

# KOMFORT ROTO EC S

281 / 401

# AIRsupply

## Features

- Air handling units 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.



**Air flow:**  
up to 447 m<sup>3</sup>/h  
124 l/s



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



## Design

- The unit casing is made of painted steel, internally filled with mineral wool layer for heat and sound insulation.
- The insulation is 40 mm thick.
- **KOMFORT Roto EC S ... L** – left-handed unit.
- **KOMFORT Roto EC S ... R** – right-handed unit.

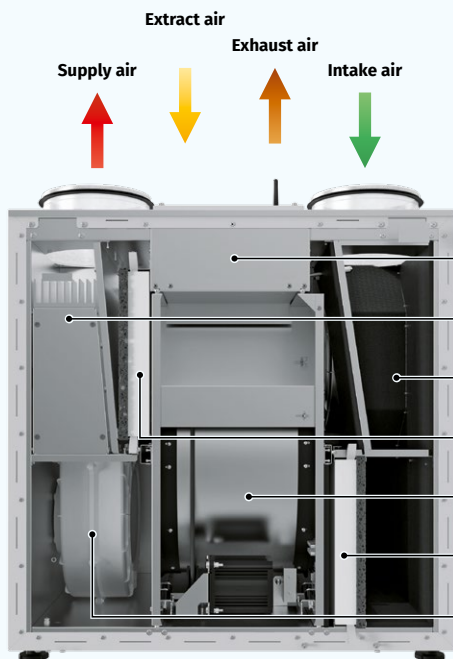
## Air filtration

- Two built-in **Coarse 90% (G4)** filters provide efficient supply air filtration.
- Supply ePM1 65% (F7) filter available as an option.

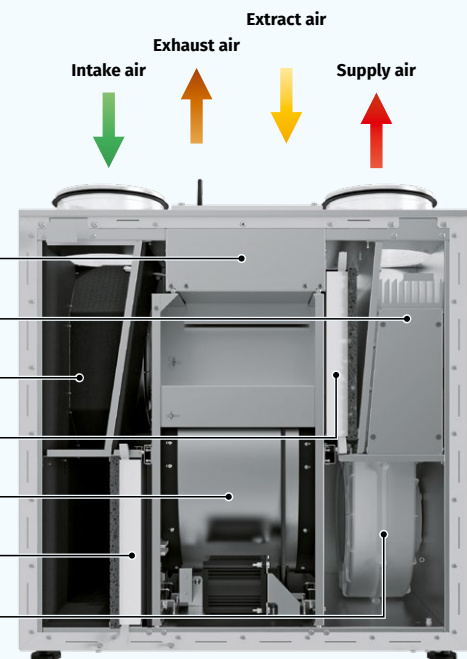
## Heater

- Units **KOMFORT Roto EC SE** are equipped with an electric heater.

**KOMFORT ROTO EC S ... L**



**KOMFORT ROTO EC S ... R**



Terminal box

Electric heater

Exhaust fan

Exhaust filter

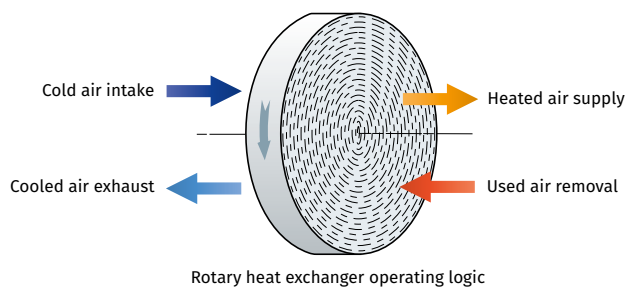
Rotary heat exchanger

Supply filter

Supply fan

### Heat recovery

- The unit has a high-efficient rotary heat exchanger
- The advantages of the rotary heat exchanger as compared to plate heat exchangers include no condensate generation, maintaining comfort air humidity and high freeze resistance.



### Control and automation

- The units are equipped with an integrated automation system. The remote control panel is not included in the delivery set (purchased separately).
- The S21 controller allows to integrate the unit into the **Smart Home** system or **BMS (Building Management System)**.
- Unit control is done via Wi-Fi using the mobile application **Blauberg Home**.






Download the **Blauberg Home** app for Android



Download the **Blauberg Home** app for iOS



### Automation functions

Functions	Description
Unit control via Wi-Fi using a mobile application	+
Unit control via a wired remote control panel	S22 control panel (option) 
Unit control via a wireless remote control panel	S22 Wi-Fi control panel (option) 
Unit control via a wired remote LCD control panel	S25 control panel (option) 
<b>BMS (Building Management System)</b>	RS-485
	Wi-Fi
	Ethernet
	MODBUS (RTU, TCP)
<b>Blauberg Cloud Server service</b>	+
<b>Speed selection</b>	+
<b>Filter replacement indication</b>	by filter timer
<b>Alarm indication</b>	+
<b>Week-scheduled operation</b>	+
<b>Bypass</b>	automatic
	manual
<b>Timer</b>	+
<b>Boost mode</b>	+
<b>Fireplace mode</b>	+
<b>Freeze protection</b>	+
<b>Cooler connection</b>	+
<b>Minimum supply air temperature control</b>	+
<b>Humidity control</b>	option
<b>CO<sub>2</sub> control</b>	option
<b>VOC control</b>	option
<b>PM2.5 control</b>	option
<b>Fire alarm sensor connection</b>	option

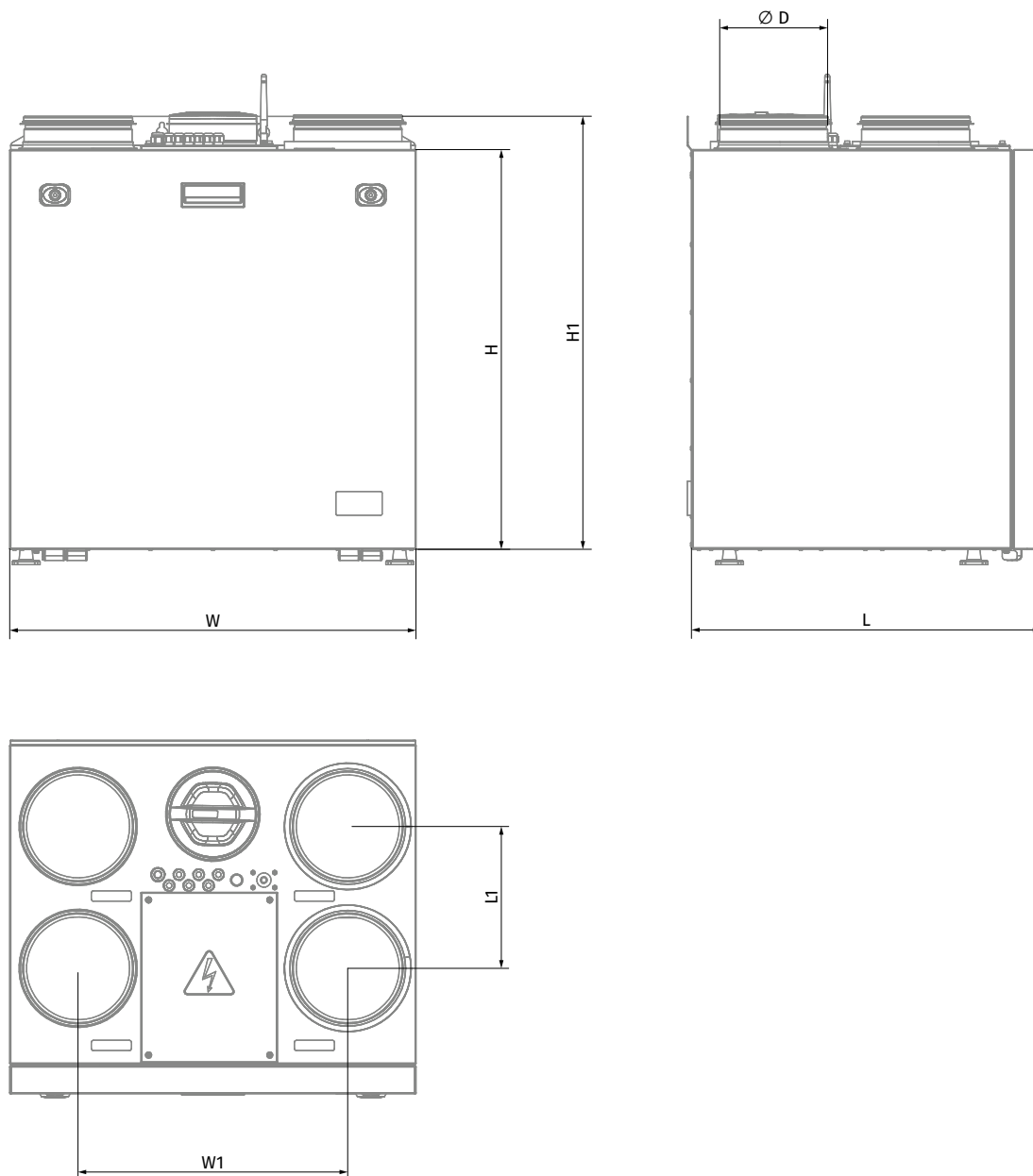
Option: the function is available when purchasing the appropriate accessory (see the "Accessories" section).

### Designation key

Series	Motor	Casing type	Casing modification	Size (Nominal airflow / 10)	Modification	Heat exchanger type	Unit version	Control system
<b>KOMFORT Roto</b>	<b>EC:</b> electronically commutated motor	<b>S:</b> vertical	<b>_:</b> w/o heater <b>E:</b> electric reheater	<b>28:</b> 280 m <sup>3</sup> /h <b>40:</b> 400 m <sup>3</sup> /h	<b>1:</b> by default	<b>_:</b> Condensing rotor <b>-E:</b> Sorption rotor	<b>L:</b> left version <b>R:</b> right version	<b>S21</b>

## Overall dimensions [mm]

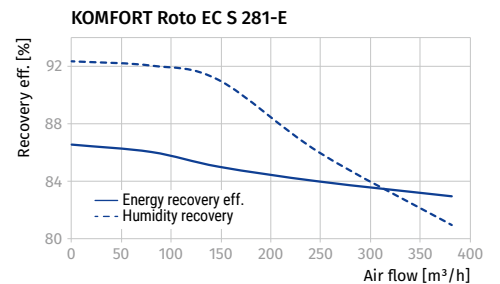
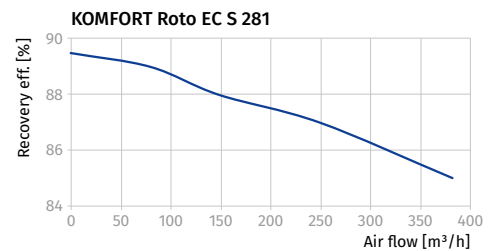
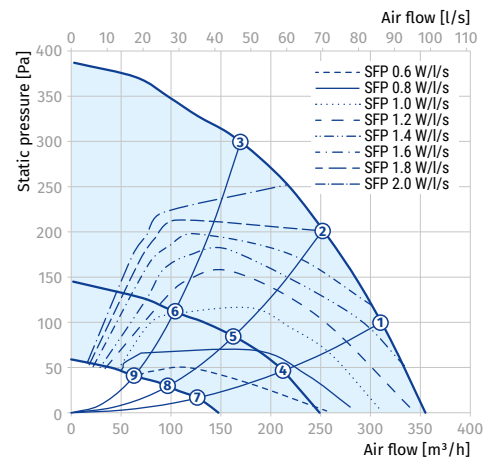
Model	Ø D	H	H1	L	L1	W	W1
KOMFORT Roto EC S	160	588	638	515	209	598	397



Technical data

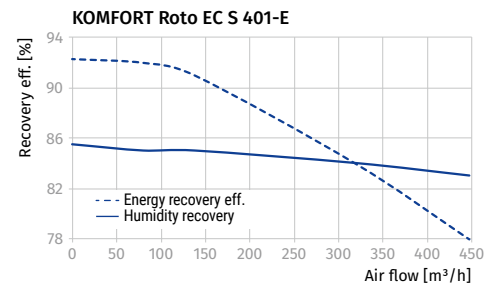
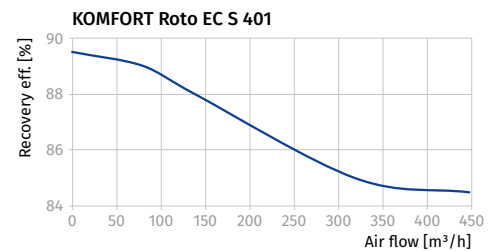
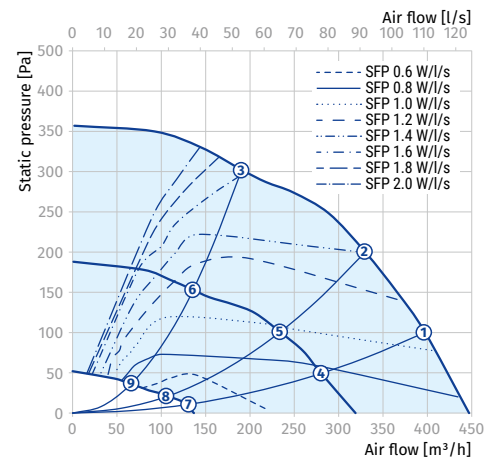
Parameters	KOMFORT Roto EC S 281	KOMFORT Roto EC S 281-E	KOMFORT Roto EC SE 281	KOMFORT Roto EC SE 281-E
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	176	176	176	176
Max. power of electric heater [W]	-	-	1200	1200
Max. unit power [W]	176	176	1376	1376
Max. unit current without electric heater [A]	1.34	1.34	1.34	1.34
Max. unit current of electric heater [A]	-	-	5.32	5.32
Max. unit current [A]	1.34	1.34	6.66	6.66
Max. air flow [m <sup>3</sup> /h]	382	382	382	382
Sound pressure level at 3 m distance [dBA]	28	28	28	28
Operating temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40
Case material	Painted steel	Painted steel	Painted steel	Painted steel
Insulation	40	40	40	40
Extract filter	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%
Supply filter	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)
Connected air duct diameter [mm]	160	160	160	160
Weight [kg]	67	68	67	68
Heat recovery efficiency [%]	89	86	89	86
Heat exchanger type	Condensing	Sorption	Condensing	Sorption
SEC class	A+	A+	A+	A+

Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Point 1</b>											
L <sub>WA</sub> to environment [dBA]	49	31	39	38	36	38	37	35	28	28	38
<b>Point 4</b>											
L <sub>WA</sub> to environment [dBA]	39	19	27	26	26	22	22	20	24	17	27















Parameters	KOMFORT Roto EC S 401	KOMFORT Roto EC S 401-E	KOMFORT Roto EC SE 401	KOMFORT Roto EC SE 401-E
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	222	222	222	222
Max. power of electric heater [W]	-	-	1200	1200
Max. unit power [W]	222	222	1422	1422
Max. unit current without electric heater [A]	1.6	1.6	1.6	1.6
Max. unit current of electric heater [A]	-	-	5.32	5.32
Max. unit current [A]	1.6	1.6	6.92	6.92
Max. air flow [m³/h]	447	447	447	447
Sound pressure level at 3 m distance [dBA]	37	37	37	37
Operating temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40
Case material	Painted steel	Painted steel	Painted steel	Painted steel
Insulation	40	40	40	40
Extract filter	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%
Supply filter	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)	G4 / Coarse > 60% (option F7 / ePM1 60%)
Connected air duct diameter [mm]	160	160	160	160
Weight [kg]	69	70	69	70
Heat recovery efficiency [%]	89	85	89	85
Heat exchanger type	Condensing	Sorption	Condensing	Sorption
SEC class	A+	A	A+	A

Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Point 1</b>											
L <sub>WA</sub> to environment [dBA]	<b>57</b>	35	43	42	45	44	44	43	38	<b>37</b>	<b>46</b>
<b>Point 4</b>											
L <sub>WA</sub> to environment [dBA]	<b>48</b>	29	37	36	38	37	35	33	26	<b>28</b>	<b>37</b>



## Accessories

		KOMFORT Roto EC S 281	KOMFORT Roto EC S 401
G4 panel filter		FP 428x220x40 Coarse 90% G4	FP 428x220x40 Coarse 90% G4
F7 panel filter		FP 428x220x40 ePM1 60% F7	FP 428x220x40 ePM1 60% F7
LCD Control panel		S25	S25
Control panel		S22	S22
Wireless control panel		S22 Wi-Fi	S22 Wi-Fi
Internal humidity sensor		FS2	FS2
Internal CO <sub>2</sub> sensor		CD-3	CD-3
CO <sub>2</sub> sensor with indication		CD-1	CD-1
Humidity sensor		HR-S	HR-S
Silencer		SD 125	SD 125
Air damper		VKA 125	VKA 125
Electric actuator		TF230	TF230