

REB/EC

Compact heat recovery units for residential and commercial installations



Magnelis®
An ArcelorMittal product



Magnelis®
An ArcelorMittal product



High-efficiency compact heat recovery units with crossflow exchanger, EC Technology motors, automatic control, and built-in by-pass.

Common features:

- EC Technology fans adjustable 0-10 V, with high-efficiency backward-curved impellers.
- Sensitive, high efficiency (>73%), Eurovent certified cross-flow heat exchanger.
- Interchangeable nozzles to adapt them to the installation.
- Condensate tray and drainage connection.
- High-efficiency filtration in supply (F6+F8 or F7+F9) and in extraction (F6 or F7).
- Access panels for filter removal for maintenance.
- 25 mm rockwool insulation on the bottom and top panels, and polyethylene on the side panels.
- Motorised BY-PASS damper.

Control panel:

- Built-in electrical control panel (IP65).
- Integrated control system compatible with MODBUS RTU.
- Built-in maintenance disconnect switch.

- Temperature sensors in supply and return air.
- Condition check of outlet filters with pressure switch.
- Wired remote control with LCD screen (up to 30 m).
- Control for free cooling through motorised BY-PASS.
- Possibility to connect up to 30 recovery units simultaneously.

Finish:

- High quality aluminium profile structure with external coating in category C5 anti-corrosive Magnelis sheet steel.
- All models can be installed outdoors as long as they have a protective roof cover.

On request:

- CO₂ sensor.

Available versions:

- REB/EC-H: Horizontal heat recovery unit with F6+F8 or F7+F9 filtration stages.
- REB/EC-V: Vertical heat recovery unit with F6+F8 or F7+F9 filtration stages.

Order code

REB/EC	—	V	—	500	—	F6+F8
↓		↓		↓		↓
REB/EC: Compact heat recovery units for residential and commercial installations		V: Vertical H: Horizontal		Model		Filters: F6 + F8 F7 + F9

Common features

Impulsion filter (ODA)	F6+F8 / F7+F9
Extraction filter (ETA)	F6 / F7
Fan type	PLUG FAN EC with backward curved impeller
Free cooling function by means of a motorised by-pass	YES
Insulation	25 mm rock wool in bottom and top panels, and polyethylene in side panels
Condensate exhaust	YES
Pressure switch for checking the condition of inlet filters	YES
Safety and maintenance switch	YES
Built-in control panel	YES
Heat recovery type	Sensitive



Erp. (Energy Related Products)

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

Technical characteristics

Model	Nominal flow rate ¹ (50 Pa)	Nominal flow rate ¹ (150 Pa)	Recovery unit efficiency ² (%)	Installed power (kW)	Voltage 50/60 Hz (V)	Max. admissible current (A)	Sound pressure level ³ dB(A)	Approx. weight (Kg)
REB/EC-500	565	520	74	0.17 x 2	1/200-240	1.70-1.45 x 2	43	66
REB/EC-700	725	700	74	0.17 x 2	1/200-240	1.70-1.45 x 2	43	73
REB/EC-1000	1140	1055	74	0.50 x 2	1/200-277	2.50-1.80 x 2	41	98
REB/EC-1500	1690	1565	74	0.50 x 2	1/200-277	2.50-1.80 x 2	41	119
REB/EC-2000	2160	2020	74	0.50 x 2	1/200-277	2.50-1.80 x 2	40	214
REB/EC-2300	2440	2325	74	0.78 x 2	1/200-277	4.00-2.90 x 2	44	214
REB/EC-2800	3040	2885	73	1.30 x 2	1/200-277	6.60-4.80 x 2	47	225
REB/EC-3800	4050	3870	74	1.30 x 2	1/200-277	6.60-4.80 x 2	46	261
REB/EC-4500	4955	4690	74	1.35 x 2	1/200-277	6.80-5.00 x 2	44	266
REB/EC-5500	5885	5700	73	2.50 x 2	3+N/380-480	4.00-3.20 x 2	50	298
REB/EC-6500	6765	6595	73	3.30 x 2	3+N/380-480	5.40-4.20 x 2	52	307
REB/EC-8000	8985	8660	73	3.4 x 2	3+N/380-480	5.40-4.20 x 2	51	385

1. F6 configuration.

2. Wet efficiency for nominal airflow (50 Pa) with F6+F8 filters, outdoor conditions -5°C/ 80% RH and indoor conditions 20°C/50% RH.

3. Radiated sound pressure level in dB(A) at 3 m distance at full speed.

Filter characteristics

Filters EN 779

ISO 16890

	ISO ePM ₁	ISO ePM ₁₀
F6	-	70%
F7	55%	-
F8	65%	-
F9	80%	-

Lower filter extraction in models 500 to 1500

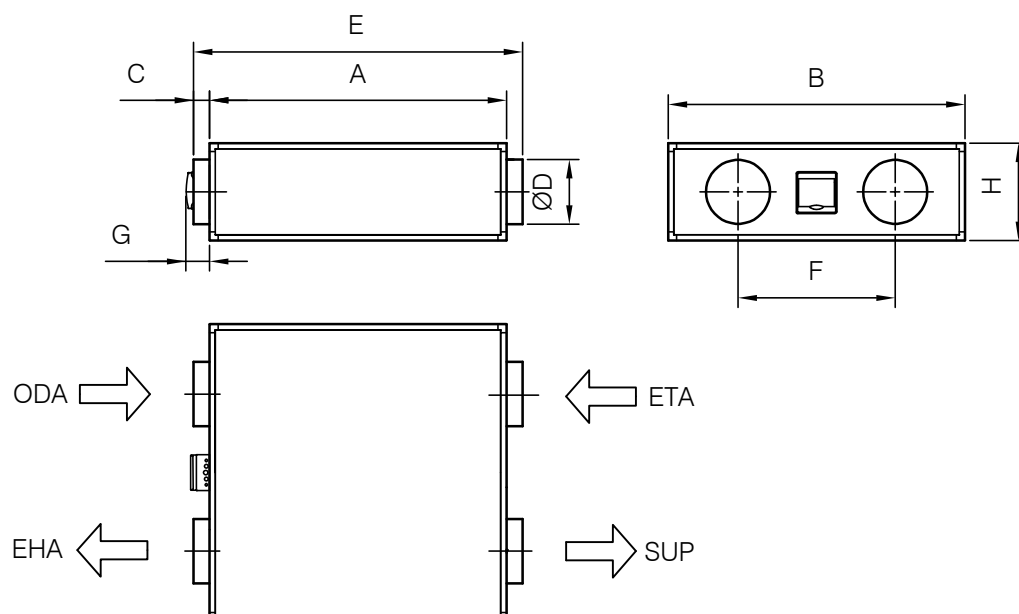


Side filter extraction in models 2000 to 8000



Dimensions mm

REB/EC-H

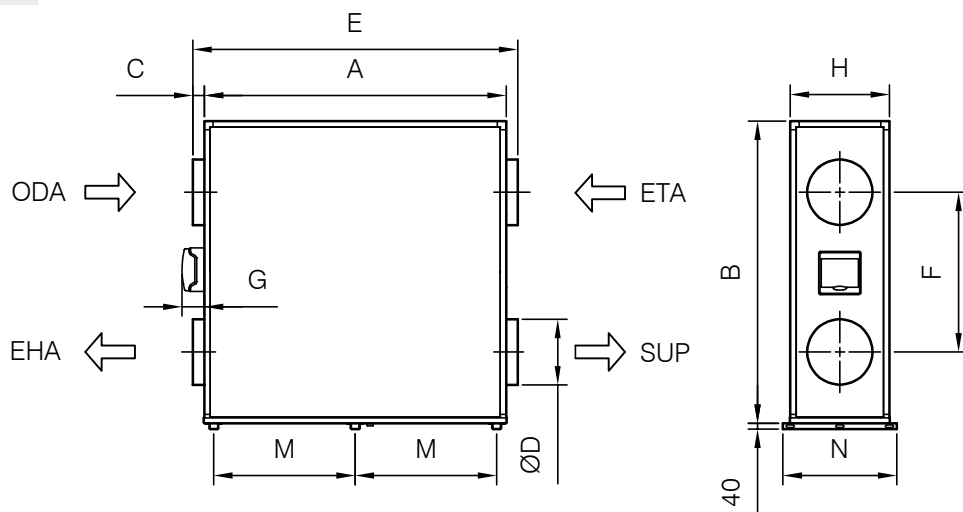


	A	B	C	D	E	F	G	H
REB/EC-H-500	1000	1000	50	150	1100	600	120	285
REB/EC-H-700	1000	1000	50	150	1100	600	120	380
REB/EC-H-1000	1100	1100	50	250	1200	600	120	435
REB/EC-H-1500	1150	1150	50	250	1250	600	120	510
REB/EC-H-2000	1650	1650	76	315	1802	938	120	510
REB/EC-H-2300	1650	1650	76	315	1802	938	120	510
REB/EC-H-2800	1650	1650	76	315	1802	938	120	510
REB/EC-H-3800	1650	1650	76	450	1802	938	120	700
REB/EC-H-4500	1650	1650	76	450	1802	938	120	700
REB/EC-H-5500	1650	1650	76	450	1802	938	120	860
REB/EC-H-6500	1650	1650	76	450	1802	938	120	860
REB/EC-H-8000	1800	1800	76	630	1952	1088	120	1075

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

Dimensions mm

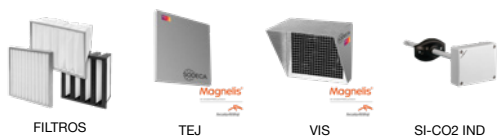
REB/EC-V



	A	B	C	D	E	F	G	H	M	N
REB/EC-V-500	1000	1000	50	150	1100	600	120	285	439	385
REB/EC-V-700	1000	1000	50	150	1100	600	120	380	439	480
REB/EC-V-1000	1100	1100	50	250	1200	600	120	435	489	535
REB/EC-V-1500	1150	1150	50	250	1250	600	120	510	514	610
REB/EC-V-2000	1650	1650	76	315	1802	938	120	510	759	610
REB/EC-V-2300	1650	1650	76	315	1802	938	120	510	759	610
REB/EC-V-2800	1650	1650	76	315	1802	938	120	510	759	610
REB/EC-V-3800	1650	1650	76	450	1802	938	120	700	759	800
REB/EC-V-4500	1650	1650	76	450	1802	938	120	700	759	800
REB/EC-V-5500	1650	1650	76	450	1802	938	120	860	759	960
REB/EC-V-6500	1650	1650	76	450	1802	938	120	860	759	960
REB/EC-V-8000	1800	1800	76	630	1952	1088	120	1075	834	1175

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

Accessories



Characteristic curves

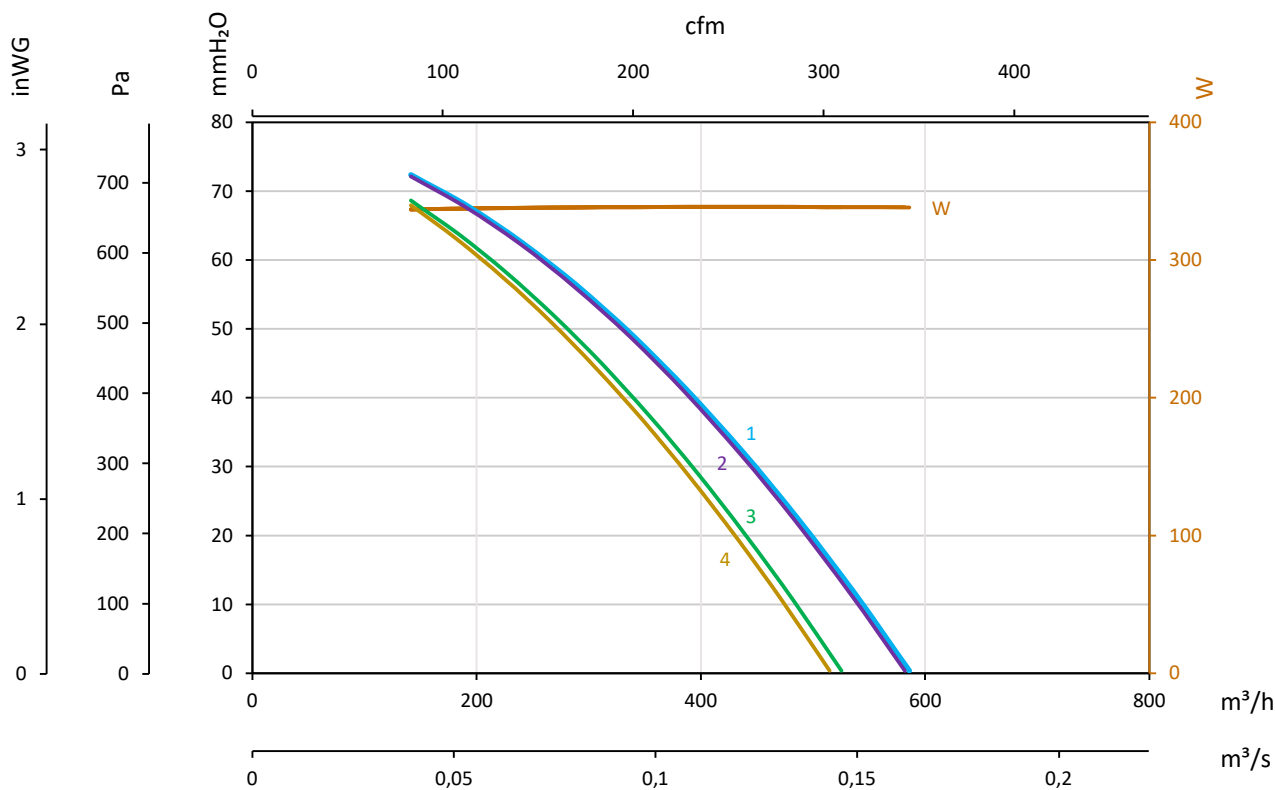
Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

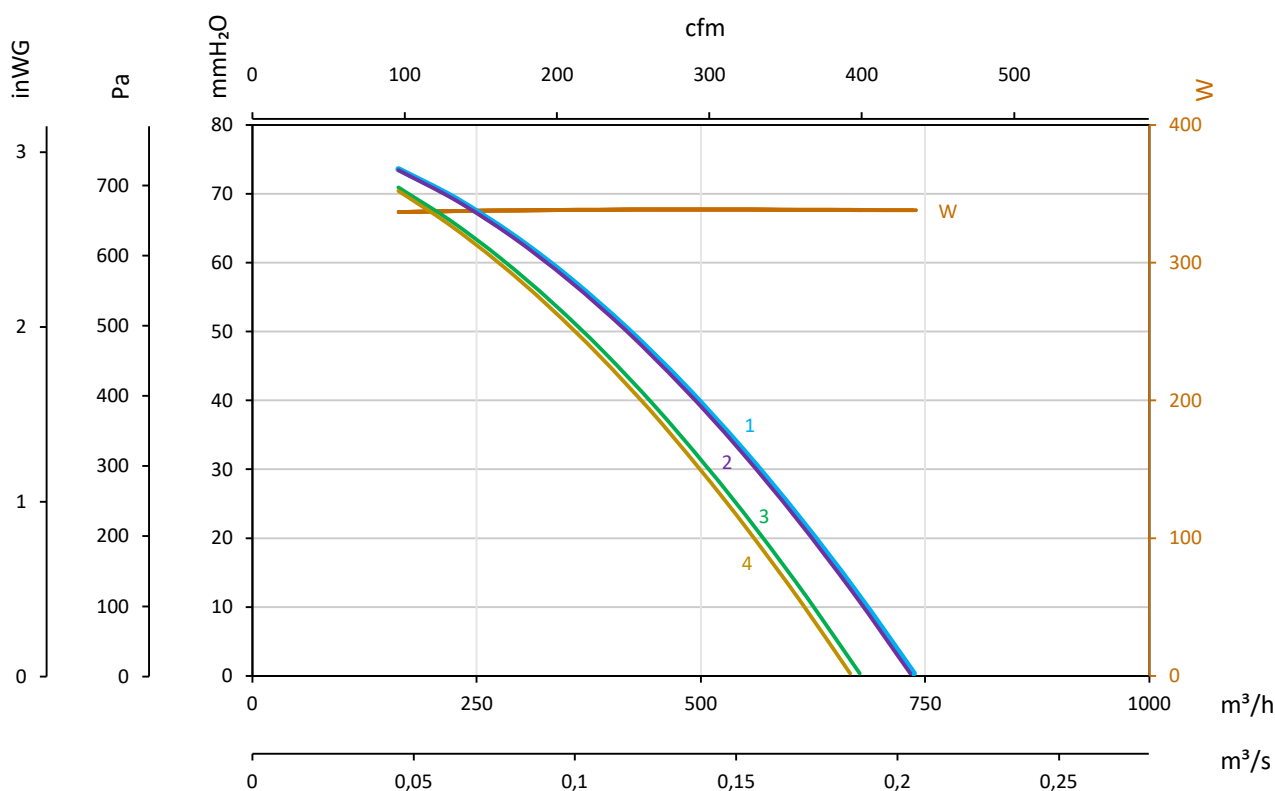
W= Electrical power

- 1: Extraction filter: F6
- 2: Extraction filter: F7
- 3: Supply filter: F6 + F8
- 4: Supply filter: F7 + F9

REB/EC-500



REB/EC-700



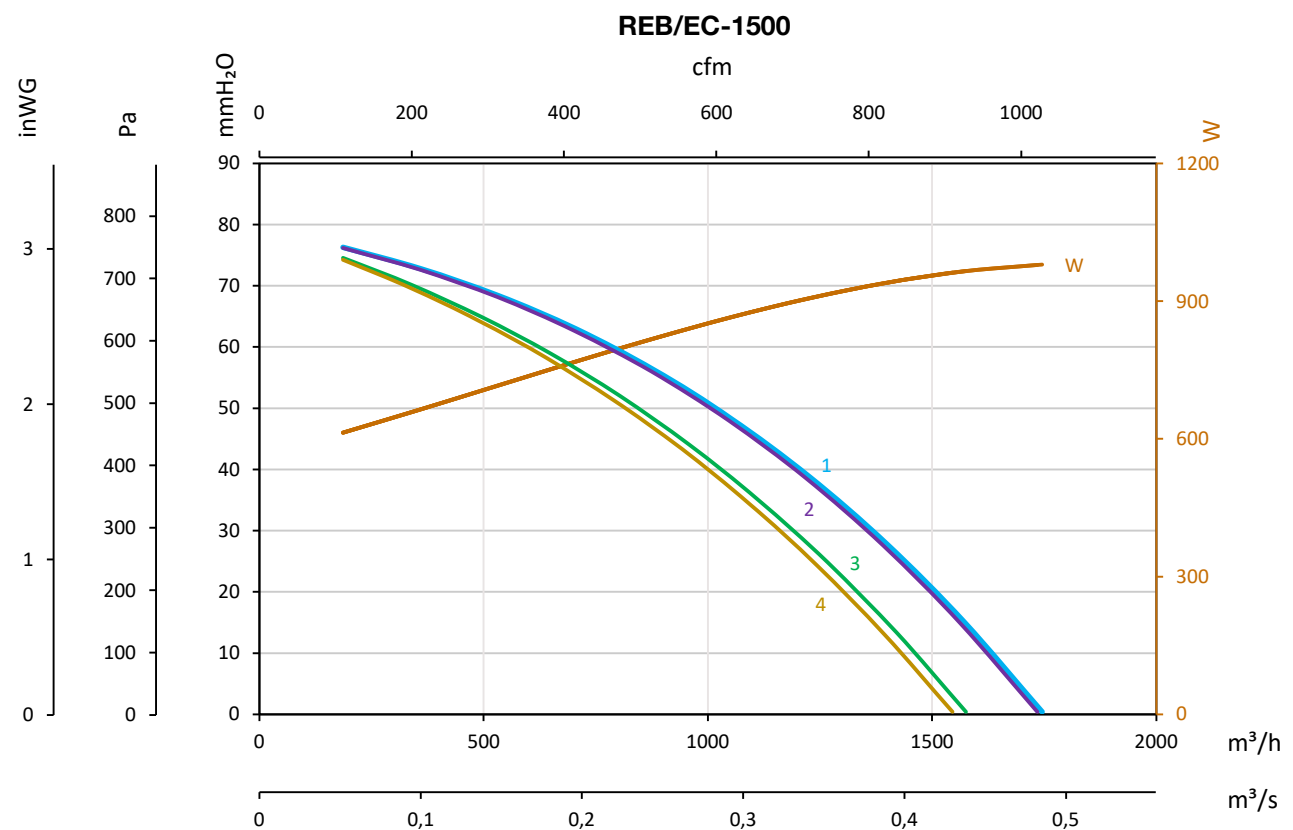
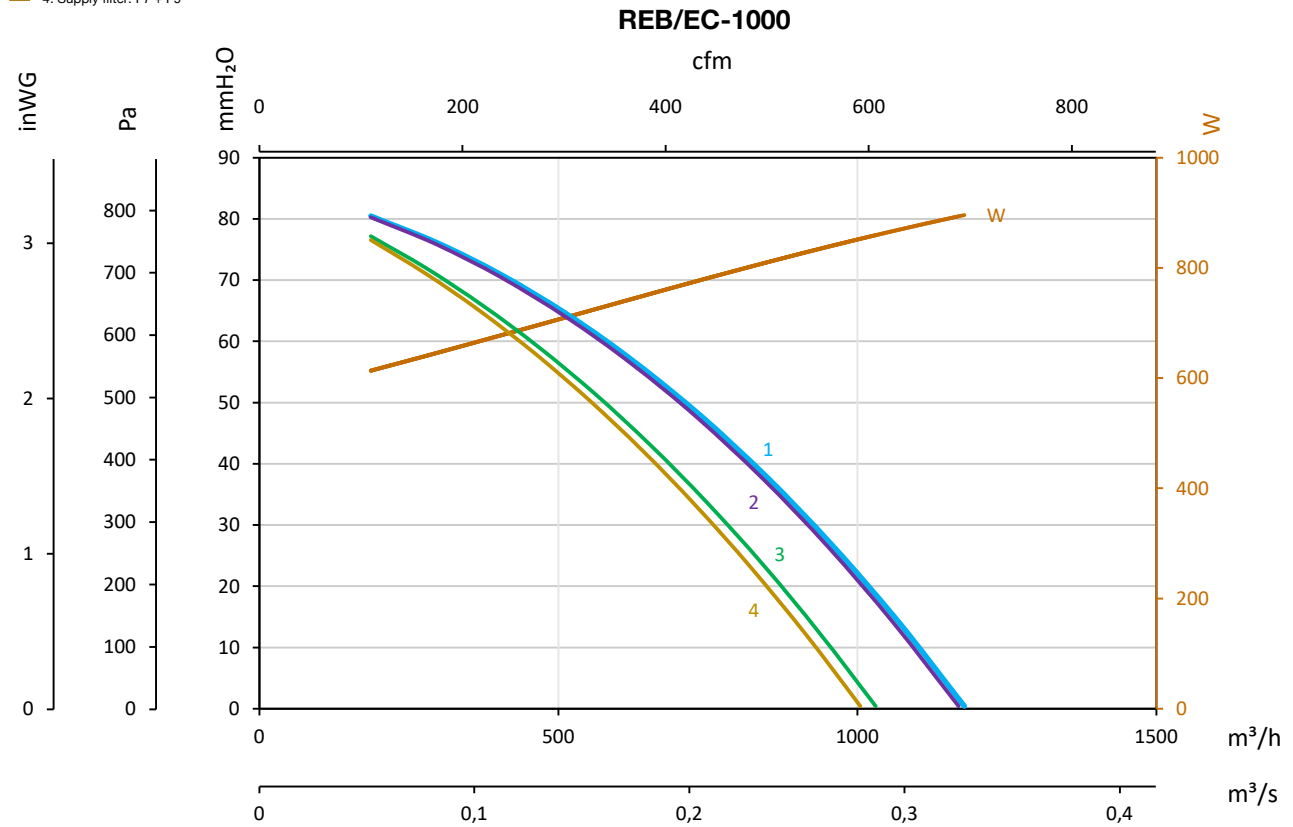
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

W= Electrical power

- 1: Extraction filter: F6
- 2: Extraction filter: F7
- 3: Supply filter: F6 + F8
- 4: Supply filter: F7 + F9



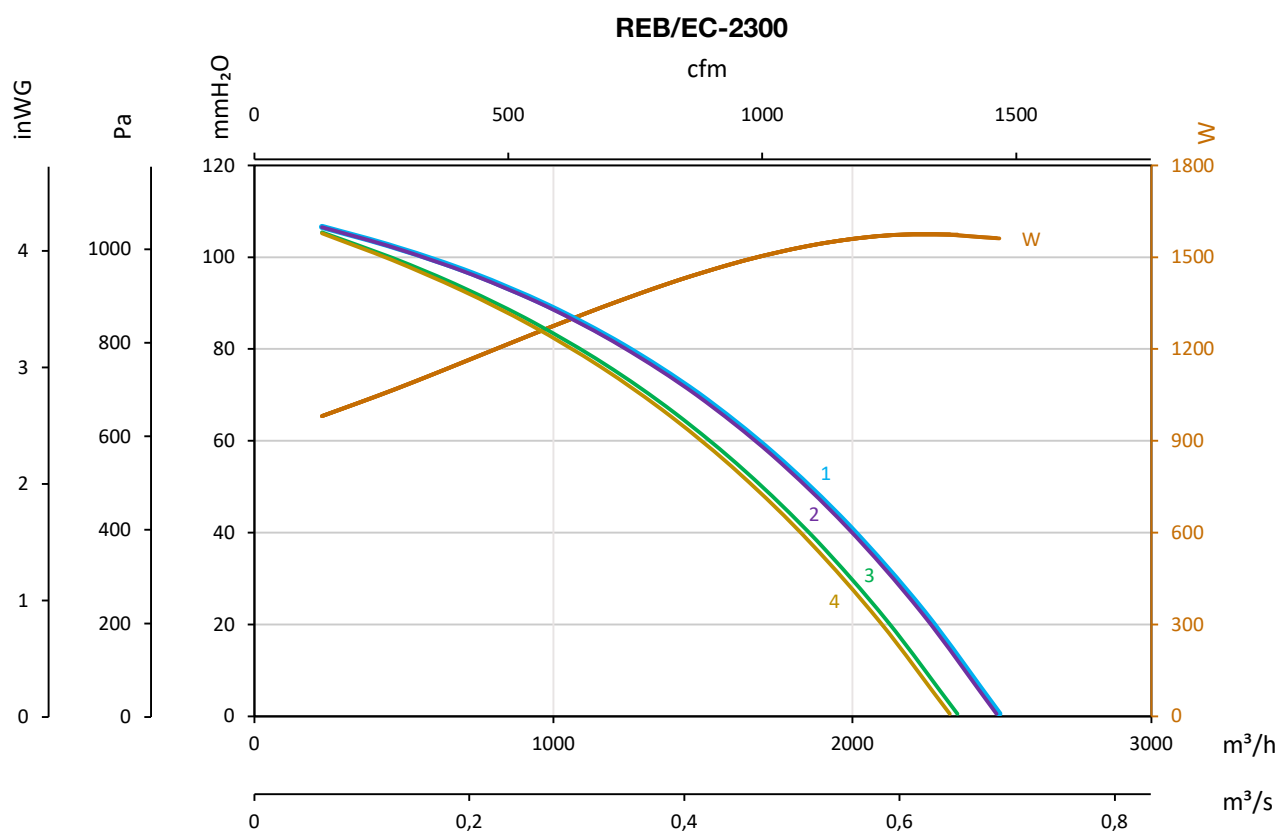
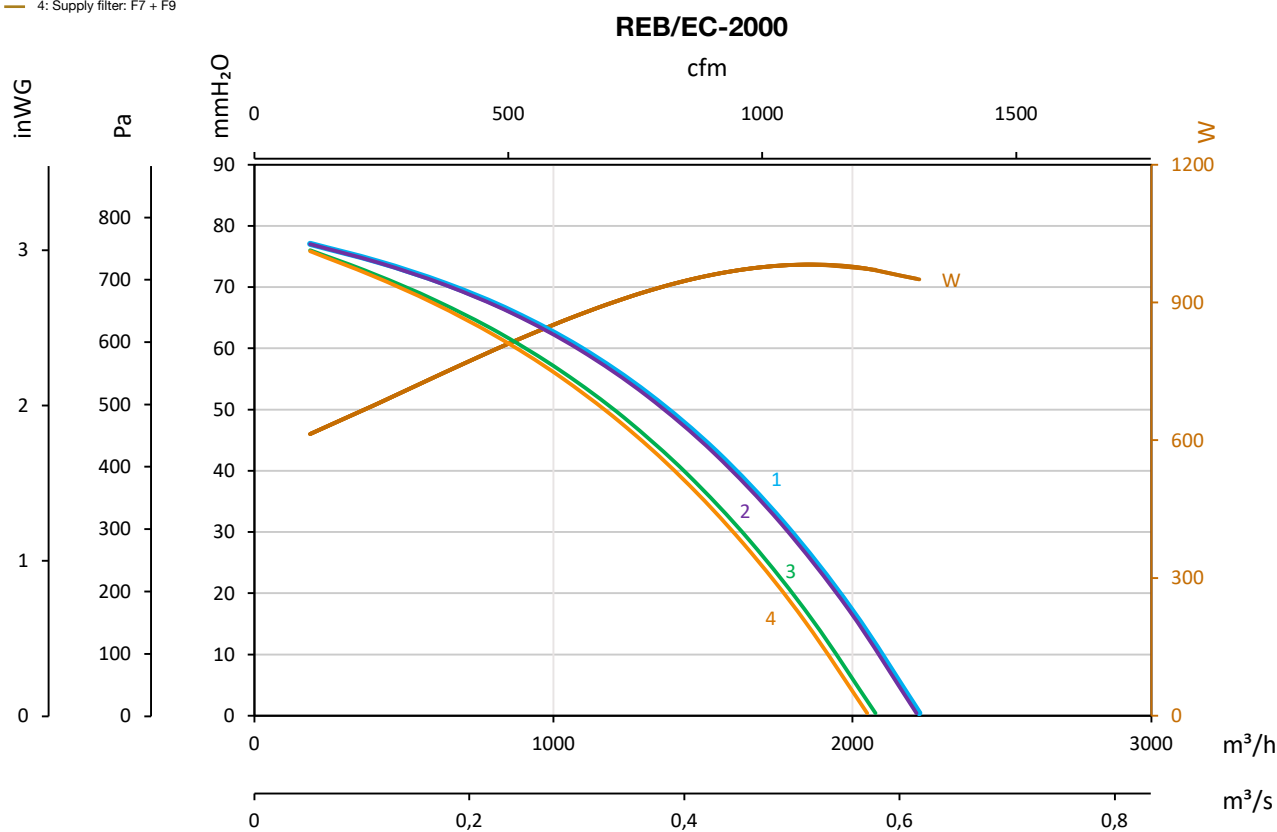
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

W= Electrical power

- 1: Extraction filter: F6
- 2: Extraction filter: F7
- 3: Supply filter: F6 + F8
- 4: Supply filter: F7 + F9



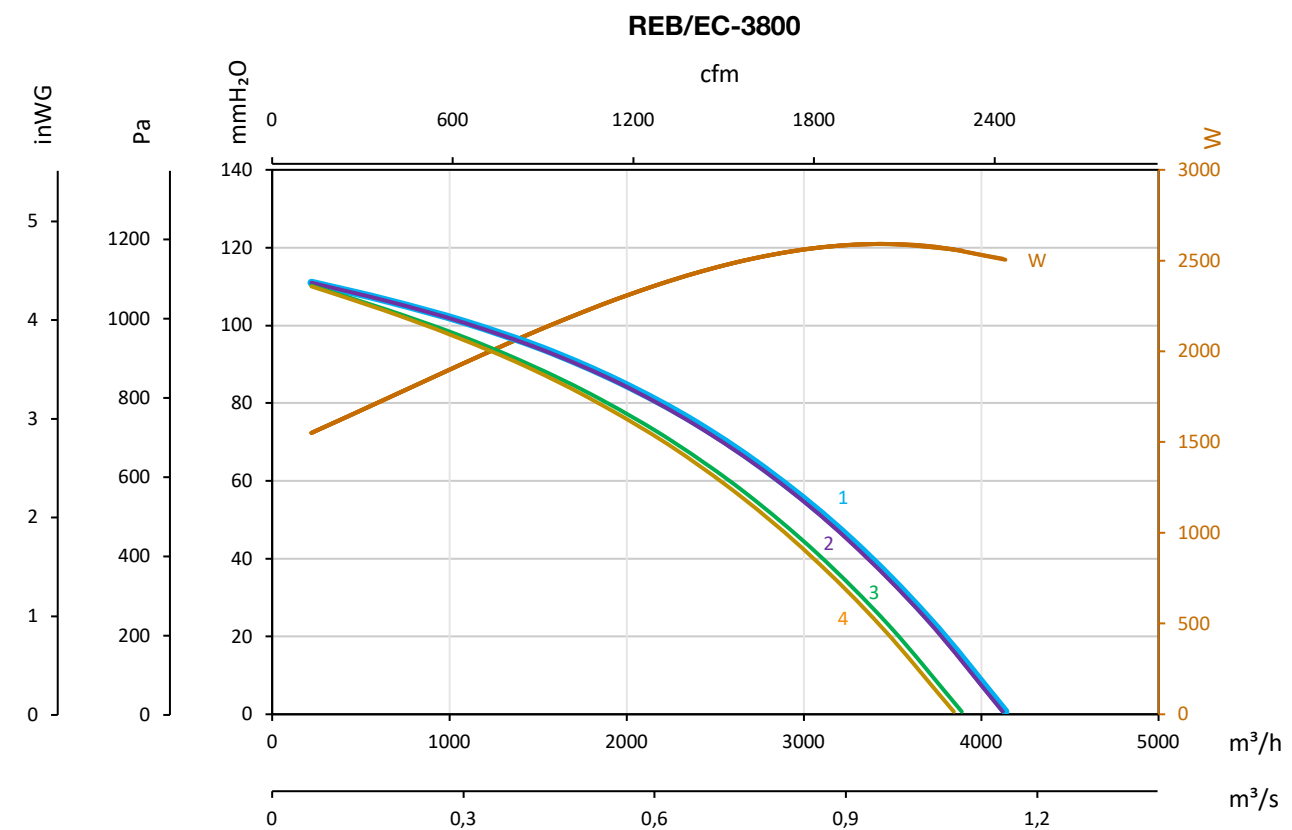
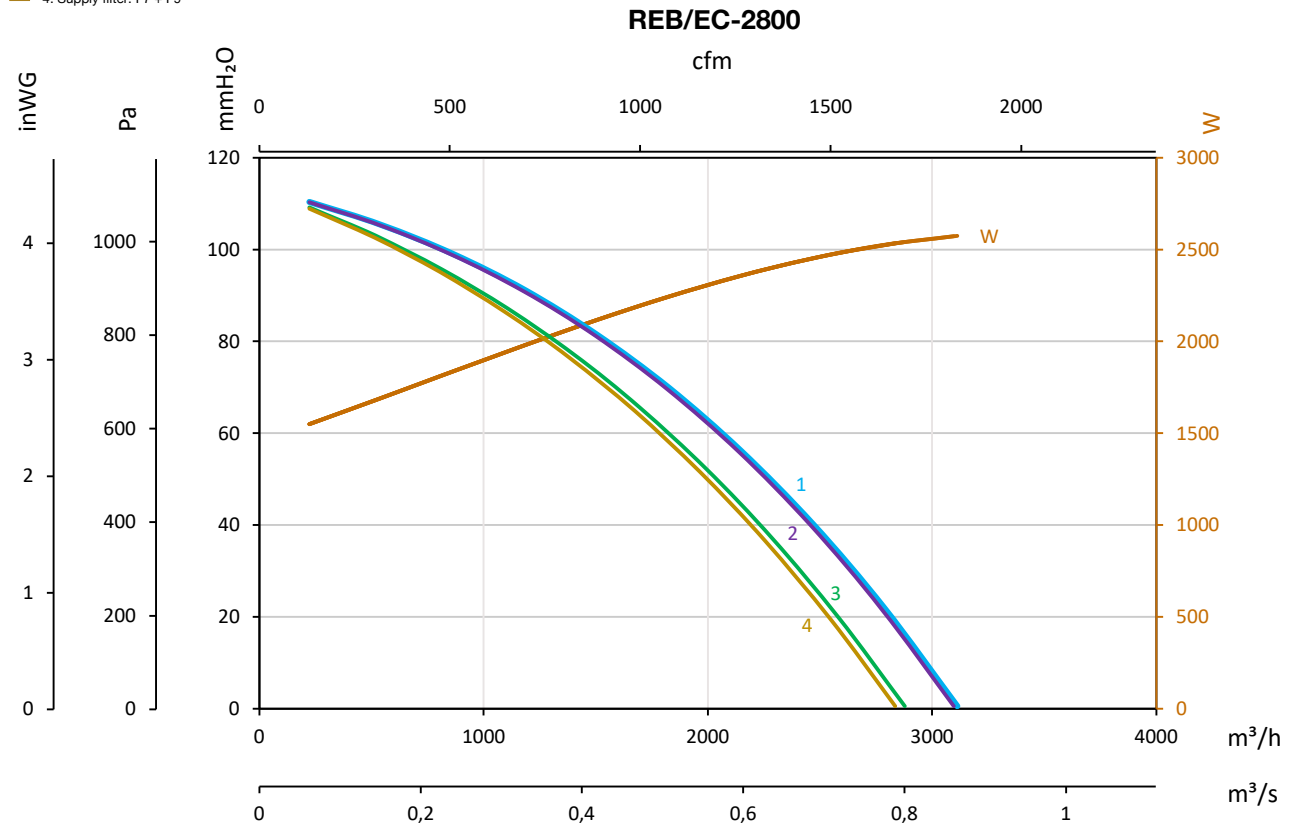
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

W= Electrical power

- 1: Extraction filter: F6
- 2: Extraction filter: F7
- 3: Supply filter: F6 + F8
- 4: Supply filter: F7 + F9



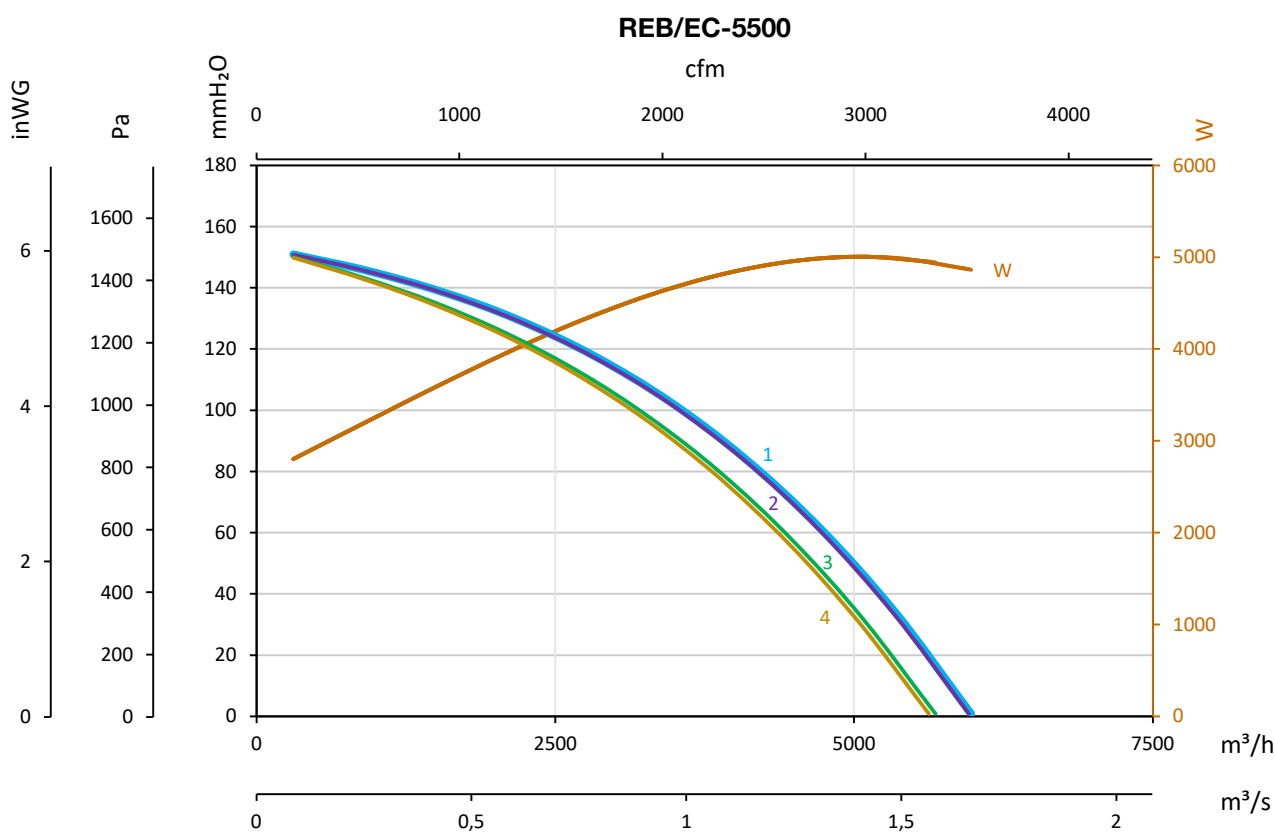
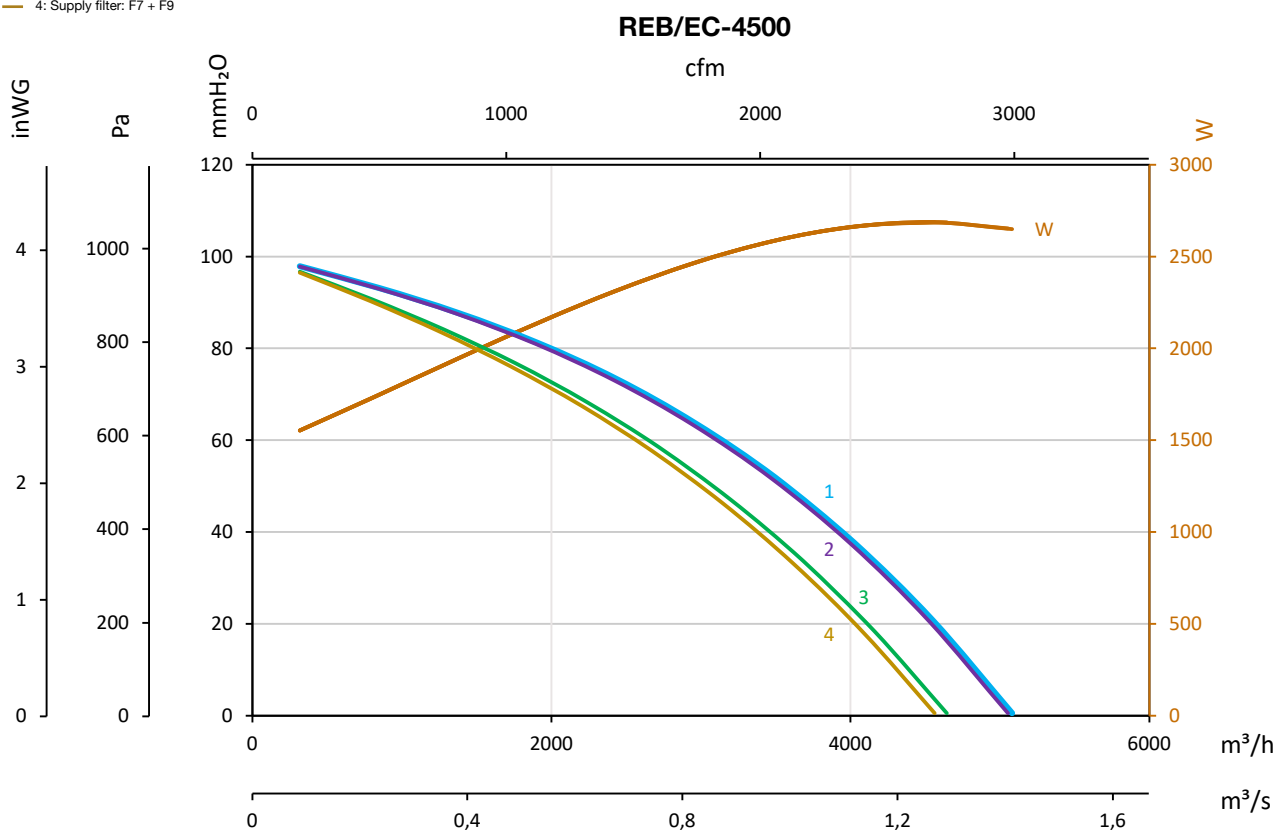
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

W= Electrical power

- 1: Extraction filter: F6
- 2: Extraction filter: F7
- 3: Supply filter: F6 + F8
- 4: Supply filter: F7 + F9



Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

W= Electrical power

- 1: Extraction filter: F6
- 2: Extraction filter: F7
- 3: Supply filter: F6 + F8
- 4: Supply filter: F7 + F9

