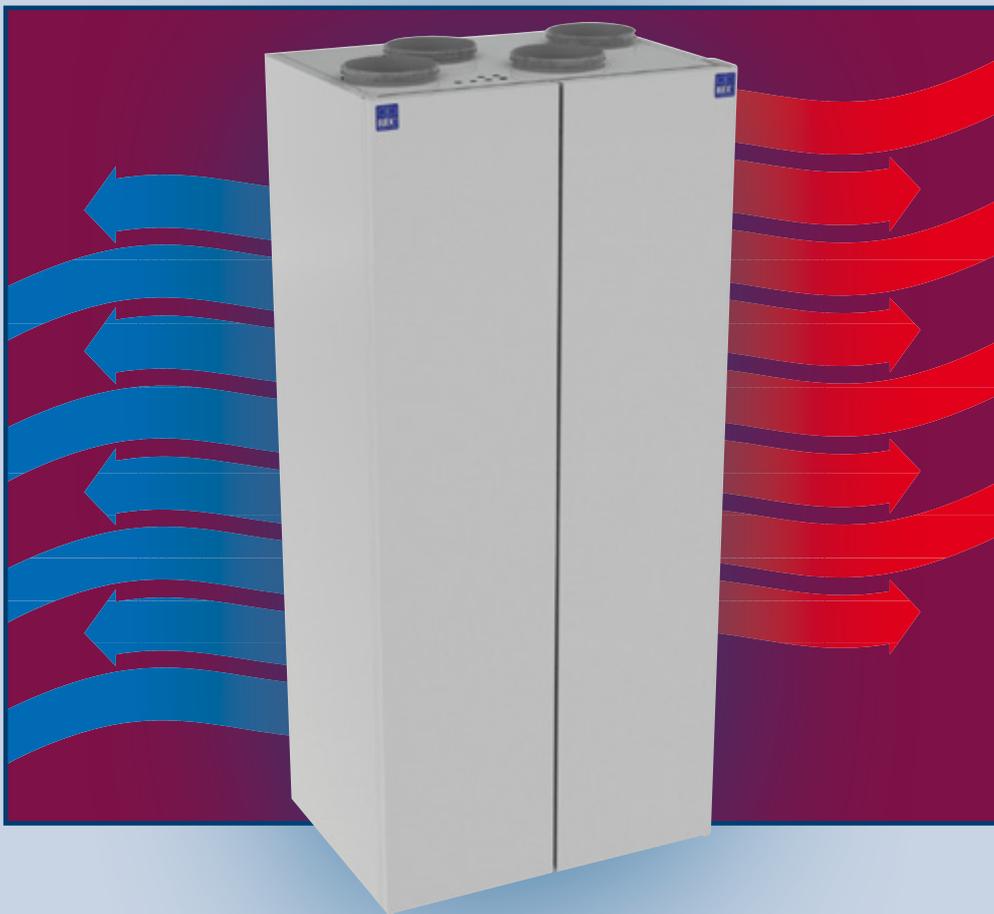


Air Handling Unit REC Temovex 700S-EC



Air handling unit

REC Temovex RT 700S-EC



General

REC Temovex 700S-EC is a compact unit for efficient ventilation with highly efficient heat recovery. This unit is designed to look like white goods and is designed to be placed on the floor in laundry rooms, boiler rooms, catering environments, etc. RT 700S-EC consists of fans, filters, afterheaters (electricity or water), automatic bypass, the control system Temosat Advanced, an integrated control panel, and our own counterflow heat exchanger. The cabinet casing is made of twin hot galvanised plates, with

30 mm intermediate insulation. The front and sides of the unit are powder painted in white, and the two doors are fitted with a magnetic strip. Our counterflow heat exchanger means that the thermal energy in the used indoor air can be taken and used to heat the fresh incoming air. By using a counterflow heat exchanger, we also ensure that there is no leakage of air between used and fresh air. All in all, this ensures good operating economy, supreme comfort and a good indoor climate.

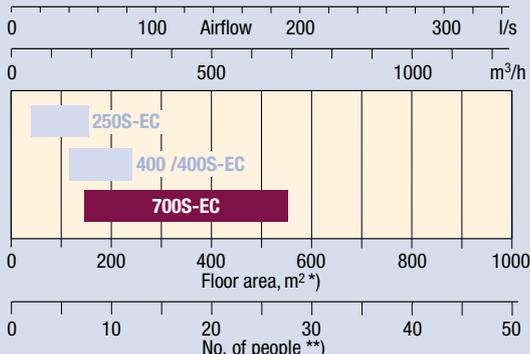
Fans

RT 700S-EC is provided with EC fans (electronic commutation) of outer rotor motor type. The fans can be set individually and steplessly from 20 to 85%. These motors come with built-in overheat protection which is reset by terminating the power to the motors. The impellers have backward-curved blades. For simple servicing/replacement, the fan coils are fitted with quick-action contacts.

Controls/control panel

The unit is equipped with Temosat Advanced, and a user-friendly control panel is integrated in the front of the unit (inside the door). From this panel, your required supply air temperature, low speed or high speed operation, etc. can be adjusted with ease. These units are supplied ready for connection of external forcing and/or flow reduction via a timer or other switch.

Shortcut, air flow-floor area-heat from people



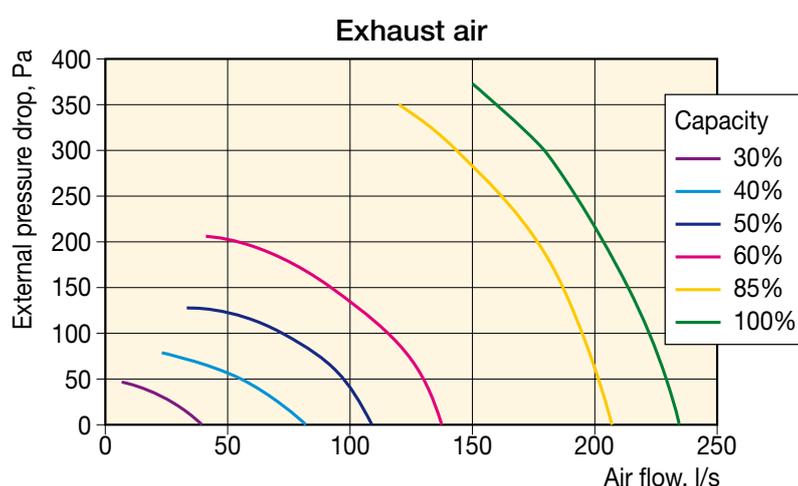
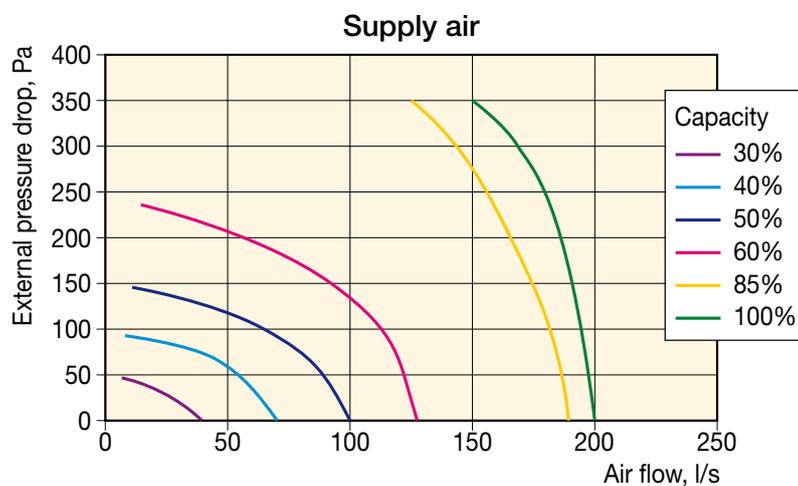
The supply air and exhaust air fans are individually adjustable in all units.

The min. flow is stated for all models at a 100 Pa external pressure drop. Max. flow 70% of max. capacity.

*) Calculated on minimum air flow 0.35 l/s /m² acc. to BBR 99 "Allmänt för bostäder"

**) Calculated on air flow of 7 l/s /person acc. to BBR 99 "Minsta tilluftsflöde"

Dimensioning diagram



Technical Specifications

	Electrical version	HW version water temp. 55/45°C
Rated output, unit	2160 W	360 W
Rated output, heater	1800 W	2400 W
Rated output, fans	2 x 178 W	2 x 178 W
Voltage/frequency	230 V, 50 Hz	230 V, 50 Hz
Fuse	10 A	10 A
Filter SA/EA	Bag F6/G3	Bag F6/G3
Weight	195 kg	195 kg
Water connection	X	10 mm
Fire classification	A15	A15
Dimensions (WxDxH)	870x620x1900 mm	870x620x1900 mm
Duct connections	4x200 mm	4x200 mm
Condensation drain	3/4"	3/4"

Placement guide

1. Door with magnetic strip
2. Exhaust air filter, (behind the hatch)
3. Bypass damper + Bypass damper motor 1
4. Exhaust air fan, (behind the hatch)
5. Supply air fan, (behind the hatch)
6. Heat exchanger
7. Outdoor air filter, (behind the hatch)
8. Inspection hatch
9. Adjustable feet
10. Condensation drainage
11. Control panel
12. Bypass damper motor
(behind EH hatch above the filter)
13. Bypass damper 2
(behind OH hatch to the left)

RT 700S-EC

Supply air - sound power levels L_{WA} dB(A)

Capacity %	External pressure Pa	Total dB(A)	Octave band							
			63	125	250	500	1k	2k	4k	8k
20	125	52	45,3	47,8	45,4	43,8	37,3	24,5	22,8	19,3
50	161	57,5	48,9	53,3	52,1	49	43,4	34	33,9	31,7
60	241	61,2	54,3	55,8	55,9	53,4	45,9	38,1	38,2	36,2
max	343	68	55,2	61,8	64,5	61,2	51,6	46,4	47,8	46,6

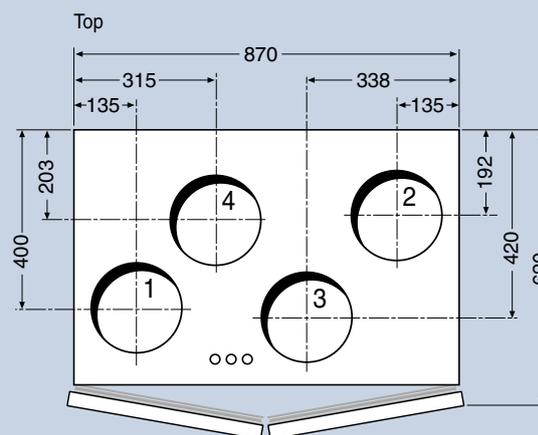
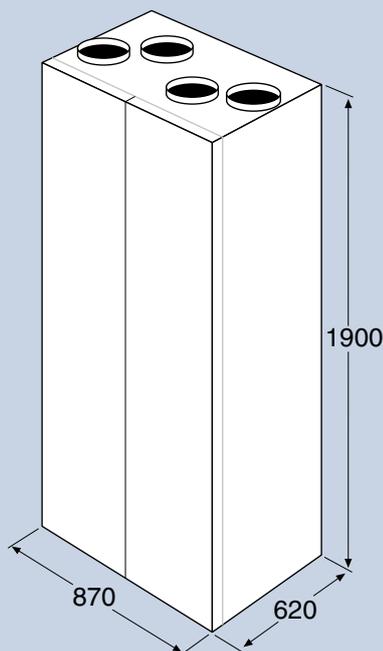
Exhaust air - sound power levels L_{WA} dB(A)

Capacity %	External pressure Pa	Total dB(A)	Octave band							
			63	125	250	500	1k	2k	4k	8k
20	87	50,3	43,9	45,4	42,8	37,6	42,5	35,8	23,3	17,3
50	73	54,1	48,7	50,1	46,2	39,8	42,2	40,1	31,3	22,9
60	58	55,9	47	53	49,2	41,9	43,6	42,4	34,2	25,7
max	125	64,7	55,8	60,9	59,3	49,7	51,2	52,9	44,6	38,7

Surroundings - sound power levels L_{WA} dB(A)

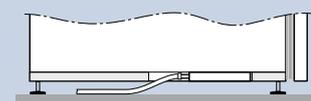
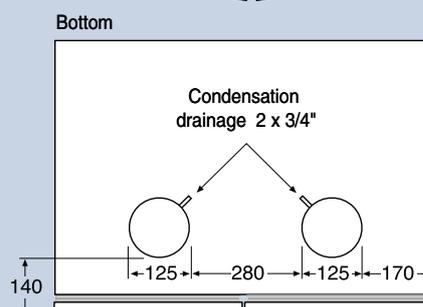
Capacity %	External pressure Pa	Total dB(A)	Octave band							
			63	125	250	500	1k	2k	4k	8k
20	155	39	29,5	36,8	31,3	28,1	21,9	16,2	17,1	20,1
50	200	43,8	29,3	41,9	37,1	32,5	27,3	21,1	19,9	21,8
60	200	44,9	31,1	43	38,3	33,1	28,4	22,6	20,7	22,6
max	65	47,9	32,2	45,4	42,5	37	32,5	25,7	22,8	25,1

Dimensions



Connections

1. Extract air Ø200 mm
2. Supply air Ø200 mm
3. Outdoor air Ø200 mm
4. Exhaust air Ø200 mm



Filter, replacement interval

A filter alarm is integrated in Temosat Advanced. This is based on time and uses a lamp to indicate when the filter is due to be replaced 1 time/year. The alarm is easy to reset on the control panel.

New filters can be ordered with ease from www.rec-indovent.se.

Afterheaters (electricity or water)

The RT 700S-EC is fitted with an electric afterheater, 1.8 kW. The after-heater ensures that the supply air temperature falls no lower than the set temperature. If a water coil is used, we recommend an automatic outdoor air damper, fitted on the outdoor air duct to protect the coil from freezing in the event of opera-

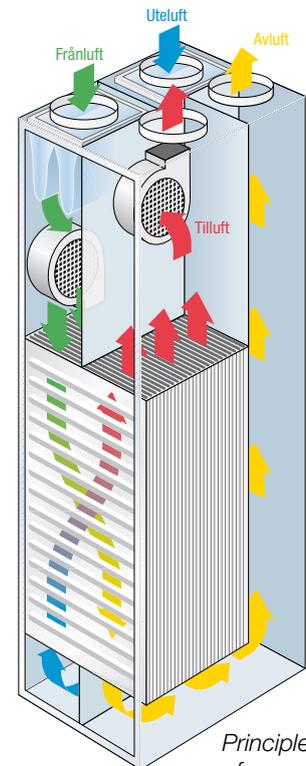
tional disruption. The unit is supplied ready for electric connection of an outdoor air damper.

Condensation water

The RT 700S-EC comes with factoryfitted condensation drainage. This should be connected to a drain or floor drain. If drainage cannot be arranged, it is possible to provide the unit with a condensation evaporator unit as an optional extra.

Bypass/summer bypass

The RT 700S-EC comes fitted with an automatic bypass. Temosat Advanced also applies cooling recovery on hot summer days. No bypass is fitted if the EKB (external cooling coil) option is selected.



Principle of operation



Control functions

STANDARD

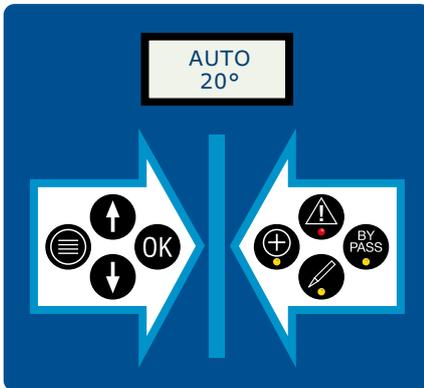
- Alarm indicator (A alarm)
- External output for buzzer alarm (A alarm)
- Filter replacement indicator - lamp
- External output for filter replacement (B alarm)
- Automatic bypass
- Manual forcing/normal speed/low speed
- External output, outdoor air damper control
- Operation/stop, external switch *)
- Normal/basic, external switch *)
- Normal/forcing, external switch *)

*) Max. two variants can be connected

OPTIONS

- Energy saving function, "Not at home" for Passive building (ECO)
- Fire function - time restricted forcing supply air, reduction of exhaust air (BRAS)
- Condensation evaporator (KAVK)
- External cooling coil, water (e.g. district cooling or rock heat pump) (EKB)
- Afterheater, HW (hot water) (EVBV)
- Operation/stop, digital timer
- Normal/basic, digital timer
- Normal/forcing, digital timer
- Remote panel (FJÄRR)

Control panel



Buttons

-  Menu button, press to return to the main menu.
-  Arrow up, move up in menus or change mode
-  Arrow down, move down in menus or change mode
-  OK, confirm selected setting

Indicator lamps and symbols

-  Alarm, comes on when an alarm is triggered – look in the display for more detailed information
-  Bypass, comes on when the bypass is open (no recovery)
-  Afterheater, comes on when the afterheater is heating
-  Change mode, comes on when changes can be made

REC Indovent reserves the right to make changes to the specification and design with no prior notification.