EC TECHNOLOGY

EFFICIENT SOLUTIONS WITH **HEAT RECOVERY UNITS**

- EC TECHNOLOGY MOTOR
- COUNTERFLOW PLATE HEAT EXCHANGER
- WITH INTERCHANGEABLE CONNECTIONS
- HIGH ENERGY EFFICIENCY
- WITH FILTRATION DESIGNED TO COMPLY WITH CURRENT REGULATIONS
- WITH THERMAL INSULATION

SODECA®

CE ACCORDING ErP 2018

HIGH EFFICIENCY
HEAT RECOVERY UNITS

SODECA's business is centred on providing efficient ventilation and indoor air quality solutions.

Indoor Air Quality (IAQ) is the quality of the air that we breathe indoors and is governed by many conditions that directly affect our health and well-being. Different factors exist inside buildings that affect the air that we take into our lungs.
The indoor humidity and temperature, along with different contaminants that are present internally, are added to harmful elements entering from the outside. Poor natural ventilation coupled with inadequate installation increases the risk of inhaling viruses and bacteria as well as other contaminants that affect our IAQ.

For this reason, SODECA offers ventilation and air treatment solutions that meet the most stringent quality standards and in accordance with current legislation, to ensure the air that we breathe is of the best quality and is safe for our health as well as our environment.

This catalogue contains just a few of all the options we offer. Please contact us and we will give you the best advice from our experienced and knowledgeable staff.

HIGH THERMAL EFFICIENCY AND INDOOR AIR QUALITY

SODECA continuously improves their building ventilation solutions in order to meet the need to breathing healthy air with comfort and energy savings.

Commercial premises, offices, hospitality venues and communal spaces can **now have the most efficient heat recovery units**. High efficiency heat recovery units offer better indoor air quality (IAQ) and ultimately,health and well-being, as well as important energy savings.

AIR TREATMENT, SAVINGS AND EFFICIENCY

SODECA's heat recovery units are the perfect combination of complete air treatment with energy savings and efficiency.

Using the heat contained in extracted air, energy used by air conditioning systems is reduced, lessening the impact on the environment and contributing to a lower carbon footprint.

THE IMPORTANCE OF **BREATHING HEALTHY AIR**

Air contamination can have significant consequences on people's health and productivity. However, the solutions we implement in indoor spaces must be chosen correctly.

Ideal indoor air quality is not only a source of wellbeing, it is also an opportunity to optimise resources. People are increasingly spending more time indoors. A building with healthy air equates to well-being as well as efficiency. Breathing healthy air has never been so important as it is today. Investing in high efficiency solutions that transform indoor air into healthy air guarantees peace of mind.

ENERGY EFFICIENCY
INVESTMENT IN SUSTAINABILITY AND HEALTH

Renewing indoor air and saving energy. The aim of Directive 2010/31/EU is to create buildings that are sustainable as well as environmentally friendly.

Heat recovery units are ventilation systems that renew and condition inside air, while saving energy in the process. These units constitute the best solution to achieve good quality indoor air efficiently. An essential step towards a more sustainable world with healthier air.

HEAT RECOVERY UNITS

To achieve energy savings and sustainability objectives,
SODECA uses **high efficiency equipment.**

The efficiency of the filters used in our RECUP/EC recovery units, in accordance with current legislation, is shown in the table below.

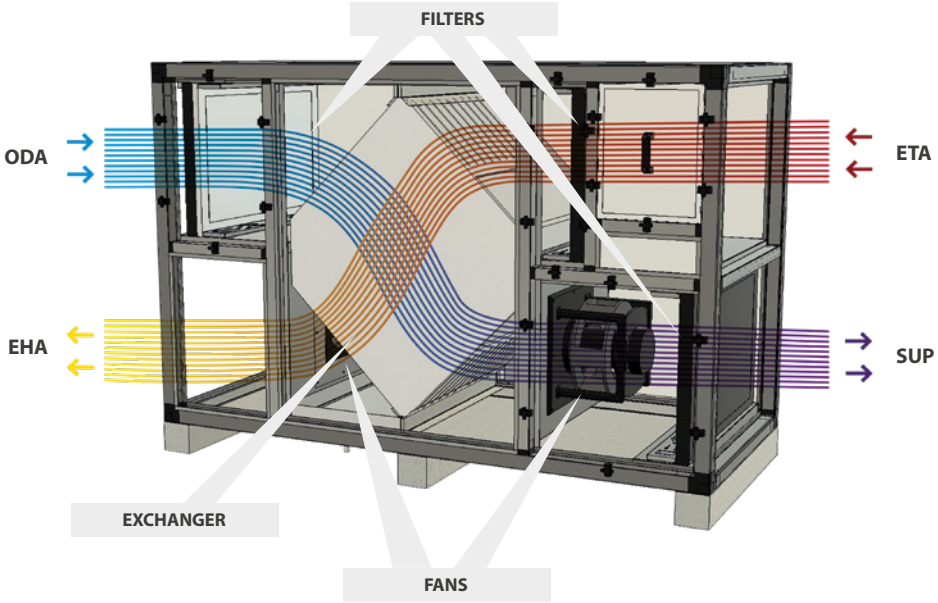
EN 779: 2012	EN ISO 16890 - range of actual measured average efficiencies		
Filter class	**ePM_1**	**$ePM_{2.5}$**	**ePM_{10}**
M5	5% - 35%	10% - 45%	40% - 70%
M6	10% - 40%	20% - 50%	60% - 80%
F7	40% - 65%	65% - 75%	80% - 90%
F8	65% - 90%	75% - 95%	90% - 100%
F9	80% - 90%	85% - 95%	90% - 100%

Source: Eurovent 4/23 - 2022

The versatility of RECUP/EC units makes it possible to install different filtration stages in the same unit, which in turn enables compliance with regulations in force in different countries.

HEAT RECOVERY UNITS

SODECA heat recovery units are designed to ensure the highest quality of air inside buildings. All models offer different filtration possibilities depending on the needs required by the space to be treated.



ODA: Fresh outdoor air / **EHA:** Exit of exhaust air / **ETA:** Air extracted from premises / **SUP:** Air supplied into the premises

EC TECHNOLOGY, **GUARANTEED OF PEACE OF MIND**

Heat recovery units with EC Technology motors allow speed adjustment by means of a 0-10 V signal. This allows airflow rates to be tailored to optimal requirements, giving considerable energy savings.

OUR **OBJECTIVES**

- Energy saving and the subsequent reduction in the use of natural resources.
- Energy efficiency improvement.
- Reduction in noise pollution.
- Environmental protection.
- Reduction in CO_2 emissions.

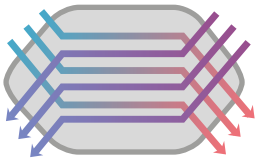
Energy efficiency

We recommend installing heat recovery units in any air conditioned premise to obtain important energy savings.

High efficiency motors with proportional control capacities.

HEAT EXCHANGER

The heat exchanger component in the recovery unit transfers heat from the exhaust air extraction circuit to the external clean air supply circuit. The greater the thermal efficiency of the exchanger, the less the need to supply additional air conditioning.



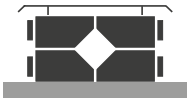
Counterflow heat exchanger

85-90% thermal efficiency With no leaks between air circuits

The exchangers can be of the sensible heat or enthalpy type. Sensible heat exchangers only recover the heat present in air, whereas the enthalpy exchanger also recovers moisture, which means that efficiency can be higher in very humid environments (although they require regular cleaning for safe operation).

TYPES OF **INSTALLATION**

In false ceiling
Low-profile equipment with access to components through the side or base.



On the roof
Equipment for outdoor operation, with lateral access to components. They may require accessories such as roof support pads, rain shields or other elements.

In technical room
Compact equipment with lateral access to components.

THERMAL **BY-PASS**

The BY-PASS device diverts the air flow and prevents it from passing through the heat recovery unit and the thermal exchange of the unit.

THE BEST
THERMAL INSULATIOIN

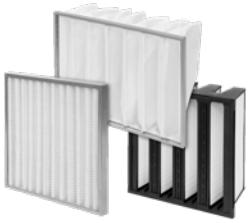
For some time now, SODECA has endorsed the international goal of improving the energy efficiency of buildings. For this reason, the high efficiency recovery models listed in this catalogue (RECUP/EC BS and RECUP/EC H) **incorporate EPS panels with a thermal bridge break**, to provide a better insulation.

AUTOMATIC
CONTROL

In heat recovery units, automatic control may offer a wide range of functions, depending on the equipment series or models. The most important are:

- Programmable Timer.
- Flow control based on CO_2 levels.
- Connection to a centralised building management control system (BMS), normally using the MODBUS RTU protocol.

FILTERS



Filters retain particles that affect air quality and they must be replaced after period of time. The load loss of the filters gradually increases.

Some pieces of equipment have load loss control elements aimed at optimising the filter replacement process.

- Pressure sensors: Small sensors that enable load loss detection in the filtration stages.
- Pressure switch: Pressure switch that switches an electric circuit on and off based on the filter load loss reading.

Depending on its configuration, the equipment may have:

- A pre-filter stage to guarantee the correct operation of the equipment. Depending on the system equirements, the filter grades may be: M6+F8.
- Final filter stages to ensure the quality of the air supplied to the premises, where the filter grades may be: F7+F9 or even HEPA, according to the IDA/ODA category.

HEAT RECOVERY UNITS

12 **UNIREC**
High efficiency single zone heat recovery ventilators for domestic installations

14 **VENUS**
High efficiency single zone heat recovery ventilators for residential installations

17 **REB**
Heat recovery units with EC Technology motor and built-in by-pass

20 **REB-HEPA**
Heat recovery units with EC Technology motor, built-in by-pass and HEPA filter

22 **RECUP/EC-BS**
Heat recovery units with counter flow plate exchanger, automatic control and EC Technology motors, for installation in false ceilings

27 **RECUP/EC-H**
Heat recovery units with counter flow exchanger, automatic control and EC Technology motors, for installation on a roof or in a plant room

UNIREC

High efficiency single zone heat recovery ventilators for domestic installations

Remote control

Designed to renew the air inside the home while minimising energy loss, and to supply clean air, due to their filters, which prevent particles entering from outside.

Characteristics:
- Reversible EC fan.
- Thermal efficiency of up to 90%.
- Equipped with G3 Filters.
- Compact ceramic heat exchanger.
- Easy installation. Adaptable to various wall thicknesses thanks to its telescopic duct.
- Automatic air intake grille. In the OFF position it remains closed to avoid air leaks.
- In heat recovery mode, the supply and extraction cycle takes 70 seconds.
- Duct length from 120 mm to 470 mm.

Control:
- Control panel built into the system.
- Remote control.
- Extraction position. Blow or heat recovery.
- Two speeds.
- Humidity control.
- Natural mode. Inlet grille open and fan stopped.
- Possibility of connecting several computers in a network.

Motor:
- Supply voltage from 100 V to 230 V 50/60 Hz.
- Built-in power cable.

Order code

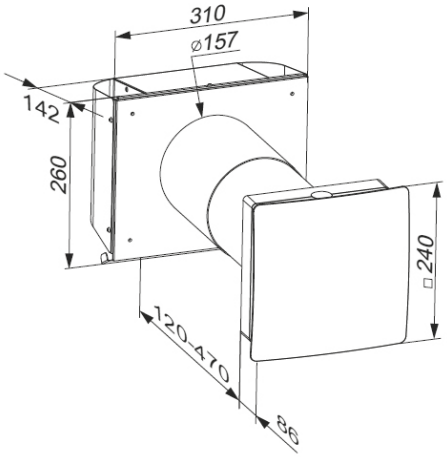
UNIREC — 50 — S

- UNIREC: High efficiency single zone heat recovery ventilators for domestic installations
- Capacity m³/h
- Length of duct from 120 mm to 470 mm

Technical characteristics

Model	Fans			Input voltage	Frequency	Maximum flow rate	Thermal efficiency	LpA irradiated 3 m	Temperature of the air to be carried	Duct diameter	Length of duct
	Speed	Current	Power								
	(r/min)	(A)	(W)	(V)	(Hz)	(m³/h)	(%)	dB (A)	(ºC)	(mm)	(mm)
UNIREC-50-S	1450	0.039	5.61	1x100-230	50/60	54	90	23	-20 a +50	150	120-470

Dimensions mm



Working cycles in recovery mode

EXTRACTION (70 seconds)

During this cycle, the ceramic heat exchanger absorbs heat from the extracted air.

SUPPLY (70 seconds)

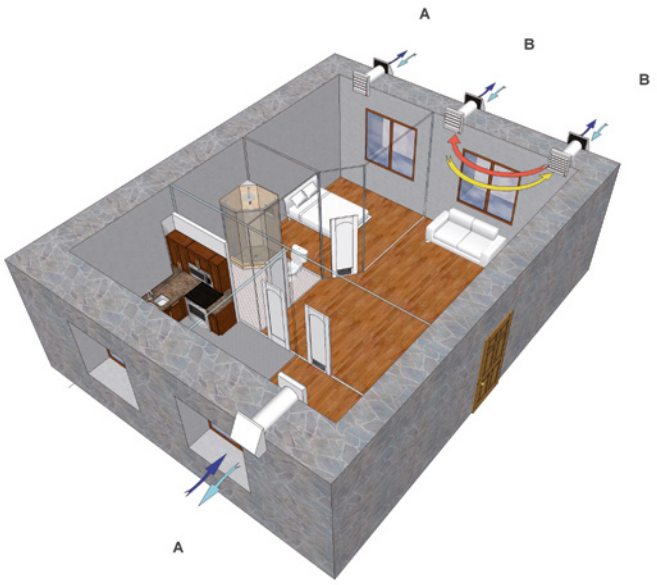
During this cycle, the heat exchanger provides heat to the air coming in from the outside.

Once this cycle has fi nished, the process of extraction starts again, and so on.

Installation examples

A: Machines working individually in heat recovery mode for a single room.

B: Machines working in a network, synchronised; while one performs the supply cycle, the other performs the extraction cycle, and so on.



VENUS

High efficiency single zone heat recovery ventilators for residential installations

EC version control

High performance heat recovery ventilators to be installed inside residential buildings. With a low power consumption and heat recovery efficiency of up to 93%. For technical ceiling installation.

Finishing:
- Light expanded polypropylene body for low noise emission levels.
- Low profile models for false ceiling installation.
- 160 mm inlets/outlets (models 150 and 300) and 250 mm inlets/outlets (models 500 and 700).

Features of all versions:
- Counterflow heat exchanger.
- Flow adjustment capacity according to external control signal.
- Condensate drain with built-in siphon.
- Access to filters and condensate drainage from above and below.

Additional features of the EC version:
- Operation compatible 50/60 Hz.
- Air supply filters with F7 efficiency level.
- High efficiency EC fans.
- Digital remote control panel included.
- Antifreeze protection and free cooling.
- Multizone control through the possibility of connecting CO2, PIR (presence) and HR (relative humidity) sensors. ALL / NOTHING type signal.

Version	AC	EC
Motor Type	AC	EC (high efficiency)
Control panel	Manual selector CP-SM-V-4 (accessory not included)	Digital (included)
Control panel cable	4-wire, 230V (not included)	4-wire PTPM-RJ12 10 m Included/ Maximum 30 m
No. of fan speeds	3	3
Supply/Extraction filter efficiency	F5 / G4	F7 / G4
Alarm management	YES	YES
Flow control via external control	YES	YES
Each fan adjusted precisely	-	YES
Control of closing hatches	-	YES (hatches not supplied)
Connections to 5 optional sensors	-	Types: CO2 / PIR / HR
Sensor power supply	-	15V DC
External control to force maximum flow	-	YES
Free cooling by stopping 1 fan	-	YES (with timer setting)
Antifreeze protection	-	YES
Adjustable filter change alarm	-	YES
LED filter state control	YES	YES

Order code

VENUS — 300 — EC

- VENUS: High efficiency single zone heat recovery ventilators for residential installations
- 150 m³/h, 300 m³/h, 500 m³/h, 700 m³/h
- EC: High efficiency fan; AC: Standard fan

Technical characteristics

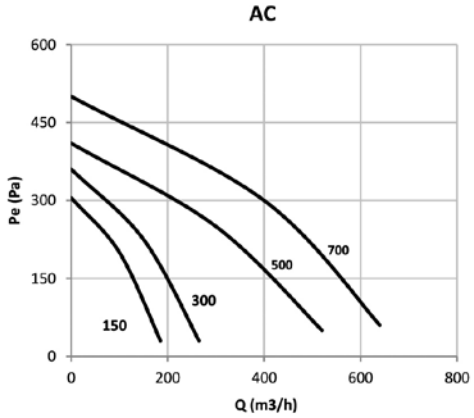
Model	Maximum flow rate	Total power	Recovery efficiency	Maximum admissible current (A)	Irradiated sound level at 3 m	Approx. weight	According ErP
	(m³/h)	(W)	(%)	220-240V	dB (A)	(Kg)	
VENUS-150-AC	185	105	93	2 x 0.23	37.3	17.4	2018
VENUS-150-EC	175	65	93	2 x 0.14	37.7	17.2	2018
VENUS-300-AC	265	145	93	2 x 0.32	38.9	19.5	2018
VENUS-300-EC	315	170	93	2 x 0.37	43.5	19.3	2018
VENUS-500-AC	515	230	93	2 x 0.50	47.1	35	2018
VENUS-500-EC	535	220	93	2 x 0.48	45.8	35.5	2018
VENUS-700-AC	650	270	93	2 x 0.59	42.9	40	2018
VENUS-700-EC	785	430	93	2 x 0.93	53.6	40.7	2018

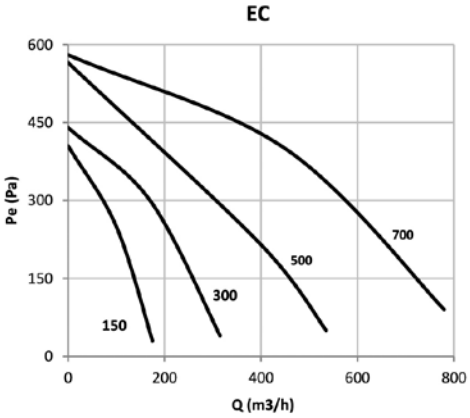
Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

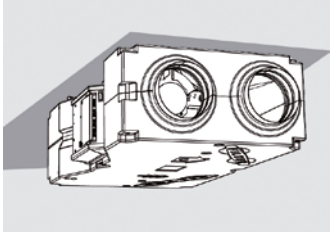
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

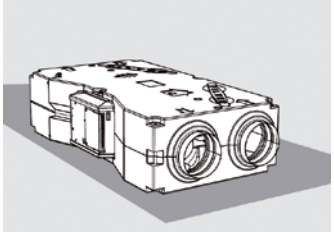




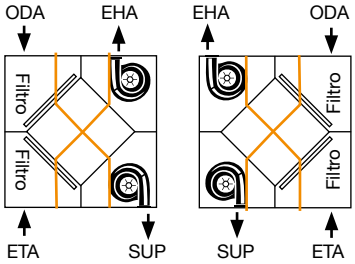
Installation



In false ceilings



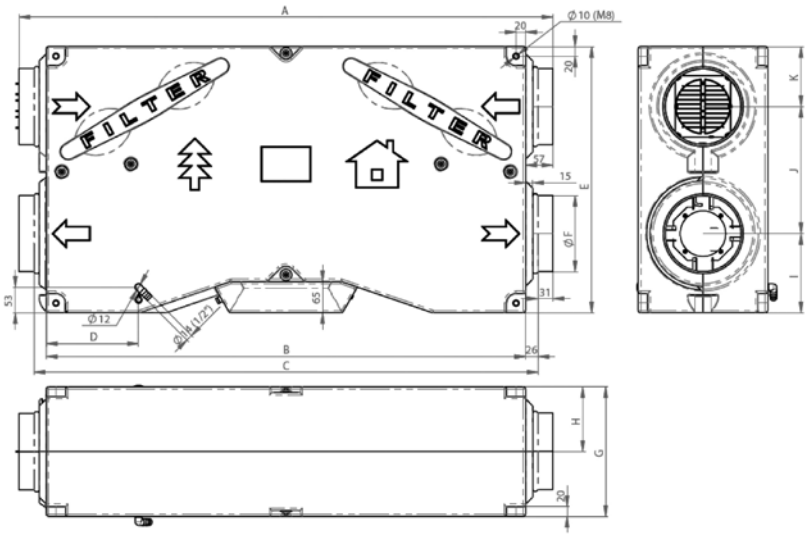
Floor-mounted



Configuration may be chosen by turning the machine through 180º.
Access to filters and drainage from above and below.

ODA: Fresh outdoor air / SUP: Air impulsion to the premise / EHA: Exit of exhaust air / ETA: Air extraction from premises

Dimensions mm



	A	B	C	D	E	ØF	G	H	I	J	K
VENUS 150 / 300	1114	1000	1051	193	555	159	270	135	165	265	125
VENUS 500 / 700	1505	1391	1441	248	846	249	360	180	235	420	190

Accessories

CP-SM-V-4

RH SENSOR

PIR SENSOR

CO2 sensor

Compuerta de cierre

SERVO DE COMPUERTA

FILTROS

CABLE PTPM-RJ12

REB

Heat recovery units with EC Technology motor and built-in by-pass

REB-15...120

REB-180...270

REB-400...600

Heat recovery units with EC Technology motor and built-in by-pass, low power consumption and heat recovery efficiency of over 86%.

Characteristics:
- Counterflow heat exchanger.
- With 100% automatic by-pass (except model REB-15).
- Low consumption fans with built-in regulation.
- Lateral maintenance access.
- Operation compatible 50/60 Hz.
- Particle filters with efficiencies depending on models.

Finishing on models 15 to 120:
- Equipment structure made of anti-corrosive galvanised sheet steel.
- Anti-condensation foam coating.
- Interior in lightweight expanded polypropylene and with low noise emissions.
- Low profile models for false ceiling installation.

Finishing on models 180 and 270:
- Aluminium profile and prefinished sheet steel structure with 25 mm thick thermal and acoustic insulation panels.
- Low profile models for false ceiling installation.

Finishing on REB-400 and REB-600 models:
- Aluminium profile and prefinished sheet steel structure with 30 mm thick thermal and acoustic insulation panels.
- For installation in technical rooms.
- Control compatible with MODBUS RTU.

Order code

REB — 15

REB: Heat recovery units with EC Technology motor and built-in by-pass

Model

Characteristics based on size

	REB-15	REB-25..120	REB-180..270	REB-400..600
Supply standard filters	G4	G4	G4+F9	F6+F8
Extraction standard filters	G4	G4	G4	F6
Second filter stage integrated in the fresh air circuit	-	-	YES	YES
Free cooling function 100% of flow	-	-	YES	YES
Heat recovery type	Enthalpy	Enthalpy	Enthalpy	Sensitive
Condensate exhaust	-	-	-	YES
Built-in pressure switches for filter condition control	-	-	YES	-
Maintenance switch	-	-	YES	YES
Compatible with SI-VOC+HUMEDAD control	YES	YES	YES	-
Control by MODBUS RTU	-	-	-	YES

Technical characteristics

Model	Maximum flow rate	Total power	Maximum admissible current (A)		Recovery efficiency	Irradiated sound level at 5 m	Approx. weight	According ErP
	(m³/h)	(W)	220-240V II	380-415V III	(%)	dB (A)	(Kg)	
REB-15	180	60	0.26		72	38	18	Excluded
REB-25	300	70	0.30		81	35	31	2018
REB-40	480	90	0.39		82	37	39	2018
REB-60	720	140	0.61		80	39	55	2018
REB-80	960	300	1.30		82	41	72	2018
REB-120	1440	325	1.41		79	42	91	2018
REB-180	1770	750	5.80		73	53	150	2018
REB-270	2570	1000	7.20		73	53	180	2018
REB-400	4440	4800		8.00	88	61	375	2018
REB-600	6000	7800		12.40	88	61	465	2018

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Accessories

FILTROS

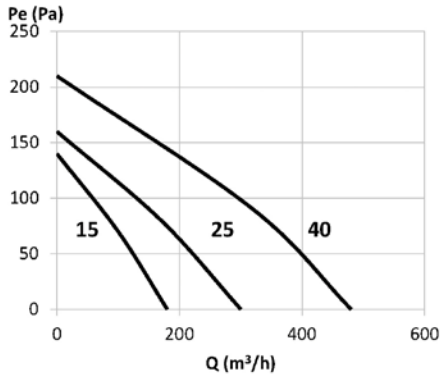
TEJ

SI-VOC+HUMEDAD

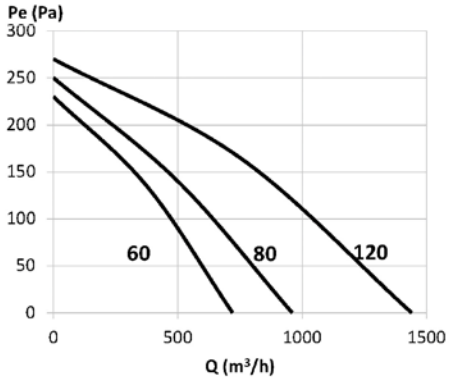
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

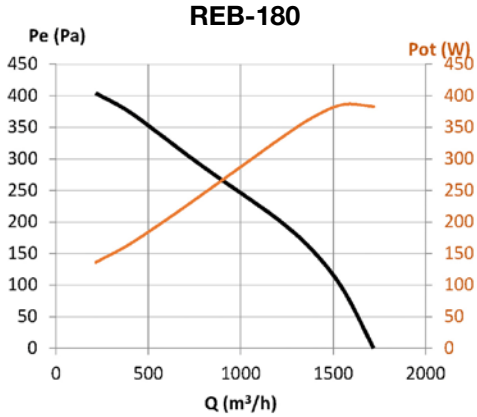
REB-15-25-40



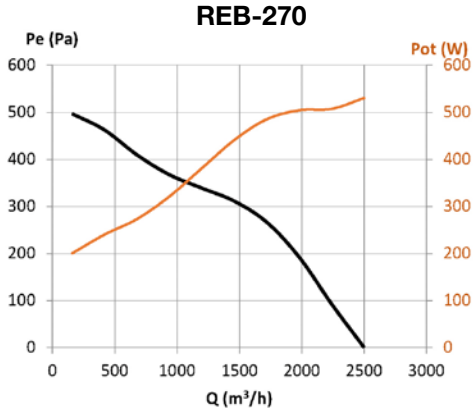
REB-60-80-120



REB-180

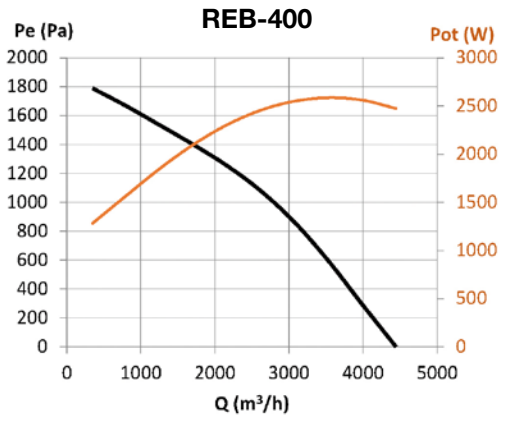


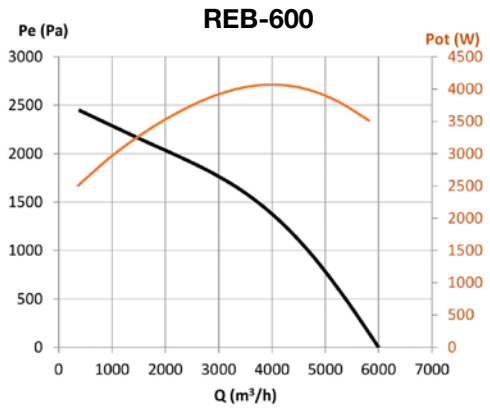
REB-270



Characteristic curves

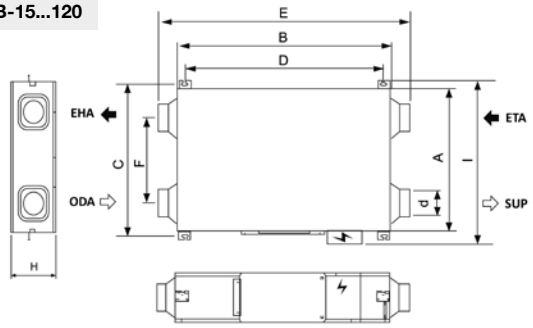
Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg



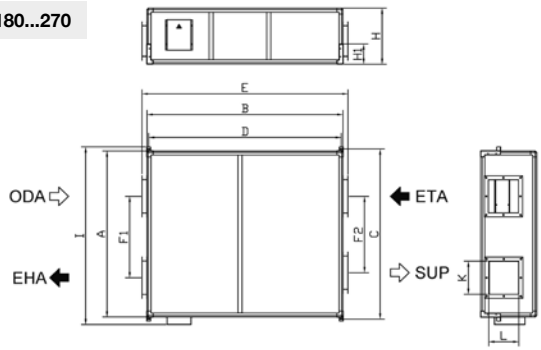


Dimensions mm

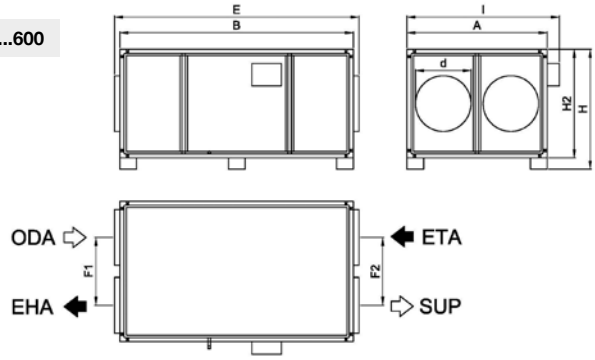
REB-15...120



REB-180...270



REB-400...600



	A	B	C	D	E	F	F1	F2	H	H1	H2	I	d	K	L
REB-15	510	883	560	813	1043	345	-	-	272	-	-	620	97	-	-
REB-25	675	890	735	820	1070	335	-	-	280	-	-	790	146	-	-
REB-40	813	888	863	818	1068	480	-	-	280	-	-	930	146	-	-
REB-60	995	970	1055	910	1130	728	-	-	313	-	-	1065	197	-	-
REB-80	883	1325	953	1255	1485	429	-	-	390	-	-	1000	247	-	-
REB-120	1132	1328	1202	1258	1488	680	-	-	395	-	-	1250	247	-	-
REB-180	1240	1630	1280	1596	1730	-	554	554	558	200	-	1355	-	230	260
REB-270	1654	1950	1695	1916	2050	-	810	760	558	200	-	1769	-	330	300
REB-400	1260	1900	-	-	2000	-	600	600	818	-	718	1372	450	-	-
REB-600	1260	2100	-	-	2200	-	600	600	1075	-	975	1372	500	-	-

ODA: Fresh outdoor air / SUP: Air impulsion to the premise / EHA: Exit of exhaust air / ETA: Air extraction from premises

REB-HEPA

Heat recovery units with EC Technology motor, built-in by-pass and HEPA filter

Heat recovery units with EC Technology motor, built-in by-pass and HEPA filter. Low power consumption and heat recovery efficiency of up to 82%.

Characteristics:
- Counterflow heat exchanger.
- With 100% automatic by-pass.
- Low consumption fans with built-in regulation.
- Lateral maintenance access.
- Operation compatible 50/60 Hz.
- HEPA H13 type filters with a filtration efficiency of 99.95%.

Finish:
- Galvanised sheet steel structure.
- Anti-condensation foam coating.
- Interior in lightweight expanded polypropylene and with low noise emissions.
- Low profile models for false ceiling installation.

Order code

REB-HEPA — 40

REB-HEPA: Heat recovery units with EC Technology motor, built-in by-pass and HEPA filter

Model

Characteristics

Motor Type	EC
Fan speeds	3
Supply standard filters	HEPA H13
Extraction standard filters	G4
Side access to filters	YES
Free cooling function by means of a motorised by-pass	YES
Heat recovery type	Enthalpy
Compatible with SI-VOC+HUMEDAD control	YES

Technical characteristics

Model	Maximum flow rate (m³/h)	Total power (W)	Maximum admissible current (A)	Recovery efficiency (%)	Irradiated sound level at 5 m dB (A)	Approx. weight (Kg)	According ErP
REB-HEPA-40	400	115	0.7	82	38	39	Excluded
REB-HEPA-60	600	150	0.9	80	40	55	2018
REB-HEPA-80	800	320	1.5	82	42	72	2018
REB-HEPA-120	1100	360	1.8	79	43	91	2018

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

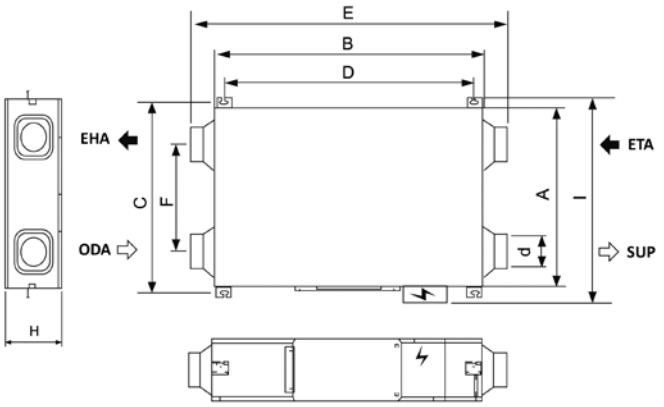
Accessories

FILTROS

TEJ

SI-VOC+HUMEDAD

Dimensions mm

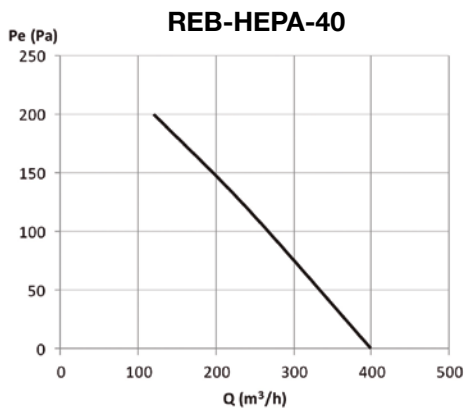


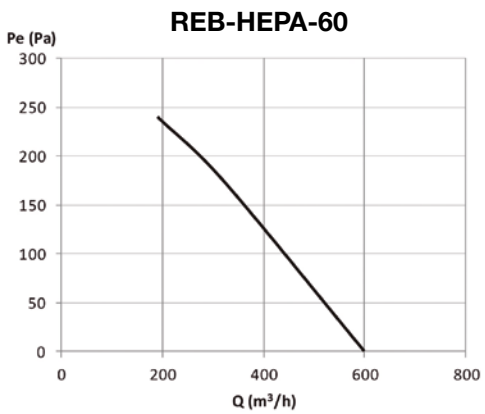
	A	B	C	D	E	F	H	I	d
REB-HEPA-40	807	984	864	913	1176	482	273	903	143
REB-HEPA-60	1007	1066	1055	1008	1230	728	322	1135	195
REB-HEPA-80	882	1402	940	1335	1565	431	400	1010	245
REB-HEPA-120	1132	1402	1190	1335	1565	681	400	1260	245

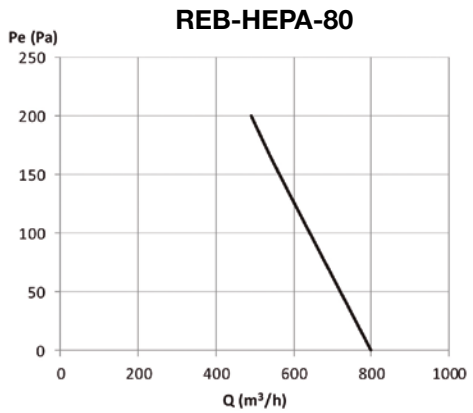
ODA: Fresh outdoor air / SUP: Air impulsion to the premise / EHA: Exit of exhaust air / ETA: Air extraction from premises

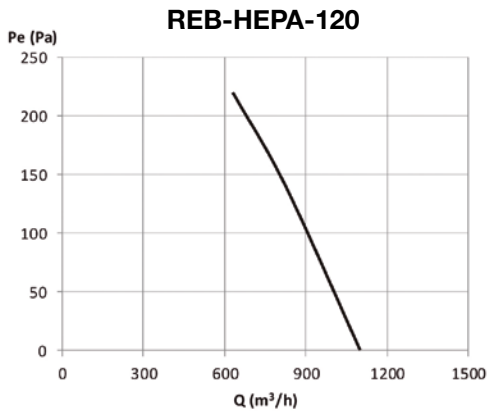
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg



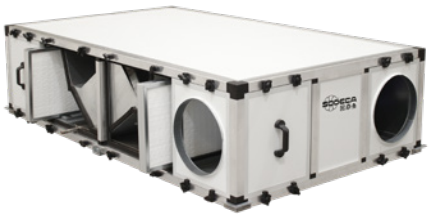






RECUP/EC-BS

Heat recovery units with counter flow plate exchanger, automatic control and EC Technology motors, for installation in false ceilings



Common features:
- EC type Plug Fan adjustable 0-10 V.
- Built-in maintenance disconnector switch.
- Thermal efficiency of the equipment 85-90%.
- Structure with high quality reinforced aluminum profiles.
- Panels with a 25 mm thick thermal and acoustic insulation; exterior made of prefinished sheet.
- EPS type panels with thermal bridge break.
- High efficiency filtration:
- M6 + F8.
- F7 + F9.
- Broad access for maintenance.
- Free cooling with motorized damper to perform BY-PASS.
- Condensation collection tray and drain.

Built-in control box:
- Control for free cooling through motorized BY-PASS.
- Fan speed control by manual selection or by optional external sensors (CO2 or pressure).
- Integrated control system with remote control panel.
- STOP/START and speed control available through control panel or external contacts.
- Built-in temperature and humidity sensors.
- Filters condition check by means of built-in pressure switches.
- Fault alarm management and shutdown due to fire alarm.
- Compatible with MODBUS RTU.

Finish:
- Aluminium frame and external prefinished sheet structure.
- 25 mm thermal and acoustic insulation panels.
- Low profile models for false ceiling installation.
- Interchangeable nozzles for better adaptation.

On request:
- External battery modules for air treatment.
- Filters with special efficiencies.
- Modules with UVc germicidal chamber.

Order code

RECUP/EC-BS — 800 — BS — M6+F8

- RECUP/EC-BS: Heat recovery units with counter flow plate exchanger, automatic control and EC Technology motors, for installation in false ceilings
- 800: Size
- BS: Horizontal ducts and installation in false ceilings
- M6+F8: Filters M6+F8, Filters F7+F9

Characteristics based on size

	RECUP/ EC-800-BS	RECUP/ EC-1200-BS	RECUP/ EC-1600-BS	RECUP/ EC-2100-BS	RECUP/ EC-2700-BS
Supply filter (ODA)	M6+F8 / F7+F9	M6+F8 / F7+F9	M6+F8 / F7+F9	M6+F8 / F7+F9	M6+F8 / F7+F9
Extraction filter (ETA)	M6	M6	M6	M6	M6
Free cooling function by means of a motorised by-pass	YES	YES	YES	YES	YES
Panel thickness	25 mm	25 mm	25 mm	25 mm	25 mm
Condensate exhaust	YES	YES	YES	YES	YES
Built-in pressure switches for filter condition control	YES	YES	YES	YES	YES
Safety and maintenance switch	YES	YES	YES	YES	YES
Built-in control panel	YES	YES	YES	YES	YES

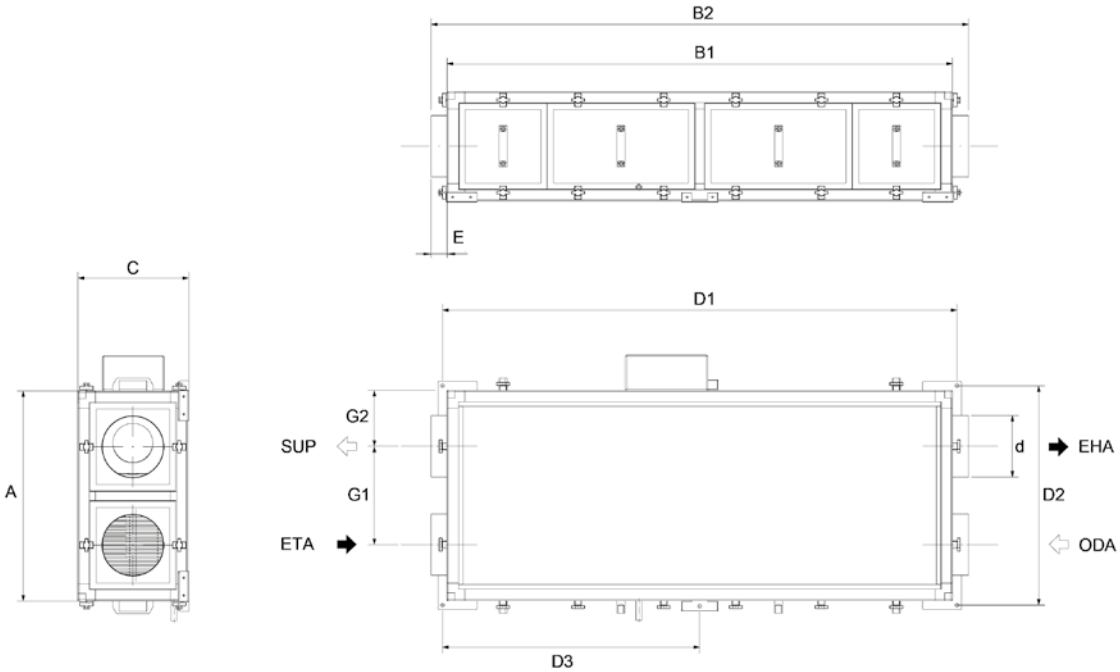
Technical characteristics

Model	Nominal flow rate (m³/h)	Recovery unit efficiency (%)	Available pressure (Pa)	Nominal power (kW)	Nominal current (A)	Voltage 50/60 Hz (V)	Irradiated sound level at 5 m dB (A)	Approx. weight (Kg)	According ErP
RECUP/EC-800-BS	800	86.5	70	0.39	2.91	1/230	45	78	2018
RECUP/EC-1200-BS	1200	86.8	70	0.32	1.16	1/230	34	105	2018
RECUP/EC-1600-BS	1600	86.2	100	0.53	2.11	1/230	40	178	2018
RECUP/EC-2100-BS	2100	88.0	100	0.76	3.14	1/230	43	216	2018
RECUP/EC-2700-BS	2700	86.9	100	1.23	5.17	1/230	50	216	2018

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Dimensions mm



	A	B1	B2	C	D1	D2	D3	E	G1	G2	d
RECUP/EC-800-BS	684	1644	1694	357	1664	704	832	25	320	182	200
RECUP/EC-1200-BS	1124	1890	1940	480	1910	1144	955	25	695	214	315
RECUP/EC-1600-BS	1250	1970	2020	480	1990	1270	995	25	781	235	355
RECUP/EC-2100-BS	1250	2198	2248	620	2218	1270	1109	25	736	257	400
RECUP/EC-2700-BS	1250	2198	2248	620	2218	1270	1109	25	736	257	400

ODA: Fresh outdoor air / SUP: Air impulsion to the premise / EHA: Exit of exhaust air / ETA: Air extraction from premises

Accessories

FILTROS

TEJ

SI-PRESOSTATO

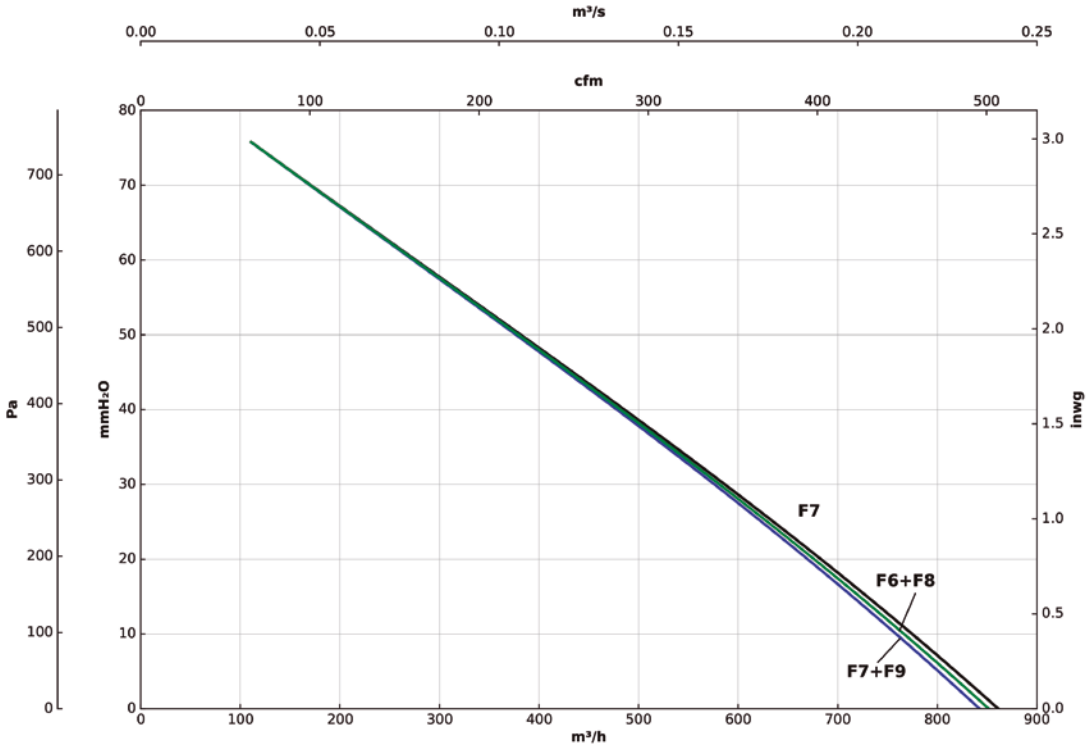
SI-CO2 IND

CG

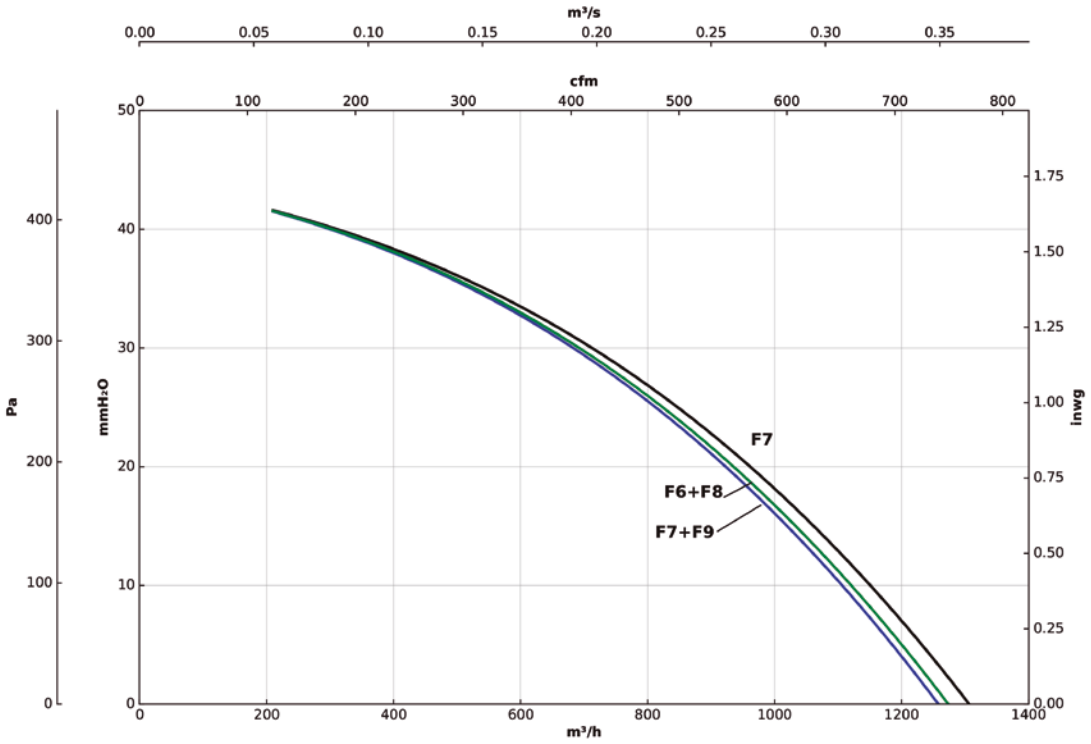
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

RECUP/EC-800-BS



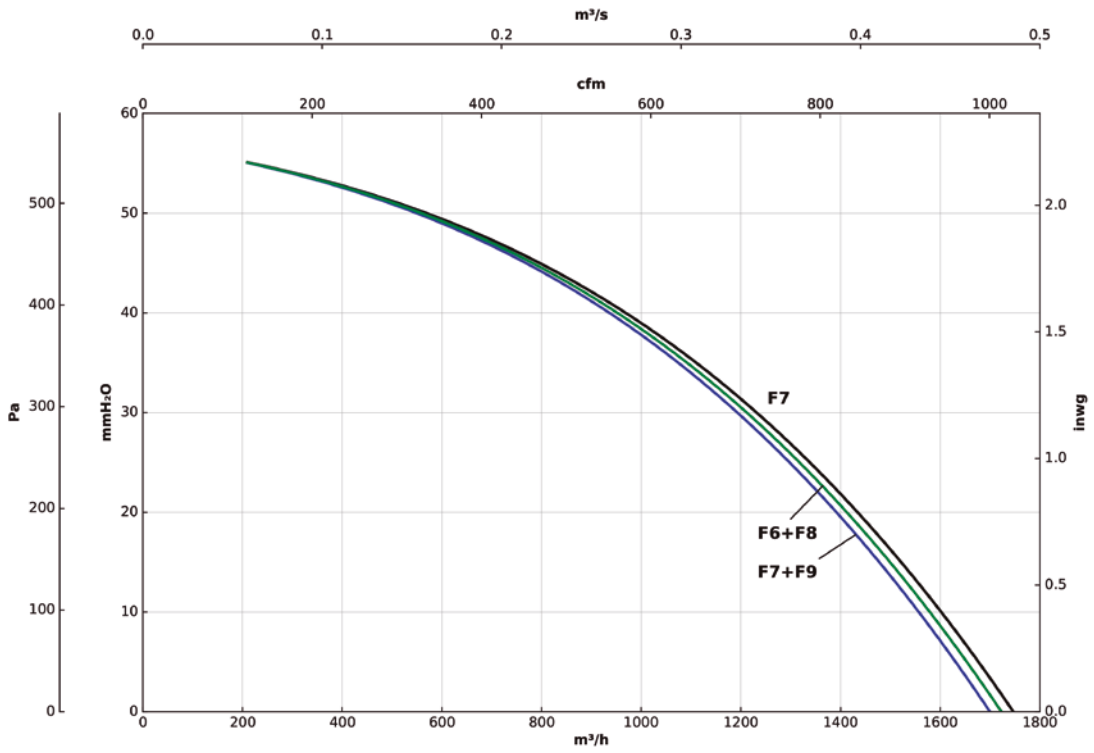
RECUP/EC-1200-BS



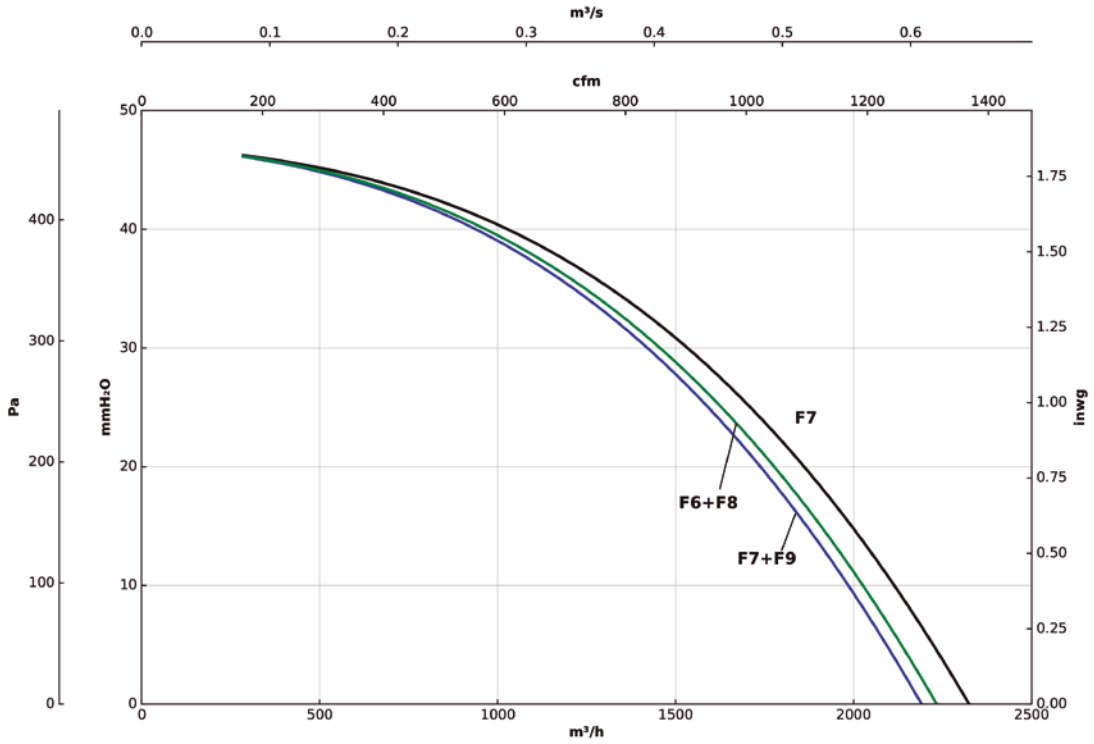
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

RECUP/EC-1600-BS

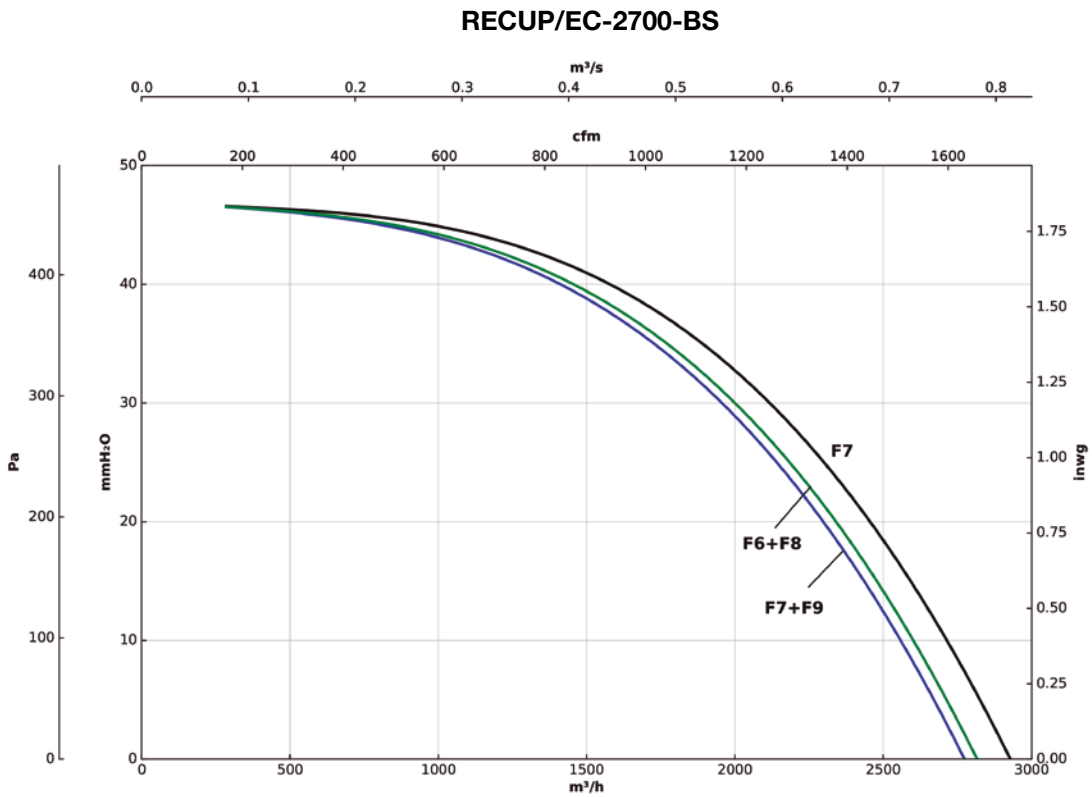


RECUP/EC-2100-BS

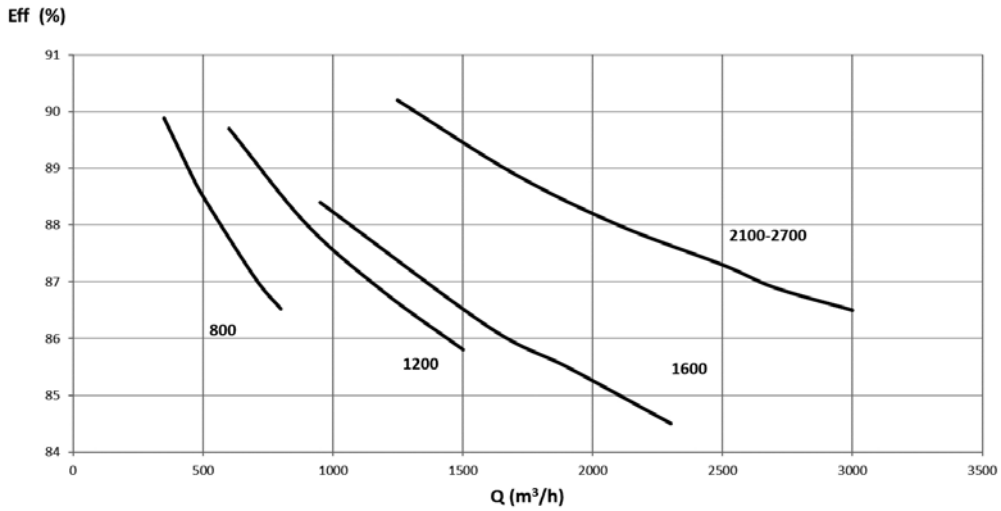


Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg



Efficiency curves



RECUP/EC-H

Heat recovery units with counter flow exchanger, automatic control and EC Technology motors, for installation on a roof or in a plant room

Common features:
- EC type Plug Fan adjustable 0-10 V.
- Built-in maintenance disconnector switch.
- Thermal efficiency of the equipment 85-90%.
- Structure with high quality reinforced aluminum profiles.
- Panels with thermal and acoustic insulation, exterior in pre-lacquered sheet.
- EPS type panels with thermal bridge break.
- G4 pre-filter + M6 or F7 filter in the air supply.
- High efficiency filtration F8 or F9 in the air supply.
- Broad access for maintenance.
- Free cooling with motorized damper to perform BY-PASS.
- Condensation collection tray and drain.

Built-in control box:
- Control for free cooling through motorized BY-PASS.
- Fan speed control by manual selection or by optional external sensors (CO2 or pressure).
- Integrated control system with remote control panel.
- STOP/START and speed control available through control panel or external contacts.
- Built-in temperature and humidity sensors.
- Filters condition check by means of built-in pressure switches.
- Fault alarm management and shutdown due to fire alarm.
- Compatible with MODBUS RTU.

Finish:
- Structure in aluminum profiles and pre-lacquered outer sheet.
- 25 mm thermal and acoustic insulation panels up to model 2700.
- 50 mm thermal and acoustic insulation panels from model 3300.

On request:
- External battery modules for air treatment.
- Filters with special efficiencies.
- Modules with UVc germicidal chamber.

Order code

RECUP/EC-H — 1200 — H — M6+F8

- RECUP/EC-H: Heat recovery units with counter flow exchanger, automatic control and EC Technology motors, for installation on a roof or in a plant room
- 1200: Size
- H: Horizontal ducts and installation on roofs or in technical rooms
- M6+F8: Filters M6+F8 / Filters F7+F9

Characteristics based on size

	RECUP/ EC-1200-H	RECUP/ EC-1600-H	RECUP/ EC-2100-H	RECUP/ EC-2700-H
Supply filter (ODA)	G4+M6/F7	G4+M6/F7	G4+M6/F7	G4+M6/F7
Impulsion filter (SUP)	F8/F9	F8/F9	F8/F9	F8/F9
Extraction filter (ETA)	M6	M6	M6	M6
Free cooling function by means of a motorised by-pass	YES	YES	YES	YES
Panel thickness	25 mm	25 mm	25 mm	25 mm
Condensate exhaust	YES	YES	YES	YES
Built-in pressure switches for filter condition control	YES	YES	YES	YES
Safety and maintenance switch	YES	YES	YES	YES
Built-in control panel	YES	YES	YES	YES

Characteristics based on size

	RECUP/ EC-3300-H	RECUP/ EC-4500-H	RECUP/ EC-6000-H	RECUP/ EC-8000-H	RECUP/ EC-10000-H
Supply filter (ODA)	G4+M6/F7	G4+M6/F7	G4+M6/F7	G4+M6/F7	G4+M6/F7
Impulsion filter (SUP)	F8/F9	F8/F9	F8/F9	F8/F9	F8/F9
Extraction filter (ETA)	M6	M6	M6	M6	M6
Free cooling function by means of a motorised by-pass	YES	YES	YES	YES	YES
Panel thickness	50 mm	50 mm	50 mm	50 mm	50 mm
Condensate exhaust	YES	YES	YES	YES	YES
Built-in pressure switches for filter condition control	YES	YES	YES	YES	YES
Safety and maintenance switch	YES	YES	YES	YES	YES
Built-in control panel	YES	YES	YES	YES	YES

Technical characteristics

Model	Nominal flow rate (m³/h)	Recovery unit efficiency (%)	Available pressure (Pa)	Nominal power (kW)	Nominal current (A)	Voltage 50/60 Hz (V)	Irradiated sound level at 5 m dB (A)	Approx. weight (Kg)	According ErP
RECUP/EC-1200-H	1200	90	200	0.45	1.78	1/230	37	210	2018
RECUP/EC-1600-H	1600	88.8	200	0.63	2.54	1/230	40	210	2018
RECUP/EC-2100-H	2100	88.8	200	0.82	1.48	3+N/400	43	281	2018
RECUP/EC-2700-H	2700	87.8	200	1.11	1.88	3+N/400	46	281	2018
RECUP/EC-3300-H	3300	88.8	300	1.68	2.65	3+N/400	50	324	2018
RECUP/EC-4500-H	4500	88.6	300	2.53	4.34	3+N/400	57	342	2018
RECUP/EC-6000-H	6000	89.1	300	2.55	4.26	3+N/400	47	385	2018
RECUP/EC-8000-H	8000	88	300	4.04	6.41	3+N/400	51	385	2018
RECUP/EC-10000-H	10000	87	300	6.11	9.38	3+N/400	56	385	2018

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Accessories

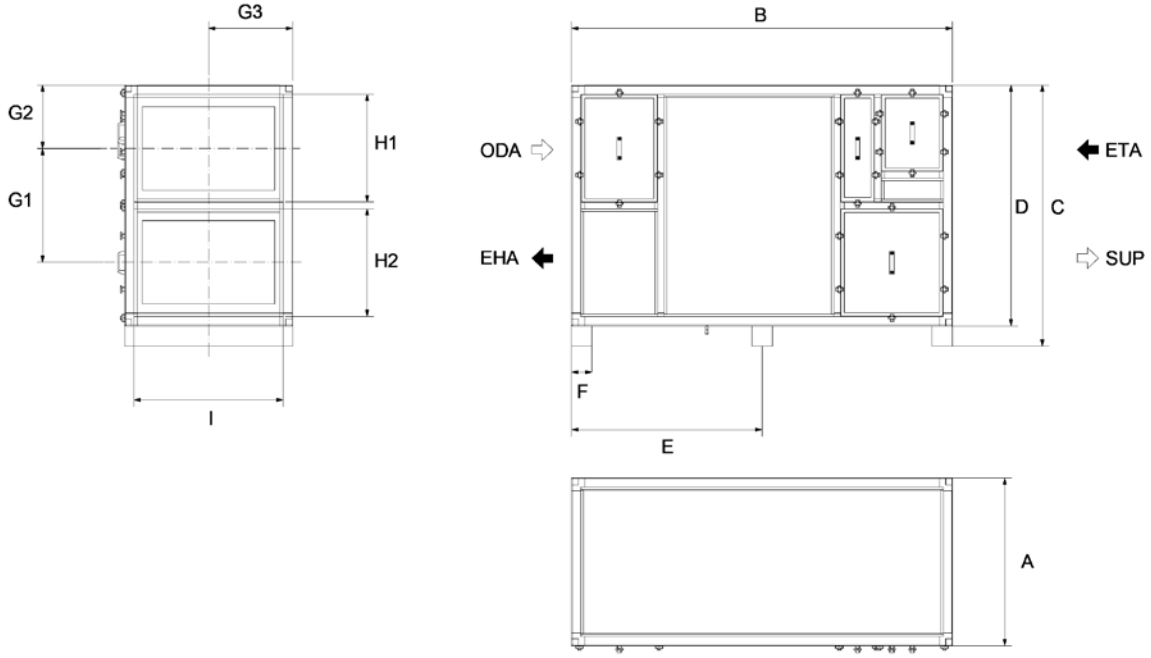
FILTROS

SI-PRESOSTATO

SI-CO2 IND

CG

Dimensions mm



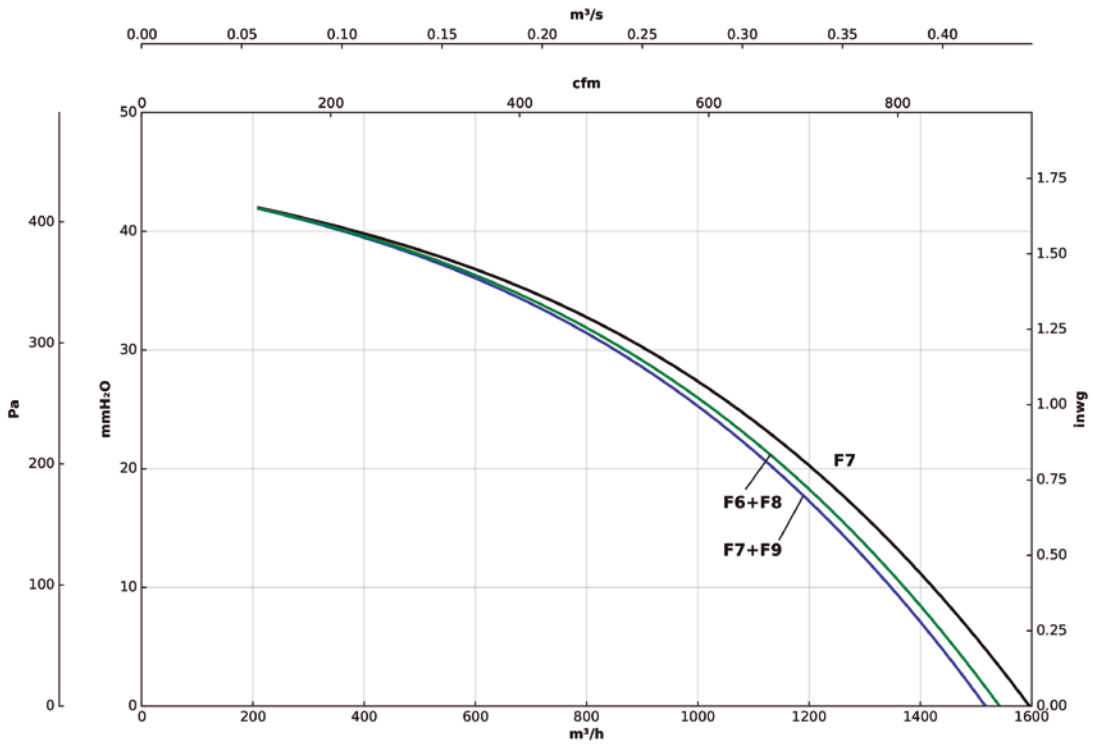
	A	B	C	D	E	F	G1	G2	G3	H1	H2	I
RECUP/EC-1200-H	566	2213	1507	1387	1030	120	672	355	283	637	647	492
RECUP/EC-1600-H	566	2213	1507	1387	1030	120	672	355	283	637	647	492
RECUP/EC-2100-H	669	2213	1507	1387	1030	120	672	355	335	637	647	595
RECUP/EC-2700-H	669	2213	1507	1387	1030	120	672	355	335	637	647	595
RECUP/EC-3300-H	992	2250	1544	1424	1048	120	677	374	496	637	637	881
RECUP/EC-4500-H	1297	2250	1544	1424	1048	120	677	374	649	637	637	1186
RECUP/EC-6000-H	1889	2250	1544	1424	1048	120	677	374	945	637	637	1778
RECUP/EC-8000-H	1889	2250	1544	1424	1048	120	677	374	945	637	637	1778
RECUP/EC-10000-H	1889	2250	1544	1424	1048	120	677	374	945	637	637	1778

ODA: Fresh outdoor air / SUP: Air impulsion to the premise / EHA: Exit of exhaust air / ETA: Air extraction from premises

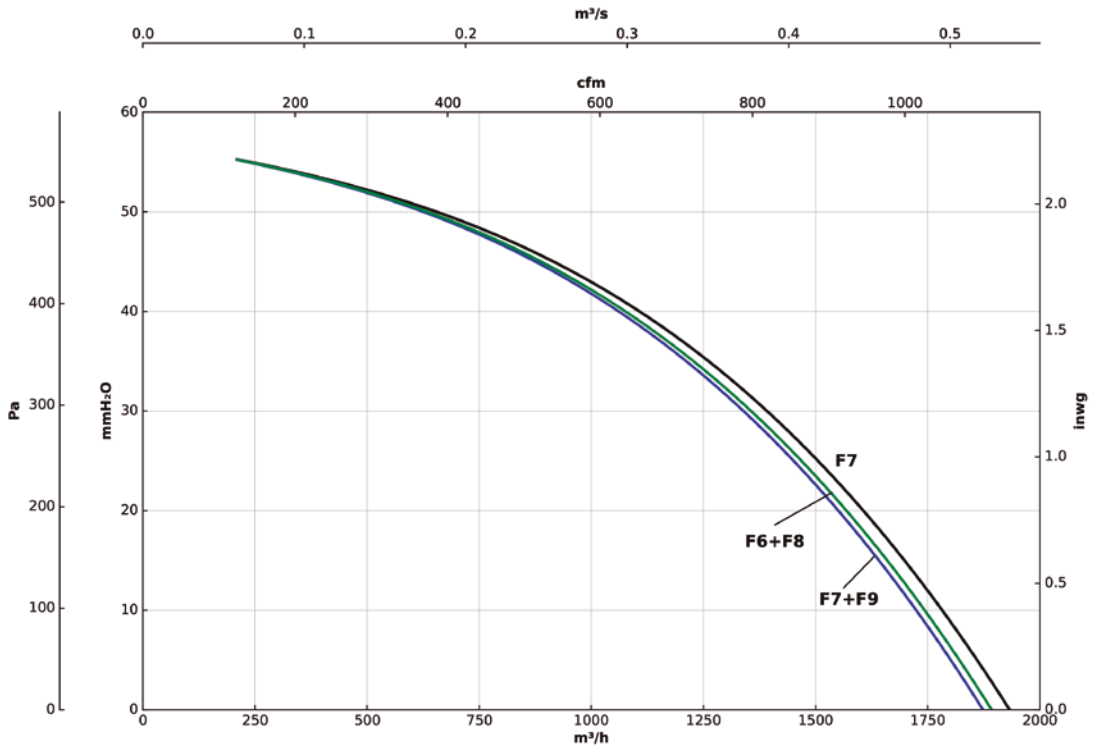
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

RECUP/EC-1200-H



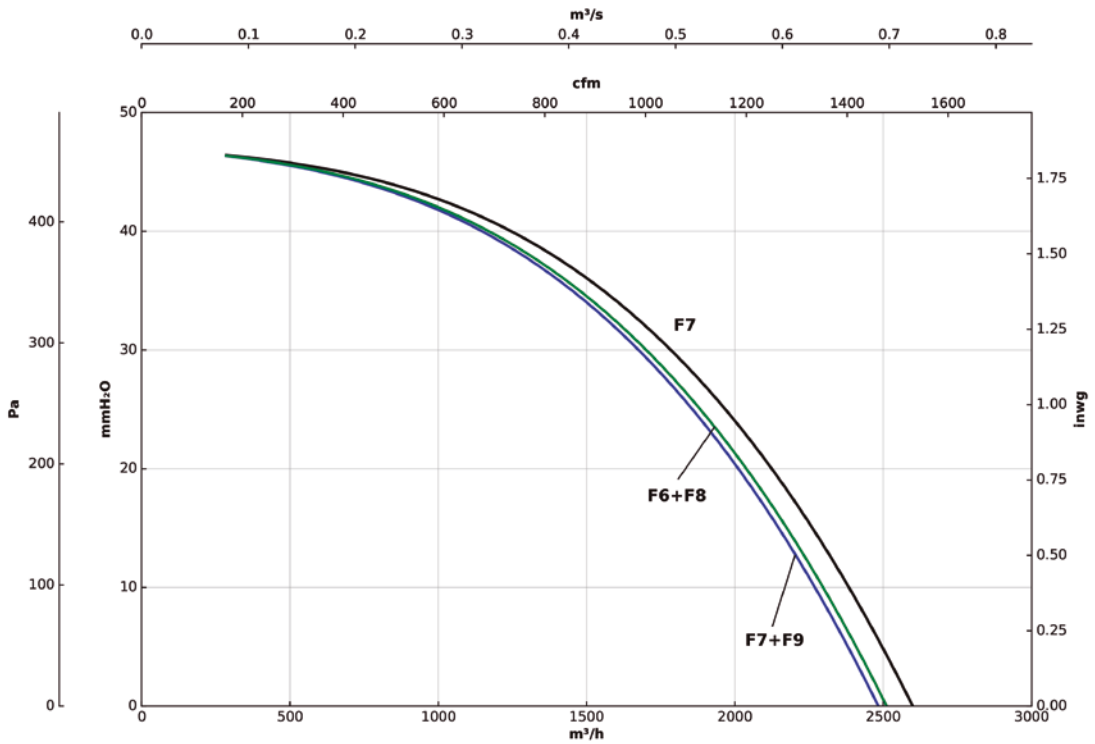
RECUP/EC-1600-H



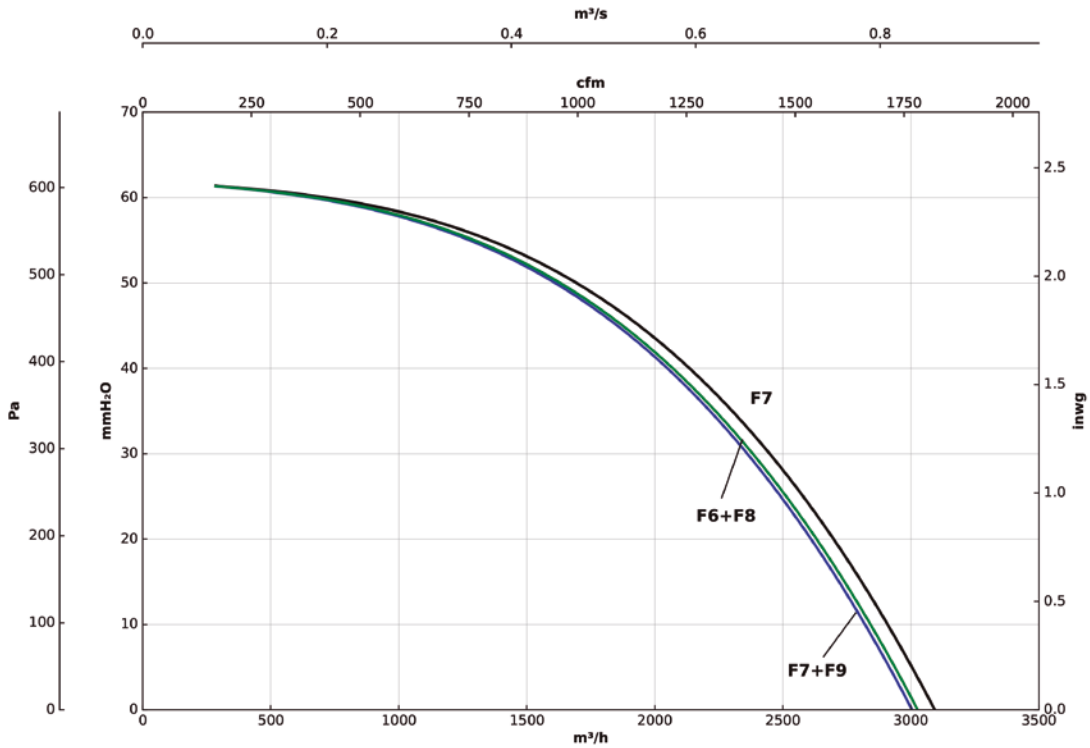
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

RECUP/EC-2100-H



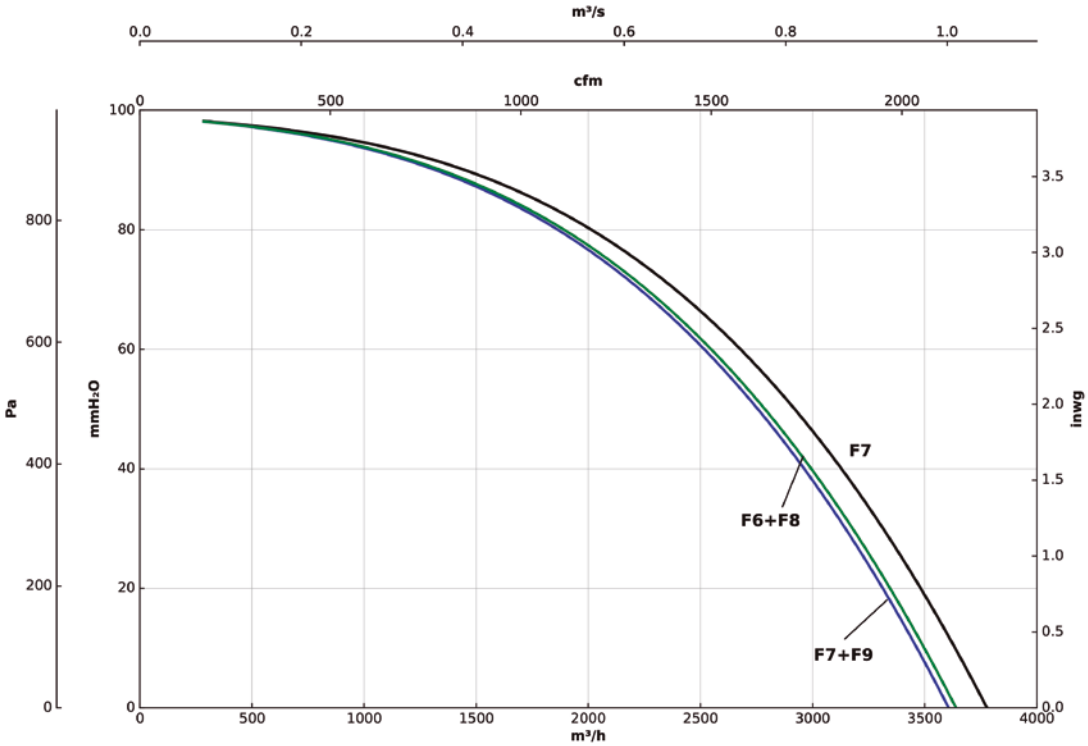
RECUP/EC-2700-H



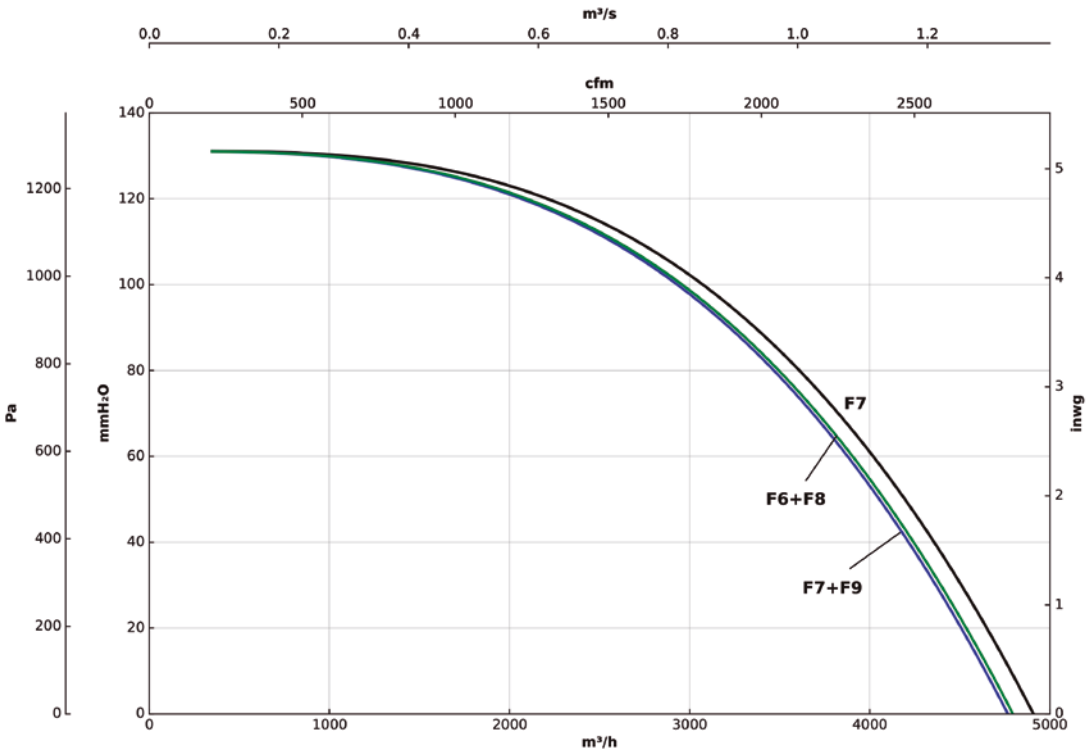
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

RECUP/EC-3300-H



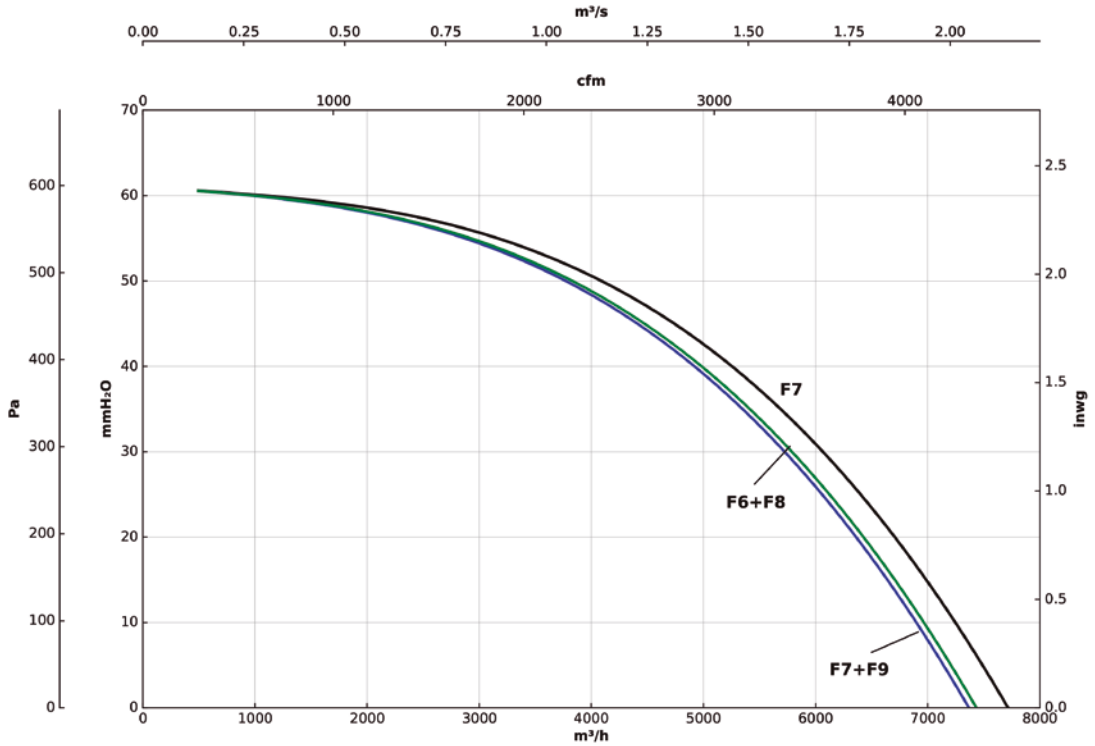
RECUP/EC-4500-H



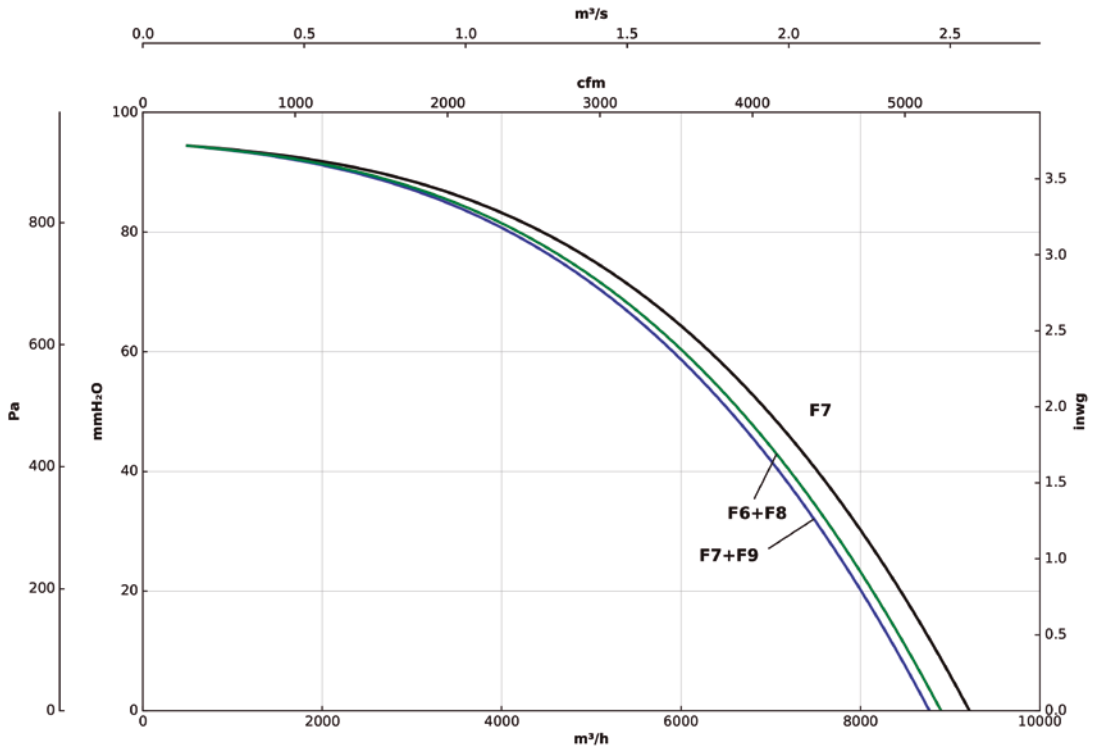
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

RECUP/EC-6000-H

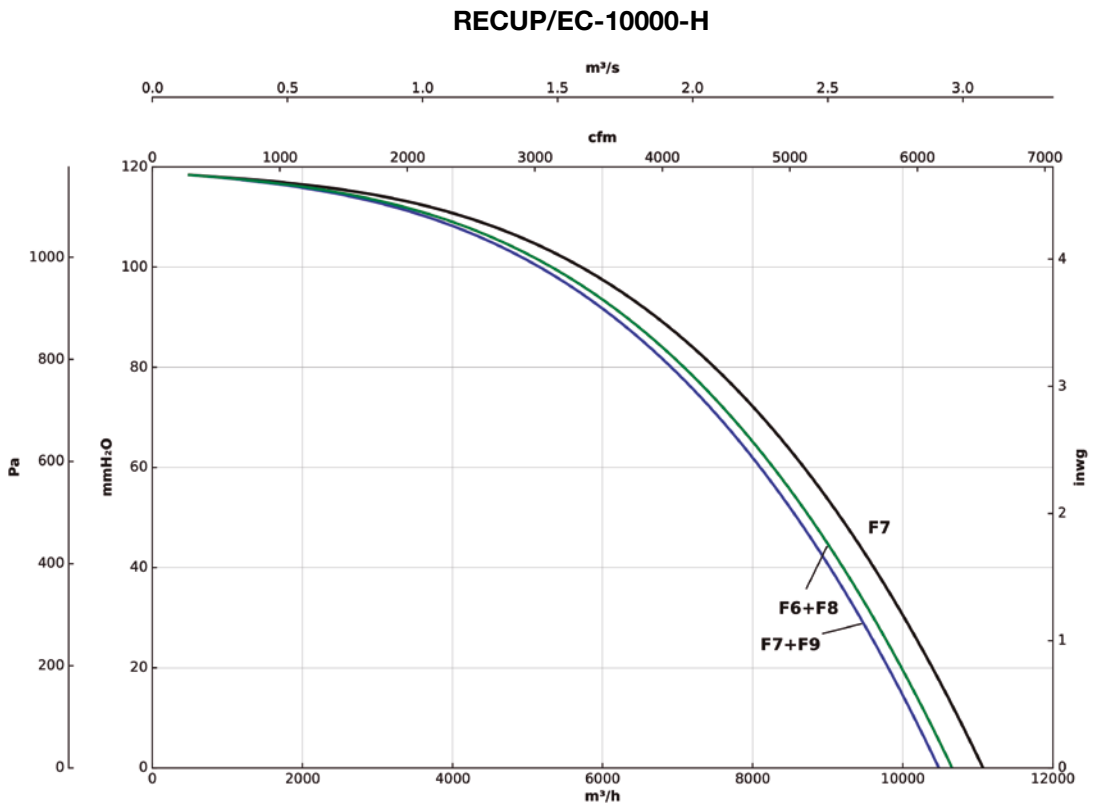


RECUP/EC-8000-H

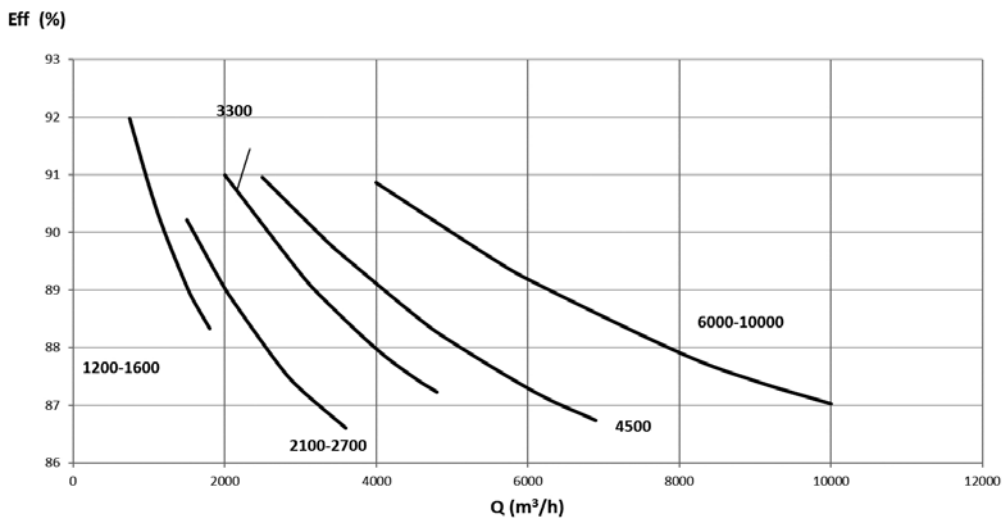


Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg



Efficiency curves



HEADQUARTER

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ISO 9001
BUREAU VERITAS
Certification

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