

REC R 220

Centralized heat recovery unit with controls 220 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 EXCHANGE CORE

Counter-flow heat exchange core, in polypropylene, with efficiency >90% in optimal ambient conditions.

FANS

EC fans, backward-curved centrifugal, low consumption.

Product

REC R 220 H/V

Installation

Horizontal/Vertical

Efficiency ratings

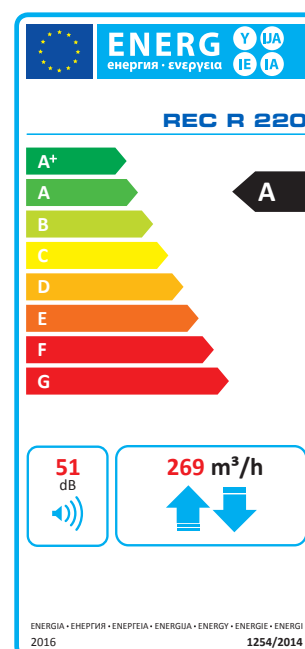
> 90%

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	269
Available static pressure	Pa	100
Thermal efficiency	%	>90
Nominal voltage	V	230 – 1F
Frequency	Hz	50-60
Consumption at maximum flow rate	A	1.5
Nominal power	W	173
Filters	Class	F7 (ePM1 70%)



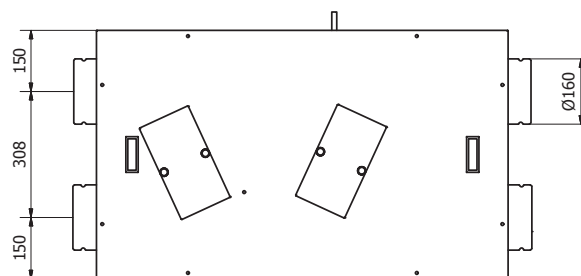
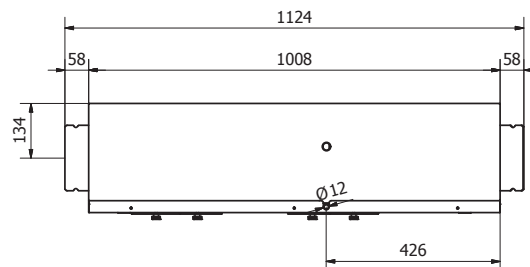
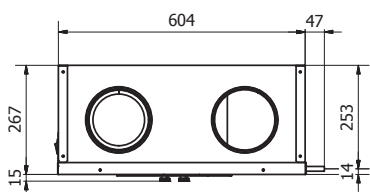
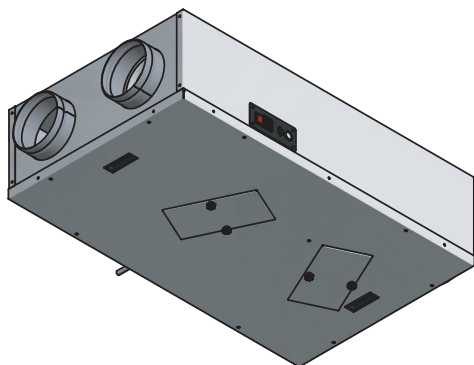


MVHR

Maximum air quality
in residential environment

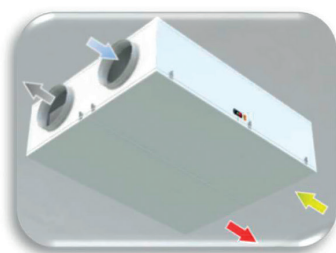
DIMENSIONS

Horizontal version (H)

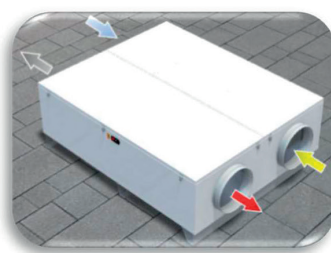


CONFIGURATIONS

Nominal duct diameter: Ø 160 mm Weight: 42 kg
Sound pressure level at 1.5 m (L_{pA} in dB(A)): 39 dB(A)



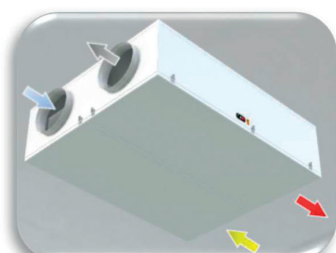
HS (standard)
CEILING



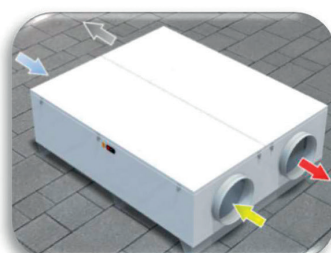
HB
BASE



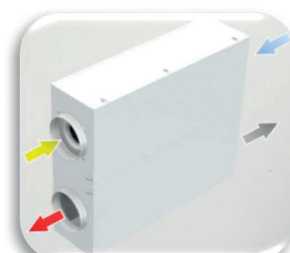
HP
WALL



KS*
CEILING



KB*
BASE

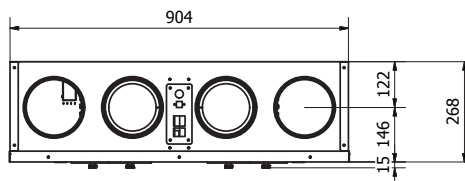
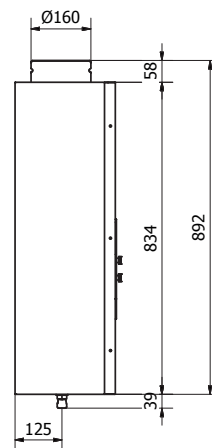
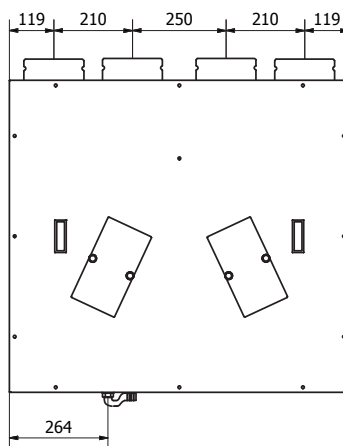
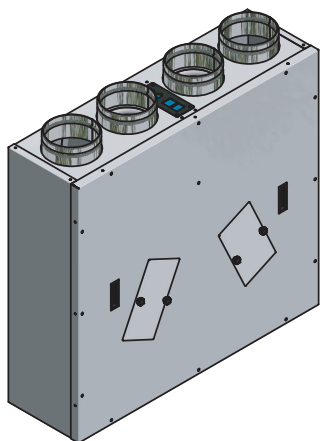


KP*
WALL

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

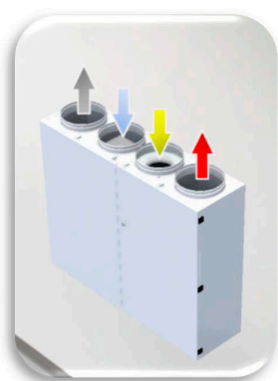
DIMENSIONS

Vertical version (V)

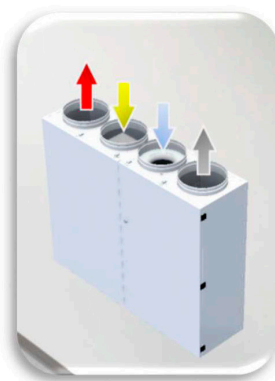


CONFIGURATIONS

Nominal duct diameter: Ø 160 mm Weight: 53 kg
 Sound pressure level at 1.5m (L_{pa} in dB(A)): 39 dB(A)



VA (standard)
WALL



VB*
WALL

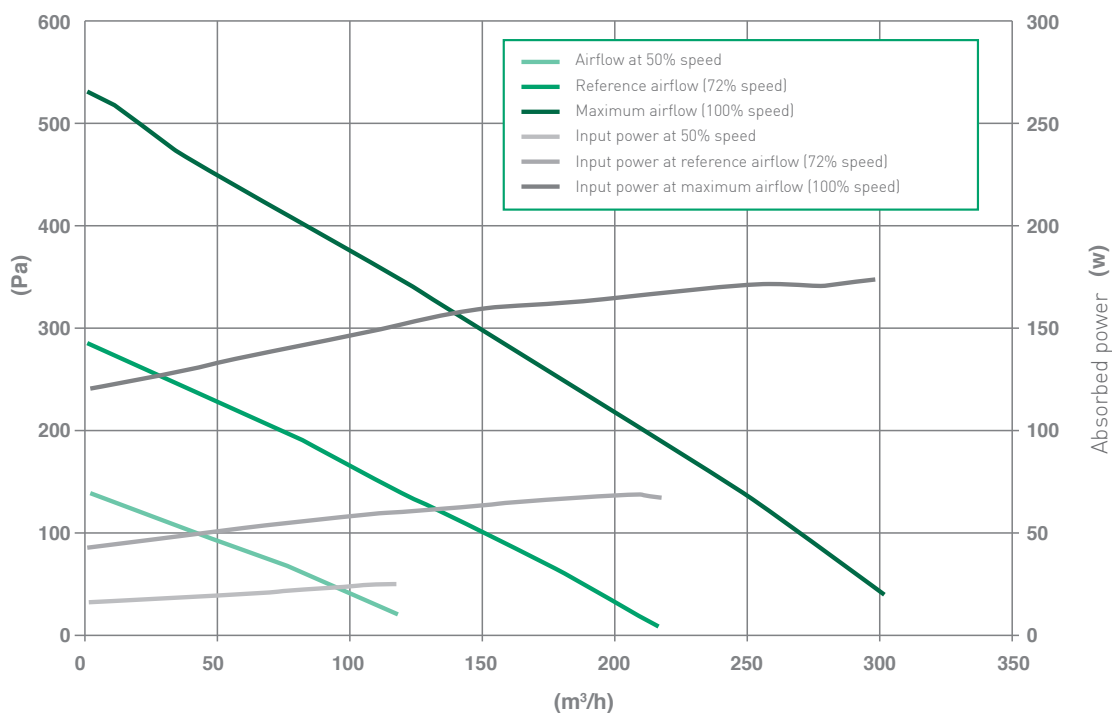
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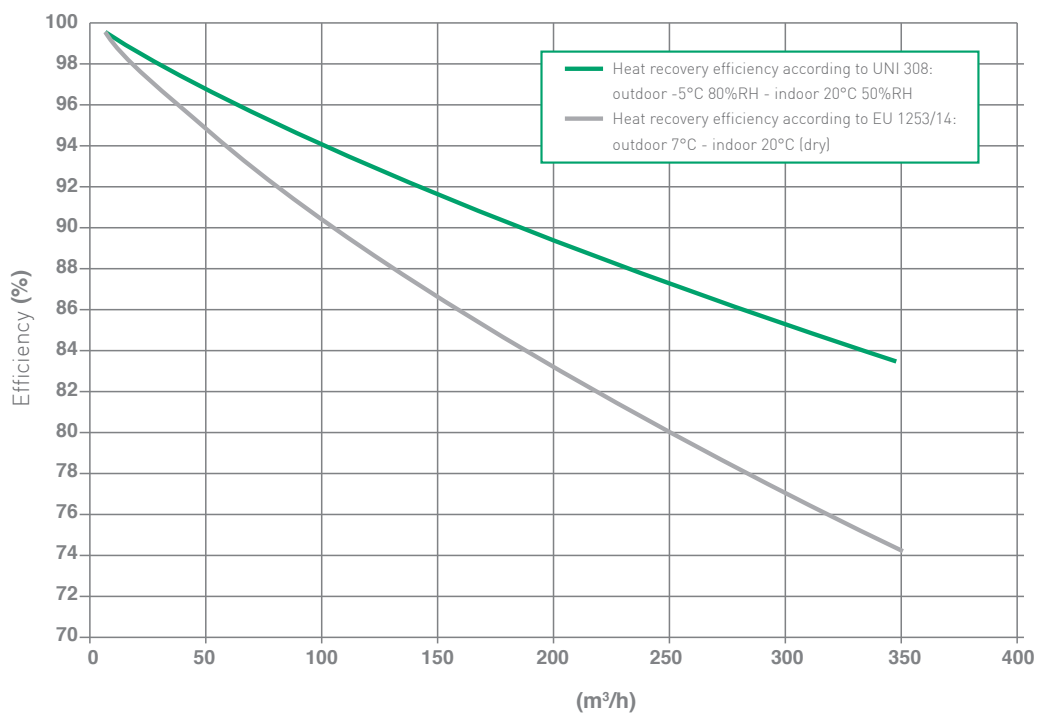
MVHR

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AERAUIC PERFORMANCE



HEAT RECOVERY UNIT THERMAL EFFICIENCY



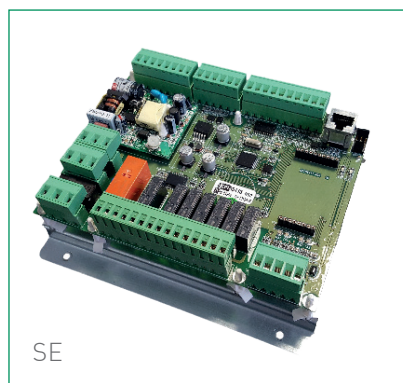
CONTROL TYPES

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
in residential environment**PRODUCT DATA SHEET**

Model identifier		REC R 220 H/V EB
Specific energy consumption in kWh/(m ² .a) per zone climate and SEC class	Cold climate Mild climate Hot climate	-73,7 kWh/m ² .a -36,4 kWh/m ² .a -12,4 kWh/m ² .a
Energy class		A
Product type		BVU, bidirectional
Motor type		Variable speed
Heat recovery system		Counter-flow heat exchanger
Heat recovery thermal efficiency*		83,9%
Maximum air flow rate (m ³ /h)*		269 m ³ /h
Electrical power consumption at maximum flow rate (W)*		173 W
Sound power level (L _{wa} in dB(A))		51 dB(A)
Reference air flow rate (m ³ /s)*		0,052 m ³ /s
Pressure difference (Pa)*		50 Pa
Specific power consumption (W/(m ³ /h))		0,35 W/(m ³ /h)
Control type		Centralized environmental control
Control coefficient		0,85
Leakage rate (%)	indoor outdoor recirculation	1,4% 2,2% Not applicable
Mixing rate (%)		Not applicable
Position and description of visual signal filter warning		Alarm displayed on remote display
Fresh air supply installation		Not applicable
Air flow sensitivity to variations pressure at + 20Pa and - 20Pa (%)		Not applicable
Internal / external air tightness (m ³ /h)		Not applicable
Annual electricity consumption (AEC) specific for a 100m ² dwelling (kWh of electricity /yr)**	Cold climate Mild climate Hot climate	895,4 kWh elettr./a 358,4 kWh elettr./a 313,4 kWh elettr./a
Annual heating saving specific for a 100m ² dwelling (kWh of primary energy /yr)**	Cold climate Mild climate Hot climate	8733,8 kWh en.prim./a 4464,5 kWh en.prim./a 2018,8 kWh en.prim./a

* as per regulation no. 1253/2014

** calculated as per regulation no. 1254/2014

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