
Electric power input [W]			53	3		
Sound power level [dBA]			47	1		
Reference flow rate [m ³ /s]			0.0	17		
Reference pressure difference [Pa]			N/	A		
Specific power input (SPI) [W/(m³/h)]			0.4	83		
Control typology			Local dema	nd contro	bl	
Maximum internal leakage rates [%]			0.	1		
Maximum external leakage rates [%]			0.	Ð		
Mixing rate of bidirectional units [%]			20)		
Airflow sensitivity at +20 Pa and -20 Pa			0.9	3		
The indoor/outdoor air tightness [m³/h]			7			
Internet address		http://v	www.blauber	gventilat	oren.de/	
The annual electricity consumption (AEC) [kWh electricity/a]	Col	d	Aver	age	War	m
The annual electricity consumption (AEC) [kWin electricity/a]	863	3	32	6	28	1
The annual heating saved (AHS) [kWh primary energy/a]	Col	d	Aver	age	War	m
The annual heating saved (Ans) [kwn priniary energy/a]	923	0	471	8	213	3



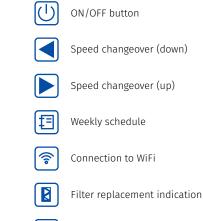
1 Turning unit on/off

2 Speed selection (Min/Mid/Max)

3 Increasing temperature set point for the reheater (available for the models with a reheater)

- **4** Turning reheater on/off (available for the models with a reheater)
- **5** Decreasing temperature set point for the reheater (available for the models with a reheater)
- 6 Turning timer on/off
- **7** Activation/deactivation of the scheduled operation mode

CONTROL PANEL



Alarm indication

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SINGLE-ROOM AIR HANDLING UNITS

Technical data

Parameters		Fresh	10 nbox	0 WiFi			Freshb	ox 100 E	RV WiF	i		Fresht	oox E-10	00 WiFi		F	reshbo	x E-100	ERV Wi	Fi
Speed	I	II		IV	V	I	II	Ш	IV	V	I	11	111	IV	V	I	II		IV	٧
Voltage [V / 50 (60) Hz]										1~	230									
Max. power without heater(s) [W]	20	23	29	37	53	20	23	29	37	53	20	23	29	37	53	20	23	29	37	53
Preheater power consumption [W]			-					-					600					600		
Reheater power consumption [W]			-					-					-					-		
Max. current consumption without heater(s) [A]										0	.4									
Max. current consumption with heater(s) [A]			-					-					3.08					3.08		
Maximum air flow [m³/h (l/s)]	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)
RPM [min ⁻¹]		max 2200																		
Sound pressure level at 3 m [dBA]	13	20	27	33	39	13	20	27	33	39	13	20	27	33	39	13	20	27	33	39
Transported air temperature [°C]										-25.	+40									
Casing material									ро	lymer c	oated s	teel								
Insulation thickness [mm]										1	0									
Extract filter										G	64									
Supply filter								G	4 + F8	(Option:	F8 Car	bon; H13	3)							
Connected air duct diameter [mm]										1	00									
Weight [kg]										3	31									
Heat recovery efficiency [%]*	96	94	92	89	87	96	94	92	89	87	96	94	92	89	87	96	94	92	89	87
Heat recovery core type		counter-flow																		
Heat exchanger material		polystyrene enthalpic membrane polystyrene enthalpic membrane																		
SEC class											A									

*Heat recovery efficiency is specified in compliance with EN 13141-8.

Parameters		Freshb	ox E1-1	00 WiFi		F	reshbo	c E1-100	ERV W	iFi		Freshb	ox E2-1	00 WiF	i	Fi	reshbox	c E2-100	ERV W	iFi
Speed	Ι	11		IV	٧	I	II	III	IV	V	I	II		IV	V	I	II		IV	V
Voltage [V / 50 (60) Hz]										1~:	230									
Max. power without heater(s) [W]	20	23	29	37	53	20	23	29	37	53	20	23	29	37	53	20	23	29	37	53
Preheater power consumption [W]			-					-					600					600		
Reheater power consumption [W]										3	50									
Max. current consumption without heater(s) [A]										0	.4									
Max. current consumption with heater(s) [A]					1.	94									4.	67				
Maximum air flow [m³/h (l/s)]	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)	30 (8)	44 (12)	60 (17)	75 (21)	100 (28)
RPM [min ⁻¹]										max	2200									
Sound pressure level at 3 m [dBA]	13	20	27	33	39	13	20	27	33	39	13	20	27	33	39	13	20	27	33	39
Transported air temperature [°C]						1				-25	+40									
Casing material									ро	lymer co	oated s	teel								
Insulation thickness [mm]										1	0									
Extract filter										G	64									
Supply filter										G	64									
Connected air duct diameter [mm]										1(00									
Weight [kg]										3	1									
Heat recovery efficiency [%]*	96	94	92	89	87	96	94	92	89	87	96	94	92	89	87	96	94	92	89	87
Heat recovery core type										counte	er-flow									
Heat exchanger material		р	olystyre	ne			entha	lpic mer	nbrane			р	olystyre	ne			entha	enthalpic membrane		
SEC class											Ą									
*Heat recovery efficiency is specified in com	pliance	with EN	13141-8.																	

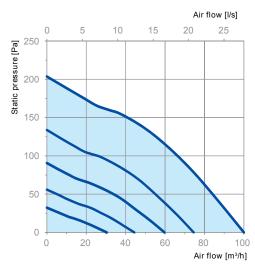
Sound-power level, A - weighted	Total	Octave 63	e freque 125	ncy ban 250	d [Hz] 500	1000	2000	4000	8000	Sound pressure level at 3 m, A-filter applied	Sound pressure level at 1 m, A-filter applied
		03	125	250	500	1000	2000	4000	8000	A litter applied	A filler applied
LwA to environment [dBA]	4000	45	40	44	38	33	29	27	22	28	38

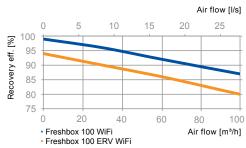
SINGLE-ROOM AIR HANDLING UNITS

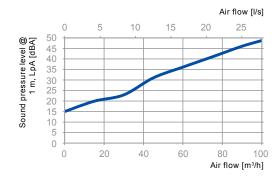


FRESHBOX 100 WIFI

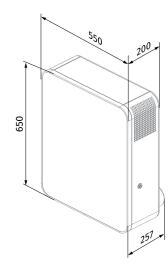
Technical data

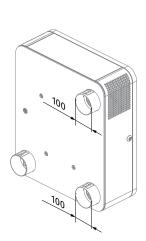






Overall dimensions [mm]





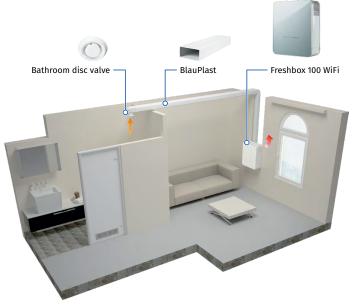
Mounting example

Each space requiring ventilation is equipped with one or several Freshbox 100 WiFi units.

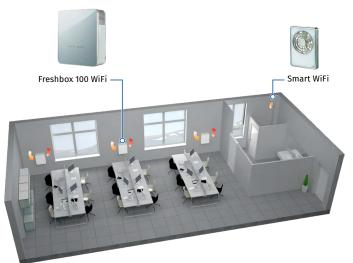
A single unit is capable to ensure efficient ventilation in spaces with floor area up to 75 $\ensuremath{m^2}$.

Freshbox 100 WiFi units can be upgraded with a bathroom exhaust air duct. To enable such a configuration the units can be additionally equipped with the optional ϕ 100 mm spigot (supplied as standard).

FRESHBOX 100 WIFI DEPLOYMENT IN A COMPACT RESIDENTIAL SPACE



FRESHBOX 100 WIFI MOUNTING EXAMPLE IN THE OFFICE





SINGLE-ROOM AIR HANDLING UNITS

Accessories

Name	Description
MS Freshbox 100 chrome	Mounting kit: • Two Ø 100 mm air ducts, 500 mm long • Ventilation outer hood made of polished steel • Cardboard template
MS Freshbox 100 white	Mounting kit: • Two Ø 100 mm air ducts, 500 mm long • Ventiation outer hood, painted white • Cardboard template
AH Freshbox 100 chrome	Ventilation outer hood made of polished steel
AH Freshbox 100 white	Ventilation outer hood, painted white
EH Freshbox 100	Heater to prevent condensate freezing in the drain pipe and outer ventilation hood
FP 193x158x18 G4 PPI	G4 Panel filter
FP 193x158x47 F8	F8 Panel filter
FP 193x158x47 F8 C	F8 Carbon panel filter
FP 193x158x47 H13	H13 Hepa panel filter
HR-S	Humidity sensor
CD-1	CO ₂ Sensor with LED lights for indication of CO ₂ concentration and a touch button for operation mode switching
CD-2	 CO2 Sensor



SINGLE-ROOM AIR HANDLING UNITS

Features

- Efficient solution for supply and exhaust ventilation of enclosed spaces.
 Electric preheating or reheating is available
- for cold climate conditions.
- Units with enthalpy heat exchangers are available for use in hot and wet climates.
- Low-energy EC motors.
- Silent operation.
- Supply air purification ensured by two built-in G4 and F8 filters (optionally H13).
- Upgradeable with an exhaust duct to provide air extraction from the bathroom.
- Easy installation.
- Compact size.



Heat recovery efficiency: up to 96 %



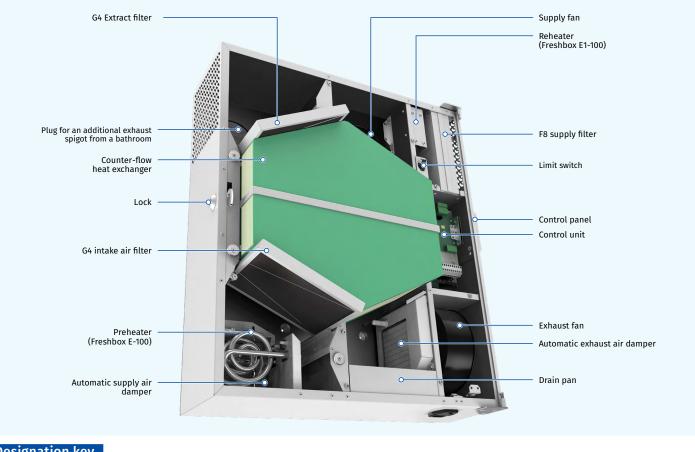


Design

- Polymer coated metal casing decorated with an acrylic front panel. Heat and noise insulation is ensured by a layer of 10 mm cellular synthetic rubber.
- The front panel provides convenient access for filter maintenance and has a lock for extra security.
- The unit has two ϕ 100 mm pipes for fresh air intake and stale air extraction outside. The third ϕ 100 mm pipe (included in the scope of delivery) can be additionally fitted to the unit to connect the exhaust air duct from the bathroom.

Motors

- The units feature efficient electronically commutated (EC) motors with an external rotor and impellers with forward curved blades. These state-ofthe-art motors are the most advanced solution in energy efficiency today.
- EC motors are characterised with high performance and optimum control across the entire speed range. In addition to that the efficiency of electronically commutated motors reaches very impressive levels of up to 90 %.



Designation key

Model	Heater	Nominal air flow [m³/h]	Heat exchanger type	Colour
Freshbox	_: no heater E: preheater E1: reheater	- 100	_: heat recovery ERV: energy recovery	_: white casing Black: black casing



SINGLE-ROOM AIR HANDLING UNITS

Air dampers

• The unit is equipped with supply and exhaust air dampers which activate automatically to prevent drafts while the unit is off.

Air filtration

 Supply air cleaning is provided by the G4 and F8 panel filters (PM2.5 > 75 %). To meet more stringent air purity requirements the F8 filter can be replaced with an H13 (PM2.5 > 99 %) (purchased separately). Exhaust air is cleaned by the panel filter G4.

Heaters

PREHEATING

• Freshbox E-100 units are equipped with an electric preheater which protects the heat exchanger from freezing.

REHEATING

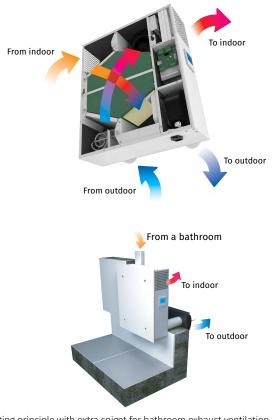
• Freshbox E1-100 units feature an electric reheater to raise the supply air temperature as necessary.

HEATER FOR CONDENSATE FREEZE PROTECTION

 Operation in a cold climate may result in condensate freezing in the exhaust air duct and the external hood. Therefore, it is recommended to install the EH Freshbox 100 (optional) heater (purchased separately) to prevent icing.

Operating principle

- The cold outdoor air passes through the filters and the heat exchanger and then is delivered to the serviced space by the supply centrifugal fan.
- Warm stale air from indoors passes through the filter and the heat exchanger and is discharged outdoors by the centrifugal fan.
- The supply and exhaust air flows are fully separated which helps eliminate the possibility of odour or microbial transfer between the streams.



Operating principle with extra spigot for bathroom exhaust ventilation

Heat exchanger

- The Freshbox 100 units are equipped with a counter-flow heat exchanger with a polystyrene core.
 - In the cold season the exhaust air heat is captured and transferred to the supply air stream which reduces the ventilationgenerated heat losses.
 - Some condensate may form during heat recovery. The condensate is collected in the drain pan and is removed from the exhaust air duct.
 - In the warm season the intake air heat is transferred to the extract air stream. This allows for a considerable reduction of the supply air temperature which, in turn, reduces the air conditioning load.
- The **Freshbox 100 ERV** units are equipped with a counter-flow heat exchanger with an enthalpy membrane at the core.
 - In the cold season the exhaust air heat and moisture are transferred to the supply air stream through the enthalpy membrane reducing the heat losses through ventilation.
 - In warm season the heat and humidity of the outdoor air is absorbed by extract air flow through the enthalpy membrane. This way the supply air temperature and humidity decreases and heat recovery reduces operation loads for the air conditioner.





Control

- The unit is equipped with a control panel.
- The remote control is supplied as standard.

FUNCTIONS

	Freshbox 100 Freshbox E-100	Freshbox E1-100
Speed changeover	•	•
Filter replacement indication	•	•
Alarm indication	•	•
Speed setting	•	•
Timer	•	•
Weekly schedule	•	•
Reheating enabled/disabled		•
Supply air temperature setup		•

FREEZE PROTECTION

- There are two types of freeze protection available to protect the heat exchangers in the cold season.
- Freshbox 100 features an exhaust air temperature sensor downstream of the heat exchanger which disables the supply fan to let the warm extract air warm up the heat exchanger. After that the supply fan is turned on and the unit reverts to the normal operation mode.
- The **Freshbox E-100** units are equipped with an electric preheater which warms up the supply air upstream of the heat exchanger to prevent its freezing.
- These features ensure a continuous balanced air exchange regardless of ambient air temperature variations.



SINGLE-ROOM AIR HANDLING UNITS

Technical data

Parameters	F	reshbox 10	00	Fre	shbox 100	ERV	Fr	eshbox E-1	00	Fres	hbox E-100) ERV
Speed	I	II		I	II		I	II		I	II	
Voltage [V / 50 (60) Hz]		1~110-240	1		1~110-240			1~230		1~230		
Max. power without heater(s) [W]	12	21	45	12	21	45	12	12 21 45		12 21		45
Preheater power consumption [W]		-			-			600			600	
Reheater power consumption [W]		-			-			-			-	
Max. current consumption without heater(s) [A]		0.4			0.4			0.4		0.4		
Max. current consumption with heater(s) [A]		-			-			3,08		3,08		
Maximum air flow [m³/h (l/s)]	30 (8)	60 (17)	100 (28)	30 (8)	60 (17)	100 (28)	30 (8)	60 (17)	100 (28)	30 (8)	60 (17)	100 (28)
RPM [min ⁻¹]						max	2200					
Sound pressure level at 3 m [dBA]	13	27	39	13	27	39	13	27	39	13	27	39
Transported air temperature [°C]						-25	+40					
Casing material						polymer c	pated steel					
Insulation thickness [mm]						1	0					
Extract filter						G	64					
Supply filter					G4 +	F8 (Option:	F8 Carbon	; H13)				
Connected air duct diameter [mm]						1	00					
Weight [kg]						3	1					
Heat recovery efficiency [%]*	96	92	87	90	86	80	96	92	87	90	86	80
Heat exchanger type						count	er-flow					
Heat exchanger material		polystyren	9	enthalpic membrane			polystyrene			enthalpic membrane		
SEC class							4					

*Heat recovery efficiency is specified in compliance with EN 13141-8.

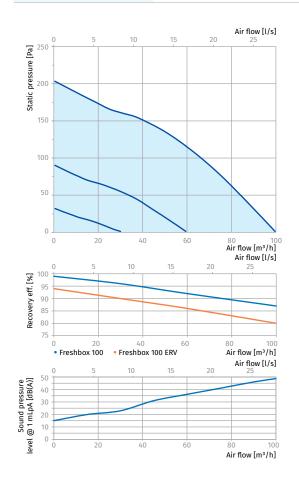
Parameters	Fre	eshbox E1-	100	Fres	hbox E1-100) ERV	Fre	eshbox E2-	100	Fres	hbox E2-10	0 ERV
Speed	I		III	I		III	I		III	I	11	
Voltage [V / 50 (60) Hz]					1~2							
Max. power without heater(s) [W]	12	21	45	12	21	45	12	21	45	12	21	45
Preheater power consumption [W]		-			-			600			600	
Reheater power consumption [W]		350			350			350			350	
Max. current consumption without heater(s) [A]		0.4			0.4			0.4		0.4		
Max. current consumption with heater(s) [A]		1.94			1.94			4.67			4.67	
Maximum air flow [m³/h (l/s)]	30 (8)	60 (17)	100 (28)	30 (8)	60 (17)	100 (28)	30 (8)	60 (17)	100 (28)	30 (8)	60 (17)	100 (28)
RPM [min ⁻¹]		max 2200										
Sound pressure level at 3 m [dBA]	13	27	39	13	27	39	13	27	39	13	27	39
Transported air temperature [°C]						-25	+40					
Casing material						polymer co	pated steel					
Insulation thickness [mm]						1	0					
Extract filter						G	64					
Supply filter						G	64					
Connected air duct diameter [mm]						1(00					
Weight [kg]						3	1					
Heat recovery efficiency [%]*	96	92	87	90	86	80	96	92	87	90	86	80
Heat exchanger type						counte	er-flow					
Heat exchanger material		polystyrene	9	enthalpic membrane			polystyrene			enthalpic membrane		
SEC class							4					

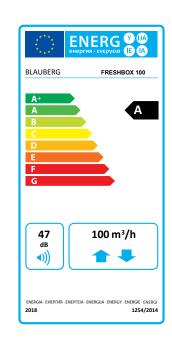
*Heat recovery efficiency is specified in compliance with EN 13141-8.



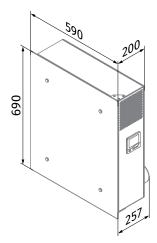
SINGLE-ROOM AIR HANDLING UNITS

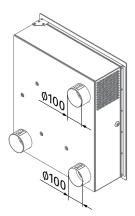
		Octave	frequency	band [Hz]]		Sound pressure level	Sound pressure level			
Sound-power level, A - weighted	Total	63	125	250	500	1000	2000	4000	8000	at 3 m, A-filter applied	at 1 m, A-filter applied
LwA to environment [dBA]	4000	45	40	44	38	33	29	27	22	28	38





Overall dimensions [mm]







SINGLE-ROOM AIR HANDLING UNITS

100	accoriac
	essories
ALL	essories

Accessories		
Name		Description
MS Freshbox 100 chrome		Mounting kit: • Two Ø 100 mm air ducts, 500 mm long • Ventilation outer hood made of polished steel • Cardboard template
MS Freshbox 100 white		Mounting kit: • Two Ø 100 mm air ducts, 500 mm long • Ventilation outer hood, painted white • Cardboard template
AH Freshbox 100 chrome		Ventilation outer hood made of polished steel.
AH Freshbox 100 white	4	Ventilation outer hood, painted white
EH Freshbox 100		Heater to prevent condensate freezing in the drain pipe and outer ventilation hood
FP 193x158x18 G4 PPI		G4 Filter
FP 193x158x47 F8		F8 Filter
FP 193x158x47 F8 C		F8 Carbon Filter
FP 193x158x47 H13		H13 Hepa Filter
HR-S		Humidity sensor
CD-1		CO ₂ Sensor with LED lights for indication of CO ₂ concentration and a touch button for operation mode switching
CD-2	81-	CO2 Sensor



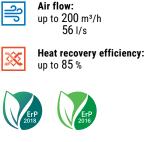
SINGLE-ROOM AIR HANDLING UNITS



SINGLE-ROOM AIR HANDLING UNITS

Features

- Efficient solution for supply and exhaust ventilation of enclosed spaces.
 EC fans with low energy consumption.
- Supply air cleaning is provided by the G4 and
- F7 filters. Additional air purification due to recirculation. H13 filter is available as an option.Upgradeable with an exhaust duct to provide
- air extraction from the bathroom.
- Easy installation.
- Compact size.
- Controlled by Android or iOS smartphone or tablet over Wi-Fi.



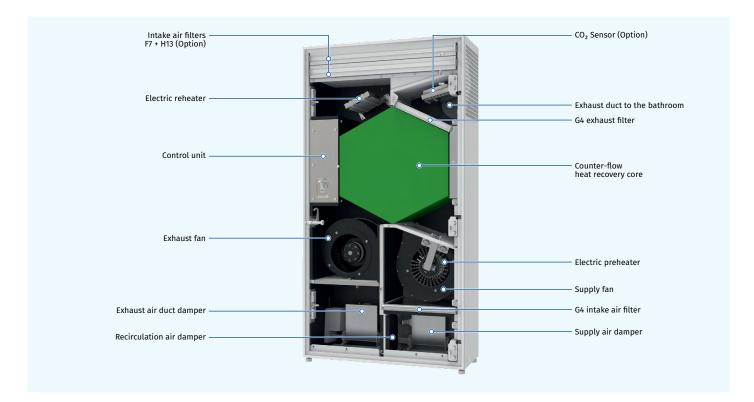


Design

- The casing is made of polymer coated steel plates.
- The front panel provides convenient access for filter maintenance and has a lock for extra security.
- The unit has two ϕ 100 mm pipes for fresh air intake and stale air extraction outside. The third ϕ 100 mm pipe (included in the scope of delivery) can be additionally fitted to the unit to connect the exhaust air duct from the bathroom.
- Available modifications with an integrated preheater and reheater for cold climate applications.

Motors

- The units feature efficient electronically commutated (EC) motors with an external rotor and impellers with forward curved blades. These stateofthe-art motors are the most advanced solution in energy efficiency today.
- EC motors are characterised with high performance and optimum control across the entire speed range. In addition to that the efficiency of electronically commutated motors reaches very impressive levels of up to 90 %.



Designation key

2 congression moy				
Model	Heater	Nominal air flow [m³/h]	Heat exchanger type	Control
Freshbox	_: no heater E: preheating E1: reheating E2: preheating + reheating	- 200	_: heat recovery ERV: energy recovery	WiFi: Sensor control panel and Wi-Fi communication



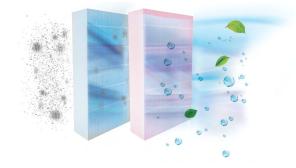
SINGLE-ROOM AIR HANDLING UNITS

Air dampers

• The unit is equipped with supply and exhaust air dampers which activate automatically to prevent drafts while the unit is off.

Air filtration

- Supply air cleaning is provided by the G4 and F7 filters. To meet more stringent air purity requirements the F7 filter can be replaced with an H13 Filter (purchased separately).
- Exhaust air is cleaned by the panel filter G4.



Heaters

PREHEATING

• Freshbox E-200 ERV WiFi. Freshbox E2-200 ERV WiFi units are equipped with an electric preheater for freeze protection of the heat exchanger.

REHEATING

• Freshbox E1-200 ERV WiFi. Freshbox E2-200 ERV WiFi units feature an electric reheater to raise the supply air temperature as necessary.

Freeze protection

- The **Freshbox 200 ERV WiFi** features an exhaust air temperature sensor downstream of the heat exchanger which disables the supply fan to let the warm extract air warm up the heat exchanger. Then the supply fan is turned on and the unit reverts to normal operation.
- Freeze protection for **Freshbox E-200 ERV WiFi** and **Freshbox E2-200 ERV WiFi** is implemented with an electric preheater.

Heat and energy recovery

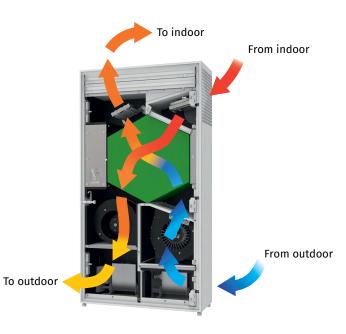
- The unit is equipped with a counter-flow energy recovery core with an enthalpy membrane at the core.
 - In the cold season the exhaust air heat and moisture are transferred to the supply air stream through the enthalpy membrane reducing the heat losses through ventilation.
 - Consequently, it is the intake air heat and moisture transferred to the extract air stream through the enthalpy membrane in the warm season. This allows for a considerable reduction of the supply air temperature and humidity which, in turn, reduces the air conditioning load.



Operating principle

HEAT RECOVERY OPERATION MODE

- The cold outdoor air passes through the filters and the heat exchanger and then is delivered to the serviced space by the supply centrifugal fan.
- Warm stale air from indoors passes through the filter and the heat exchanger and is discharged outdoors by the centrifugal fan.
- The supply and exhaust air flows are fully separated which helps eliminate the possibility of odour or microbial transfer between the streams.



RECIRCULATION OPERATION MODE

• The supply and exhaust air dampers are closed. the recirculation damper is open The room air circulates through the filters. Then it is returned back to the room purified.





Control

- The unit is equipped with a control panel.
- The remote control is supplied as standard
- Wi-Fi communication.

AUTOMATIC FUNCTIONS



SINGLE-ROOM AIR HANDLING UNITS

1 Turning unit on/off

2 Speed selection (Min/Mid/Max)

3 Increasing temperature set point for the reheater (available for the models with a reheater)

- **4** Turning reheater on/off (available for the models with a reheater)
- **5** Decreasing temperature set point for the reheater (available for the models with a reheater)
- 6 Turning timer on/off
- **7** Activation/deactivation of the scheduled operation mode

	Freshbox 200 WiFi Freshbox E-200 WiFi	Freshbox E1-200 WiFi Freshbox E2-200 WiFi
Speed selection	•	•
Filter replacement indication	•	•
Alarm indication	•	•
Speed setup	•	•
Timer	•	•
Week scheduler	•	•
Reheater enabled/disabled		•
Supply air temperature setup		•
Control with the mobile application Android / iOS	•	•

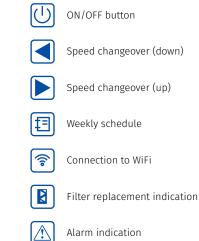




Download Andrioid application **Blauberg Freshbox**

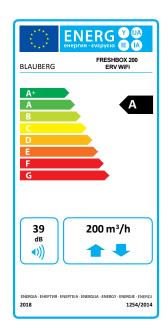
Download iOS application **Blauberg Freshbox**

CO	NTF	ROL	PANEL



Ecodesign parameters

Trade mark			BLAU	BERG							
Model		F	RESHBOX 2	00 ERV W	/iFi						
	Col	d	Aver	age	Wa	rm					
	-70.5 A+ -35.9 A -13.5										
Type of ventilation unit			Bidirec	tional							
Type of drive installed			Variable	speed							
Type of heat recovery system			Recupe	rative							
Thermal efficiency of heat recovery [%]			68	3							
Maximum flow rate [m³/h]			20	0							
Electric power input [W]			12	5							
Sound power level [dBA]	39										
Reference flow rate [m ³ /s]	0.039										
Reference pressure difference [Pa]	N/A										
Specific power input (SPI) [W/(m³/h)]	0.366										
Control typology	Local demand control										
Maximum internal leakage rates [%]	0.1										
Maximum external leakage rates [%]	0.9										
Mixing rate of bidirectional units [%]			20)							
Airflow sensitivity at +20 Pa and -20 Pa	0.93										
The indoor/outdoor air tightness [m³/h]			7								
Internet address		http://	www.blaube	rgventilat	oren.de/						
Thermal efficiency of heat recovery [%] Maximum flow rate [m ³ /h] Electric power input [W] Sound power level [dBA] Reference flow rate [m ³ /s] Reference pressure difference [Pa] Specific power input (SPI) [W/(m ³ /h)] Control typology Maximum internal leakage rates [%] Maximum external leakage rates [%] Mixing rate of bidirectional units [%] Airflow sensitivity at +20 Pa and -20 Pa The indoor/outdoor air tightness [m ³ /h] Internet address	Col	d	Aver	age	Wa	rm					
The annual electricity consumption (AEC) [KWII electricity/a]	79	5	25	8	21	3					
The annual beating caved (AUS) [kW/b primary caparas/a]	Col	d	Aver	age	Wa	rm					
The annual heating saved (AFIS) [KWII printary energy/d]	816	1	417	72	188	36					



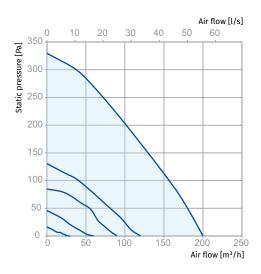


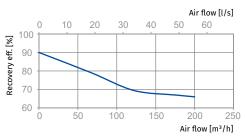
SINGLE-ROOM AIR HANDLING UNITS

Technical data

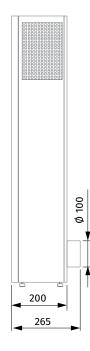
Parameters		Freshbo	ox 200 E	RV WiF	i	F	reshbo	k E-200	ERV Wi	iFi	F	reshbox	E1-200	ERV W	iFi	Fr	eshbox	E2-200	D ERV W	liFi
Speed	I	II		IV	۷	Ι			IV	۷	I	II	III	IV	٧	I	II	III	IV	V
Voltage [V / 50 (60) Hz]										1~	230									
Max. power without heater(s) [W]	10	15	25	44	134	10	15	25	44	134	10	15	25	44	134	10	15	25	44	134
Preheater power consumption [W]			_					650					_					650		
Reheater power consumption [W]			_				-				700				700					
Max. current consumption with heater(s) [A]		1.0			4.0				4.2				7.2							
Maximum air flow [m³/h (l/s)]	30 (8)	60 (17)	90 (25)	120 (33)	200 (56)	30 (8)	60 (17)	90 (25)	120 (33)	200 (56)	30 (8)	60 (17)	90 (25)	120 (33)	200 (56)	30 (8)	60 (17)	90 (25)	120 (33)	200 (56)
RPM [min ⁻¹]		2000																		
Sound pressure level at 3 m [dBA]	12	22	30	36	45	12	22	30	36	45	12	22	30	36	45	12	22	30	36	45
Transported air temperature [°C]										-15.	+40									
Casing material									ро	lymer c	oated s	teel								
Insulation thickness [mm]										3	0									
Extract filter										G	64									
Supply filter									G4	+ F7 (0	ption: H	113)								
Connected air duct diameter [mm]										1	00									
Weight [kg]										5	5									
Heat recovery efficiency [%]*	85	81	75	68	66	85	81	75	68	66	85	81	75	68	66	85	81	75	68	66
Heat recovery core type										count	er-flow									
Heat recovery core material									en	thalpic	membr	ane								
SEC class											Ą									

*Heat recovery efficiency is specified in compliance with EN 13141-8.





Overall dimensions [mm]



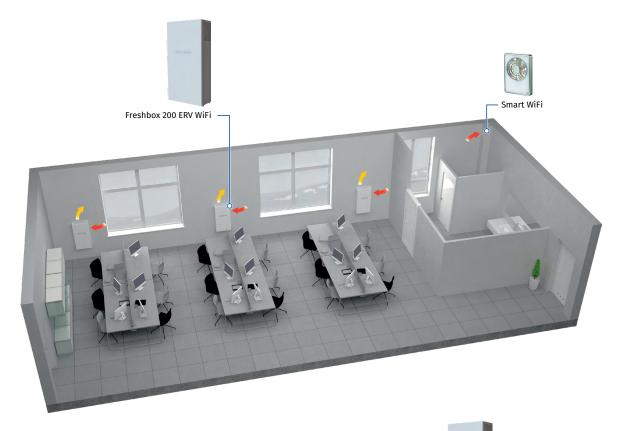


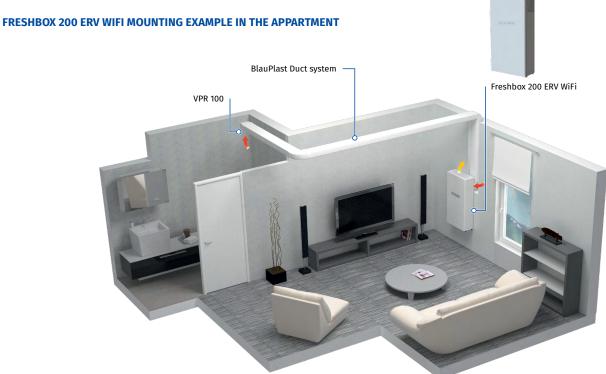
Mounting example

Each space requiring ventilation is equipped with one or several **Freshbox 200 ERV WiFi** units.

Can be upgraded with a bathroom exhaust air duct. To enable such a configuration the units can be additionally equipped with the optional ϕ 100 mm spigot (supplied as standard).

FRESHBOX 200 ERV WIFI MOUNTING EXAMPLE IN THE OFFICE







SINGLE-ROOM AIR HANDLING UNITS

Accessories

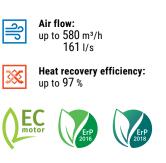
Name		Description
MS Freshbox 200 chrome		Mounting kit: • Two Ø 100 mm air ducts, 500 mm long • Ventilation outer hood made of polished steel • Cardboard template
MS Freshbox 200 white		Mounting kit: • Two Ø 100 mm air ducts, 500 mm long • Ventilation outer hood, painted white • Cardboard template
AH Freshbox 200 chrome		Ventilation outer hood made of polished steel
AH Freshbox 200 white		Ventilation outer hood, painted white
FP 201x162x20 G4		Exhaust G4 cassette filter
FP 243x162x20 G4		Supply G4 cassette filter
FP 502x162x40 F7		Supply F7 cassette filter
FP 502x162x40 H13		Supply HEPA H13 cassette filter
CD-1	() () () () () () () () () () () () () (CO2 sensor with indication
CD-2	8	CO2 Sensor



SINGLE-ROOM AIR HANDLING UNITS

Features

- The CIVIC EC LB units are designed for single-room ventilation of schools, offices and other public and commercial premises. Offer the ideal simple and efficient ventilation solutions for existing and renovated buildings and require no layout of air ducts.
- Efficient supply and extract ventilation for separate premises.
- EC motors with low energy consumption.
- Low-noise operation.
- Simple mounting.





Design

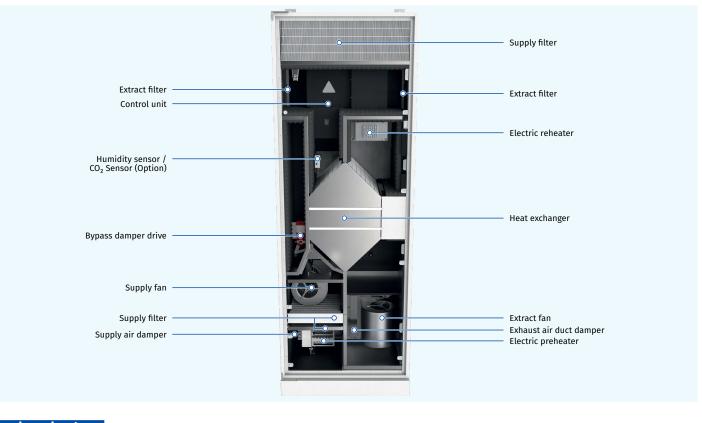
- Made of high-quality polymer coated steel, internally lined with heat- and sound insulation of mineral wool or other materials.
- Built-in preheater and reheater modifications available for cold climate conditions.

Motors

- High efficient electronically commutated motors with external motor and impeller with forward curved blades. Such motors are the most state-of-the-art energy saving solution.
- EC motors are featured with high performance and total speed controllable range. High efficiency reaching 90% is the premium advantage of the electronically commutated motors.

Air filtration

- Supply air is cleaned with G4 and F8 (PM2.5 > 75%) supply panel air filters. For premises requiring high air quality it is recommended to install carbon F8 filters and H11 (PM2.5 > 95%) filters. Available as specially ordered accessories.
 Panel G4 filter is used for extract air filtration
- Panel G4 filter is used for extract air filtration.



Designation key

Model	Motor type	Mounting	Bypass	Heater	Nominal air flow [m³/h]	Heat exchanger type	Control panel	
CIVIC	EC: synchronous electronically commutated motor	L: floor mounting	B: with bypass	_: without heater E: preheating E2: preheating + reheating	300; 500	_: heat recovery -E: energy recovery	S14: sensor control panel S17: th-Tune control panel S18: pGD control panel	_: remote -1: built-in



SINGLE-ROOM AIR HANDLING UNITS

Bypass

• The units are equipped with a bypass. The bypass damper opens for free cooling ventilation mode in summer.

Air dampers

• The automatic supply and extract air dampers are used to prevent uncontrollable air draughts during the unit standstill.

Heaters

PREHEATING

 CIVIC EC LBE and CIVIC EC LBE2 units are equipped with an electric preheater which protects the heat exchanger from freezing.

REHEATING

• CIVIC EC LBE2 units feature an electric reheater to raise the supply air temperature.

Control

• The ventilation units may be operated with an integrated or an external control panel.

THREE AVAILABLE MODIFICATIONS OF THE CONTROL PANEL:

	S14	S17	518
Built-in control panel	•	•	•
External control panel	•	•	•
Preheater		•	•
Reheater		•	•
Humidity sensor	0	0	0
CO ₂ sensor	0	0	0
Functions			
MODbus		0	0
Speed control from 0 to 100 %	•	•	•
Bypass control	Manual	Auto	Auto
Filter maintenance indicator	•	•	•
Alarm indicator	•	•	•
Timer scheduled operation		•	•
Week scheduled operation		•	•
Supply air temperature setup		•	•
• - available; o - option.			

FREEZE PROTECTION

- The freeze protection function may be realized by two ways.
 - For the units without preheater: the supply fan shuts down on a signal from the exhaust air temperature sensor to let warm extract air flow warm up the heat exchanger. Then the supply fan turns on and the unit operates normally.
 - For the units with a preheater: the supply air is warmed up before contacting the heat exchanger, thus preventing its freezing. In this case balanced air exchange is not interrupted.

Heat exchanger

- The CIVIC EC LB unit has a counter-flow heat exchanger made of polystyrene and aluminium.
 - In cold season the heat energy of the extract air flow is absorbed by intake air flow, thus decreasing the heat losses caused by ventilation. Condensate generated during heat recovery is collected in a drain pan and removed to the sewage system.
 - In warm season the heat of the outdoor air is absorbed by extract air flow. This way the supply air temperature decreases and heat recovery reduces operation loads for the air conditioner.
- The **CIVIC EC LB...** -**E** unit is equipped with a counter-flow heat exchanger made of enthalpy membrane.
 - In cold season the heat and moisture of the extract air are absorbed by supply air through the enthalpy membrane. thus decreasing the heat losses caused by ventilation.
 - In warm season the heat and humidity of the outdoor air is absorbed by extract air flow through the enthalpy membrane. This way the supply air temperature and humidity decreases and heat recovery reduces operation loads for the air conditioner.





Functioning

- **Cold outside air** flows through the filters and heat exchanger and is moved to the room with a supply centrifugal fan.
- Warm polluted air from the premise flows through the filter and the heat exchanger and is exhausted outside with an extract centrifugal fan.



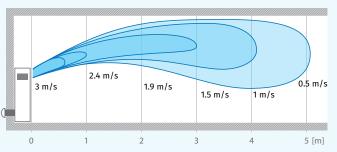


SINGLE-ROOM AIR HANDLING UNITS

Technical data

Parameters	CIVIC EC LB 300	CIVIC EC LBE 300	CIVIC EC LBE2 300	CIVIC EC LB 300-E	CIVIC EC LBE 300-E	CIVIC EC LBE2 300-E	CIVIC EC LB 500	CIVIC EC LBE 500	CIVIC EC LBE2 500
Voltage [V / 50 (60) Hz]					1~230				
Power consumption without heater(s) [W]	123	123	123	123	123	123	232	232	232
Preheater power consumption [W]	-	1400	1400	-	1400	1400	-	1400	1400
Reheater power consumption [W]	-	-	1400	-	-	1400	-	-	2800
Max. current consumption without heater(s) [A]	0.9	0.9	0.9	0.9	0.9	0.9	1.7	1.7	1.7
Max. current consumption with heater(s) [A]	0.9	7	13.1	0.9	7	13.1	1.7	7.8	20
Maximum air flow [m³/h (l/s)]	320 (89)	320 (89)	320 (89)	320 (89)	320 (89)	320 (89)	580 (161)	580 (161)	580 (161)
RPM [min ⁻¹]	2150	2150	2150	2150	2150	2150	1280	1280	1280
Sound pressure level at 3 m [dBA]	35	35	35	35	35	35	35	35	35
Transported air temperature [°C]					-25+40				
Casing material				ро	lymer coated s	teel			
Insulation				40) mm mineral w	ool			
Extract filter					G4				
Supply filter				G4 and F8	(Option: F8 Ca	rbon; H11)			
Connected air duct diameter [mm]	200	200	200	200	200	200	250	250	250
Weight [kg]	138±3%	139±3%	140±3%	136±3%	137±3%	138±3%	191±3%	193±3%	194±3%
Heat exchanger type					counter-flow				
Heat exchanger material		polystyrene		er	nthalpy membra	ine		aluminium	
Heat recovery efficiency* [%]		8297		7690				7993	
SEC class	А	А	А	А	А	А	А	А	А

*Heat recovery efficiency is specified in compliance with EN 13141-8.

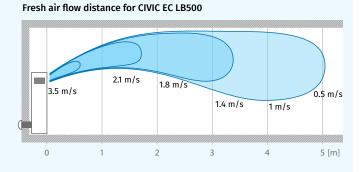


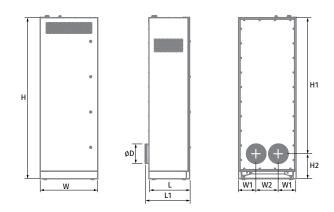




Model	D	Н	H1	H2	L	11	W	W1	W2
CIVIC EC LB300	200	1770	1476	294	470	520	620	230	195
CIVIC EC LB500	250	2170	1833	337	535	585	750	290	230

The unit is rated for indoor application with the ambient temperature ranging from +1 °C to +40 °C and relative humidity up to 80%.



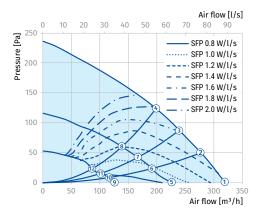


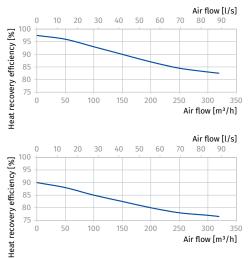


SINGLE-ROOM AIR HANDLING UNITS

CIVIC EC LB

CIVIC EC LB/LBE/LBE2 300





150

200

300

Air flow [m³/h]

350

Unit power with no heater [W]

1 123 2 113 3 108	
3 108	
3 108	
4 100	
5 55	
6 52	
7 50	
8 45	
9 24	
10 23	
11 23	
12 23	

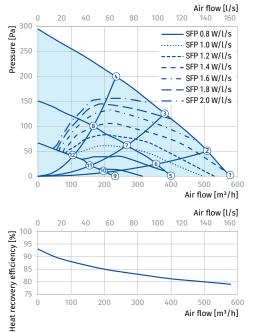
CIVIC EC LB/LBE/LBE2 500

50

100

75

0



Unit power with no heater [W]

Point	CIVIC EC LB500 CIVIC EC LBE500 CIVIC EC LBE2 500
1	232
2	215
3	170
4	168
5	98
6	92
7	85
8	75
9	33
10	31
11	30
12	29

SINGLE-ROOM AIR HANDLING UNITS

Accessories

Accessories					
		Civic EC LB 300 S17/S18	Civic EC LB 300 S14	Civic EC LB 500 S17/S18	Civic EC LB 500 S14
Outer ventilation hood made of brushed stainless steel		AH Civic 300 LB chrome	AH Civic 300 LB chrome	AH Civic 500 LB chrome	AH Civic 500 LB chrome
Outer ventilation hood made of white coated steel		AH Civic 300 LB white	AH Civic 300 LB white	AH Civic 500 LB white	AH Civic 500 LB white
G4 filter		FP 308x238x22 G4 PPI	FP 308x238x22 G4 PPI	FP 450x257x27 G4 PPI	FP 450x257x27 G4 PPI
G4 filter		FP 265x213x48 G4	FP 265x213x48 G4	FP 318x290x22 G4	FP 318x290x22 G4
F8 filter		FP 384x273x60 F8	FP 384x273x60 F8	FP 318x290x60 F8	FP 318x290x60 F8
F8 carbon filter		FP 533x135x48 F8 C	FP 533x135x48 F8 C	FP 666x196x48 F8 C	FP 666x196x48 F8 C
H11 HEPA filter		FP 533x135x60 H11	FP 533x135x60 H11	FP 666x196x60 H11	FP 666x196x60 H11
VOC sensor		DPWQ30600	-	DPWQ30600	-
CO ₂ sensor		DPWQ40200	-	DPWQ40200	-
Humidity sensor		DPWC11200	-	DPWC11200	-
Internal humidity sensor	•	FS2	FS2	FS2	FS2
Humidity sensor		HR-S	HR-S	HR-S	HR-S
Syphon kit		SFK 20x32	SFK 20x32	SFK 20x32	SFK 20x32
Drain pump		CP-2	CP-2	CP-2	CP-2





SINGLE-ROOM AIR HANDLING UNITS



SINGLE-ROOM AIR HANDLING UNITS

Features

- The CIVIC EC DB units are designed for single-room ventilation of schools, offices and other public and commercial premises. Offer the ideal simple and efficient ventilation solutions for existing and renovated buildings and require no layout of air ducts.
- Efficient supply and extract ventilation for separate premises.
- EC motors with low energy consumption.
- Low-noise operation.
- Simple mounting.



Design

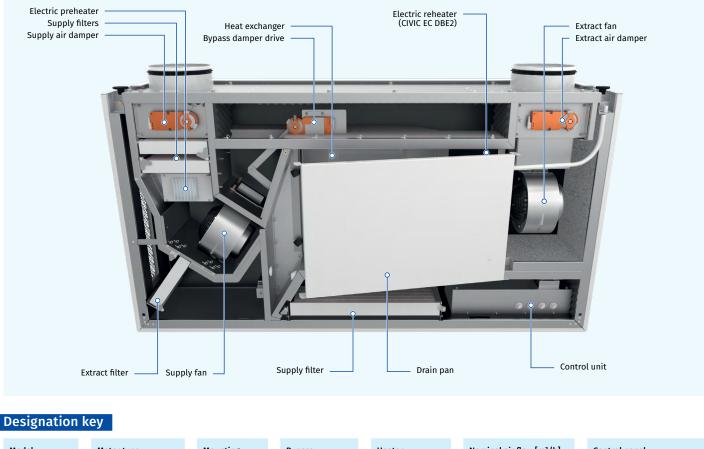
- Made of high-quality polymer coated steel, internally lined with heat- and sound insulation of mineral wool or other materials.
- Available modifications with an integrated preheater and reheater for cold climate applications.

Motors

- High efficient electronically commutated motors with external motor and impeller with forward curved blades. Such motors are the most state-of-the-art energy saving solution.
- EC motors are featured with high performance and total speed controllable range. High efficiency reaching 90% is the premium advantage of the electronically commutated motors.

Air filtration

 Supply air is cleaned with G4 and F8 (PM2.5 > 75%) supply panel air filters. For premises requiring high air quality it is recommended to install carbon F8 filter or H11 (PM2.5 > 95%) filter. Available as specially ordered accessories.
 Panel G4 filter is used for extract air filtration



Model	Motor type	Mounting	Bypass	Heater	Nominal air flow [m³/h]	Control panel
CIVIC	EC: synchronous electronically commutated motor	D: ceiling mounting	B: with bypass	_: without heater E: preheating E2: preheating + reheating	300; 500	S17: th-Tune control panel S18: pGD control panel



SINGLE-ROOM AIR HANDLING UNITS

Bypass

• The units are equipped with a bypass. The bypass damper opens for free cooling ventilation mode in summer.

Air dampers

• The automatic supply and extract air dampers are used to prevent uncontrollable air draughts during the unit standstill.

Heater

PREHEATING

• CIVIC EC DBE and CIVIC EC DBE2 units are equipped with an electric preheater which protects the heat exchanger from freezing.

REHEATING

• CIVIC EC DBE2 units feature an electric reheater to raise the supply air temperature.

Functioning

- Cold outside air flows through the filters and heat exchanger and is moved to the room with a supply centrifugal fan.
- Warm polluted air from the premise flows through the filter and the heat exchanger and is exhausted outside with an extract centrifugal fan.



Heat exchanger

- The **CIVIC EC DB** unit has a counter-flow heat exchanger made of aluminium.
- In cold season the heat energy of the extract air flow is absorbed by intake air flow, thus decreasing the heat losses caused by ventilation. Condensate generated during heat recovery is collected in a drain pan and removed through the drain pipes to the sewage system.
- In warm season the heat of the outdoor air is absorbed by extract air flow. This way the supply air temperature decreases and heat recovery reduces operation loads for the air conditioner.



Control

• The ventilation units may be operated with an integrated or an external control panel.

TWO AVAILABLE MODIFICATIONS OF THE CONTROL PANEL:

	S17	S18
Built-in control panel	•	•
External control panel	•	•
Preheater	•	•
Reheater	•	•
Humidity sensor	0	0
CO ₂ sensor	0	0
Functions		
MODbus	0	0
Speed control from 0 to 100 %	•	•
Bypass control	Auto	Auto
Bypuss control	71010	Auto
Filter maintenance indicator	•	•
Filter maintenance indicator	•	
Filter maintenance indicator Alarm indicator	•	•

• - available; o - option.

FREEZE PROTECTION

• The freeze protection function may be realized by two ways.

- For the units without preheater: the supply fan shuts down on a signal from the exhaust air temperature sensor to let warm extract air flow warm up the heat exchanger. Then the supply fan turns on and the unit operates normally.
- For the units with a preheater: the supply air is warmed up before contacting the heat exchanger, thus preventing its freezing. In this case balanced air exchange is not interrupted.



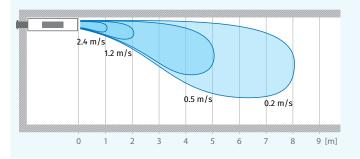
SINGLE-ROOM AIR HANDLING UNITS

Technical data

Parameters	CIVIC EC DB300	CIVIC EC DBE300	CIVIC EC DBE2 300	CIVIC EC DB500	CIVIC EC DBE500	CIVIC EC DBE2 500
Voltage [V / 50 (60) Hz]			1~2	230		
Power consumption without heater(s) [W]	175	175	175	230	230	230
Preheater power consumption [W]	-	1050	1050	_	1050	1050
Reheater power consumption [W]	-	-	1400	-	-	1400
Max. current consumption without heater(s) [A]	1.3	1.3	1.3	1.7	1.7	1.7
Max. current consumption with heater(s) [A]	-	7.3	13.6	-	7.2	13.5
Air flow [m³/h (l/s)]	300 (83)	300 (83)	300 (83)	510 (142)	510 (142)	510 (142)
RPM [min ⁻¹]	2150	2150	2150	1700	1700	1700
Noise level @ 3 m [dBA]	22	22	22	24	24	24
Max. transported air temperature [°C]			-25	.+40		
Casing material			polymer co	ated steel		
Insulation			40 mm. mi	neral wool		
Extract filter			G	4		
Supply filter			G4 and F8 (Option	: F8 Carbon; H11)		
Connected air duct diameter [mm]	200	200	200	250	250	250
Weight [kg]	78	79	80	103	104	105
Heat exchanger type			counte	er-flow		
Heat exchanger material			alum	inum		
Heat recovery efficiency* [%]		7991			7994	
SEC class	Α	А	А	А	А	А

*Heat recovery efficiency is specified in compliance with EN 13141-8.



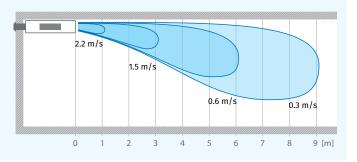


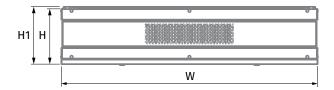
Overall dimensions [mm]

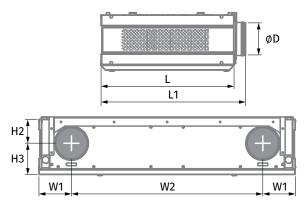
Model	D	Н	H1	H2	H3	L	11	W	W1	W2
CIVIC EC DB300	199	333	347	145	188	806	873	1547	196	1155
CIVIC EC DB500	249	386	400	169	217	1006	1083	1806	244	1316

The unit is rated for indoor application with the ambient temperature ranging from +1 °C to +40 °C and relative humidity up to 80%

Fresh air flow distance for CIVIC EC DB500







Heat recovery [%]

CIVIC EC DB

CIVIC EC DB/DBE/DBE2 300

	T 1	Octave frequency band [Hz]										
Sound-power level, A - weighted	0	Total	63	125	250	500	1000	2000	4000	8000	LpA. 3m	LpA. 1m
LwA to environment @ point 1	dBA	42	27	30	32	36	37	35	27	25	22	32
LwA to environment @ point 5	dBA	35	22	22	32	24	29	25	20	17	15	25
LwA to environment @ point 9	dBA	27	12	16	19	19	15	21	17	17	6	16

Total power of the unit [W]

175

155

145

130

83

78

73

68

36

34

32

32

Point

1

2

3

4

5

6

7

8

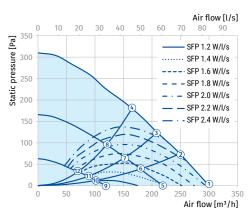
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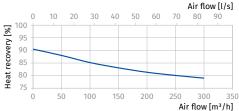
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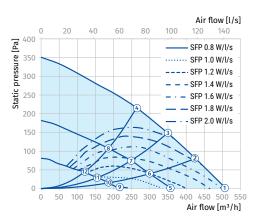
CIVIC EC DB300 CIVIC EC DBE300 CIVIC EC DBE2 300

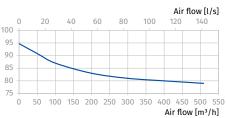




CIVIC EC DB/DBE/DBE2 500

Sound-power level, A - weighte	d	Total	Octave fre 63	quency banc 125	l [Hz] 250	500	1000	2000	4000	8000	LpA. 3m	LpA. 1m
LwA to environment @ point 1	dBA	44	22	28	38	41	37	33	25	16	24	34
LwA to environment @ point 5	dBA	40	18	24	32	32	36	28	29	17	19	29
LwA to environment @ point 9	dBA	34	10	17	22	21	33	18	18	17	13	23





Total names of the unit [W]

Total cound	pressure level	at 2 m	(1 m)	[dp
iotal sound	pressure level	alsmi	(1111)	Lap

Total power of the unit [W]		
Point	CIVIC EC DB500 CIVIC EC DBE500 CIVIC EC DBE2 500	ľ
1	230	1
2	220	2
3	200	3
4	178	4
5	106	5
6	100	e
7	92	7
8	87	٤
9	46	ç
10	45	1
11	43	1
12	41	1

BA]

······				
Point	CIVIC EC DB300 CIVIC EC DBE 300 CIVIC EC DBE2 300			
1	24 (34)			
2	23 (33)			
3	23 (33)			
4	22 (32)			
5	19 (29)			
6	19 (29)			
7	19 (29)			
8	18 (28)			
9	13 (23)			
10	13 (23)			
11	13 (23)			
12	13 (23)			



Total sound pressure level at 3 m (1 m) [dBA]

CIVIC EC DB300 CIVIC EC DBE 300 CIVIC EC DBE2 300

22 (32)

21 (31)

21 (31)

20 (30)

15 (25)

15 (25)

15 (25)

15 (25)

6 (16)

6 (16)

6 (16)

6 (16)

Point

1

2

3

4

5

6

7

8

9

10

11

12



33

SINGLE-ROOM AIR HANDLING UNITS

CIVIC EC DB300 S17/S18 CIVIC EC DBE300 S17/S18 CIVIC EC DBE2 300 S17/S18 CIVIC EC DB500 S17/S18 CIVIC EC DBE500 S17/S18 CIVIC EC DBE2 500 S17/S18 FP 270x216x48 G4 FP 325x388x48 G4 G4 filter F8 filter FP 270x218x48 F8 FP 325x314x48 F8 F8 carbon filter FP 518x270x48 F8 C FP 714x320x48 F8 C H11 HEPA filter FP 518x270x48 H11 FP 714x320x48 H11 Outer grill VDA 250 CFn Al VDA 200 CFn Al VOC sensor DPWQ30600 DPWQ30600 $\rm CO_2$ sensor DPWQ40200 DPWQ40200 Humidity sensor DPWC11200 DPWC11200 Internal humidity sensor FS2 FS2 Humidity sensor HR-S HR-S SFK 20x32 SFK 20x32 Syphon kit CP-2 CP-2 Drain pump



Accessories



SINGLE-ROOM AIR HANDLING UNITS



BLAUBERG

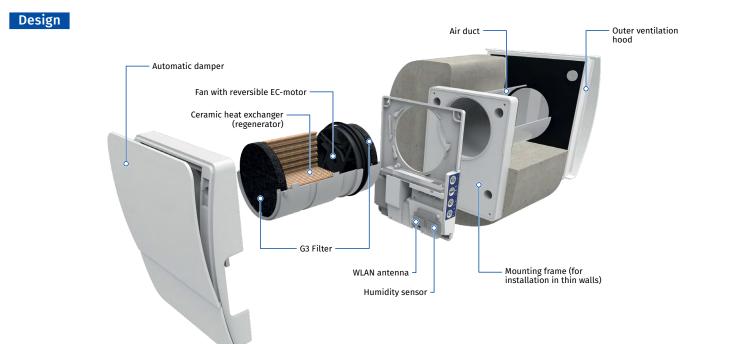
VENTO EXPERT A30 S10 W V.2

HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and regulated air exchange create individually controlled microclimate.
- Wi-Fi communication between several single-room ventilation units for coordinated operation.
- Controlled by Android or iOS smartphone or tablet.







One of the best regeneration efficiency on the market due to innovative hexagonal structure of the heat exchanger cells



Built-in Wi-Fi for wireless communication between units and Android or iOS device control

Designation key

Model	Air duct
Vento Expert	A: round air duct

Nominal air flow [m³/h] 30

_

Ventilation hood type

Control

S10: white plastic hood AH-10 white 100

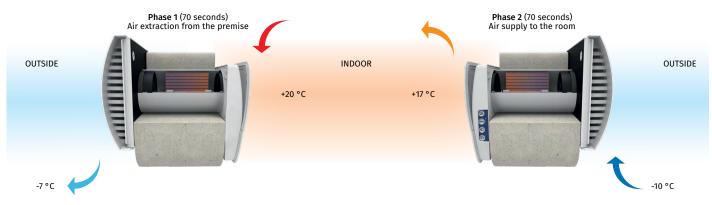
W V.2: control and setup of the unit with the Wi-Fi mobile application



HEAT RECOVERY SINGLE-ROOM UNITS

Heat and moisture regeneration

UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise. flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up. the unit switches to the supply mode.
- Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
- When the ceramic regenerator is cooled down. the unit switches to the extract air mode.

Control

• Control of the unit operation mode is performed by means of smartphone or tablet. Wi-Fi communication between several units for coordinated operation is available.





Blauberg Vento V.2 app for Android or iOS devices is available at Google Play and App Store.





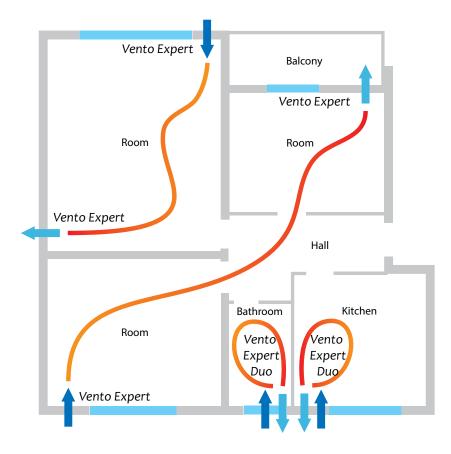




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase synchronized units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. This way the most efficient balanced ventilation is arranged.
- In case of brand new construction, units are mounted in two stages:
 - Pre-installation of an air duct and an outer ventilation hood at the stage of indoor finishing and outer decorative wall finishing.
 - Completion of the installation before commissioning of a house. It includes installation of the indoor unit with controller and air damper, the cartridge, the regenerator, the fan and the filters.



With mounting frame for thin walls



Angular mounting into a wall with standard thickness using KIT BlauPlast white 100 / KIT BlauPlast chrome 100

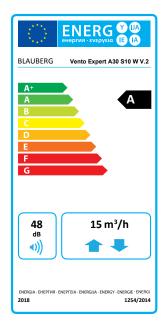




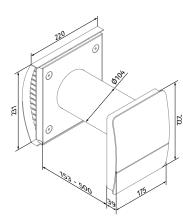
VENTO EXPERT A30 S10 W V.2

Technical data

Parameters	Vento Expert A30 S10 W V.2		0 W V.2
Speed	I	II	III
Voltage [V/50 (60) Hz]		100-240	
Power [W]	1.80	3.00	4.40
Current [A]	0.027	0.037	0.051
RPM [min ⁻¹]	1600	2200	2500
Air flow in ventilation mode [m³/h (l/s)]	10 (3)	20 (6)	30 (8)
Air flow in heat recovery mode [m³/h (l/s)]	5 (1)	10 (3)	15 (4)
SFP [W/l/s]	1.30	1.08	1.06
Filter		G3	
Transported air temperature [°C]	-15 +40		
Sound pressure level at 1 m [dBA]	30	37	40
Sound pressure level at 3 m [dBA]	21	28	31
Outdoor sound pressure attenuation [dBA] in accordance with DIN EN 20140		42	
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%] up to 81			
SEC class		А	
Ingress protection rating		IP24	



Overall dimensions [mm]



Vento Expert A30 S10 W V.2

Vento Expert A30 S10 W V.2 (with a mounting frame for thin walls)



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
Pre-installation Kit Vento Expert A30 S10		Pre-installation kit for mounting into a wall with standard thickness. Includes: • Air duct • AH-10 white 100 outer ventilation hood • Plastic foam plug • Plastic foam wedges
Completion Kit Vento Expert A30 W V.2	ę	Final mounting kit. Includes: • Cartridge with a heat regenerator, a fan and G3 filters • Indoor unit with a controller and air damper
FP3 Vento G3		G3 filters (2 pcs.)
AH-10 *colour* 100		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 100		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
KIT BlauPlast white 100		Kit for angular mounting with white color grille (for walls with standard thickness)
KIT BlauPlast chrome 100		Kit for angular mounting with stainless steel outer grille (for walls with standard thickness)
BlauPlast RTR 100/0.35-0.5		Telescopic air duct with the diameter of 100 mm and adjustable length from 350 to 500 mm
BlauPlast RTR 100/0.5-1		Telescopic air duct with the diameter of 100 mm and adjustable length from 500 to 1000 mm
SE Vento Expert W		Sensor control panel
CD-1		CO $_2$ sensor with LED CO $_2$ indication and a sensor button for operation mode selection
CD-2	aguer .	CO2 sensor
S Vento Expert A30		Cardboard template for indoor installation of the unit





HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving, supply and exhaust, single-room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and controllable air exchange create individually controlled microclimate.
- Wi-Fi data exchange between several single-room ventilation units for coordinated operation.
- Controlled by Android or iOS smartphone or tablet.





Model	Air duct	Nominal air flow [m³/h]	Front panel	Ventilation hood type	Co
Vento Expert	A: round air duct	50	-1: flat front panel	\$10: white plastic hood AH-10 white 160 (for standard walls) \$: metal hood (for thin walls)	W the ap

W V.2: Control and setup of the unit with the Wi-Fi mobile application



VENTO EXPERT A50-1 S10 W V.2

Control

- Unit control via smartphone or tablet application.
- The units can be connected by Wi-Fi for synchronized operation.
- House ventilation control via cloud service from anywhere in the world.
- Connection to smart house or Building Management System (BMS) via Wi-Fi.

Blauberg Vento V.2 app for Android or iOS devices is available at Google Play and App Store.



• Vento Expert A50-1 S10 W V.2 either can operate as independent unit or can be connected with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.

FOR LIVING ROOMS AND BEDROOMS



FOR KITCHEN AND BATHROOM



• Control of the unit operation mode is also performed by means of the sensor control panel located on the unit casing or the remote control.



• Vento Expert is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the speed III independently on other units in the system.



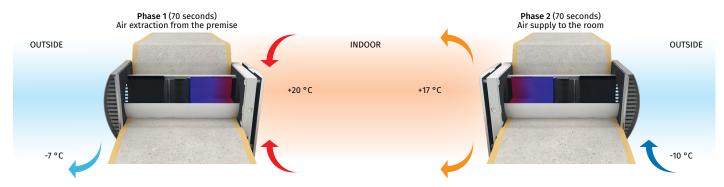
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VENTO EXPERT A50-1 S10 W V.2

HEAT RECOVERY SINGLE-ROOM UNITS

Energy recovery

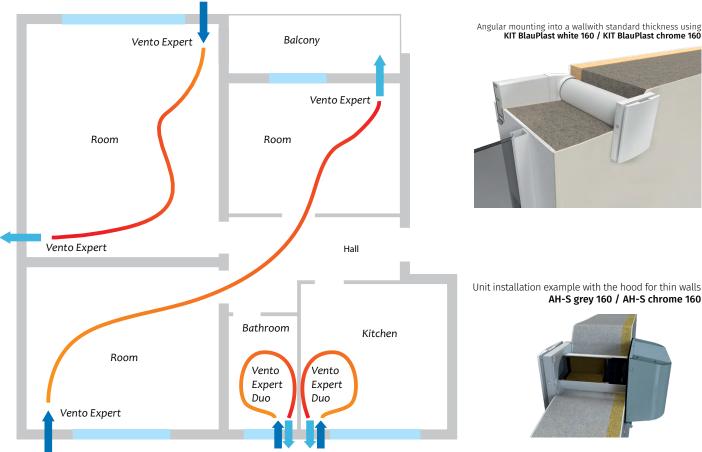
UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise, flows through the ceramic heat exchanger and transfers its heat and moisture to it.
- As the ceramic heat exchanger gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the heat exchanger and absorbs accumulated heat and humidity.
- When the heat exchanger is cooled down, the unit switches to the extract air mode.

Mounting

- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase synchronized units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. This way the most efficient balanced ventilation is arranged.
- In case of brand new construction, units are mounted in two stages:
 - Pre-installation of an air duct and an outer ventilation hood at the stage of indoor finishing and outer decorative wall finishing.
 - Completion of the installation before commissioning of a house. It includes installation of the indoor unit with controller and shutters the cartridge, the heat exchanger, the fan and the filters.



Unit installation example with the hood for thin walls AH-S grey 160 / AH-S chrome 160

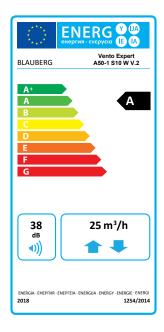




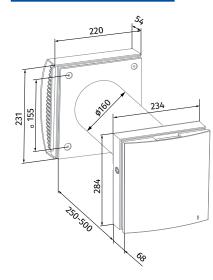
Technical data

Parameters	Vento Expert A50-1 S10 W V.2 Vento Expert A50-1 S W V.2		
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-230	
Power [W]	4.45	5.08	7.06
Current [A]	0.035	0.040	0.059
RPM [min ⁻¹]	800	1300	1900
Air flow in ventilation mode [m³/h (l/s)]	15 (4) 30 (8) 50 (14		50 (14)
Air flow in energy recovery mode [m³/h (l/s)]		15 (4)	25 (7)
SFP [W/l/s]	2.14	1.22	1.02
Filter	G3 (Option: F8 PM2.5 > 99 %*)		
Transported air temperature [°C]	-20+40		
Sound pressure level at 1 m in accordance with ISO 3741:2004 [dBA]	20 27 30		
Sound pressure level at 3 m in accordance with ISO 3741:2004 [dBA]	11	18	21
Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA]		42	
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%] up to 93			
Ingress protection rating	IP24		

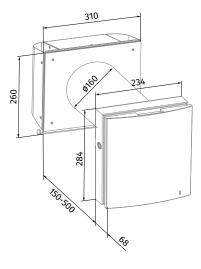
* maximum air flow 40 m³/h



Overall dimensions [mm]



Vento Expert A50-1 S10 W V.2



Vento Expert A50-1 S W V.2 (for thin walls)



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
Pre-installation Kit Vento Expert A50-1 S10		Pre-installation kit for mounting into walls with standard thickness. Includes: • Air duct • AH-10 white 160 outer ventilation hood • Polystyrene foam plug • Polystyrene foam wedges
Pre-installation Kit Vento Expert A50-1 S		Pre-installation kit for mounting into thin walls. Includes: • Air duct • AH-S chrome 160 outer ventilation hood • Polystyrene foam plug • Polystyrene foam wedges
Completion Kit Vento Expert A50-1 W V.2		Final mounting kit. Includes: • Cartridge with a heat exchanger, a fan and G3 filters • Indoor unit with a controller and shutters • Remote control
ZL1 Vento 160/150	Ţ,	Cartridge with heat regenerator for cold climate
FP Vento Expert A50 G3		G3 filters (2 pcs.)
FP Vento Expert A50 F8		Filter set. Includes: • Plastic frame (1 pc.) • G2 pre-filter (1 pc.) • F8 filter (1 pc.). Filtration rate PM2.5 99 %
AH-8 white 160		White painted aluminium outer ventilation hood for a cold climate
AH-8 chrome 160		Brushed stainless steel outer ventilation hood for a cold climate
AH-10 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-11 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-S white 160		Stainless steel ventilation hood, painted white
AH-S chrome 160		Brushed stainless steel ventilation hood



HEAT RECOVERY SINGLE-ROOM UNITS

Name		Description
PP 160/0.5		Plastic outer grille with pipe for mounting from indoor
KIT BlauPlast white 160		Kit for angular mounting with white color grille (for walls with standard thickness)
KIT BlauPlast chrome 160	Q	Kit for angular mounting with stainless steel outer grille (for walls with standard thickness)
R 160-500		500 mm air duct and polystyrene foam plug
R 160-700		700 mm air duct and polystyrene foam plug
SE Vento Expert W	ii ii g ii c a i j a	Sensor control panel
FB Vento Expert A50	000 300 60 60	Remote control
CD-1		CO_2 sensor with LED CO_2 indication and a sensor button for operation mode selection
CD-2	9	CO2 sensor
S Vento Expert A50	• ==	Cardboard template for indoor installation of the unit

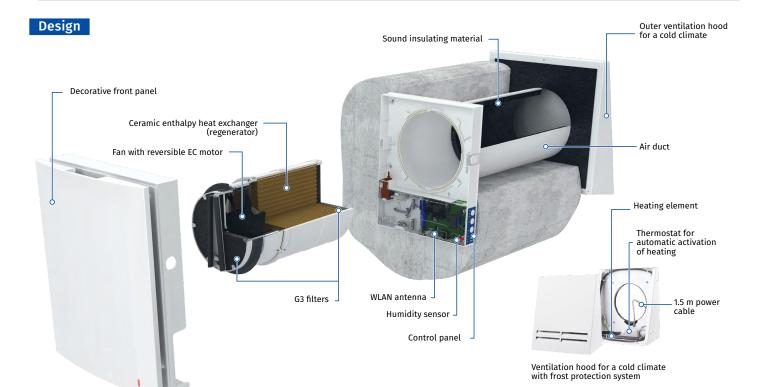


HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Extended temperature range up to -30 °C. • Arrangement of efficient energy-saving,
- supply and exhaust, single-room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and controllable air exchange create individually controlled microclimate.
- Wi-Fi data exchange between several single-room ventilation units for coordinated operation.
- Controlled by Android or iOS smartphone or tablet.





One of the best heat recovery efficiency on the market due to innovative hexagonal structure of the heat exchanger cells

Designation key

Model	Air duct	Maximum air flow [m³/h]
Vento Expert	A: round air duct	50



Built-in Wi-Fi for wireless communication between units and Android or iOS device control

Cartridge type

C3: cartridge for

a cold climate



Front panel type

-1: flat front panel

Integrated automatic air shutters prevent air back drafting



Easy maintenance. Indoor unit is opened by pressing the latches on both sides. The specially designed front panel can be closed manually to ensure 100 % air tightness and protect against wind import impact

Control

S8: ventilation hood for a cold climate with frost protection system

Ventilation hood type

W V.2: control and setup of the unit with the Wi-Fi mobile application



VENTO EXPERT A50C3-1 S8 W V.2

Control

- Unit control via smartphone or tablet application.
- The units can be connected by Wi-Fi for synchronized operation.
- House ventilation control via cloud service from anywhere in the world.
- Connection to smart house or Building Management System (BMS) via Wi-Fi.

Blauberg Vento V.2 app for Android or iOS devices is available at Google Play and App Store.



SMART HOUSE

- Vento Expert A50C3-1 S8 W V.2 either can operate as independent unit or can be connected with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.
- FOR LIVING ROOMS AND BEDROOMS



• Control of the unit operation mode is also performed by means of the sensor control panel located on the unit casing or the remote control.



• Vento Expert A50C3-1 S8 W V.2 is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the high speed independently on other units in the system.

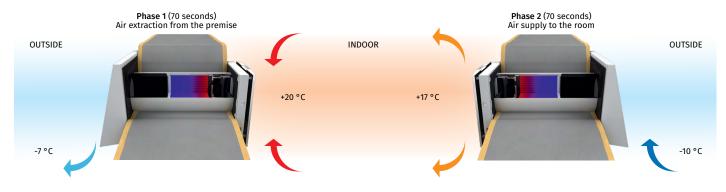


HEAT RECOVERY SINGLE-ROOM UNITS

Energy recovery

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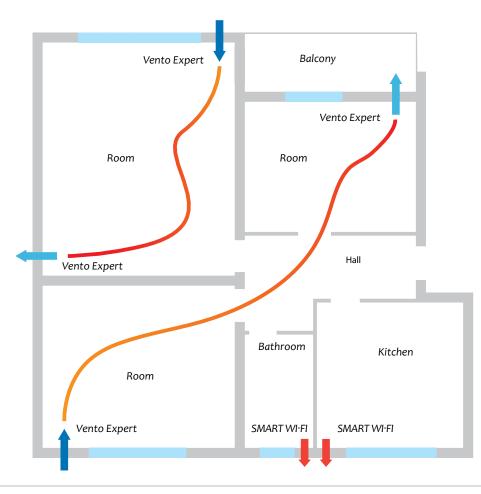
UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise, flows through the ceramic heat exchanger and transfers its heat and moisture to it.
- As the ceramic heat exchanger gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the heat exchanger and absorbs accumulated heat and humidity.
- When the heat exchanger is cooled down, the unit switches to the extract air mode.

Mounting

- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase synchronized units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. This way the most efficient balanced ventilation is arranged.
- In case of brand new construction, units are mounted in two stages:
 Pre-installation of an air duct and an outer ventilation hood at the
 - stage of indoor finishing and outer decorative wall finishing.Completion of the installation before commissioning of a house. It
 - includes installation of the indoor unit with controller and shutters, the cartridge, the heat exchanger, the fan and the filters.

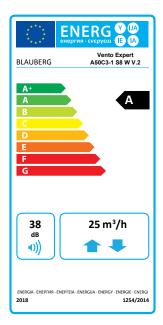




VENTO EXPERT A50C3-1 S8 W V.2

Technical data

Parameters	Vento Expert A50C3-1 S8 W V.2		S8 W V.2
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-240	
Capacity with hood heating element off [W]	4.45	5.08	7.06
Capacity with hood heating element on [W]	64.45	65.08	67.06
Current with hood heating element off [A]	0.035	0.040	0.059
Current with hood heating element on [A]	0.295	0.300	0.319
RPM [min ⁻¹]	800	1300	1900
Air flow in ventilation mode [m³/h (l/s)]	15 (4)	30 (8)	50 (14)
Air flow in energy recovery mode [m³/h (l/s)]	8 (2)	15 (4)	25 (7)
SFP [W/l/s]	2.14	1.22	1.02
Filter	G3 (Option: F8 PM2.5 > 99 %*)		
Transported air temperature [°C]	-30+40		
Sound pressure level at 1 m in accordance with ISO 3741:2004 [dBA]	20	27	33
Sound pressure level at 3 m in accordance with ISO 3741:2004 [dBA]	11	18	24
Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA]		42	
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%] up to 93		up to 93	
Ingress protection rating	IP24		
* maximum air flow 40 m³/h			



Overall dimensions [mm]

Vento Expert A50C3-1 S8 W V.2



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

News		Description
Name		Description
Pre-installation Kit Vento Expert A50-1 S8		Pre-installation kit for mounting into walls with standard thickness. Includes: • Air duct • AH-8 white 160 outer ventilation hood • Polystyrene foam plug • Polystyrene foam wedges
Completion Kit Vento Expert A50C3-1 W V.2		Final mounting kit. Includes: • Cartridge with a heat exchanger, a fan and G3 filters • Indoor unit with a controller and shutters • Remote control
FP Vento Expert A50 G3		G3 filters (2 pcs.)
FP Vento Expert A50 F8	6	Filter set. Includes: • Plastic frame (1 pc.) • G2 pre-filter (1 pc.) • F8 filter (1 pc.). Filtration rate PM2.5 99 %
AH-8 white 160		White painted aluminium hood for a cold climate
AH-8 chrome 160		Brushed stainless steel outer ventilation hood for a cold climate
R 160-500		500 mm air duct and polystyrene foam plug
R 160-700		700 mm air duct and polystyrene foam plug
SE Vento Expert W		Sensor control panel
FB Vento Expert A50	0 0 0 0 0 0 0	Remote control
CD-1		$\rm CO_2$ sensor with LED $\rm CO_2$ indication and a sensor button for operation mode selection
CD-2	91	CO ₂ sensor
S Vento Expert A50		Cardboard template for indoor installation of the unit





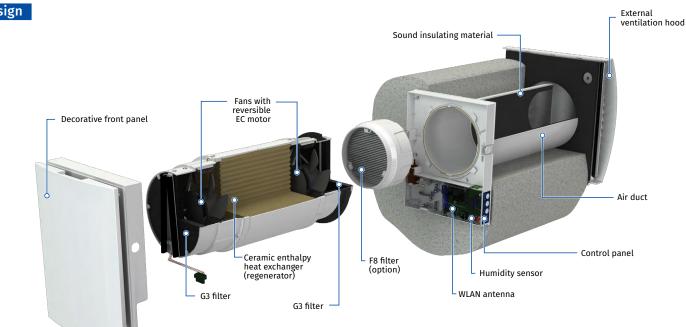
HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving, supply and exhaust, single-room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and controllable air exchange create individually controlled microclimate.
- Wi-Fi data exchange between several single-room ventilation units for coordinated operation.
- Controlled by Android or iOS smartphone or tablet.
- Connection to smart house or Building Management System (BMS).

Design







One of the best heat recovery efficiency on the market due to innovative hexagonal structure of the heat exchanger cells



Built-in Wi-Fi for wireless communication between units and Android or iOS device control



Integrated automatic air shutters prevent air back drafting



Easy maintenance. Indoor unit is opened by pressing the latches on both sides. The specially designed front panel can be closed manually to ensure 100 % air tightness and protect against wind impact

Designation key

Model	Air duct
Vento Expert	A: round air duct

	Maximum air flow [m³/h]
-	100

low	Unit modificatio
	-1

on	Ventilation hood type
	S10: plastic outer ventilation hood AH-10 white 160 (for standard walls) S: metal hood (for thin walls)

Control	
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W V.2: control and setup of the unit with the Wi-Fi mobile application



VENTO EXPERT A100-1 S10 W V.2

Control

- Unit control via smartphone or tablet application.
- The units can be connected by Wi-Fi for synchronized operation.
- House ventilation control via cloud service from anywhere in the world.
- Connection to smart house or Building Management System (BMS) via Wi-Fi.

Blauberg Vento V.2 app for Android or iOS devices is available at Google Play and App Store.



- Vento Expert A100-1 S10 W V.2 either can operate as independent unit or can be connected with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.
- slave slave slave master C C C Vento Expert A100-1 S10 W V.2
- Control of the unit operation mode is also performed by means of the sensor control panel located on the unit casing or the remote control.



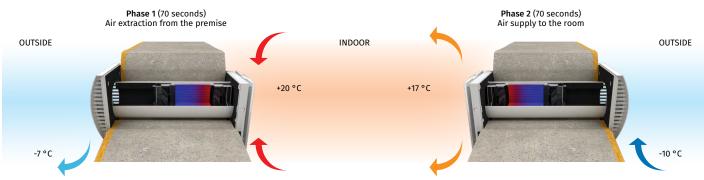
• Vento Expert A100-1 S10 W V.2 is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the speed III independently on other units in the system.



HEAT RECOVERY SINGLE-ROOM UNITS

Energy recovery

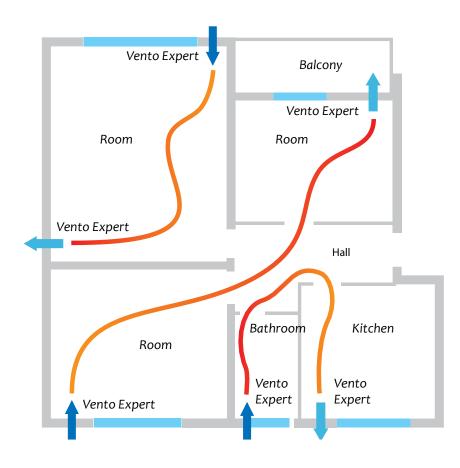
UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise, flows through the ceramic heat exchanger and transfers its heat and moisture to it.
- As the ceramic heat exchanger gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the heat exchanger and absorbs accumulated heat and humidity.
- When the heat exchanger is cooled down, the unit switches to the extract air mode.

Mounting

- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase synchronized units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. This way the most efficient balanced ventilation is arranged.
- The Vento **Expert A100-1 W V.2** unit can also be installed in a bathroom and kitchen, if allowed by local building codes. Otherwise, the Vento Expert Duo unit or an extract fan should be installed.



Angular mounting into a wallwith standard thickness using KIT BlauPlast white 160 / KIT BlauPlast chrome 160



Unit installation example with the hoods for thin walls AH-S grey 160 / AH-S chrome 160



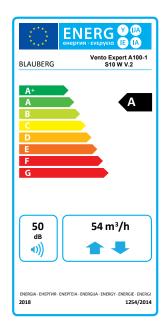


VENTO EXPERT A100-1 S10 W V.2

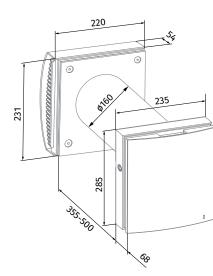
Technical data

Parameters		Vento Expert A Vento Expert	100-1 S10 W V.2 A100-1 S W V.2	
Speed	Ι	II	III	MAX
Voltage [V / 50 (60) Hz]		100	-240	
Power [W]	3.20	4.00	6.60	18.00
Current [A]	0.037	0.046	0.071	0.151
RPM [min ⁻¹]	780	1100	1920	2940
Air flow in ventilation mode [m³/h (l/s)]	18(5)	30 (8)	58 (16)	108 (30)
Air flow in energy recovery mode [m³/h (l/s)]	9 (3)	15 (4)	29 (8)	54 (15)
SFP [W/l/s]	1.28	0.96	0.82	1.20
Filter G3 (Option: F8 PM2.5 > 99 %*)				
Transported air temperature [°C]	-20 +40			
Sound pressure level at 1 m in accordance with ISO 3741:2004 [dBA]	23	27	40	51
Sound pressure level at 3 m in accordance with ISO 3741:2004 [dBA]	13	18	30	42
Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA]		4	12	
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%]	up to 87			

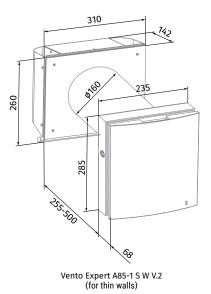
* maximum air flow 82 m³/h



Overall dimensions [mm]



Vento Expert A85-1 S10 W V.2





HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Accessories	
Name	Description
FP Vento Expert A100 G3	G3 filters (2 pcs.)
FP Vento Expert A50 F8	Filter set. Includes: • Plastic frame (1 pc.) • G2 pre-filter (1 pc.) • F8 filter (1 pc.). Filtration rate PM2.5 99 %
AH-10 *colour* 160	Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160	Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-11 *colour* 160	Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-S grey 160	Stainless steel ventilation hood, painted grey
AH-S chrome 160	Brushed stainless steel ventilation hood
PP 160/0.5	Plastic outer grille with pipe for mounting from indoor
KIT BlauPlast white 160	Kit for angular mounting with white color grille (for walls with standard thickness)
KIT BlauPlast chrome 160	Kit for angular mounting with stainless steel outer grille (for walls with standard thickness)
R 160-500	500 mm air duct and polystyrene foam plug
R 160-700	700 mm air duct and polystyrene foam plug



VENTO EXPERT A100-1 S10 W V.2

Name		Description
SE Vento Expert W		Sensor control panel
FB Vento Expert A50		Remote control
CD-1		CO_2 sensor with LED CO_2 indication and a sensor button for operation mode selection
CD-2	8	CO2 sensor
S Vento Expert A50	• 522	Cardboard template for indoor installation of the unit





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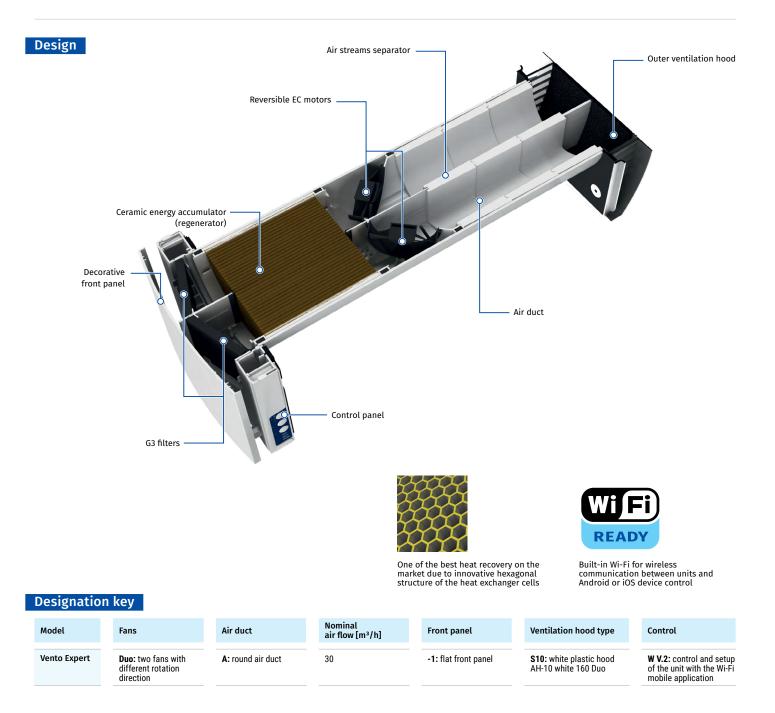
VENTO EXPERT DUO A30-1 S10 W V.2

HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of balanced energy saving, supply and exhaust, single-room ventilation in kitchen, bathroom and utility room.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and controllable air exchange create individually controlled microclimate.
- Wi-Fi data exchange between several single-room ventilation units for coordinated operation.
- Controlled by Android or iOS smartphone or tablet.





Control

- Unit control via smartphone or tablet application.
- The units can be connected by Wi-Fi for synchronized operation.
- House ventilation control via cloud service from anywhere in the world.
- Connection to smart house or Building Management System (BMS) via Wi-Fi.

Blauberg Vento V.2 app for Android or iOS devices is available at Google Play and App Store.

Google Play

C

SINGLE-ROOM HEAT RECOVERY UNITS | 2019

connected with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.

• Vento Expert Duo either can operate as independent unit or can be

FOR LIVING ROOMS AND BEDROOMS



FOR KITCHEN AND BATHROOM



• Control of the unit operation mode is also performed by means of the sensor control panel located on the unit casing or the remote control.

ON/OFF button

3 unit speeds



control. If humidity increases above a set point, the unit boosts to the high speed independently on other units in the system.

App Store





HEAT RECOVERY SINGLE-ROOM UNITS

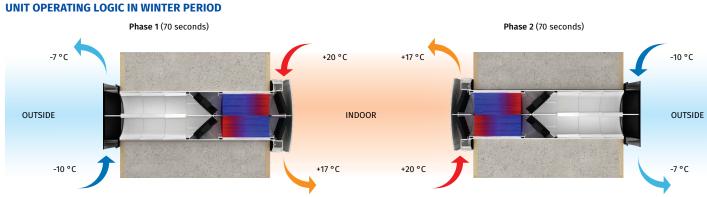


Heat and moisture recovery

absorbs accumulated heat and humidity.

transfers heat energy and moisture to it.

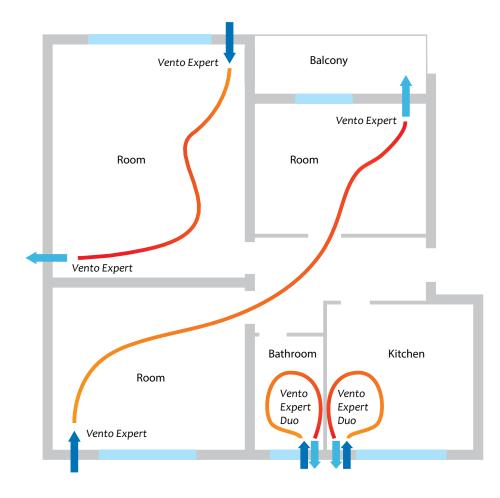
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- One of the fans supplies fresh and cold air from outdoor. which flows through the correspondent part of the ceramic heat exchanger and opposite processes start.
- Mounting
- Vento Expert units should be installed in the living room and bedrooms while Vento Expert Duo units should be installed in kitchen, bathrooms and utility room.

• At the same time, the other fan extracts slate and warm air from indoor, that flows through the other part of the ceramic heat exchanger and

• The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.

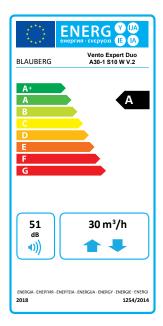




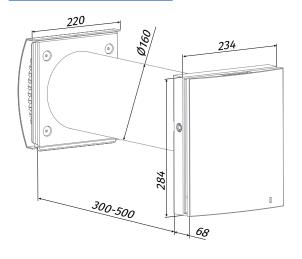
VENTO EXPERT DUO A30-1 S10 W V.2

Technical data

Parameters	Vento Expert Duo A30-1 S10 W V.2		
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-230	
Power [W]	2.17	3.66	6.62
Current [A]	0.026	0.039	0.066
RPM [min ⁻¹]	1600	2200	2500
Air flow [m³/h (l/s)]	10 (3)	20 (6)	30 (8)
Air flow in humidity extract mode [m³/h (l/s)]	60 (16)		
SFP [W/l/s]	0.78	0.66	0.79
Filter		G3	
Transported air temperature [°C]	-15+40		
Sound pressure level at 1 m in accordance with ISO 3741:2004 [dBA]	33	40	43
Sound pressure level at 3 m in accordance with ISO 3741:2004 [dBA]	24	31	34
Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA]	42		
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%]	up to 85		
Ingress protection rating		IP24	



Overall dimensions [mm]



HEAT RECOVERY SINGLE-ROOM UNITS



VENTO EXPERT DUO A30-1 S10 W V.2

HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
FP Vento Expert Duo A30 G3		G3 filters (2 pcs.)
AH-10 *colour* 160 Duo		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160 Duo		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-5 white 160 Duo		Stainless steel ventilation hood, painted white
AH-5 chrome 160 Duo		Brushed stainless steel ventilation hood
PP 160/0.5		Outer ventilation hood for mounting from inside
R 160-500		500 mm air duct and polystyrene foam plug
R 160-700		700 mm air duct and polystyrene foam plug
LST Vento Expert Duo		Air stream separator
SE Vento Expert W	ii îi ș I ș ș I ș ș	Sensor control panel
FB Vento Expert A50	8000 600 600	Remote control
CD-1	1111 1111 1111	CO_2 sensor with LED CO_2 indication and a sensor button for operation mode selection
CD-2	81	CO2 sensor
S Vento Expert A30	• 52	Cardboard template for indoor installation of the unit





HEAT RECOVERY SINGLE-ROOM UNITS

Features

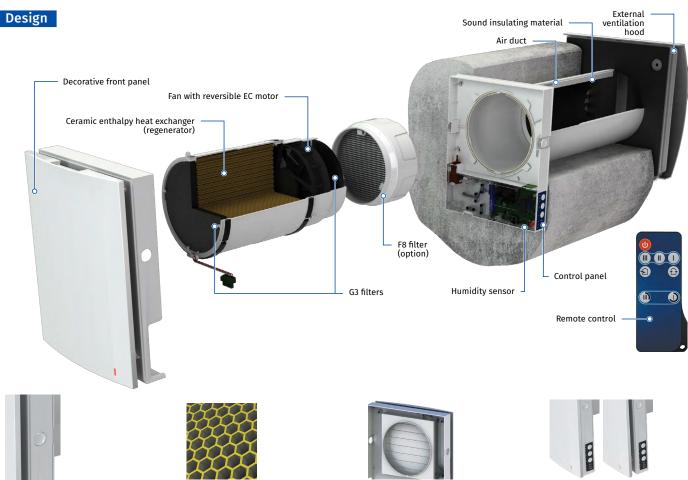
- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and regulated air exchange create individually controlled microclimate.
- Coordinated network based on several integrated single-room ventilation units with central control.





ဂို





Easy maintenance. Indoor unit is opened by pressing the latches on both sides

One of the best regeneration efficiency on the market due to innovative hexagonal structure of the heat exchanger cells



Integrated automatic air shutters prevent air back drafting



The specially designed front panel can be closed manually to ensure 100 % air tightness and protect against wind impact

Designation key

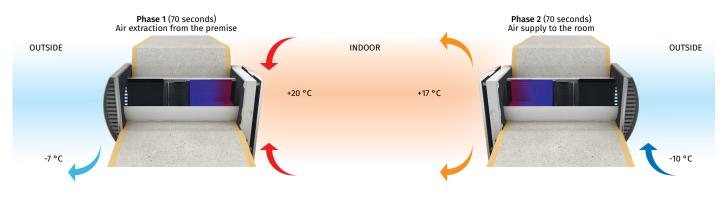
Model	Air duct	Nominal air flow [m³/h]	Front panel	Ventilation hood type	Control
Vento Expert	A: round air duct	50	-1: flat front panel	S10: white plastic hood AH-10 white 160 (for standard walls) S: metal hood for thin walls	Pro: control with touch buttons and a remote control



HEAT RECOVERY SINGLE-ROOM UNITS

Heat and moisture regeneration

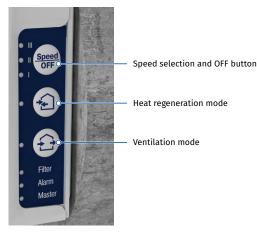
UNIT OPERATING LOGIC IN WINTER PERIOD

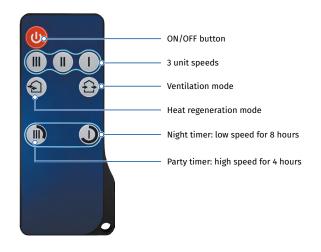


- Warm stale air is extracted from the premise. flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
 When the ceramic regenerator is cooled down, the unit switches to the
- extract air mode.

Control

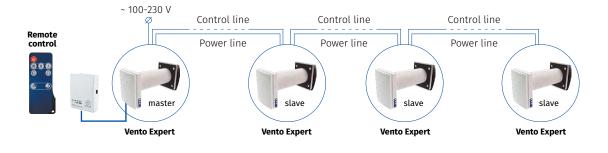
• Control of the unit operation mode is performed by means of sensor control panel located on the unit casing or a remote controller.





Vento Expert either can operate as independent unit or can be connected with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.

Vento Expert is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the speed III independently on other units in the system.

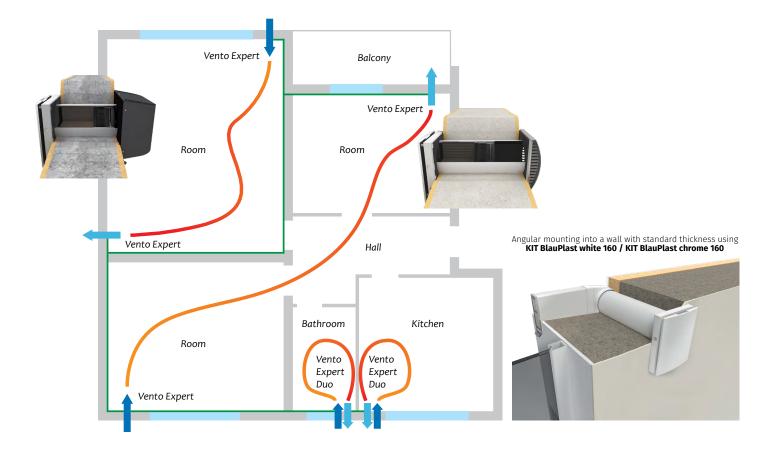




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

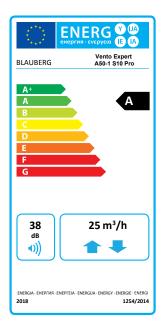
- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase connected units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. This way the most efficient balanced ventilation is arranged.
- In case of brand new construction, units are mounted in two stages:
 - **Pre-installation** at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of an air duct, an outer ventilation hood and cable installation.
 - **Final mounting** before commissioning of a house. It includes installation of a regenerator with a fan and filters and mounting and wiring of an indoor unit with a controller and shutters.



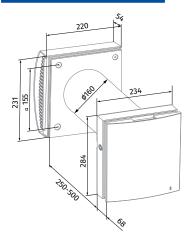


Technical data

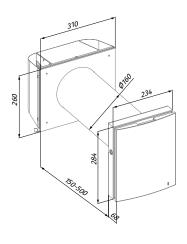
Parameters	Vento Expert A50-1 S10 Pro		
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-230	
Power [W]	3.61	4.15	5.20
Current [A]	0.025	0.030	0.039
RPM [min ⁻¹]	800	1300	1900
Air flow in ventilation mode [m³/h (l/s)]	15 (4)	30 (8)	50 (14)
Air flow in heat recovery mode [m³/h (l/s)]	8 (2)	15 (4)	25 (7)
SFP [W/l/s]	1.73	1.00	0.75
Filter	G3 (Option: F8 PM2.5 > 99 %*)		
Transported air temperature [°C]	-20+40		
Sound pressure level at 1 m [dBA]	20	27	30
Sound pressure level at 3 m [dBA]	11	18	21
Outdoor sound pressure attenuation [dBA] in accordance with DIN EN 20140	42		
Heat recovery efficiency according to DIBt LÜ-A 20 [%] up to 93			
SEC Class	Α		
Ingress Protection Rating	IP24		



Overall dimensions [mm]



Vento Expert A50-1 S10 Pro



Vento Expert A50-1 S Pro (for thin walls)

HEAT RECOVERY SINGLE-ROOM UNITS



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Namo		Description
Name		Description
Pre-installation Kit Vento Expert A50-1 S10		Pre-installation kit for mounting into a wall with standard thickness. Includes: • Air duct; • AH 160 outer ventilation hood; • Plastic foam plug. • Plastic foam wedges.
Pre-installation Kit Vento Expert A50-1 S		Pre-installation kit for mounting into a thin wall. Includes: • Air duct; • AH-S chrome 160 outer ventilation hood; • Plastic foam plug. • Plastic foam wedges.
Completion Kit Vento Expert A50-1		Final mounting kit. Includes: • Cartridge with a heat regenerator, a fan and G3 filters; • Indoor unit with a controller and shutters; • Remote control.
ZL1 Vento 160/150	Ć.	Cartridge with heat regenerator for cold climate
FP Vento Expert A50 G3		G3 filters (2 pcs.)
FP Vento Expert A50 F8		Includes: • Plastic frame (1 pc.); • G2 pre-filter (1 pc.); • F8 filter (1 pc.). Filtration rate PM2.5 99 %. F8 filter reduces airflow of the unit down to 40 m³/h
AH-8 white 160		White painted aluminium hood for a cold climate
AH-8 chrome 160		Brushed stainless steel outer ventilation hood for a cold climate
AH-10 *colour* 160	attions	Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-11 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-S chrome 160		Outer ventilation hood for thin wall made of brushed stainless steel
AH-S grey 160		Outer ventilation hood for thin wall, painted grey



HEAT RECOVERY SINGLE-ROOM UNITS

Name		Description
PP 160/0.5		Outer plastic ventilation hood for mounting from inside
KIT BlauPlast white 160		Kit for angular mounting with white color grille (for walls with standard thickness)
KIT BlauPlast chrome 160		Kit for angular mounting with stainless steel outer grille (for walls with standard thickness)
FB-Vento Expert	000 00 00 00 00 00 00 00 00 00 00 00 00	Remote control
CD-1	ال الق الق	CO2 sensor with LED indication and On/Off button
CD-2	944	CO ₂ sensor

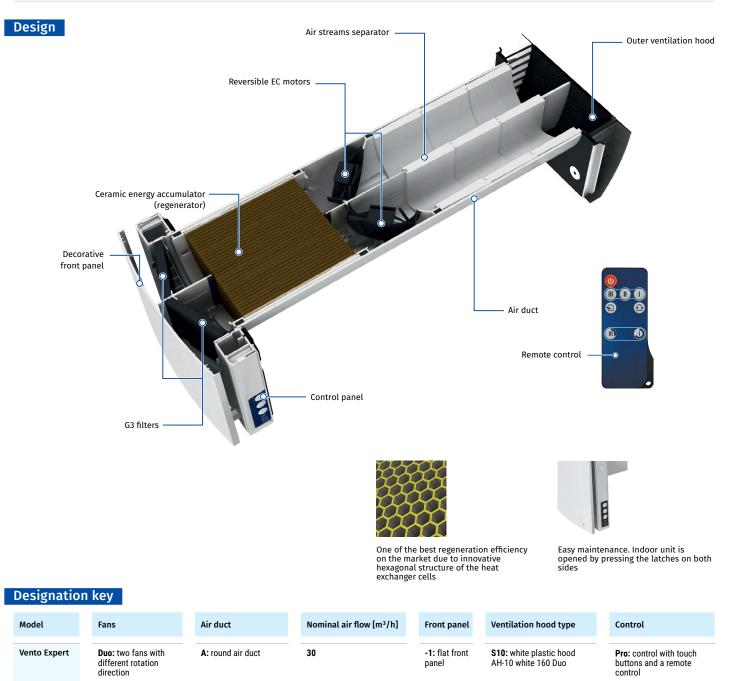


HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and regulated air exchange create individually controlled microclimate.
- Coordinated network based on several integrated single-room ventilation units with central control.

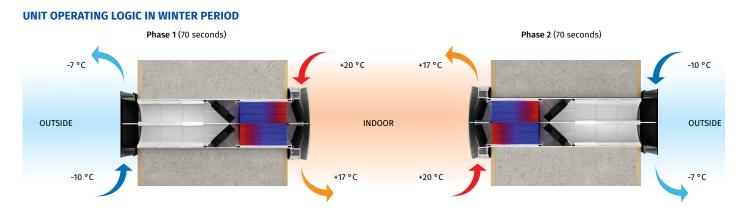






HEAT RECOVERY SINGLE-ROOM UNITS

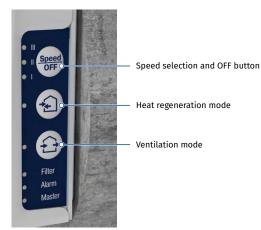
Heat and moisture regeneration

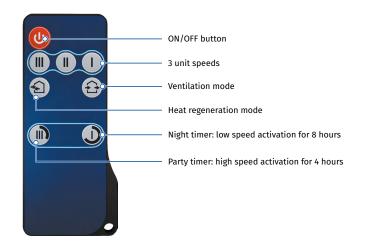


- One fan supplies fresh and cold air from outdoor, which flows through the correspondent part of the ceramic regenerator and absorbs accumulated heat and humidity.
- At the same time, another fan extracts slate and warm air from indoor, that flows through the other part of the ceramic regenerator and transfers heat energy and moisture to it.

Control

• Control of the unit operation mode is performed by means of the sensor control panel located on the unit casing or the remote controller.





• After 70 seconds operation the fans change the rotation direction and

opposite processes start.

Vento Expert Duo either can operate as independent unit or can be wired with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.

Vento Expert Duo is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the high speed independent of other units in the system.

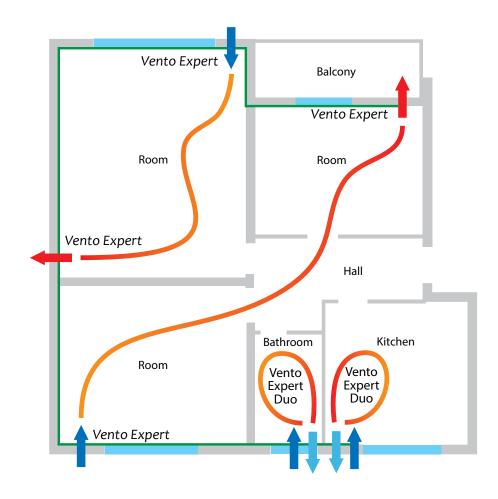




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

- The unit is designed for through-the-wall installation inside a prepared core hole in an outer wall of the building.
- Vento Expert Duo must be installed in each room with high humidity like kitchen, bathroom to be ventilated while Vento Expert must be installed in each living room to be ventilated.



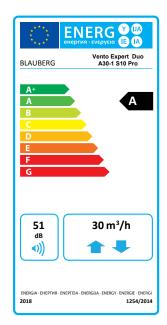


HEAT RECOVERY SINGLE-ROOM UNITS

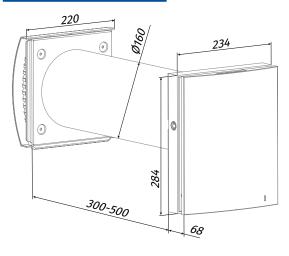
VENTO EXPERT DUO A30-1 S10 PRO

Technical data

Parameters	Vento	Expert Duo A3	0-1 Pro
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-240	
Power [W]	2.00	3.70	6.40
Current [A]	0.027	0.043	0.067
RPM [min ⁻¹]	1600	2200	2500
Air flow [m³/h (l/s)]	10 (3)	20 (6)	30 (8)
Air flow in heat recovery mode [m³/h (l/s)]		60 (16)	
SFP [W/l/s]	0.72	0.67	0.77
Filter		G3	
Transported air temperature [°C]		15+40	
Sound pressure level at 1 m [dBA]	33	40	43
Sound pressure level at 3 m [dBA]	24	31	34
Outdoor sound pressure attenuation [dBA] in accordance with DIN EN 20140		42	
Heat recovery efficiency according to DIBt LÜ-A 20 [%] up to 85		up to 85	
SEC Class		А	
Ingress protection rating		IP24	



Overall dimensions [mm]



Vento Expert Duo A30-1 S10 Pro



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
FP Vento Expert Duo A50 G3		G3 filters (2 pcs.)
AH-10 *color* 160 Duo		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160 Duo		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-5 white 160 Duo		Stainless steel outer ventilation hood, painted white
AH-5 chrome 160 Duo		Outer ventilation hood made of brushed stainless steel
PP 160/0.5		Outer ventilation hood for mounting from inside
LST Vento Expert Duo		Air stream separator
R 160-500		500 mm air duct and plastic foam plug
R 160-700		700 mm air duct and plastic foam plug
FB Vento Expert A50		Remote control
CD-1) 	CO₂ sensor with LED indication and on/off button
CD-2	and the	CO2 sensor



HEAT RECOVERY SINGLE-ROOM UNITS



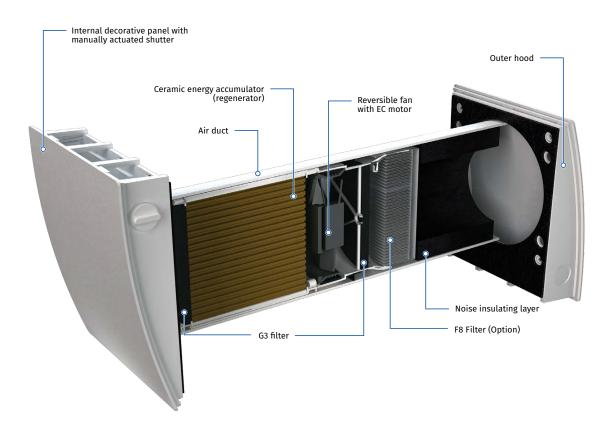
HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Air purification with optional F8 filter PM2.5 > 99 %.
- Protection from outdoor noise.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and regulated air exchange create individually controlled microclimate.



Design



Designation key				
Model Air du	Ict Nominal air	low [m³/h] Internal grille ty	ype Ventilation hood type	Control
Vento Eco A: rou	nd air duct 50	4	S11: plastic hood for sta S: metal hood for thin wa	

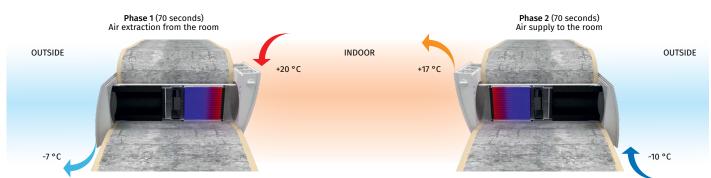
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HEAT RECOVERY SINGLE-ROOM UNITS

Heat and moisture regeneration

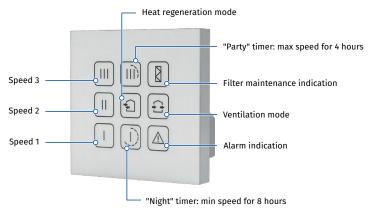
UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
- When the ceramic regenerator is cooled down, the unit switches to the extract air mode.

Control

• Control of the unit operation mode is performed by means of the sensor control panel.



- One control panel with sensor buttons can control up to two units.
- Low voltage (12 V) power supply between control panel and Vento Eco units.



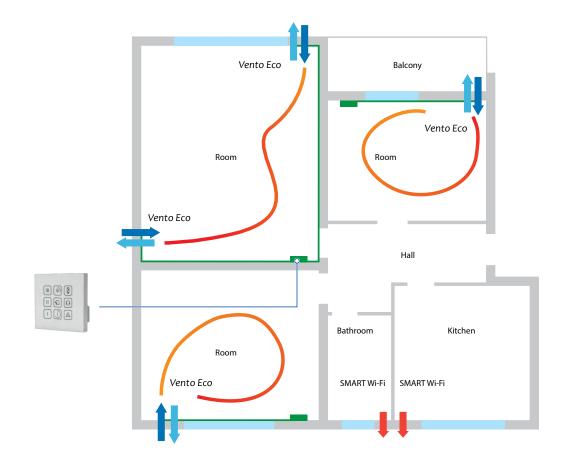




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

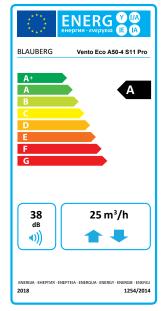
- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- One unit is able to ventilate a room up to 25 m². For bigger rooms two or more units must be installed.





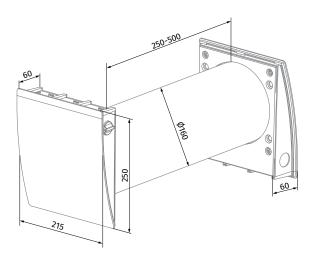
Technical data

Parameters	Vento Eco A50-	4 S11 Pro / Vento	Eco A50-4 S Pro
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-240	
Power [W]	1.00	2.10	4.30
Current [A]	0.017	0.025	0.041
RPM [min ⁻¹]	915	1555	2330
Air flow in ventilation mode [m³/h (l/s)]	15 (4)	30 (8)	50 (14)
Air flow in heat recovery mode [m³/h (l/s)]	8 (2)	15 (4)	25 (7)
SFP [W/l/s]	0.48	0.50	0.62
Filter	G3 (C	ption: F8 PM2.5 > 9	99 %*)
Transported air temperature [°C]	sported air temperature [°C] -20(-30**) +40		
Heat recovery efficiency according to DIBt LÜ-A 20 [%]	according to DIBt LÜ-A 20 [%] up to 92		
Outdoor sound pressure attenuation according to DIN EN 20140 [dBA]		41	
Sound pressure level at 1 m according to ISO 3741: 2004 [dBA]	21	27	29
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	12	18	20
SEC Class	A		
Ingress protection rating	IP24		

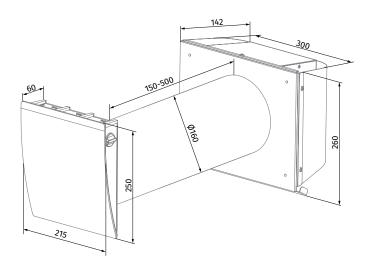


* maximum air flow 40 m³/h ** with **ZL1 Vento 160/100** cartridge and **AH-8** outer hood applied

Overall dimensions [mm]



Vento Eco A50-4 S11 Pro



Vento Eco A50-4 S Pro (for thin walls)

HEAT RECOVERY SINGLE-ROOM UNITS



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
Completion Kit Vento Eco A50-4		Indoor grille and cartridge with heat regenerator, fan and G3 filters
ZL1 Vento 160/150	Ţ,	Cartridge with heat regenerator for cold climate
FP Vento Eco A50 G3		G3 filters (2 pcs.)
FP Vento Eco A50 F8	6	G2 + F8 filters (1 pc.). Filtration rate PM2.5 > 99 %. Combination of G2 + F8 filters reduces air flow down to 40 m³/h
AH-8 white 160		White painted aluminium hood for a cold climate
AH-8 chrome 160		Brushed stainless steel outer ventilation hood for a cold climate
AH-10 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-11 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-S chrome 160		Outer ventilation hood for thin wall made of brushed stainless steel
AH-S white 160		Outer ventilation hood for thin wall made of stainless steel, painted white
PP 160/0.5		Outer plastic ventilation hood for mounting from inside



HEAT RECOVERY SINGLE-ROOM UNITS

VENTO ECO A50-4 S11 PRO



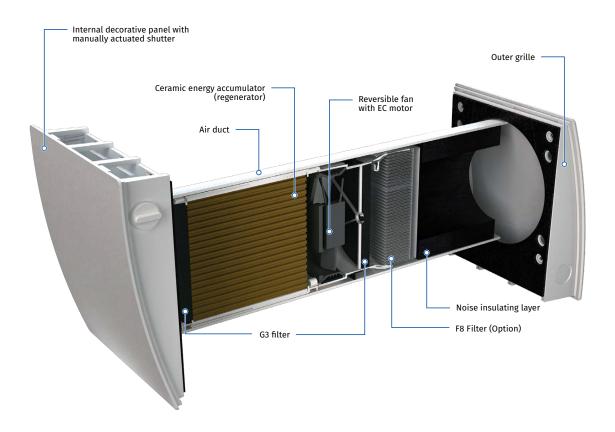
HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Two units operating in opposite phases ensure balanced ventilation.
- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Air purification with optional F8 filter PM2.5 > 99 %.
- Protection from outdoor noise.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and regulated air exchange create individually controlled microclimate.



Design



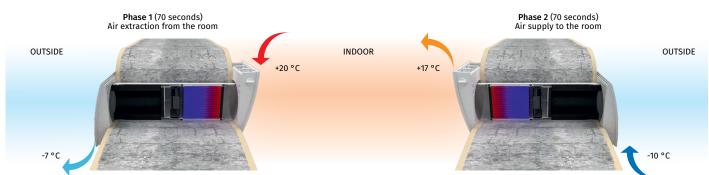
Model Air duct Nominal air flow [m³/h] Internal grille type Ventilation hood type Control Vento Eco2 A: round air duct 50 4 S11: plastic hood for standard walls S: metal hood for thin walls Pro: sensor control panel



HEAT RECOVERY SINGLE-ROOM UNITS

Heat and moisture regeneration

UNIT OPERATING LOGIC IN WINTER PERIOD

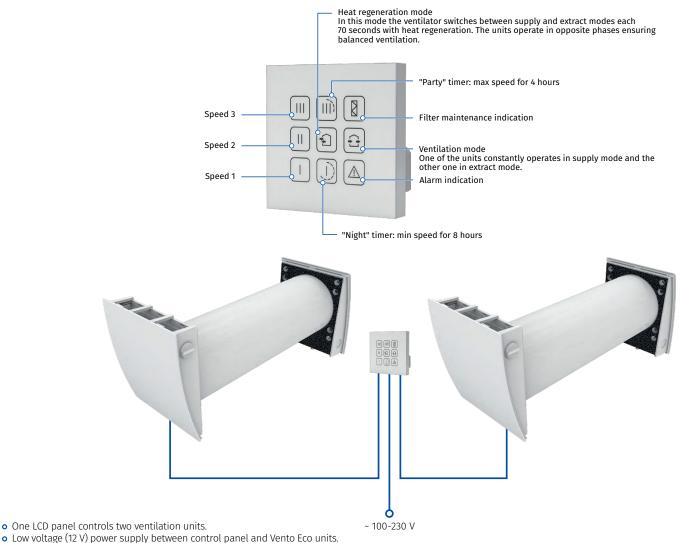


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
- When the ceramic regenerator is cooled down, the unit switches to the extract air mode.

Heat regeneration mode

Control

• Control of the unit operation mode is performed by means of the sensor control panel.



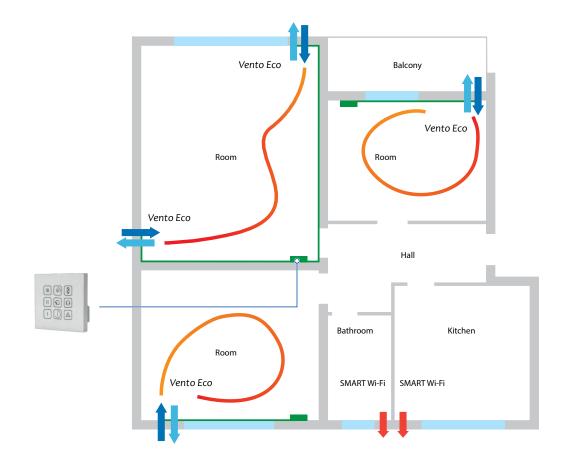




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- One unit is able to ventilate a room up to 25 m². For bigger rooms two or more units must be installed.





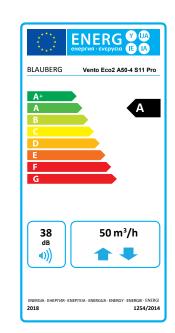
HEAT RECOVERY SINGLE-ROOM UNITS

VENTO ECO2 A50-4 S11 PRO

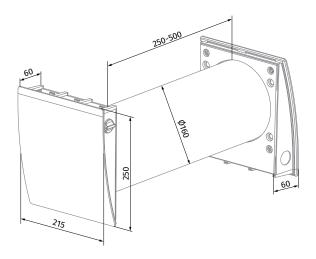
Technical data

Parameters	Vento Eco2 A50-	4 S11 Pro1 / Vento	Eco2 A50-4 S Pro
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-240	
Power [W]	2.37	3.80	7.61
Current [A]	0.033	0.047	0.080
RPM [min ⁻¹]	915	1555	2330
Air flow in ventilation mode [m³/h (l/s)]	15 (4)	30 (8)	50 (14)
SFP [W/l/s]	0.57	0.46	0.55
Filter	G3 (0	Option: F8 PM2.5 >	99 %*)
Transported air temperature [°C]	-20(-30**) +40		
Outdoor sound pressure attenuation according to DIN EN 20140 [dBA]	ound pressure attenuation according to DIN EN 20140 [dBA] 41		
Heat recovery efficiency according to DIBt LÜ-A 20 [%] up to 92		up to 92	
Sound pressure level at 1 m according to ISO 3741: 2004 [dBA]	21	27	29
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	12	18	20
SEC Class		А	
Ingress protection rating	IP24		

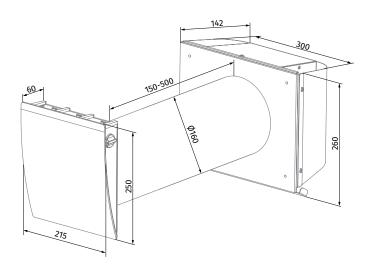
* maximum air flow 40 m³/h ** with **ZL1 Vento 160/100** cartridge and **AH-8** outer hood applied



Overall dimensions [mm]



Vento Eco2 A50-4 S11 Pro



Vento Eco2 A40-4 S Pro (for thin walls)



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
Completion Kit Vento Eco A50-4		Indoor grille and cartridge with heat regenerator, fan and G3 filters
ZL1 Vento 160/150	Ţ,	Cartridge with heat regenerator for cold climate
FP Vento Eco A50 G3		G3 filters (2 pcs.)
FP Vento Eco A50 F8		G2 + F8 filters (1 pc.). Filtration rate PM2.5 > 99 %. Combination of G2 + F8 filters reduces air flow down to 40 m ³ /h
AH-8 white 160		White painted aluminium hood for a cold climate
AH-8 chrome 160		Brushed stainless steel outer ventilation hood for a cold climate
AH-10 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 160		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-11 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-S chrome 160		Outer ventilation hood for thin wall made of brushed stainless steel
AH-S grey 160		Outer ventilation hood for thin wall, painted grey
PP 160/0.5		Outer plastic ventilation hood for mounting from inside



HEAT RECOVERY SINGLE-ROOM UNITS

VENTO ECO2 A50-4 S11 PRO



HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Heat recovery minimises ventilation heat losses.
- Humidity balance and controllable air exchange create individually set microclimate.



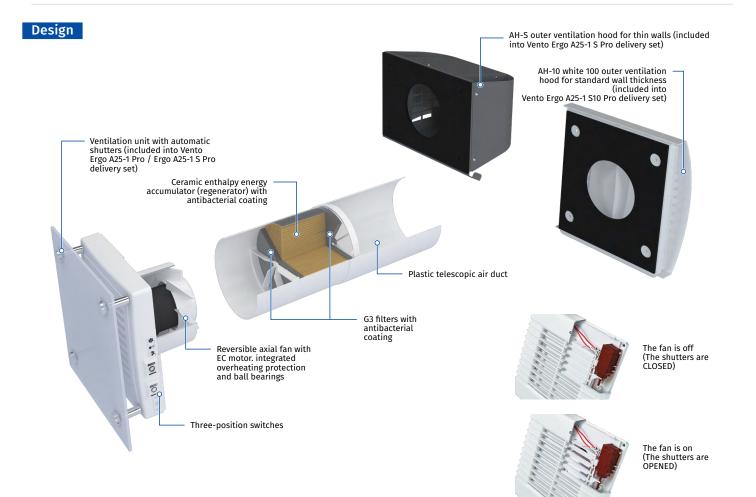


from 3.68 W SFP: from 1.60 W/I/s









Designation key

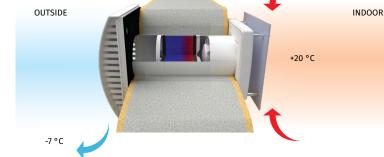
Model	Air duct	Nominal air flow [m³/h]	Front panel	Hood type	Control
Vento Ergo	A: round air duct	25	-1: flat front panel	\$10: white plastic hood AH-10 white 100 (for standard walls) \$: AH-S chrome 100 metal hood for thin walls	Pro: three-position switches and remote control

Heat and moisture regeneration

• High-tech ceramic energy accumulator with heat recovery up to 85 %.

Air extraction from the premise

UNIT OPERATING LOGIC IN WINTER PERIOD Phase 1 (70 seconds)

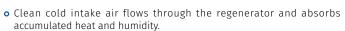


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers a part of the accumulated heat and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.

• Due to its cellular structure it has a larger contact area surface and high efficiency. The energy accumulator is featured with excellent heatconducting properties and thermal energy storage capacity.

Phase 2 (70 seconds)

Air supply to the room



• When the ceramic regenerator is cooled down, the unit is switched to the extract air mode.

Control

- The unit operation mode control is performed by means of manual three-position switches located on the unit casing or using the remote controller.
- The unit is equipped with a humidity sensor for indoor humidity control and regulation.

Passive air supply mode: The automatic shutters are opened, the fan does not run.

The integrated units operate in permanent air supply or air extract mode depending on settings during mounting. The unit is set into air extract mode by default.

• Remote control and operation mode selection:

Unit activation/deactivation

3 unit speeds

Ventilation mode:



Night mode:

+17 ° C

In the night the unit is switched to low speed mode by the photo sensor.

Air supply mode: The unit operates in permanent air supply mode.

Reversible ventilation with heat recovery:

The unit switches from supply to extract mode and vice versa in set time periods and transfers the heat and moisture contained in the extract air to cold intake air in winter or the coolness in summer through the ceramic heat exchanger.

Humidity control mode: Set required humidity level (45, 55 or 65 %). The unit automatically maintains the comfortable set indoor humidity point.



OUTSIDE

-10 °C

HEAT RECOVERY SINGLE-ROOM UNITS

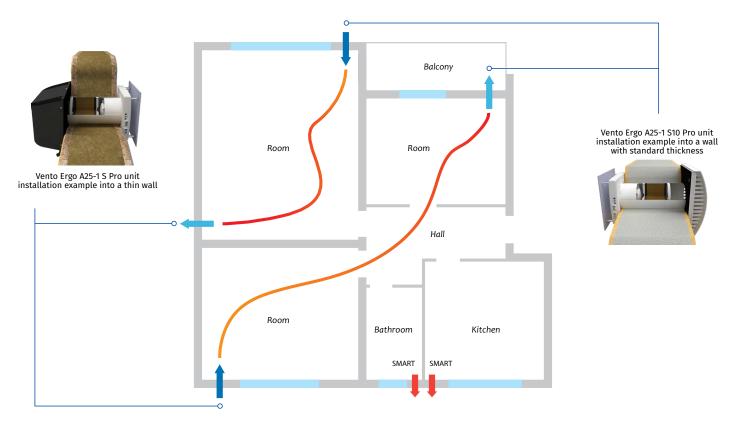
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HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

- The unit is designed for external through-the-wall installation inside a prepared round hole in the outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase connected units. Some units supply fresh air to the room and the other units extract stale air from the room. This allows to arrange the most efficient balanced ventilation.
- In case of brand new construction the units are mounted in two stages:
 pre-installation at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of the telescopic air ducts. outer ventilation hood and laying out of electric cables.
 - **final mounting** before commissioning of a house. It includes installation of the regenerator, the filters, connection of the ventilation unit
- If mounting of the ventilation hood on the outer wall is undesirable it may be flush mounted and the external grille may be inserted into the outer window jamb using the **KIT BlauPlast 110x55-1** pre-installation kit. Available upon separate order.



Angular mounting into a wall with standard thickness using KIT BlauPlast 110x55-2

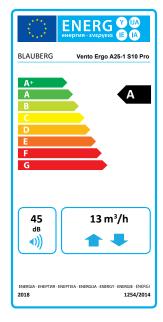




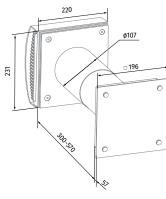
Technical data

Parameters	Ver	nto Ergo A25-1 S10) Pro
Speed	I	II	III
Voltage [V / 50 (60) Hz]		100-230	
Power [W]	3.68	4.15	5.59
Current [A]	0.024	0.027	0.038
RPM [min ⁻¹]	1250	1397	2541
Maximum air flow [m³/h (l/s)]	7 (2)	16 (4)	25 (7)
Air flow in heat recovery mode [m³/h (l/s)]	4 (1)	8 (2)	13 (4)
SFP [W/l/s]	3.60	1.90	1.60
Outdoor sound pressure attenuation according to DIN EN 20140 [dBA]		40	
Sound pressure level at 1 m according to ISO 3741: 2004 [dBA]	31	35	43
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	22	25	33
Heat recovery efficiency according to DIBt LÜ-A 20 [%]		up to 85	
SEC Class		А	
Ingress protection rating		IP24	

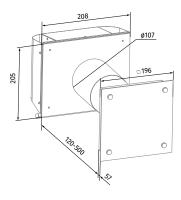
HEAT RECOVERY SINGLE-ROOM UNITS



Overall dimensions [mm]



Vento Ergo A25-1 S10 Pro



Vento Ergo A25-1 S Pro



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description
Pre-installation Kit Vento Ergo A25-1 S10 Pro		Pre-installation kit for mounting into a wall with standard thickness. Includes: • Round Ø 100 mm air duct. 300-570 mm long. • AH-10 white 100 outer ventilation hood. • Plastic foam plug. • Plastic foam wedges.
Pre-installation Kit Vento Ergo A25-1 S		Pre-installation kit for mounting into a thin wall. Includes: • Round Ø 100 mm air duct. 120-500 mm long. • AH-S chrome 100 outer ventilation hood. • Plastic foam plug. • Plastic foam wedges.
Completion Kit Vento Ergo A25-1		Final mounting kit. Includes: • Ceramic regenerator Ø 100 mm. • Vento Ergo A25-1 ventilation unit. • G3 filters.
FP Vento A25 G3		G3 filters (2 pcs.)
AH-8 white 100		White painted aluminium hood for a cold climate
AH-8 chrome 100		Brushed stainless steel outer ventilation hood for a cold climate
AH-10 *colour* 100		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage
AH-10 chrome 100		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish
AH-S chrome 100		Outer ventilation hood for thin wall made of brushed stainless steel
AH-S grey 100		Outer ventilation hood for thin wall, painted grey
KIT BlauPlast 110x55-2		Installation kit for angular mounting into a wall with standard thickness Includes: • Plastic ventilation grille 230x86 mm. • Plastic air duct 204x60 mm. • Plastic connecting bend from Ø 150 to 204x60 mm.
FB Vento Ergo	000 000 000 000	Remote control



HEAT RECOVERY SINGLE-ROOM UNITS



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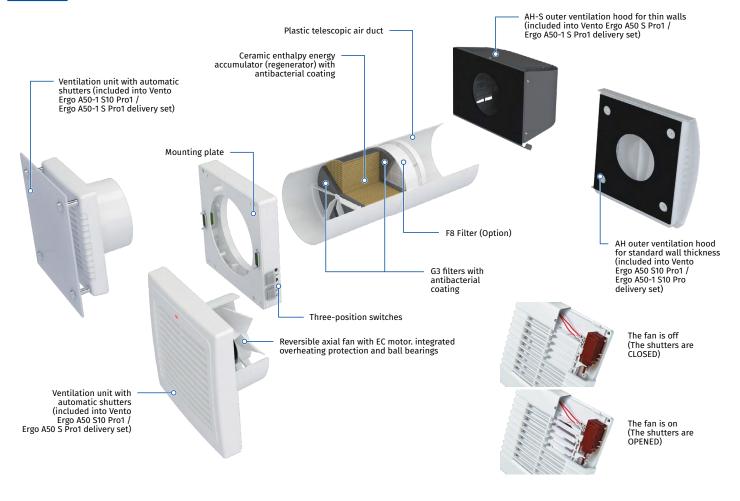
HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Heat recovery minimises ventilation heat losses.
- Humidity balance and controllable air exchange create individually set microclimate.
- Coordinated network based on several integrated single-room ventilation units with central control.

Air flow: up to 50 m³/h 14 l/s	• •
Heat recovery efficiency: up to 88 %	••••
Power: from 4.5 W SFP: from 1.01 W/I/s	
Noise level: from 13 dBA	
	0.99

Design



Designation key

Model	Air duct	Nominal air flow [m³/h]	Front panel	Hood type	Control
Vento Ergo	A: round air duct	50	_: no flat front panel -1: flat front panel	\$10: white plastic hood AH-10 white 100 (for standard walls) \$: AH-S chrome 150 metal hood for thin walls	Pro: three-position switches and remote control

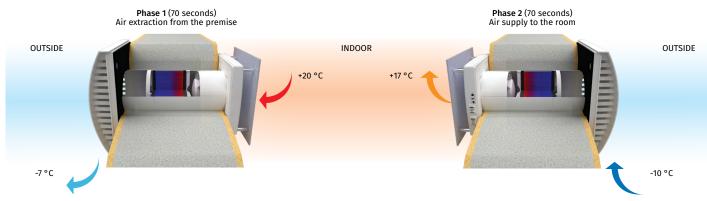


HEAT RECOVERY SINGLE-ROOM UNITS

Heat and moisture regeneration

• High-tech ceramic energy accumulator with heat recovery up to 88 %.

UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers a part of the accumulated heat and moisture to it. • In 70 seconds, after heating of the ceramic regenerator, the unit switches
- to the supply mode.

Control

- The unit operation mode control is performed by means of manual three-position switches located on the unit casing or using the remote controller.
- The unit is equipped with a humidity sensor for indoor humidity control and regulation.
- Connection of the units into one ventilation system provide balanced ventilation and central control.

Passive air supply mode: The automatic shutters are opened, the fan does not run.

The integrated units operate in permanent air supply or air extract mode depending on settings during mounting. The unit is set into air extract mode by default.

Unit activation/deactivation

3 unit speeds

Ventilation mode:

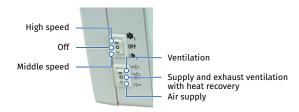
• Remote control and operation mode selection:

o Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.

• Due to its cellular structure it has a larger heat transfer area surface

and high efficiency. The energy accumulator is featured with excellent heat-conducting properties and thermal energy storage capacity.

• In 70 seconds, after cooling of the ceramic regenerator, the unit is switched to the extract air mode.



Night mode:

In the night the unit is switched to low speed mode by the photo sensor.

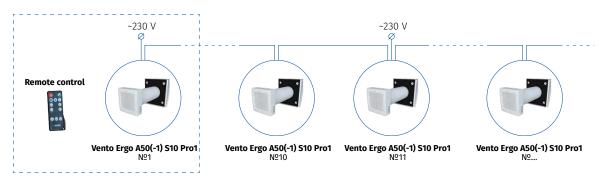
Air supply mode: The unit operates in permanent air supply mode.

Reversible ventilation with heat recovery: The unit switches from supply to extract mode and vice versa in set time periods and transfers the heat and moisture contained in the extract air to ackle instance in the extract of the set of the se o cold intake air in winter or the coolness in summer through the ceramic heat exchanger.

Humidity control mode:

Set required humidity level (45, 55 or 65 %). The unit automatically maintains the comfortable set indoor humidity point.

• Connection of several units in series enables their synchronous control by the first unit. The signal from the remote control is received by the first unit only. Power 230 V must be supplied to the 1st and every 11th unit in a chain.

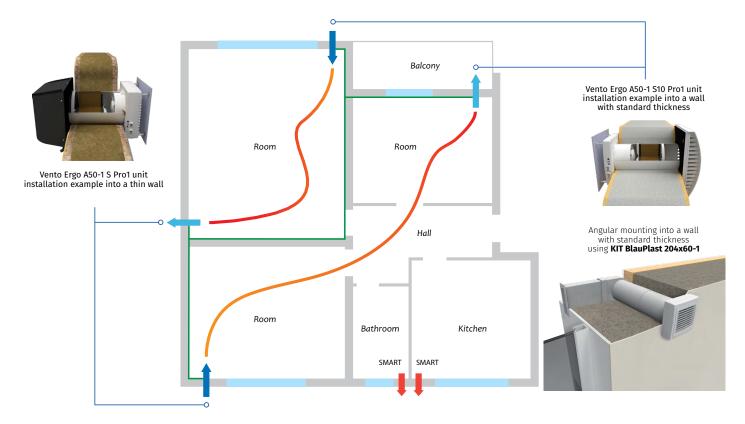




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

- The unit is designed for external through-the-wall installation inside a prepared round hole in the outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase connected units. Some units supply fresh air to the room and the other units extract stale air from the room. This allows to arrange the most efficient balanced ventilation.
- In case of brand new construction the units are mounted in two stages:
 pre-installation at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of the telescopic air ducts. outer ventilation hood and laying out of electric cables.
 - **final mounting** before commissioning of a house. It includes installation of the regenerator, the filters, connection of the ventilation unit.
- If mounting of the ventilation hood on the outer wall is undesirable it may be flush mounted and the external grille may be inserted into the outer window jamb using the KIT BlauPlast 204x60-1 pre-installation kit. Available upon separate order.

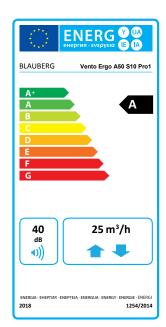




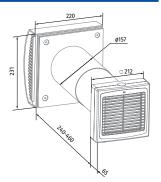
HEAT RECOVERY SINGLE-ROOM UNITS

Technical data

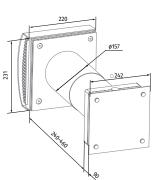
Parameters	Vento Ergo A50 S	S10 Pro1 / Vento Er	go A50-1 S10 Pro	
Speed	I	II	III	
Voltage [V / 50 (60) Hz]		1 ~ 100-230		
Power [W]	4.5	5	7	
Current [A]	0.024	0.026	0.039	
RPM [min ⁻¹]	610	800	1450	
Maximum air flow [m³/h (l/s)]	21 (6)	32 (9)	50 (14)	
Air flow in heat recovery mode [m³/h (l/s)]	11 (3)	16 (4)	25 (7)	
SFP [W/l/s]	1.54	1.12	1.01	
Outdoor sound pressure attenuation according to DIN EN 20140 [dBA]		40		
Sound pressure level at 1 m according to ISO 3741: 2004 [dBA]	22	29	32	
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	13	20	23	
Heat recovery efficiency according to DIBt LÜ-A 20 [%]		up to 88		
Transported air temperature [°C]		-20+40		
SEC Class		А		
Ingress protection rating		IP24		



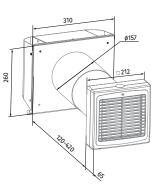
Overall dimensions [mm]

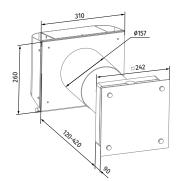


Vento Ergo A50 S10 Pro1



Vento Ergo A50-1 S10 Pro1





Vento Ergo A50 S Pro1

Vento Ergo A50-1 S Pro1



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description		
Pre-installation Kit Vento Ergo A50 S10 Pro1		Pre-installation kit for mounting into a wall with standard thickness. Includes: • Round Ø 150 mm air duct • AH-10 white 160 outer ventilation hood • Plastic foam plug. • Plastic foam wedges.		
Completion Kit Vento Ergo A50 Pro1		Includes: • Ceramic regenerator Ø 150 mm • Vento Ergo A50 ventilation unit • G3 filters • Mounting plate • Remote control		
Completion Kit Vento Ergo A50-1 Pro1		Includes: • Ceramic regenerator Ø 150 mm • Vento Ergo A50-1 ventilation unit • G3 filters • Mounting plate • Remote control		
FP Vento Ergo A50 G3		G3 filters (2 pcs.)		
AH-8 white 150		White painted aluminium hood for a cold climate		
AH-8 chrome 150		Brushed stainless steel outer ventilation hood for a cold climate		
AH-10 *colour* 160	and the second se	Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage		
AH-10 chrome 160		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish		
AH-S grey 150		Outer ventilation hood for thin wall, painted grey		
AH-S chrome 150		Outer ventilation hood for thin wall made of brushed stainless steel		
PP 160/0.5		Outer ventilation hood for mounting from inside		



HEAT RECOVERY SINGLE-ROOM UNITS

Name		Description
KIT BlauPlast 204x60-1		Installation kit for angular mounting. Includes: • Plastic ventilation grille 230x86 mm • Plastic air duct 204x60 mm • Plastic connecting bend from Ø 150 to 204x60 mm
FP Vento Ergo A50 F8		F8 filter (1 pc)
FB Vento Ergo	0000 0000 0000	Remote control



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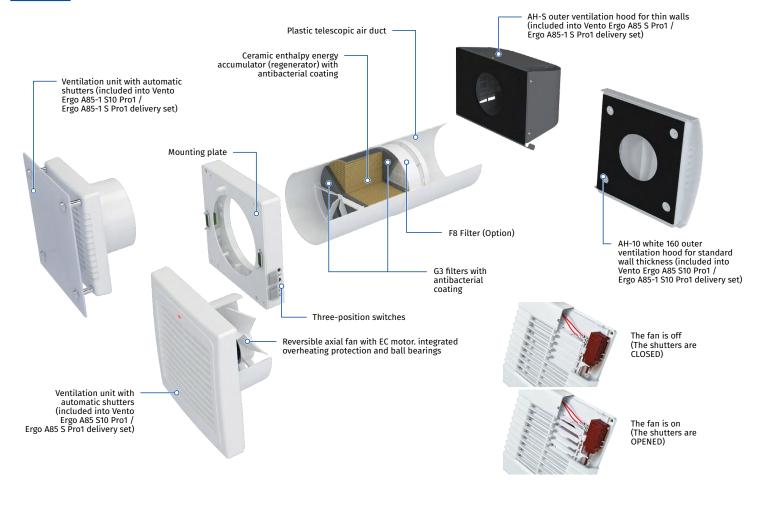
HEAT RECOVERY SINGLE-ROOM UNITS

Features

- Arrangement of efficient energy-saving supply and exhaust single-room ventilation in flats, houses, cottages, social and commercial premises.
- Heat recovery minimises ventilation heat losses.
- Humidity balance and controllable air exchange create individually set microclimate.
- Coordinated network based on several integrated single-room ventilation units with central control.

Air flow: up to 85 m³/h 24 l/s	•	
Heat recovery efficiency: up to 90 %		•
Power: from 4.74 W SFP: from 0.80 W/I/s		
Noise level: from 19 dBA	0	0
tor VerP		000

Design



Designation key

Model	Air duct	Nominal air flow [m³/h]	Front panel	Hood type	Control
Vento Ergo	A: round air duct	85	_: no flat front panel -1: flat front panel	S10: white plastic hood AH-10 white 100 S: AH-S chrome 150 metal hood for thin walls	Pro: three-position switches and remote control

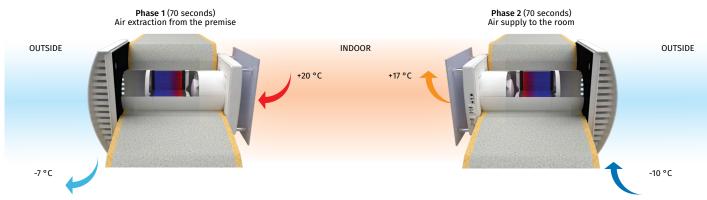


HEAT RECOVERY SINGLE-ROOM UNITS

Heat and moisture regeneration

• High-tech ceramic energy accumulator with heat recovery up to 88 %.

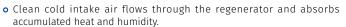
UNIT OPERATING LOGIC IN WINTER PERIOD



- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers a part of the accumulated heat and moisture to it. • In 70 seconds, after heating of the ceramic regenerator, the unit switches
- to the supply mode.

Control

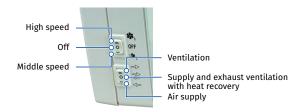
- The unit operation mode control is performed by means of manual three-position switches located on the unit casing or using the remote controller.
- The unit is equipped with a humidity sensor for indoor humidity control and regulation.
- Connection of the units into one ventilation system provide balanced ventilation and central control.
- Remote control and operation mode selection:

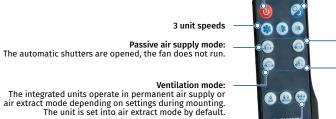


• Due to its cellular structure it has a larger heat transfer area surface

and high efficiency. The energy accumulator is featured with excellent heat-conducting properties and thermal energy storage capacity.

• In 70 seconds, after cooling of the ceramic regenerator, the unit is switched to the extract air mode.





Unit activation/deactivation



In the night the unit is switched to low speed mode by the photo sensor.

Air supply mode: The unit operates in permanent air supply mode.

Reversible ventilation with heat recovery: The unit switches from supply to extract mode and vice versa in set time periods and transfers the heat and moisture contained in the extract air to cald instance in the extract of the set o cold intake air in winter or the coolness in summer through the ceramic heat exchanger.

Humidity control mode:

Set required humidity level (45, 55 or 65 %). The unit automatically maintains the comfortable set indoor humidity point.

• Connection of several units in series enables their synchronous control by the first unit. The signal from the remote control is received by the first unit only. Power 220 V must be supplied to the 1st and every 11th unit in a chain.

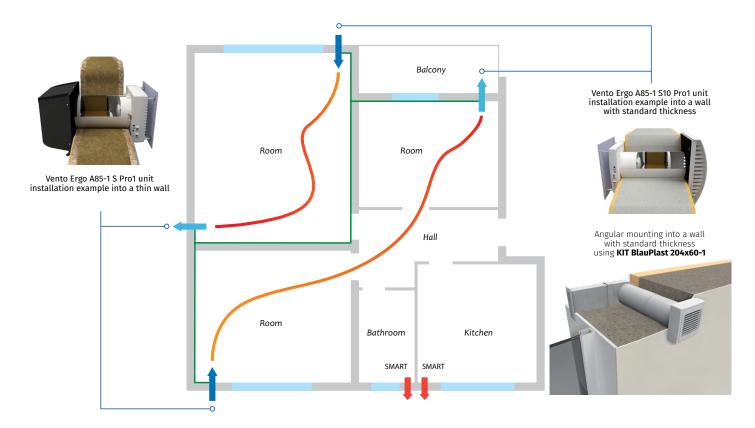




HEAT RECOVERY SINGLE-ROOM UNITS

Mounting

- The unit is designed for external through-the-wall installation inside a prepared round hole in the outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase connected units. Some units supply fresh air to the room and the other units extract stale air from the room. This allows to arrange the most efficient balanced ventilation.
- In case of brand new construction the units are mounted in two stages:
 pre-installation at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of the telescopic air ducts. outer ventilation hood and laying out of electric cables.
- **final mounting** before commissioning of a house. It includes installation of the regenerator. the filters. connection of the ventilation unit.
- If mounting of the ventilation hood on the outer wall is undesirable it may be flush mounted and the external grille may be inserted into the outer window jamb using the KIT BlauPlast 204x60-1 pre-installation kit. Available upon separate order.

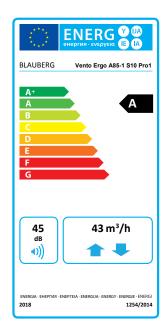




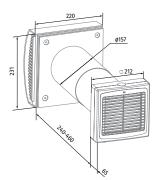
HEAT RECOVERY SINGLE-ROOM UNITS

Technical data

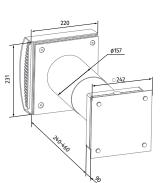
Parameters	Vento Ergo A85 S	510 Pro1 / Vento Erg	go A85-1 S10 Pro1	
Speed	I		III	
Voltage [V / 50 (60) Hz]		1 ~ 100-230		
Power [W]	4.74	6.56	9.65	
Current [A]	0.034	0.050	0.071	
RPM [min ⁻¹]	1000	1500	2045	
Maximum air flow [m³/h (l/s)]	36 (10)	59 (16)	85 (24)	
Air flow in heat recovery mode [m³/h (l/s)]	18 (5)	30 (8)	43 (12)	
SFP [W/l/s]	0.95	0.80	0.82	
Outdoor sound pressure attenuation according to DIN EN 20140 [dBA]		40		
Sound pressure level at 1 m according to ISO 3741: 2004 [dBA]	29	35	44	
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	19	25	34	
Heat recovery efficiency according to DIBt LÜ-A 20 [%]		up to 90		
Transported air temperature [°C]		-20+40		
SEC Class		А		
Ingress protection rating		IP24		



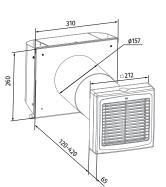
Overall dimensions [mm]

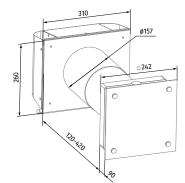


Vento Ergo A85 S10 Pro1



Vento Ergo A85-1 S10 Pro1





Vento Ergo A85 S Pro1

Vento Ergo A85-1 S Pro1



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Description		
Pre-installation Kit Vento Ergo A50 S10 Pro1		Pre-installation kit for mounting into a wall with standard thickness. Includes: • Round Ø 150 mm air duct • AH-10 white 160 outer ventilation hood • Plastic foam plug. • Plastic foam wedges.		
Completion Kit Vento Ergo A85 Pro1		Includes: • Ceramic regenerator Ø 150 mm • Vento Ergo A85 ventilation unit • G3 filters • Mounting plate • Remote control		
Completion Kit Vento Ergo A85-1 Pro1		Includes: • Ceramic regenerator Ø 150 mm • Vento Ergo A85-1 ventilation unit • G3 filters • Mounting plate • Remote control		
FP Vento Ergo A50 G3		G3 filters (2 pcs.)		
AH-10 *colour* 160		Plastic outer ventilation hood. Available in colours: white black grey terracotta brown vintage		
AH-10 chrome 160		Plastic outer ventilation hood with a plate with brushed stainless steel effect finish		
AH-S grey 160		Outer ventilation hood for thin wall, painted grey		
AH-S chrome 160		Outer ventilation hood for thin wall made of brushed stainless steel		
PP 160/0.5		Outer ventilation hood for mounting from inside		
KIT BlauPlast 204x60-1		Installation kit for angular mounting. Includes: • Plastic ventilation grille 230x86 mm • Plastic air duct 204x60 mm • Plastic connecting bend from Ø 150 to 204x60 mm		
FP Vento Ergo A50 F8		F8 filter (1 pc)		
FB Vento Ergo	8 6 9 9 9 9 9 9	Remote control		



HEAT RECOVERY SINGLE-ROOM UNITS

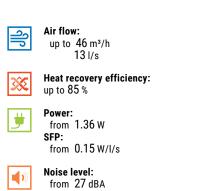


SOLO A35 S4 PRO R

WALL VENTS

Features

- Wall ventilator with heat and energy recovery.
- Supply clean fresh air to the premises.
- Remove stale extract air from the premise.
- Clean the air of dust and insects.
- Prevent penetration of excessive humidity and appearance of mould.
- Protect against outdoor noise.
- Recover heat and provide humidity balance inside.
- Reduce the heating costs in winter and air conditioning costs in summer.
- Low energy demand.



Design

FAN

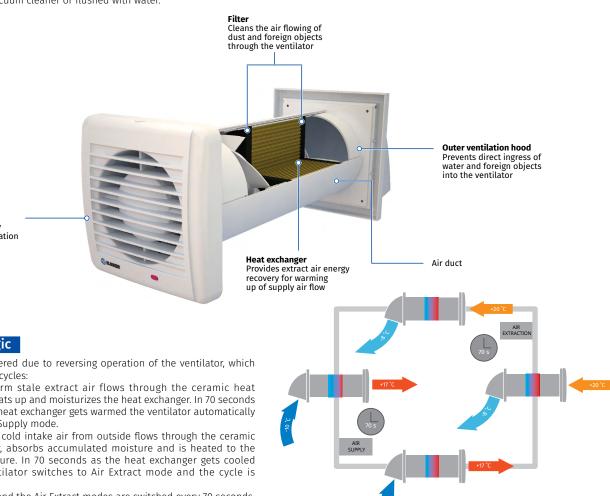
• Air is supplied or extracted by a reversible axial fan with EC motor. Due to EC technology the fan is distinguished with low energy demand. The motor has overheating protection and ball bearings for longer service life

AIR FILTERS

• Two built-in filters with total filter class G3 are used to clean supply and extract air flows. The filters ensure fresh air cleaning of dust and insects and prevent the ventilator parts from soiling. The filters are cleaned either with a vacuum cleaner or flushed with water.

ENERGY HEAT EXCHANGER

• The high-technology ceramic energy heat exchanger with recovery efficiency up to 85 % is used for extract air heat energy recovery and supply air heating.



Reversible fan Generates air flow by means of the fan rotation

Operation logic

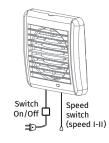
- Energy is recovered due to reversing operation of the ventilator, which consists of two cycles:
- CYCLE I. As warm stale extract air flows through the ceramic heat exchanger, it heats up and moisturizes the heat exchanger. In 70 seconds as the ceramic heat exchanger gets warmed the ventilator automatically switches to Air Supply mode.
- CYCLE II. Fresh, cold intake air from outside flows through the ceramic heat exchanger, absorbs accumulated moisture and is heated to the room temperature. In 70 seconds as the heat exchanger gets cooled down, the ventilator switches to Air Extract mode and the cycle is renewed.
- The Air Supply and the Air Extract modes are switched every 70 seconds.



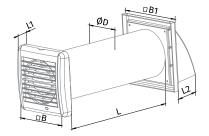
SOLO A35 S4 PRO R

WALL VENTS

Control



Overall dimensions



Dimensions [mm]	ØD	В	B1	L	L1	L2
Solo A35 S4 Pro R	103	150	153	305-380	30	84
Solo A35 L S4 Pro R	103	150	153	305-700	30	84

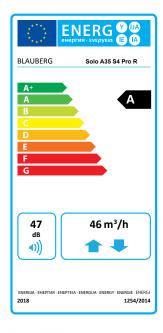
Entract cycle

Mounting example

Technical data

Parameters	Solo A35 S4 Pro R /	Solo A35 L S4 Pro R
Speed	I	II
Voltage [V/50 (60) Hz]	2	30
Power [W]	1.36	1.89
Current [A]	0.031	0.034
Maximum air flow [m³/h (l/s)]	30 (8)	46 (13)
SFP [W/l/s]	0.33	0.30
Sound pressure level at 3 m distance [dBA]	27	32
Transported air temperature [°C]	-15.	+40
Heat recovery efficiency [%]	up t	to 85
Heat exchanger type	Cera	amic
Energy efficiency class		A
Ingress protection rating	IP	24









PCOS004850

MODULE FOR MODBUS CONNECTION

Features

- The PCOS004850 control module is designed for connection of the pCO series controllers (except for pCOB) to ventilation control systems in compliance with RS485 communication protocol.
- The PCOS004850 control module enables integration of the unit into a building management system.



Compatibility

• The PCOS004850 control module is compatible with all the air handling units of KOMFORT Roto and CIVIC series with S17 and S18 controllers.

Parameters	Values					
Cable cross section [mm ²]	0.2 - 2.5. Two-wire shielded twisted pair cable AWG20/22					
Operating conditions	from -10 up to + 60 °C, relative humidity 90 %					
Storage conditions	from -10 up to + 70 °C, relative humidity 90 %					
Dimensions [mm]	60x29x20					



CD-1/CD-2

CO2 SENSORS

Features

- Indoor carbon dioxide concentration measurement.
- Air capacity control depending on CO₂ concentration.
- Efficient energy saving device.



Design

• The sensor has two separate outputs, a normally opened dry relay contact and an analogue output 0–10 V that is adjustable fo 2–10 V/ 0–20 mA/4–20 mA. The relay output is used to turn the fan on/off depending on indoor CO_2 concentration and the analogue output is used for smooth fan speed control for a fan with EC motor or a fan with extra speed controller with 0–10 V input. In case of smooth fan speed control the fan speed varies proportionally to carbon dioxide emissions. Due to the relay and analogue outputs the sensor is compatible with any ventilation system. The self-calibration system ensures reliable sensor operation during the sensor service life.

Modifications

- **CD-1:** integrated LED lights for indication of CO₂ concentration and a touch button for operation mode switching (mode 1: on, mode 2: off, mode 3: operation according to CO₂ concentration). The button is used to turn the fan on or turn it off when CO₂-based ventilation is not required.
- CD-2: no integrated LED-lights and no touch button. This model is recommended for premises requiring permanent ventilation as school classes and other public premises.

Mounting and power supply

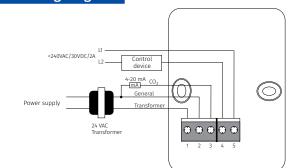
- Wall surface mounting.
- 24 VAC low current power supply.
- The sensor has a socket for AT power unit offered as an accessory (AT-220/25 or AT-120/25 models).



Technical data

Parameters	Value						
Power supply / Consumption	24 VAC (50/60 Hz ± 10 %), 24 VDC/1.6 W Max						
Gas sensing element	Non-dispersive infrared detector (NDIR) with self-calibration system						
CO ₂ -measuring range	0–2.000 ppm (parts per million)						
Accuracy at 25 °C. 2.000 ppm	±30 ppm + 3 % of reading						
Response time	max. 2 min						
Warm up time for each turning-on	2 hours (first time), 2 minutes (operation)						
Analogue output	0–10 VDC (default), 4–20 mA selectable by jumpers						
On/Off output	1X2A switch load Four set points selectable by jumpers						
	1st green indicator lights when CO2 concentration is below 600 ppm						
	1st and 2nd green indicators light when CO₂ concentration is 600-800 ppm						
6 LED lights for CO ₂ concentration	1st yellow indicator lights when CO₂ concentration is 800-1200 ppm						
indication (for CD-1 model)	1st and 2nd yellow indicators light when CO_2 concentration is 1200–1400 ppm						
	1st red indicator lights when CO₂ concentration is 1400–1600 ppm						
	1st and 2nd red indicators light when CO ₂ concentration is above 1600 ppm						
Operating conditions / Storage regulations	0-50 °C; 0-95 % RH non condensing/0-50 °C						
Weight/Dimensions	0.120 kg/100 mm x 80 mm x 30 mm						

Sensor wiring diagram





DRWQ40200

CO2 SENSORS

Features

 Self-calibrating sensor with microprocessor control for measuring carbon dioxide content in the air within the range from 0 to 2.000 million⁻¹ (parts per million).



Design

- DRWQ40200 CO₂ sensor has 2 analogue outputs: 0-10 V and 4-20 mA. An analogue output provides for stepless fan speed control (requires an EC motor fan or a frequency drive).
- With stepless control the fan speed is changed in proportion to carbon dioxide concentration changes. The CO₂ content in the air is measured by means of a non-dispersive infrared analyser (NDIR).

Mounting

• The sensor is mounted onto a wall or a mounting box inside the serviced space. The unit is powered from a 24 V AC/DC low-current electric mains.

Parameters	Values
Power source	24 V AC/DC
Gas analyser	optical (NDIR)
CO2 measurement range	0-2.000 million ⁻¹ (parts per million) of CO₂
CO₂ output signal	0-10 V
CO2 measurement precision	\pm 30 million ^1 (parts per million), \pm 5 % of maximum value
Operating conditions	0-50 °C; 10-90 % relative humidity without condensate
Protection class	IP55
Dimensions	95x97x30 mm

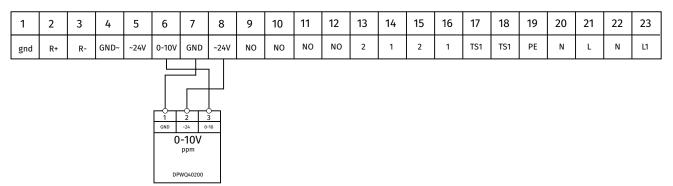


CO2 SENSORS

DRWQ40200

Connection diagram

KOMFORT Roto EC D/S



Civic EC L

1	2	3	4	5		6	7		8	9	
PE	И	L	NC	L	L	L	~24V	~24V	GND	GND	B5
									0-10 ppm DPWQ402		

Civic EC D

1	2	3	4	5	6	7	7		3	9	10		11		12	13
GND	0-10V	TACH	0-10V	TACH	NO	GND	GND	~24V	~24V	NO	L	L	L	L	L	0-10V
0-10V ppm DPWQ46200																



DPWQ30600

VOC SENSOR

Features

- Self-calibrating processor-controlled VOC sensor provides air quality measurement.
- The device is used for quantitative assessment of indoor air saturation with contaminants (e.g. cigarette smoke, expired air, and solvent and detergent vapours).
- Enables setting the sensitivity level relative to an expected maximum air pollution level.
- Enables on-demand ventilation which results in considerable energy savings as air is exchanged only upon reaching the pre-set level of air pollution.



Design

- **DPWQ30600** VOC sensor has 2 analogue outputs: 0-10 V and 4-20 mA. An analogue output provides for stepless fan speed control (requires an EC motor fan or a frequency drive).
- With stepless control the fan speed is changed in proportion to air quality changes.

Mounting

• The sensor is mounted onto a wall or a mounting box inside the serviced space. The unit is powered from a 24 V AC/DC low-current electric mains.

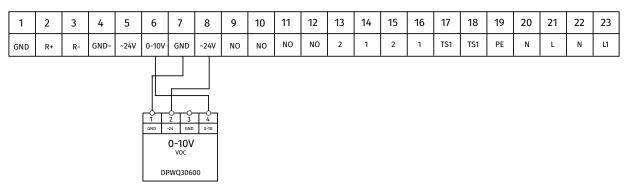
Parameters	Values
Power source	24 V AC/DC
Gas analyser	VOC sensor
Measurement range	0-100 % air quality
Output signal	0-10 V
Measurement precision	±20 %
Operating conditions	0-50 °C; 10-90 % relative humidity without condensate
Protection class	IP30
Dimensions	79x81x26 mm



DPWQ30600

Connection diagram

KOMFORT Roto EC D/S



Civic EC L

1	2	3	4	5		6	7		8	9	
PE	Ν	L	NC	L	L	L	~24V ~24V		GND	GND	B5
									2 2 -24 0-1 VO DPWQ	с	_

Civic EC D

1	2	3	4	5	6	7	7		8		10		11		12	13
GND	0-10V	ТАСН	0-10V	TACH	NO	GND	GND	~24V	~24V	NO	L	L	L	L	L	0-10V
						1 2 3 4 OND -24 GND 0-10 0-10V VOC DPWQ30600										

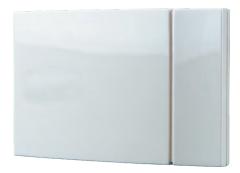


DPWC11200

HUMIDITY AND TEMPERATURE SENSOR

Features

• The sensor is intended for temperature, humidification and/or dehumidification control in ventilation, air conditioning and heating systems.



Design

- The **DPWC11200** humidity and temperature sensor has 2 analogue outputs: 0-10 V and 4-20 mA. An analogue output provides for stepless fan speed control (requires an EC motor fan).
- With stepless control the fan speed is changed in proportion to the humidity and temperature level. Being equipped with both relay and analogue outputs the sensor is compatible with most every existing ventilation systems.

Mounting

• The sensor is mounted onto a wall in the serviced space. The unit is powered from a 24 V AC/DC low-current electric mains.

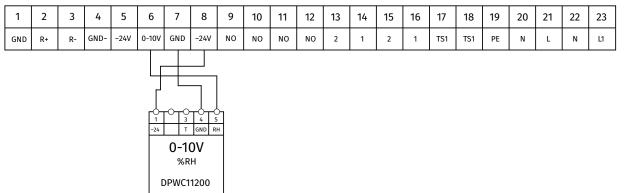
Parameters	Values
Power source	8-30 V DC / 12-24 V AC
Analogue outputs	0-10 V and 4-20 mA
Temperature measurement precision	±1.2 °C
Humidity measurement precision	±3 % RH
Operating conditions	-10-60 °C; 10-90 % humidity without condensate
Protection class	IP30
Dimensions	127x80x30 mm



DPWC11200

Connection diagram

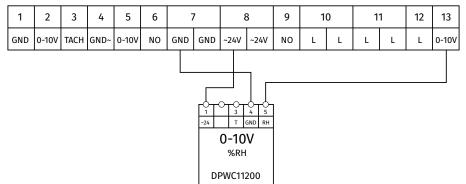
KOMFORT Roto EC D/S



Civic EC L

1	2	3	4	Ĺ	5		7			9	
PE	N	L	NC	L	L	L	~24V	~24V	GND	GND	B5
								1	-0	r gnd IOV RH	5 5 RH

Civic EC D



HUMIDITY AND TEMPERATURE SENSOR



HR-S

ELECTRO-MECHANICAL HUMIDISTATS

Features

- The humidistat is designed for controlling humidification and/or dehumidification in ventilation, air conditioning and heating systems.
- Can also be used to alarm when the humidity exceeds or falls below a pre-set level.



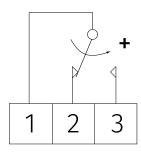
Design

• The single-stage humidistat HR-S uses a synthetic element as sensor medium. The synthetic element stretches as the humidity increases and shrinks as the humidity decreases.

Mounting

• The humidistat is designed for indoor mounting on the wall surface.

Humidistat wiring diagram

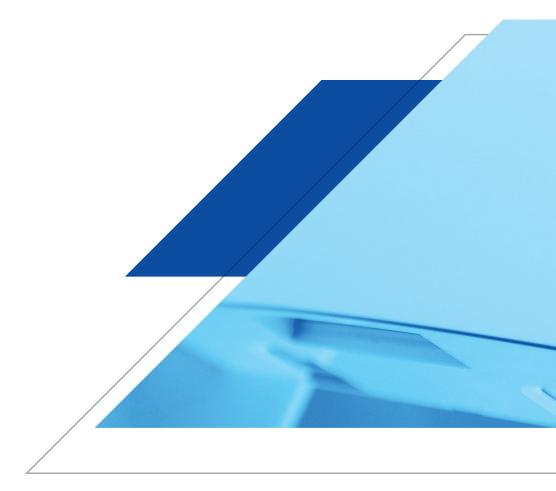


Humidification Dehumidification Closing contact between terminals 1 and 2 Closing contact between terminals 1 and 3

Parameters	HR-S
Switch contact	250 V AC, 5 A.
Moisture	20-90 %
Casing material	Polycarbonate
Temperature range [°C]	0-40
Mounting	Wall surface mounting
Ingress protection	IP30
Dimensions	86x86x30 mm







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01/2019