



# HVAC VENTILATION



PART OF **BLAUBERG**  
GROUP

**Blauberg Ventilation** offers a wide scope of ventilation equipment which combines innovative technology, contemporary design and German quality.



**The Company offers a wide range** of domestic fans, ventilation units with heat recovery, industrial fans, and various accessories for creating ventilation systems.



Domestic ventilation



Single-room ventilation with heat recovery



Air handling units with heat recovery



Modular air handling units



Industrial ventilation



Heaters and coolers



Electrical accessories for fans



Air ducts and air distribution elements



Mounting elements for ventilation systems

**Our philosophy** is to cultivate long-term client relations based on trust and reliability. We are always open to cooperation in the field of ventilation equipment production.



# BLAUBERG

GROUP

**Blauberg Ventilation** is a part of the international group of companies **Blauberg Group**.

The Group headquarters as well as the **R&D center** and the **quality control laboratory** are located in **Munich, Germany**.

The Group is represented by a great number of offices and companies all over the world, ensuring timely **supply and servicing**.



## MANUFACTURING FACILITIES

- **Munich**, Germany
- **Trier**, Germany
- **Poznań**, Poland
- **Elk**, Poland
- **Tata**, Hungary
- **Kyiv**, Ukraine
- **Moscow**, Russia

5

R&D CENTERS  
IN THE WORLD

7

FACTORIES  
IN THE WORLD

24

REPRESENTATIVE OFFICES  
IN 15 COUNTRIES







**100+**

OVER 100 MILLION  
FANS MADE BY US

**110**

COUNTRIES WHERE YOU  
CAN BUY OUR PRODUCTS

**3500**

EMPLOYEES  
WORLDWIDE

**Blauberg Group** develops ventilation technology which complies with European and international standards and requirements specific to efficiency, reliability and safety.

Continuous improvement of the entire process flow, stringent product quality assurance at each production step, active implementation of innovative technology and consistent improvement of consumer appeal of the products were the key elements of the group's strategy of earning international recognition and making the Blauberg Group brands stand for uncompromising quality.






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**Residential fans**






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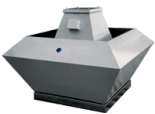


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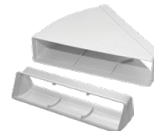
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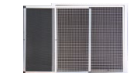
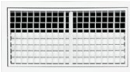
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## Diffusers and grilles



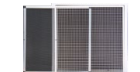
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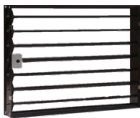


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# Turbo

## Inline mixed flow fans

### Use

- Supply and extraction ventilation of offices, bathrooms, toilets, laundries, kitchens, ensembles in apartments, hotels, homes and commercial buildings.
- Ventilation air ducts requiring high pressure, powerful air flow and low noise level.
- Compatible with Ø 100 up to 315 mm round air ducts.



**Air flow:**  
up to 1750 m<sup>3</sup>/h  
486 l/s



**Power:**  
from 21 W



**Noise level:**  
from 33 dBA



### Design

- The casing is made of low flammable polypropylene.
- Ventilation unit with terminal box. Can be turned to any position.
- Special design of the casing permits easy dismantling of the impeller and motor block for fan servicing without dismantling the air duct.

### Motor

- 220–240 V single phase at 50 Hz.
- All motors have a sealed ball bearing motor with a service life of up to 40,000 hours, are 2 speed with an exterior two speed switch.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.
- 100 mm & 125 mm fans cannot be speed controlled.

### Wiring

- Comes with a 1.2 m lead, 2 pin plug and external two speed switching.
- Timer fans come with a 1.2 m lead, 4 pin plug and external two speed switching.

### Mounting

- Due to the compact design the fan is the ideal solution for mounting in limited spaces, including space behind a false ceiling.
- The fan can be installed in any section of the ventilation system from intake to the end of the ductworks.
- Wall or ceiling mounting with a mounting plate.
- TD:** mounting kit for installation of one diameter fans in parallel (for boosting capacity)



- TL:** mounting kit for installation of one diameter fans in series (for boosting pressure).



### Accessories

Filter box

Speed controller

Grilles and cowls

Ducting

Low profile ducting

Backdraft damper

Fire damper





### Modifications

- o **T:** turn-off delay timer adjustable from 2 to 30 minutes.
- o **G:** speed controller, temperature controller with external temperature sensor (cable length 4 m), power cable with Australian plug.



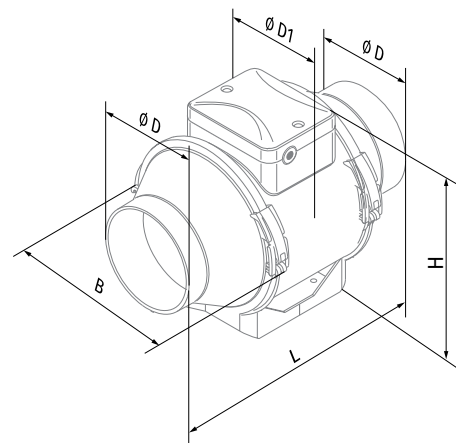
Designation key		
Series	Duct diameter [mm]	Modifications
Turbo	100; 125; 150; 200; 250; 315	T: turn-off delay timer adjustable from 2 to 30 minutes G: speed controller, temperature controller with external temperature sensor, power cable with Australian plug

### Ordering Information

Part Number	Model	Description
BLATURBO100	Turbo 100	MIXFLO 100 mm 2 SPEED FAN
BLATURBO125	Turbo 125	MIXFLO 125 mm 2 SPEED FAN
BLATURBO150	Turbo 150	MIXFLO 150 mm 2 SPEED FAN
BLATURBO200	Turbo 200	MIXFLO 200 mm 2 SPEED FAN
BLATURBO250	Turbo 250	MIXFLO 250 mm 2 SPEED FAN
BLATURBO315	Turbo 315	MIXFLO 315 mm 2 SPEED FAN
BLATURBO150T	Turbo 150 T	MIXFLO 150 mm 2 SPEED FAN C/W RUN ON TIMER & 4 PIN PLUG
BLATURBO200T	Turbo 200 T	MIXFLO 200 mm 2 SPEED FAN C/W RUN ON TIMER & 4 PIN PLUG
BLATURBO150 G	Turbo 150 G	MIXFLO 150mm C/W SPEED CONTROLLER, EXTERNAL TEMP SENSOR
BLATURBO200 G	Turbo 200 G	MIXFLO 200mm C/W SPEED CONTROLLER, EXTERNAL TEMP SENSOR
BLATURBO250 G	Turbo 250 G	MIXFLO 250mm C/W SPEED CONTROLLER, EXTERNAL TEMP SENSOR
BLATURBO350 G	Turbo 350 G	MIXFLO 315mm C/W SPEED CONTROLLER, EXTERNAL TEMP SENSOR

### Overall Dimensions [mm]

Model	∅ D	∅ D1	B	H	L	Weight [kg]
Turbo 100	96	164	167	190	246	1.45
Turbo 125	123	164	167	190	246	1.79
Turbo 150	148	187	220	251	289	3.18
Turbo 200	199	209	239	261	295.5	3.8
Turbo 250	247	257	287	323	383	7.83
Turbo 315	310	323	362	408	445	11.7

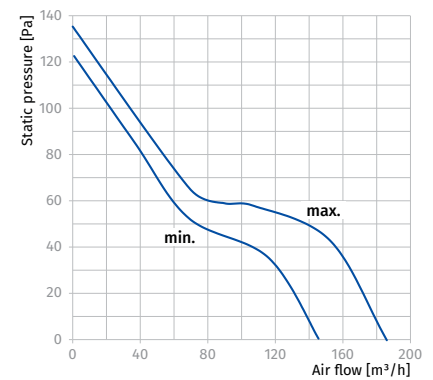


## Technical Data

Parameters	Turbo 100		Turbo 125		Turbo 150	
Speed	min	max	min	max	min	max
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Power [W]	21	33	23	37	42	50
Current [A]	0.11	0.21	0.18	0.27	0.19	0.22
Maximum air flow [m <sup>3</sup> /h (l/s)]	145 (40)	187 (52)	220 (61)	280 (78)	430 (119)	560 (156)
RPM [min <sup>-1</sup> ]	2180	2385	1950	2455	1940	2620
Sound pressure level at 3 m [dBA]	33	38	34	39	38	48
Max. transported air temperature [°C]	+60		+60		+60	
SEC class	C		B		B	
IP rating	IPX4		IPX4		IPX4	
Motor IP rating	IPX4		IPX4		IPX4	
ErP	-		-		2018	

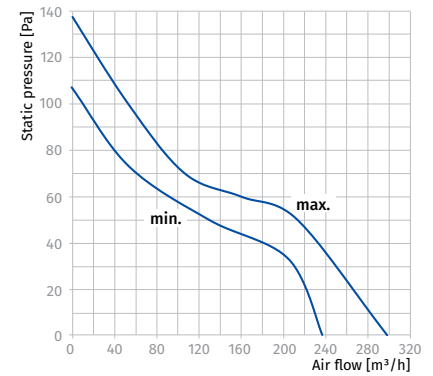
### TURBO 100

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
L <sub>WA</sub> to inlet [dBA]	54	19	35	50	49	44	37	25	17	33	43
L <sub>WA</sub> to outlet [dBA]	53	17	34	50	49	48	36	24	17	32	42
L <sub>WA</sub> to env. [dBA]	47	14	29	43	43	39	33	22	15	27	37
<b>Max speed</b>											
L <sub>WA</sub> to inlet [dBA]	59	24	34	53	54	53	48	37	26	38	48
L <sub>WA</sub> to outlet [dBA]	57	23	33	52	52	52	47	37	26	37	47
L <sub>WA</sub> to env. [dBA]	52	18	29	46	48	47	43	33	23	32	42



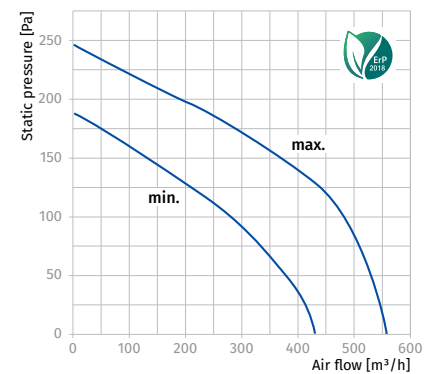
### TURBO 125

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
L <sub>WA</sub> to inlet [dBA]	54	26	38	52	50	44	38	27	17	34	44
L <sub>WA</sub> to outlet [dBA]	54	25	37	51	49	43	38	28	18	33	43
L <sub>WA</sub> to env. [dBA]	49	21	32	46	45	40	35	25	16	29	39
<b>Max speed</b>											
L <sub>WA</sub> to inlet [dBA]	60	20	31	57	51	51	50	39	27	39	49
L <sub>WA</sub> to outlet [dBA]	59	20	31	56	51	51	49	39	26	38	48
L <sub>WA</sub> to env. [dBA]	54	16	27	51	46	47	45	36	24	34	44



### TURBO 150

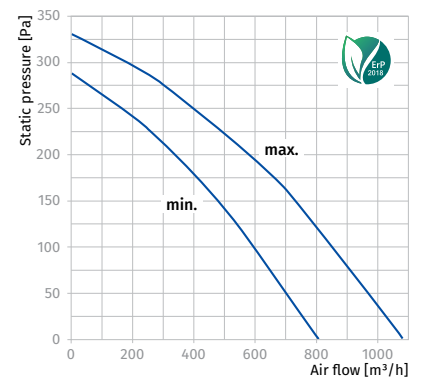
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
L <sub>WA</sub> to inlet [dBA]	59	31	45	54	52	54	48	35	29	38	48
L <sub>WA</sub> to outlet [dBA]	63	37	49	56	56	60	48	39	30	42	52
L <sub>WA</sub> to env. [dBA]	52	21	30	48	48	45	42	34	23	32	42
<b>Max speed</b>											
L <sub>WA</sub> to inlet [dBA]	69	38	51	57	62	60	66	49	44	48	58
L <sub>WA</sub> to outlet [dBA]	72	42	55	66	67	68	65	53	45	52	62
L <sub>WA</sub> to env. [dBA]	65	23	37	56	59	57	61	47	35	44	54



Parameters	Turbo 200		Turbo 250		Turbo 315	
Speed	min	max	min	max	min	max
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Power [W]	76	108	125	177	227	315
Current [A]	0.34	0.48	0.54	0.79	0.99	1.42
Maximum air flow [m³/h (l/s)]	805 (224)	1080 (300)	1070 (297)	1360 (378)	1420 (394)	1750 (486)
RPM [min <sup>-1</sup> ]	1915	2380	1955	2440	2115	2505
Sound pressure level at 3 m [dBA]	45	50	52	58	52	60
Max. transported air temperature [°C]	+60		+60		+60	
SEC class	B		-		-	
IP rating	IPX4		IPX4		IPX4	
Motor IP rating	IPX4		IPX4		IPX4	
ErP	2018		2018		2018	

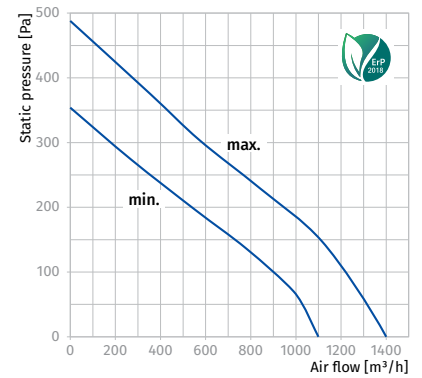
**TURBO 200**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	66	38	50	58	59	60	59	55	45	45	55
LWA to outlet [dBA]	64	40	50	54	58	59	57	51	44	43	53
LWA to env. [dBA]	60	27	42	49	54	55	54	46	34	39	49
<b>Max speed</b>											
LWA to inlet [dBA]	71	41	50	63	64	65	64	62	52	50	60
LWA to outlet [dBA]	70	43	52	61	66	64	63	58	51	50	60
LWA to env. [dBA]	65	34	43	54	60	60	60	53	41	45	55



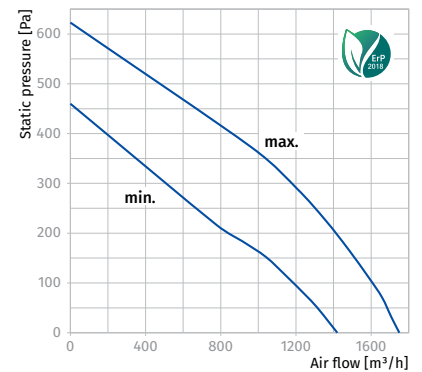
**TURBO 250**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	72	48	57	63	66	69	64	54	45	52	62
LWA to outlet [dBA]	75	48	56	64	70	71	66	56	45	54	64
LWA to env. [dBA]	65	32	51	57	61	59	56	45	32	44	54
<b>Max speed</b>											
LWA to inlet [dBA]	78	52	62	66	71	75	72	62	52	58	68
LWA to outlet [dBA]	81	52	60	66	76	77	74	63	52	60	70
LWA to env. [dBA]	72	35	50	63	69	66	63	53	40	51	61



**TURBO 315**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	72	43	54	62	67	66	67	58	47	52	62
LWA to outlet [dBA]	70	45	57	59	64	66	63	56	46	50	60
LWA to env. [dBA]	62	28	51	53	57	57	54	46	36	41	51
<b>Max speed</b>											
LWA to inlet [dBA]	80	50	59	68	73	77	74	70	59	60	70
LWA to outlet [dBA]	78	51	60	66	70	75	71	66	57	58	68
LWA to env. [dBA]	72	37	51	66	66	67	65	58	48	52	62





# Primo 355-400 AC & EC

## Inline mixed flow fans

### Use

- Inline fans for supply and exhaust ventilation of various commercial and industrial premises requiring powerful air flow.
- The fans are compatible with Ø 355 and 400 mm air ducts.
- New product combines wide capabilities and high performance features of axial and centrifugal fans, providing powerful air flow.



**Air flow:**  
up to 5700 m<sup>3</sup>/h  
1583 l/s



**Power:**  
from 126 W



**Noise level:**  
from 33 dBA



### Design

- The fan casing is made of polymer and reinforced with a metal housing. Due to the conically shaped polymer impeller with specially profiled blades, the air stream circular velocity increases, which results in higher air flow and pressure, as compared to characteristics of standard axial fans.
- The specially designed diffuser, impeller and airflow rectifier at the fan outlet provide smooth air flow distribution and enable the best combination of high capacity, powerful pressure and low noise. The fan casing is equipped with an airtight terminal box for connection to power mains.

### Motor

- The fans are equipped with three-speed four-pole asynchronous motors or energy efficient EC motors.
- 220–240 V single phase at 50 Hz.
- All motors have a sealed ball bearing motor with a service life of up to 40,000 hours, are 2 speed with an exterior two speed switch.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.

### Overall Dimensions [mm]

Model	Ø D	Ø D1	B	L
Primo 355 AC & EC	350	390	450	388
Primo 400 AC & EC	395	441	500	388

### Ordering Information

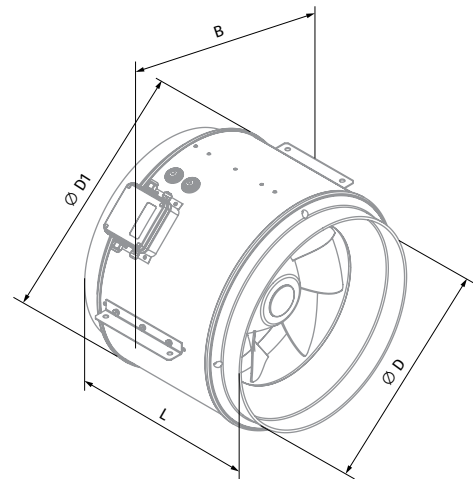
Part Number	Model	Description
BLAUPRIMO355	Primo 355	MIXFLO 355 mm 3 SPEED FAN
BLAUPRIMO400	Primo 400	MIXFLO 400 mm 3 SPEED FAN
BLAUPRIMOEC355	Primo EC 355	MIXFLO 355 mm FAN EC MOTOR
BLAUPRIMOEC400	Primo EC 400	MIXFLO 400 mm FAN EC MOTOR

### Speed Control

- The AC fans are controlled by either a three-stage **CDPE-3 E5** controller or a smooth thyristor controller connected to the maximum speed terminal.
- EC models are regulated by a smooth 0-10 V controller.

### Mounting

- The fans may be mounted at any place and at any angle within the ductwork system. Several fans may be installed in one system in parallel to attain higher air capacity or in series to increase operating pressure in the system. The fan casing is equipped with fixing brackets for suspended mounting.



## Technical Data

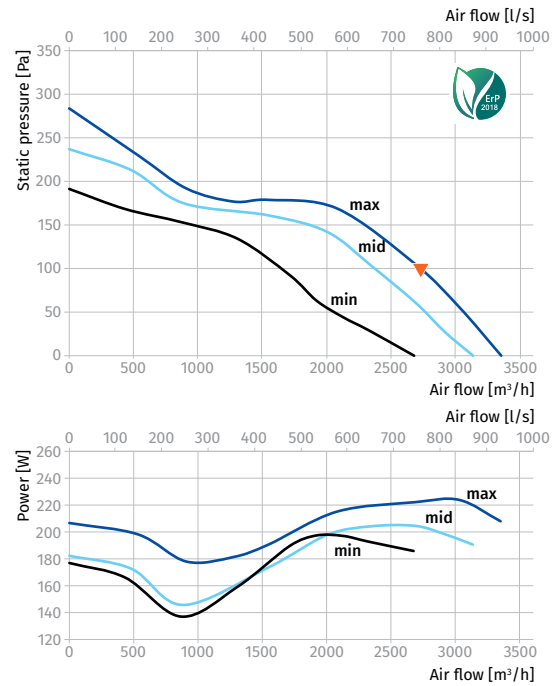
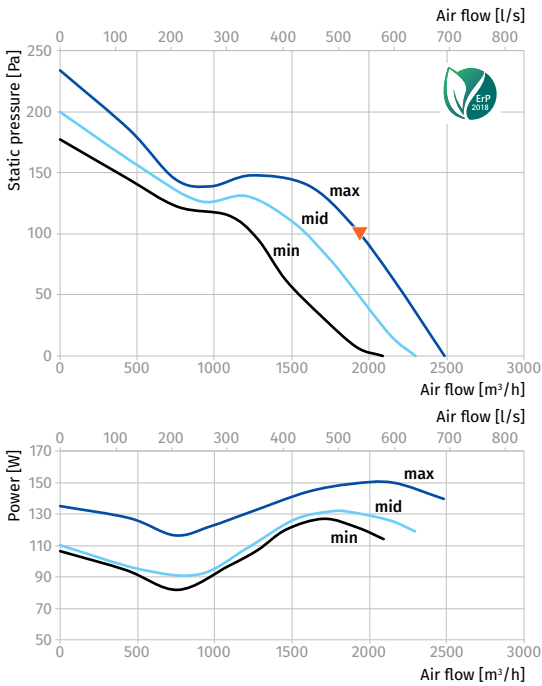
Parameters	Primo 355			Primo 400		
	min	mid	max	min	mid	max
Speed						
Voltage [V / 50 Hz]	1~ 230			1~ 230		
Power [W]	126	131	150	197	204	224
Current [A]	0.60	0.58	0.66	0.91	0.90	0.98
Maximum air flow [m³/h (l/s)]	2090 (581)	2296 (638)	2485 (690)	2677 (744)	3136 (871)	3350 (931)
RPM [min <sup>-1</sup> ]	1350	1400	1470	1320	1390	1446
Sound pressure at 3 m [dBA]	47	47	49	48	49	51
Transported air temperature [°C]	-25...+55			-25...+55		
Protection rating	IPX4			IPX4		
Motor protection rating	IP44			IP44		
Erp compliance	2018			2018		

### PRIMO 355

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA	
		63	125	250	500	1000	2000	4000	8000	3 m	1 m
LWA to inlet [dBA]	69	50	61	63	60	63	60	56	48	49	59
LWA to outlet [dBA]	69	56	61	63	61	65	59	54	48	49	59
LWA to environment [dBA]	63	42	49	61	53	57	50	46	35	43	53

### PRIMO 400

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA	
		63	125	250	500	1000	2000	4000	8000	3 m	1 m
LWA to inlet [dBA]	71	57	62	66	65	64	61	55	47	51	61
LWA to outlet [dBA]	73	57	65	63	67	68	63	59	51	52	62
LWA to environment [dBA]	64	45	52	53	57	60	54	48	38	43	53



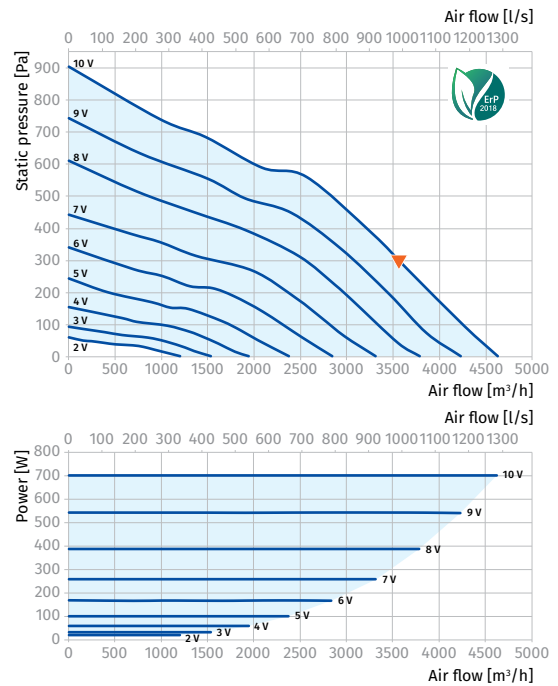
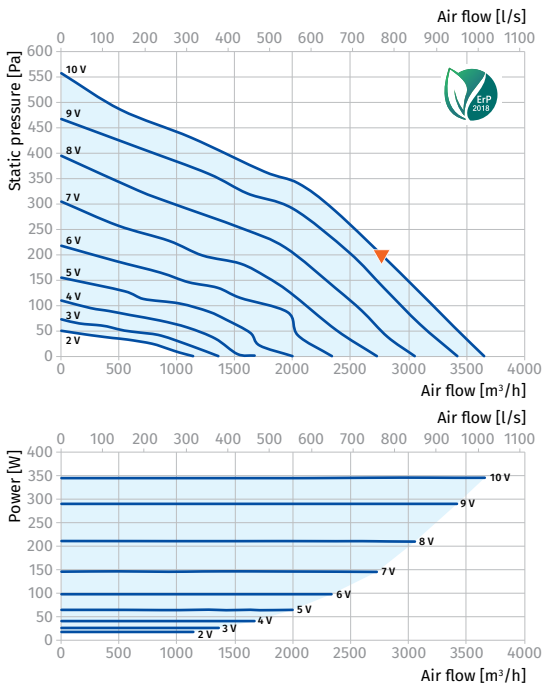
Parameters	Primo EC 355	Primo EC 355 max	Primo EC 400
Voltage [V / 50 Hz]	1~ 230	1~ 230	1~ 230
Power [W]	346	701	726
Current [A]	1.54	3.10	3.23
Maximum air flow [m <sup>3</sup> /h (l/s)]	3685 (1024)	4630 (1286)	5700 (1583)
RPM [min <sup>-1</sup> ]	2470	3175	2580
Sound pressure at 3 m [dBA]	33-63	35-68	33-66
Transported air temperature [°C]	-25...+55	-25...+55	-25...+55
Protection rating	IPX4	IPX4	IPX4
Motor protection rating	IP44	IP44	IP44
Erp compliance	2018	2018	2018

**PRIMO EC 355**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to inlet [dBA]	83	73	76	75	75	78	74	69	61	63	73
LwA to outlet [dBA]	85	70	79	75	77	81	76	71	64	65	75
LwA to environment [dBA]	76	56	64	67	70	71	68	63	53	55	65

**PRIMO EC 355 MAX**

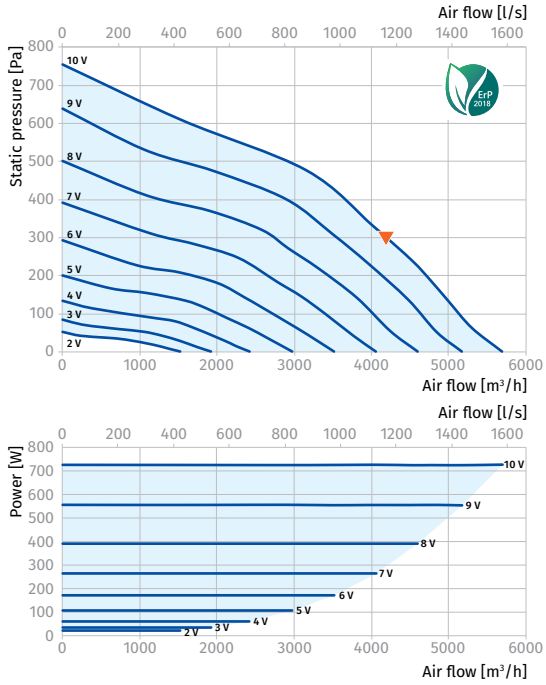
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to inlet [dBA]	88	74	82	79	79	83	80	75	66	68	78
LwA to outlet [dBA]	90	72	83	79	81	86	82	77	70	70	80
LwA to environment [dBA]	80	45	63	66	73	77	74	68	57	60	70





**PRIMO EC 400**

Sound power level, A-weighted ▼	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	<b>87</b>	70	77	78	81	81	79	74	67	<b>66</b>	<b>76</b>
L <sub>WA</sub> to outlet [dBA]	<b>88</b>	62	76	78	83	84	80	75	66	<b>68</b>	<b>78</b>
L <sub>WA</sub> to environment [dBA]	<b>80</b>	59	66	69	74	77	72	67	58	<b>60</b>	<b>70</b>



# Turbo EC

## Inline mixed flow fans EC motor

### Use

- Designed for supply and exhaust ventilation systems requiring high energy efficiency, excellent response, high pressure and air flow rate while keeping noise under control.
- Such supply and extraction ventilation of offices, bathrooms, toilets, laundries, kitchens, ensuites in apartments, hotels, homes, industrial and commercial buildings.
- Compatible with air ducts from 150 to 315 mm in diameter.



**Air flow:**  
up to 1995 m<sup>3</sup>/h  
554 l/s



**Power:**  
from 65 W



**Noise level:**  
from 23 dBA



### Design

- Turbo EC fans combine the versatility and outstanding performance of both axial and centrifugal fans, producing a powerful air flow and high pressure while retaining the signature energy efficiency and response of EC motors.
- The casing of Turbo EC fan is made of low combustible polypropylene. The removable central unit with a motor, impeller and terminal box is attached to the fittings by means of special mounting brackets with integral latches. This helps to make the fan maintenance extremely simple and convenient. The fan service no longer requires major disassembly and dismantling of the fan. All you have to do is remove the main unit from the casing and carry out the maintenance as required.
- The inlet fitting has a profiled header which ensures smooth air flow into the fan. Conically shaped impeller with specially profiled blades cause circular velocity rise, that results in air flow boost and pressure increase comparing to conventional design.
- The fan outlet combination of a diffuser, specially designed impeller and rectifier, allow for the optimum air distribution, high air capacity and pressure without excessive noise.

### Motor

- High efficient direct current EC motor.
- EC technology meets the up to date requirements to energy saving and controllable ventilation and provides up to 35 % energy saving as compared to asynchronous motors.
- EC motors ensure totally controllable speed range for the fan and has integrated overheating protection with automatic restart.
- EC motors have no friction and wearing parts as capacitor and brushes. Instead a maintenance free EC controller electronic circuit board is used.
- The impeller is dynamically balanced.
- The fan is compatible with 50 Hz and 60 Hz power mains and the maximum speed does not depend on power mains frequency.
- All motors have a sealed ball bearing motor with a service life of up to 40,000 hours, are 2 speed with an exterior two speed switch.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.

### Wiring

- Comes with a 1.2 m lead, 2 pin plug and external two speed switching.

### Speed Control

- The fan speed is controlled with a 0–10 V control signal from the following sources:
  - integrated or external speed controller
  - controller with sensors
  - central BMS system.
- The control signal value changes depending on air temperature, pressure, smoke concentration and other parameters.
- During signal value change the fan with EC motor correspondingly changes the rotations speed and delivers required air volume to the ventilation system.
- The computer central building management systems (BMS) enable integration of several EC motors in network and precise individual operation control for each fan.

### Mounting

- The fans are intended for installation in matching diameter air ducts at any point of the ventilation system without limitation to mounting angle.
- The fan casing has a flat mounting plate for a secure wall mounting.
- Electrical connection and installation must be performed in accordance with the instruction manual and the electrical connections diagram applied to the terminal box.
- A single system may have several fans installed in parallel to boost the output capacity or in series to boost the working pressure.

#### Designation key

Series	Motor type	Duct diameter [mm]
Turbo	EC: electronically commutated motor	150; 200; 250; 315

#### Accessories

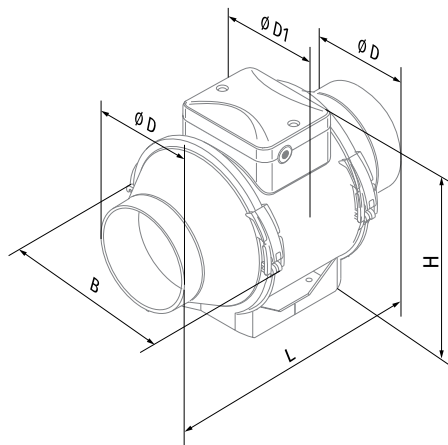
Filter box	Speed controller	Grilles and cowls	Ducting	Low profile ducting	Backdraft damper	Fire damper

### Ordering Information

Part Number	Model	Description
BLATURBOEC150	Turbo EC 150	MIXFLO 150 mm FAN EC MOTOR
BLATURBOEC200	Turbo EC 200	MIXFLO 200 mm FAN EC MOTOR
BLATURBOEC250	Turbo EC 250	MIXFLO 250 mm FAN EC MOTOR
BLATURBOEC315	Turbo EC 315	MIXFLO 315 mm FAN EC MOTOR

### Overall Dimensions [mm]

Type	∅ D	∅ D1	B	H	L	Weight [kg]
Turbo EC 150	148	187	216.5	253.5	289	2.30
Turbo EC 200	198	209	239	277.5	295.5	3.95
Turbo EC 250	247	257	288	339	383	7.80
Turbo EC 315	308.5	323	360	423	443	11.95



**Technical Data**

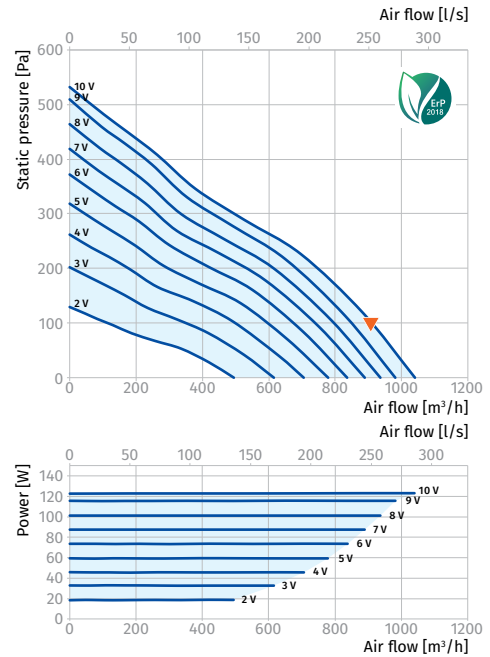
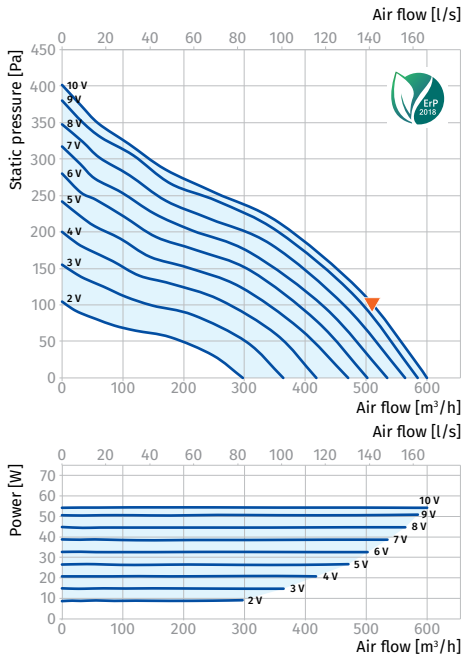
Parameters	Turbo EC 150	Turbo EC 200	Turbo EC 250	Turbo EC 315
Voltage [V / 50-60 Hz]	1~ 230	1~ 230	1~ 230	1~ 230
Power [W]	55	123	169	284
Current [A]	0.48	1.02	1.38	1.25
Maximum air flow [m <sup>3</sup> /h (l/s)]	600 (167)	1040 (289)	1285 (357)	1970 (547)
RPM [min <sup>-1</sup> ]	3390	3390	2870	2826
Sound pressure at 3 m [dBA]	23-50	25-56	28-61	28-61
Transported air temperature [°C]	-25...+55	-25...+55	-25...+55	-25...+55
Protection rating	IPX4	IPX4	IPX4	IPX4
SEC class	B	-	-	-
ErP	2018	2018	2018	2018

**TURBO EC 150**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to inlet [dBA]	<b>70</b>	37	43	58	65	63	65	59	52	<b>50</b>	<b>60</b>
LwA to outlet [dBA]	<b>68</b>	41	45	52	60	63	63	59	52	<b>47</b>	<b>57</b>
LwA to environment [dBA]	<b>67</b>	32	44	59	63	59	58	51	43	<b>46</b>	<b>56</b>

**TURBO EC 200**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to inlet [dBA]	<b>76</b>	36	45	57	70	69	72	69	59	<b>56</b>	<b>65</b>
LwA to outlet [dBA]	<b>76</b>	48	49	56	69	71	71	70	60	<b>56</b>	<b>65</b>
LwA to environment [dBA]	<b>69</b>	35	42	54	64	65	65	58	43	<b>49</b>	<b>59</b>



INLINE FANS

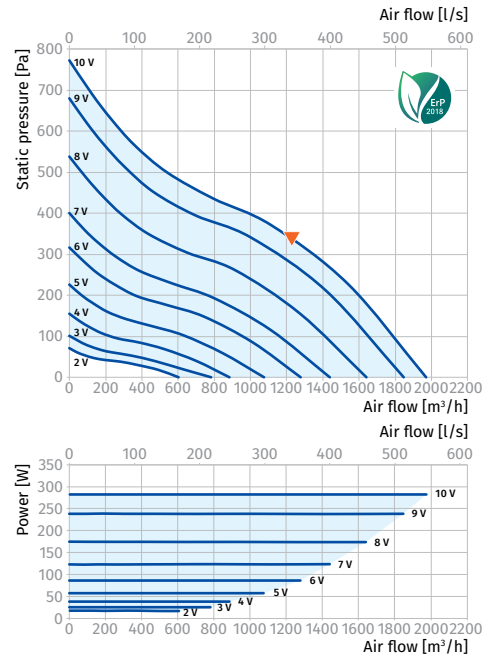
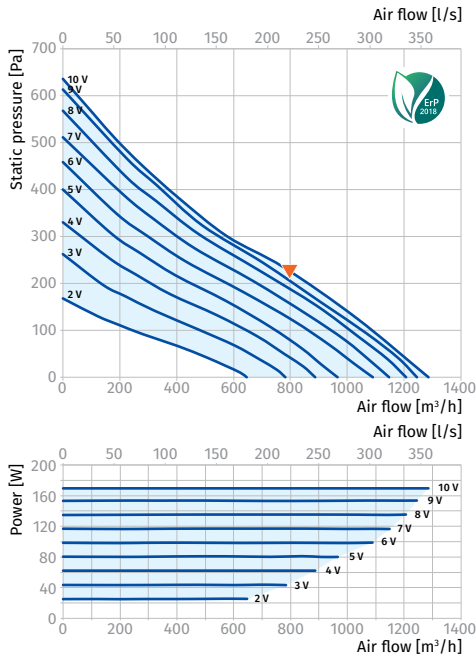


**TURBO EC 250**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	81	43	51	64	77	77	77	69	62	61	71
LWA to outlet [dBA]	81	49	54	67	75	78	77	72	62	61	71
LWA to environment [dBA]	73	53	49	56	66	71	68	55	43	53	63

**TURBO EC 315**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	81	42	54	64	74	78	75	70	63	61	70
LWA to outlet [dBA]	83	43	54	72	77	78	78	73	66	63	72
LWA to environment [dBA]	75	37	48	60	68	73	68	60	48	55	65



# Iso-Mix

## Sound insulated inline mixed flow fans

### Use

- Supply and extract ventilation systems installed in various premises requiring low noise level.
- For ventilation air ducts requiring high pressure, powerful air flow and low noise level.
- Compatible with Ø 150 up to Ø 315 mm air ducts.



**Air flow:**  
up to 1920 m<sup>3</sup>/h  
533 l/s



**Power:**  
from 45 W



**Noise level:**  
from 38 dBA



### Design

- The casing is made of polymer coated steel, internally filled with 50 mm mineral wool thermal- and sound-insulating layer.
- Special inner perforation of the casing and sound insulating material are designed for wide frequency sound absorbing.
- Mixed flow impeller made of high quality plastic.
- The diffusor, the specially profiled impeller and directing vanes provide high performance and powerful pressure combined with low noise operation.
- External airtight terminal block on the fan casing for power supply.
- Mounting brackets on the fan casing for mounting to the floor, to the wall or ceiling.

### Motor

- 220-240 V single phase at 50 Hz.
- All motors have a sealed ball bearing motor with a service life of up to 40 000 hours, are 2 speed with an exterior two speed switch and can be fitted with a speed controller.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.

### Wiring

- All fans come standard with a 1.2 m lead, 2 pin plug and external two speed switching.

### Mounting

- Due to its compact design the fan is the ideal solution for mounting in limited spaces.
- The fan is suitable for mounting in any section of the ventilation system from intake to the end of the ductwork.

## Ordering Information

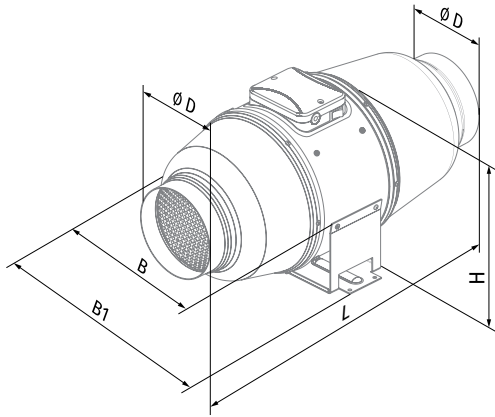
Part Number	Model	Description
BLATURBO150MIX	Iso-Mix 150	MIXFLO 150 mm 2 SPEED FAN – SILENT SERIES
BLATURBO200MIX	Iso-Mix 200	MIXFLO 200 mm 2 SPEED FAN – SILENT SERIES
BLATURBO250MIX	Iso-Mix 250	MIXFLO 250 mm 2 SPEED FAN – SILENT SERIES
BLATURBO315MIX	Iso-Mix 315	MIXFLO 315 mm 2 SPEED FAN – SILENT SERIES

### Accessories

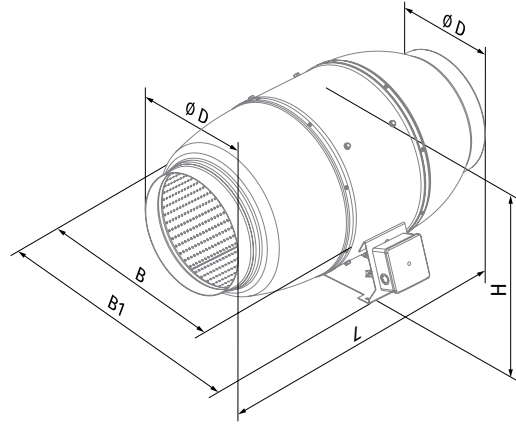
Filter box	Speed controller	Grilles and cowls	Ducting	Low profile ducting	Backdraft damper	Fire damper

**Overall Dimensions [mm]**

Type	Ø D	B	B1	L	H	Weight [kg]
Iso-Mix 150	148	247	273	579	263	6.1
Iso-Mix 200	198	293	386	550	295	8
Iso-Mix 250	248	358	445	658	360	15
Iso-Mix 315	313	432	520	780	434	25



Iso-Mix 150



Iso-Mix 200 / Iso-Mix 250 / Iso-Mix 315

## Technical Data

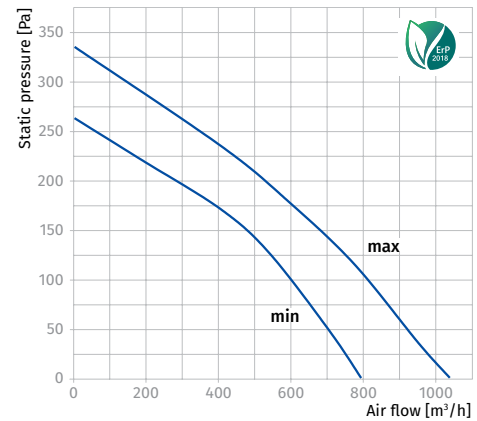
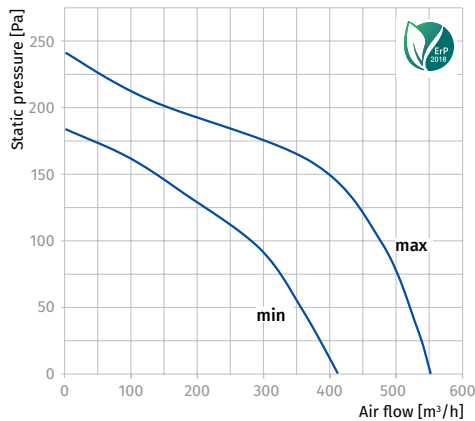
Parameters	Iso-Mix 150		Iso-Mix 200	
	min	max	min	max
Speed				
Voltage [V]	1 ~ 230		1 ~ 230	
Frequency [Hz]	50/60		50/60	
Power [W]	45	52	78	110
Current [A]	0.20	0.23	0.35	0.49
Maximum air flow [m <sup>3</sup> /h (l/s)]	410 (114)	550 (153)	790 (219)	1035 (288)
RPM [min <sup>-1</sup> ]	1985	2640	2000	2460
Sound pressure at 3 m [dBA]	38	43	41	44
Max. transported air temperature [°C]	+60		+60	
SEC class	C		C	
IP rating	IPX4		IPX4	
Motor IP rating	IP44		IP44	
ErP	2018		2018	

### ISO-MIX 150

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	59	32	49	55	53	52	38	28	15	38	48
LWA to outlet [dBA]	61	35	40	44	60	52	44	44	29	40	50
LWA to environment [dBA]	47	37	40	41	40	38	29	22	19	26	36
<b>Max speed</b>											
LWA to inlet [dBA]	63	34	53	60	57	56	41	30	17	43	53
LWA to outlet [dBA]	64	37	42	46	64	56	46	46	30	44	54
LWA to environment [dBA]	53	44	47	48	47	45	34	26	23	33	43

### ISO-MIX 200

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	61	33	52	58	55	54	39	30	16	41	51
LWA to outlet [dBA]	61	42	45	52	55	57	52	45	35	40	50
LWA to environment [dBA]	51	40	46	46	44	41	37	35	30	31	41
<b>Max speed</b>											
LWA to inlet [dBA]	65	35	55	61	59	57	42	31	17	44	54
LWA to outlet [dBA]	66	38	44	48	66	57	48	48	31	46	56
LWA to environment [dBA]	57	44	52	52	49	45	41	39	34	36	46



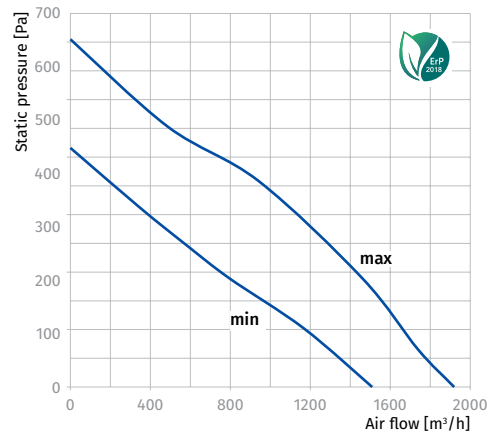
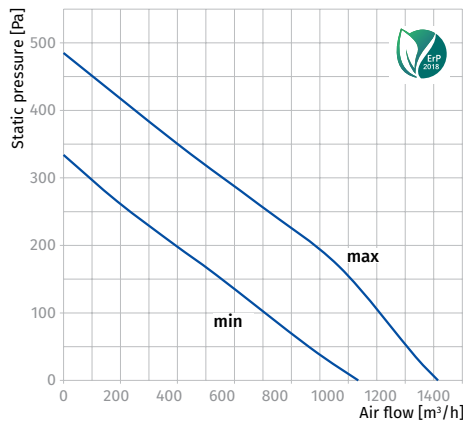
Parameters	Iso-Mix 250		Iso-Mix 315	
	min	max	min	max
Speed				
Voltage [V]	1 ~ 230		1 ~ 230	
Frequency [Hz]	50/60		50/60	
Power [W]	127	178	230	330
Current [A]	0.52	0.79	0.93	1.41
Maximum air flow [m³/h (l/s)]	1035 (288)	1315 (365)	1510 (419)	1920 (533)
RPM [min <sup>-1</sup> ]	1960	2460	2120	2620
Sound pressure at 3 m [dBA]	45	49	46	49
Max. transported air temperature [°C]	+60		+60	
SEC class	-		-	
IP rating	IPX4		IPX4	
Motor IP rating	IP44		IP44	
ErP	2018		2018	

### ISO-MIX 250

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	66	36	56	63	60	59	43	32	17	45	55
LWA to outlet [dBA]	64	37	42	46	63	55	46	46	30	43	53
LWA to environment [dBA]	55	44	48	51	47	44	37	31	25	34	44
<b>Max speed</b>											
LWA to inlet [dBA]	69	38	59	66	63	62	45	34	18	49	59
LWA to outlet [dBA]	75	43	50	54	74	65	54	54	36	54	64
LWA to environment [dBA]	58	47	49	53	53	49	44	39	31	38	48

### ISO-MIX 315

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	67	36	57	63	61	59	43	32	18	46	56
LWA to outlet [dBA]	71	50	54	62	66	67	62	54	42	51	61
LWA to environment [dBA]	56	47	47	52	50	45	41	37	29	36	46
<b>Max speed</b>											
LWA to inlet [dBA]	70	38	60	67	64	62	45	34	18	49	59
LWA to outlet [dBA]	75	53	56	66	69	71	66	56	44	54	64
LWA to environment [dBA]	60	51	52	54	55	50	46	43	35	40	50



# Iso-Mix EC

## Sound insulated inline mixed flow fans with EC motor

### Use

- Combined supply and exhaust ventilation systems of various commercial and industrial spaces with stringent noise requirements (such as libraries, conference halls, school classrooms, offices).
- For ventilation air ducts requiring high pressure, powerful air flow and low noise level.
- Compatible with Ø 150 up to Ø 315 mm air ducts.



**Air flow:**  
up to 1970 m<sup>3</sup>/h  
547 l/s



**Power:**  
from 55 W



**Noise level:**  
from 20 dBA



### Features

- The new series of **Iso-Mix EC** duct fan series is provided with a special sound insulated casing which ensures silent operation and excellent aerodynamic characteristics.
- Iso-Mix EC** fans combine the versatility and outstanding performance of both axial and centrifugal fans producing a powerful air flow and high pressure while retaining the signature energy efficiency and response of EC motors.
- Several fans can be integrated into a single computer controlled system with sensor feedback combined with speed control across the entire dynamic range.

- EC motor has no friction and wearing parts as capacitor and brushes. Instead a maintenance free EC controller electronic circuit board is used.
- The impeller is dynamically balanced.
- The fan is compatible with 50 Hz and 60 Hz power mains and the maximum speed does not depend on power mains frequency.
- All motors have a sealed ball bearing motor with a service life of up to 40 000 hours, are 2 speed with an exterior two speed switch and can be fitted with a speed controller.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.

### Design

- The external casing is made of steel with a polymer coating.
- The internal casing perforations conduct sound waves and direct them at the noise absorbing material at a specific angle. Noise and heat insulation is ensured by a mineral wool layer 50 mm in thickness. Wideband noise control is achieved by means of special casing perforation and the use of noise absorbing material.
- The inner casing and the impeller are made of durable high quality plastic.
- Conical impellers with specially profiled blades help boost angular velocity of the air flow resulting in higher pressure and air capacity compared to the conventional designs. The combination of a diffuser, a specially designed impeller and flow straightener vanes at the fan outlet allow, for an optimum flow distribution to achieve high capacity and increased air pressure without generating excessive noise.
- The fan casing is equipped with an external water tight terminal box for electrical connections.

### Speed Control

- The fan speed is controlled with a 0–10 V control signal from the following sources:
  - integrated or external speed controller
  - controller with sensors
  - central BMS system.
- The control signal value changes depending on air temperature, pressure, smoke concentration and other parameters.
- During signal value change the fan with EC motor correspondingly changes the rotations speed and delivers required air volume to the ventilation system.
- The computer central building management systems (BMS) enable integration of several EC motors in network and precise individual operation control for each fan.

### Motor

- High efficient direct current EC motor.
- EC technology meets the up to date requirements to energy saving and controllable ventilation and provides up to 35 % energy saving as compared to asynchronous motors.
- EC motors ensure totally controllable speed range for the fan and has integrated overheating protection with automatic restart.

### Mounting

- The fans are designed to be used with round air ducts.
- The fan casing has mounting brackets for convenient installation onto the floor, walls or ceiling. The ducts can be fitted at any angle relative to the fan axis.
- Make sure to provide sufficient maintenance access during fan installation. Electrical connection and installation must be performed in accordance with the instruction manual and the electrical connections diagram applied to the terminal box.
- A single system may have several fans installed in parallel to boost the output capacity or in series to boost the working pressure.

#### Designation key

Series	Motor type	Spigot diameter [mm]
Iso-Mix	EC: electronically commutated motor	150; 200; 250; 315

#### Accessories

Filter box	Speed controller	Grilles and cowls	Ducting	Low profile ducting	Backdraft damper	Fire damper

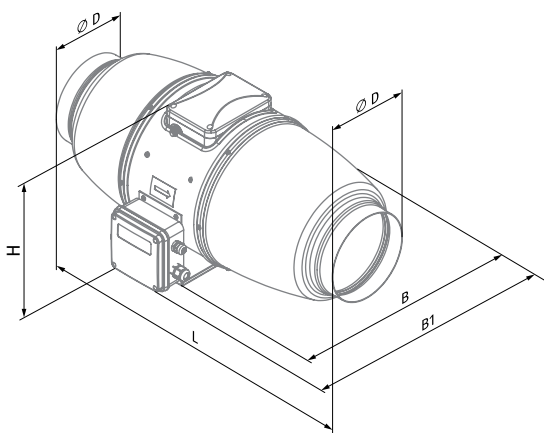


### Ordering Information

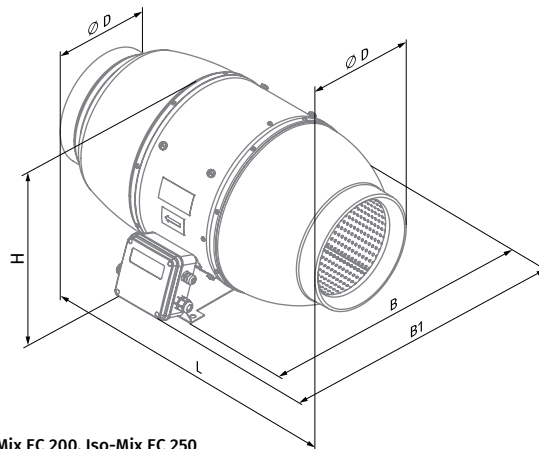
Part Number	Model	Description
BLATURBOEC150MIX	Iso-Mix EC 150	MIXFLO 150 mm FAN EC MOTOR - SILENT SERIES
BLATURBOEC200MIX	Iso-Mix EC 200	MIXFLO 200 mm FAN EC MOTOR - SILENT SERIES
BLATURBOEC250MIX	Iso-Mix EC 250	MIXFLO 250 mm FAN EC MOTOR - SILENT SERIES
BLATURBOEC315MIX	Iso-Mix EC 315	MIXFLO 315 mm FAN EC MOTOR - SILENT SERIES

### Overall dimensions [mm]

Type	Ø D	B	B1	H	L
Iso-Mix EC 150	147	273	314	264	579
Iso-Mix EC 200	198	343	393	296	558
Iso-Mix EC 250	248	402	452	363	664
Iso-Mix EC 315	313	478	528	455	785



Iso-Mix EC 150, Iso-Mix EC 315



Iso-Mix EC 200, Iso-Mix EC 250

## Technical Data

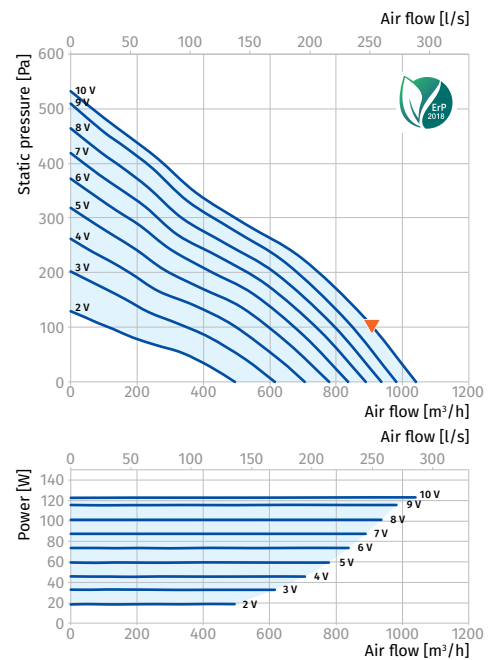
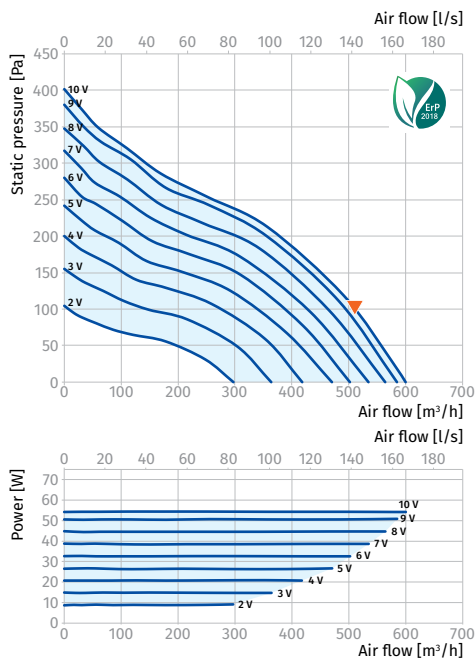
Parameters	Iso-Mix EC 150	Iso-Mix EC 200	Iso-Mix EC 250	Iso-Mix EC 315
Voltage [V / 50 Hz]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Power [W]	55	123	169	284
Current [A]	0.48	1.02	1.38	1.25
Maximum air flow [m <sup>3</sup> /h (l/s)]	600 (167)	1040 (289)	1285 (357)	1970 (547)
RPM [min <sup>-1</sup> ]	3390	3390	2870	2826
Sound pressure at 3 m [dBA]	20-41	22-48	24-50	26-52
Transported air temperature [°C]	-25...+55	-25...+55	-25...+55	-25...+55
IP rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	B	-	-	-
ErP	2018	2018	2018	2018

### ISO-MIX EC 150(160)

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	61	45	58	58	41	37	33	30	23	41	51
L <sub>WA</sub> to outlet [dBA]	58	47	58	46	43	39	32	27	20	38	48
L <sub>WA</sub> to environment [dBA]	58	48	48	50	57	45	43	36	30	38	48

### ISO-MIX EC 200

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	68	37	47	57	63	63	62	61	55	48	58
L <sub>WA</sub> to outlet [dBA]	70	42	50	59	64	66	64	63	58	50	60
L <sub>WA</sub> to environment [dBA]	63	31	43	53	61	56	53	47	37	43	52

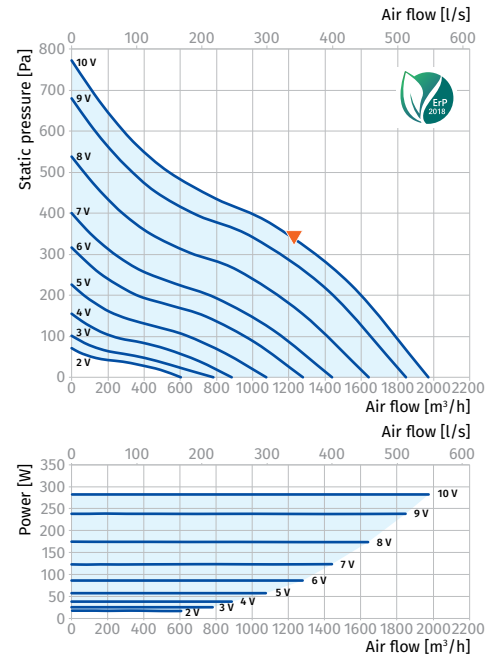
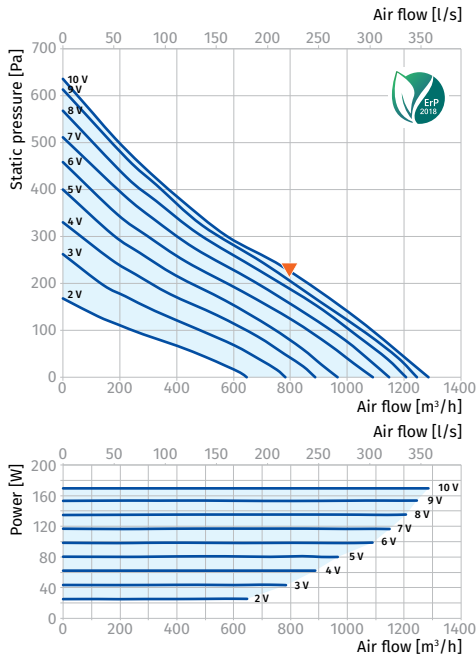


**ISO-MIX EC 250**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>70</b>	45	48	60	66	65	63	58	52	<b>50</b>	<b>60</b>
LWA to outlet [dBA]	<b>74</b>	46	54	62	70	69	66	63	56	<b>54</b>	<b>64</b>
LWA to environment [dBA]	<b>63</b>	40	45	52	60	57	51	43	31	<b>42</b>	<b>52</b>

**ISO-MIX EC 315**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>72</b>	41	55	64	65	70	65	63	55	<b>52</b>	<b>62</b>
LWA to outlet [dBA]	<b>77</b>	52	61	67	74	71	69	67	62	<b>57</b>	<b>66</b>
LWA to environment [dBA]	<b>66</b>	33	48	58	60	63	57	50	38	<b>46</b>	<b>55</b>



# Centro

## Inline centrifugal fans

### Use

- Supply and extraction ventilation of offices, bathrooms, toilets, laundries, kitchens, ensembles in apartments, hotels, homes and commercial buildings.
- Compatible with Ø 150 up to 315 mm round air ducts.



**Air flow:**  
up to 1700 m<sup>3</sup>/h  
472 l/s



**Power:**  
from 80 W



**Noise level:**  
from 65 dBA



### Design

- High quality durable plastic casing.
- Aerodynamically shaped casing.
- Airtight mounting box.

### Motor

- 220–240 V single phase at 50 Hz.
- All motors have a sealed ball bearing motor with a service life of up to 40,000 hours.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.

### Wiring

- All fans come standard with a 1.2 m lead and 2 pin plug.
- Fans can be speed controlled.

### Mounting

- Due to compact design the fan is the ideal solution for mounting in limited spaces.
- Any mounting position.
- Wall or ceiling mounting with fixing brackets supplied as a standard.
- Flexible air ducts are fixed on the fan spigots.



INLINE FANS

### Designation key

Series	Duct diameter [mm]	Motor modifications
Centro	150; 200; 250; 315	max: high powered motor

### Ordering Information

Part Number	Model	Description
BLACENTRO150	Centro 150	INLINE FAN CENTRIFUGAL 150 mm
BLACENTRO200	Centro 200	INLINE FAN CENTRIFUGAL 200 mm
BLACENTRO250	Centro 250	INLINE FAN CENTRIFUGAL 250 mm
BLACENTRO315	Centro 315	INLINE FAN CENTRIFUGAL 315 mm
BLACENTRO315MAX	Centro 315 max	INLINE FAN CENTRIFUGAL 315 mm

### Accessories

Filter box

Speed controller

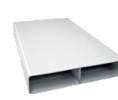
Grilles and cowls

Ducting

Low profile ducting

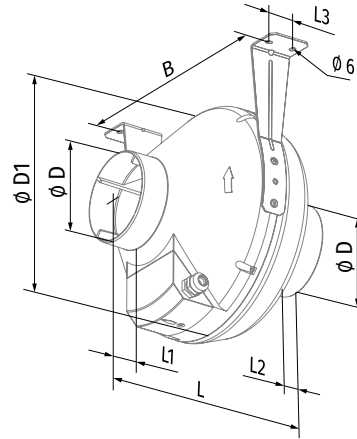
Backdraft damper

Fire damper



**Overall Dimensions [mm]**

Type	∅ D	∅ D1	B	L	L1	L2	L3	Weight [kg]
Centro 150	150/160	300	310	286	30	30	30	2.45
Centro 200	200	340	354	276	30	30	40	3.00
Centro 250	250	340	354	265	30	30	40	4.30
Centro 315	315	400	414	276	40	55	40	4.85
Centro 315 max	315	400	414	276	40	55	40	4.85



## Technical Data

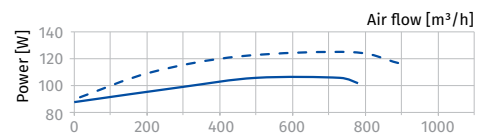
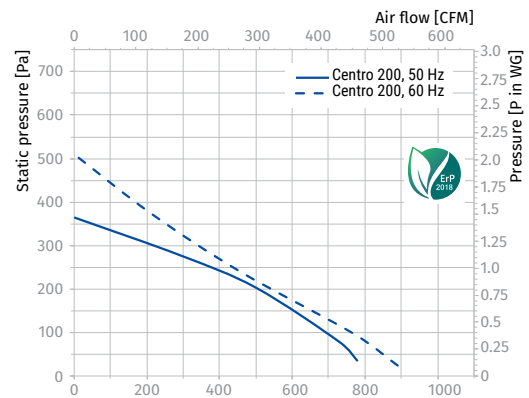
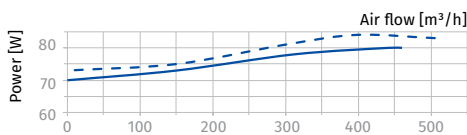
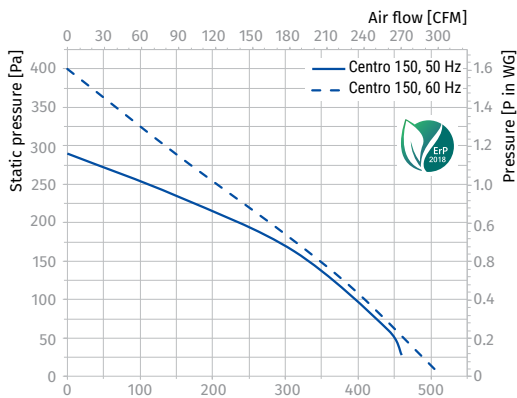
Parameters	Centro 150		Centro 200	
Voltage [V]	1 ~ 230		1 ~ 230	
Frequency [Hz]	50	60	50	60
Power [W]	80	84	107	132
Current [A]	0.35	0.37	0.47	0.58
Maximum air flow [m <sup>3</sup> /h (l/s)]	460 (128)	505 (140)	780 (217)	890 (247)
RPM [min <sup>-1</sup> ]	2725	2840	2660	2765
Sound pressure at 3 m [dBA]	69	69	65	65
Max. transported air temperature [°C]	-25...+55	-25...+50	-25...+55	-25...+50
SEC class	B	-	B	-
IP rating	IPX4		IPX4	
Motor IP rating	IP44		IP44	
ErP	2018		2018	

### CENTRO 150

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	53	87	86	75	74	71	68	54	69	79
LWA to outlet [dBA]	90	53	88	85	72	71	66	65	52	69	79
LWA to environment [dBA]	63	26	46	55	57	57	57	47	35	42	52

### CENTRO 200

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	85	47	74	81	77	77	78	70	59	65	75
LWA to outlet [dBA]	83	44	73	77	75	75	78	70	60	63	73
LWA to environment [dBA]	66	27	48	59	61	61	59	51	39	46	56

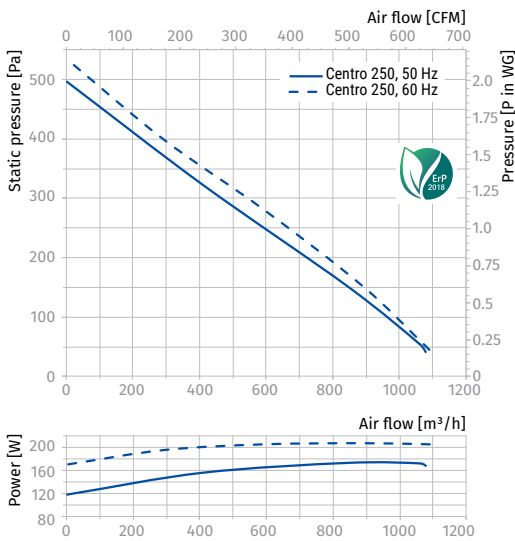




Parameters	Centro 250		Centro 315		Centro 315 max	
Voltage [V]	1 ~ 230		1 ~ 230		1 ~ 230	
Frequency [Hz]	50	60	50	50	50	
Power [W]	173	207	200	310		
Current [A]	0.76	0.9	0.88	1.36		
Maximum air flow [m³/h (l/s)]	1080 (300)	1090 (303)	1340 (372)	1700 (472)		
RPM [min <sup>-1</sup> ]	2090	2120	2655	2590		
Sound pressure at 3 m [dBA]	70	70	66	73		
Max. transported air temperature [°C]	-25...+55	-25...+50	-25...+55	-25...+45		
SEC class	B	-	-	-		
IP rating	IPX4		IPX4		IPX4	
Motor IP rating	IP44		IP44		IP44	
ErP	2018		2018		2018	

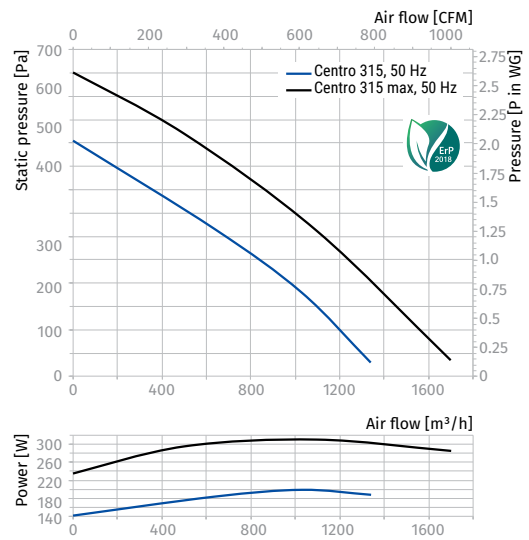
**CENTRO 250**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	61	78	85	83	85	81	77	65	70	80
LWA to outlet [dBA]	88	64	77	73	82	84	82	77	63	68	78
LWA to environment [dBA]	69	35	49	61	64	64	62	50	39	49	59



**CENTRO 315, CENTRO 315 MAX**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Centro 315</b>											
LWA to inlet [dBA]	86	51	73	71	75	81	82	77	68	66	76
LWA to outlet [dBA]	87	55	66	76	73	81	84	77	69	66	76
LWA to environment [dBA]	69	30	48	59	63	65	62	52	38	48	58
<b>Centro 315 max</b>											
LWA to inlet [dBA]	93	56	80	78	82	88	89	84	74	73	83
LWA to outlet [dBA]	93	59	72	82	79	87	90	83	75	72	82
LWA to environment [dBA]	78	33	54	63	71	73	73	63	55	57	67



INLINE FANS

# Centro EC

## Inline centrifugal fans with EC motor

### Use

- Supply and extraction ventilation and air conditioning systems of various premises requiring cost saving controllable ventilation.
- Supply and extraction ventilation of offices, bathrooms, toilets, laundries, kitchens, ensembles in apartments, hotels, homes and commercial buildings.
- Compatible with Ø 150 up to 315 mm round air ducts.



**Air flow:**  
up to 1500 m<sup>3</sup>/h  
417 l/s



**Power:**  
from 82 W



**Noise level:**  
from 29 dBA



### Design

- Durable, impact resistant and corrosion free ABS-plastic casing.
- Aerodynamically shaped casing.
- Airtight terminal box for connection to power mains.

### Motor

- High efficient direct current EC motor with external rotor and backward curved blades.
- EC technology meets the up to date requirements to energy saving and controllable ventilation and provides up to 35 % energy saving as compared to asynchronous motors.
- EC motors ensure totally controllable speed range for the fan and has integrated overheating protection with automatic restart.
- EC motors have no friction and wearing parts as capacitor and brushes. Instead a maintenance free EC controller electronic circuit board is used.
- The impeller is dynamically balanced.
- The fan is compatible with 50 Hz and 60 Hz power mains and the maximum speed does not depend on power mains frequency.
- All motors have a sealed ball bearing motor with a service life of up to 40 000 hours, are 2 speed with an exterior two speed switch and can be fitted with a speed controller.
- All motors have manual reset thermal overload protection as required for inline duct fans AS/NZS60335-2-80:2004.

### Wiring

- Comes with a 1.2 m lead, 2 pin plug.

### Speed Control

- The fan speed is controlled with a 0–10 V control signal from the following sources:
  - integrated or external speed controller
  - controller with sensors
  - central BMS system.
- The control signal value changes depending on air temperature, pressure, smoke concentration and other parameters.
- During signal value change the fan with EC motor correspondingly changes the rotations speed and delivers required air volume to the ventilation system.
- The computer central building management systems (BMS) enable integration of several EC motors in network and precise individual operation control for each fan.

### Mounting

- The fans are designed for duct mounting in any point of the ventilation system with the casing mounted at any angle. In case of vertical mounting a protective outer hood must be installed on the top.
- Fixation to the floor wall or ceiling is performed with the supplied mounting brackets.
- Electric connection and installation must be performed in compliance with the manual and the wiring diagram on the terminal box.



Mounting bracket for easy installation supplied with the fan

#### Designation key

Series	Motor	Spigot diameter [mm]
Centro	EC: electronically commutated motor	150; 200; 250; 315

#### Accessories

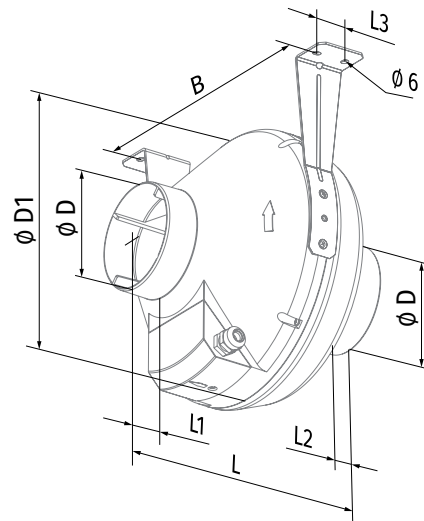


### Ordering Information

Part Number	Model	Description
BLACENTROEC150	Centro EC 150	INLINE FAN CENTRIFUGAL 150 mm EC MOTOR
BLACENTROEC200	Centro EC 200	INLINE FAN CENTRIFUGAL 200 mm EC MOTOR
BLACENTROEC250	Centro EC 250	INLINE FAN CENTRIFUGAL 250 mm EC MOTOR
BLACENTROEC315	Centro EC 315	INLINE FAN CENTRIFUGAL 315 mm EC MOTOR

### Overall Dimensions [mm]

Model	∅ D	∅ D1	B	L	L1	L2	L3	Weight [kg]
Centro EC 150	150/160	300	310	286	30	30	30	2.5
Centro EC 200	200	340	354	276	30	30	40	3
Centro EC 250	250	340	354	265	30	30	40	4.3
Centro EC 315	315	400	414	276	40	55	40	4.9



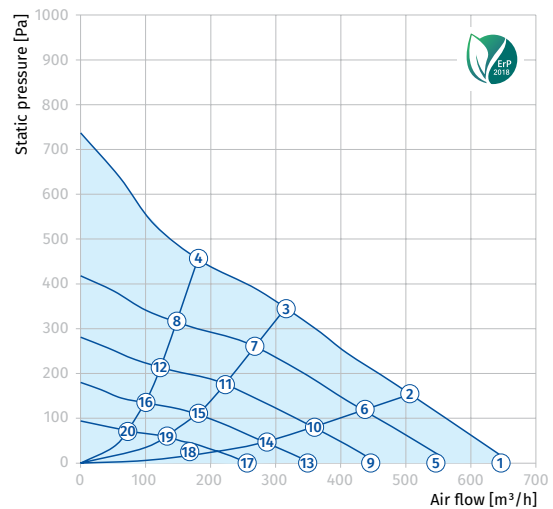
## Technical Data

Parameters	Centro EC 150	Centro EC 200	Centro EC 250	Centro EC 315
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50	50	50	50
Power [W]	82	84	165	165
Current [A]	0.63	0.64	1.1	1.15
Maximum air flow [m³/h (l/s)]	630 (175)	885 (246)	1250 (347)	1500 (417)
RPM [min <sup>-1</sup> ]	3400	2700	2600	2500
Sound pressure level at 3 m [dBA]	30-72	29-67	32-69	32-69
Transported air temperature [°C]	-25...+60	-25...+60	-25...+60	-25...+60
SEC class	B	B	-	-
IP rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
ErP	2018	2018	2018	2018

### CENTRO EC 150

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	93	55	90	89	77	76	73	70	56	72	82
L <sub>WA</sub> to outlet [dBA]	93	55	91	88	74	73	68	67	54	72	82
L <sub>WA</sub> to environment [dBA]	66	26	48	58	61	60	59	51	39	45	55

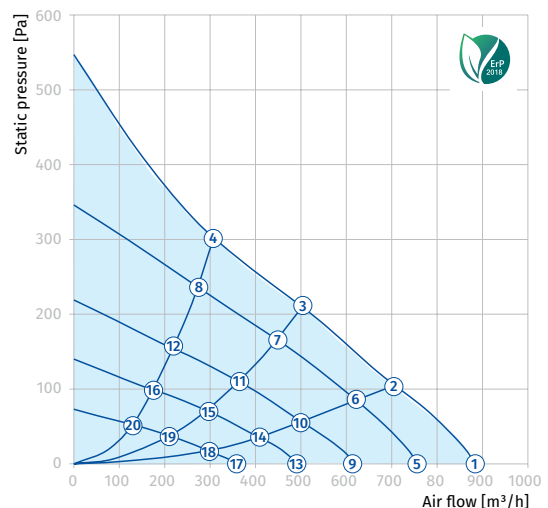
Point	Power [W]	Point	Power [W]
1	82	11	31
2	82	12	27
3	82	13	17
4	82	14	17
5	54	15	17
6	57	16	16
7	53	17	9
8	49	18	9
9	32	19	8
10	33	20	8



### CENTRO EC 200

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	87	48	76	84	79	79	80	72	61	67	77
L <sub>WA</sub> to outlet [dBA]	85	45	75	79	77	77	80	72	62	64	74
L <sub>WA</sub> to environment [dBA]	67	27	49	60	62	61	60	52	39	47	57

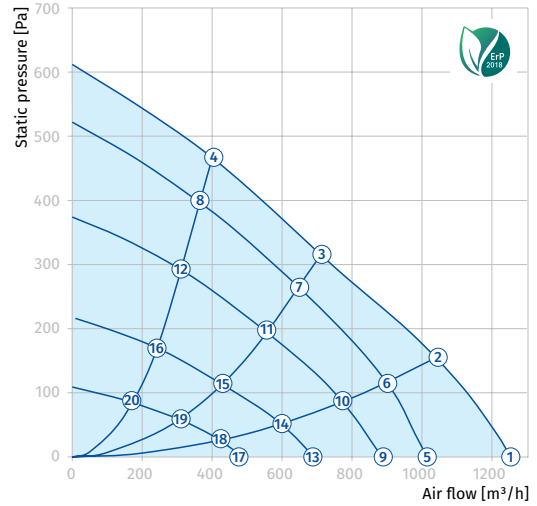
Point	Power [W]	Point	Power [W]
1	84	11	32
2	84	12	31
3	83	13	16
4	82	14	18
5	51	15	18
6	54	16	17
7	58	17	8
8	55	18	8
9	28	19	9
10	32	20	8



**CENTRO EC 250**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>89</b>	60	77	84	82	84	80	76	64	<b>69</b>	<b>79</b>
LWA to outlet [dBA]	<b>87</b>	63	76	72	81	83	81	76	62	<b>67</b>	<b>77</b>
LWA to environment [dBA]	<b>68</b>	30	49	58	62	65	61	52	38	<b>48</b>	<b>58</b>

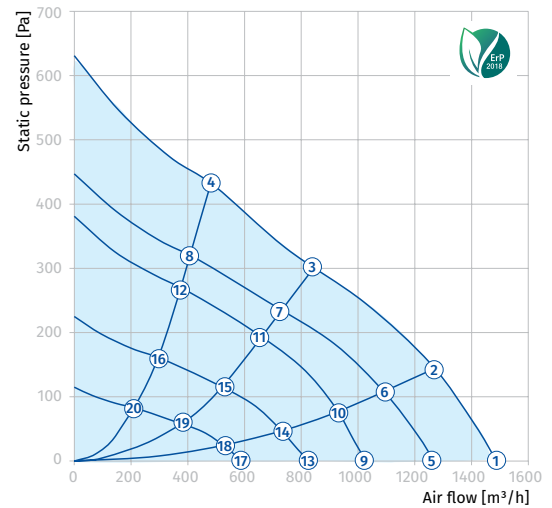
Point	Power [W]	Point	Power [W]
1	152	11	89
2	161	12	78
3	165	13	37
4	154	14	40
5	121	15	43
6	131	16	38
7	140	17	16
8	125	18	17
9	76	19	18
10	83	20	16



**CENTRO EC 315**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>86</b>	51	73	71	75	81	82	77	68	<b>66</b>	<b>76</b>
LWA to outlet [dBA]	<b>87</b>	55	66	76	73	81	84	77	69	<b>67</b>	<b>77</b>
LWA to environment [dBA]	<b>69</b>	30	48	56	62	64	64	56	49	<b>48</b>	<b>58</b>

Point	Power [W]	Point	Power [W]
1	149	11	90
2	164	12	84
3	165	13	37
4	158	14	39
5	94	15	45
6	106	16	41
7	112	17	17
8	104	18	19
9	74	19	19
10	83	20	17



# Ducto

## Inline fans

### Use

- Low noise axial inline fans for exhaust or supply ventilation with superior capacity up to 340 m<sup>3</sup>/h.
- Designed for PVC ducting systems or flexible ducts.
- From low to medium air flow motion for short distances at low air resistance.
- Compatible with Ø 100, 125 and 150 mm air ducts.



**Air flow:**  
up to 340 m<sup>3</sup>/h  
94 l/s



**Power:**  
from 7.5 W



**Noise level:**  
from 25 dBA



### Design

- The casing and the impeller are made of high quality durable plastic.
- Specially designed mixed flow impeller profile ensures high air flow and low noise level.
- Low energy usage from 7.5 W.
- The models of Blauberg Ducto Series are equipped with a single-phase motor.
- The motor has thermal overheating protection for motor overload prevention.
- Motor on special anti-vibration connectors.

### Control

- Manual speed control with a room light switch. It is not included in the delivery package.
- Smooth speed control with a thyristor speed controller (see Accessories).
- Several fans may be connected to the same controller. The models with timer are not compatible with a speed controller.

### Wiring

- Comes with a 1.2 m lead, 2 pin plug.

### Overall Dimensions and Mounting

- The fan is mounted into a matching duct size. Fastening with clamps in case of flexible duct connection.
- The mounting bracket enables installation of the fan on horizontal and vertical flat surfaces.
- Two fans can be installed in series for higher operation pressure.

### Ducto Kit

- The Ducto loft mounted extractor fan kit is an all in one extraction system for exhaust ventilation of bathrooms, showers, wet rooms and other utility spaces.
- Consist: Ducto 150 fan, flexible air duct 10 m., internal round plastic grille, external square plastic grille, adhesive tape.



RESIDENTIAL FANS

#### Designation key

Series	Spigot diameter	Options
Ducto	100; 125; 150	W1

### Ordering Information

Part Number	Model	Description
BLADUCTO100	Ducto 100	INLINE AXIAL FAN 100 mm
BLADUCTO125	Ducto 125	INLINE AXIAL FAN 125 mm
BLADUCTO150	Ducto 150	INLINE AXIAL FAN 150 mm
BLABDUCTOKIT	Ducto 150 Kit	INLINE AXIAL FAN 150 mm KIT

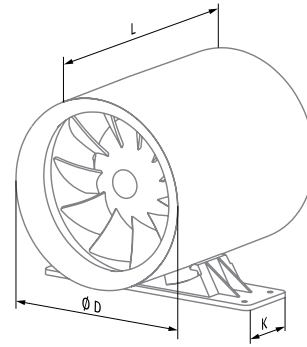
#### Accessories

Filter box	Speed controller	Grilles and cowls	Ducting	Low profile ducting	Backdraft damper	Fire damper



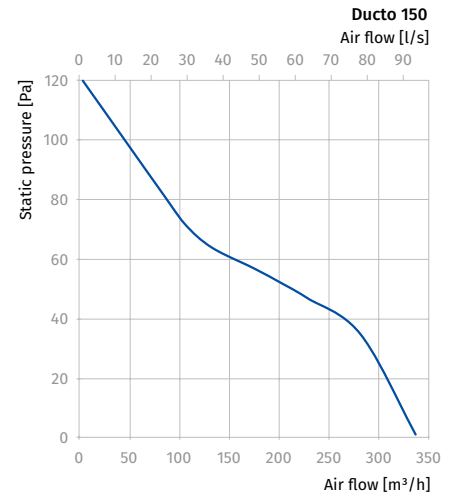
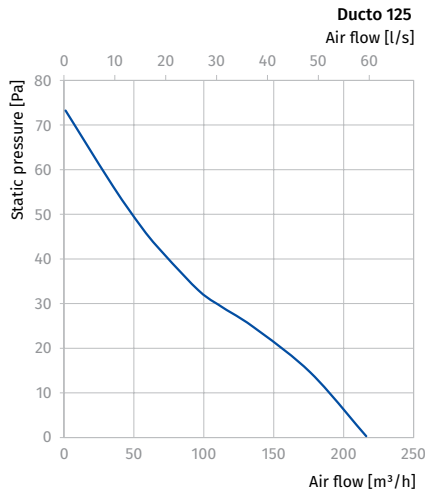
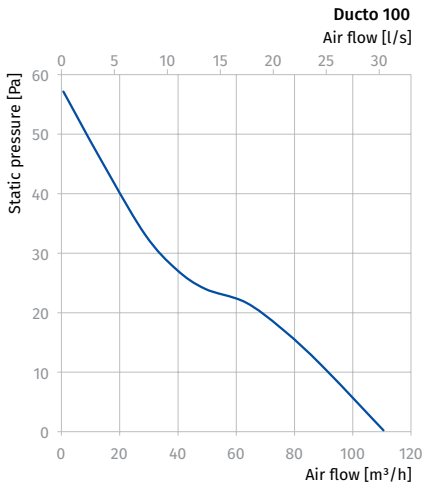
### Overall Dimensions [mm]

Type	Ø D	L	K	Weight [kg]
Ducto 100	100	137.5	53.5	0.61
Ducto 125	125	161.5	53.5	0.75
Ducto 150	150	181.5	53.5	1.3



### Technical Data

Model	Ducto 100	Ducto 125	Ducto 150
Voltage [V]	220-240	220-240	220-240
Frequency [Hz]	50	50	50
Power [W]	7.5	13	22
Current [A]	0.049	0.085	0.095
Air flow [m³/h (l/s)]	110 (31)	215 (60)	340 (94)
RPM [min⁻¹]	2100	2250	2250
Noise level [dBA]	25	33	39



# Bravo

## Exhaust fans

### Features



- Wall and ceiling mounting
- Low noise impeller
- Easy maintenance
- Continuous operation
- Backdraft damper
- Ball bearing motor
- 5 year warranty



**Air flow:**  
up to 305 m<sup>3</sup>/h  
85 l/s



**Power:**  
from 14 W  
**SFP:**  
from 0.28 W/l/s



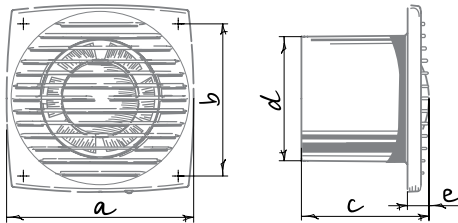
**Noise level:**  
from 35 dBA



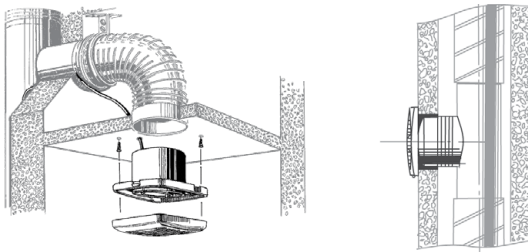
IP34



### Overall Dimensions and Mounting

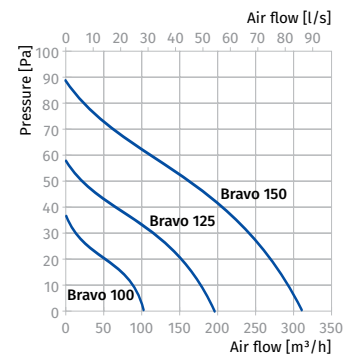


Dimensions [mm]	a	b	c	∅ d	e
Bravo 100	150	122	102	100	17
Bravo 125	176	144	104	125	17
Bravo 150	205	174	124	150	19



### Technical Data

Model	Bravo 100	Bravo 125	Bravo 150
Voltage [V/Hz]	220-240/50	220-240/50	220-240/50
Power [W]	14	16	24
Current [A]	0.085	0.1	0.13
RPM [min <sup>-1</sup> ]	2300	2400	2400
Air flow [m <sup>3</sup> /h (l/s)]	101 (28)	192 (53)	305 (85)
SFP [W/l/s]	0.5	0.3	0.28
Noise level [dBA]	35	37	39



### Ordering Information

Part Number	Model	Description
BLABBRAVO100	Bravo 100	WALL/CEILING FAN 100 mm
BLABBRAVO125	Bravo 125	WALL/CEILING FAN 125 mm
BLABBRAVO150	Bravo 150	WALL/CEILING FAN 150 mm

### Accessories

Flexible air ducts



Grilles and cowls



# Quatro

## Exhaust fans with decorative front panel

### Features



- o Wall and ceiling mounting.
- o Easy maintenance.
- o Low noise impeller.
- o Continuous operation.
- o Backdraft damper.
- o Ball bearing motor.
- o 5 year warranty.



**Air flow:**  
up to 265 m<sup>3</sup>/h  
74 l/s



**Power:**  
from 24 W

**SFP:**  
from 0.33 W/l/s



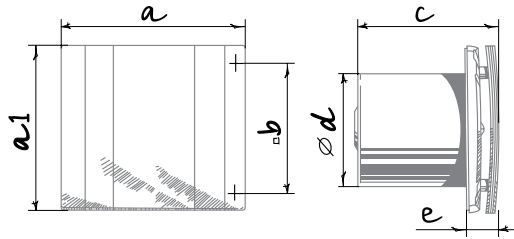
**Noise level:**  
from 37 dBA



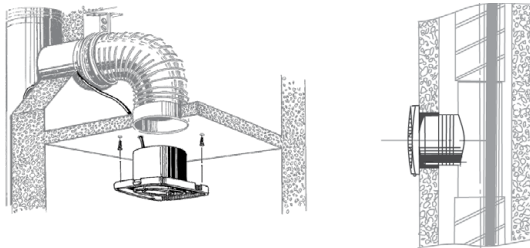
IP34



### Overall Dimensions and Mounting

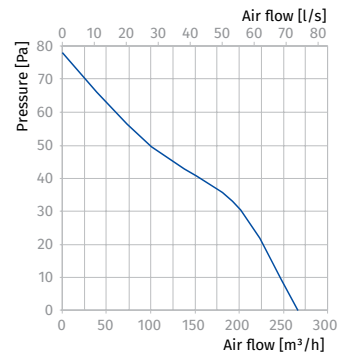


Dimensions [mm]	a	a1	b	c	Ø d	e
Quatro 150	236	207	165	157	150	38



### Technical Data

Model	Quatro 150
Voltage [V/Hz]	220-240/50
Power [W]	24
Current [A]	0.13
RPM [min <sup>-1</sup> ]	2400
Air flow [m <sup>3</sup> /h (l/s)]	265 (74)
SFP [W/l/s]	0.33
Noise level [dBA]	37



### Ordering Information

Part Number	Model	Description
BLABQUATRO150	Quatro 150	WALL FAN 150 mm STANDARD WHITE

#### Accessories

Flexible air ducts



Grilles and cowls



# Wind

## Window exhaust fans

### Features



- Window mounting
- Low noise impeller
- Easy maintenance
- Ball bearing motor
- Continuous operation
- Automatic shutters
- 5 year warranty



**Air flow:**  
up to 295 m<sup>3</sup>/h  
82 l/s



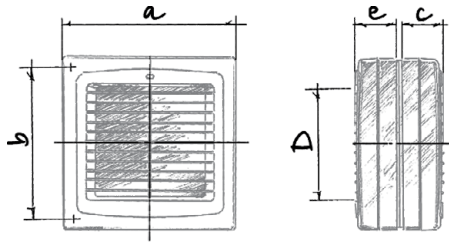
**Power:**  
from 26 W  
**SFP:**  
from 0.32 W/l/s



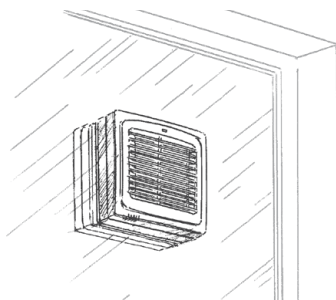
**Noise level:**  
from 41 dBA



### Overall Dimensions and Mounting

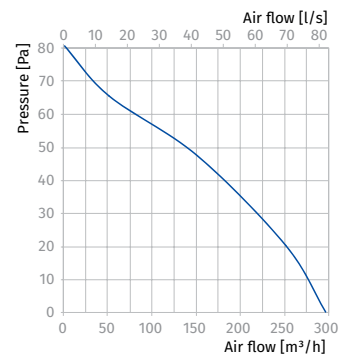


Dimensions [mm]	a	b	e	c	D
Wind 150	210	195	66	60	150



### Technical Data

Model	Wind 150
Voltage [V/Hz]	220-240/50
Power [W]	26
Current [A]	0.13
RPM [min <sup>-1</sup> ]	2400
Air flow [m <sup>3</sup> /h (l/s)]	295 (82)
SFP [W/l/s]	0.32
Noise level [dBA]	41



### Ordering Information

Part Number	Model	Description
BLABWIND150	Wind 150	WALL FAN 150 mm FOR GLASS WITH AUTO SHUTTERS

# BLA920N

## Header Box Fan



### Features

- The Blauberg **BLA920N** offer superior performance in header box fan design with superior performance, low height profile, low noise, good airflow and high pressure.
- Blauberg header box fans are designed for contractors and developers who are looking for quality header box fans with good performance and fast efficient installation times.
- Quick install screw down clips that lock down onto the ceiling provide a fast installation process and a tidy finish, with a clip mounted grille providing a tight secure fit to the ceiling.
- Extraction of air from bathrooms, kitchens, ensuites, toilets, laundries and apartments.

### Design

- Centrifugal side discharge fan, low noise and backdraft damper, made from high quality ABS plastic housing with an injection moulded plastic pure white grille.

### Motor

- 240 V single phase at 50 Hz. All motors have a sealed NSK ball bearing motor with a service life of up to 20,000 hours and come with a thermal overload fuse that cannot be reset.

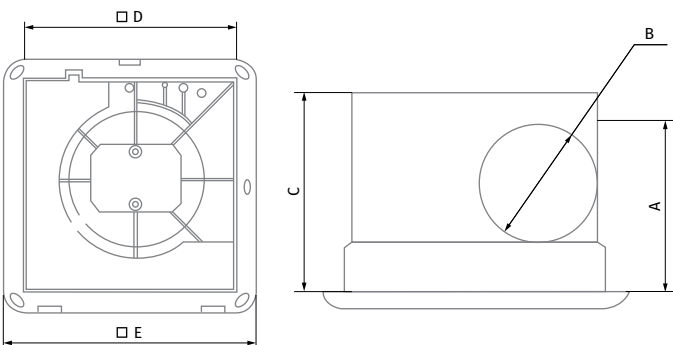
### Wiring

- 1.0 m lead and 2 pin plug.

### Ordering Information

Part Number	Description
BLA920N	Header Box Fan with 125 mm or 150 mm Side Duct Outlet

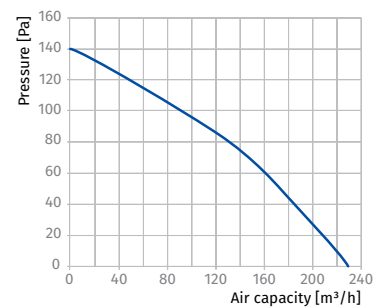
### Overall Dimensions [mm]



Model	A	B	C	D	E
BLA920N	140	150	155	275	320

### Technical Data

Model	BLA920N
Voltage [V/Hz]	220-240/50
Power [W]	30
Current [A]	0.15
Extract capacity [m <sup>3</sup> /h]	234
Noise level [dBA]	41
RPM [min <sup>-1</sup> ]	1150
Installation type	Ceiling
Installation position	Ceiling
DN (diameter nominal) [mm]	125/150
Air flow temperature [°C]	-10 ... +45
Index of protection	IP24
Internal thermal protection	Fuse
Casting material	ABS plastic



# BLA150N

## Header Box Fan

### Features

- The Blauberg **BLA150N** header box fans are designed for contractors and developers who are looking for a quality header box fan for the extraction of air in apartment projects.
- Low noise levels and a low height profile allow for installation into limited ceiling space areas.
- Extraction of air from bathrooms, kitchens, ensuites, toilets, laundries, apartments etc.



### Design

- Centrifugal side discharge fan, low noise and backdraft damper, made from high quality ABS plastic housing and injection moulded, spring mounted pure white grille.

### Motor

- 240 V single phase at 50 Hz. All motors have a sealed NSK ball bearing motor with a service life of up to 20,000 hours and come with a thermal overload fuse that cannot be reset.

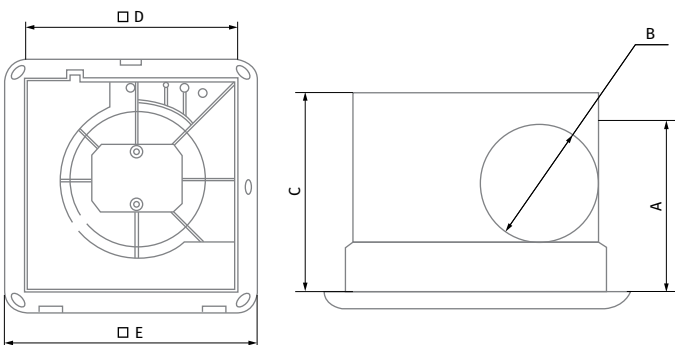
### Wiring

- 1.0 m lead and 2 pin plug.

### Ordering Information

Part Number	Description
BLA150N	150 mm Header Box Fan

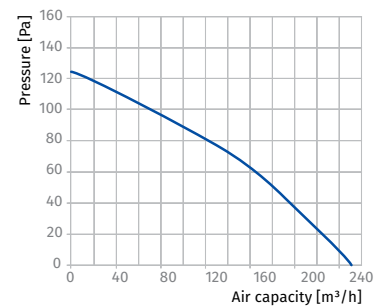
### Overall Dimensions [mm]



Model	A	B	C	D	E
BLA150N	170	150	170	285	340

### Technical Data

Model	BLA150N
Voltage [V/Hz]	220-240/50
Power [W]	50
Extract capacity [m <sup>3</sup> /h]	259
Noise level [dBA]	44
RPM [min <sup>-1</sup> ]	2050
Installation type	Ceiling
Installation position	Ceiling
DN (diameter nominal) [mm]	150
Air flow temperature [°C]	-10 ... +45
Index of protection	IP24
Internal thermal protection	Fuse
Casting material	ABS plastic





# BLA907N

## Header Box Fan



### Features

- The Blauberg **BLA907N** offers superior performance in header box fan design with superior performance, low height profile, low noise, good airflow and high pressure.
- Blauberg header box fans are designed for contractors and developers who are looking for quality header box fans with good performance and fast efficient installation times.
- Extraction of air from bathrooms, kitchens, ensuites, toilets, laundries and apartments.

### Design

- Centrifugal side discharge fan, low noise and backdraft damper, made from high quality ABS plastic housing with an injection moulded plastic pure white grille.

### Motor

- 240 V single phase at 50 Hz. All motors have a sealed NSK ball bearing motor with a service life of up to 20,000 hours and come with a thermal overload fuse that cannot be reset.

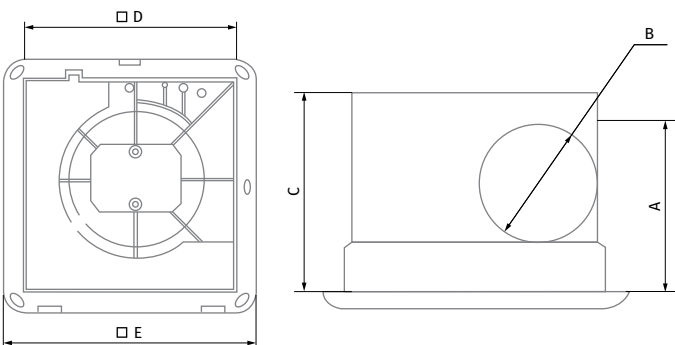
### Wiring

- 1.0 m lead and 2 pin plug.

### Ordering Information

Part Number	Description
BLA907N	Header Box Fan with 100 mm / 150 mm Side Duct Outlet

### Overall Dimensions [mm]



Model	A	B	C	D	E
BLA907N	140	100/150	165	260	300

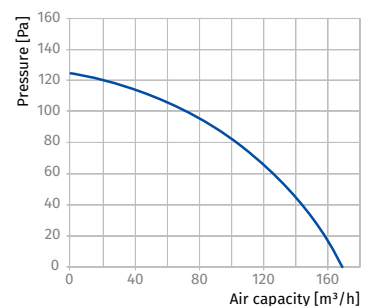
### Mounting

- Quick install screw down clips that lock down onto the ceiling provide a fast installation process and a tidy finish, with a clip mounted grille providing a tight secure fit to the ceiling.



### Technical Data

Model	BLA907N
Voltage [V/Hz]	220-240/50
Power [W]	24
Extract capacity [m³/h]	162
Noise level [dBA]	38
RPM [min <sup>-1</sup> ]	2050
Installation type	Ceiling
Installation position	Ceiling
DN (diameter nominal) [mm]	100
Air flow temperature [°C]	-10 ... +45
Index of protection	IP24
Internal thermal protection	Fuse
Casting material	ABS plastic



# BLA910LED

## Header Box Fan

### Features

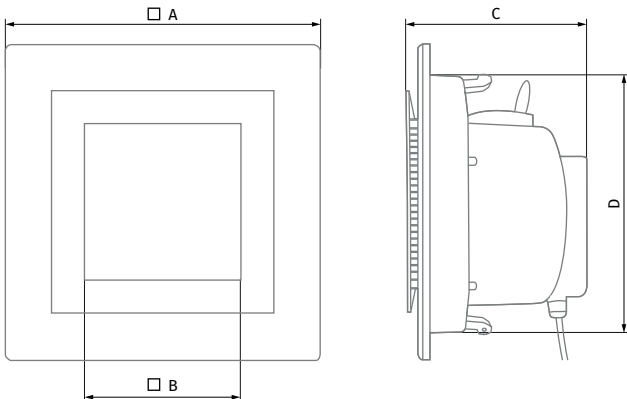
- Stylish white fascia designed to blend into any décor
- Proven reliability, sealed ball bearing motor and backdraft damper
- Horizontal duct outlet for easy installation – where ceiling space is limited (minimum 170 mm)
- Duct adaptor 100 to 150 mm included
- 1.2 m lead & plug
- Extraction of air from bathrooms, kitchens, ensuites, toilets, laundries and apartments.



### Ordering Information

Part Number	Description
BLA910LED	Header Box Fan LED Light 16 W LED 150 mm Outlet

### Overall Dimensions [mm]



Model	A	B	C	D
BLA910LED	300	140	165	240

### Technical Data

Model	BLA910LED
Voltage [V/Hz]	220–240/50
Power [W]	36
Extract capacity [m <sup>3</sup> /h]	216
Noise level @ 3m [dBA]	36
Light Source LED [W]	16
Lumens	1100
Colour Temp [K]	5000
Beam angle	120°
Environmental Protection	IP44



# Vento Expert A50-1 S10 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.
- 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.



**Air flow:**  
up to 50 m<sup>3</sup>/h  
14 l/s



**Heat recovery efficiency:**  
up to 93 %



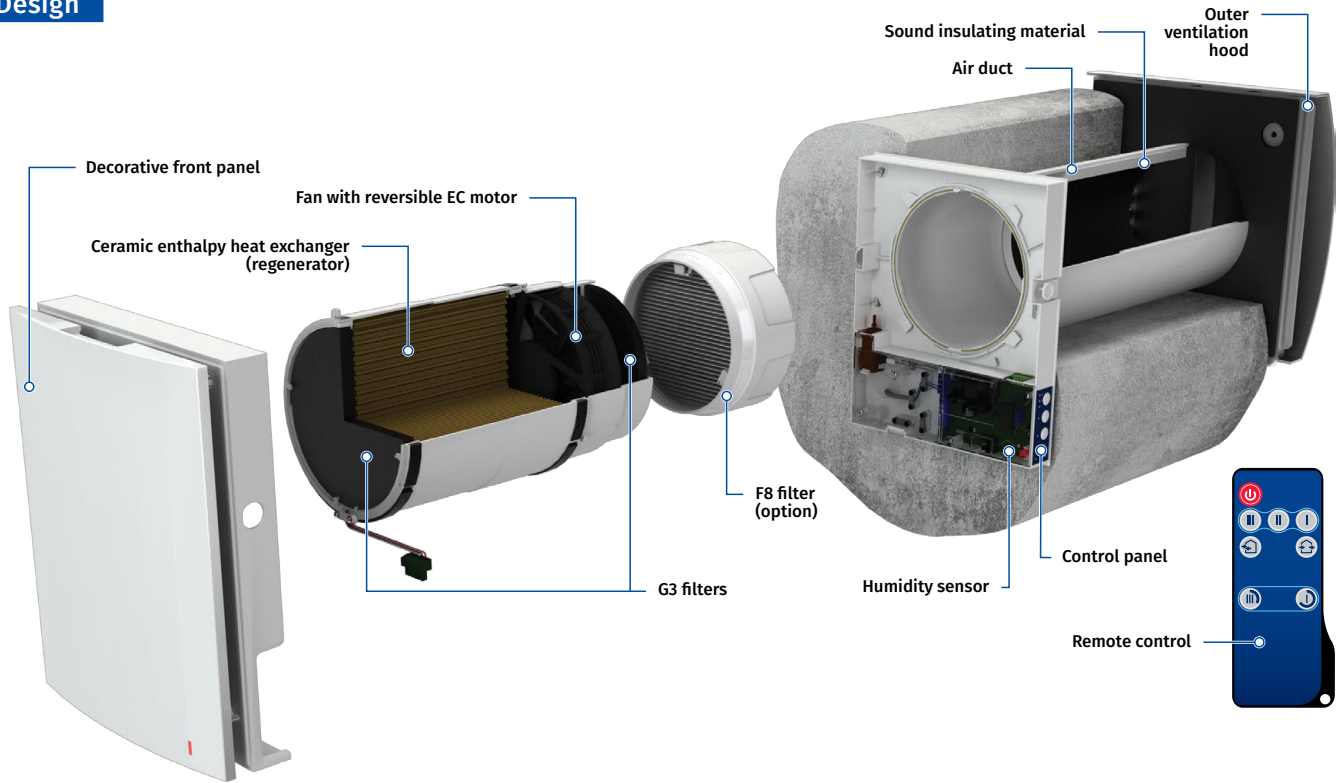
**Power:**  
from 3.61 W  
**SFP:** from 0.75 W/l/s



**Noise level:**  
from 11 dBA



### Design



SINGLE-ROOM UNITS WITH HEAT RECOVERY



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



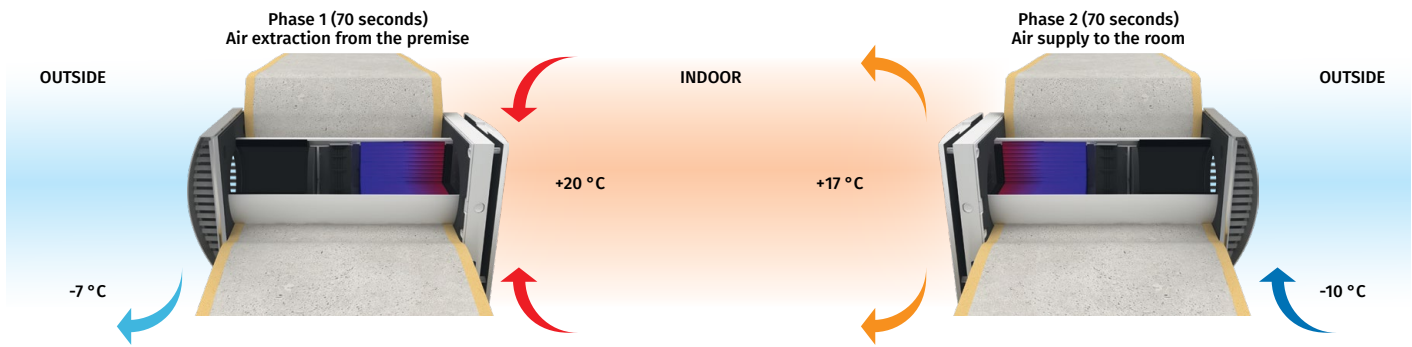
The specially designed front panel can be closed manually to ensure 100 % air tightness and protect against wind impact

### Designation key

Model	Air duct	Rated air flow [m <sup>3</sup> /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 and Moisture Regeneration

### UNIT OPERATING LOGIC IN WINTER PERIOD

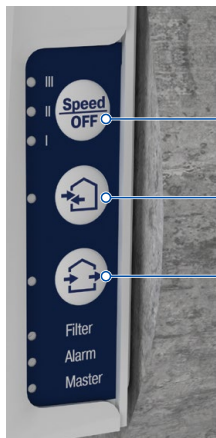


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.

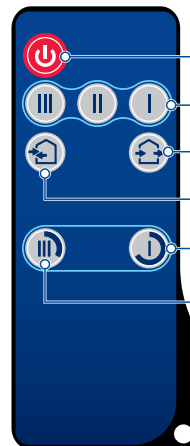
- Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
- When the ceramic regenerator is cooled down, the unit switches to the extract air mode.

## Control

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



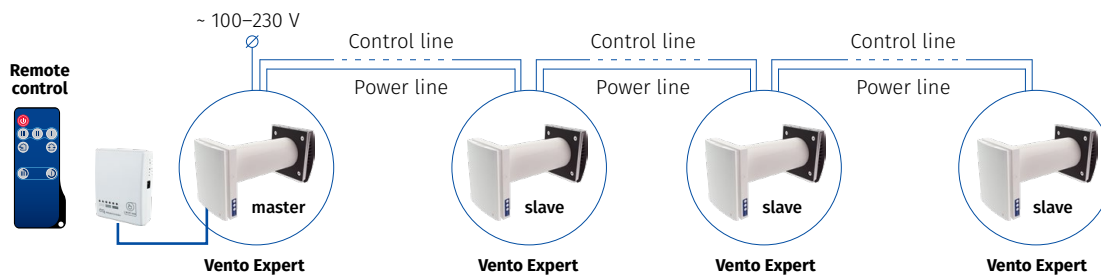
- Speed selection and OFF button
- Heat regeneration mode
- Ventilation mode



- ON/OFF button
- 3 unit speeds
- Ventilation mode
- Heat regeneration mode
- Night timer: low speed for 8 hours
- Party timer: high speed for 4 hours

**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.

**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.

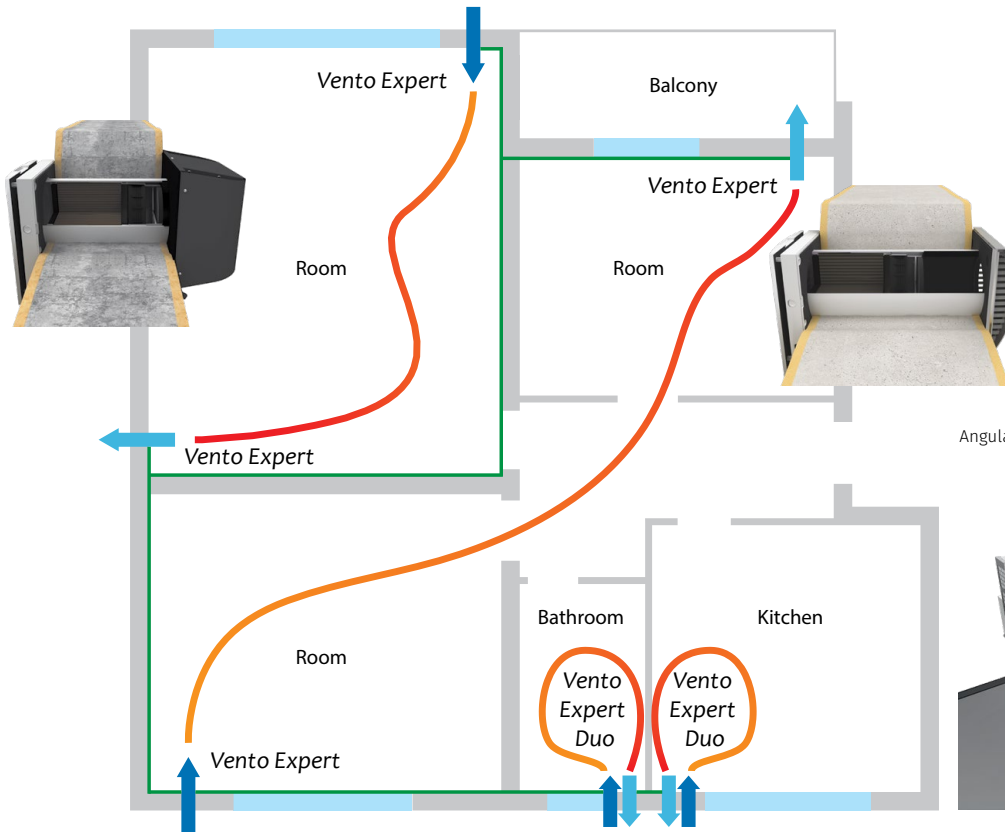


## Ordering Information

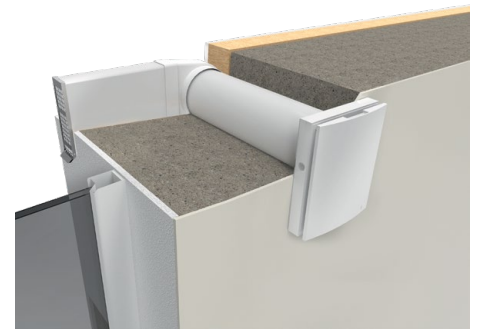
Part Number	Model	Description
BLAVENTOAS0PRO	Vento Expert A50-1 S10 Pro	SINGLE ROOM ERV

## 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.



Angular mounting into a wall with standard thickness using **KIT BlauPlast white 160 / KIT BlauPlast chrome 160**



### Technical data

Parameters	Vento Expert A50-1 S10 Pro		
	I	II	III
Speed			
Voltage [V / 50 (60) Hz]		100-240	
Power [W]	3.61	4.15	5.20
Current [A]	0.025	0.030	0.039
RPM [min <sup>-1</sup> ]	800	1300	1900
Air flow in ventilation mode [m <sup>3</sup> /h (l/s)]	15 (4)	30 (8)	50 (14)
Air flow in heat recovery mode [m <sup>3</sup> /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		
Classification of air flow sensitivity to pressure difference variations in accordance with EN 13141-8	S2		
Indoor/outdoor airtightness classification of the complete unit in accordance with EN 13141-8	D1		
Heat recovery efficiency according to DIBt LÜ-A 20 [%]	up to 93		
Ingress Protection Rating	IP24		

\* maximum air flow 40 m<sup>3</sup>/h

BLAUBERG Vento Expert A50-1 S10 Pro

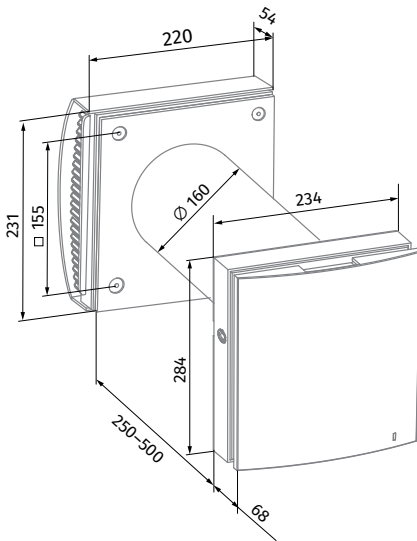
Energy class: **A**

Sound power level: **38 dB**

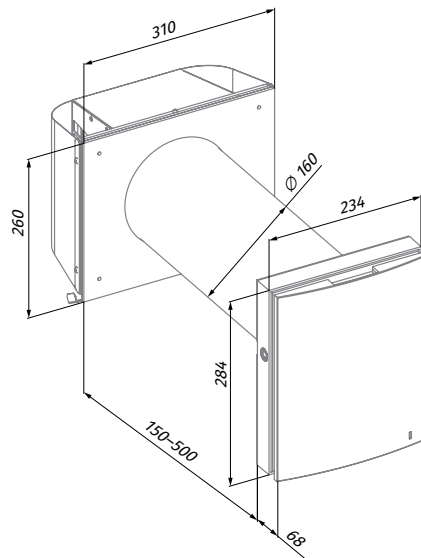
Air flow rate: **25 m<sup>3</sup>/h**

ENERGIA - ЕНЕРГИЯ - ΕΝΕΡΓΕΙΑ - ENERGIA - ENERGY - ENERGIE - ENERGI 2020 1254/2014

### Overall dimensions [mm]





















































Vento Expert A50-1 S10 Pro



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



**Accessories**

Name	Description												
Pre-installation Kit Vento Expert A50-1 S10 	Pre-installation kit for mounting into a wall with standard thickness. Includes: <ul style="list-style-type: none"> <li>• Air duct</li> <li>• AH 160 outer ventilation hood</li> <li>• Plastic foam plug</li> <li>• Plastic foam wedges</li> </ul>												
Pre-installation Kit Vento Expert A50-1 S 	Pre-installation kit for mounting into a thin wall. Includes: <ul style="list-style-type: none"> <li>• Air duct</li> <li>• AH-S chrome 160 outer ventilation hood</li> <li>• Plastic foam plug</li> <li>• Plastic foam wedges</li> </ul>												
Completion Kit Vento Expert A50-1 	Final mounting kit. Includes: <ul style="list-style-type: none"> <li>• Cartridge with a heat regenerator, a fan and G3 filters</li> <li>• Indoor unit with a controller and shutters</li> <li>• Remote control</li> </ul>												
ZL1 Vento 160/150 	Cartridge with heat regenerator for cold climate												
FP Vento Expert A50 G3 	G3 filters (2 pcs.)												
FP Vento Expert A50 F8 	Includes: <ul style="list-style-type: none"> <li>• Plastic frame (1 pc.)</li> <li>• G2 pre-filter (1 pc.)</li> <li>• F8 filter (1 pc.). Filtration rate PM2.5 &gt; 99 %</li> </ul> F8 filter reduces airflow of the unit down to 40 m³/h												
AH-8 white 160 	White painted aluminium outer ventilation hood with frost protection for a cold climate												
AH-8 chrome 160 	Brushed stainless steel outer ventilation hood with frost protection for a cold climate												
AH-10 *colour* 160 	Plastic outer ventilation hood. Available in colours: <table style="display: inline-table; vertical-align: middle;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>white</td> <td>black</td> <td>grey</td> <td>terracotta</td> <td>brown</td> <td>vintage</td> </tr> </table>							white	black	grey	terracotta	brown	vintage
													
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: <table style="display: inline-table; vertical-align: middle;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>white</td> <td>black</td> <td>grey</td> <td>terracotta</td> <td>brown</td> <td>vintage</td> </tr> </table>							white	black	grey	terracotta	brown	vintage
													
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												

Name		Description
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		Remote control
CD-1		CO <sub>2</sub> sensor with LED indication and On/Off button
CD-2		CO <sub>2</sub> sensor

# Vento Expert A50-1 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 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.



**Air flow:**  
up to 50 m<sup>3</sup>/h  
14 l/s



**Heat recovery efficiency:**  
up to 93 %



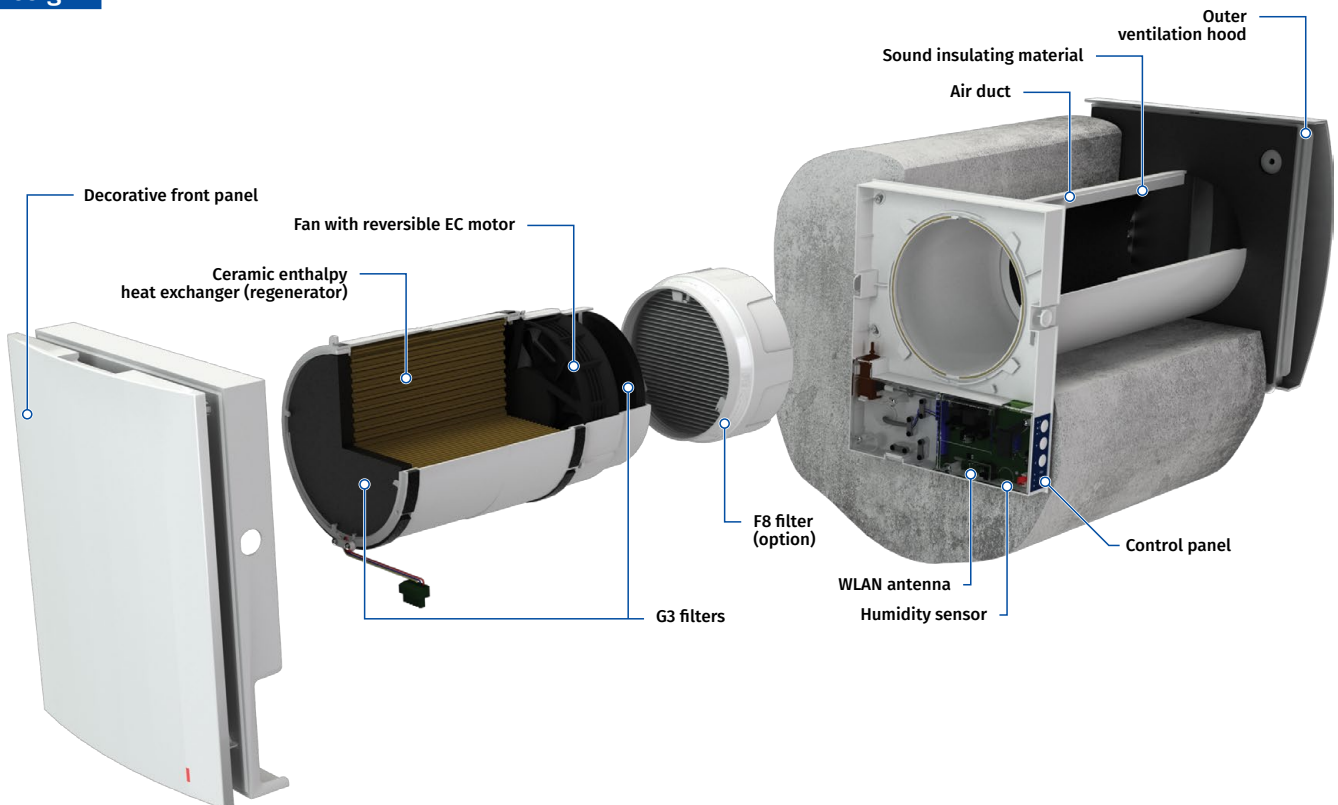
**Power:**  
from 4.45 W  
**SFP:** from 1.02 W/l/s



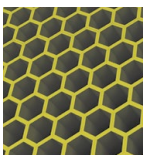
**Noise level:**  
from 11 dBA



### Design



SINGLE-ROOM UNITS WITH HEAT RECOVERY



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

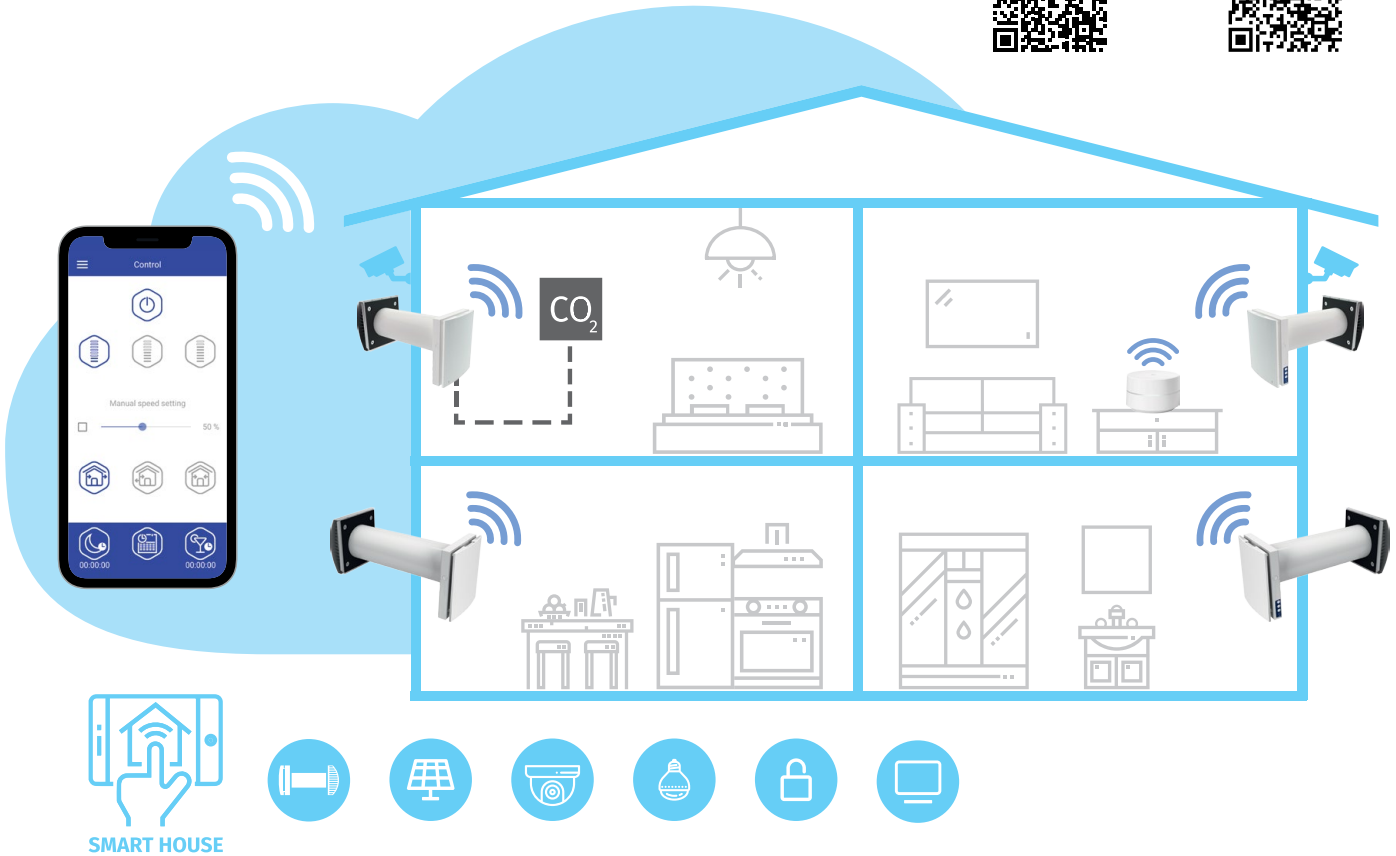
#### Designation key

Model	Air duct	Rated air flow [m <sup>3</sup> /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)	W V.2: Control and setup of the unit with the Wi-Fi mobile application

## 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.



SINGLE-ROOM UNITS WITH HEAT RECOVERY

- 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.

- 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.

### FOR LIVING ROOMS AND BEDROOMS

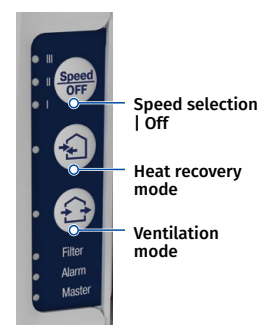
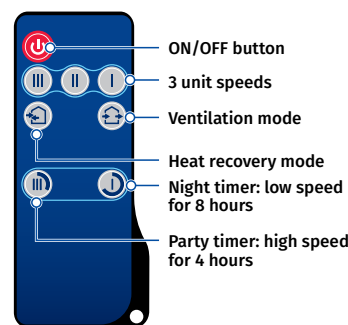


Vento Expert

### FOR KITCHEN AND BATHROOM



Vento Expert Duo



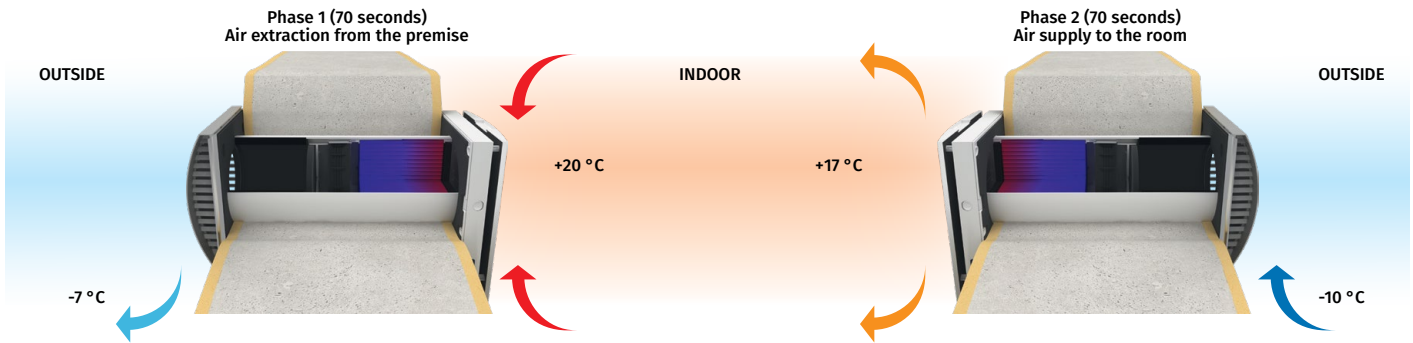
- Vento Expert is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the speed III.

## Ordering Information

Part Number	Model	Description
BLAVENTOA50EXPERTV2	Vento Expert A50-1 S10 W V.2	SINGLE ROOM ERV WITH WIFI CONTROL

**Energy recovery**

**UNIT OPERATING LOGIC IN WINTER PERIOD**

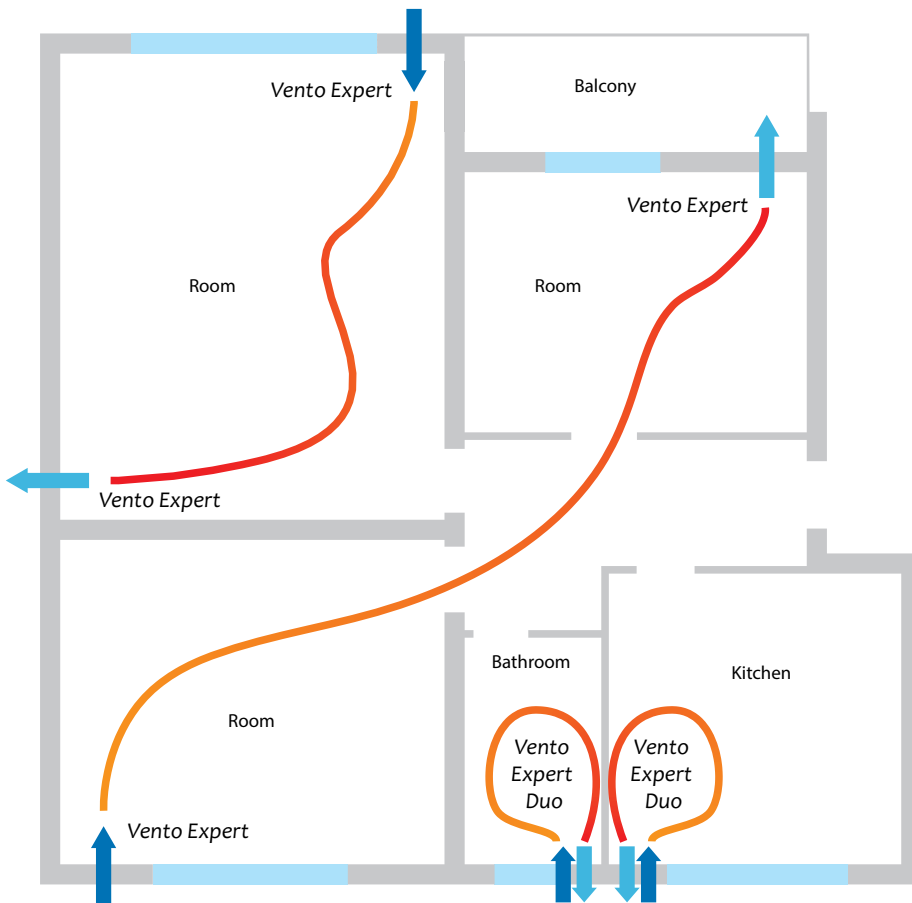


- Warm stale air is extracted from the premise, flows through the ceramic heat exchanger and transfers its heat and moisture to it.
- As the ceramic heat exchanger gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the heat exchanger and absorbs accumulated heat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

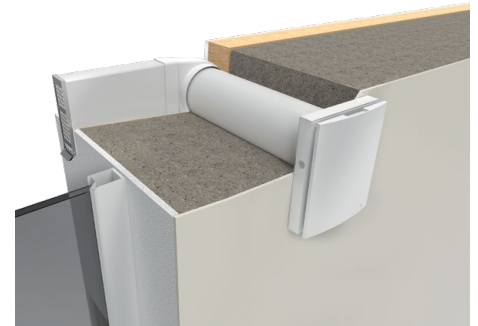
**Mounting**

- 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.

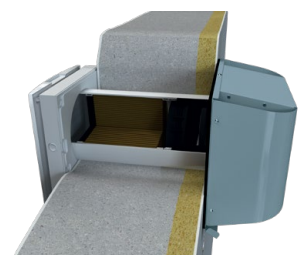
SINGLE-ROOM UNITS WITH HEAT RECOVERY



Angular mounting into a wall with standard thickness using **KIT BlauPlast white 160 / KIT BlauPlast chrome 160**



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		
	I	II	III
Speed			
Voltage [V / 50 (60) Hz]		100-240	
Power [W]	4.45	5.08	7.06
Current [A]	0.035	0.040	0.059
RPM [min <sup>-1</sup> ]	800	1300	1900
Air flow in ventilation mode [m <sup>3</sup> /h (l/s)]	15 (4)	30 (8)	50 (14)
Air flow in energy recovery mode [m <sup>3</sup> /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]	-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	
Classification of air flow sensitivity to pressure difference variations in accordance with EN 13141-8		S2	
Indoor/outdoor airtightness classification of the complete unit in accordance with EN 13141-8		D1	
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%]		up to 93	
Ingress protection rating		IP24	

\* maximum air flow 40 m<sup>3</sup>/h

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BLAUBERG Vento Expert A50-1 S10 W V.2

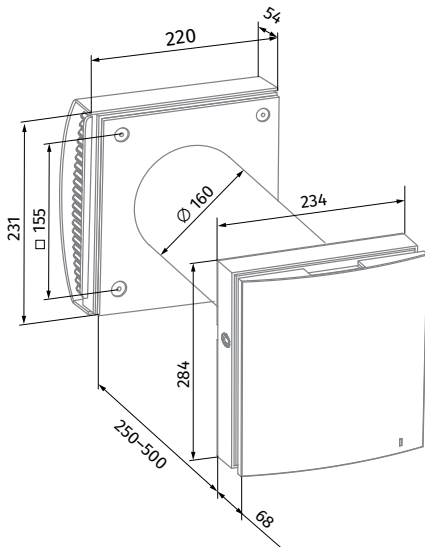
A+ A A- B C D E F G

38 dB

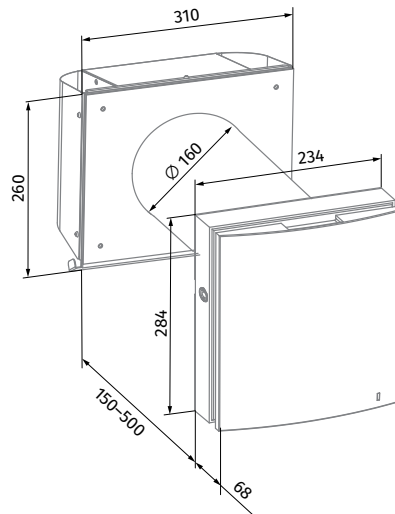
25 m<sup>3</sup>/h

ENERGIA · ЕНЕРГИЯ · ΕΝΕΡΓΕΙΑ · ENERGIA · ENERGIE · ENERGI  
2020 1254/2014

### Overall dimensions [mm]



Vento Expert A50-1 S10 W V.2



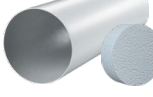
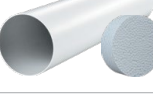







Vento Expert A50-1 S W V.2  
(for thin walls)

## Accessories

Name		Description												
Pre-installation Kit Vento Expert A50-1 S10		Pre-installation kit for mounting into walls with standard thickness. Includes: <ul style="list-style-type: none"> <li>• Air duct</li> <li>• AH-10 white 160 outer ventilation hood</li> <li>• Polystyrene foam plug</li> <li>• Polystyrene foam wedges</li> </ul>												
Pre-installation Kit Vento Expert A50-1 S		Pre-installation kit for mounting into thin walls. Includes: <ul style="list-style-type: none"> <li>• Air duct</li> <li>• AH-S chrome 160 outer ventilation hood</li> <li>• Polystyrene foam plug</li> <li>• Polystyrene foam wedges</li> </ul>												
Completion Kit Vento Expert A50-1 W V.2		Final mounting kit. Includes: <ul style="list-style-type: none"> <li>• Cartridge with a heat exchanger, a fan and G3 filters</li> <li>• Indoor unit with a controller and shutters</li> <li>• Remote control</li> </ul>												
ZL1 Vento 160/150		Cartridge with heat regenerator for cold climate												
FP Vento Expert A50 G3		G3 filters (2 pcs.)												
FP Vento Expert A50 F8		Filter set. Includes: <ul style="list-style-type: none"> <li>• Plastic frame (1 pc.)</li> <li>• G2 pre-filter (1 pc.)</li> <li>• F8 filter (1 pc.). Filtration rate PM2.5 &gt; 99 %</li> </ul>												
AH-8 white 160		White painted aluminium outer ventilation hood with frost protection for a cold climate												
AH-8 chrome 160		Brushed stainless steel outer ventilation hood with frost protection for a cold climate												
AH-10 *colour* 160		Plastic outer ventilation hood. Available in colours: <table border="0" data-bbox="1046 1357 1417 1429"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>white</td> <td>black</td> <td>grey</td> <td>terracotta</td> <td>brown</td> <td>vintage</td> </tr> </table>							white	black	grey	terracotta	brown	vintage
														
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: <table border="0" data-bbox="1046 1615 1417 1686"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>white</td> <td>black</td> <td>grey</td> <td>terracotta</td> <td>brown</td> <td>vintage</td> </tr> </table>							white	black	grey	terracotta	brown	vintage
														
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												
PP 160/0.5		Plastic outer grille with pipe for mounting from indoor												



Name		Description
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
SE Vento Expert W		Sensor control panel
FB Vento Expert A50		Remote control
CD-1		CO <sub>2</sub> sensor with LED CO <sub>2</sub> indication and a sensor button for operation mode selection
CD-2		CO <sub>2</sub> sensor
S Vento Expert A50		Cardboard template for indoor installation of the unit

# Vento Expert A100-1 S10 W V.2

## Heat recovery single-room units

### Features

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



**Air flow:**  
up to 108 m<sup>3</sup>/h  
30 l/s



**Heat recovery efficiency:**  
up to 83 %



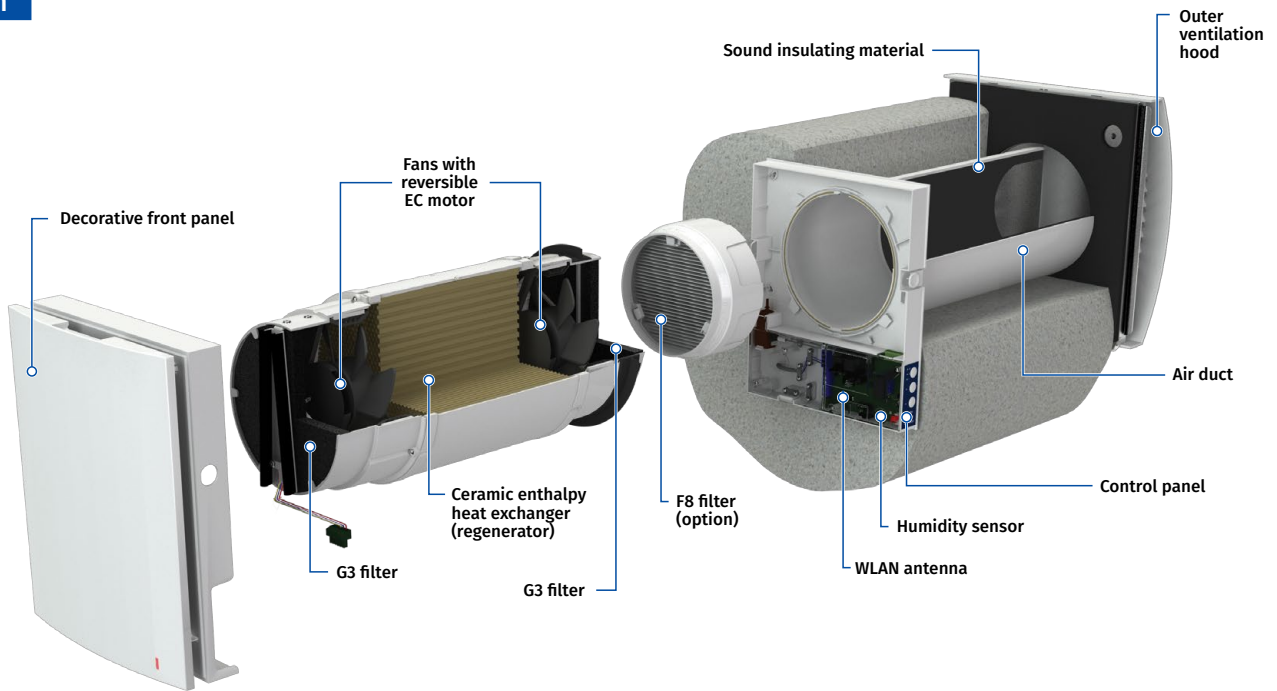
**Power:**  
from 3.2 W  
**SFP:** from 0.82 W/l/s



**Noise level:**  
from 13 dBA



### Design



SINGLE-ROOM UNITS WITH HEAT RECOVERY



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

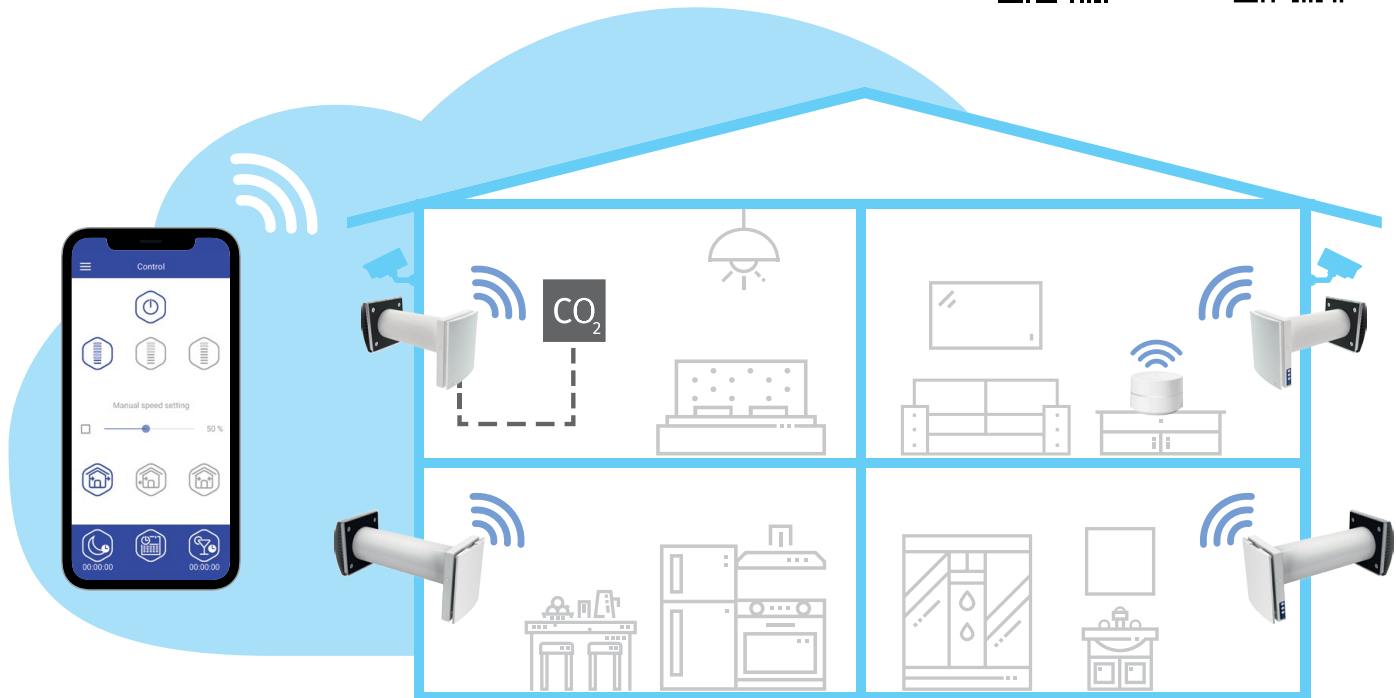
### Designation key

Model	Air duct	Maximum air flow [m <sup>3</sup> /h]	Unit modification	Ventilation hood type	Control
Vento Expert	A: round air duct	100	-1	S10: plastic outer ventilation hood AH-10 white 160 (for standard walls) S: metal hood (for thin walls)	W V.2: control and setup of the unit with the Wi-Fi mobile application

### 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.



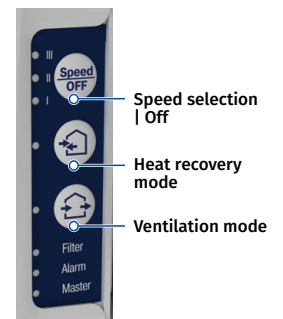
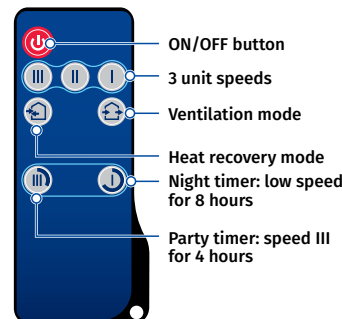
SINGLE-ROOM UNITS WITH HEAT RECOVERY

- 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.

- 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



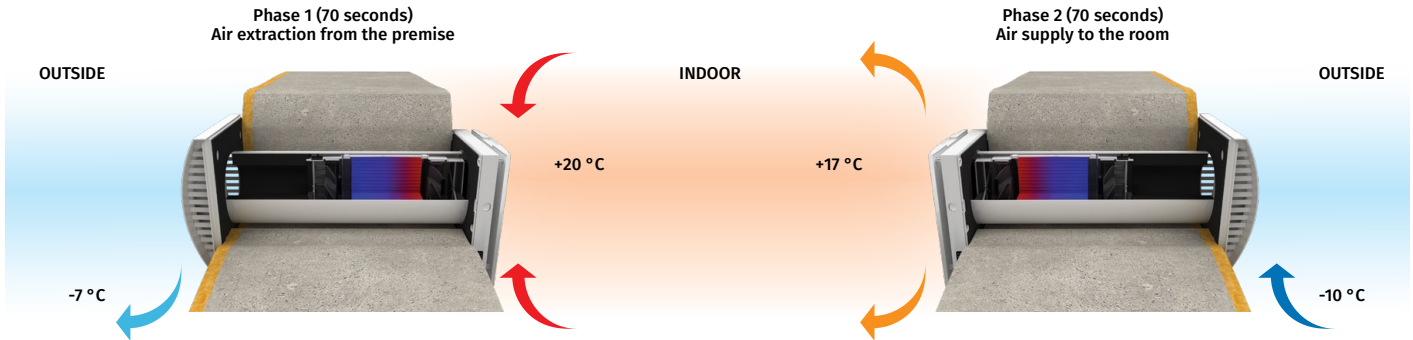
- Vento Expert A100-1 S10 W V.2 is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the speed III.

### Ordering Information

Part Number	Model	Description
BLAVENTOA100EXPERTV2	Vento Expert A100-1 S10 W V.2	SINGLE ROOM ERV WITH WIFI CONTROL

**Energy recovery**

**UNIT OPERATING LOGIC IN WINTER PERIOD**

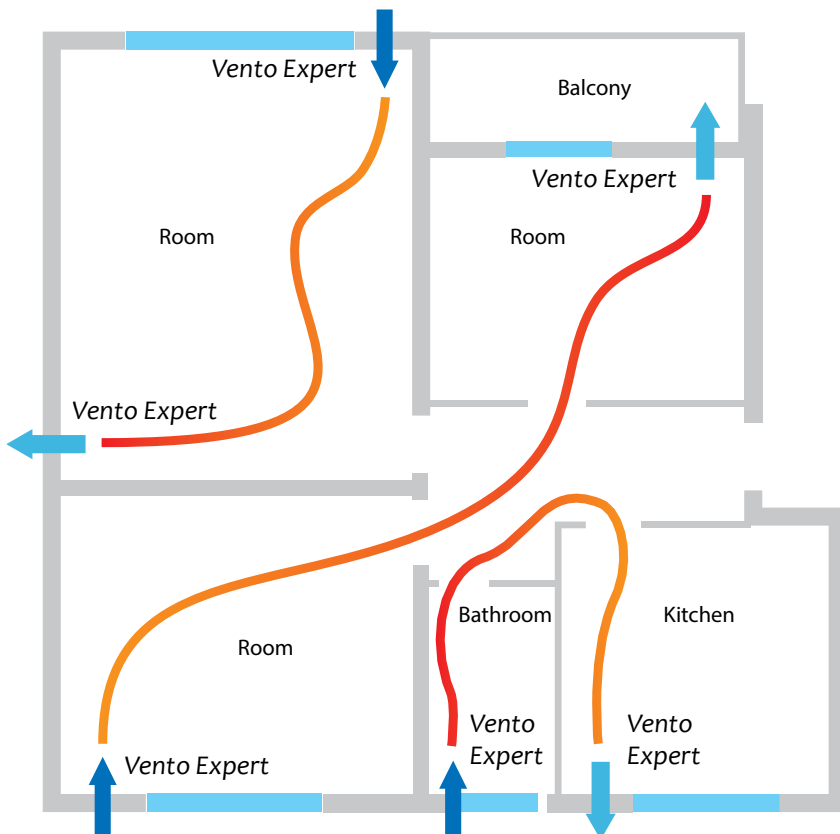


- Warm stale air is extracted from the premise, flows through the ceramic heat exchanger and transfers its heat and moisture to it.
- As the ceramic heat exchanger gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the heat exchanger and absorbs accumulated heat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

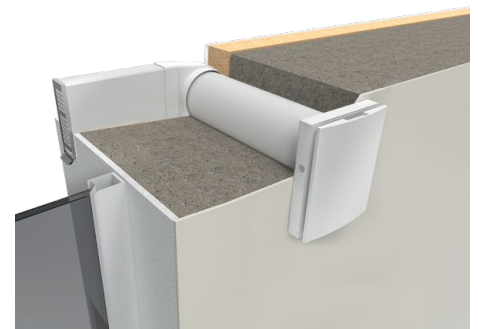
**Mounting**

- 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 A100-1W 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.

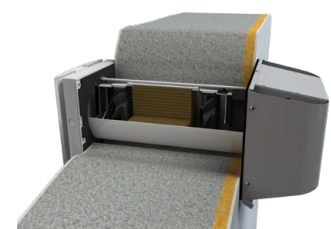
SINGLE-ROOM UNITS WITH HEAT RECOVERY



Angular mounting into a wall with standard thickness using **KIT BlauPlast white 160 / KIT BlauPlast chrome 160**



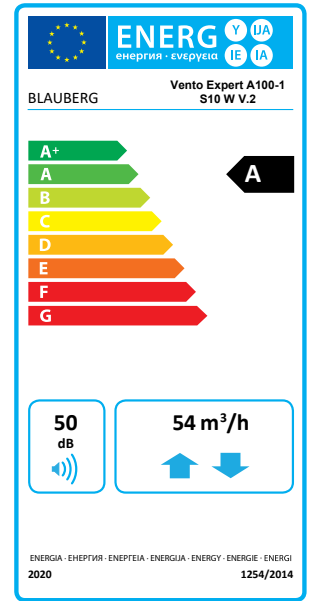
Unit installation example with the hoods for thin walls **AH-S grey 160 / AH-S chrome 160**



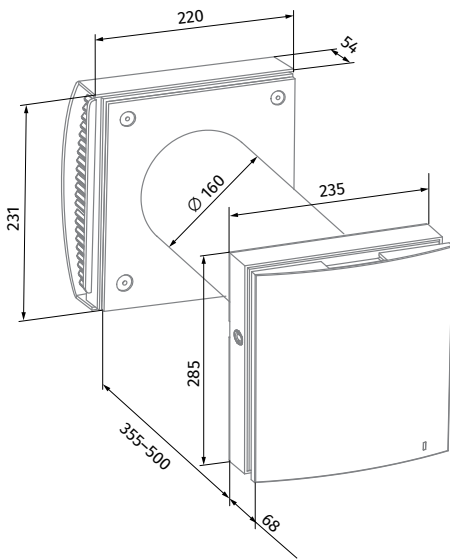
## Technical data

Parameters	Vento Expert A100-1 S10 W V.2 Vento Expert A100-1 S W V.2			
	I	II	III	MAX
Speed				
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 <sup>-1</sup> ]	780	1100	1920	2940
Air flow in ventilation mode [m <sup>3</sup> /h (l/s)]	18(5)	30 (8)	58 (16)	108 (30)
Air flow in energy recovery mode [m <sup>3</sup> /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]	42			
Classification of air flow sensitivity to pressure difference variations in accordance with EN 13141-8	S2			
Indoor/outdoor airtightness classification of the complete unit in accordance with EN 13141-8	D1			
Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%]	up to 87			
Ingress Protection Rating	IP24			

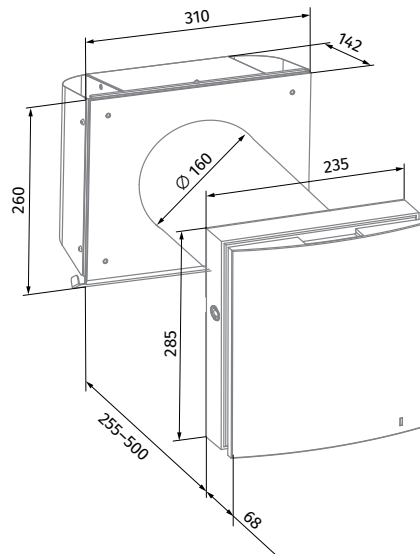
\* maximum air flow 82 m<sup>3</sup>/h



## Overall dimensions [mm]
















































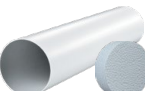




Vento Expert A100-1 S10 W V.2






Vento Expert A100-1 S W V.2  
(for thin walls)

**Accessories**

Name		Description												
FP Vento Expert A100 G3		G3 filters (2 pcs.)												
FP Vento Expert A50 F8		Filter set. Includes: <ul style="list-style-type: none"> <li>• Plastic frame (1 pc.)</li> <li>• G2 pre-filter (1 pc.)</li> <li>• F8 filter (1 pc.). Filtration rate PM2.5 &gt; 99 %</li> </ul>												
AH-10 *colour* 160		Plastic outer ventilation hood. Available in colours: <table border="0" data-bbox="1045 593 1412 660"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>white</td> <td>black</td> <td>grey</td> <td>terracotta</td> <td>brown</td> <td>vintage</td> </tr> </table>							white	black	grey	terracotta	brown	vintage
														
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: <table border="0" data-bbox="1045 840 1412 907"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>white</td> <td>black</td> <td>grey</td> <td>terracotta</td> <td>brown</td> <td>vintage</td> </tr> </table>							white	black	grey	terracotta	brown	vintage
														
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												
SE Vento Expert W		Sensor control panel												
FB Vento Expert A50		Remote control												

SINGLE-ROOM UNITS WITH HEAT RECOVERY

Name		Description
CD-1		CO <sub>2</sub> sensor with LED CO <sub>2</sub> indication and a sensor button for operation mode selection
CD-2		CO <sub>2</sub> sensor
S Vento Expert A50		Cardboard template for indoor installation of the unit



# FRESHBOX 100 ERV WiFi

## 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.
- Low energy EC motors.
- Silent operation.
- Supply air purification ensured by two built-in G4 and F8 filters (optionally H13 filter, F8 Carbon).
- 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 m<sup>3</sup>/h  
28 l/s



**Heat recovery efficiency:**  
up to 96 %

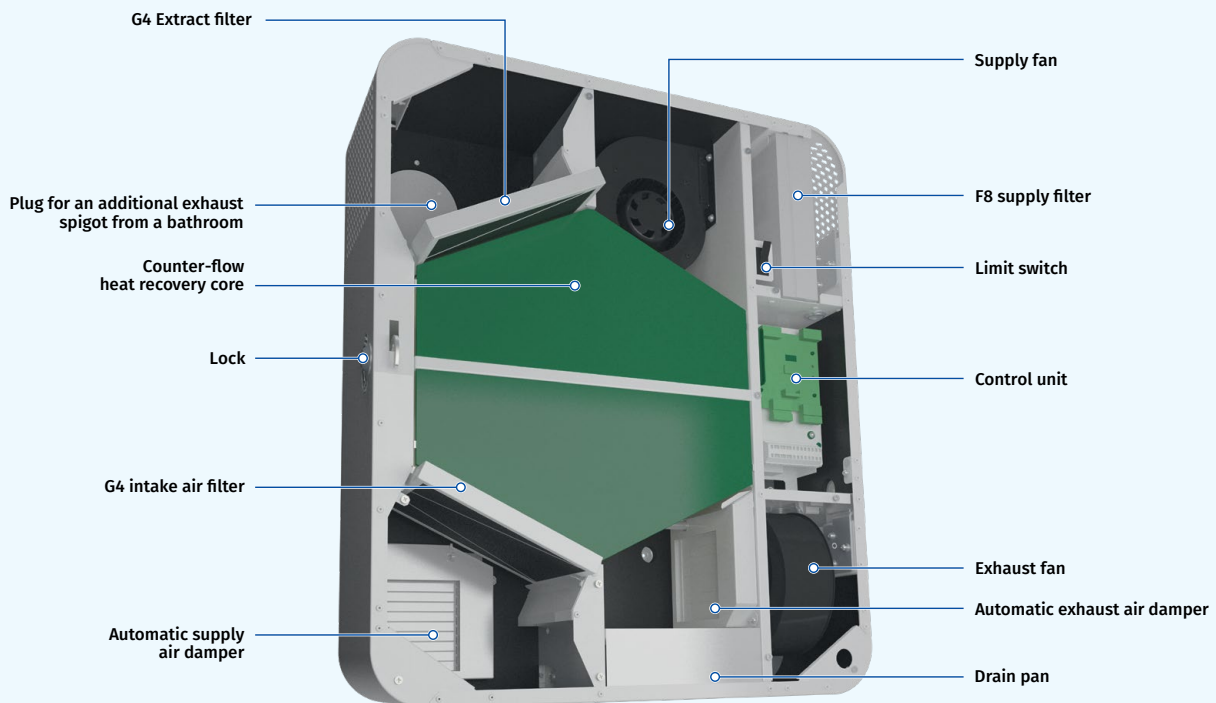


### Design

- 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.

### Motor

- The units feature efficient electronically commutated (EC) motors with an external rotor and impellers with forward curved blades. These state-of-the-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

Series	Heater	Rated air flow [m <sup>3</sup> /h]	Heat exchanger core type	Control
Freshbox	.: no heater E: Preheating E1: reheating E2: Preheating and reheating	– 100	ERV: energy recovery	WiFi: sensor control panel and Wi-Fi communication

### Air Dampers

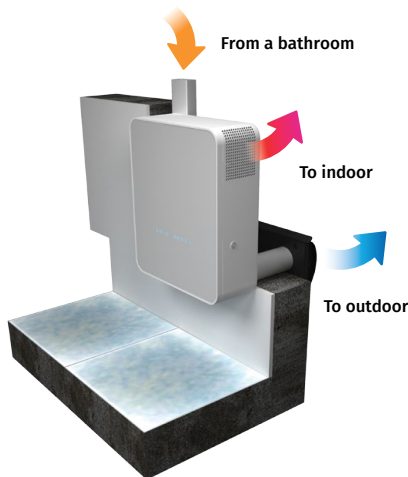
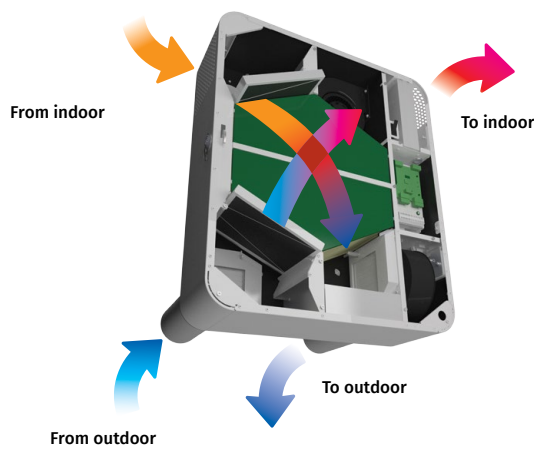
- The unit is equipped with supply and exhaust air dampers which activate automatically to prevent drafts while the unit is off.

### 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 or F8 Carbon 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.



Operating principle with extra spigot for bathroom exhaust ventilation

### Heat and Energy Recovery

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

#### REHEATING

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

### Freeze Protection

- Freshbox 100 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. After that the supply fan is turned on and the unit reverts to the normal operation mode.
- Overheating protection for **Freshbox E-100 ERV WiFi** and **Freshbox E2-100 ERV WiFi** is implemented with a preheater.

SINGLE-ROOM UNITS WITH HEAT RECOVERY

### Ordering Information

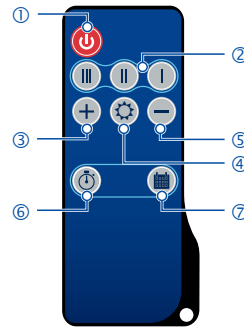
Part Number	Model	Description
BLAFRESHBOX100	FRESHBOX 100 ERV WiFi	SINGLE ROOM ENERGY RECOVERY WITH WIFI CONTROL

## Control

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



## REMOTE CONTROL



- 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

## AUTOMATIC FUNCTIONS

	Freshbox 100 ERV WiFi Freshbox E-100 ERV WiFi	Freshbox E1-100 ERV WiFi Freshbox E2-100 ERV 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	•	•

## CONTROL PANEL

- ON/OFF button
- Speed changeover (down)
- Speed changeover (up)
- Weekly schedule
- Connection to WiFi
- Filter replacement indication
- Alarm indication



Download  
Android application  
**Blauberg Freshbox**



Download  
iOS application  
**Blauberg Freshbox**

## Technical Data

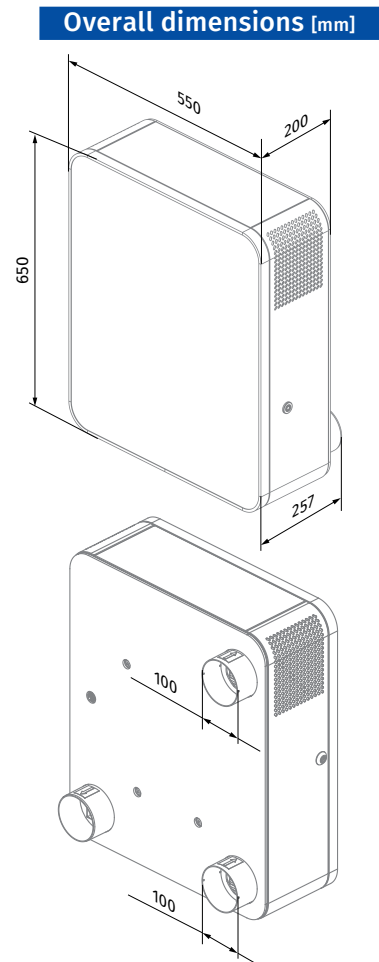
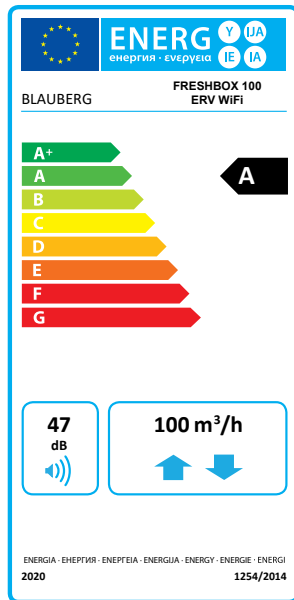
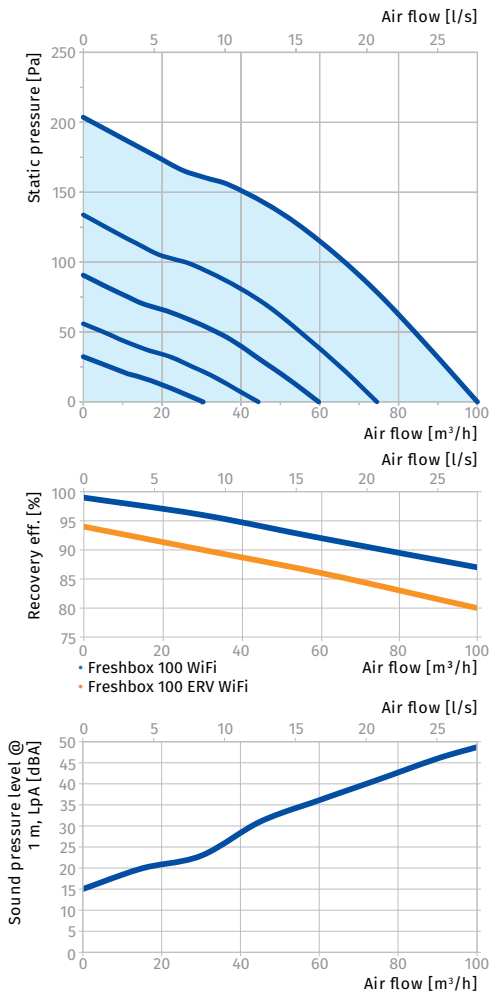
Parameters	Freshbox 100 ERV WiFi					Freshbox E-100 ERV WiFi				
	I	II	III	IV	V	I	II	III	IV	V
Speed										
Voltage [V / 50 (60) Hz]	1~ 110-240					1~230				
Max. power without heater(s) [W]	20	23	29	37	53	20	23	29	37	53
Preheater power consumption [W]						700				
Reheater power consumption [W]										
Max. current consumption without heater(s) [A]	0.4									
Max. current consumption with heater(s) [A]						3.6				
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)
RPM [min <sup>-1</sup> ]	max 2200									
Sound pressure level at 3 m [dBA]	13	20	27	33	39	13	20	27	33	39
Transported air temperature [°C]	-20...+40									
Casing material	polymer coated steel									
Insulation thickness [mm]	10									
Extract filter	G4									
Supply filter	G4 + F8 (Option: F8 Carbon; H13)									
Connected air duct diameter [mm]	100									
Weight [kg]	31									
Heat recovery efficiency [%]*	96	94	92	89	87	96	94	92	89	87
Heat recovery core type	counter-flow									
Heat exchanger material	enthalpic membrane									
SEC class	A									

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

Parameters	Freshbox E1-100 ERV WiFi					Freshbox E2-100 ERV WiFi				
	I	II	III	IV	V	I	II	III	IV	V
Speed										
Voltage [V / 50 (60) Hz]	1~230									
Max. power without heater(s) [W]	20	23	29	37	53	20	23	29	37	53
Preheater power consumption [W]						700				
Reheater power consumption [W]	350									
Max. current consumption without heater(s) [A]	0.4									
Max. current consumption with heater(s) [A]	1.94					5.2				
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)
RPM [min⁻¹]	max 2200									
Sound pressure level at 3 m [dBA]	13	20	27	33	39	13	20	27	33	39
Transported air temperature [°C]	-20...+40									
Casing material	polymer coated steel									
Insulation thickness [mm]	10									
Extract filter	G4									
Supply filter	G4									
Connected air duct diameter [mm]	100									
Weight [kg]	31									
Heat recovery efficiency [%]*	96	94	92	89	87	96	94	92	89	87
Heat recovery core type	counter-flow									
Heat exchanger material	enthalpic membrane									
SEC class	A									

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

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



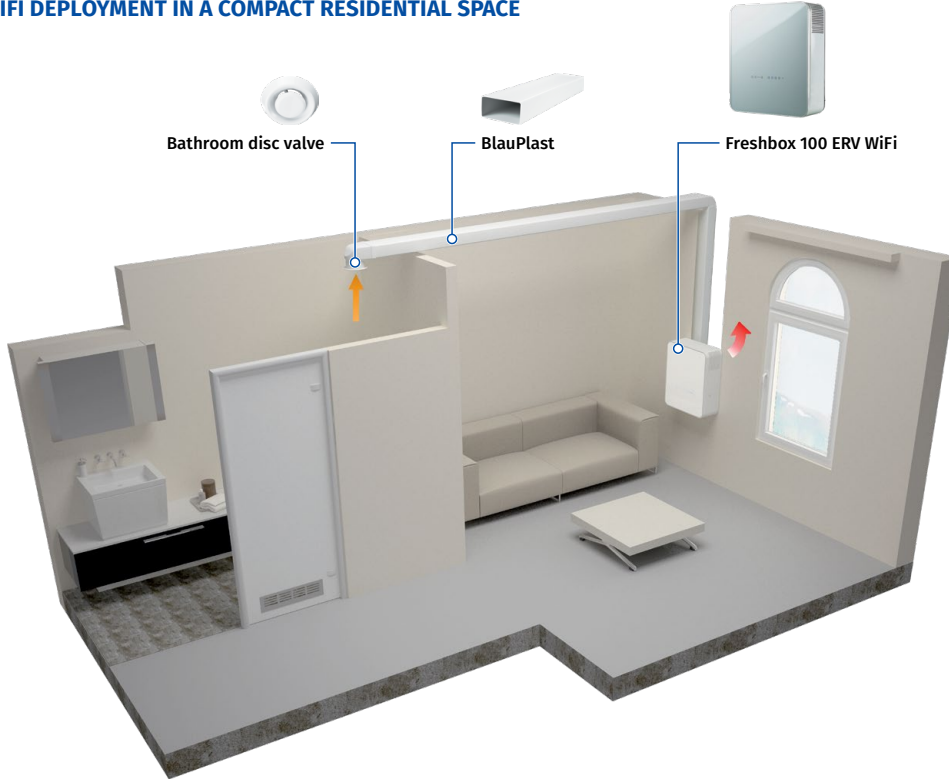
SINGLE-ROOM UNITS WITH HEAT RECOVERY

**Mounting example**

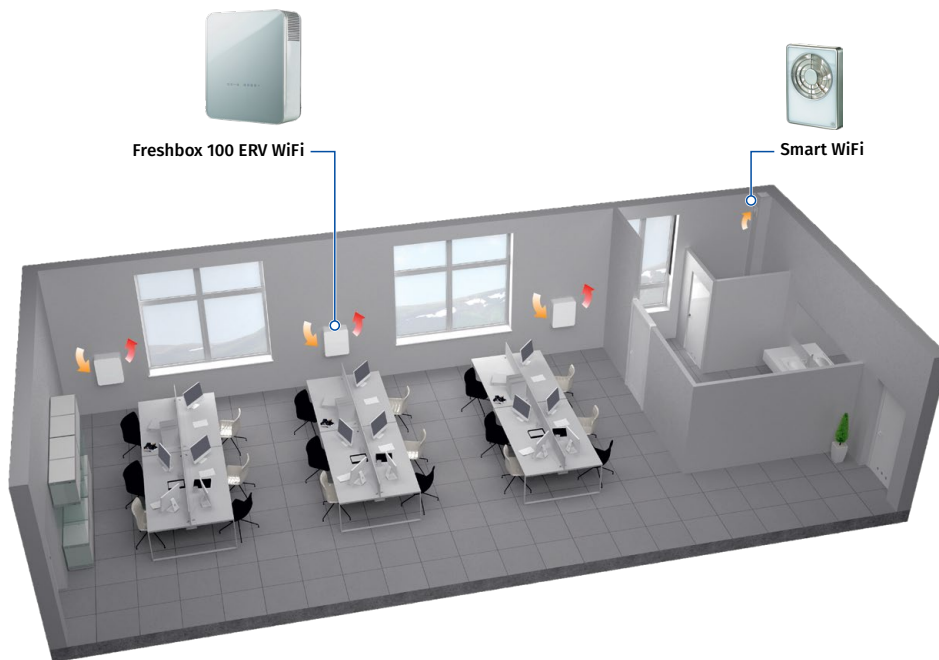
Each space requiring ventilation is equipped with one or several **Freshbox 100 ERV WiFi** units. A single unit is capable to ensure efficient ventilation in spaces with floor area up to 75 m<sup>2</sup>.

**Freshbox 100 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 Ø 100 mm spigot (supplied as standard).

**FRESHBOX 100 ERV WIFI DEPLOYMENT IN A COMPACT RESIDENTIAL SPACE**















**FRESHBOX 100 ERV WIFI MOUNTING EXAMPLE IN THE OFFICE**



SINGLE-ROOM UNITS WITH HEAT RECOVERY

## Accessories

Name		Description
MS Freshbox 100 chrome		Mounting kit: <ul style="list-style-type: none"> <li>• Two Ø 100 mm air ducts, 500 mm long</li> <li>• Ventilation outer hood made of polished steel</li> <li>• Cardboard template</li> </ul>
MS Freshbox 100 white		Mounting kit: <ul style="list-style-type: none"> <li>• Two Ø 100 mm air ducts, 500 mm long</li> <li>• Ventilation outer hood, painted white</li> <li>• Cardboard template</li> </ul>
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 <sub>2</sub> sensor with LED CO <sub>2</sub> indication and a sensor button for operation mode selection
CD-2		CO <sub>2</sub> Sensor

# FRESHBOX 200 ERV WiFi

## 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.



**Air flow:**  
up to 200 m<sup>3</sup>/h  
56 l/s



**Heat recovery efficiency:**  
up to 85 %



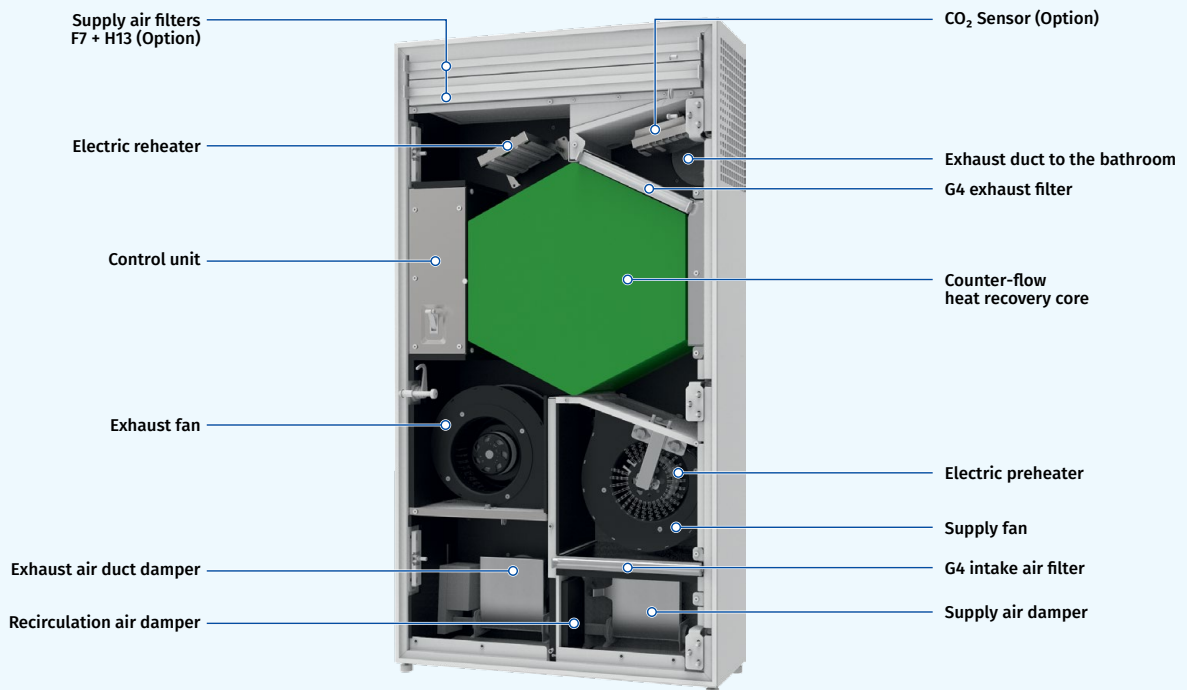
### Design

- 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 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.
- Available modifications with an integrated preheater and reheater for cold climate applications.

### Motor

- The units feature efficient electronically commutated (EC) motors with an external rotor and impellers with forward curved blades. These state-of-the-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 %.

SINGLE-ROOM UNITS WITH HEAT RECOVERY



### Designation key

Model	Heater	Rated air flow [m <sup>3</sup> /h]	Heat exchanger type	Control
Freshbox	_: no heater E: Preheating E1: reheating E2: Preheating and reheating	– 200	ERV: energy recovery	WiFi: sensor control panel and Wi-Fi communication

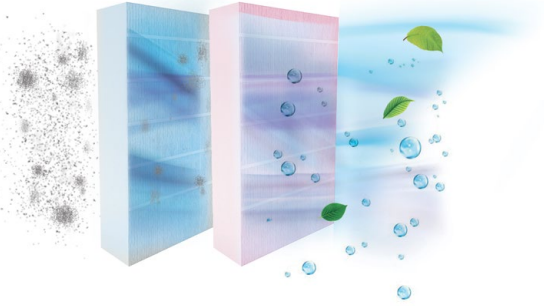


### Air Dampers

- 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

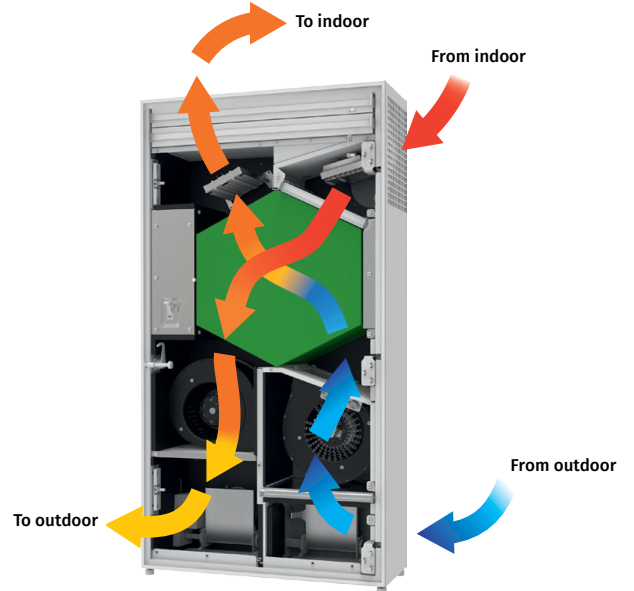
- The unit is equipped with a counter-flow energy recovery core with an enthalpy membrane at the core.
  - In the cold season** the exhaust air heat and moisture are transferred to the supply air stream through the enthalpy membrane reducing the heat losses through ventilation.
  - Consequently, it is 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

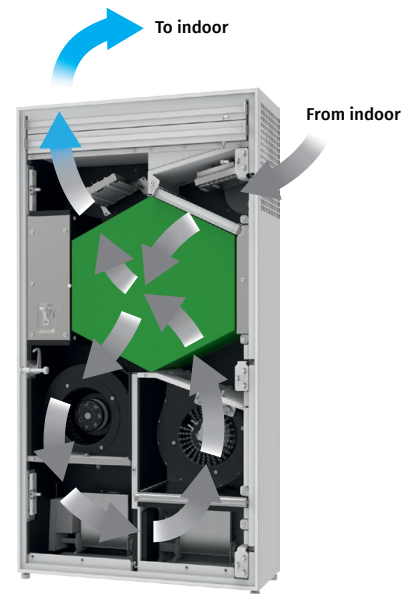
#### HEAT RECOVERY OPERATION MODE

- 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.



### Ordering Information

Part Number	Model	Description
BLAFRESHBOX200	FRESHBOX 200 ERV WiFi	SINGLE ROOM ENERGY RECOVERY WITH WIFI CONTROL

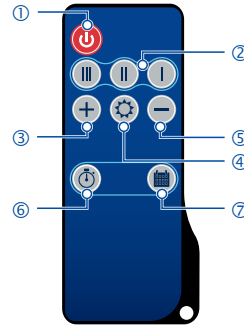


## Control

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



## REMOTE CONTROL



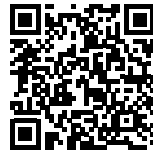
- 1 Turning unit on/off
- 2 Speed selection (Min/Mid/Max)
- 3 Increasing temperature set point for the reheater (available for the models with a reheater)
- 4 Turning reheater on/off (available for the models with a reheater)
- 5 Decreasing temperature set point for the reheater (available for the models with a reheater)
- 6 Turning timer on/off
- 7 Activation/deactivation of the scheduled operation mode

## AUTOMATIC FUNCTIONS

	Freshbox 200 ERV WiFi Freshbox E-200 ERV WiFi	Freshbox E1-200 ERV WiFi Freshbox E2-200 ERV 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  
Android application  
**Blauberg Freshbox**



Download  
iOS application  
**Blauberg Freshbox**

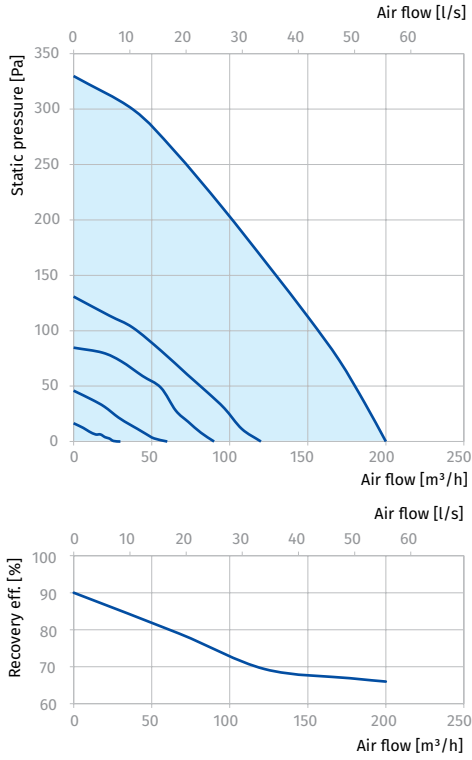
## CONTROL PANEL

- ON/OFF button
- Speed changeover (down)
- Speed changeover (up)
- Weekly schedule
- Connection to WiFi
- Filter replacement indication
- Alarm indication

## Technical Data

Parameters	Freshbox 200 ERV WiFi					Freshbox E-200 ERV WiFi					Freshbox E1-200 ERV WiFi					Freshbox E2-200 ERV WiFi				
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
Speed																				
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					4					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 <sup>-1</sup> ]	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	polymer coated steel																			
Insulation thickness [mm]	30																			
Extract filter	G4																			
Supply filter	G4 + F7 (Option: H13)																			
Connected air duct diameter [mm]	100																			
Weight [kg]	55																			
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	counter-flow																			
Heat recovery core material	enthalpic membrane																			
SEC class	A																			

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



**ENERG**  
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**BLAUBERG**

FRESHBOX 200  
ERV WIFI

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A									
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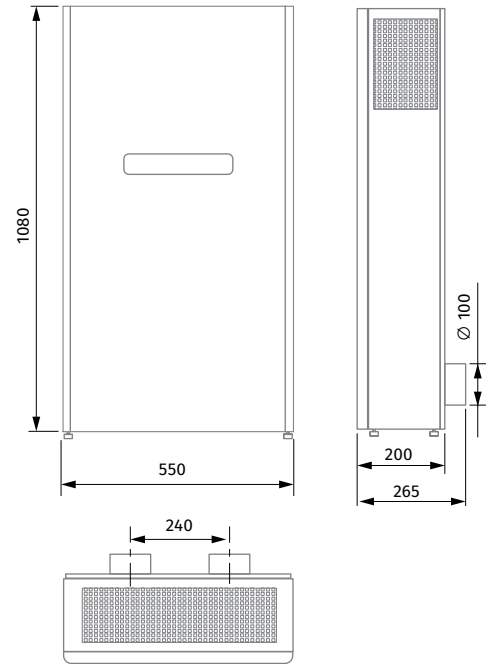
**39**  
dB

**200 m³/h**

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2020 1254/2014

**Overall dimensions [mm]**



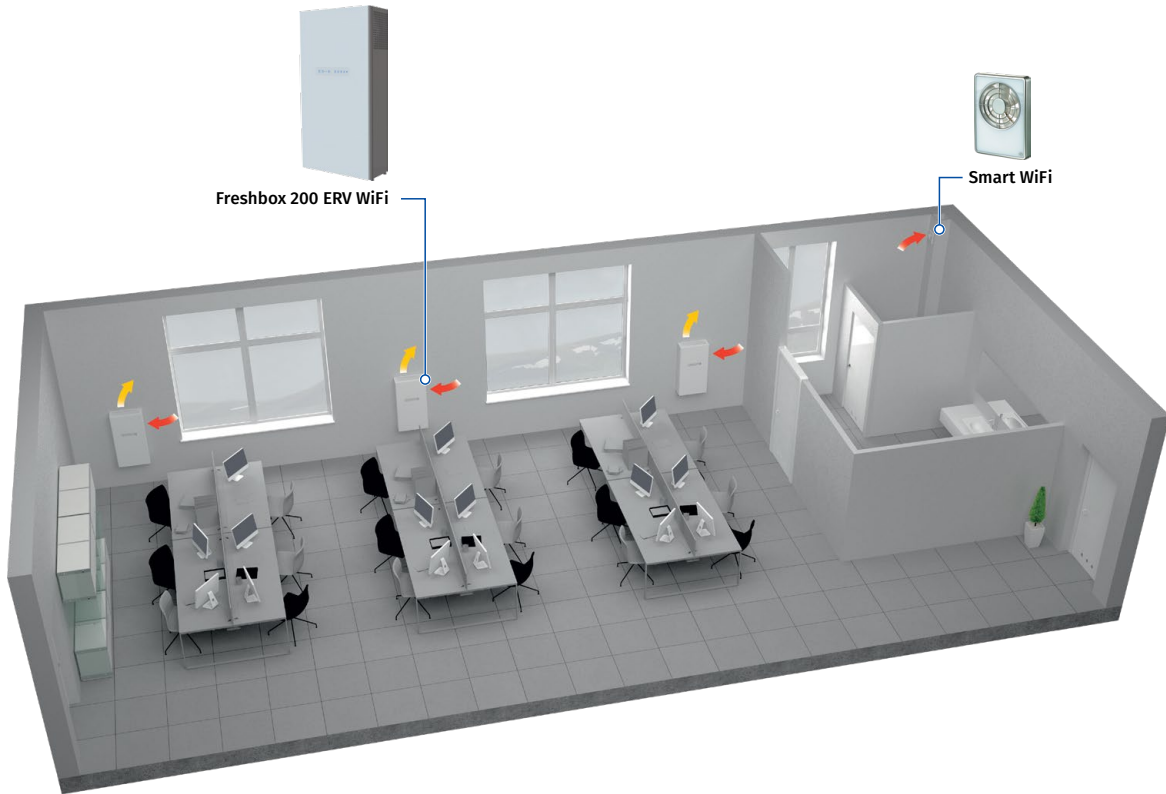
SINGLE-ROOM UNITS WITH HEAT RECOVERY

**Mounting Example**

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

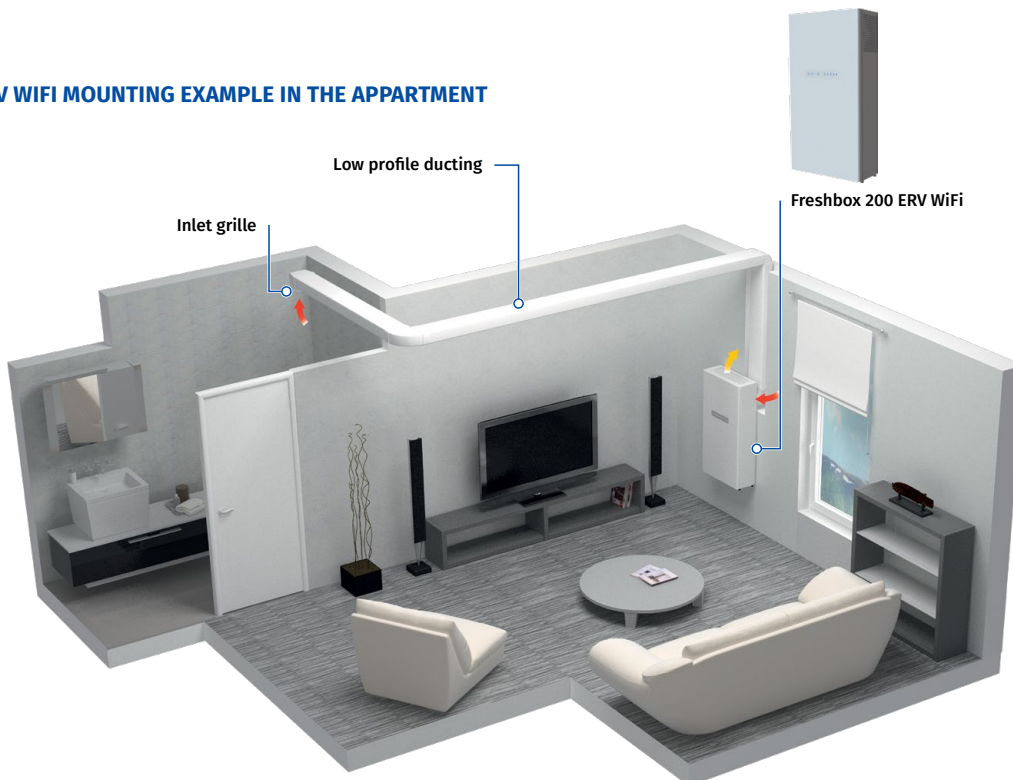
Can be upgraded with a bathroom exhaust air duct. To enable such a configuration the units can be additionally equipped with the optional  $\varnothing$  100 mm spigot (supplied as standard).

**FRESHBOX 200 ERV WIFI MOUNTING EXAMPLE IN THE OFFICE**













SINGLE-ROOM UNITS WITH HEAT RECOVERY

**FRESHBOX 200 ERV WIFI MOUNTING EXAMPLE IN THE APARTMENT**



## Accessories

Name		Description
MS Freshbox 200 chrome		Mounting kit: <ul style="list-style-type: none"> <li>• Two Ø 100 mm air ducts, 500 mm long</li> <li>• Ventilation outer hood made of polished steel</li> <li>• Cardboard template</li> </ul>
MS Freshbox 200 white		Mounting kit: <ul style="list-style-type: none"> <li>• Two Ø 100 mm air ducts, 500 mm long</li> <li>• Ventilation outer hood, painted white</li> <li>• Cardboard template</li> </ul>
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		CO <sub>2</sub> sensor with LED CO <sub>2</sub> indication and a sensor button for operation mode selection
CD-2		CO <sub>2</sub> Sensor

# KOMFORT ERV D S41

## Suspended heat and energy recovery air handling units

### Features

- Air handling unit for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat and energy recovery enables reduction of air conditioning load in hot climate conditions and heat losses in cold climate conditions.
- Controllable air exchange ensures the best suitable indoor microclimate.
- Compatible with round Ø 100 or 150 mm air ducts.



**Air flow:**  
up to 500 m<sup>3</sup>/h  
139 l/s



**Heat recovery efficiency:**  
up to 80 %

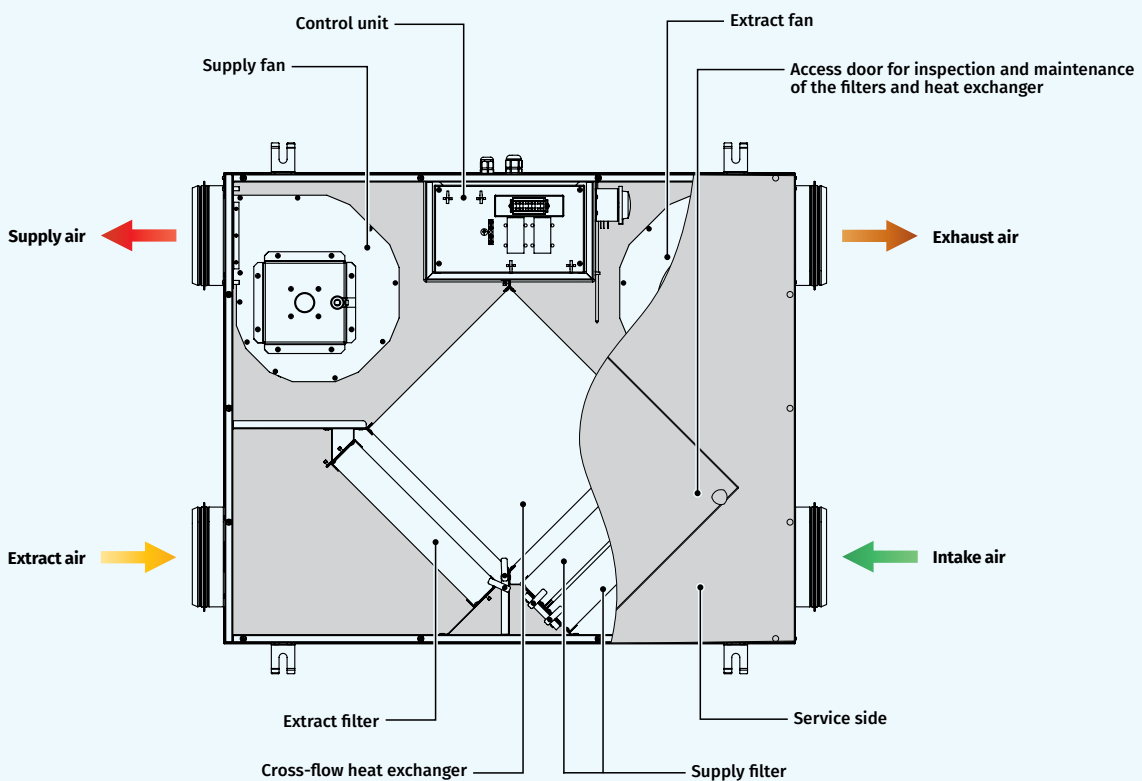


### Design

- The casing is made of polymer coated steel panels, internally heat- and sound insulated with 5–10 mm (depend on modification) polyurethane foam.
- The bottom service panel provides easy access for maintenance of the filters and the heat exchanger.
- The spigots for connection to the air ducts are located on the sides of the unit and are rubber sealed for airtight connection to the air ducts.
- The mounting brackets on the casing ensure easy installation under the ceiling.

### Fans

- The units are equipped with three-speed external rotor motors with centrifugal impellers and forward curved blades.
- Integrated overheating protection with automatic restart.
- Ball bearings for longer service life.
- Dynamically balanced impellers.
- Distinguished with reliable and low noise operation.



### Air Filtration

- Two built-in G4 and F7 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

### Heat Recovery

- The unit is equipped with a plate cross-flow enthalpy aluminium heat exchanger.
- Heat recovery is based on heat and moisture transfer between the extract and supply air streams through the heat exchanger plates. The air flows are fully separated while flowing through the heat exchanger.
- The process of heat transfer proceeds in the heat exchanger where extract air transfers most of its heat to the intake air flow. This reduces heat energy losses in cold seasons. In summer heat recovery acts reverse: the cooled extract air transfers part of cold to the warm intake air. This contributes to better performance of the air conditioner in ventilated premises.



### Control and Automation

- The unit has the integrated S41 control panel with the functions:
  - Unit On/Off
  - Speed selection
  - Setting indoor air temperature
  - Setting week scheduled operation



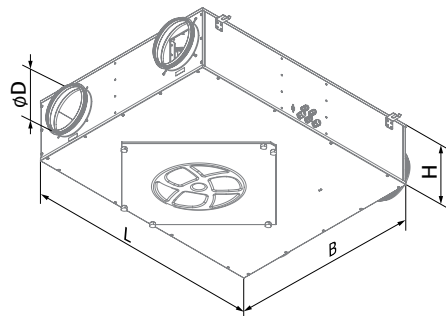
### Mounting

- Due to the low casing height the unit perfectly fits for mounting in the limited space behind the suspended ceiling.
- The unit mounting position must provide access for service maintenance.

Designation key					
Series	Unit type	Mounting type	Rated air flow [m³/h]	Modification	Control
KOMFORT	ERV: energy recovery ventilation unit	D: suspended mounting, horizontally oriented spigots	350; 450	P	S41: control panel with LCD display

### Overall Dimensions [mm]

Model	D	B	H	L
KOMFORT ERV D350P S41	150	704	227	854
KOMFORT ERV D450P S41	150	704	227	1020



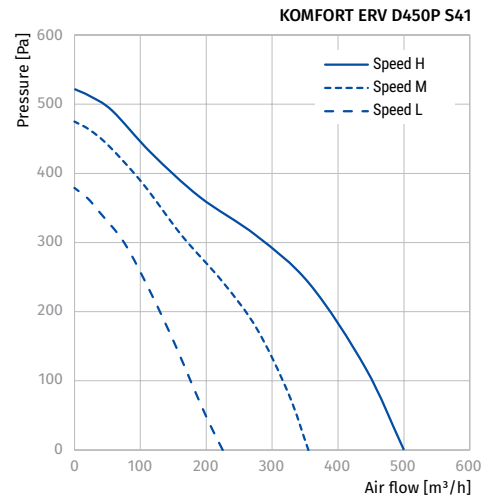
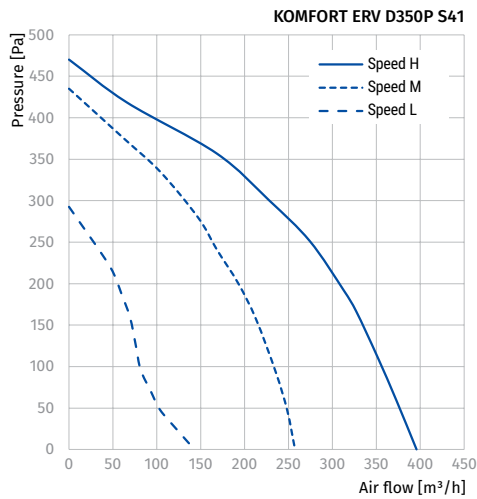
### Ordering Information

Part Number	Model	Description
BLAKOMFORTD350PS41	KOMFORT ERV D350P S41	CEILING MOUNTED ENERGY RECOVERY AHU
BLAKOMFORTD450PS41	KOMFORT ERV D450P S41	CEILING MOUNTED ENERGY RECOVERY AHU




**Technical Data**

Parameters	KOMFORT ERV D350P S41			KOMFORT ERV D450P S41		
	L	M	H	L	M	H
Speed						
Voltage [V/50 Hz]		220		220		
Power [W]	181	231	330	250	292	354
Current [A]	0.82	1.05	1.50	1.10	1.30	1.60
Maximum air flow [m <sup>3</sup> /h (l/s)]	140 (39)	260 (72)	400 (111)	225 (63)	355 (99)	500 (139)
RPM [min <sup>-1</sup> ]	800	1100	1450	900	1250	1650
Sound pressure level at 3 m [dBA]	40	49	58	42	51	59
Transported air temperature [°C]		-25...+40		-25...+40		
PM2.5 filtration efficiency	96	95	95	96	95	94
Casing material		polymer coated steel			polymer coated steel	
Connected air duct diameter [mm]		150		150		
Mass [kg]		32		39		
Heat recovery efficiency [%]	76	72	66	78	75	70
Heat exchanger type		cross-flow			cross-flow	
Heat exchanger material		aluminium			aluminium	

\* Heat recovery efficiency is specified in compliance with EN 13141-7.



## Accessories

		KOMFORT ERV D350P S41	KOMFORT ERV D450P S41
G4 panel filter		FP 300×220×48 G4	FP 300×270×48 G4
F8 panel filter		FP 300×220×48 F8	FP 300×270×48 F8
Summer block		SB C4 300/270	SB C4 300/270



# KOMFORT ERV EC DB S14

## Suspended heat and energy recovery air handling units

### Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Reduction of load on air conditioning systems in a hot climate and heat loss in a cold climate due to heat and moisture recovery.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round Ø 100 or 150 mm air ducts.



**Air flow:**  
up to 430 m<sup>3</sup>/h  
119 l/s



**Heat recovery efficiency:**  
up to 85 %



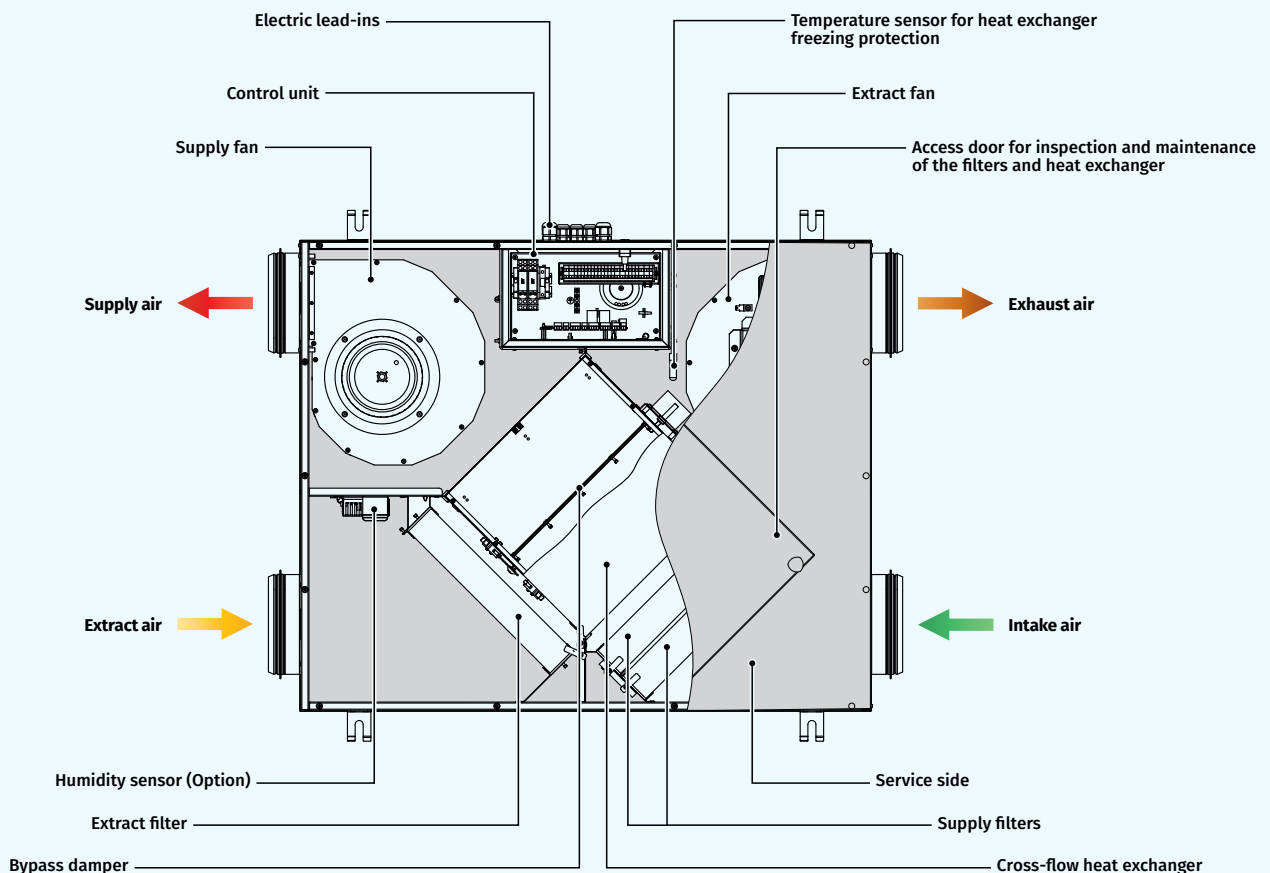
### Design

- The casing is made of polymer coated steel panels, internally filled with foamed polyurethane layer 5–10 mm (depend on modification) for heat- and sound insulation.
- The unit is equipped with a removable bottom panel for ease of maintenance. This service panel is used to access the filters and the heat exchanger for maintenance operations.
- The spigots are located at the sides of the unit and are equipped with rubber seals for airtight connection to the air ducts.
- The casing is equipped with fixing brackets to suspend the unit to the ceiling.

### Fans

- The unit is equipped with high efficient external rotor EC motors used for air supply and exhaust.
- The **KOMFORT ERV EC DB250 S14** units are equipped with a centrifugal impeller with forward curved blades and the **KOMFORT ERV EC DB350 S14** units – with backward curved blades.
- EC motors have the best power consumption to air flow ratio and meet the latest demands concerning energy saving and high efficient ventilation.
- EC motors are featured with high performance, low noise level and totally controllable speed range.
- The impellers are dynamically balanced.

AIR HANDLING UNITS WITH HEAT RECOVERY



### Heat Recovery

- The unit is equipped with an enthalpy plate cross-flow heat exchanger for energy (heat and humidity) recovery. Due to humidity recovery condensate is not generated in the enthalpy heat exchanger.



- The air flows are completely separated in the heat exchanger. Thus smells and contaminants are not transferred from the extract air to the supply air.
- Heat recovery is based on heat and/or humidity transfer through the heat exchanger plates. In the cold season supply air is heated in the heat exchanger by transferring the heat energy of warm and humid extract air to the cold fresh air. Heat recovery minimizes ventilation heat losses and heating costs respectively.
- In the warm season the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cool extract air. That reduces operation load on air conditioners and saves electricity.

### FROST PROTECTION

- The integrated automatic freeze protection is used to prevent freezing of the heat exchanger in the cold season. The supply fan turns off according to the temperature sensor to get the heat exchanger warmed up with extract air. After that the supply fan turns on and the unit continues to run in the standard mode.

### Air Filtration

- Two built-in G4 and F8 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

### Bypass

- The units are equipped with a bypass for summer ventilation (air cooling by the cool air from outside).

### Control and Automation

- The **KOMFORT ERV EC DB S14** units have an integrated control system with a wall-mounted control panel S14 with a LED indication. The units are equipped with a USB connector (Type B) and can be connected to a PC for configuring the advanced settings in a special software.
- The standard delivery set includes a 10 m cable for connection of the unit to the control panel.
- S14 automation functions:**
  - Unit On/Off.
  - Unit performance control (selection of Low, Medium or High speed).
  - Bypass damper opening and closing for summer ventilation.
  - Alarm indication.
  - Filter maintenance indication.
- Additional functions of the S14 automation with installed software:**
  - Fan speed adjustment from 0 to 100 %. Each speed is individually adjusted for the supply and the extract fans.
  - Operation control on feedback from the FS2 duct humidity sensor (to be ordered separately).
  - Unit operation setting according to the external control unit (to be ordered separately).
  - Temperature setting for freeze protection system activation.
  - Control and operation adjustment of the filter maintenance timer
  - External relay control unit and humidity level control.
  - Software version upgrading.



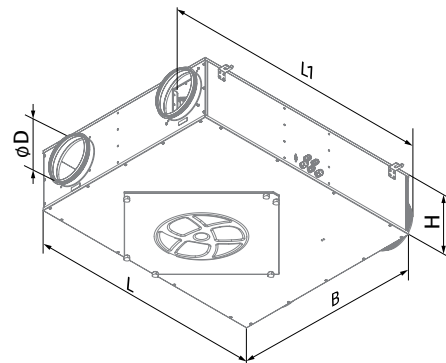
### Mounting

- Due to a low casing height the air handling units are a perfect solution for space restricted installation above suspended ceilings.
- The unit mounting position must provide access for service maintenance.

Designation key						
Series	Unit type	Motor type	Mounting type	Bypass	Rated air flow [m³/h]	Control
KOMFORT	ERV: energy recovery ventilation	EC: electronically commutated motor	D: suspended mounting, horizontally oriented spigots	B: integrated bypass	250; 350	S14: sensor control panel with LED indication

### Overall Dimensions [mm]

Model	D	B	H	L	L1
KOMFORT ERV EC DB250 S14	149	704	227	947	854
KOMFORT ERV EC DB350 S14	149	754	277	1117	1024



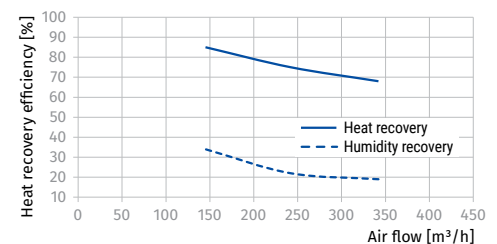
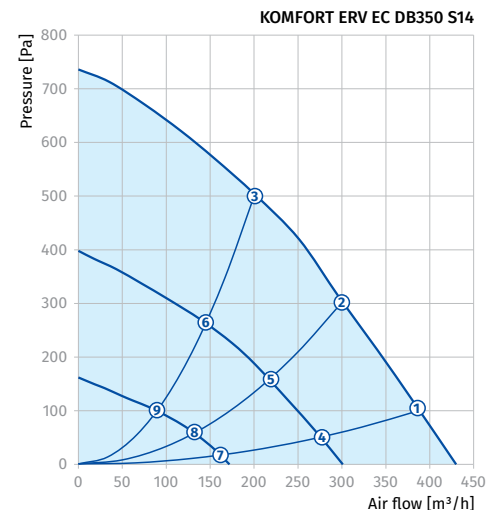
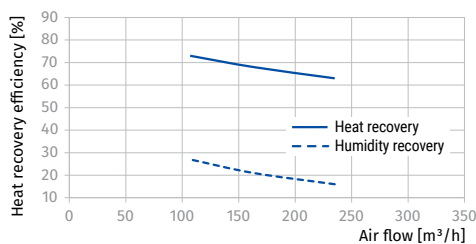
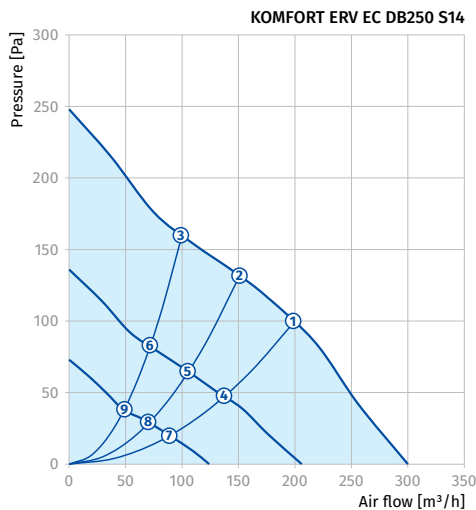
### Ordering Information

Part Number	Model	Description
BLAKOMFORTERVECDB250S14	KOMFORT ERV EC DB250 S14	EC MOTORS CEILING MOUNTED ENERGY RECOVERY AHU
BLAKOMFORTERVECDB250S14	KOMFORT ERV EC DB350 S14	EC MOTORS CEILING MOUNTED ENERGY RECOVERY AHU

## Technical Data

Parameters	KOMFORT ERV EC DB250 S14	KOMFORT ERV EC DB350 S14
Voltage [V / 50 (60) Hz]	1 ~ 230	1 ~ 230
Power [W]	84	171
Current [A]	0.7	1.3
Maximum air flow [m³/h (l/s)]	300 (83)	430 (119)
RPM [min <sup>-1</sup> ]	2000	3200
Sound pressure level at 3 m [dBA]	36	46
Transported air temperature [°C]	-25...+40	-25...+40
Extract filter	G4	G4
Supply filter	G4 + F8 (PM2.5 > 83 %)	G4 + F8 (PM2.5 > 87 %)
Connected air duct diameter [mm]	150	150
Weight [kg]	29	42
Heat recovery efficiency [%]*	63–73	68–85
Humidity recovery efficiency [%]	16–27	19–34
Heat exchanger type	cross-flow	cross-flow
Heat exchanger material	enthalpy	enthalpy
SEC class	A	A
ErP	2016, 2018	2016, 2018









\* Heat recovery efficiency is specified in compliance with EN 13141-7.



### Total power of the unit [W]

Point	KOMFORT ERV EC DB250 S14	KOMFORT ERV EC DB350 S14
1	80	147
2	67	145
3	59	144
4	43	75
5	34	73
6	28	70
7	23	21
8	22	21
9	19	20

## Accessories

		KOMFORT ERV EC DB250 S14	KOMFORT ERV EC DB350 S14
G4 panel filter		FP 300x220x48 G4	FP 300x270x48 G4
F8 panel filter		FP 300x220x48 F8	FP 300x270x48 F8
Internal humidity sensor		FS2	FS2
CO <sub>2</sub> sensor with indication		CD-1	CD-1
CO <sub>2</sub> sensor		CD-2	CD-2
Humidity sensor		HR-S	HR-S
Air damper		VKA 150	VKA 150
Electric actuator		LF230	LF230

# KOMFORT Ultra S3 250 S3 white

## Compact heat recovery air handling units

### Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat and humidity recovery reduces ventilation heat losses in the cold season and the load on the air conditioners in the hot season.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round Ø 125 mm air ducts.



**Air flow:**  
up to 290 m<sup>3</sup>/h  
81 l/s



**Heat recovery efficiency:**  
up to 73 %

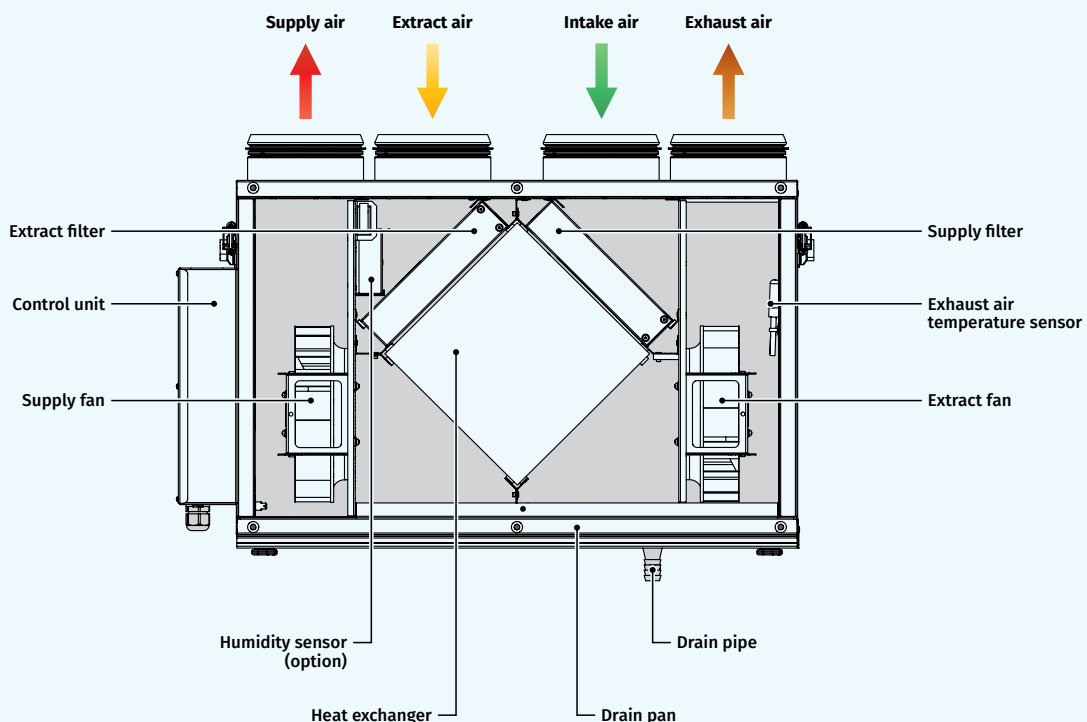


### Design

- The casing of the unit is made of double skinned white painted metal panels, internally filled with 20 mm, mineral wool layer for heat and sound insulation.
- The spigots are located at the top of the unit and are rubber sealed for airtight connection to the air ducts.
- The hinged panel of the casing ensures easy access to the unit internals for service works including cleaning, filter replacement, etc.

### Fans

- Asynchronous external rotor motors and centrifugal impellers with backward curved blades are used for air supply and exhaust.
- Integrated motor overheating protection with automatic restart.
- Dynamically balanced impellers.
- Equipped with ball bearings for longer service life.
- Reliable and quiet operation.



### Heat Recovery

- The **KOMFORT Ultra S3 250-E S3 white** unit is equipped with a plate enthalpy cross-flow heat exchanger made of polymerized cellulose that recovers heat and humidity.
- Due to humidity recovery the enthalpy heat exchanger produces no condensate.



- The air flows are fully separated within the heat exchangers. Odours and contaminants contained in the extract air are not transferred to the supply air flow.
- Heat recovery is based on heat and/or humidity transfer through the plates of the heat exchanger. In the cold season supply air is heated in the heat exchanger by transferring the heat energy of warm and humid extract air to the cold fresh air. Heat recovery minimizes heat losses, which reduces the cost of space heating.
- In summer the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cooled extract air. This reduces load on air conditioners and saves electricity.
- In summer, when the indoor and outdoor temperature difference is low heat recovery is not reasonable. In this case the heat exchanger can be temporary replaced with a summer block for warm seasons (available separately).

### Air Filtration

- Two built-in G4 and F8 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

### Control and Automation

- Turning the unit on/off from the control panel.
- Selecting ventilation mode – three speeds: minimum, medium, maximum.
- Freeze protection of the heat exchanger by means of turning off the supply fan during defrosting.



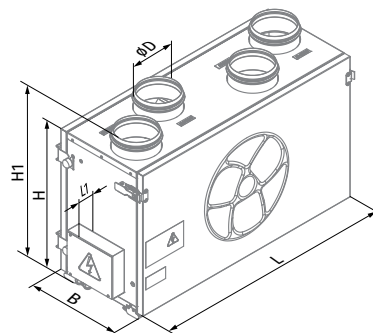
### Mounting

- The units can be fixed to the wall, ceiling or mounted on the floor using the mounting brackets.
- While mounting provide free access to the service panel for filter replacement and servicing.
- Due to universal casing design both left and right mounting is possible. It requires swapping the service and the back panel.

Designation key							
Serie	Unit type	Spigot modification	Modification	Rated air flow [m³/h]	Heat exchanger type	Control	Casing
KOMFORT	<b>Ultra:</b> compact unit	<b>S:</b> vertical spigot orientation	<b>3</b>	<b>250</b>	– <b>E:</b> energy recovery	<b>S3:</b> multi speed switch	<b>white:</b> painted steel

### Overall Dimensions [mm]

Model	D	B	H	H1	L	L1
KOMFORT Ultra S3 250-E S3 white	125	300	443	490	713	43

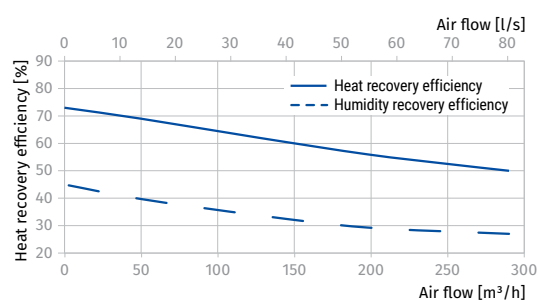
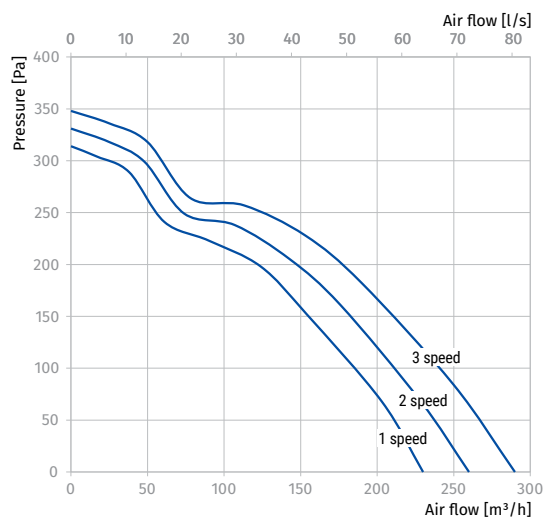


### Ordering Information








Part Number	Model	Description
BLAKOMFORTULTRAS3250-ES3	KOMFORT Ultra S3 250-E S3 white	WALL/FLOOR MOUNTED COMPACT ENERGY AHU

### Technical Data

Parameters	KOMFORT Ultra S3 250-E S3 white
Voltage [V/50 (60) Hz]	1 ~ 220-240
Power [W]	176
Current [A]	0.8
Maximum air flow [m <sup>3</sup> /h (l/s)]	290 (81)
RPM [min <sup>-1</sup> ]	1550
Sound pressure level at 3 m [dBA]	28-47
Transported air temperature [°C]	-25...+60
Insulation	20 mm, mineral wool
Extract filter	G4
Supply filter	F8+G4
Connected air duct diameter [mm]	125
Heat recovery efficiency [%]	50-73
Humidity recovery efficiency [%]	27-45
Heat exchanger type	cross-flow
Heat exchanger material	polymerized cellulose



**Accessories**

		KOMFORT Ultra S3 250-E S3 white
G4 panel filter		FP 240x184x40 G4
F8 panel filter		FP 240x184x40 F8
Silencer		SD 125
Silencer		SDF 125
Backdraft air damper		VRV 125
Air damper		VK 125
Summer block		SB C4 200/240



# KOMFORT Ultra L3 250 S3 white

## Compact heat recovery air handling units

### Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat and humidity recovery reduces ventilation heat losses in the cold season and the load on the air conditioners in the hot season.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round Ø 125 mm air ducts.



**Air flow:**  
up to 290 m<sup>3</sup>/h  
81 l/s



**Heat recovery efficiency:**  
up to 73 %

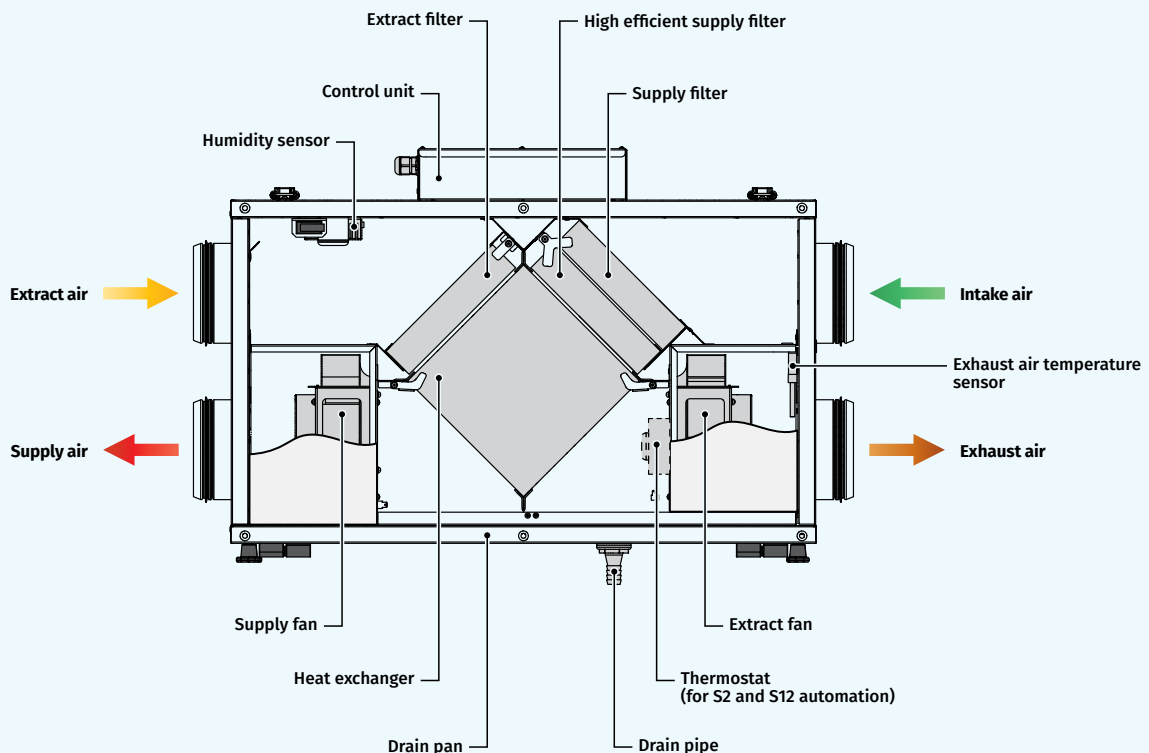


### Design

- The casing of the unit is made of double skinned white painted metal panels, internally filled with 20 mm mineral wool layer for heat- and sound insulation.
- The spigots for connection to the air ducts are located at the side of the unit.
- The hinged panel of the casing ensures easy access to the unit internals for service works including cleaning, filter replacement, etc.

### Fans

- Asynchronous external rotor motors and centrifugal impellers with backward curved blades are used for air supply and exhaust.
- Integrated motor overheating protection with automatic restart.
- Dynamically balanced impellers.
- Equipped with ball bearings for longer service life.
- Reliable and quiet operation.



### Heat Recovery

- The **KOMFORT Ultra L3 250-E S3 white** unit is equipped with a plate enthalpy cross-flow heat exchanger made of polymerized cellulose that recovers heat and humidity.
- Due to humidity recovery the enthalpy heat exchanger produces no condensate.



- The air flows are fully separated within the heat exchangers. Odours and contaminants contained in the extract air are not transferred to the supply air flow.
- Heat recovery is based on heat and/or humidity transfer through the plates of the heat exchanger. In the cold season supply air is heated in the heat exchanger by transferring the heat energy of warm and humid extract air to the cold fresh air. Heat recovery minimizes heat losses, which reduces the cost of space heating.
- In summer the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cooled extract air. This reduces load on air conditioners and saves electricity.
- In summer, when the indoor and outdoor temperature difference is low heat recovery is not reasonable. In this case the heat exchanger can be temporarily replaced with a summer block for warm seasons (available separately).

### Air Filtration

- Two built-in G4 and F8 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

### Control and Automation

- Turning the unit on/off from the control panel.
- Selecting ventilation mode – three speeds: minimum, medium, maximum.
- Freeze protection of the heat exchanger by means of turning off the supply fan during defrosting.



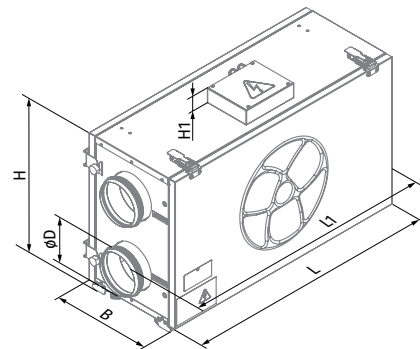
### Mounting

- The units can be fixed to the wall, ceiling or mounted on the floor using the mounting brackets.
- While mounting provide free access to the service panel for filter replacement and servicing.
- Due to universal casing design both left and right mounting is possible. It requires swapping the service and the back panel.

Designation key							
Serie	Unit type	Spigot modification	Modification	Rated air flow [m³/h]	Heat exchanger type	Control	Casing
KOMFORT	<b>Ultra:</b> compact unit	L: horizontal spigot orientation	3	250	– E: energy recovery	S3: multi speed switch	<b>white:</b> painted steel

### Overall Dimensions [mm]

Model	D	B	H	H1	L	L1
KOMFORT Ultra L3 250-E S3 white	125	300	443	43	713	810

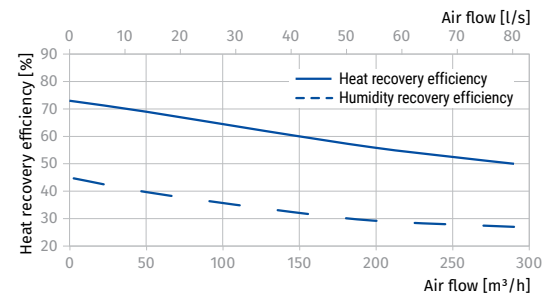
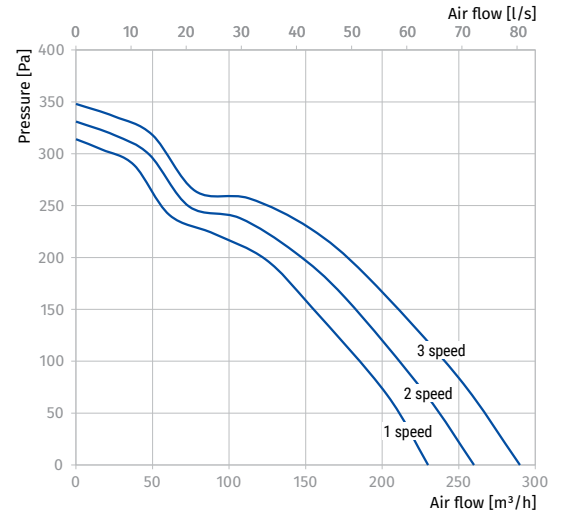


### Ordering Information








Part Number	Model	Description
BLAKOMFORTULTRAL3250-ES3	KOMFORT Ultra L3 250-E S3 white	WALL/FLOOR MOUNTED COMPACT ENERGY AHU

**Technical Data**

Parameters	KOMFORT Ultra L3 250-E S3 white
Voltage [V/50 (60) Hz]	1 ~ 220-240
Power [W]	176
Current [A]	0.8
Maximum air flow [m <sup>3</sup> /h (l/s)]	290 (81)
RPM [min <sup>-1</sup> ]	1550
Sound pressure level at 3 m [dBA]	28-47
Transported air temperature [°C]	-25...+60
Insulation	20 mm, mineral wool
Extract filter	G4
Supply filter	F8+G4
Connected air duct diameter [mm]	125
Heat recovery efficiency [%]	50-73
Humidity recovery efficiency [%]	27-45
Heat exchanger type	cross-flow
Heat exchanger material	polymerized cellulose



**Accessories**

		KOMFORT Ultra L3 250-E S3 white
G4 panel filter		FP 240x184x40 G4
F8 panel filter		FP 240x184x40 F8
Silencer		SD 125
Silencer		SDF 125
Backdraft air damper		VRV 125
Air damper		VK 125
Summer block		SB C4 200/240

# KOMFORT Ultra EC S2 300

## Compact heat recovery air handling units

### Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- The heat recovery technology is used to minimize ventilation heat losses.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round  $\varnothing$  125 mm air ducts.



**Air flow:**  
up to 300 m<sup>3</sup>/h  
83 l/s



**Heat recovery efficiency:**  
up to 73 %

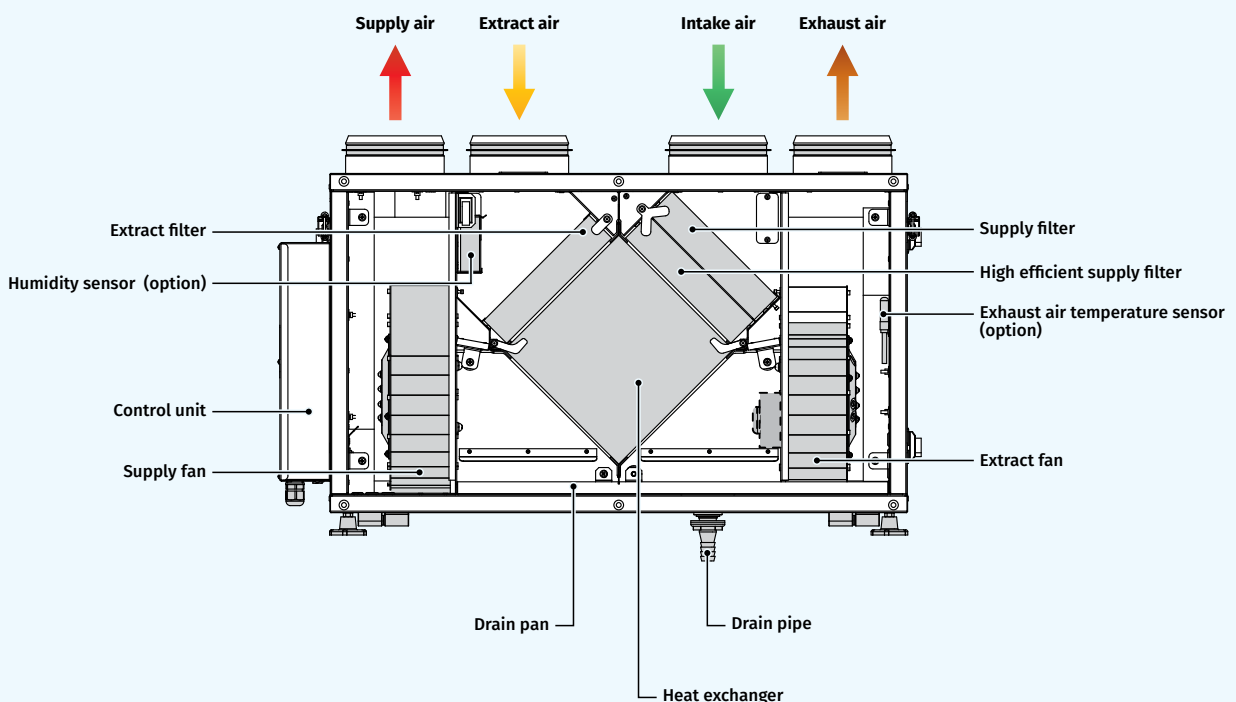


### Design

- The casing of **KOMFORT Ultra EC S2 300-E S14 white** is made of double skinned white painted metal panels, internally filled with 20 mm mineral wool layer for heat- and sound insulation.
- The spigots are located at the top of the unit and are rubber sealed for airtight connection to the air ducts.
- The hinged panel of the casing ensures easy access to the unit internals for service works including cleaning, filter replacement, etc.

### Fans

- The unit is equipped with high efficient external rotor EC motors and centrifugal impellers with forward curved blades.
- EC motors have the best power consumption to air flow ratio and meet the latest demands concerning energy saving and high efficient ventilation.
- EC motors are featured with high performance, low noise level and totally controllable speed range.
- The impellers are dynamically balanced.



### Heat Recovery

The **KOMFORT Ultra EC S2 300-E ... white** unit is equipped with an enthalpy plate cross-flow heat exchanger for energy (heat and humidity) recovery. Due to humidity recovery condensate is not generated in the enthalpy heat exchanger.



- The air flows are completely separated in the heat exchanger. Thus smells and contaminants are not transferred from the extract air to the supply air.
- Heat recovery is based on heat and/or humidity transfer through the heat exchanger plates. In the cold season supply air is heated in the heat exchanger by transferring the heat energy of warm and humid extract air to the cold fresh air. Heat recovery minimizes ventilation heat losses and heating costs respectively.
- In the warm season the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cool extract air. That reduces operation load on air conditioners and saves electricity.
- When the indoor and outdoor temperature difference is insignificant, heat recovery is not reasonable. In this case the heat exchanger can be temporarily replaced with a summer block for the warm season (available as a specially ordered accessory).

### FREEZE PROTECTION

- The integrated automatic freeze protection is used to prevent freezing of the heat exchanger in the cold season. The supply fan turns off according to the temperature sensor to get the heat exchanger warmed up with extract air. After that the supply fan turns on and the unit continues to run in the standard mode.

### Air Filtration

- Two built-in G4 and F8 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

### Control and Automation

The **KOMFORT Ultra EC S2 300-E S14 white** units have an integrated control system with a wall-mounted control panel S14 with a LED indication.



#### The S14 control panel functions:

- Unit On/Off.
- Speed selection: Low, Medium or High.
- Activation of the summer ventilation mode: The supply fan stops and the extract fan continues its operation with no heat recovery.
- Alarm indication.
- Filter maintenance indication.

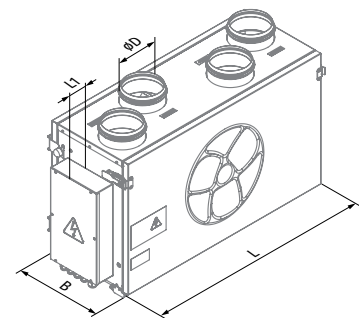
The **KOMFORT Ultra EC S2 300-E S14 white unit is equipped with a USB connector (Type B) and can be connected to a PC for configuring the advanced settings in a special software:**

- Fan speed adjustment from 0 to 100 %. Each speed is individually adjusted for the supply and the extract fans.
- Operation control on feedback from the FS2 duct humidity sensor (to be ordered separately).
- Unit operation setting according to the external relay (to be ordered separately).
- Temperature setting for freeze protection system activation.
- Control and operation adjustment of the filter maintenance timer.
- External control unit and humidity level control.
- Software version upgrading.

Designation key								
Series	Unit type	Motor type	Spigot modification	Insulation	Rated air flow [m³/h]	Heat exchanger type	Control	Casing
KOMFORT	<b>Ultra:</b> compact unit	<b>EC:</b> electronically commutated motor	<b>S:</b> vertical spigot orientation	<b>2:</b> Insulation 20 mm	<b>300</b>	– <b>E:</b> energy recovery	<b>S14:</b> sensor control panel with LED indication	<b>white:</b> painted steel

### Overall Dimensions [mm]

Model	D	B	H	H1	L	L1
KOMFORT Ultra EC S2 300-E S14 white	125	300	443	490	713	63



KOMFORT Ultra EC S2 300-E S14 white

### Ordering Information

Part Number	Model	Description
BLAKOMFORTULTRAECCL2300-ES14	KOMFORT Ultra EC S2 300-E S14 white	EC MOTORS WALL/FLOOR MOUNTED COMPACT ENERGY AHU

## Technical Data

Parameters	KOMFORT Ultra EC S2 300-E S14 white
Voltage [V / 50 (60) Hz]	1 ~ 230
Power [W]	165
Current [A]	1.3
Maximum air flow [m <sup>3</sup> /h (l/s)]	300 (83)
RPM [min <sup>-1</sup> ]	2050
Sound pressure level at 3 m [dBA]	33
Transported air temperature [°C]	-25...+40
Insulation	20 mm mineral wool
Extract filter	G4
Supply filter	G4, F8
Connected air duct diameter [mm]	125
Weight [kg]	28
Heat recovery efficiency [%]*	51-73
Humidity recovery efficiency [%]	26-45
Heat exchanger type	cross-flow
Heat exchanger material	enthalpy
SEC class for S2 automation	C
SEC class for S14 automation	A
ErP	2016, 2018

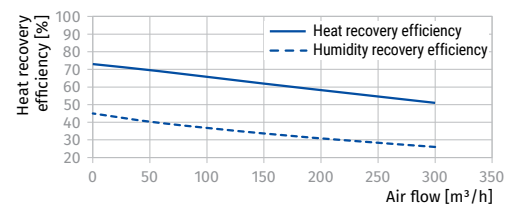
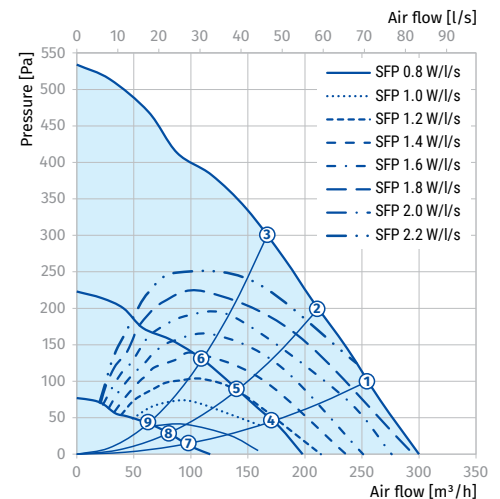
\* Heat recovery efficiency is specified in compliance with the EN 13141-7.

Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m [dBA]	LpA 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to supply inlet [dBA]	56	48	43	53	44	44	40	26	24		
L <sub>WA</sub> to supply outlet [dBA]	71	53	53	68	65	60	59	52	51		
L <sub>WA</sub> to exhaust inlet [dBA]	57	43	51	52	52	45	37	26	21		
L <sub>WA</sub> to exhaust outlet [dBA]	72	53	60	66	67	61	62	55	48		
L <sub>WA</sub> to environment [dBA]	53	33	44	47	50	44	38	29	24	33	43













Data provided for point 1 of the air flow diagram

Total power. Total sound pressure level.

Point	Total power of the unit [W]	Sound pressure level at 3 m (1 m) [dBA]
1	150	33 (43)
2	138	33 (43)
3	121	32 (42)
4	52	31 (41)
5	48	28 (38)
6	41	27 (37)
7	17	27 (37)
8	16	23 (33)
9	14	23 (33)



**Accessories**

		KOMFORT Ultra EC S2 300-E S14 white
G4 panel filter		FP 240x184x40 G4
F8 panel filter		FP 240x184x40 F8
Internal humidity sensor		FS2
CO <sub>2</sub> sensor with indication		CD-1
CO <sub>2</sub> sensor		CD-2
Humidity sensor		HR-S
Silencer		SD 125
Silencer		SDF 125
Backdraft air damper		VRV 125
Air damper		VKA 125
Electric actuator		LF230
Summer block		SB C4 200/240



# KOMFORT Ultra EC L2 300

## Compact heat recovery air handling units

### Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- The heat recovery technology is used to minimize ventilation heat losses.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round Ø 125 mm air ducts.



**Air flow:**  
up to 300 m<sup>3</sup>/h  
83 l/s



**Heat recovery efficiency:**  
up to 73 %

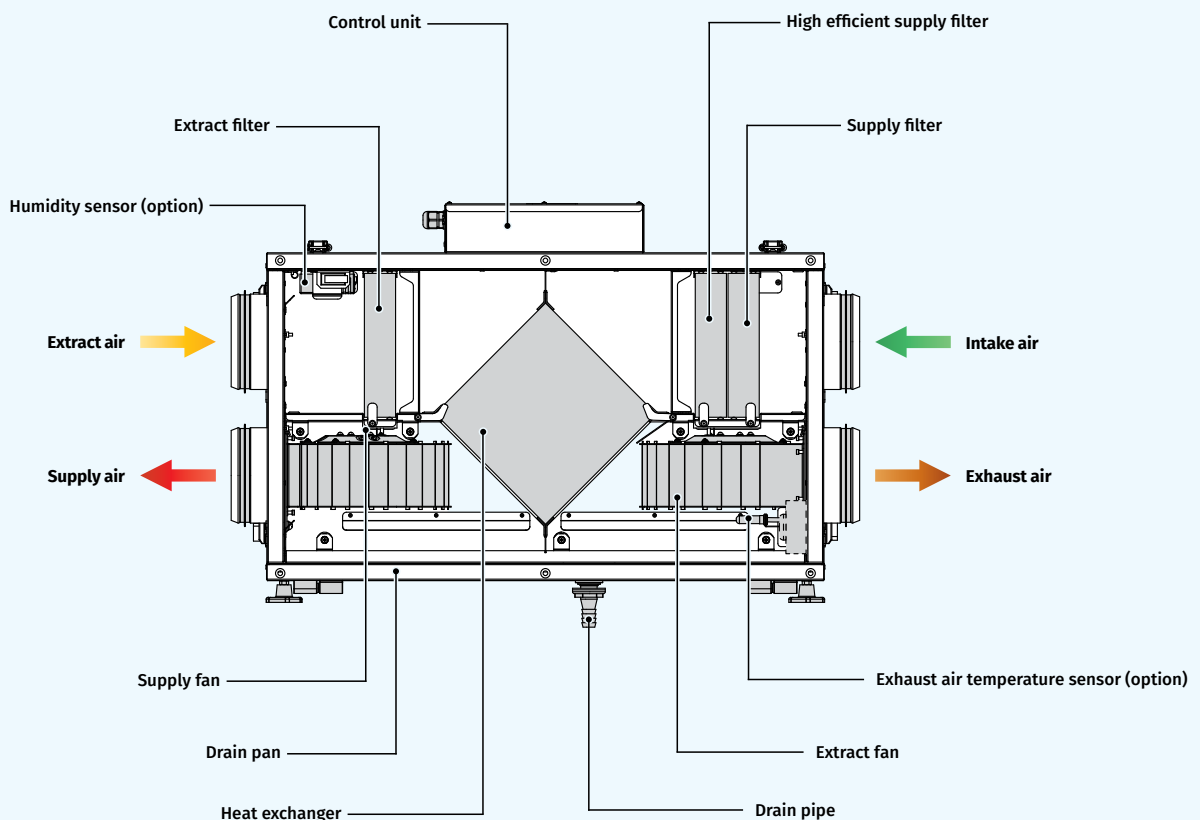


### Design

- The casing of **KOMFORT Ultra EC L2 300-E S14 white** is made of double skinned white painted metal panels, internally filled with 20 mm mineral wool layer for heat- and sound insulation.
- The spigots are located at the sides of the unit and are equipped with rubber seals for airtight connection to the air ducts.
- The hinged panel of the casing ensures easy access to the unit internals for service works including cleaning, filter replacement, etc.

### Fans

- The unit is equipped with high efficient external rotor EC motors and centrifugal impellers with forward curved blades.
- EC motors have the best power consumption to air flow ratio and meet the latest demands concerning energy saving and high efficient ventilation.
- EC motors are featured with high performance, low noise level and totally controllable speed range.
- The impellers are dynamically balanced.



### Heat Recovery

- The **KOMFORT Ultra EC L2 300-E ... white** unit is equipped with an enthalpy plate cross-flow heat exchanger for energy (heat and humidity) recovery. Due to humidity recovery condensate is not generated in the enthalpy heat exchanger.



- The air flows are completely separated in the heat exchanger. Thus smells and contaminants are not transferred from the extract air to the supply air.
- Heat recovery is based on heat and/or humidity transfer through the heat exchanger plates. In the cold season supply air is heated in the heat exchanger by transferring the heat energy of warm and humid extract air to the cold fresh air. Heat recovery minimizes ventilation heat losses and heating costs respectively.
- In the warm season the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cool extract air. That reduces operation load on air conditioners and saves electricity.
- When the indoor and outdoor temperature difference is insignificant, heat recovery is not reasonable. In this case the heat exchanger can be temporarily replaced with a summer block for the warm season (available as a specially ordered accessory).

### FREEZE PROTECTION

- The integrated automatic freeze protection is used to prevent freezing of the heat exchanger in the cold season. The supply fan turns off according to the temperature sensor to get the heat exchanger warmed up with extract air. After that the supply fan turns on and the unit continues to run in the standard mode.

### Air Filtration

- Two built-in G4 and F8 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

### Control and Automation

- The **KOMFORT Ultra EC L2 300-E S14 white** units have an integrated control system with a wall mounted control panel S14 with a LED indication.



#### The S14 control panel functions:

- Unit On/Off.
- Speed selection: Low, Medium or High.
- Activation of the summer ventilation mode: The supply fan stops and the extract fan continues its operation with no heat recovery.
- Alarm indication.
- Filter maintenance indication.

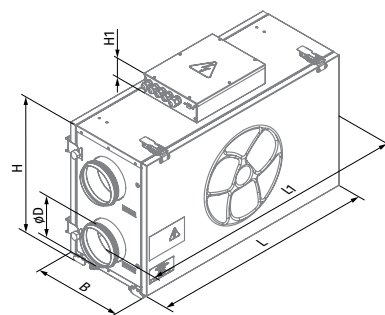
#### The KOMFORT Ultra EC L2 300-E S14 white unit is equipped with a USB connector (Type B) and can be connected to a PC for configuring the advanced settings in a special software:

- Fan speed adjustment from 0 to 100 %. Each speed is individually adjusted for the supply and the extract fans
- Operation control on feedback from the FS2 duct humidity sensor (to be ordered separately)
- Unit operation setting according to the external control unit (to be ordered separately)
- Temperature setting for freeze protection system activation
- Control and operation adjustment of the filter maintenance timer
- External relay status and humidity level control
- Software version upgrading

Designation key								
Series	Unit type	Motor type	Spigot modification	Insulation	Rated air flow [m³/h]	Heat exchanger type	Control	Casing
KOMFORT	Ultra: compact unit	EC: electronically commutated motor	L: horizontal spigot orientation	2: Insulation 20 mm	300	- E: energy recovery	S14: sensor control panel with LED indication	white: painted steel

### Overall Dimensions [mm]

Model	D	B	H	H1	L	L1
KOMFORT Ultra EC L2 300-E S14 white	125	300	443	63	713	810



KOMFORT Ultra EC L2 300-E S14 white

### Ordering Information

Part Number	Model	Description
BLAKOMFORTULTRAEC2300-ES14	KOMFORT Ultra EC L2 300-E S14 white	EC MOTORS WALL/FLOOR MOUNTED COMPACT ENERGY AHU

## Technical Data

Parameters	KOMFORT Ultra EC L2 300-E S14 white
Voltage [V / 50 (60) Hz]	1 ~ 230
Power [W]	165
Current [A]	1.3
Maximum air flow [m <sup>3</sup> /h (l/s)]	300 (83)
RPM [min <sup>-1</sup> ]	2050
Sound pressure level at 3 m [dBA]	33
Transported air temperature [°C]	-25...+40
Insulation	20 mm mineral wool
Extract filter	G4
Supply filter	G4, F8
Connected air duct diameter [mm]	125
Weight [kg]	28
Heat recovery efficiency [%]*	51-73
Humidity recovery efficiency [%]	26-45
Heat exchanger type	cross-flow
Heat exchanger material	enthalpy
SEC class for S2 automation	C
SEC class for S14 automation	A
ErP	2016, 2018

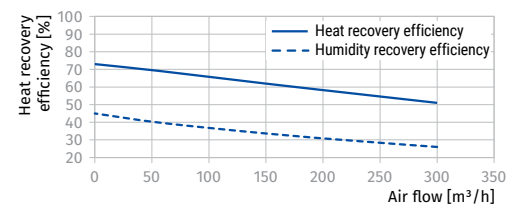
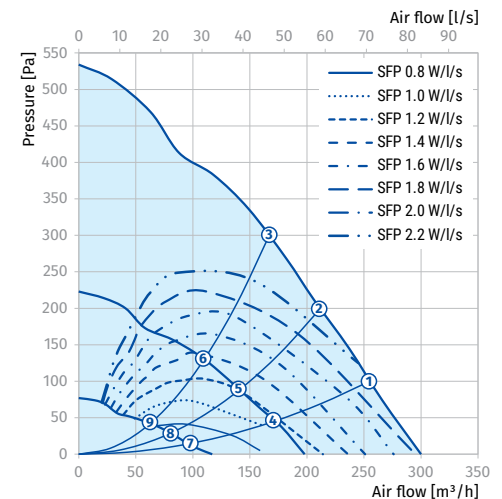
\* Heat recovery efficiency is specified in compliance with the EN 13141-7.

Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m [dBA]	LpA 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to supply inlet [dBA]	56	48	43	53	44	44	40	26	24		
L <sub>WA</sub> to supply outlet [dBA]	71	53	53	68	65	60	59	52	51		
L <sub>WA</sub> to exhaust inlet [dBA]	57	43	51	52	52	45	37	26	21		
L <sub>WA</sub> to exhaust outlet [dBA]	72	53	60	66	67	61	62	55	48		
L <sub>WA</sub> to environment [dBA]	53	33	44	47	50	44	38	29	24	33	43













Data provided for point 1 of the air flow diagram

Total power. Total sound pressure level.

Point	Total power of the unit [W]	Sound pressure level at 3 m (1 m) [dBA]
1	150	33 (43)
2	138	33 (43)
3	121	32 (42)
4	52	31 (41)
5	48	28 (38)
6	41	27 (37)
7	17	27 (37)
8	16	23 (33)
9	14	23 (33)



**Accessories**

		KOMFORT Ultra EC L2 300-E S14 white
G4 panel filter		FP 240x184x40 G4
F8 panel filter		FP 240x184x40 F8
Internal humidity sensor		FS2
CO <sub>2</sub> sensor with indication		CD-1
CO <sub>2</sub> sensor		CD-2
Humidity sensor		HR-S
Silencer		SD 125
Silencer		SDF 125
Backdraft air damper		VRV 125
Air damper		VKA 125
Electric actuator		LF230
Summer block		SB C4 200/240

# Decor ... G

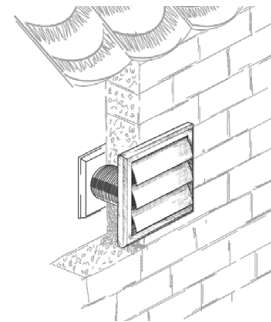
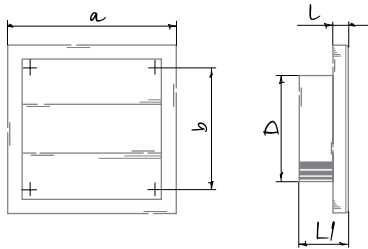
## Plastic gravity grilles

### Features

- Outer wall mounting
- Equipped with gravity louvre shutters for back flow prevention
- Temperature- and UV-resistant antistatic plastic
- Flush mounted fasteners
- Easy maintenance



### Overall Dimensions and Mounting



GRILLES

Model	Dimensions [mm]					Air pass [m <sup>2</sup> ]
	a	b	l	L1	Ø D	
Decor 155x155/100G	154	110	15	–	100	0.0096
Decor 185x185/125G	186	142	15	45	125	0.0113
Decor 250x250/150G	250	214	15	41	150	0.0177-0.056

### Ordering Information

Part Number	Model	Description
BLABGR100WHG	Decor 155x155/100G	GRILLE, GRAVITY, WHITE, 100 mm
BLABGR125WHG	Decor 185x185/125G	GRILLE, GRAVITY, WHITE, 125 mm
BLABGR150WHG	Decor 250x250/150G	GRILLE, GRAVITY, WHITE, 150 mm

# Decor

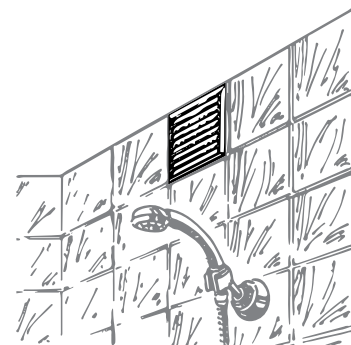
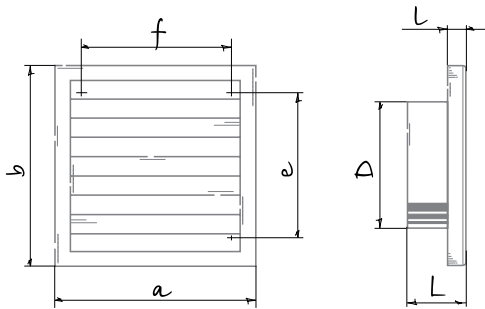
## Plastic fixed grilles



### Features

- Wall or ceiling mounting
- Temperature- and UV-resistant antistatic plastic
- Flush mounted fasteners
- Equipped with a protecting insect screen (s)
- Easy maintenance

### Overall Dimensions and Mounting



Model	Dimensions [mm]						Air pass [m <sup>2</sup> ]
	a	b	L	l	e×f	Ø D	
Decor 155x155/100s	154	154	-	15	110 × 110	100	0.0067
Decor 185x185/125s	186	186	45	15	142 × 142	125	0.0083
Decor 185x185/150s	186	186	45	15	142 × 142	150	0.0083

### Ordering Information

Part Number	Model	Description
BLABGR100WHF	Decor 155x155/100s	GRILLE, FIXED, WHITE, 100 mm – C/W INSECT MESH
BLABGR125WHF	Decor 185x185/125s	GRILLE, FIXED, WHITE, 125 mm – C/W INSECT MESH
BLABGR150WHF	Decor 185x185/150s	GRILLE, FIXED, WHITE, 150 mm – C/W INSECT MESH

# Decor ... HK

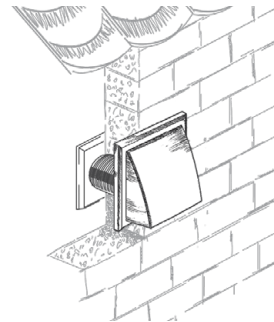
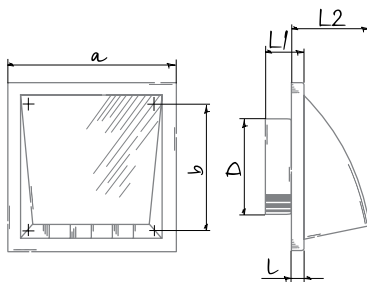
## Plastic weatherproof cowl

### Features

- Outer wall mounting
- Gravity backdraft damper for back flow prevention
- Protection grille against birds and rodents
- Temperature- and UV-resistant antistatic plastic
- Flush mounted fasteners
- Easy maintenance



### Overall Dimensions and Mounting



Model	Dimensions [mm]						Air pass [m <sup>2</sup> ]
	a	b	l	L1	L2	Ø D	
Decor 155x155/100HK	154	110	15	45	87	100	0.008
Decor 185x185/125HK	186	142	15	45	101	125	0.012
Decor 185x185/150HK	186	142	15	50	101	150	0.012

### Ordering Information

Part Number	Model	Description
BLABGR100C	Decor 155x155/100HK	GRILLE, COWL, WEATHERPROOF WHITE, 100 mm
BLABGR125C	Decor 185x185/125HK	GRILLE, COWL, WEATHERPROOF WHITE, 125 mm
BLABGR150C	Decor 185x185/150HK	GRILLE, COWL, WEATHERPROOF WHITE, 150 mm

# Decor ... EG

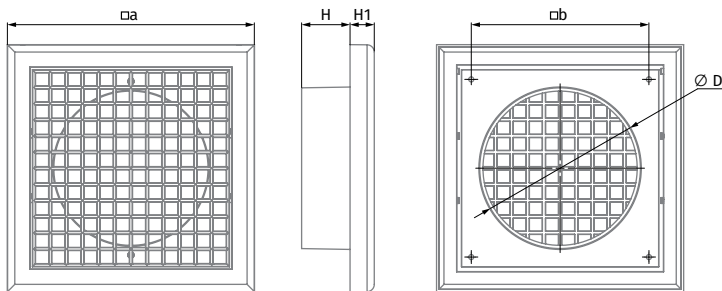
## Plastic eggcrate grilles

### Features

- o Wall mounting
- o Easy maintenance
- o Connection with rectangular or round ducts
- o ABS plastic
- o Temperature resistant, UV protected antistatic plastic
- o Designed for wall mounting in conjunction with rectangular or round ducts and is a suitable extraction fan.



### Overall Dimensions



Model	Dimensions [mm]					Air pass [m <sup>2</sup> ]
	□ a	□ b	Ø D	H	H1	
DECOR-EG 155x155/100s	153	110	99.5	30	15	0.0072
DECOR-EG 185x185/125s	186	142	124.8	30	15	0.0112
DECOR-EG 185x185/150s	186	142	149.6	35	15	0.0162

### Ordering Information

Part Number	Model	Description
BLABGR100WHE	DECOR-EG 155x155/100s	GRILLE, EGGCRATE, WHITE, 100 mm - C/W INSECT MESH
BLABGR125WHE	DECOR-EG 185x185/125s	GRILLE, EGGCRATE, WHITE, 125 mm - C/W INSECT MESH
BLABGR150WHE	DECOR-EG 185x185/150s	GRILLE, EGGCRATE, WHITE, 150 mm - C/W INSECT MESH



# DPR

## Plastic supply and exhaust diffusers

### Features

- For supply ventilation, air conditioning and heating.
- Designed for ceiling or soffit mounting
- Used to arrange correct air circulation in premises.
- Temperature resistant, UV protected antistatic plastic

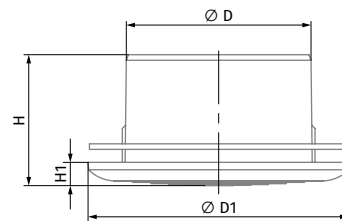


### Design

- Made of high quality plastic.
- Special aerodynamic disk valve design ensures uniform air distribution.
- Easy mounting with a mounting flange and a lock ring.
- The internal part has a sealing ring for more tight fit.
- A built-in insect screen.
- Equipped with mounting flanges with a lock ring for easy connection to round  $\varnothing$  100-150 mm air ducts.

### Overall Dimensions

Model	Dimensions [mm]				Air pass [m <sup>2</sup> ]
	D	D1	H	H1	
DPR 100	100	141	71	12.5	0.006
DPR 125	125	166	72	14	0.010
DPR 150	150	188	72	15	0.014



### Ordering Information

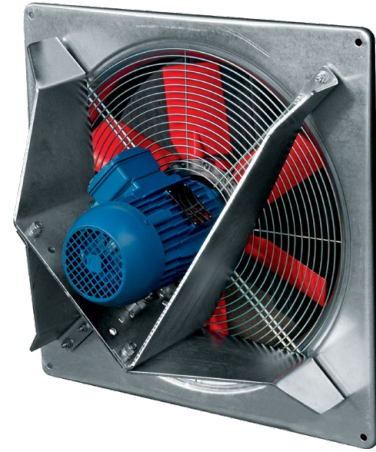
Part Number	Model	Description
BLABGR100RG	DPR 100	GRILLE - ROUND - WHITE, 100 mm - C/W INSECT MESH
BLABGR125RG	DPR 125	GRILLE - ROUND - WHITE, 125 mm - C/W INSECT MESH
BLABGR150RG	DPR 150	GRILLE - ROUND - WHITE, 150 mm - C/W INSECT MESH



# Plate Mounted Axial Fans

## Application

- Suitable for wall mounted applications.



## Design

- Galvanised steel fan casing, incorporate a corrosion resistant inlet finger guard as standard.

## Motor

- TEFC type in 415 V three-phase only. Motors are speed controllable using variable frequency control.
- External rotor motor in 240 V single phase & 415 V three phase, four and six pole options. Motors are speed controllable.
- Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.

## Protection

- Standard motors fitted are IP55. Higher degrees of protection are available as options if required.

## Impeller

- High efficiency adjustable pitch axial impeller. Impeller options include Aluminium, GRP/Nylon and Anti-static.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# SS & Heavy Duty Roof Mounted Axial Fans – Vertical Discharge

## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees. They are suitable for wide range of ventilation applications including industrial and commercial requiring medium to large air volumes and incorporate low loss non-return weather shutter.



## Design

- High efficiency axial impeller with TEFC motor. Hot Dipped Galvanised steel fan casing with galvanised sheet steel vertical cowl.

## Motor

- Motors are TEFC type and available in 415V three-phase only. Motors are speed controllable using variable frequency control. Options include motors complying with Exe, Exd, Exn etc. Standards.

## Protection

- Standard motors fitted are IP55. Higher degrees of protection are available as options if required.

## Impeller

- High efficiency adjustable pitch axial impeller. Impeller options include Aluminium, GRP/Nylon and Anti-static.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or other information required.

# Inline Axial Fans

## Application

- Suitable for mounting in any position, has flanged ends for ease of installation to ductwork. These units incorporate a viewing port and external terminal box. Mounting feet, inlet cones and matching flanges are also available as optional extras.



## Design

- Mild steel fan casing with hot-dip galvanised finish.

## Motor

- TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.
- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.
- Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.

## Protection

- Standard motors fitted are IP55. Higher degrees of protection are available as options if required.

## Impeller

- High efficiency adjustable pitch axial impeller. Impeller options include Aluminium, GRP/Nylon and Anti-static.

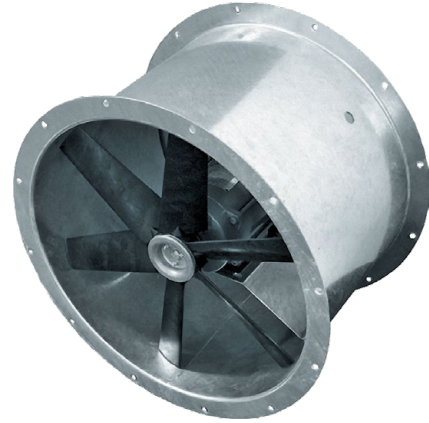
## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

## Inline Axial Fans Ex'd'

### Application

- Ex'd axial fans incorporate a flameproof motor and anti-static impellor. Typical applications include battery exhaust rooms and paint spray booths.
- Mounting feet, inlet cones and matching flanges are available as options.



### Design

- Mild steel fan casing with hot-dip galvanised finish.

### Motor

- TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.

### Protection

- IP55

### Impeller

- High efficiency anti-static axial impellor.

### Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, sizes, fan curves, noise specification or other information required.

# Plate Mounted Axial Fans

## Application

- Suitable for wall or panel mounted applications.
- Incorporated finger guard on the fan inlet comes as standard.



## Design

- Galvanised steel fan casing with powder coated finish on most sizes.

## Motor

- External rotor motor in 240V single phase and 415V three phase with two, four and six pole options. Motors are speed controllable.
- All three phase motors incorporate 2-speed Star/Delta motors.

## Protection

- IP44 with integral thermal protection.

## Impeller

- High efficiency fixed pitch axial impeller.

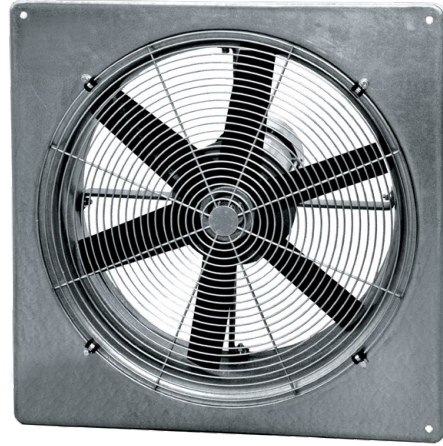
## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, sizes, fan curves, noise specification or any other information required.

# Plate Mounted Axial Fans Ex'd'

## Application

- The pre-engineered plate mounted fans incorporate a flameproof motor and anti-static impellor. Typical applications include battery exhaust rooms and paint spray booths.
- Incorporated finger guard on the fan inlet comes as standard.



## Design

- Galvanised steel fan casing.

## Motor

- Available in 240V single phase only. Motors are not speed controllable.

## Impeller

- High efficiency anti-static axial impellor.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, sizes, fan curves, noise specification or any other information required.



# Roof Air Cowl – Vertical Discharge

## Application

- o Designed for roof installations, they incorporate low loss design and are suitable for most general ventilation exhaust systems.



## Design

- o Galvanised steel base, windband and non-return shutter. Standard colour is “Dune” and other colours are available on request.
- o Lifting lugs are provided for ease of lifting and installation and are standard on all sizes.
- o Optional aluminium non return shutters are available for low airflow applications.

## Technical Data & Specification

- o Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Air Cowl – Horizontal Discharge

## Application

- Designed for roof installations, they incorporate low loss design and are suitable for most general ventilation exhaust systems.



## Design

- Galvanised steel base and cowl. Larger sizes have galvanised steel base UV stabilised cowl. Standard colour is “Dune” and other colours are available on request.
- Lifting lugs are provided for ease of lifting and installation on all larger sizes.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Mounted Axial Fans – Horizontal Discharge

## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees. They are suitable for wide range of ventilation applications including industrial and commercial requiring small to large air volumes and incorporate low loss non-return weather shutter.



## Design

- Galvanised steel base and UV stabilised cowl. Colour 'Dune' as standard, other colours available upon request.

## Motor

- TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.
- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.
- Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.
- Motors are TEFC type and available in 415V three-phase only. Motors are speed controllable using variable frequency control. Options include motors complying with Exe, Exd, Exn etc. Standards.

## Protection

- Standard motors fitted are IP55. Higher degrees of protection are available as options if required.

## Impeller

- High efficiency adjustable pitch axial impeller. Impeller options include Aluminium, GRP/Nylon and Anti-static.

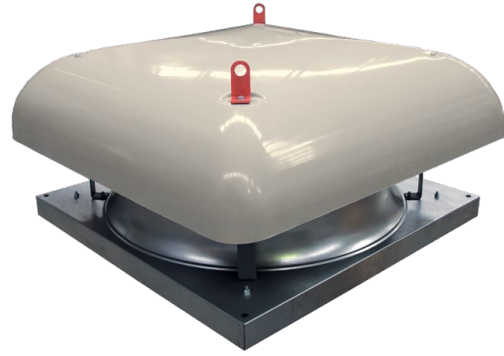
## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Mounted Axial Fans – Supply Air

## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees. They are suitable for wide range of ventilation applications including industrial and commercial requiring small to large air volumes.



## Design

- Galvanised steel base and UV stabilised cowl.

## Motor

- TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.
- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.
- Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.

## Protection

- Standard motors fitted are IP55. Higher degrees of protection are available as options if required.

## Impeller

- High efficiency adjustable pitch axial impeller. Impeller options include Aluminium, GRP/Nylon and Anti-static.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Mounted Axial Fans – Vertical Discharge

## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees. They are suitable for wide range of ventilation applications including industrial and commercial requiring small to large air volumes and incorporate low loss non-return weather shutter.



## Design

- Galvanised steel base and powder coated cowl.

## Motor

- TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.
- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.
- Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.

## Protection

- Standard motors fitted are IP55. Higher degrees of protection are available as options if required.

## Impeller

- High efficiency adjustable pitch axial impeller. Impeller options include Aluminium, GRP/Nylon and Anti-static.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Mounted Centrifugal Fans – Horizontal Discharge

## Application

- o Designed for roof installations, up to a maximum pitch of 15 degrees, they are suitable for a wide range of ventilation applications including domestic, industrial and commercial requiring small to large air volumes and medium to high pressures.



## Design

- o Galvanised steel base and UV stabilised cowl.

## Motor

- o TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.
- o External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.
- o Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.

## Protection

- o Standard motors are rated to IP54. Higher levels of protection are available.

## Impeller

- o High efficiency backward curved impeller.

## Technical Data & Specification

- o Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Mounted Centrifugal Fans – Supply Air

## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees, they are suitable for a wide range of ventilation applications including domestic, industrial and commercial requiring small to large air volumes and medium to high pressures.



## Design

- Galvanised steel base and UV stabilised cowl.

## Motor

- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.

## Protection

- IP54 with integral thermal protection.

## Impeller

- High efficiency backward curved impellor.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Roof Mounted Centrifugal Fans – Vertical Discharge

## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees, they are suitable for a wide range of ventilation applications including domestic, industrial and commercial requiring small to large air volumes and medium to high pressures.



## Design

- Galvanised steel base and powder coated cowl.

## Motor

- TEFC type in 415V three-phase only. Motors are speed controllable using variable frequency control.
- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.
- Options include motors complying with Exe, Exd, Exn etc. Standards, no external terminal box supplied for these options.

## Protection

- Standard motors are rated to IP54. Higher levels of protection are available.
- Metal construction complies with the requirements or AS1668 for kitchen exhaust applications.

## Impeller

- High efficiency backward curved impellor.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.



# Roof Mounted Centrifugal TEFC Fans – Vertical Discharge



## Application

- Designed for roof installations, up to a maximum pitch of 15 degrees, they are suitable for a wide range of ventilation applications including domestic, industrial and commercial requiring small to large air volumes and medium to high pressures.

## Design

- Galvanised steel base and powder coated cowl. Larger sizes have a galvanised steel base and UV stabilised cowl.

## Motor

- T FEC type available only in 415V three phase with four, six and eight pole options. Motors are speed controllable using variable frequency control.
- Options include 2 speed motors and motors comply with Exe, Exd, Exn etc. Standards.

## Protection

- Standard motors are rated to IP55. Higher levels of protection are available.

## Impeller

- High efficiency backward curved impellor.

## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, fan curves, noise specification or any other information required.

# Short Case Axial Fans

## Application

- Suitable for duct mounting in any position, with a compact flanged casing for ease of installation to ductwork.



## Design

- Galvanised steel fan casing with powder coated finish.

## Motor

- External rotor motor in 240V single phase & 415V three phase, four and six pole options. Motors are speed controllable.

## Protection

- IP54 with integral thermal protection.

## Impeller

- High efficiency fixed pitch axial impeller.

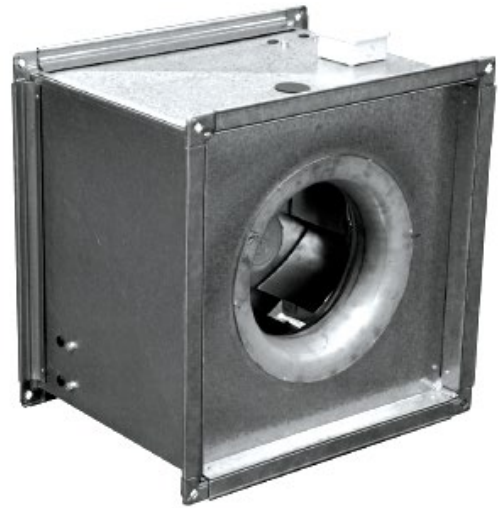
## Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, sizes, fan curves, noise specification or any other information required.

# Square Inline Centrifugal Fans

## Application

- Suitable for duct mounting in any position. They are suitable for a wide range of ventilation applications including car parks, kitchen exhaust, supply and return air where medium to high pressures are required.



## Design

- Galvanised steel fan casing with flanged end connections.

## Motor

- External rotor motor in 240V single phase and 415V three phase with four, six and eight pole options. Motors are speed controllable.
- All three phase motors incorporate 2-speed Star/Delta motors.

## Protection

- IP54 with integral thermal protection.

## Impeller

- High efficiency backward curved impeller.

## Technical Data & Specification

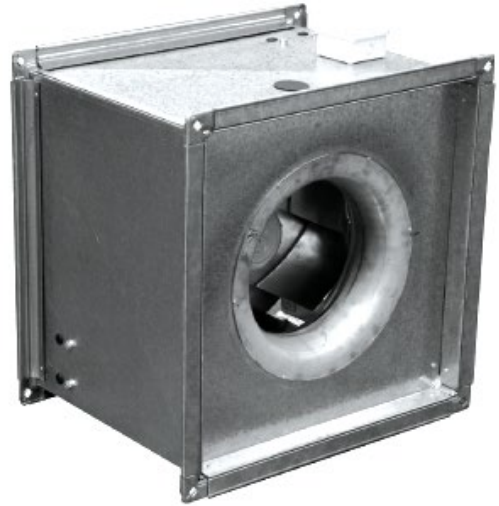
- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, sizes, fan curves, noise specification or any other information required.

# TEFC

## Square Inline Centrifugal Fans

### Application

- Suitable for duct mounting in any position, they are suitable for a wide range of ventilation applications including car parks, kitchen exhaust, supply and return air where medium to high pressures are required.



### Design

- Galvanised steel fan casing with flanged end connections.

### Motor

- TEFC type available only in 415V three phase with four, six and eight pole options. Motors are speed controllable using variable frequency control.
- Options include 2 speed motors and motors comply with Exe, Exd, Exn etc. Standards.

### Protection

- IP55 with integral thermal protection. Higher degrees of protection are available.

### Impeller

- High efficiency backward curved impellor.

### Technical Data & Specification

- Email [info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au) for all technical data, sizes, fan curves, noise specification or any other information required.

# Duct Fittings

## BLAUBERG Y JUNCTIONS – PLASTIC NON INSULATED

Product Code	Product Description
BLA644	150/100/100 Y junction – non insulated
BLA666	150/150/150 Y junction – non insulated
BLA1088	250/200/200 Y junction – non insulated
BLA1288	300/200/200 Y junction – non insulated
BLA121010	300/250/250 Y junction – non insulated
BLA121212	300/300/300 Y junction – non insulated
BLA141010	350/250/250 Y junction – non insulated
BLA141210	350/300/250 Y junction – non insulated
BLA141212	350/300/300 Y junction – non insulated
BLA141410	350/350/250 Y junction – non insulated
BLA141414	350/350/350 Y junction – non insulated



## BLAUBERG Y JUNCTIONS – PLASTIC INSULATED

Product Code	Product Description
BLA644INS	150/100/100 Y junction – insulated
BLA666INS	150/150/150 Y junction – insulated
BLA1088INS	250/200/200 Y junction – insulated
BLA1288YINS	300/200/200 Y junction – insulated
BLA121010YINS	300/250/250 Y junction – insulated
BLA121212INS	300/300/300 Y junction – insulated
BLA141010YINS	350/250/250 Y junction – insulated
BLA141210INS	350/300/250 Y junction – insulated
BLA141212INS	350/300/300 Y junction – insulated
BLA141410YINS	350/350/250 Y junction – insulated
BLA141414INS	350/350/350 Y junction – insulated

## BLAUBERG SINGLE BRANCH TAKE OFF – PLASTIC NON INSULATED

Product Code	Product Description
BLA666BTO	150/150/150 Branch take off – non insulated
BLA866BTO	200/150/150 Branch take off – non insulated
BLA888BTO	200/200/200 Branch take off – non insulated
BLA101010BTO	250/250/250 Branch take off – non insulated
BLA10106BTO	250/250/150 Branch take off – non insulated
BLA10108BTO	250/250/200 Branch take off – non insulated
BLA1066BTO	250/150/150 Branch take off – non insulated
BLA1086BTO	250/200/150 Branch take off – non insulated
BLA1088BTO	250/200/200 Branch take off – non insulated
BLA121010BTO	300/250/250 Branch take off – non insulated
BLA12106BTO	300/250/150 Branch take off – non insulated
BLA12108BTO	300/250/200 Branch take off – non insulated
BLA121210BTO	300/300/250 Branch take off – non insulated
BLA12126BTO	300/300/150 Branch take off – non insulated
BLA12128BTO	300/350/200 Branch take off – non insulated
BLA1288BTO	300/200/200 Branch take off – non insulated
BLA141010BTO	350/250/250 Branch take off – non insulated
BLA141210 BTO	350/300/200 Branch take off – non insulated
BLA141212 BTO	350/300/300 Branch take off – non insulated
BLA14126 BTO	350/300/150 Branch take off – non insulated
BLA14128 BTO	350/300/200 Branch take off – non insulated
BLA141410 BTO	350/350/250 Branch take off – non insulated
BLA141412 BTO	350/350/300 Branch take off – non insulated
BLA14146 BTO	350/350/150 Branch take off – non insulated
BLA14148 BTO	350/350/200 Branch take off – non insulated



**BLAUBERG SINGLE BRANCH TAKE OFF – PLASTIC INSULATED**

Product Code	Product Description
BLA666BTOINS	150/150/150 Branch take off – insulated
BLA866BTOINS	200/150/150 Branch take off – insulated
BLA888BTOINS	200/200/200 Branch take off – insulated
BLA101010BTOINS	250/250/250 Branch take off – insulated
BLA10106BTOINS	250/250/150 Branch take off – insulated
BLA10108BTOINS	250/250/200 Branch take off – insulated
BLA1066BTOINS	250/150/150 Branch take off – insulated
BLA1086BTOINS	250/200/150 Branch take off – insulated
BLA1088BTOINS	250/200/200 Branch take off – insulated
BLA121010BTOINS	300/250/250 Branch take off – insulated
BLA12106BTOINS	300/250/150 Branch take off – insulated
BLA12108BTOINS	300/250/200 Branch take off – insulated
BLA121210BTOINS	300/300/250 Branch take off – insulated
BLA12126BTOINS	300/300/150 Branch take off – insulated
BLA12128BTOINS	300/350/200 Branch take off – insulated
BLA1288BTOINS	300/200/200 Branch take off – insulated
BLA141010BTOINS	350/250/250 Branch take off – insulated
BLA141210BTOINS	350/300/200 Branch take off – insulated
BLA141212BTOINS	350/300/300 Branch take off – insulated
BLA14126BTOINS	350/300/150 Branch take off – insulated
BLA14128BTOINS	350/300/200 Branch take off – insulated
BLA141410BTOINS	350/350/250 Branch take off – insulated
BLA141412BTOINS	350/350/300 Branch take off – insulated
BLA14146BTOINS	350/350/150 Branch take off – insulated
BLA14148BTOINS	350/350/200 Branch take off – insulated

**BLAUBERG DOUBLE BRANCH TAKE OFF – PLASTIC NON INSULATED**

Product Code	Product Description
BLA8666BTO	200/150/150/150 Double branch take off – non insulated
BLA8886BTO	200/200/150/150 Double branch take off – non insulated
BLA101066BTO	250/250/150/150 Double branch take off – non insulated
BLA101086BTO	250/250/200/150 Double branch take off – non insulated
BLA101088BTO	250/250/200/200 Double branch take off – non insulated
BLA10666BTO	250/150/150/150 Double branch take off – non insulated
BLA10886BTO	250/200/200/150 Double branch take off – non insulated
BLA10888BTO	250/200/200/200 Double branch take off – non insulated
BLA12101010BTO	300/200/200/200 Double branch take off – non insulated
BLA121066BTO	300/250/150/150 Double branch take off – non insulated
BLA121086BTO	300/250/200/150 Double branch take off – non insulated
BLA121088BTO	300/250/200/200 Double branch take off – non insulated
BLA12121010BTO	300/300/250/250 Double branch take off – non insulated
BLA121266BTO	300/300/150/150 Double branch take off – non insulated
BLA121286BTO	300/300/200/150 Double branch take off – non insulated
BLA121288BTO	300/300/200/200 Double branch take off – non insulated
BLA12866BTO	300/200/150/150 Double branch take off – non insulated
BLA12886 BTO	300/200/200/150 Double branch take off – non insulated
BLA12888BTO	300/200/200/200 Double branch take off – non insulated
BLA14101010BTO	350/250/250/250 Double branch take off – non insulated
BLA14121010BTO	350/300/250/250 Double branch take off – non insulated
BLA14121212BTO	350/300/300/300 Double branch take off – non insulated
BLA141266BTO	350/300/150/150 Double branch take off – non insulated
BLA141286BTO	350/300/200/150 Double branch take off – non insulated
BLA141288BTO	350/300/200/200 Double branch take off – non insulated
BLA14141010BTO	350/350/250/250 Double branch take off – non insulated
BLA14141212BTO	350/350/300/300 Double branch take off – non insulated
BLA141466BTO	350/350/150/150 Double branch take off – non insulated
BLA141486BTO	350/350/200/150 Double branch take off – non insulated
BLA141488BTO	350/350/200/200 Double branch take off – non insulated



**BLAUBERG DOUBLE BRANCH TAKE OFF – PLASTIC INSULATED**

Product Code	Product Description
BLA8666BTOINS	200/150/150/150 Double branch take off – insulated
BLA8866BTOINS	200/200/150/150 Double branch take off – insulated
BLA101066BTOINS	250/250/150/150 Double branch take off – insulated
BLA101086BTOINS	250/250/200/150 Double branch take off – insulated
BLA101088BTOINS	250/250/200/200 Double branch take off – insulated
BLA10666BTOINS	250/150/150/150 Double branch take off – insulated
BLA10886BTOINS	250/200/200/150 Double branch take off – insulated
BLA10888BTOINS	250/200/200/200 Double branch take off – insulated
BLA12101010BTOINS	300/200/200/200 Double branch take off – insulated
BLA121066BTOINS	300/250/150/150 Double branch take off – insulated
BLA121086BTOINS	300/250/200/150 Double branch take off – insulated
BLA121088BTOINS	300/250/200/200 Double branch take off – insulated
BLA12121010BTOINS	300/300/250/250 Double branch take off – insulated
BLA121266BTOINS	300/300/150/150 Double branch take off – insulated
BLA121286BTOINS	300/300/200/150 Double branch take off – insulated
BLA121288BTOINS	300/300/200/200 Double branch take off – insulated
BLA12866BTOINS	300/200/150/150 Double branch take off – insulated
BLA12886BTOINS	300/200/200/150 Double branch take off – insulated
BLA12888BTOINS	300/200/200/200 Double branch take off – insulated
BLA14101010BTOINS	350/250/250/250 Double branch take off – insulated
BLA14121010BTOINS	350/300/250/250 Double branch take off – insulated
BLA14121212BTOINS	350/300/300/300 Double branch take off – insulated
BLA141266BTOINS	350/300/150/150 Double branch take off – insulated
BLA141286BTOINS	350/300/200/150 Double branch take off – insulated
BLA141288BTOINS	350/300/200/200 Double branch take off – insulated
BLA14141010BTOINS	350/350/250/250 Double branch take off – insulated
BLA14141212BTOINS	350/350/300/300 Double branch take off – insulated
BLA141466BTOINS	350/350/150/150 Double branch take off – insulated
BLA141486BTOINS	350/350/200/150 Double branch take off – insulated
BLA141488BTOINS	350/350/200/200 Double branch take off – insulated

**BLAUBERG DUCT REDUCERS – PLASTIC NON INSULATED**

Product Code	Product Description
BLA125100R	125/100 Reducer – non insulated
BLA150100R	150/100 Reducer – non insulated
BLA150125R	150/125 Reducer – non insulated
BLA200150R	200/150 Reducer – non insulated
BLA250200R	250/200 Reducer – non insulated
BLA300250R	300/250 Reducer – non insulated
BLA350300R	350/300 Reducer – non insulated



### BLAUBERG MANUAL BALANCING DAMPERS

- o Product Description
  - Inline galvanised manual inline duct damper
- o Features
  - Adjustment on the exterior of the damper for airflow

Product Code	Product Description
BLABDMA150	150 mm Manual Balancing Damper
BLABDMA200	200 mm Manual Balancing Damper
BLABDMA250	250 mm Manual Balancing Damper
BLABDMA350	300 mm Manual Balancing Damper
BLABDMA400	400 mm Manual Balancing Damper
BLABDMA450	450 mm Manual Balancing Damper



### BLAUBERG BACKDRAFT DAMPERS

- o Product Description
  - Inline galvanised backdraft damper
- o Features
  - For the prevention of air movement in the duct when a fan is not operating

Product Code	Product Description
BLABACKDRAFT100	100 mm Backdraft Damper – Metal
BLABACKDRAFT125	125 mm Backdraft Damper – Metal
BLABACKDRAFT150	150 mm Backdraft Damper – Metal
BLABACKDRAFT200	200 mm Backdraft Damper – Metal
BLABACKDRAFT250	250 mm Backdraft Damper – Metal
BLABACKDRAFT315	315 mm Backdraft Damper – Metal



- o Product Description
  - Inline plastic backdraft damper
- o Features
  - For the prevention of air movement in the duct when a fan is not operating. For use with 100 mm to 150 mm fans with low pressure curves (Pa).

Product Code	Product Description
BLABBACKDRAFT100	100 mm Backdraft Damper – Plastic
BLABBACKDRAFT125	100 mm Backdraft Damper – Plastic
BLABBACKDRAFT150	150 mm Backdraft Damper – Plastic



### BLAUBERG JOINING COLLARS

- o Product Description
  - Inline plastic/metal duct joining collar for joining two lengths of ducting together

Product Code	Product Description
BLADUCTJOINER100	100 mm duct Joiner – Plastic
BLADUCTJOINER125	125 mm duct Joiner – Plastic
BLADUCTJOINER150	150 mm duct Joiner – Plastic
BLADUCTJOINER200	200 mm duct Joiner – Metal
BLADUCTJOINER250	250 mm duct Joiner – Metal
BLADUCTJOINER300	300 mm duct Joiner – Metal
BLADUCTJOINER350	350 mm duct Joiner – Metal
BLADUCTJOINER350	350 mm duct Joiner – Metal
BLADUCTJOINER400	400 mm duct Joiner – Metal
BLADUCTJOINER450	450 mm duct Joiner – Metal





# Ducting

## BLAUBERG 3 ZERO POLYESTER NUDE CORE DUCT

Product Code	Size
BLADUCT100-3	100 mm×6 m
BLADUCT125-3	125 mm×6 m
BLADUCT150-3	150 mm×6 m
BLADUCT200-3	200 mm×6 m
BLADUCT250-3	250 mm×6 m
BLADUCT300-3	300 mm×6 m
BLADUCT350-3	350 mm×6 m
BLADUCT400-3	400 mm×6 m
BLADUCT450-3	450 mm×6 m
BLADUCT500-3	500 mm×6 m

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems



## BLAUBERG 4 ZERO ALUMINIUM/POLYESTER NUDE CORE DUCT

Product Code	Size
BLADUCT100-4	100 mm×6 m
BLADUCT125-4	125 mm×6 m
BLADUCT150-4	150 mm×6 m
BLADUCT200-4	200 mm×6 m
BLADUCT250-4	250 mm×6 m
BLADUCT300-4	300 mm×6 m
BLADUCT350-4	350 mm×6 m
BLADUCT400-4	400 mm×6 m
BLADUCT450-4	450 mm×6 m
BLADUCT500-4	500 mm×6 m

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems



## BLAUBERG 3 ZERO – R0.6 POLYESTER INSULATED DUCT

Product Code	Size
BLADUCT100-R0.6	100 mm×6 m
BLADUCT125-R0.6	125 mm×6 m
BLADUCT150-R0.6	150 mm×6 m
BLADUCT200-R0.6	200 mm×6 m
BLADUCT250-R0.6	250 mm×6 m
BLADUCT300-R0.6	300 mm×6 m
BLADUCT350-R0.6	350 mm×6 m
BLADUCT400-R0.6	400 mm×6 m
BLADUCT450-R0.6	450 mm×6 m
BLADUCT500-R0.6	500 mm×6 m

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems



## BLAUBERG 3 ZERO – R1.0 POLYESTER INSULATED DUCT

Product Code	Size
BLADUCT100-R1.0	100 mm×6 m
BLADUCT125-R1.0	125 mm×6 m
BLADUCT150-R1.0	150 mm×6 m
BLADUCT200-R1.0	200 mm×6 m
BLADUCT250-R1.0	250 mm×6 m
BLADUCT300-R1.0	300 mm×6 m
BLADUCT350-R1.0	350 mm×6 m
BLADUCT400-R1.0	400 mm×6 m
BLADUCT450-R1.0	450 mm×6 m
BLADUCT500-R1.0	500 mm×6 m

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems

**BLAUBERG 3 ZERO – R1.5 POLYESTER INSULATED DUCT**

Product Code	Size
BLADUCT100-R1.5	100 mm×6 m
BLADUCT125-R1.5	125 mm×6 m
BLADUCT150-R1.5	150 mm×6 m
BLADUCT200-R1.5	200 mm×6 m
BLADUCT250-R1.5	250 mm×6 m
BLADUCT300-R1.5	300 mm×6 m
BLADUCT350-R1.5	350 mm×6 m
BLADUCT400-R1.5	400 mm×6 m
BLADUCT450-R1.5	450 mm×6 m
BLADUCT500-R1.5	500 mm×6 m

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems

**BLAUBERG – SEMI RIGID ALUMINIUM DUCT**

Product Code	Size
BLADUCTAN100	100 mm×3 m
BLADUCTAN125	125 mm×3 m
BLADUCTAN150	150 mm×3 m
BLADUCTAN200	200 mm×3 m

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems

**BLAUBERG – FLEXIBLE AIR DUCT BLAUFLEX PVC**

- o Made of 65 micron thick white PVC film reinforced with steel wire frame
- o Temperature range, °C : -18 ... +70

Model	Ø d	l (Length)
BlauFlex PVC/102/3	102 mm	3 m
BlauFlex PVC/127/4	127 mm	4 m
BlauFlex PVC/152/5	152 mm	5 m

Product Code	Size
BLABDCT1003PVC	100 mm×3 m PVC DUCT
BLABDCT1254PVC	125 mm×4 m PVC DUCT
BLABDCT1505PVC	150 mm×5 m PVC DUCT

All ducting meets the requirements of Australian Standards 4254 and the building codes of Australia for domestic and commercial air handling systems



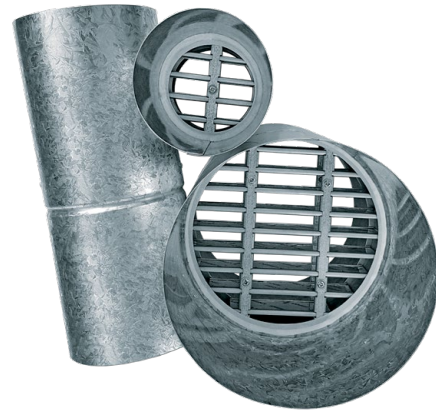
DUCTING

# Lorient LVH-0

## Intumescent Round Fire Dampers

### Use

- Cost effective round intumescent fire damper for walls, floors and ceilings



### Features

- Cost effective solution
- Innovative & easy to install light weight design
- Suitable for extract and supply systems in commercial, industrial and residential projects
- No hazardous fibrous packing required
- No thermal clearances required in installation
- Reduced maintenance & resultant cost savings
- Also available as LVH-OSS (stainless steel construction) for aggressive environment
- Integrity Fire Rating – up to 4 hours
- Galvanised sleeve (spigot) 360 mm long

### Ordering Information

Product Code	Size
LVH44C-100R	100 mm
LVH44C-125R	125 mm
LVH44C-150R	150 mm
LVH44C-200R	200 mm
LVH44C-250R	250 mm
LVH44C-300R	300 mm
LVH44C-350R	350 mm

### Accessories

#### FIRE RATED MASTIC

- Grey fire mastic seal to be used with all fire intumescent fire dampers

Product Code	Weight
LVHFRMG	310 g

# Lorient LVH-44

## Intumescent Square/Rectangular Fire Dampers

### Use

- o Square/rectangular intumescent fire damper for walls, floors and ceilings



### Features

- o Integrity Fire Rating – up to 4 hours
- o Damper Depth 44 mm
- o Sizes available from 45 mm to over 10,000 mm
- o Innovative, slimline design
- o Simple installation
- o Suitable for retrofit of seized mechanical dampers
- o Approvals for wall, floor and ceiling mounting
- o No thermal expansion clearances during installation
- o Reduced maintenance and resultant cost saving

### Ordering Information

Product Code	Size
LVH44-100/100	100 mm×100 mm
LVH44-100/125	100 mm×125 mm
LVH44-125/125	125 mm×125 mm
LVH44-125/150	125 mm×150 mm
LVH44-150/150	150 mm×150 mm
LVH44-150/175	150 mm×175 mm
LVH44-175/175	175 mm×175 mm
LVH44-175/200	175 mm×200 mm
LVH44-200/200	200 mm×200 mm
LVH44-200/250	200 mm×250 mm
LVH44-250/250	250 mm×250 mm
LVH44-250/300	250 mm×300 mm
LVH44-300/300	300 mm×300 mm
LVH44-300/350	300 mm×350 mm
LVH44-350/350	350 mm×350 mm
LVH44-350/400	350 mm×400 mm
LVH44-400/400	400 mm×400 mm
LVH44-400/450	400 mm×450 mm
LVH44-450/450	450 mm×450 mm
LVH44-450/500	450 mm×500 mm
LVH44-500/500	500 mm×500 mm
LVH44-500/550	500 mm×550 mm
LVH44-550/550	550 mm×550 mm
LVH44-550/600	550 mm×600 mm
LVH44-600/600	600 mm×600 mm

Customised sizes are available up to 10 m×10 m

### Accessories

#### FIRE RATED MASTIC

- o Grey fire mastic seal to be used with all fire intumescent fire dampers

Product Code	Weight
LVHFRMG	310 g

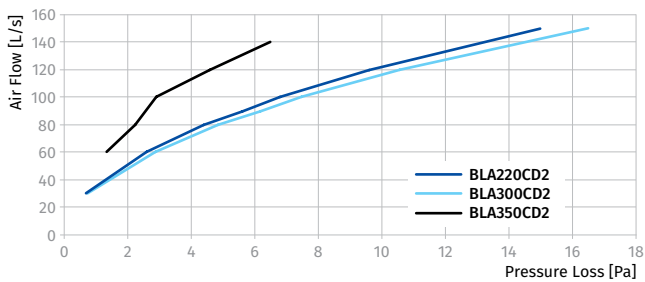
# Low Profile Ducting

## Features

- Designed to provide quiet and efficient air extraction from bathrooms, toilets, dryers and rangehoods, where there are confined ceiling and wall spaces. This allows Mechanical Engineers and Architects a more flexible design where space for services becomes limited.
- Available in three sizes to suit a large range of airflow and low resistance requirements, at low noise levels to maximize fan performance.
- All low profile ducting sizes have been independently tested and complies with Australian Standards a 4254.2-2012: Ductwork for air-handling systems in buildings. 2.1.2 Rigid ductwork.
- Testing has been completed and is compliant to AS/NZS 1530.3 to have smoke development index no greater than 3 and a spread of flame index no greater than 0. All ducting has passed a UL181 burning test.

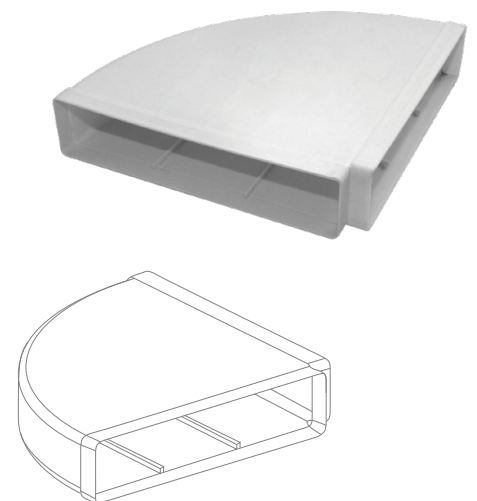
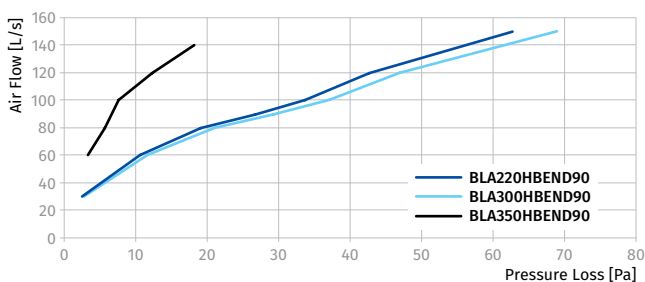
### CHANNEL DUCT 2 M LENGTH

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220CD2	220 mm×90 mm×2 m	0.68	2.6	4.4	5.6	6.8	9.6		15
BLA300CD2	300 mm×60 mm×2 m	0.75	2.86	4.48	6.15	7.47	10.55		16.48
BLA350CD2	350 mm×75 mm×2 m		1.20	2		2.60	4.10	5.80	



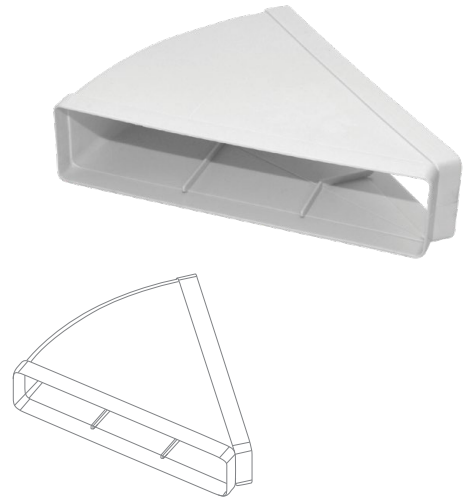
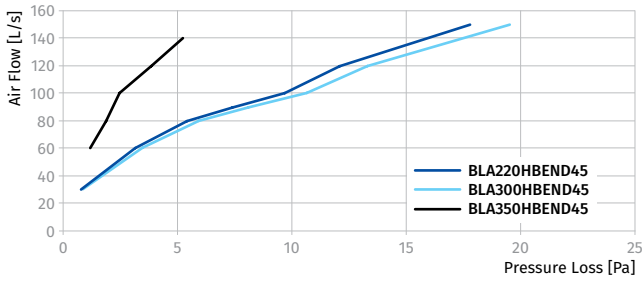
### HORIZONTAL DUCT 90 DEGREE BEND

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220HBEND90	220 mm×90 mm	2.47	10.59	19.16	26.73	33.74	42.74		62.79
BLA300HBEND90	300 mm×60 mm	2.71	11.64	21.05	29.37	37.08	46.97		69
BLA350HBEND90	350 mm×75 mm		3.30	5.70		7.60	12.30	18.20	



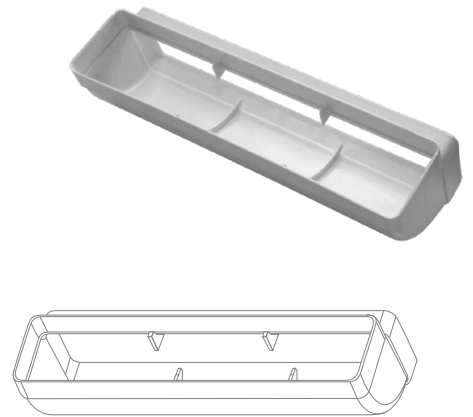
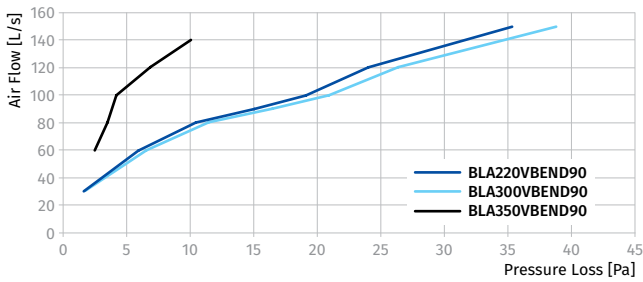
**HORIZONTAL DUCT 45 DEGREE BEND**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220HBEND45	220 mm×90 mm	0.77	3.16	5.41	7.38	9.68	12.11	17.79	
BLA300HBEND45	300 mm×60 mm	0.85	3.47	5.95	8.11	10.64	13.13	19.55	
BLA350HBEND45	350 mm×75 mm	1.20		1.90	2.50		3.90	5.30	



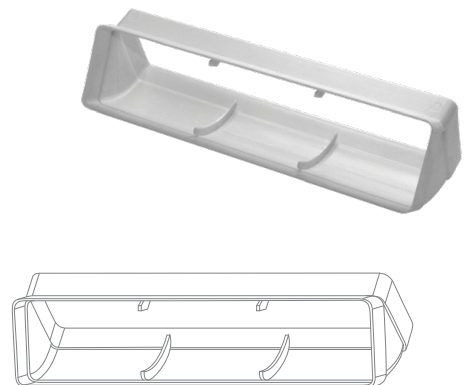
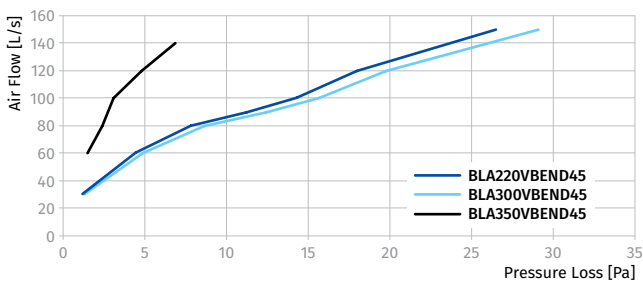
**VERTICAL DUCT 90 DEGREE BEND**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220VBEND90	220 mm×90 mm	1.62	5.94	10.45	15.02	19.09	24	35.36	
BLA300VBEND90	300 mm×60 mm	1.78	6.53	11.48	16.51	20.98	26.37	38.86	
BLA350VBEND90	350 mm×75 mm	2.50		3.50	4.20		6.90	10.10	



**VERTICAL DUCT 45 DEGREE BEND**

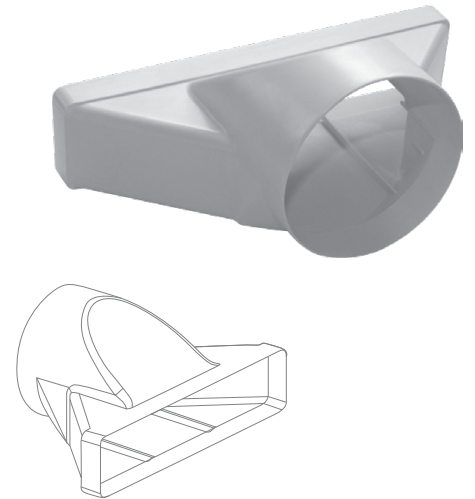
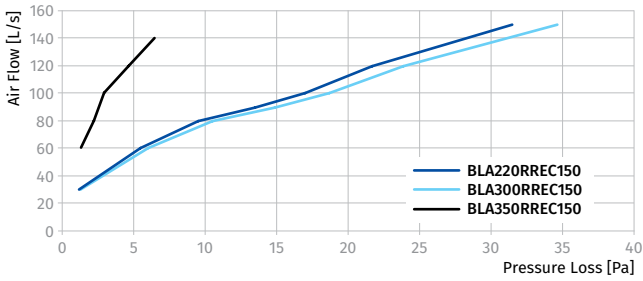
Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220VBEND45	220 mm×90 mm	1.19	4.46	7.84	11.25	14.28	17.97	26.49	
BLA300VBEND45	300 mm×60 mm	1.31	4.90	8.65	12.37	15.69	19.75	29.11	
BLA350VBEND45	350 mm×75 mm	1.50		2.40	3.10		4.80	6.90	



DUCTING

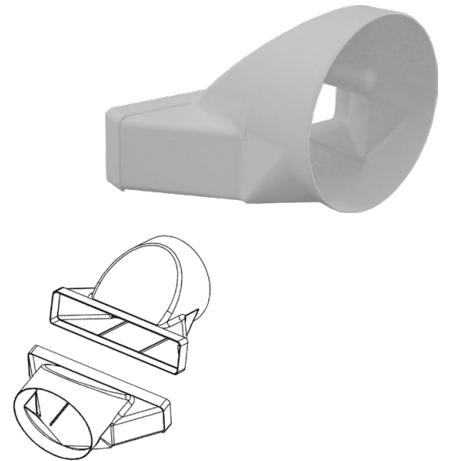
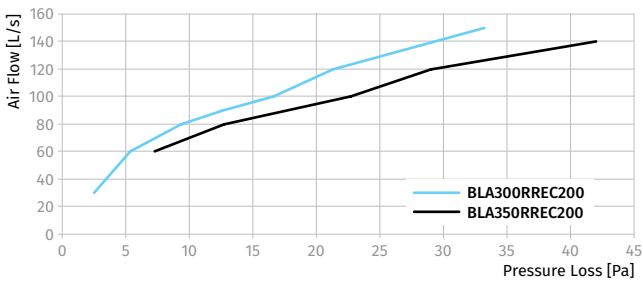
**ROUND TO RECTANGULAR ADAPTOR 150 Ø**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220RREC150	220 mm×90 mm / 150 Ø	1.19	5.48	9.53	13.49	17	21.71		31.5
BLA300RREC150	300 mm×60 mm / 150 Ø	1.31	6.02	10.47	14.82	18.68	23.86		34.62
BLA350RREC150	350 mm×75 mm / 150 Ø		1.30	2.20		2.90	4.60	6.40	



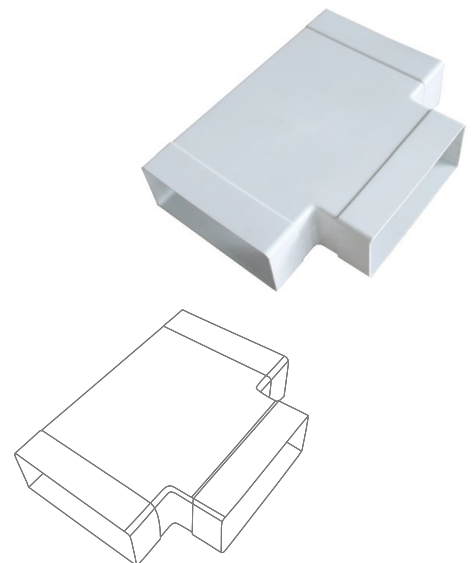
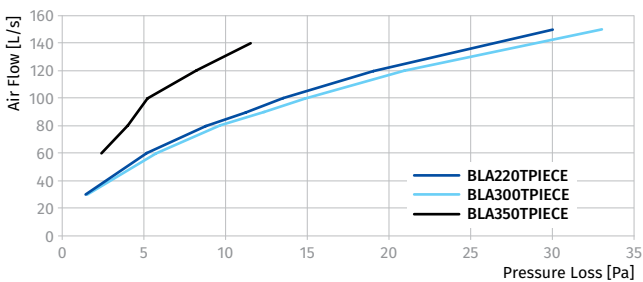
**ROUND TO RECTANGULAR ADAPTOR 200 Ø**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA300RREC200	300 mm×60 mm / 200 Ø	2.53	5.36	9.33	12.54	16.65	21.26		33.22
BLA350RREC200	350 mm×75 mm / 200 Ø		7.30	12.70		22.66	28.94	31.99	



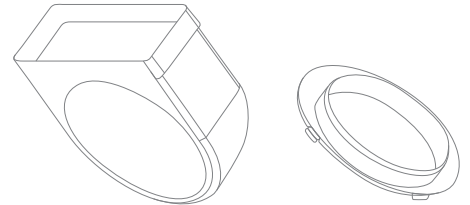
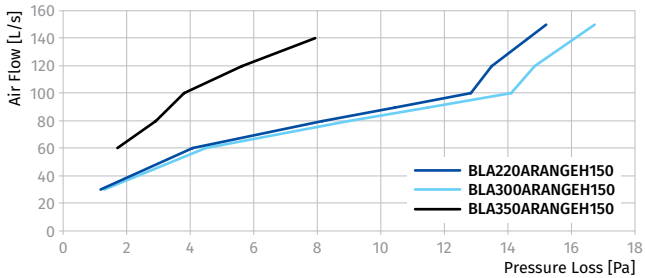
**T PIECE DUCT**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220TPIECE	220 mm×90 mm	1.4	5.2	8.8	11.2	13.5	19		30
BLA300TPIECE	300 mm×60 mm	1.54	5.72	9.68	12.32	14.85	20.9		33
BLA350TPIECE	350 mm×75 mm		2.4	4		5.2	8.2	11.5	



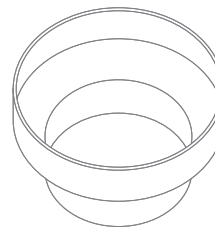
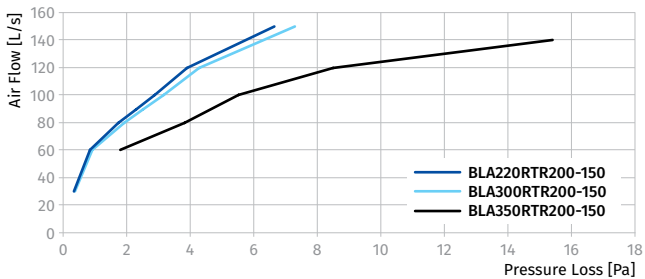
**ADJUSTABLE RANGEHOOD ADAPTORS**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220ARANGEH150	220 mm×90 mm / 150 Ø	1.19	4.09	8.16	10.44	12.82	13.49	15.21	
BLA300ARANGEH150	300 mm×60 mm / 150 Ø	1.31	4.49	8.97	11.47	14.09	14.82	16.71	
BLA350ARANGEH150	350 mm×75 mm / 150 Ø	1.70		2.90	3.80		5.60	7.90	



**ROUND TO ROUND ADAPTORS 200 Ø – 150 Ø**

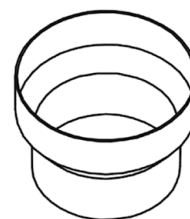
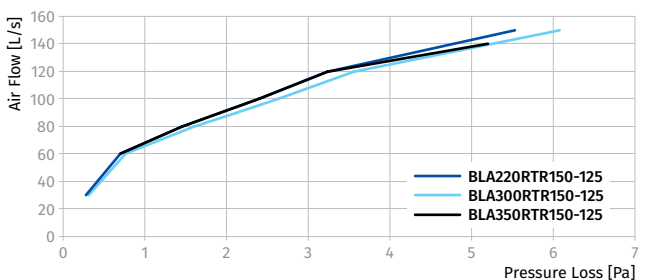
Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220RTR200-150	350 mm×75 mm	0.34	0.84	1.74	2.29	2.88	3.89	6.64	
	300 mm×60 mm								
BLA300RTR200-150	350 mm×75 mm	0.37	0.92	1.91	2.52	3.16	4.27	7.30	
	300 mm×60 mm								
BLA350RTR200-150	350 mm×75 mm	1.80	3.80	5.50		8.50		15.40	
	300 mm×60 mm								
	220 mm×90 mm								



DUCTING

**ROUND TO ROUND ADAPTORS 150 Ø – 125 Ø**

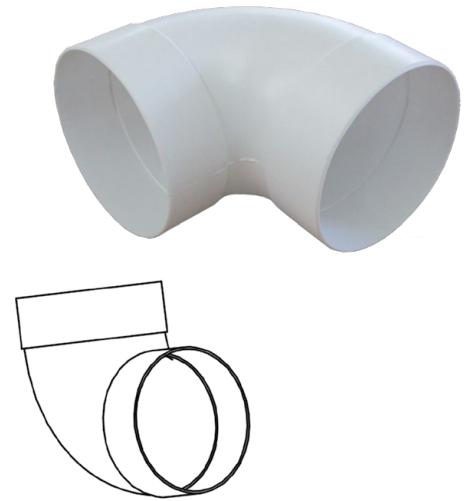
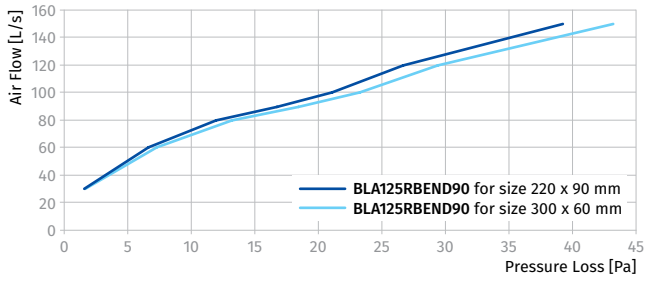
Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA220RTR150-125	350 mm×75 mm	0.28	0.70	1.45	1.91	2.4	3.24	5.53	
	300 mm×60 mm								
BLA300RTR150-125	350 mm×75 mm	0.31	0.77	1.59	2.10	2.64	3.56	6.08	
	300 mm×60 mm								
BLA350RTR150-125	350 mm×75 mm	0.70	1.45	2.40		3.24		5.20	
	300 mm×60 mm								
	220 mm×90 mm								





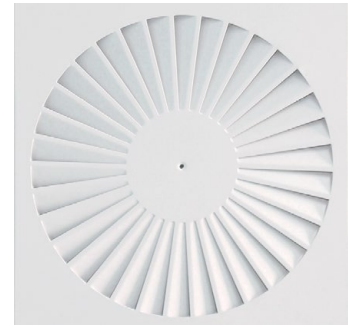
**90 DEGREE ELBOW 125 Ø**

Part No.	Dimensions	Air Flow [L/s]							
		30	60	80	90	100	120	140	150
BLA125RBEND90	220 mm×90 mm	1.54	6.62	11.98	16.71	21.09	26.71		39.24
BLA125RBEND90	300 mm×60 mm	1.69	7.27	13.16	18.36	23.18	29.35		43.12



# Swirl Diffusers

## Fixed Blade Swirl Diffusers



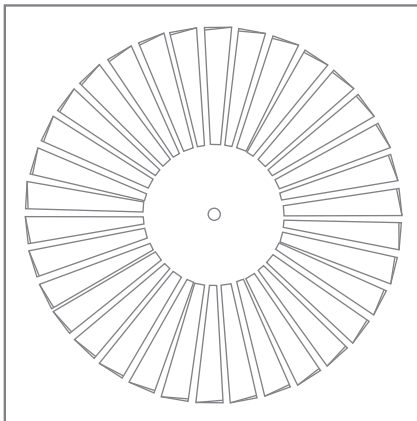
### Features

- Increasingly stringent requirements from the standpoint of technical features (higher supply flow rates and lower velocities in the occupant area) and aesthetics (smoother incorporation in the interior design) have generally made swirl diffusers a better choice for air diffusion.
- The recommended mounting height is around 2.5 to 4.0 m for all models. All these units can be used in VAV systems, allowing the flow rate to be reduced up to 25% of the nominal air flow rate without producing uncomfortable air currents in the facility.

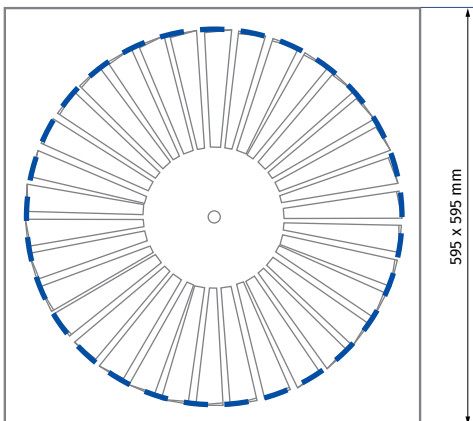
### Design

- Powder coated white as standard
- A high quality diffuser to generate airflow according to the principle of turbulent mixed airflow
- Low sound power level and pressure loss
- Installation for prefabricated ceiling or surface mounted for closed false ceilings
- No. of Blade — 34
- Grilles are powder coated white as standard

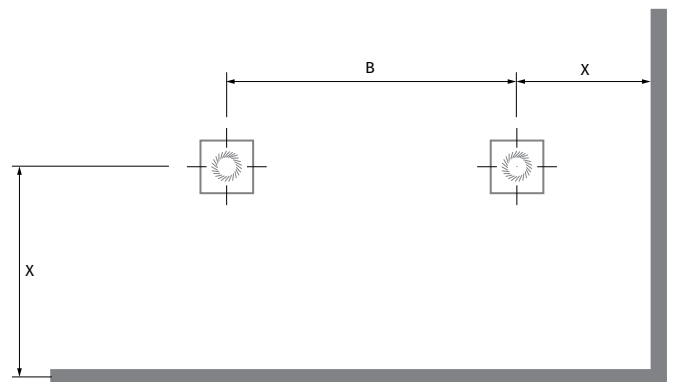
### Overall Dimensions and Mounting



Front Face



Back Face



B – Distance between diffuser axes (in/m)  
X – Distance between diffuser axis and wall (in/m)

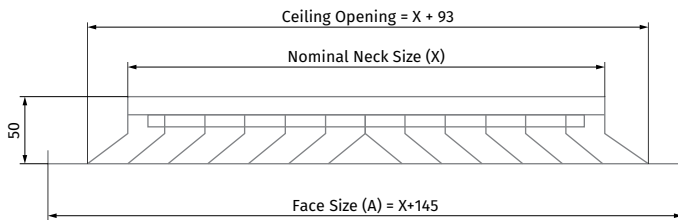
# Supply Air Ceiling Grilles



## Overall Dimensions

Nominal Neck Metric (x)	Face Size ( A )
150x150 mm	295x295 mm
225x225 mm	370x370 mm
300x300 mm	445x445 mm
375x375 mm	520x520 mm
450x450 mm	595x595 mm

The first number is for horizontal dimension and the second number is for vertical dimension  
Grilles are powder coated white as standard



**Quick Selection Table**

Flow rate (m³/h) (l/s)	Dim A <sub>k</sub>	150×150 0.0109	225×225 0.0244	300×300 0.0435	375×375 0.0679	450×450 0.0978	525×525 0.1331	600×600 0.1739
100 27.8	V <sub>k</sub>	2.5	1.1					
	X	0.5	0.3					
	P <sub>t</sub>	4.5	0.9					
	NR	18	-					
120 33.3	V <sub>k</sub>	3.1	1.4					
	X	0.6	0.4					
	P <sub>t</sub>	6.5	1.3					
	NR	22	6					
140 38.9	V <sub>k</sub>	3.6	1.6					
	X	0.7	0.5					
	P <sub>t</sub>	8.9	1.8					
	NR	26	9					
160 44.4	V <sub>k</sub>	4.1	1.8	1.0				
	X	0.8	0.5	0.4				
	P <sub>t</sub>	11.6	2.3	0.7				
	NR	29	13	-				
180 50.0	V <sub>k</sub>	4.6	2.0	1.1				
	X	0.9	0.6	0.4				
	P <sub>t</sub>	14.7	2.9	0.9				
	NR	32	16	-				
200 55.6	V <sub>k</sub>	5.1	2.3	1.3				
	X	1.0	0.7	0.5				
	P <sub>t</sub>	18.2	3.6	1.1				
	NR	35	18	6				
250 69.4	V <sub>k</sub>	6.4	2.8	1.6	1.0			
	X	1.2	0.8	0.6	0.5			
	P <sub>t</sub>	28.4	5.7	1.8	0.7			
	NR	40	24	12	-			
300 83.3	V <sub>k</sub>	7.6	3.4	1.9	1.2			
	X	1.5	1.0	0.7	0.6			
	P <sub>t</sub>	40.9	8.2	2.6	1.1			
	NR	45	28	16	7			
350 97.2	V <sub>k</sub>	8.9	4.0	2.2	1.4	1.0		
	X	1.7	1.2	0.9	0.7	0.6		
	P <sub>t</sub>	55.7	11.1	3.5	1.4	0.7		
	NR	49	32	20	11	-		
400 111.1	V <sub>k</sub>		4.6	2.6	1.6	1.1		
	X		1.3	1.0	0.8	0.7		
	P <sub>t</sub>		14.5	4.6	1.9	0.9		
	NR		35	24	15	7		
450 125.0	V <sub>k</sub>		5.1	2.9	1.8	1.3		
	X		1.5	1.1	0.9	0.7		
	P <sub>t</sub>		18.4	5.8	2.4	1.1		
	NR		38	27	17	10		
500 138.9	V <sub>k</sub>		5.7	3.2	2.0	1.4		
	X		1.7	1.2	1.0	0.8		
	P <sub>t</sub>		22.7	7.1	2.9	1.4		
	NR		41	29	20	13		
600 166.7	V <sub>k</sub>		6.8	3.8	2.5	1.7	1.3	
	X		2.0	1.5	1.2	1.0	0.9	
	P <sub>t</sub>		32.7	10.3	4.2	2.0	1.1	
	NR		45	34	25	17	11	

Flow rate (m³/h) (l/s)	Dim A <sub>k</sub>	150×150 0.0109	225×225 0.0244	300×300 0.0435	375×375 0.0679	450×450 0.0978	525×525 0.1331	600×600 0.1739
700 194.4	V <sub>k</sub>		8.0	4.5	2.9	2.0	1.5	1.1
	X		2.3	1.7	1.4	1.2	1.0	0.9
	P <sub>t</sub>		44.5	14.0	5.7	2.8	1.5	0.9
	NR		49	37	28	21	15	9
800 222.2	V <sub>k</sub>			5.1	3.3	2.3	1.7	1.3
	X			2.0	1.6	1.3	1.1	1.0
	P <sub>t</sub>			18.3	7.5	3.6	2.0	1.1
	NR			41	32	24	18	12
900 250.0	V <sub>k</sub>			5.7	3.7	2.6	1.9	1.4
	X			2.2	1.8	1.5	1.3	1.1
	P <sub>t</sub>			23.1	9.5	4.6	2.5	1.4
	NR			44	35	27	21	15
1000 277.8	V <sub>k</sub>			6.4	4.1	2.8	2.1	1.6
	X			2.5	2.0	1.7	1.4	1.2
	P <sub>t</sub>			28.5	11.7	5.6	3.0	1.8
	NR			46	37	30	23	18
1200 333.3	V <sub>k</sub>			7.7	4.9	3.4	2.5	1.9
	X			3.0	2.4	2.0	1.7	1.5
	P <sub>t</sub>			41.1	16.9	8.1	4.4	2.6
	NR			51	42	34	28	23
1400 388.9	V <sub>k</sub>				5.7	4.0	2.9	2.2
	X				2.8	2.3	2.0	1.7
	P <sub>t</sub>				23	11.1	6.0	3.5
	NR				46	38	32	26
1600 444.4	V <sub>k</sub>				6.5	4.5	3.3	2.6
	X				3.2	2.7	2.3	2.0
	P <sub>t</sub>				30	14.5	7.8	4.6
	NR				49	41	35	30
1800 500.0	V <sub>k</sub>				7.4	5.1	3.8	2.9
	X				3.6	3.0	2.6	2.2
	P <sub>t</sub>				38	18.3	9.9	5.8
	NR				52	44	38	33
2000 555.6	V <sub>k</sub>					5.7	4.2	3.2
	X					3.3	2.9	2.5
	P <sub>t</sub>					22.6	12.2	7.1
	NR					47	41	35
2500 694.4	V <sub>k</sub>					7.1	5.2	4.0
	X					4.2	3.6	3.1
	P <sub>t</sub>					35.3	19.1	11.2
	NR					52	46	41
3000 833.3	V <sub>k</sub>						6.3	4.8
	X						4.3	3.7
	P <sub>t</sub>						27.4	16.1
	NR						51	45
3500 972.2	V <sub>k</sub>						7.3	5.6
	X						5	4.4
	P <sub>t</sub>						37.3	21.9
	NR						54	49
4000 1111.1	V <sub>k</sub>						8.3	6.4
	X						5.7	5.0
	P <sub>t</sub>						48.8	28.6
	NR						58	52

**SYMBOLS:**

- A<sub>k</sub> – Effective area
- V<sub>k</sub> – Effective velocity in m/s
- X – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s
- Pressure (P<sub>t</sub>) – All pressures are in Pa (N/m²)
- NR – Noise level index in dB based on a room absorption and one diffuser

# Round Ceiling Diffusers

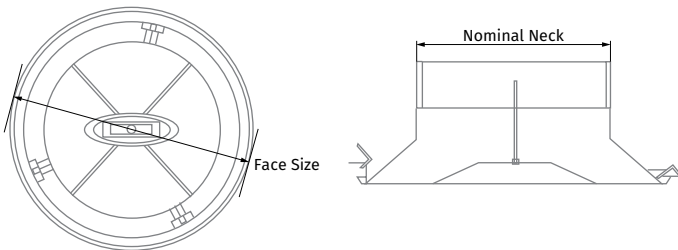
## Features

- The ceiling diffuser is a supply or return air diffuser made from an Engineering Polymer. It has a simple, visually appealing style that is suitable in commercial and domestic buildings. The central diffusion cone can be adjusted up or down by hand to control the air volume being supplied. For “shut off” the cone can be adjusted fully to stop the air supply completely.
- The radial supply air pattern creates a strong ceiling effect resulting in a draft-less environment. The strong ceiling effect allows it to be used in Variable Air Volume applications.



## Design

- Non-glare mottle white finish
- Grilles are complete with snap down fixing clip and spring arrangement
- The airflow passage are smooth ensuring quiet and efficient airflow



## Quick Selection Table

- Data is based on isothermal conditions with a room height of 2.7 m with the diffuser mounted flush in an unobstructed ceiling.
- Throws are given at a terminal velocity of 0.25 m/s. Data is tabulated with centre cone in two-test positions 20% and 100% open respectively. Noise Ratings are based on a room absorption level of 10 dB.

Neck Size (mm) Percentage Open	150								200							
	20% Open			100% Open					20% Open				100% Open			
	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR
15	1.0	9	<15	15	0.5	2	<15	25	1.3	6	<15	25	0.7	1	<15	
30	1.3	38	16	30	1.0	8	16	50	1.6	25	<15	50	1.2	5	<15	
45	1.7	85	17	45	1.3	18	18	75	2.0	56	21	75	1.6	12	<15	
60	2.0	151	20	60	1.6	31	21	100	2.3	100	33	100	2.0	21	15	
75	2.4	237	24	75	2.0	49	25	125	2.6	156	41	125	2.3	32	19	
90	2.8	241	29	90	2.4	70	30	150	3.0	224	55	150	2.6	46	26	

Neck Size (mm) Percentage Open	250								300							
	20% Open			100% Open					20% Open				100% Open			
	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR
40	1.5	5	<15	40	0.8	1	<15	60	1.6	5	<15	60	0.7	1	<15	
80	2.0	21	<15	80	1.5	4	<15	120	2.2	19	<15	120	1.6	4	<15	
120	2.4	47	19	120	1.9	10	<15	180	2.8	43	16	180	2.3	9	<15	
160	2.9	84	31	160	2.4	17	<15	240	3.3	76	26	240	2.7	16	<15	
200	3.4	131	37	200	2.8	27	16	300	3.8	119	33	300	3.2	24	15	
240	3.9	188	43	240	3.2	39	22	360	4.3	171	39	360	3.6	35	20	

## SYMBOLS:

**X** – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s

**Pressure (P<sub>t</sub>)** – All pressures are in Pa (N/m<sup>2</sup>)

**NR** – Noise level index in dB based on a room absorption and one diffuser

# Jetflo Diffusers



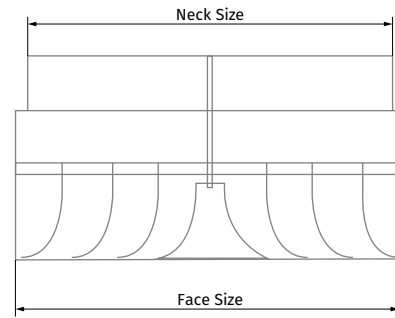
## Features

- Suitable for heating, cooling and exhaust applications
- From A.B.S polymers providing long term strength and rigidity
- Complete with the twin spring clip arrangement found on the round ceiling diffusers
- Finished standard white
- Easily adjustable butterfly damper which can be adjusted from the face of the grille using a simple push-in dial

## Overall Dimensions

Nominal Neck Metric (x)	Face Size (A)
150 mm	205 mm
200 mm	260 mm
250 mm	305 mm

Grilles are powder coated white as standard  
The first number is for horizontal dimension and the second number is for vertical dimension



## Quick Selection Table

- Data is based on isothermal conditions with a room height of 2.7 m with the diffuser mounted flush in an unobstructed ceiling.
- Throws are given at a terminal velocity of 0.25 m/s. Data is tabulated with centre cone in two-test positions 20 % and 100 % open respectively. Noise Ratings are based on a room absorption level of 10 dB.

Neck Size (mm)	150								200							
	20% Open			100% Open					20% Open				100% Open			
	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR
150	16.5	1.0	9	<15	16.5	0.5	2	<15	27.5	1.3	6	<15	27.5	0.7	1	<15
150	33	1.3	38	16	33	1.0	8	16	55	1.6	25	<15	55	1.2	5	<15
150	49.5	1.7	85	17	49.5	1.3	18	18	82.5	2.0	56	21	82.5	1.6	12	<15
150	66	2.0	151	20	66	1.6	31	21	110	2.3	100	33	110	2.0	21	15
150	82.5	2.4	237	24	82.5	2.0	49	25	137.5	2.6	156	41	137.5	2.3	32	19
150	99	2.8	241	29	99	2.4	70	30	165	3.0	224	55	165	2.6	46	26

Neck Size (mm)	250								300							
	20% Open			100% Open					20% Open				100% Open			
	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR	Airflow (l/s)	X	P <sub>t</sub>	NR
250	44	1.5	5	<15	44	0.8	1	<15	66	1.6	5	<15	66	0.7	1	<15
250	88	2.0	21	<15	88	1.5	4	<15	132	2.2	19	<15	132	1.6	4	<15
250	132	2.4	47	19	132	1.9	10	<15	198	2.8	43	16	198	2.3	9	<15
250	176	2.9	84	31	176	2.4	17	<15	264	3.3	76	26	264	2.7	16	<15
250	220	3.4	131	37	220	2.8	27	16	330	3.8	119	33	330	3.2	24	15
250	264	3.9	188	43	264	3.2	39	22	396	4.3	171	39	396	3.6	35	20

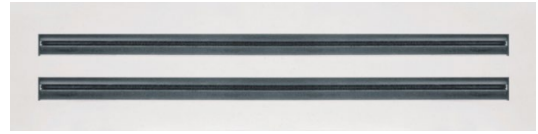
### SYMBOLS:

**X** – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s

**Pressure (P<sub>t</sub>)** – All pressures are in Pa (N/m<sup>2</sup>)

**NR** – Noise level index in dB based on a room absorption and one diffuser

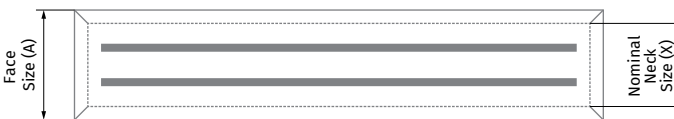
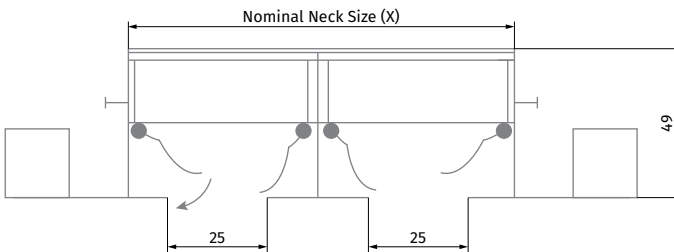
# Linear Slot Diffusers



## Overall Dimensions

No. of Slot	Nominal Neck Metric (X)	Face Size (A)
1 Slot	45 mm	89 mm
2 Slots	86 mm	130 mm
3 Slots	126 mm	170 mm
4 Slots	167 mm	211 mm
5 Slots	207 mm	251 mm
6 Slots	248 mm	292 mm

Length dimension can be modified based on different specification.  
Grilles are powder coated white as standard



**Quick Selection Table**

Flow rate		Dim.	600-1	900-1	1200-1	1500-1	900-2	1200-2	900-3	1500-2	1200-3	1500-3	1200-4	1500-4		
(m³/h)	(l/s)	A <sub>k</sub>	0.00672	0.01007	0.01343	0.01679	0.02015	0.02687	0.03022	0.03358	0.04030	0.05037	0.05373	0.06716		
60	16.7	V <sub>k</sub>	2.5	1.7	1.2	1.0										
		X	1.3	1.1	0.9	0.8										
		P <sub>t</sub>	1.3	6	3	2										
		NR	27	<20	<20	<20										
80	22.2	V <sub>k</sub>	3.3	2.2	21.7	1.3	1.1									
		X	1.7	1.4	1.2	1.1	1.0									
		P <sub>t</sub>	23	10	6	4	3									
		NR	34	26	20	<20	<20									
100	27.8	V <sub>k</sub>	4.1	2.8	2.1	1.7	1.4	1.0								
		X	2.2	1.8	1.5	1.4	1.3	1.1								
		P <sub>t</sub>	37	16	9	6	4	2								
		NR	39	31	26	22	<20	<20								
140	38.9	V <sub>k</sub>	5.8	3.9	2.9	2.3	1.9	1.4	1.3	1.2	1.0					
		X	3.0	2.5	2.1	1.9	1.8	1.5	1.4	1.4	1.2					
		P <sub>t</sub>	72	32	18	11	8	4	3	2						
		NR	47	39	34	30	27	20	<20	<20	<20					
180	50.0	V <sub>k</sub>		5.0	3.7	3.0	2.5	1.9	1.7	1.5	1.2	1.0				
		X		3.2	2.8	2.5	2.3	2.0	1.8	1.7	1.6	1.4				
		P <sub>t</sub>		53	30	19	13	7	6	5	3	2				
		NR		45	40	36	33	27	24	22	<20	<20				
200	55.6	V <sub>k</sub>		5.5	4.1	3.3	2.8	2.1	1.8	1.7	1.4	1.1	1.0			
		X		3.5	3.1	2.7	2.5	2.2	2.0	1.9	1.8	1.6	1.5			
		P <sub>t</sub>		65	37	23	16	9	7	6	4	3	2			
		NR		48	43	39	35	29	26	24	20	<20	<20			
250	69.4	V <sub>k</sub>			5.2	4.1	3.4	2.6	2.3	2.1	1.7	1.4	1.3	1.0		
		X			3.8	3.4	3.1	2.7	2.6	2.4	2.2	2.0	1.9	1.7		
		P <sub>t</sub>			57	37	25	14	11	9	6	4	4	2		
		NR			48	44	41	34	32	29	25	21	<20	<20		
300	83.3	V <sub>k</sub>			6.2	5.0	4.1	3.1	2.8	2.5	2.1	1.7	1.6	1.2		
		X			4.6	4.1	3.8	3.3	3.1	2.9	2.7	2.4	2.3	2.1		
		P <sub>t</sub>			82	53	37	21	16	13	9	6	5	3		
		NR			52	48	45	39	36	34	30	26	23	<20		
400	111.1	V <sub>k</sub>				6.6	5.5	4.1	3.7	3.3	2.8	2.2	2.1	1.7		
		X				5.5	5.0	4.3	4.1	3.9	3.5	3.2	3.1	2.7		
		P <sub>t</sub>				94	65	37	29	23	16	10	9	6		
		NR				55	52	46	43	41	37	33	30	25		
500	138.9	V <sub>k</sub>					5.2	4.6	4.1	3.4	2.8	2.6	2.1			
		X					5.4	5.1	4.8	4.4	4.0	3.8	3.4			
		P <sub>t</sub>					57	45	37	25	16	14	9			
		NR					51	49	46	42	38	36	31			
600	166.7	V <sub>k</sub>						5.5	5.0	4.1	3.3	3.1	2.5			
		X						6.1	5.8	5.3	4.7	4.6	4.1			
		P <sub>t</sub>						65	53	37	23	21	13			
		NR						53	51	47	43	40	35			
700	194.4	V <sub>k</sub>							5.8	4.8	3.9	3.6	2.9			
		X							6.8	6.2	5.5	5.4	4.8			
		P <sub>t</sub>							72	50	32	28	18			
		NR							54	50	46	44	39			
800	222.2	V <sub>k</sub>								5.5	4.4	4.1	3.3			
		X								7.1	6.3	6.1	5.5			
		P <sub>t</sub>								65	42	37	23			
		NR								54	50	47	42			
900	250.0	V <sub>k</sub>										5.0	4.7	3.7		
		X										7.1	6.9	6.2		
		P <sub>t</sub>										53	46	30		
		NR										52	50	45		
1000	277.8	V <sub>k</sub>											5.2	4.1		
		X											7.7	6.9		
		P <sub>t</sub>											57	37		
		NR											53	48		
1200	333.3	V <sub>k</sub>												5.0		
		X												8.2		
		P <sub>t</sub>												53		
		NR												52		

**SYMBOLS:**

- A<sub>k</sub> – Effective area
- V<sub>k</sub> – Effective velocity in m/s
- X – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s
- Pressure (P<sub>t</sub>) – All pressures are in Pa (N/m²)
- NR – Noise level index in dB based on a room absorption and one diffuser



Flow rate (m <sup>3</sup> /h) (l/s)	Dim. A <sub>k</sub>	600-1	900-1	1200-1 600-2	1500-1	900-2 600-3	1200-2 600-4	900-3	1500-2	1200-3 900-4	1500-3	1200-4	1500-4
		0.00672	0.01007	0.01343	0.01679	0.02015	0.02687	0.03022	0.03358	0.04030	0.05037	0.05373	0.06716
60	16.7	V <sub>k</sub>	2.4	1.6	1.2	1.0							
		X	1.1	0.9	0.7	0.7							
		P <sub>t</sub>	13	6	3	2							
		NR	26	<20	<20	<20							
80	22.2	V <sub>k</sub>	3.2	2.1	1.6	1.3	1.1						
		X	1.4	1.1	1.0	0.9	0.8						
		P <sub>t</sub>	22	10	6	4	2						
		NR	33	24	<20	<20	<20						
100	27.8	V <sub>k</sub>	4.0	2.6	2.0	1.6	1.3	1.0					
		X	1.8	1.4	1.2	1.1	1.0	0.9					
		P <sub>t</sub>	35	16	9	6	4	2					
		NR	38	29	23	<20	<20	<20					
140	38.9	V <sub>k</sub>	5.5	3.7	2.8	2.2	1.8	1.4	1.2	1.1			
		X	2.5	2.0	1.7	1.6	1.4	1.2	1.2	1.1			
		P <sub>t</sub>	69	30	17	11	8	4	3	3			
		NR	46	37	31	26	22	<20	<20	<20			
180	50.0	V <sub>k</sub>		4.8	3.6	2.9	2.4	1.8	1.6	1.4	1.2	1.0	
		X		2.6	2.2	2.0	1.8	1.6	1.5	1.4	1.3	1.2	
		P <sub>t</sub>		50	28	18	13	7	6	5	3	2	
		NR		43	37	32	28	21	<20	<20	<20	<20	
200	55.6	V <sub>k</sub>		5.3	4.0	3.2	2.6	2.0	1.8	1.4	1.3	1.1	1.0
		X		2.9	2.5	2.2	2.0	1.8	1.7	1.4	1.4	1.3	1.2
		P <sub>t</sub>		62	35	22	16	9	7	5	4	2	2
		NR		46	40	34	30	24	21	<20	<20	<20	<20
250	69.4	V <sub>k</sub>			5.0	4.0	3.3	2.5	2.2	2.0	1.7	1.3	1.2
		X			3.1	2.8	2.5	2.2	2.1	2.0	1.8	1.6	1.5
		P <sub>t</sub>			55	35	24	14	11	9	6	4	3
		NR			45	40	36	29	27	24	20	<20	<20
300	83.3	V <sub>k</sub>			5.9	4.8	4.0	3.0	2.6	2.4	2.0	1.6	1.5
		X			3.7	3.3	3.0	2.6	2.5	2.3	2.1	1.9	1.9
		P <sub>t</sub>			79	50	35	20	16	13	9	6	5
		NR			49	44	40	34	31	29	25	20	<20
400	111.1	V <sub>k</sub>				6.3	5.3	4.0	3.5	3.2	2.6	2.1	2.0
		X				4.4	4.0	3.5	3.3	3.1	2.9	2.6	2.5
		P <sub>t</sub>				90	62	35	28	22	16	10	9
		NR				51	47	41	38	36	32	27	25
500	138.9	V <sub>k</sub>					5.0	4.4	4.0	3.3	2.6	2.5	2.0
		X					4.4	4.1	3.9	3.6	3.2	3.1	2.8
		P <sub>t</sub>					55	43	35	24	16	14	9
		NR					46	44	41	37	32	31	26
600	166.7	V <sub>k</sub>						5.3	4.8	4.0	3.2	3.0	2.4
		X						5.0	4.7	4.3	3.8	3.7	3.3
		P <sub>t</sub>						62	50	35	22	20	13
		NR						48	46	42	37	35	30
700	194.4	V <sub>k</sub>							5.5	4.6	3.7	3.5	2.8
		X							5.5	5.0	4.5	4.3	3.9
		P <sub>t</sub>							69	48	30	27	17
		NR							50	45	40	39	34
800	222.2	V <sub>k</sub>								5.3	4.2	4.0	3.2
		X								5.7	5.1	5.0	4.4
		P <sub>t</sub>								62	40	35	22
		NR								49	44	44	37
900	250.0	V <sub>k</sub>									4.8	4.5	3.6
		X									5.8	5.0	5.0
		P <sub>t</sub>									50	6.2	28
		NR									47	55	40
1000	277.8	V <sub>k</sub>										4.8	4.0
		X											5.5
		P <sub>t</sub>											35
		NR											43
1200	333.3	V <sub>k</sub>											4.8
		X											6.6
		P <sub>t</sub>											50
		NR											47

**SYMBOLS:**

 A<sub>k</sub> – Effective area

 V<sub>k</sub> – Effective velocity in m/s

X – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s

 Pressure (P<sub>t</sub>) – All pressures are in Pa (N/m<sup>2</sup>)

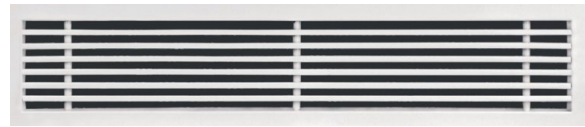
NR – Noise level index in dB based on a room absorption and one diffuser



# Linear Bar Grilles

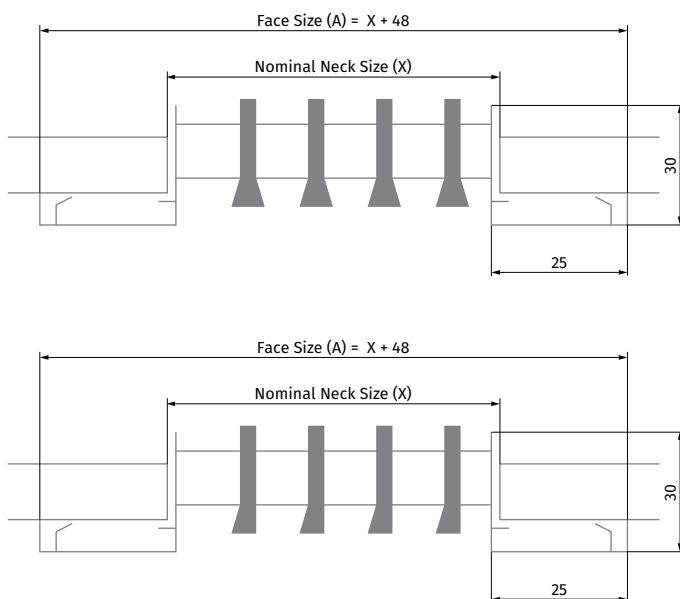
## Features

- All grilles, both with and without frames, can be manufactured with a hingeable access panel at one or both ends of the grille. The standard length of each panel piece is 150 mm, although this length can be varied upon request.
- Due to the large amount of possibilities offered by this type of grille, it is recommended to consult in specific cases with special dimensions.
- This range of grille has the necessary characteristics for its integration in contemporary architecture and interior design. They can be installed in ceilings, walls, consoles, fan-coils, induction units, both for supply and return air application and properly reinforced in floors.
- The maximum recommended length is 2 m in one piece, although 2 or more modules can be combined to give appearance of continuity.



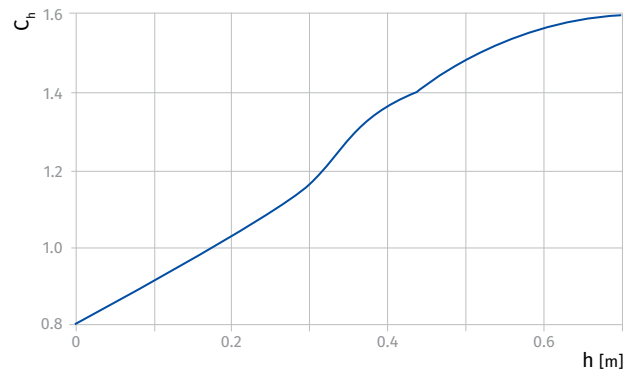
## Design

- Made of extruded aluminium
- Fixed blades at 0 degree, 15 degree, 30 degree
- Rigid, heavy gauge extruded frames with reinforced mitered and welded corners
- Standard finish white, other finishes are available
- Surface mounting or concealed mounting
- Size manufactured on request
- Construction is of a fixed core, while a hinged core option is available



## General notes on the quick selection table

- Apart from the before-mentioned factor  $C_s$  ( for grilles mounted in sill or floor ), another correction factor exists for the distance of the grille to the ceiling, when mounted in a wall. For a free jet this factor  $C_h$  will be 1.6.



- Corrected throw = Throw
- $C_h$ , with  $h$  in the graph the distance between grille and ceiling.

$$X_c = \dots C_h$$

## SYMBOLS:

$A_k$  – Effective area

$V_k$  – Effective velocity in m/s

$X$  – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s

**Pressure ( $P_t$ )** – All pressures are in Pa ( $N/m^2$ )

**NR** – Noise level index in dB based on a room absorption and one diffuser

**Quick Selection Table**

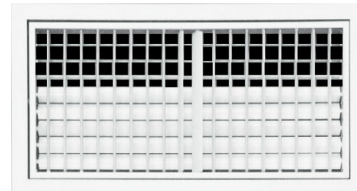
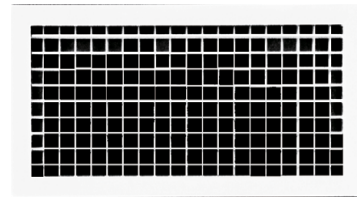
Flow rate (m³/h) (l/s)	L H A <sub>K</sub>	1000	1000	1000	1000	1000	1000	1000	1000		
		50 0.024	75 0.0370	100 0.0500	125 0.0630	150 0.0820	200 0.1080	250 0.1400	300 0.1720		
100	27.8	V <sub>K</sub>	1.2	0.8	0.6						
		X	2.3	1.9	1.6						
		P <sub>t</sub>	0.8	0.3	0.2						
		NR	-	-	-						
120	33.3	V <sub>K</sub>	1.4	0.9	0.7						
		X	2.8	2.2	1.9						
		P <sub>t</sub>	1.1	0.5	0.3						
		NR	-	-	-						
140	38.9	V <sub>K</sub>	1.6	1.1	0.8						
		X	3.2	2.6	2.2						
		P <sub>t</sub>	1.5	0.6	0.4						
		NR	-	-	-						
160	44.4	V <sub>K</sub>	1.9	1.2	0.9						
		X	3.7	3.0	2.6						
		P <sub>t</sub>	2.0	0.8	0.5						
		NR	-	-	-						
180	50.0	V <sub>K</sub>	2.1	1.4	1.0	0.8					
		X	4.1	3.3	2.9	2.6					
		P <sub>t</sub>	2.5	1.1	0.6	0.4					
		NR	8	-	-	-					
200	55.6	V <sub>K</sub>	2.3	1.5	1.1	0.9					
		X	4.6	3.7	3.2	2.8					
		P <sub>t</sub>	3.1	1.3	0.7	0.5					
		NR	10	-	-	-					
250	69.4	V <sub>K</sub>	2.9	1.9	1.4	1.1	0.8				
		X	5.8	4.6	4.0	3.6	3.1				
		P <sub>t</sub>	4.9	2.0	1.1	0.7	0.4				
		NR	16	7	-	-	-				
300	83.3	V <sub>K</sub>	3.5	2.3	1.7	1.3	1.0	0.8	0.6		
		X	6.9	5.6	4.8	4.3	3.7	3.3	2.9		
		P <sub>t</sub>	7.0	2.9	1.6	1.0	0.6	0.3	0.2		
		NR	21	11	-	-	-	-	-	-	
350	97.2	V <sub>K</sub>	4.1	2.6	1.9	1.5	1.2	0.9	0.7	0.6	
		X	8.1	6.5	5.6	5.0	4.4	3.8	3.3	3.0	
		P <sub>t</sub>	9.5	4.0	2.2	1.4	0.8	0.5	0.3	0.2	
		NR	25	15	9	-	-	-	-	-	-
400	111.1	V <sub>K</sub>	4.6	3.0	2.2	1.8	1.4	1.0	0.8	0.6	
		X	9.2	7.4	6.4	5.7	5.0	4.3	3.8	3.4	
		P <sub>t</sub>	12.4	5.2	2.9	1.8	1.1	0.6	0.4	0.2	
		NR	28	19	12	8	-	-	-	-	-
450	125.0	V <sub>K</sub>	5.2	3.4	2.5	2.0	1.5	1.2	0.9	0.7	
		X	10.4	8.3	7.2	6.4	5.6	4.9	4.3	3.9	
		P <sub>t</sub>	15.7	6.6	3.6	2.3	1.3	0.8	0.5	0.3	
		NR	31	22	15	11	5	-	-	-	-
500	138.9	V <sub>K</sub>	5.8	3.8	2.8	2.2	1.7	1.3	1.0	0.8	
		X	11.5	9.3	8.0	7.1	6.2	5.4	4.8	4.3	
		P <sub>t</sub>	19.4	8.2	4.5	2.8	1.7	1.0	0.6	0.4	
		NR	34	25	18	13	8	-	-	-	-
600	166.7	V <sub>K</sub>	6.9	4.5	3.3	2.6	2.0	1.5	1.2	1.0	
		X	13.8	11.1	9.6	8.5	7.5	6.5	5.7	5.2	
		P <sub>t</sub>	28.0	11.8	6.4	4.1	2.4	1.4	0.8	0.5	
		NR	38	29	23	18	12	6	-	-	-
700	194.4	V <sub>K</sub>	8.1	5.3	3.9	3.1	2.4	1.8	1.4	1.1	
		X	16.1	13.0	11.2	9.9	8.7	7.6	6.7	6.0	
		P <sub>t</sub>	38.1	16.0	8.8	5.5	3.3	1.9	1.1	0.7	
		NR	42	33	27	22	16	10	5	-	-
800	222.2	V <sub>K</sub>	9.3	6.0	4.4	3.5	2.7	2.1	1.6	1.3	
		X	18.4	14.8	12.8	11.4	10.0	8.7	7.6	6.9	
		P <sub>t</sub>	49.7	20.9	11.5	7.2	4.3	2.5	1.5	1.0	
		NR	46	37	30	25	20	14	8	-	-
900	250.0	V <sub>K</sub>		6.8	5.0	4.0	3.0	2.3	1.8	1.5	
		X		16.7	14.4	12.8	11.2	9.8	8.6	7.7	
		P <sub>t</sub>		26.5	14.5	9.1	5.4	3.1	1.8	1.2	
		NR		40	33	28	23	17	11	7	
1000	277.8	V <sub>K</sub>		7.5	5.6	4.4	3.4	2.6	2.0	1.6	
		X		18.5	15.9	14.2	12.5	10.9	9.5	8.6	
		P <sub>t</sub>		32.7	17.9	11.3	6.7	3.8	2.3	1.5	
		NR		42	36	31	25	20	14	10	
1200	333.3	V <sub>K</sub>			6.7	5.3	4.1	3.1	2.4	1.9	
		X			19.1	17.1	14.9	13.0	11.4	10.3	
		P <sub>t</sub>			25.8	16.2	9.6	5.5	3.3	2.2	
		NR			41	36	30	24	19	14	
1400	388.9	V <sub>K</sub>				6.2	4.7	3.6	2.8	2.3	
		X				19.9	17.4	15.2	13.3	12.0	
		P <sub>t</sub>				22.1	13.0	7.5	4.5	3.0	
		NR				40	34	28	23	18	

DIFFUSERS AND GRILLES

# Double Deflection Grilles

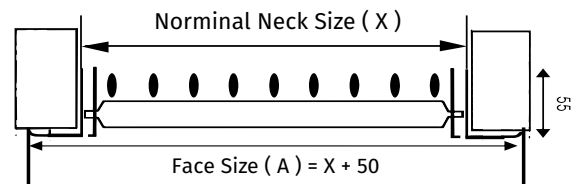
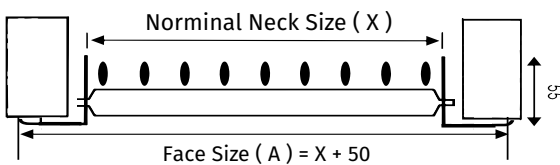
## Features

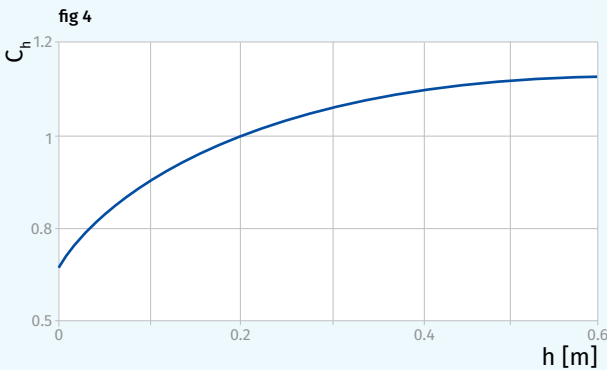
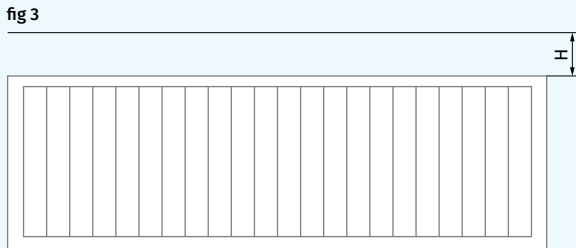
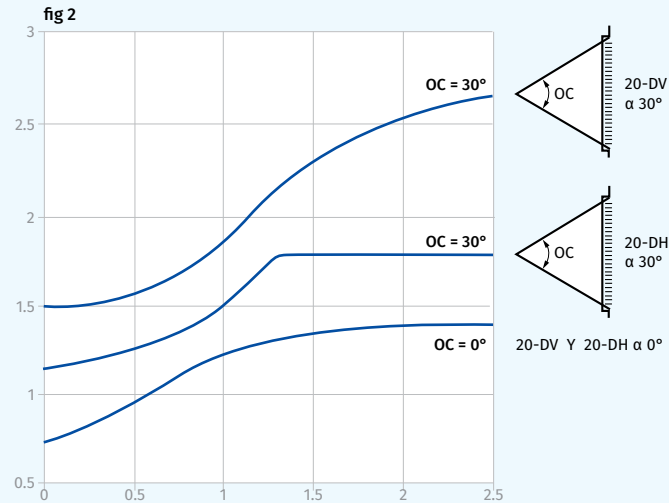
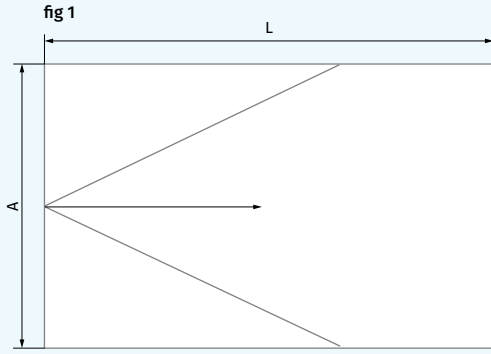
- For supply air, having a single set of fully adjustable blades to give directional control of the air pattern in four directions if required. Suitable for wall or duct mounting. Also available with curved face for circular duct installations.
- From extruded aluminium sections, ensuring functional strength and performance that also gives an attractive and aesthetically pleasing appearance. Incorporating two sets of individually adjustable blades, the blades may be set either horizontally or at angles, either up or down. Rear blades are adjusted in a similar way but only in a vertical plane. Powder coated white as standard with optional colors and finishes available on request.



## Design

- Aluminium grilles, adjustable blades
- Powder coated white as standard
- H,L: Nominal ordering sizes (duct opening size)
- Designation: Vertical front blades & Horizontal front blade
- Accessories: Sub frame SFR, Volume control damper, OBD, CLIP mounting clips for sub frame
- Size manufactured on request
- Blades are movable on horizontal and vertical lines.





### General notes on the quick selection table

Some correction factors exist as a function of the ratio between room width and length, the blade deflection angle and the distance from grille to ceiling, and are defined in the following manner:

- **A/L**: Ratio between the width and the length of the room to be conditioned. For example, for a room with a width of 4.5 m and length of 4.5 m the factor A/L equals 1 (see fig 1).
- **C<sub>a</sub>**: Factor obtained from the graph. For example, if the value of A/L = 1 and for a grille with 0° blade angle, the value of C<sub>a</sub> equals 1.3 (see fig 2).
- **C<sub>h</sub>**: Correction factor for height, obtained from the distance between grille and ceiling.
- For a free jet **C<sub>h</sub>** is always 1.1.
- For example, if the grille is located at 0.2 m from the ceiling the factor **C<sub>h</sub>** equals 1 (see fig 3&4).
- Once calculated, the correction factor for the throw (**K<sub>c</sub>**) can be determined by the following formula:

$$K_c = C_a \times C_h$$

$$K_c = 1.3 \times 1$$

- In this case of selection by table, we would obtain the correction throw (**X<sub>c</sub>**):

$$X_c = K_c \times X$$

$$X_c = 1.3 \times X$$

### Quick Selection Table

**SYMBOLS:**

- A<sub>k</sub>** – Effective area
- V<sub>k</sub>** – Effective velocity in m/s
- X** – Throw in metres correspond to a terminal velocity in occupied zone of 0.25 m/s

**Pressure (P)** – All pressures are in Pa (N/m<sup>2</sup>)

**NR** – Noise level index in dB based on a room absorption and one diffuser

**Quick Selection Table**

Flow rate (m <sup>3</sup> /h) (l/s)	Dim A <sub>k</sub> α	200×100		250×100		300×100 200×150		250×150		300×150		350×150 250×200		600×100 400×150 300×200		500×150 350×200		600×150 450×200 350×250 300×300		600×200 500×250 400×300		1000×150 750×200 600×250 500×300		1200×150 900×200 750×250 600×300		1100×200 900×250 750×300		1200×250 1000×300				
		0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	
		0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°
100	27.8	V <sub>k</sub>	2.8	2.8	2.2	2.2	1.9	1.9	1.5	1.5	1.2	1.2	1.1	1.1	0.9	0.9	0.7	0.7	0.6	0.6												
		X	2.2	1.8	1.9	1.6	1.8	1.4	1.6	1.3	1.5	1.2	1.3	1.1	1.2	1	1.1	0.9	1	0.8												
		P <sub>t</sub>	3.2	3.9	2	2.4	1.4	1.7	0.9	1.1	0.6	0.7	0.4	0.5	0.3	0.4	0.2	0.3	0.1	0.2												
		NR	10	12	5	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
150	41.7	V <sub>k</sub>	4.3	4.3	3.3	3.3	2.8	2.8	2.3	2.3	1.9	1.9	1.6	1.6	1.3	1.3	1.1	1.1	0.9	0.9	0.6	0.6										
		X	3.3	2.6	2.9	2.3	2.7	2.1	2.4	1.9	2.2	1.7	2	1.6	1.9	1.5	1.7	1.3	1.5	1.2	1.3	1										
		P <sub>t</sub>	7.2	8.7	4.4	5.3	3.2	3.8	2.1	2.5	1.4	1.7	1	1.2	0.7	0.9	0.5	0.6	0.3	0.4	0.2	0.2										
		NR	20	22	15	17	12	14	8	10	4	6	-	-	-	-	-	-	-	-												
200	55.6	V <sub>k</sub>	5.7	5.7	4.4	4.4	3.8	3.8	3	3	2.5	2.5	2.1	2.1	1.8	1.8	1.5	1.5	1.2	1.2	0.8	0.8	0.7	0.7								
		X	4.4	3.5	3.9	3.1	3.6	2.9	3.2	2.6	2.9	2.3	2.7	2.2	2.5	2	2.2	1.8	2	1.6	1.7	1.4	1.5	1.2								
		P <sub>t</sub>	12.9	15.4	7.9	9.5	5.6	6.8	3.7	4.4	2.5	3	1.8	2.2	1.3	1.6	0.9	1	0.5	0.7	0.3	0.3	0.2	0.2								
		NR	27	29	22	24	19	21	15	17	11	13	8	10	5	7	-	-	-	-												
250	69.4	V <sub>k</sub>	7.1	7.1	5.6	5.6	4.7	4.7	3.8	3.8	3.1	3.1	2.7	2.7	2.2	2.2	1.8	1.8	1.5	1.5	1.1	1.1	0.9	0.9								
		X	5.5	4.4	4.9	3.9	4.5	3.6	4	3.2	3.6	2.9	5.3	2.7	3.1	2.5	2.8	2.2	2.5	2	2.1	1.7	1.9	1.5								
		P <sub>t</sub>	20.1	24.1	12.3	14.8	8.8	10.6	5.8	6.9	3.8	4.6	2.8	3.4	2	2.4	1.3	1.6	0.9	1	0.4	0.5	0.3	0.4								
		NR	33	35	28	30	24	26	20	22	16	18	13	15	10	12	6	8	-	-												
300	83.3	V <sub>k</sub>	8.5	8.5	6.7	6.7	5.6	5.6	4.6	4.6	3.7	3.7	3.2	3.2	2.7	2.7	2.2	2.2	1.8	1.8	1.3	1.3	1	1	0.9	0.9						
		X	6.6	5.3	5.8	4.7	5.4	4.3	4.8	3.9	4.4	3.5	4	3.2	3.7	3	3.3	2.7	3	2.4	2.5	2	2.3	1.8	2.1	1.7						
		P <sub>t</sub>	28.9	34.7	17.8	21.3	12.7	15.2	8.3	10	5.5	6.6	4	4.9	2.9	3.5	1.9	2.3	1.2	1.5	0.6	0.8	0.4	0.5	0.3	0.4						
		NR	37	39	32	34	29	31	25	27	21	23	18	20	15	17	10	12	6	8	-	-										
350	97.2	V <sub>k</sub>	9.9	9.9	7.8	7.8	6.6	6.6	5.3	5.3	4.3	4.3	3.7	3.7	3.1	3.1	2.6	2.6	2.1	2.1	1.5	1.5	1.2	1.2	1	1						
		X	7.7	6.2	6.8	5.5	6.3	5	5.6	4.5	5.1	4.1	4.7	3.8	4.3	3.5	3.9	3.1	3.5	2.8	3	2.4	2.7	2.2	2.4	2						
		P <sub>t</sub>	39.4	47.2	24.2	29	17.3	20.7	11.3	13.5	7.5	9	5.5	6.6	4	4.8	2.6	3.1	1.7	2	0.9	1	0.6	0.7	0.4	0.5						
		NR	41	43	36	38	33	35	29	31	25	27	21	23	18	20	14	16	10	12	-	-										
400	111.1	V <sub>k</sub>	11.3	11.3	8.9	8.9	7.5	7.5	6.1	6.1	5	5	4.2	4.2	3.6	3.6	2.9	2.9	2.3	2.3	1.7	1.7	1.4	1.4	1.1	1.1	0.9	0.9				
		X	8.8	7	7.8	6.2	7.2	5.7	6.4	5.1	5.8	4.7	5.4	4.3	5	4	4.5	3.6	4	3.2	3.4	2.7	3.1	2.5	2.8	2.2	2.5	2				
		P <sub>t</sub>	51.4	61.7	31.6	37.9	22.5	27.1	14.7	17.7	9.8	11.8	7.2	8.6	5.2	6.2	3.4	4.1	2.2	2.6	1.1	1.4	0.8	0.9	0.5	0.6	0.3	0.4				
		NR	44	46	39	41	36	38	32	34	28	30	25	27	22	24	17	19	13	15	7	9	-	-								
450	125.0	V <sub>k</sub>			10	10	8.4	8.4	6.8	6.8	5.6	5.6	4.8	4.8	4	4	3.3	3.3	2.6	2.6	1.9	1.9	1.6	1.6	1.3	1.3	1	1				
		X			8.8	7	8.1	6.4	7.2	5.8	6.5	5.2	6.1	4.8	5.6	4.5	5	4	4.5	3.6	3.8	3.1	3.5	2.8	3.1	2.5	2.8	2.3				
		P <sub>t</sub>			40	48	28.5	34.2	18.7	22.4	12.5	14.9	9.1	10.9	6.5	7.9	4.3	5.2	2.8	3.3	1.4	1.7	1	1.2	0.7	0.8	0.4	0.5				
		NR			42	44	39	41	35	37	31	33	28	30	24	26	20	22	16	18	10	12	6	8	-	-						
500	138.9	V <sub>k</sub>			11.1	11.1	9.4	9.4	7.6	7.6	6.2	6.2	5.3	5.3	4.5	4.5	3.6	3.6	2.9	2.9	2.1	2.1	1.7	1.7	1.4	1.4	1.1	1.1	0.8	0.8		
		X			9.7	7.8	8.9	7.2	8	6.4	7.3	5.8	6.7	5.4	6.2	5	5.6	4.5	5	4	4.2	3.4	3.8	3.1	3.5	2.8	3.1	2.5	2.7	2.1		
		P <sub>t</sub>			49.4	59.3	35.2	42.3	23	27.6	15.4	18.5	11.2	13.5	8.1	9.7	5.3	6.4	3.4	4.1	1.8	2.1	1.2	1.4	0.8	1	0.5	0.6	0.3	0.3		
		NR					41	43	37	39	33	35	30	32	27	29	23	25	19	21	12	14	8	10	5	7	-	-				
550	152.8	V <sub>k</sub>					10.3	10.3	8.3	8.3	6.8	6.8	5.8	5.8	4.9	4.9	4	4	3.2	3.2	2.3	2.3	1.9	1.9	1.6	1.6	1.3	1.3	0.9	0.9		
		X					9.8	7.9	8.9	7.1	8	6.4	7.4	5.9	6.8	5.4	6.1	4.9	5.5	4.4	4.7	3.7	4.2	3.4	3.8	3.1	3.4	2.8	2.9	2.3		
		P <sub>t</sub>					42.6	51.1	27.9	33.5	18.6	22.3	13.6	16.3	9.8	11.7	6.4	7.7	4.2	5	2.1	2.6	1.5	1.7	1	1.2	0.6	0.8	0.3	0.4		
		NR					44	46	39	41	36	38	32	34	29	31	25	27	21	23	14	16	11	13	7	9	-	-				
600	166.7	V <sub>k</sub>					11.3	11.3	9.1	9.1	8.4	7.4	6.4	6.4	5.4	5.4	4.4	4.4	3.5	3.5	2.5	2.5	2.1	2.1	1.7	1.7	1.4	1.4	1	1		
		X					10.7	8.6	9.7	7.7	8.7	7	8.1	6.5	7.4	5.9	6.7	5.4	6	4.8	5.1	4.1	4.6	3.7	4.2	3.4	3.8	3	3.2	2.6		
		P <sub>t</sub>					50.7	60.9	33.2	39.8	22.1	26.6	16.2	19.4	11.6	14	7.7	9.2	4.9	5.9	2.6	3.1	1.7	2.1	1.2	1.4	0.8	0.9	0.4	0.5		
		NR					46	48	42	44	38	40	35	37	31	33	27	29	23	25	17	19	13	15	9	11	5	7				
650	180.6	V <sub>k</sub>					12.2	12.2	9.9	9.9	8.1	8.1	6.9	6.9	5.8	5.8	4.7	4.7	3.8	3.8	2.7	2.7	2.3	2.3	1.9	1.9	1.5	1.5	1.1	1.1		
		X					11.6	9.3	10.5	8.4	9.5	7.6	8.7	7	8	6.4	7.2	5.8	6.5	5.2	5.5	4.4	5	4	4.5	3.6	4.1	3.3	3.5	2.8		
		P <sub>t</sub>					59.5	71.4	38.9	46.7	26	31.2	19	22.8	13.7	16.4	9	10.8	5.8	7	3	3.6	2	2.4	1.4	1.7	0.9	1.1	0.5	0.6		
		NR					48	50	44	46	40	42	37	39	33	35	29	31	25	27	18	20	15	17	11	13	7	9				
700	194.4	V <sub>k</sub>							10.6	10.6	8.7	8.7	7.4	7.4	6.3	6.3	5.1	5.1	4.1	4.1	2.9	2.9	2.4	2.4	2	2	1.6	1.6	1.2	1.2		
		X					11.3	9	10.2	8.1	9.4	7.5	8.7	6.9	7.8	6.2	7	5.6	5.9	4.7	5.4	4.3	4.9	3.9	4.4	3.5	3.7	3				
		P <sub>t</sub>					45.2																									

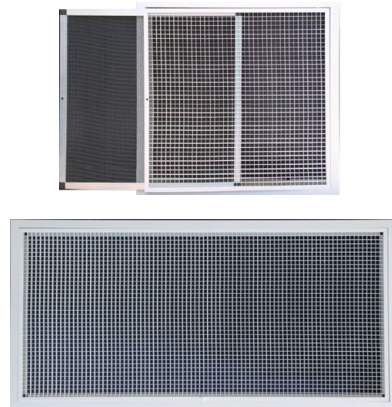




# Hinged Eggcrate Grilles with Removable Filter

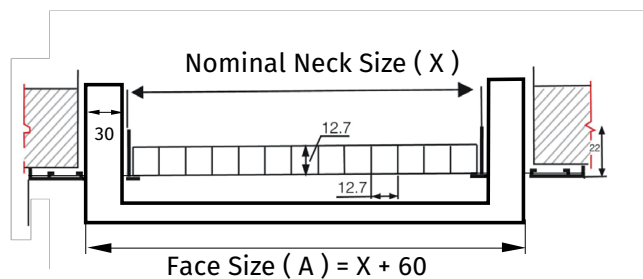
## Features

- Ideal for exhaust and return air applications.
- The Eggcrate Grille is the most popular and economical for exhaust and return air applications.
- The Loose Core Eggcrate grille allows the installer to simply push the core up and easily fix the frame into position and drop the core back into the outer frame.
- Also available with 35 degree Eggcrate Core.



## Design

- Capable of transferring or returning high air volumes at minimum pressure requirements
- Made of extruded aluminium
- Rigid, heavy gauge extruded frames with reinforced mitered and welded corners
- Surface mounting or concealed mounting
- Sizes manufactured on request
- Filter: Non woven fabrics or nitrilon



Nominal Neck Metric (X)	Face Size (A)
150×150 mm	200×200 mm
200×200 mm	250×250 mm
300×300 mm	350×350 mm
545×545 mm	595×595 mm
1145×545 mm	1195×595 mm

Grilles are powder coated white as standard  
 The first number is for horizontal dimension and the second number is for vertical dimension

**Quick Selection Table**

Nom. Neck (mm)	Equivalent Size (mm)	Core Area (m <sup>2</sup> )	V <sub>k</sub> P <sub>t</sub>	1.5 1	2.0 3	2.5 4	3.0 6	3.5 8	4.0 10	4.5 13	5.0 16	6.0 23
150×150	225×100	0.020	Q	30	41	51	61	71	81	91	101	122
			NR	<15	<15	15	19	23	26	29	32	37
200×150	250×125	0.027	Q	41	54	68	81	95	108	122	135	162
	300×100		NR	<15	<15	16	19	23	26	29	32	37
250×150	300×125	0.034	Q	54	72	90	108	126	144	162	180	216
	400×100		NR	<15	<15	16	19	23	26	30	33	38
200×200	350×125	0.036	Q	61	81	101	122	142	162	182	203	243
			NR	<15	<15	16	19	24	26	30	33	38
300×150	450×100	0.041	Q	81	108	135	162	189	216	243	270	324
			NR	<15	<15	16	20	24	27	30	33	38
300×200	400×150	0.054	Q	84	113	141	169	197	225	253	281	338
	600×100		NR	<15	<15	16	20	24	27	30	34	39
250×250	350×175	0.056	Q	91	122	152	182	213	243	273	304	365
	650×100		NR	<15	<15	16	20	25	27	30	34	39
450×150	350×200	0.061	Q	101	135	169	203	236	270	304	338	405
	750×100		NR	<15	<15	16	20	25	27	31	35	39
	700×100											
300×250	400×200	0.068	Q	122	162	203	243	284	324	365	405	486
	500×200		NR	<15	<15	16	21	25	28	31	35	40
	600×125											
300×300	350×250	0.081	Q	165	221	276	331	386	441	496	551	662
	450×200		NR	<15	<15	17	21	26	28	31	35	40
	600×150											
350×350	950×100	0.110	Q	182	243	304	365	425	486	547	608	729
	400×300		NR	<15	<15	17	21	26	28	31	36	41
	500×250											
450×300	600×200	0.122	Q	203	207	338	405	473	540	608	675	810
	850×150		NR	<15	<15	17	22	26	28	32	36	41
	700×200											
600×250	950×150	0.135	Q	216	288	360	432	404	576	648	720	864
	400×350		NR	<15	<15	17	22	26	29	32	37	42
400×400	550×300	0.144	Q	243	324	405	486	567	648	729	810	972
	750×200		NR	<15	<15	17	22	26	29	32	37	42
	-											
600×300	450×400	0.162	Q	273	365	456	547	638	729	820	911	1094
	500×350		NR	<15	<15	17	22	27	29	33	38	43
	750×2509											
450×450	900×200	0.182	Q	304	405	506	608	709	810	911	1013	1215
	500×400		NR	<15	<15	17	22	27	29	33	38	43
	600×350											
750×300	700×300	0.203	Q	380	450	563	675	788	900	1013	1125	1350
	800×250		NR	<15	<15	17	23	27	30	33	38	44
	500×450											
500×500	650×350	0.225	Q	408	545	681	817	953	1089	1225	1361	1634
	550×400		NR	<15	<15	17	23	27	30	34	39	44
	900×250											
550×550	600×450	0.272	Q	486	648	810	972	1134	1296	1458	1620	1944
	650×400		NR	<15	<15	17	24	28	31	35	39	45
	750×400											
	900×350											

**SYMBOLS:**

V<sub>k</sub> – Effective velocity in m/s

Pressure (P<sub>t</sub>) – All pressures are in Pa (N/m<sup>2</sup>)

Q – Flow rate (l/s)

NR – Noise level index in dB based on a room absorption and one diffuser

# Eggcrate Grilles with Fixing Clip Reducing Neck

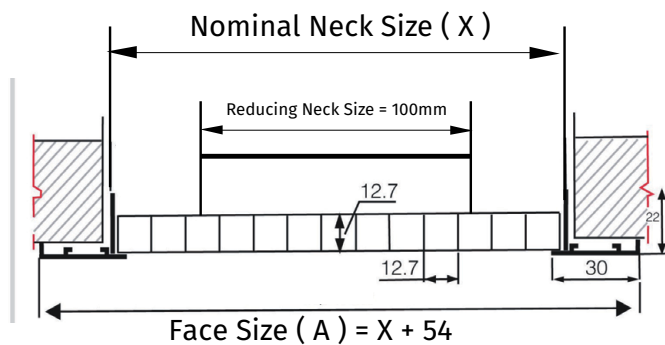
## Features

- Ideal for exhaust and return air applications.
- The Eggcrate Grille is the most popular and economical for exhaust and return air applications.
- The Eggcrate Grille with fixing clip reducing neck allows the installer to simply push the core up and easily fix the frame into position and drop the core back into the outer frame.



## Design

- Capable of transferring or returning high air volumes at minimum pressure requirements
- Made of extruded aluminium
- Rigid, heavy gauge extruded frames with reinforced mitered and welded corners
- Surface mounting or concealed mounting
- Sizes manufactured on request
- Filter: Non woven fabrics or nitrilon



Nominal Neck Metric (X)	Face Size (A)
150×150 mm	200×200 mm
200×200 mm	250×250 mm
250×250 mm	300×300 mm
300×300 mm	350×350 mm

Grilles are powder coated white as standard  
 The first number is for horizontal dimension and the second number is for vertical dimension

### Quick Selection Table

Nom. Neck (mm)	Equivalent Size (mm)	Core Area (m <sup>2</sup> )	V <sub>k</sub> P <sub>t</sub>	1.5 1	2.0 3	2.5 4	3.0 6	3.5 8	4.0 10	4.5 13	5.0 16	6.0 23
150×150	225×100	0.020	Q	30	41	51	61	71	81	91	101	122
			NR	<15	<15	15	19	23	26	29	32	37
200×150	250×125	0.027	Q	41	54	68	81	95	108	122	135	162
	300×100		NR	<15	<15	16	19	23	26	29	32	37
250×150	300×125	0.034	Q	54	72	90	108	126	144	162	180	216
	400×100		NR	<15	<15	16	19	23	26	30	33	38
200×200	350×125	0.036	Q	61	81	101	122	142	162	182	203	243
			NR	<15	<15	16	19	24	26	30	33	38
300×150	450×100	0.041	Q	81	108	135	162	189	216	243	270	324
			NR	<15	<15	16	20	24	27	30	33	38
300×200	400×150	0.054	Q	84	113	141	169	197	225	253	281	338
	600×100		NR	<15	<15	16	20	24	27	30	34	39
250×250	350×175	0.056	Q	91	122	152	182	213	243	273	304	365
	650×100		NR	<15	<15	16	20	25	27	30	34	39
450×150	350×200	0.061	Q	101	135	169	203	236	270	304	338	405
	750×100		NR	<15	<15	16	20	25	27	31	35	39
	700×100											
300×250	400×200	0.068	Q	122	162	203	243	284	324	365	405	486
	500×200		NR	<15	<15	16	21	25	28	31	35	40
	600×125											
300×300	350×250	0.081	Q	165	221	276	331	386	441	496	551	662
	450×200		NR	<15	<15	17	21	26	28	31	35	40
	600×150											
350×350	950×100	0.110	Q	182	243	304	365	425	486	547	608	729
	400×300		NR	<15	<15	17	21	26	28	31	36	41
	500×250											
450×300	600×200	0.122	Q	203	207	338	405	473	540	608	675	810
	850×150		NR	<15	<15	17	22	26	28	32	36	41
	700×200											
600×250	950×150	0.135	Q	216	288	360	432	404	576	648	720	864
	500×300		NR	<15	<15	17	22	26	29	32	37	42
400×400	750×200	0.144	Q	243	324	405	486	567	648	729	810	972
	400×350		NR	<15	<15	17	22	26	29	32	37	42
	550×300											
600×300	750×200	0.162	Q	273	365	456	547	638	729	820	911	1094
	900×200		NR	<15	<15	17	22	27	29	33	38	43
	500×400											
450×450	600×350	0.182	Q	304	405	506	608	709	810	911	1013	1215
	700×300		NR	<15	<15	17	22	27	29	33	38	43
	800×250											
750×300	500×450	0.203	Q	380	450	563	675	788	900	1013	1125	1350
	650×350		NR	<15	<15	17	23	27	30	33	38	44
	550×400											
500×500	900×250	0.225	Q	408	545	681	817	953	1089	1225	1361	1634
	600×450		NR	<15	<15	17	23	27	30	34	39	44
	750×350											
550×550	900×300	0.272	Q	486	648	810	972	1134	1296	1458	1620	1944
	600×500		NR	<15	15	17	24	28	31	35	39	45
	750×400											
	900×350											

**SYMBOLS:**

V<sub>k</sub> – Effective velocity in m/s

Pressure (P<sub>t</sub>) – All pressures are in Pa (N/m<sup>2</sup>)

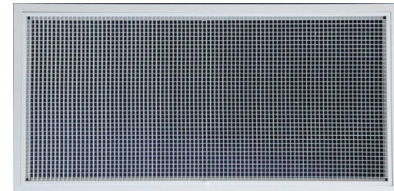
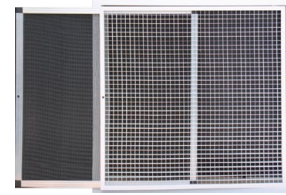
Q – Flow rate (l/s)

NR – Noise level index in dB based on a room absorption and one diffuser

# Door Grilles

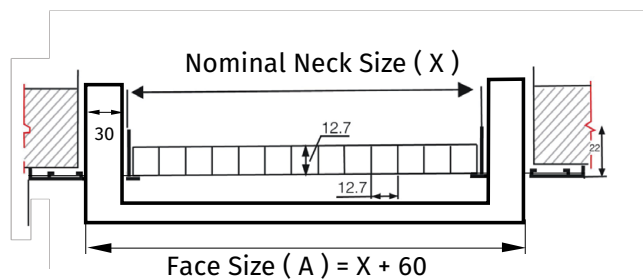
## Features

- This type of grille is always delivered with a mounting frame, provided with holes for screwing.
- The arrangement of the blades in inverted "V", impedes vision through it when applied in doors, partition wall etc.



## Design

- Made of high quality extruded aluminium profile
- Used for air transfer on doors or walls
- Size manufactured on request
- Suitable for a range of wall/door thicknesses



Nominal Neck Metric (X)	Face Size (A)
150 mm	210 mm
200 mm	260 mm
250 mm	310 mm
300 mm	360 mm
400 mm	460 mm
450 mm	510 mm
600 mm	660 mm

Grilles are powder coated white as standard  
 The first number is for horizontal dimension and the second number is for vertical dimension

### Quick Selection Table

Flow rate		Dim	300×100 200×150	400×100 200×200	500×150 350×200	400×200 300×250	500×200 400×250	600×200 500×250 400×300	600×250 500×300	600×350 500×400	700×400 600×500
(m³/h)	(l/s)	A <sub>k</sub>	0.0156	0.0208	0.0390	0.0448	0.0560	0.0684	0.0855	0.1218	0.1652
50	13.9	V <sub>k</sub>	0.9	0.7	0.4						
		P <sub>t</sub>	3.6	2.0	0.6						
60	13.9	V <sub>k</sub>	1.1	0.8	0.4						
		P <sub>t</sub>	5.1	2.9	0.8						
70	16.7	V <sub>k</sub>	1.2	0.9	0.5	0.4					
		P <sub>t</sub>	7.0	3.9	1.1	0.8					
80	19.4	V <sub>k</sub>	1.4	1.1	0.6	0.5	0.4				
		P <sub>t</sub>	9.1	5.1	1.5	1.1	0.7				
90	22.2	V <sub>k</sub>	1.6	1.2	0.6	0.6	0.4				
		P <sub>t</sub>	11.6	6.5	1.8	1.4	0.9				
100	25.0	V <sub>k</sub>	1.8	1.3	0.7	0.6	0.5	0.4			
		P <sub>t</sub>	14.3	8.0	2.3	1.7	1.1	0.7			
120	27.8	V <sub>k</sub>	2.1	1.6	0.9	0.7	0.6	0.5	0.4		
		P <sub>t</sub>	20.5	11.6	3.3	2.5	1.6	1.1	0.7		
140	33.3	V <sub>k</sub>	2.5	1.9	1.0	0.9	0.7	0.6	0.5		
		P <sub>t</sub>	28.0	15.7	4.5	3.4	2.2	1.5	0.9		
160	38.9	V <sub>k</sub>		2.1	1.1	1.0	0.8	0.6	0.5		
		P <sub>t</sub>		20.5	5.8	4.4	2.8	1.9	1.2		
180	44.4	V <sub>k</sub>		2.4	1.3	1.1	0.9	0.7	0.6	0.4	
		P <sub>t</sub>		26.0	7.4	5.6	3.6	2.4	1.5	0.8	
200	50.0	V <sub>k</sub>			1.4	1.2	1.0	0.8	0.6	0.5	
		P <sub>t</sub>			9.1	6.9	4.4	3.0	1.9	0.9	
250	55.6	V <sub>k</sub>			1.8	1.6	1.2	1.0	0.8	0.6	0.4
		P <sub>t</sub>			14.3	10.8	6.9	4.6	3.0	1.5	0.8
300	69.4	V <sub>k</sub>			2.1	1.9	1.5	1.2	1.0	0.7	0.5
		P <sub>t</sub>			20.5	15.6	10.0	6.7	4.3	2.1	1.1
350	83.3	V <sub>k</sub>			2.5	2.2	1.7	1.4	1.1	0.8	0.6
		P <sub>t</sub>			28.0	21.2	13.6	9.1	5.8	2.9	1.6
400	97.2	V <sub>k</sub>				2.5	2.0	1.6	1.3	0.9	0.7
		P <sub>t</sub>				27.7	17.7	11.9	7.6	3.7	2.0
500	111.1	V <sub>k</sub>					2.5	2.0	1.6	1.1	0.8
		P <sub>t</sub>					27.7	18.6	11.9	5.9	3.2
600	138.9	V <sub>k</sub>						2.4	1.9	1.4	1.0
		P <sub>t</sub>						26.7	17.1	9.4	4.6
700	166.7	V <sub>k</sub>							2.3	1.6	1.2
		P <sub>t</sub>							23.3	11.5	6.2
800	194.4	V <sub>k</sub>							2.6	1.8	1.3
		P <sub>t</sub>							30.4	15.0	8.1
900	222.2	V <sub>k</sub>								2.1	1.5
		P <sub>t</sub>								19.0	10.3
1000	250.0	V <sub>k</sub>								2.3	1.7
		P <sub>t</sub>								23.4	12.7
1200	277.8	V <sub>k</sub>									2.0
		P <sub>t</sub>									18.3
1400	333.3	V <sub>k</sub>									2.4
		P <sub>t</sub>									24.9
1600	444.4	V <sub>k</sub>									2.7
		P <sub>t</sub>									32.6

**SYMBOLS:**

V<sub>k</sub> – Effective velocity in m/s

Pressure (P<sub>t</sub>) – All pressures are in Pa (N/m<sup>2</sup>)

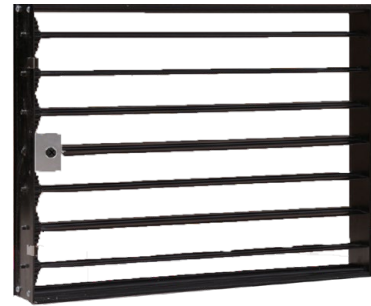
Q – Flow rate (l/s)

NR – Noise level index in dB based on a room absorption and one diffuser

# Opposite Blade Dampers

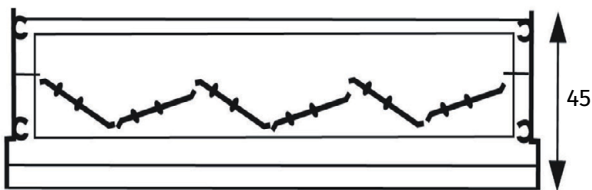
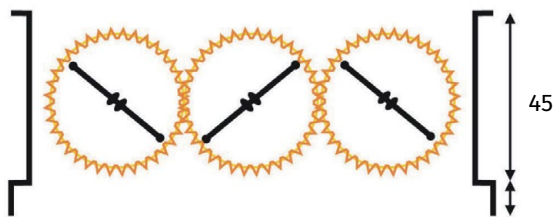
## Features

- Opposed Blade Dampers contain steel parts, and are therefore not recommended for use in corrosive environments. If you require a volume control damper suitable for these environments why not look at our uPVC Volume Control Damper
- Damper, with exceptional corrosion resistance thanks to its plastic construction.



## Design

- Made of high quality extruded aluminium profile
- Used as damper for square diffuser
- Accurate gear wheel control, screwdriver adjustment
- Size manufactured on request



### Nominal Neck Metric

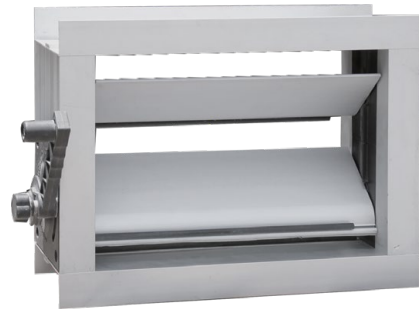
- 300×300 mm
- 400×300 mm
- 500×300 mm
- 600×300 mm

Grilles are powder coated white as standard  
Length dimension can be modified based on different specification.

# Volume Control Dampers

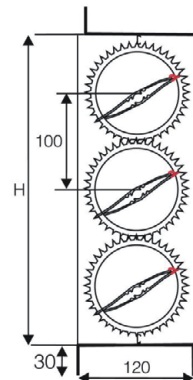
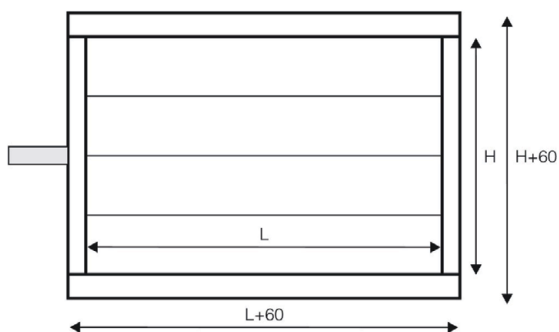
## Features

- These Volume Control Dampers are suitable for regulating or shutting off the air flow in air ducts with rectangular or square crosssections.
- The blades are manufactured from aluminium profiles and the frame is produced from galvanized steel sheets.
- The blade action is realised with the help of gears by a linkage mechanism.
- All of the dampers are produced either with damper actuators or with actuator bases or with a manual locking quadrant.



## Design

- Frame depth is 152 mm
- Flange is 35 mm
- Side seals & Blade seals (optional)
- High temperature seals also available for smoke relief
- Size manufactured on request











Blauberg Ventilation  
Unit 5, 45A Eastern Creek Drive, Eastern Creek,  
NSW 2766, Australia

[info@blaubergventilation.com.au](mailto:info@blaubergventilation.com.au)  
[www.blaubergventilation.com.au](http://www.blaubergventilation.com.au)

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