

2021

# CENTRAL DOMESTIC VENTILATION

PRODUCT GUIDE





## ADVANTAGES OF THE CENTRAL DOMESTIC VENTILATION

- Low-noise domestic ventilation
- Possible reduction of heating costs due to high heat recovery efficiency
- No additional thermal insulation of supply and exhaust air ducts, for the air temperature in the air duct is similar to the ambient air temperature.
- Summer mode (bypass): cooling of the building during the night at low outdoor temperatures
- No sound transmission from room to room
- Efficient air cleaning due to an integrated supply air filter of filter class F7 and exhaust air filter of filter class G4
- Reduced risk of mould because of a built-in humidity sensor
- Different control options, see page 10
- Plug and play packages, suitable for the number of rooms

## PLANNING PROPOSAL

Do you need help in planning your ventilation concept?

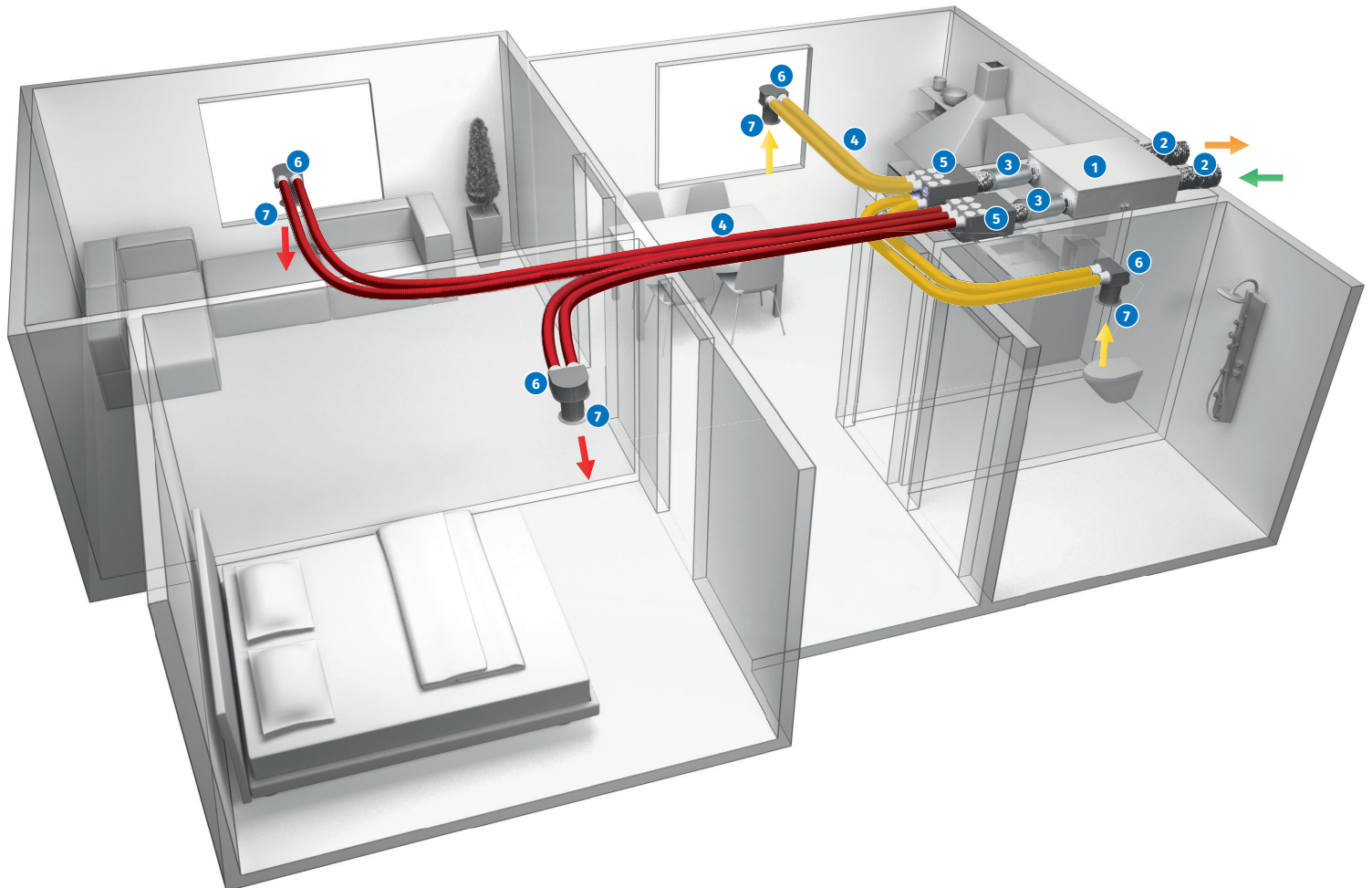
We provide free of charge, high-quality planning proposals in accordance with German DIN norms. Please send us your request with the floor plans and relevant data to [info@blaubergventilatoren.de](mailto:info@blaubergventilatoren.de).



## MOUNTING IN A ONE-STOREY BUILDING WITH A CEILING-MOUNTED UNIT

Usually the air ducts are mounted in a suspended ceiling. This mounting type requires sufficient ceiling height for laying of the air ducts and ceiling mounting.

■ Intake air ■ Exhaust air ■ Extract air ■ Supply air



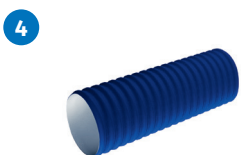
1  
KOMFORT  
ventilation unit/ceiling-mounted  
page 6



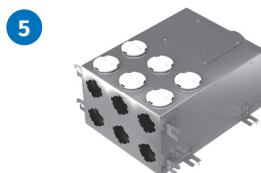
2  
Insulated air duct



3  
Silencer



4  
Flexible air ducts



5  
Distribution box



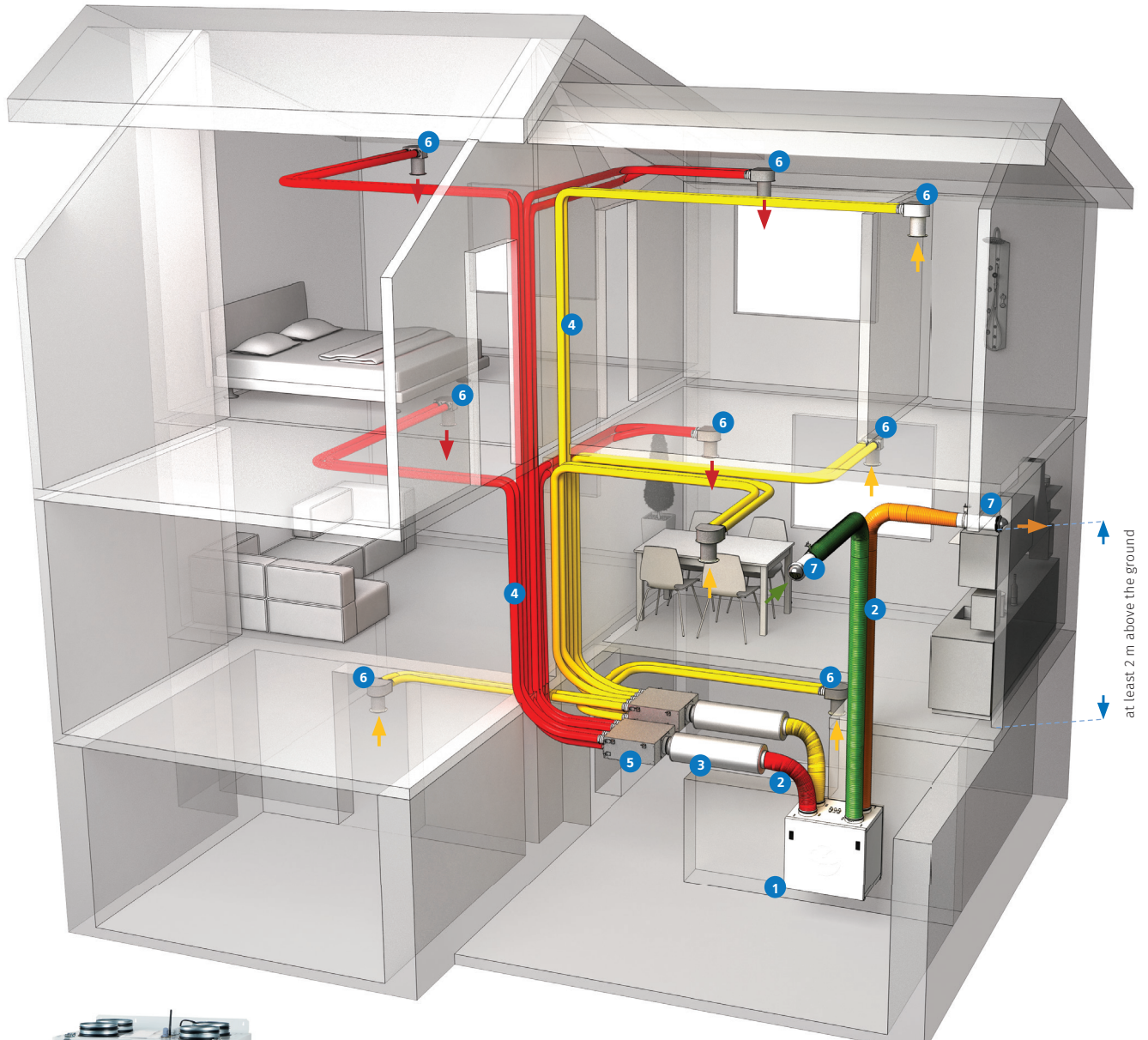
6  
Metal connector



7  
Disc valves for  
supply and extract air

## MOUNTING IN A MULTI-STOREY BUILDING WITH A FLOOR-MOUNTED UNIT

■ Intake air ■ Exhaust air ■ Extract air ■ Supply air



1



KOMFORT  
ventilation unit/floor-mounted  
page 7

2



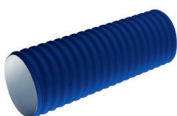
Insulated air duct

3



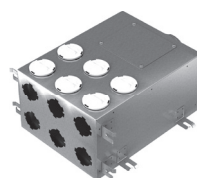
Silencer

4



Flexible air duct

5



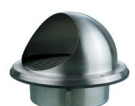
Distribution box

6



Metal connector

7



Outer hood



# KOMFORT EC D5B 180(-E)

Heat and energy recovery air handling unit

## Features

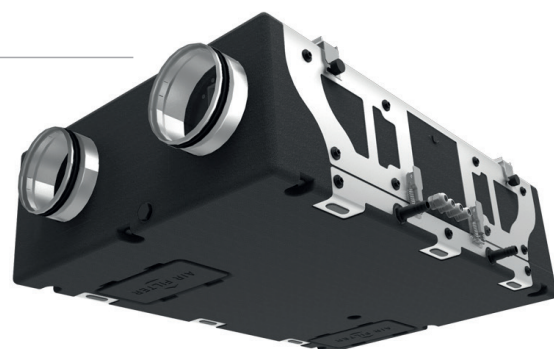
- Air handling unit for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat recovery minimizes ventilation heat losses during cold season and reduces air conditioner load during hot season.
- Controllable air exchange for creating the best suitable indoor microclimate.
- Compatible with round Ø 150 mm air ducts.



**Air flow:**  
up to 220 m³/h



**Heat recovery efficiency:**  
up to 98 %



## Design

- The casing is made of expanded polypropylene (EPP), 15–30 mm thick, with high heat- and sound-insulating properties.
- The spigots are located at the side of the unit and are rubber sealed for airtight connection to the air ducts.

## Control and automation

- The **KOMFORT EC D5B 180 (-E)** unit is available with the new S21 control board and the non-digital S14 control panel (controls, see page 10).

## Fans

- High-efficient external rotor EC motors and centrifugal impellers with forward curved blades are used for air supply and exhaust.
- 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.

## Designation key

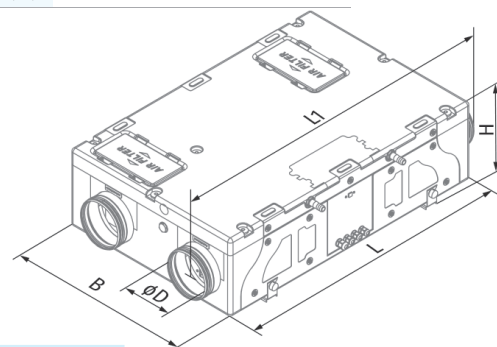
Series	Motor type	Spigot orientation	Casing modification	Bypass	Nominal air flow m³/h	Heat exchanger type	Control
KOMFORT	<b>EC:</b> electronically commutated motor	<b>D:</b> suspended mounting, horizontally oriented spigots	<b>5:</b> EPP	<b>B:</b> integrated bypass	<b>180</b>	<b>-:</b> heat recovery <b>-E:</b> energy recovery	<b>S21</b> <b>S14</b>

## Technical data

Parameters	KOMFORT EC D5B 180	KOMFORT EC D5B 180-E
Power [W]	87	87
Current [A]	0,71	0,71
Maximum air flow [m³/h]	220	220
Casing material	EPP	EPP
Transported air temperature [°C]	-25 to +40	-25 to +40
Sound pressure level at 3 m [dBA]	33	33
Heat recovery efficiency [%]	86-98	79-94

## Overall dimensions [mm]

Model	Ø D	B	L	L1	H
KOMFORT EC D5B 180(-E)	150	600	900	1009	264



Product name	KOMFORT EC D5B 180 S21	KOMFORT EC D5B 180-E S21	KOMFORT EC D5B 180 S14	KOMFORT EC D5B 180-E S14
Article number	8055157	8055164	8042843	8046629
Discount group	R006	R006	R006	R006
List price	2260.00 €	2680.00 €	2000.00 €	2420.00 €

# KOMFORT EC DB

## Suspended heat recovery air handling unit

### Features

- Air handling unit for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat recovery minimizes ventilation heat losses during cold season and reduces air conditioner load during hot season.
- Compatible with round Ø 125 and 160 mm air ducts.
- The unit is equipped with a 100 % bypass for summer ventilation (room cooling by the cool intake air).
- Controllable air exchange for creating the best suitable indoor microclimate.



**Air flow:**  
up to 410 m³/h



**Heat recovery efficiency:**  
up to 94 %



### Design

- The casing is made of double-skinned aluzinc panels, internally filled with a 40 mm mineral wool layer for heat and sound insulation.

### Control and automation

- The **KOMFORT EC DB** unit is available with the new S21 control board and the non-digital S14 control panel (controls, see page 10).
- The S21 control board allows integration of the unit into Smart Home or Building Management Systems (BMS).

### Fans

- High-efficient external rotor EC motors and centrifugal impellers with backward curved blades are used for air supply and exhaust.
- 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.

### Designation key

Series	Motor type	Mounting type	Bypass	Nominal air flow [m³/h]	Control
KOMFORT	<b>EC:</b> electronically commutated motor	<b>D:</b> suspended mounting, horizontally directed spigots	<b>B:</b> integrated bypass	<b>160; 350</b>	<b>S21 S14</b>

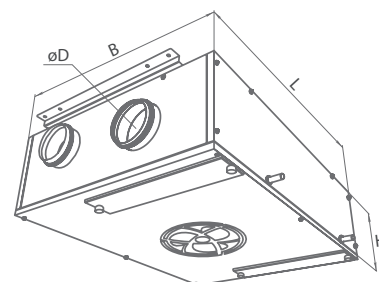
### Overall dimensions [mm]

Model	Ø D	B	H	L
KOMFORT EC DB 160	125	754	320	1008
KOMFORT EC DB 350	160	1044	320	1138

### Technical data

Parameters	KOMFORT EC DB 160	KOMFORT EC DB 350
Power [W]	50	170
Maximum air flow [m³/h]	190	410
Sound pressure level at 3 m [dBA]	26	34
Heat recovery efficiency [%]	82-94	80-91

Product name	KOMFORT EC DB 160 L S21	KOMFORT EC DB 350 L S21	KOMFORT EC DB 160 S14	KOMFORT EC DB 350 S14
Article number	8064807	8064821	8033261	8021299
Discount group	R006	R006	R006	R006
List price	2650.00 €	3600.00 €	2210.00 €	3100.00 €





# KOMFORT EC SB

## Heat and humidity recovery air handling unit

### Features

- Air handling unit for efficient, energy-saving supply and exhaust ventilation in flats, houses, cottages and other premises.
- Heat and humidity recovery minimizes ventilation heat losses during cold season and reduces air conditioner load during hot season.
- Controllable air exchange for creating the best suitable indoor microclimate.
- Compatible with round Ø 125, 160 or 200 mm air ducts.



**Air flow:**  
up to 690 m³/h



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



### Design

- The casing is made of double-skinned polymer-coated steel panels, internally filled with a 20, 25, 30, 40 mm (depending on the unit model) mineral wool layer for heat- and sound-insulation.

### Control and automation

- The **KOMFORT EC SB** unit is available with the new S21 control board and the non-digital S14 control panel (controls, see page 10).
- The S21 controller allows integration of the unit into Smart Home or Building Management Systems (BMS).

### Fans

- The unit is equipped with high-efficient EC motors with an external rotor and a centrifugal impeller with backward curved blades.
- EC motors have the best power consumption to air capacity ratio and meet the latest demands concerning energy saving and high-efficient ventilation.
- EC motors are featured with high performance, low noise level and optimum control across the entire speed range.

### Designation key

Series	Motor type	Mounting type	Bypass	Rated air flow, [m³/h]	Heat exchanger type	Control
KOMFORT	EC: electronically commutated motor	S: vertical	_: no bypass B: with a bypass	350; 550	_: Heat exchanger -E: Enthalpy exchanger	S21 S14

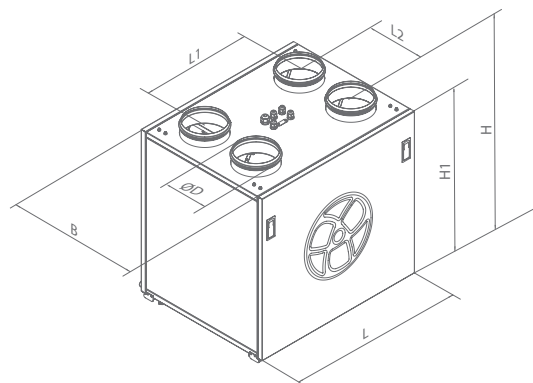
### Overall dimensions [mm]

Model	Ø D	B	H	H1	L	L1	L2
KOMFORT EC SB 350	160	583	760	675	730	426	230
KOMFORT EC SB 550	200	720	760	675	823	498	288

### Technical data

Parameters	KOMFORT EC SB 350	KOMFORT EC SB 550
Power [W]	178	337
Maximum air flow [m³/h]	450	690
Sound pressure level at a distance of 3 m [dBA]	28	26
Heat recovery efficiency [%]	85-92	84-92

Product name	KOMFORT EC SB 350 S21	KOMFORT EC SB 550 S21	KOMFORT EC SB 350 S14	KOMFORT EC SB 550 S14
Article number	8054471	8054495	8021664	8021695
Discount group	R006	R006	R006	R006
List price	3290.00 €	4260.00 €	3130.00 €	4100.00 €



# KOMFORT Roto EC S

Air handling unit with rotary heat exchanger

## Features

- Air handling unit for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat recovery is provided by the rotary heat exchanger and minimizes ventilation heat losses.
- Controllable air exchange for creating the best suitable indoor microclimate.
- Compatible with round Ø 125, 160 and 200 mm air ducts.



**Air flow:**  
up to 670 m³/h



**Heat recovery efficiency:**  
up to 92 %



## Design

- The fan casing is made of polymer coated steel and is heat- and sound-insulated with a 40 mm mineral wool layer.

## Control and automation

- The **KOMFORT Roto EC S** unit is available with the new S21 control board and the non-digital S14 control panel (controls, see page 10).
- The S21 controller allows integration of the unit into Smart Home or Building Management Systems (BMS).

## Fans

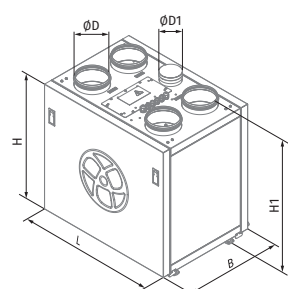
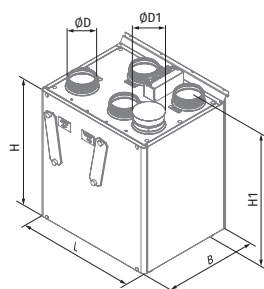
- High-efficient external rotor EC motors and centrifugal impellers are used for air supply and exhaust.
- EC motors have the best power consumption to air flow ratio and meet the latest demands concerning energy saving and high-efficient ventilation.
- EC motors are featured with high performance, low noise level and totally controllable speed range.

## Designation key

Series	Unit type	Motor type	Spigot modification	Heater type	Nominal air flow [m³/h]	Control
KOMFORT	Roto: rotary heat exchanger	EC: electronically commutated motor	S: vertical spigot orientation	_: no heater E: electric heater	280; 400; 600	S21 S14

## Overall dimensions [mm]

Model	D	D1	B	H	H1	L
KOMFORT Roto EC S 280	125	125	482	630	754	598
KOMFORT Roto EC S 400	160	100	528	675	755	745
KOMFORT Roto EC S 600	200	125	628	772	852	819



## Technical data

Parameters	KOMFORT Roto EC S 280 S21	KOMFORT Roto EC S 400 S21	KOMFORT Roto EC S 600 S21
Power [W]	195	200	405
Current [A]	1,9	1,4	2,6
Maximum air flow [m³/h]	300	440	670
Casing material	painted steel		
Operating temperature [°C]	-25 to +40		
Sound pressure level at 3 m distance [dBA]	26	33	35
Heat recovery efficiency [%]	81-90	76-85	81-89

Product name	KOMFORT Roto EC S 280 S21	KOMFORT Roto EC S 400 S21	KOMFORT Roto EC S 600 S21
Article number	8058745	8058769	8058783
Discount group	R006	R006	R006
List price	3210.00 €	3360.00 €	4310.00 €



# KOMFORT Roto EC D(E)

Air handling unit with rotary heat exchanger

## Features

- Air handling unit for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat recovery is provided by the rotary heat exchanger and minimizes ventilation heat losses.
- **KOMFORT Roto EC D(2)E** – model with electric heater.
- Compatible with round Ø 160 and 200 mm air ducts.



**Air flow:**  
up to 710 m³/h



**Heat recovery efficiency:**  
up to 87 %



## Design

- The fan casing is made of galvanized steel, internally filled with a mineral wool layer for heat and sound insulation.
- 40 mm thick insulation for **KOMFORT Roto EC D(E)** and 20 mm thick for **KOMFORT Roto EC D2(E)**.

## Control and automation

- The **KOMFORT Roto EC D(E)** unit is available with the new S21 control board and the non-digital S14 control panel (controls, see page 10).
- The S21 controller allows integration of the unit into Smart Home or Building Management Systems (BMS).

## Fans

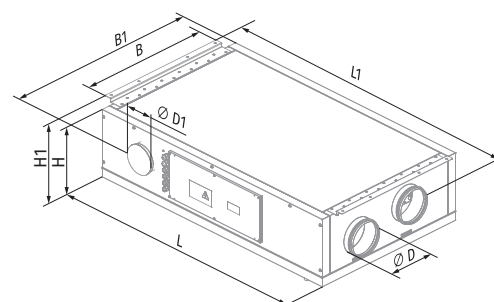
- High-efficient external rotor EC motors and centrifugal impellers are used for air supply and exhaust.
- EC motors have the best power consumption to air flow ratio and meet the latest demands concerning energy saving and high-efficient ventilation.
- EC motors are featured with high performance, low noise level and totally controllable speed range.

## Designation key

Series	Unit type	Motor type	Mounting type	Modification	Heater type	Nominal air flow [m³/h]	Service side	Control
KOMFORT	<b>Roto:</b> rotary heat exchanger	<b>EC:</b> electronically commutated motor	<b>D:</b> Suspended mounting, horizontally oriented spigots	–: Standard (insulation 40 mm) 2: Low-profile (insulation 20 mm)	–: no heater E: electric heater	<b>250; 350; 650</b>	<b>R:</b> Right <b>L:</b> Left	<b>S21</b>

## Overall dimensions [mm]

Model	D	D1	B	B1	H	H1	L	L1
KOMFORT Roto EC D 250 S21	160	125	643	688	308	345	1003	1100
KOMFORT Roto EC D 350 S21	160	125	770	818	318	361	1270	1365
KOMFORT Roto EC D 650 S21	200	125	897	932	409	422	1445	1542



## Technical data

Parameters	KOMFORT Roto EC D 250 S21	KOMFORT Roto EC D 350 S21	KOMFORT Roto EC D 650 S21
Power [W]	135	185	367
Maximum air flow [m³/h]	310	430	710
Sound pressure level at 3 m distance [dBA]	21	31	36
Heat recovery efficiency [%]	71–87	72–87	80–87

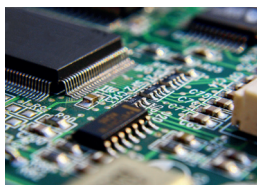
Product name	KOMFORT Roto EC D 250 S21	KOMFORT Roto EC D 350 S21	KOMFORT Roto EC D 650 S21
Article number	8065668	8065965	8069024
Discount group	R006	R006	R006
List price	3100.00 €	3780.00 €	5150.00 €

## OVERVIEW OF ALL CONTROLS

### Control board

Control board and app are always included in the delivery.

**S21**



All models of KOMFORT series are equipped with the control board S21 and can be controlled via the app (Blauberg AHU) or a control panel.

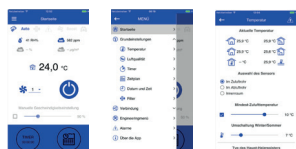
### App

### Control panels

#### New control solutions

#### Basic control option

#### Blauberg AHU



Units with S21 board can be controlled via the app without a control panel. The intuitive user interface of the app enables you to enjoy fresh indoor air while saving energy.

#### S22 (optional, in combination with S21)



Easy operation of the main functions. Comparable to S14. Connections to the unit via cable (S22) or WiFi (S22 WiFi).

#### S25 (optional, in combination with S21)



Touchscreen for entering and retrieval of all data of the ventilation unit.

#### S14



Non-digital control

### KOMFORT units

#### New control solutions

#### Basic control option

Model	S21 + App (always included in delivery) Can be controlled with S22, S22 WiFi, S25 or the app "Blauberg AHU".	S14
KOMFORT Roto EC S(E)	•	
KOMFORT Roto EC D(E)	•	
KOMFORT EC S/SB	•	•
KOMFORT EC D5B	•	•
KOMFORT EC DB	•	•
KOMFORT EC DBE	•	
KOMFORT EC DBW	•	



## Control board S21

Functions and compatibilities	S21 + app (always included in delivery)
WiFi control of the unit via app	+
Control via control panel, connection via cable	Control panel S22 (optional)
Control via LCD control panel, connection via cable	Control panel S25 (optional)
Control via wireless control panel, connection via WiFi	Control panel S22 WiFi (optional)
Speed selection	+
Filter replacement indication	according to filter timer
Alarm indication	full alarm description with history
Week-scheduled operation	+
Timer	+
Bypass control	automatic or manual
Boost-Mode	+
Fireplace mode	+
Frost protection by cyclic switch-off of the supply fan	optional preheating, controllable
Connection of a post-heating coil	optional postheating, controllable
Connection of a cooling coil	optional cooling register, controllable
Monitoring of the minimal supply air temperature	+
Humidity control	optional
CO <sub>2</sub> control	optional
VOC control	connectable, not part of Blauberg product range
PM2.5 control	connectable, not part of Blauberg product range
Fire alarm sensor connection	connectable, not part of Blauberg product range
Integration in BMS	+



**Blauberg AHU**  
Download app  
for iOS



**Blauberg AHU**  
Download app  
for Android

## Comparison external control panels

All functions are always retrievable in the app.

Functions	S25 control	S22 control / WiFi	S14 control (basic control panel)
WiFi control of the unit via mobile app	+	+	-
Alarm indication	full alarm description	LED alarm indication	LED alarm indication
Week-scheduled operation	+	-	-
Timer	+	-	-
Boost mode	+	-	-
Bypass control	automatic or manual	manual control only (via app automatic)	manual control only
Frost protection by cyclic switch-off of the supply fan	optional preheating, controllable	+	+
Connection of a post-heating coil	optional postheating, controllable	+	+
Connection of a cooling coil	optional cooling register, controllable	+	+
Monitoring of the minimal supply air temperature	+	-	-
Humidity control	optional	-	-
CO <sub>2</sub> control	optional	-	-

### Additional functions of S14 control with installed PC software:

- Setting of the required speed from 0 to 100 %. Every speed level of the supply and exhaust fan is adjusted individually during setup.
- Setting of setpoint temperature for freezing protection of the heat exchanger.

- Control and setting of the maintenance interval via filter timer.
- Control of the external control device, bypass and room humidity control.

**With the new controls this step is not necessary anymore, as all settings can be easily done via the app.**

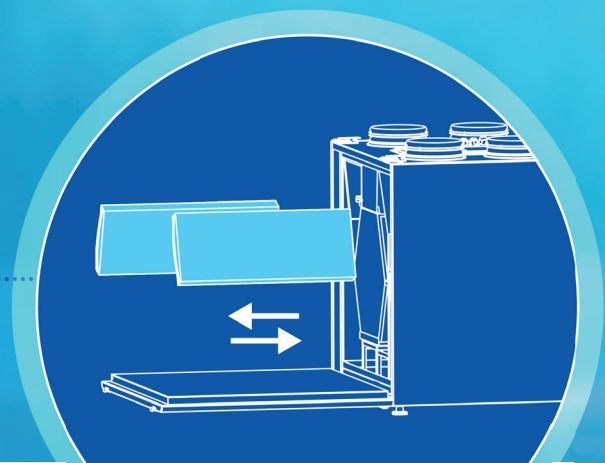
optional: This function is available when respective accessory (see accessories) is used.

## PRODUCTS AND THEIR FILTERS



Click here to download complete filter package.

## IT'S TIME FOR AIR FILTER MAINTENANCE!

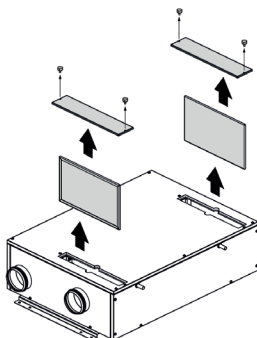


### KOMFORT EC D5B 180

Air handling unit with heat recovery

#### Filter facts

- Filter can be cleaned with a vacuum cleaner.
- Replace filters every 6 to 12 months, depending on degree of pollution, but no later than after the 2nd cleaning.
- 2 sets of filters needed for replacement.



**Air flow:**  
up to 220 m³/h



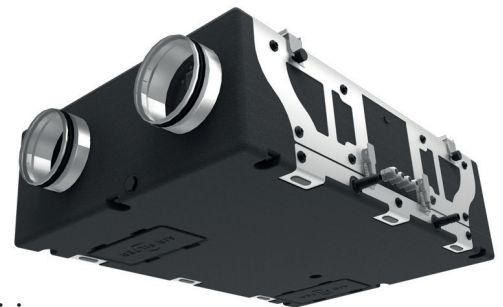
**Heat recovery efficiency:**  
up to 98 %



**Power:**  
from 178 W



**Noise level:**  
from 33 dB(A)



- Super simple filter replacement.
- Open filter panels, pull out supply and exhaust air filters, install new filters and close panels.



Filters	Article number
FP 214x186x18 G4	8054396
FP 214x186x48 F7	8054402

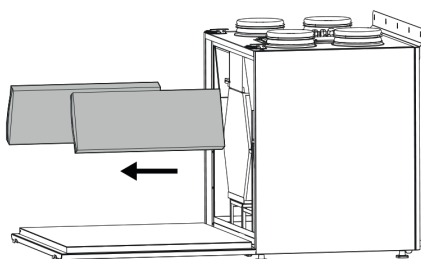


## KOMFORT EC SB 350/550

Air handling unit with heat recovery

### Filter facts

- Filters can be cleaned with vacuum cleaner.
- Replace filters every 6 to 12 months, depending on degree of pollution, but no later than after the 2nd cleaning.
- Needed for filter replacement: 1 x G4 for exhaust air, 1 x F7 for supply air



**Air flow:**  
up to 690 m³/h



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



**Power:**  
from 178 W



**Noise level:**  
from 26 dB(A)



- Super simple filter replacement.
- Open front panel, pull out supply and exhaust air filters, install new filters and close front panel.



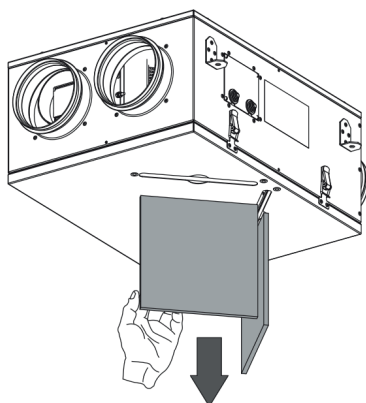
Model	Filters	Article number
KOMFORT EC SB350	FP 196x500x40 G4	8044977
KOMFORT EC SB350	FP 196x500x40 F7	8045004
KOMFORT EC SB550	FP 198x630x40 G4	8044984
KOMFORT EC SB550	FP 198x630x40 F7	8045011

## KOMFORT ULTRA D105/D105-A

Affordable single-room heat recovery unit

### Filter facts

- Clean with vacuum cleaner or water.
- Replace filters every 6 to 12 months, depending on degree of pollution, but no later than after the 2nd cleaning.
- Install only dry filters.
- 2 filter sets needed for replacement.



**Air flow:**  
up to 106 m³/h



**Heat recovery efficiency:**  
up to 76 %



**Power:**  
from 30 W



**Noise level:**  
from 24 dB(A)



Model	Filters	Article number
KOMFORT Ultra D105	FP 240x202x8 G4	8045165
KOMFORT Ultra D105-A	FP 198x205x8 G4	8045172



## KOMFORT RoTo EC S

Air handling unit with rotary heat exchanger

### Filter facts

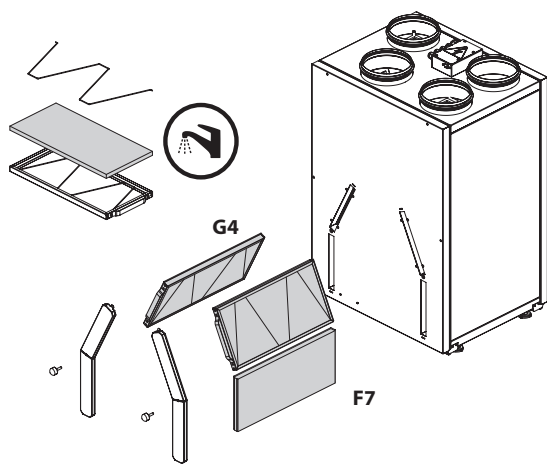
- Filters can be cleaned with vacuum cleaner.
- Replace filters every 6 to 12 months, depending on degree of pollution, but no later than after the 2nd cleaning.
- Install only dry filters.
- Needed for filter replacement: 1 x G4 for exhaust air, 1 x F7 for supply air



**Air flow:**  
up to 670 m³/h



**Heat recovery efficiency:**  
up to 92 %



- Super simple filter replacement.
- Open filter panels, pull out supply and exhaust air filters, install new filters and close panels.



Filters	Article number
FP 284x103x60 G4	on demand
FP 284x103x60 F7	on demand
FP 400x196x40 G4	8052392
FP 400x196x40 F7	8052408
FP 436x196x40 G4	8058660
FP 436x196x40 F7	8058677
FP 536x220x40 G4	8058684
FP 536x220x40 F7	8058691

## KOMFORT RoTo EC D(E)

Suspended heat recovery air handling unit

### Filter facts

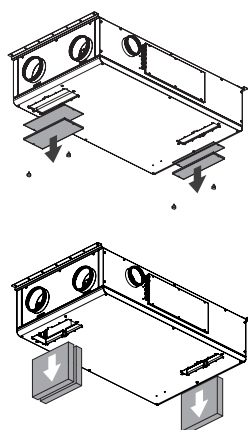
- Filters can be cleaned with vacuum cleaner.
- Replace filters every 6 to 12 months, depending on degree of pollution, but no later than after the 2nd cleaning.
- Install only dry filters.
- Needed for filter replacement: 1 x G4 for exhaust air, 1 x F7 for supply air



**Air flow:**  
up to 710 m³/h



**Heat recovery efficiency:**  
up to 87 %



- Super simple filter replacement.
- Open filter panels, pull out supply and exhaust air filters, install new filters and close panels.



Filters	Article number
FP 280x180x48 G4	8075537
FP 280x180x48 F7	8075544
FP 260x220x48 G4	8075612
FP 260x220x48 F7	8075629
FP 372x180x48 G4	8075643
FP 372x180x48 F7	8075650



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