

REC R 800

Centralized heat recovery unit with controls 800 m³/h



Vertical



Horizontal

DESCRIPTION

Centralized heat recovery unit with plug-and-play wireless controls and integrated bypass. Self-supporting structure in pre-painted sheet metal, thermal/acoustic insulation in 22 mm rock wool.

HEAT RECOVERY UNIT

Counter-flow heat recovery unit, in polypropylene, with efficiency >90%.

FANS

EC fans, backward-curved centrifugal, low consumption.

Product

REC R 800 H/V

Installation

Horizontal/Vertical

Efficiency

ratings

> 90%

FILTERS

F7 (ePM1 70%) filters with low pressure drop, for both extract and fresh air

TECHNICAL SPECIFICATIONS

Parameter description	Unit of measurement	Values
Air flow rate	mc/h	900
Available static pressure	Pa	55 (V) / 85 (H)
Thermal efficiency	%	>90
Nominal voltage	V	230 – 1F
Frequency	Hz	50-60
Consumption at maximum flow rate	A	2.9
Nominal power	W	380
Filters	Class	F7 (ePM1 70%) SUPPLY M5(ePM10 50%) EXTRACT

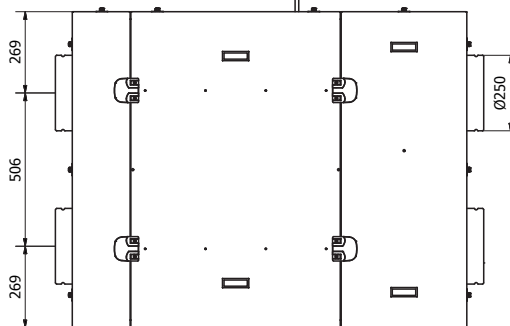
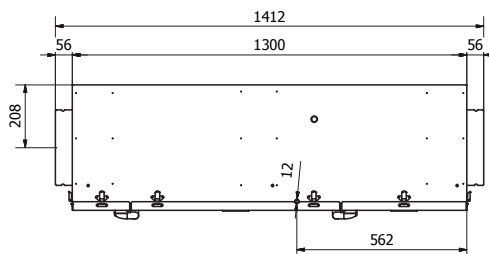
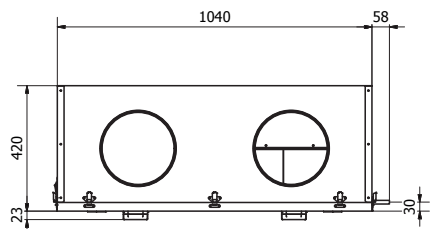
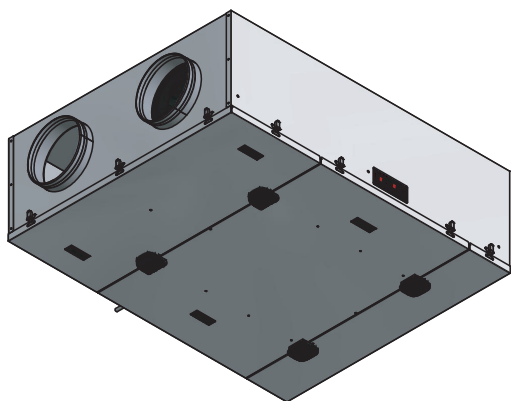


MVHR

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in residential environment

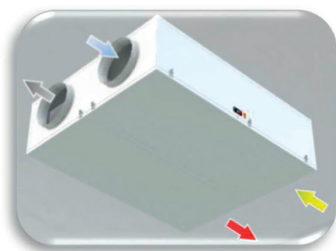
DIMENSIONS

Horizontal version (H)

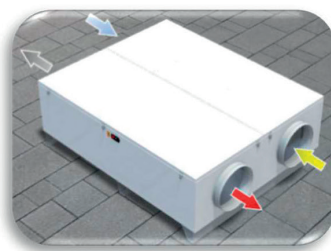


CONFIGURATIONS

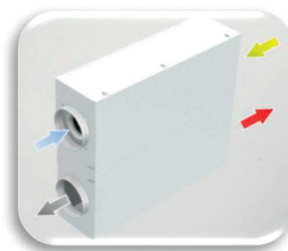
Nominal duct diameter: Ø 250 mm Weight: 100 kg
Sound pressure level at 1.5 m (Lpa in dB(A)): 47 dB(A)



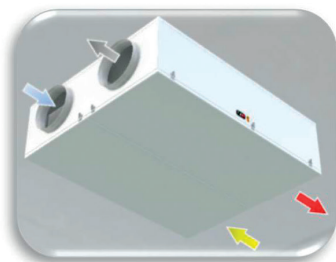
HS (standard)
CEILING



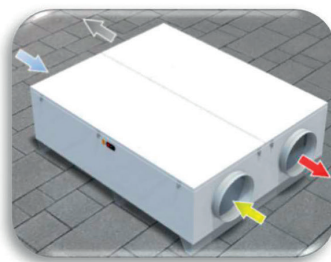
HB*
BASE



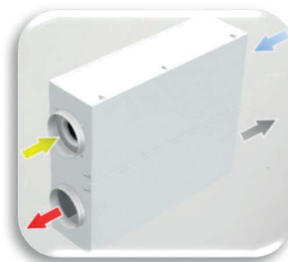
HP*
WALL



KS*
CEILING



KB*
BASE

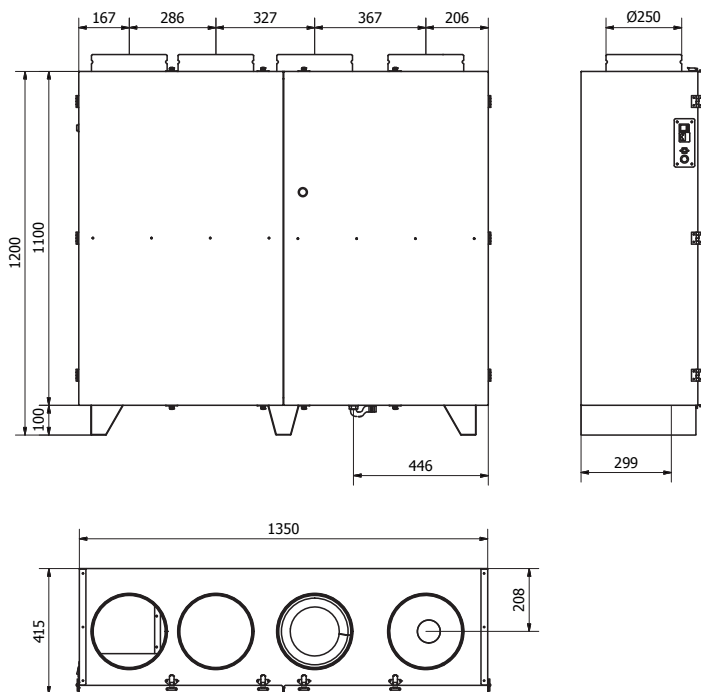
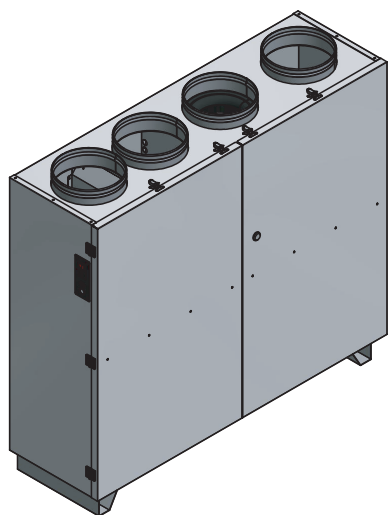


KP*
WALL

LIGHT BLUE	RENEWAL (outdoor air intake)	YELLOW	RETURN (extraction from the room)
GREY	EXHAUST (exhaust to outside)	RED	SUPPLY (room supply)

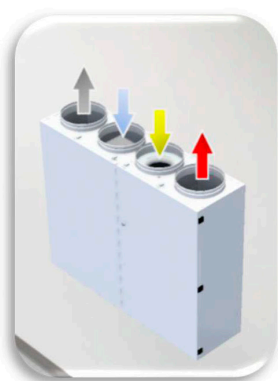
DIMENSIONS

Vertical version (V)



CONFIGURATIONS

Nominal duct diameter: $\varnothing 250$ mm Weight: 95 kg
 Sound pressure level at 1.5m (L_{pa} in dB(A)): 47 dB(A)



UA (standard)
WALL



UB*
WALL

LIGHT BLUE	RENEWAL (outdoor air intake)	YELLOW	RETURN (extraction from the room)
GREY	EXHAUST (exhaust to outside)	RED	SUPPLY (room supply)

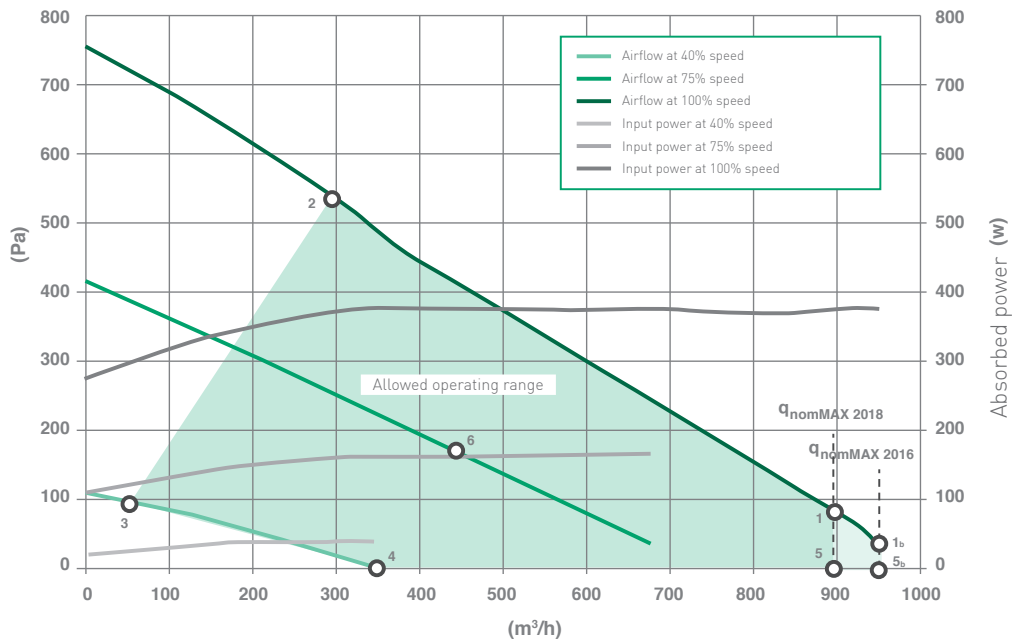


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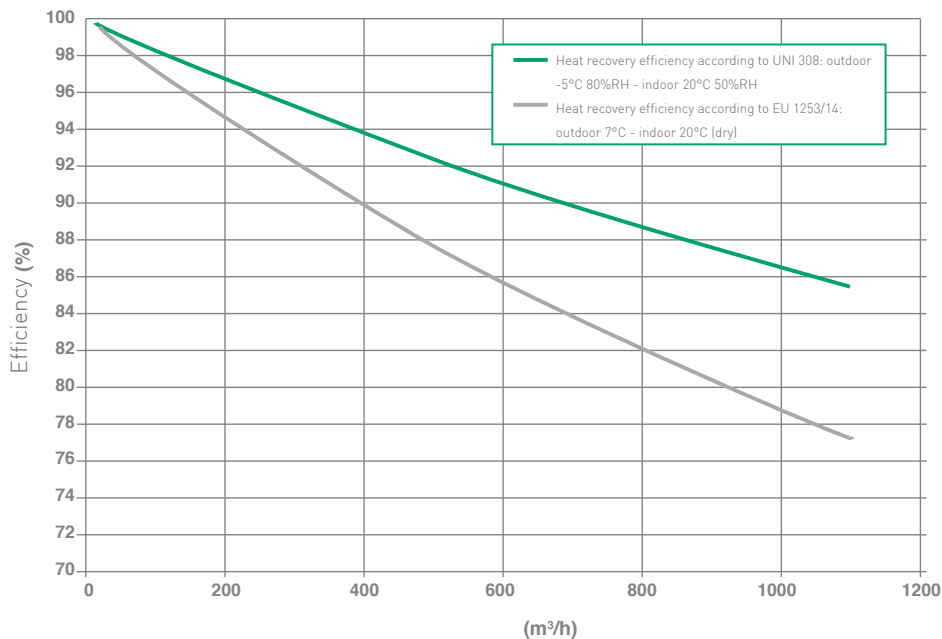
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AERAILIC PERFORMANCE

	Air flow rate nominal (m ³ /h)	Air flow rate nominal q _{nom} (m ³ /s)	Efficiency fan η _{s,Fan} (%)	Efficiency heat exchanger η _{L_nvu} (%)	Sound power L _{wa} (dB(A))	Internal specific power SFP _{int} (W(m ² /s))	Nominal external pressure Δp _{s,ext} (Pa)
1	900	0,250	52,8	80,1	57	1154,5	85
1_b	950	0,264	51,1	79,3	58	1257,6	37
2	298	0,083	32,3	92,1	65	1003,3	537
3	59	0,016	13,3	98,3	49	203,4	96
4	347	0,096	37,1	90,9	42	367	5
5	900	0,250	50,7	80,1	57	1142,6	0
5_b	950	0,264	50,6	79,3	58	1244,6	0
6	449	0,125	46,3-	88,7	56	524	170



HEAT RECOVERY UNIT THERMAL EFFICIENCY



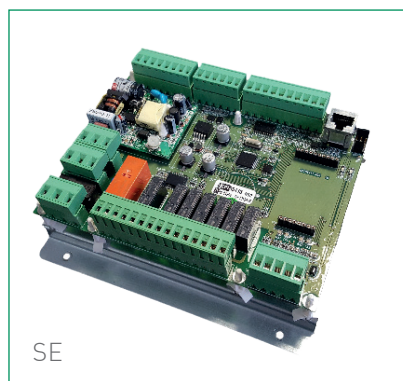
CONTROL TYPES

Electronic control board with numerous functions, including:

- speed selection 1, 2, 3 or automatic
- constant flow/pressure management option (optional)
- automatic bypass management for free-cooling and free-heating
- frost protection (also with electric heater),
- filter alarm with hour counter (optional with pressure switch)
- management of humidity, temperature, air quality, CO sensors₂...
- control of water coils and electric heaters for pre-treatment and/or post-treatment.
- ModBus communication.

Available in the following versions:

- SE on-board electronic card;
- EB white LCD display, with integrated humidity and room temperature sensors
SE+EB are included in the heat recovery unit supply
- ET colour touch-screen display (on request)



SE



EB



ET

**MVHR**Maximum air quality
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Model identifier		REC R 800 H EB	REC R 800 V EB
Product type		BNVU, bidirectional	BNVU, bidirectional
Motor type		Variable speed	Variable speed
Heat recovery system		Counter-flow heat exchanger	Counter-flow heat exchanger
Heat recovery thermal efficiency*		80,1%	80,1%
Nominal air flow rate (m ³ /s)		0,25 m ³ /s	0,25 m ³ /s
Actual electrical power consumption (kW)		0,377 kW	0,377 kW
Internal specific fan power SFPint (W/(m ³ /s))*		1155 W/(m ³ /s)	1262 W/(m ³ /s)
Face velocity at nominal flow rate (m/s)*		1,67 m/s	1,67 m/s
Nominal external pressure Δs.ext (Pa)		85 Pa	55 Pa
Internal pressure drop of ventilation components Δs.int (Pa)*		294 Pa	324 Pa
Fan static efficiency η _{s,Fan} **		52,80%	52,80%
Leakage rate (%)	indoor	3,7%	3,7%
	outdoor	4,8%	4,8%
	recirculation	Not applicable	Not applicable
Filter classification		fresh air F7 (ePM1 70%) extract M5 (ePM10 50%)	fresh air F7 (ePM1 70%) extract M5 (ePM10 50%)
Position and description of visual signal filter warning		Displayed alarm on the remote display	Displayed alarm on the remote display
Sound power level (L _{wa} in dB(A))		59 dB (A)	58 dB (A)

* as per regulation no. 1253/2014

** calculated as per regulation no. 1254/2014

* 3 humidity, CO sensor, air quality, presence sensor...