

Cleva

Right choice, right here, right now



Image: Copernico by Unsplash

The background image shows a clothing store with racks of clothes and a Cleva heat recovery unit installed in the ceiling. The unit is a compact, square device with a circular fan visible on its side. The store has white walls and a wooden floor.

In most buildings, floor space is at a premium, making it necessary to use a heat recovery solution that can be installed in the false ceiling.

Our new Cleva heat recovery units are a cost-effective solution that achieves a comfortable indoor climate in the smallest possible space.

Cleva offers high energy efficiency and low noise levels without compromising on performance. Thanks to its compact design it is ideal for commercial premises, offices or schools.



RIGHT CHOICE

Cost-effective heat recovery solution that improves indoor air quality.

RIGHT HERE

Manufactured entirely in our production centre in Madrid.

RIGHT NOW

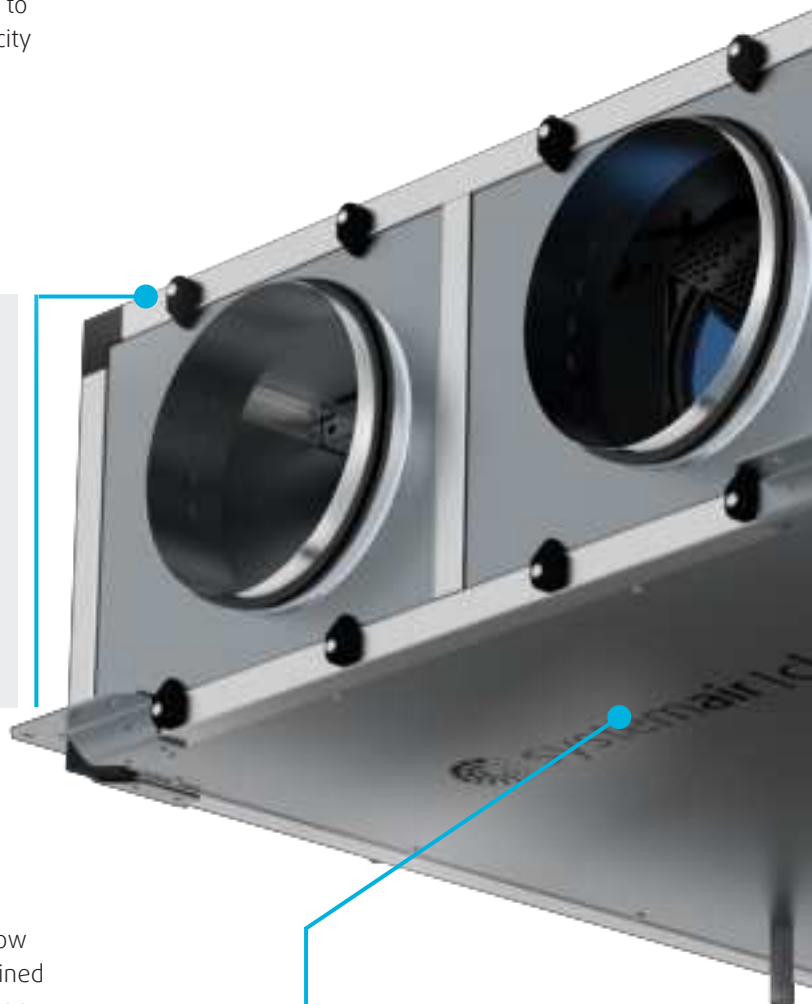
We have a large stock so that you can have your equipment as soon as you order it.

Cleva at a glance

Compact dimensions with energy efficiency

The heat recovery units in the Cleva range are highly efficient. This is because they include a plate heat exchanger that offers a high level of air tightness. This result in an efficiency of up to 83% and low pressure drop, thus ensuring minimum electricity consumption.

- 6 sizes.
- Flow rates: 500 - 4,500 m³/h.
- Enclosure with C5 corrosion resistance according to ISO 12944.
- Integrated control.
- Indoor or outdoor installation.
- Reduced height.
- Panels with interchangeable inlets and outlets allowing different air inlet and outlet configurations.
- Design for easy maintenance.



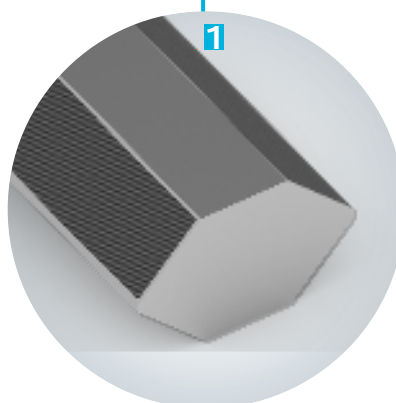
1 Heat recovery

Exclusive fin design to guarantee high performance and low pressure drop across the heat recovery.. The plates are joined by means of a double fin to guarantee high levels of sealing.

2 Filtration

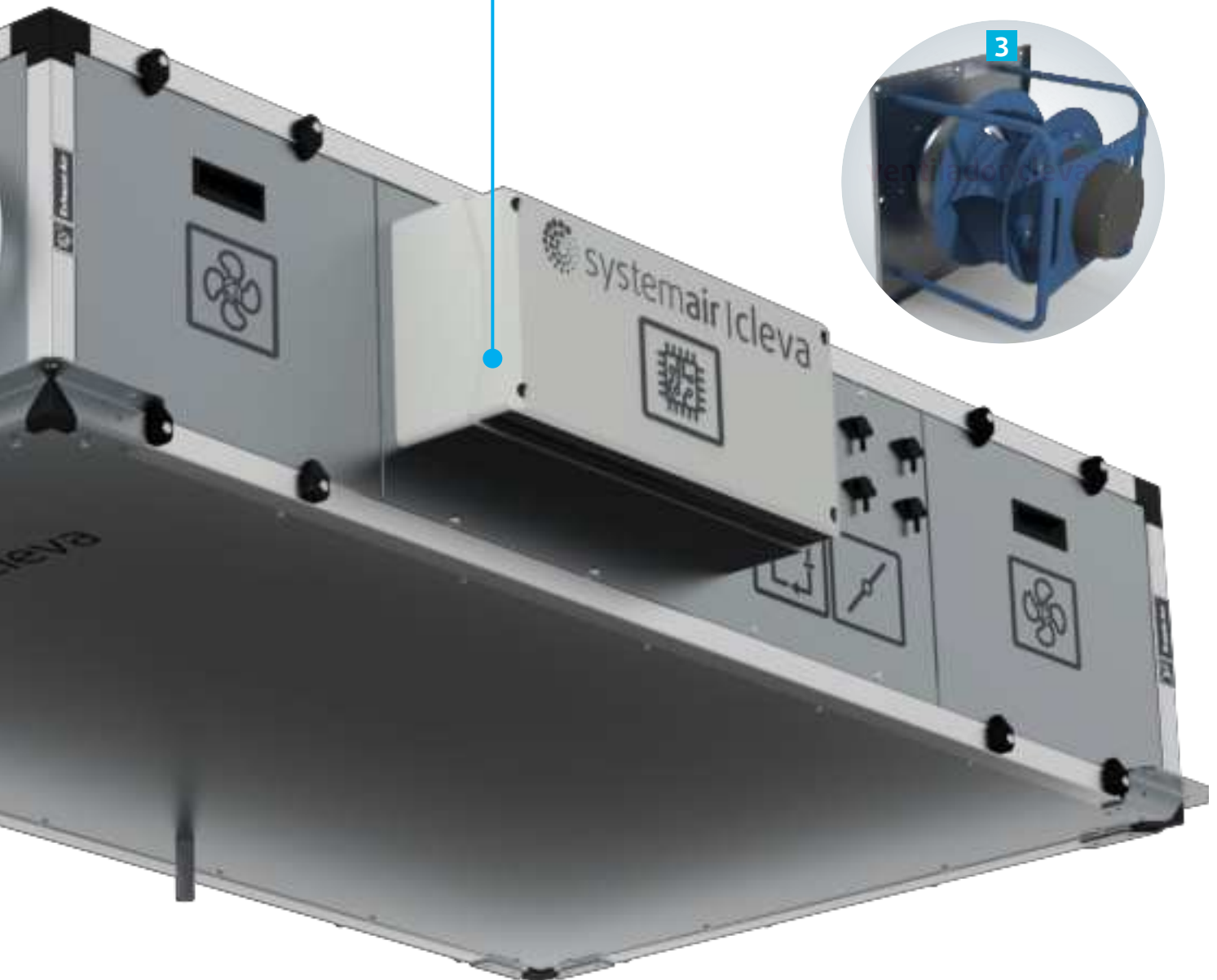
As an accessory/option, additional filters can be installed in both the return and supply air flow. A filter module can also be installed externally to the unit.

Filter combination	
Supply air	Exhaust air
ePM10 60% (M5) + ePM1 55% (F7)	ePM10 60% (M5)
ePM10 70% (M6) + ePM1 70% (F9)	ePM10 70% (M6)
ePM1 55% (F7) + ePM1 80% (F9)	ePM1 55% (F7)



3 EC fans

EC fans with backward curved impellers and integrated electronic protection for possible voltage variations and reduced SFP values. The fans are supplied with 230V/I/50 Hz and 400V/III/50 Hz power supply and IP 54/55 depending on the model.



Optional

- Outdoor roof.
- Module with cold, hot or DX water coil.
- Module with impulsion filtration stage.
- Brackets for false ceiling or floor installation.
- Change of air flow direction (return for supply).

Control system

Simplifying connection, configuration and control

Cleva units are equipped with an electrical panel incorporated in the unit with IP65 protection and a controller for the management of all the components that make up the unit.

Control of the free-cooling damper

The free-cooling/free-heating damper will open when the outside air temperature is lower/greater than the return air temperature depending on the defined set-point.

Selection of three speeds

Cleva units have three different speeds: idle, eco and comfort to suit your needs.

Probe reading

The control system allows a reading of the probes that measure the outdoor and room air temperature.

BMS Connection

Provides simplified configuration of the connection to BMS/via Modbus RTU and BACnet IP communication.

Remote on/off

It can be switched on or off remotely via a digital input (DI), BMS or from the control unit.

Dirty filter pressure switch

In case of clogging of the air filters, the control unit will warn of the need to change them.

CLEVA
CONTROL



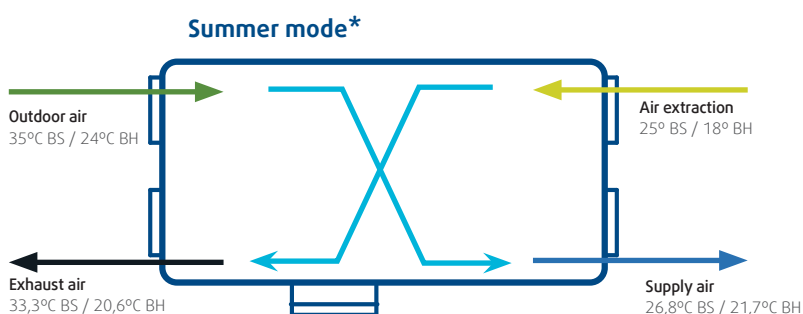
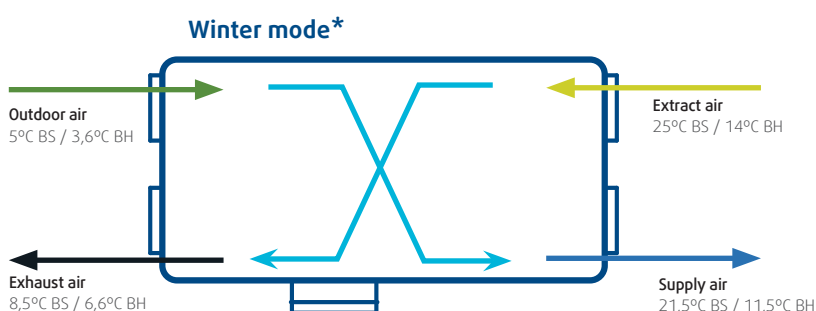
Optionals

- Constant flow control on both air flows.
- Constant pressure control in both air flows.
- Air flow control by CO2 probe.
- Additional filtering stage pressure switch in the supply air flow.
- Control by supply air temperature or by cascade.
- Cooling, heating or cooling/heating stage control (water or DX). 0-10V output. Actuators and valves not supplied.
- Ambient control unit with the following functions:
 - Changing operating modes.
 - Modification of setpoints.
 - Alarm management.
 - Time programming.
 - Overwriting

Operating modes

Efficient ventilation, versatile options

Cleva heat recovery units offer you flexibility and efficiency in every mode of operation, adapting to the seasons and your preferences to create a comfortable environment.



Technical data

Unit	Flow rate nominal m ³ /h	Air filter (Supply/Exhaust) (1)	Efficiency Winter (2) [%]	Efficiency Summer (2) [%]	Electrical supply V/PH/Hz+Pe	Maximum input current (3) [A]	Maximum input power (3) [kW]
Cleva 500	500	ePM1 55% (F7) / ePM10 60% (M5)	82,6	82,4	230/1N/50+PE	3,9	0,59
Cleva 1000	800	ePM1 55% (F7) / ePM10 60% (M5)	81,8	81,5	230/1N/50+PE	4,0	0,59
Cleva 1500	1500	ePM1 55% (F7) / ePM10 60% (M5)	79,0	78,8	230/1N/50+PE	5,5	1,25
Cleva 2000	2000	ePM1 55% (F7) / ePM10 60% (M5)	79,1	78,9	230/1N/50+PE	8,5	1,81
Cleva 3000	3000	ePM1 55% (F7) / ePM10 60% (M5)	82,4	82,2	230/1N/50+PE	13,7	2,85
Cleva 4000	4000	ePM1 55% (F7) / ePM10 60% (M5)	82,4	82,1	400/3N/50+PE	8,1	5,05

Notes:

1. Filters not included as standard. Filter classes according to ISO 16890.

2. Conditions:

Winter: Outside air: 5°C BS - 3.6°C BH. Extract air: 25°C BS - 14°C BH.

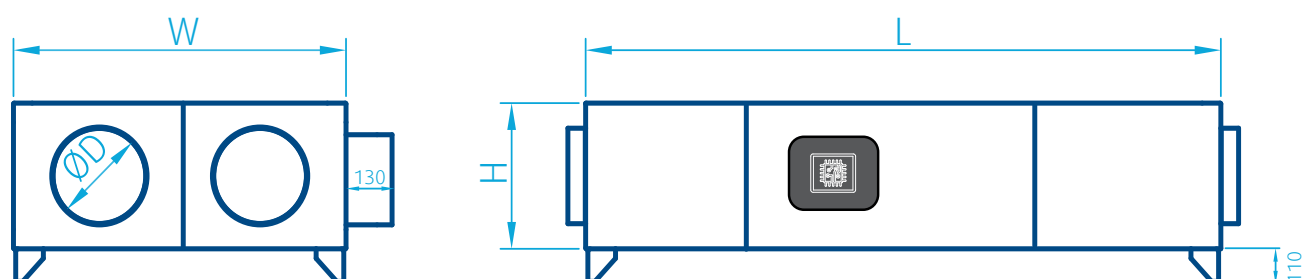
Summer: Outside air: 35°C - 24°C BH. Extract Air: 25°C - 18°C BH.

3. Consumption without optionals.

Configurations

Cleva overall dimensions*						
Unit	High [mm]	Width [mm]	Length [mm]	Weight [kg]	Duct connections diameter [mm]	Drain connection[mm]
Cleva 500	340 + 65	630	1500	91	250	1/2"
Cleva 1000	380 + 65	890	1700	135	250	1/2"
Cleva 1500	460 + 65	960	2050	197	350	1/2"
Cleva 2000	460 + 65	1270	2150	247	350	1/2"
Cleva 3000	599 + 65	1450	2500	362	450	1/2"
Cleva 4000	599 + 65	1890	2500	444	450	1/2"

*Without optionals



Sound levels

Unit	63 Hz [dB]	125 Hz [dB]	250 Hz [dB]	500 Hz [dB]	1 kHz [dB]	2 kHz [dB]	4 kHz [dB]	8 kHz [dB]	Sound power level free discharge [dBA]	Radiated sound power [dBA]	Sound pressure (2) [dBA]
Cleva 500	100	87	82	79	73	73	64	61	82	68	65
Cleva 1000	100	93	87	78	73	73	64	58	83	70	66
Cleva 1500	100	86	89	78	76	71	64	60	84	69	67
Cleva 2000	99	88	88	78	79	76	69	64	85	71	68
Cleva 3000	101	86	87	79	78	77	68	63	85	70	68
Cleva 4000	101	87	89	83	83	79	74	67	88	70	70

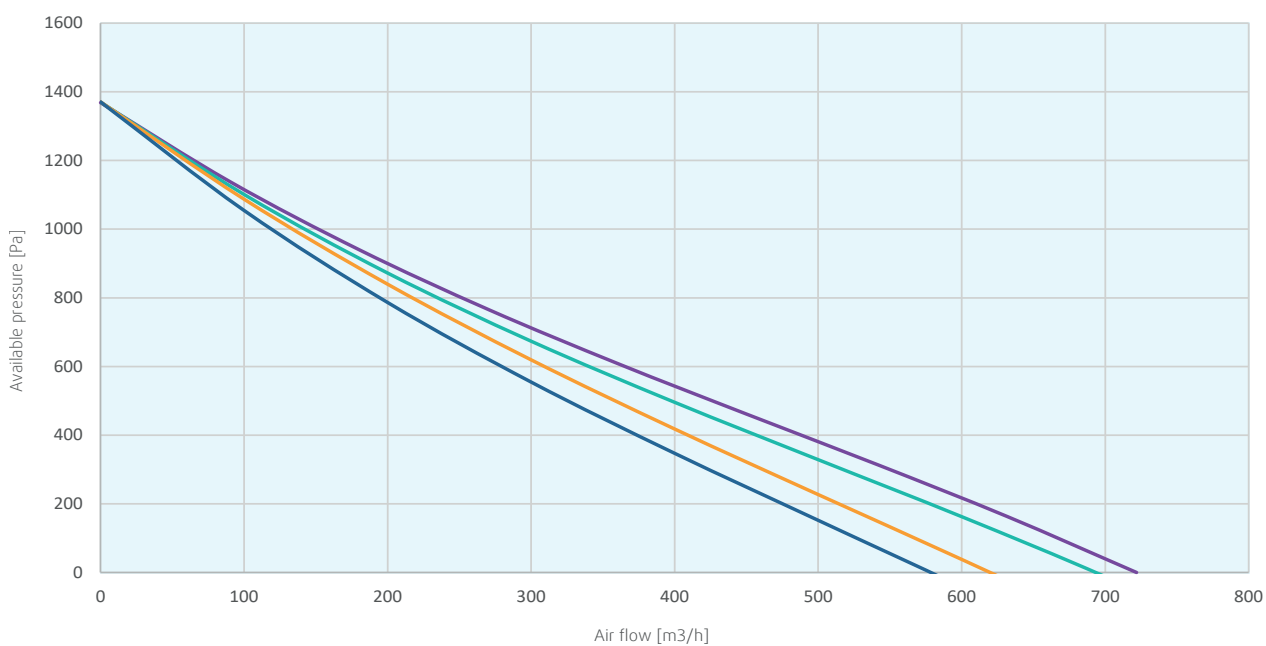
Notes:

1.- Data obtained with nominal flow rate and density 1.2 kg/m³. Air filters ePM10 70% (M6) in extraction and ePM1 55% (F7) in supply and available pressure of 75 Pa in both air flows.

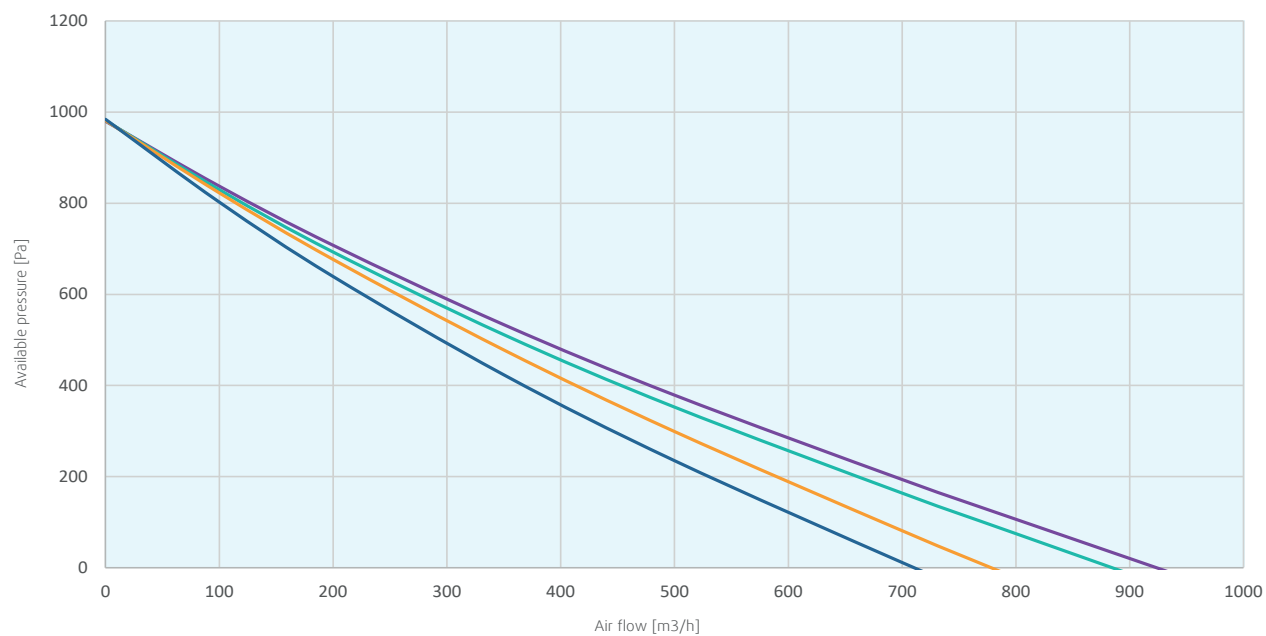
2.- Sound pressure of the unit, in free discharge at 2 m distance.

Selection curves

Cleva 500

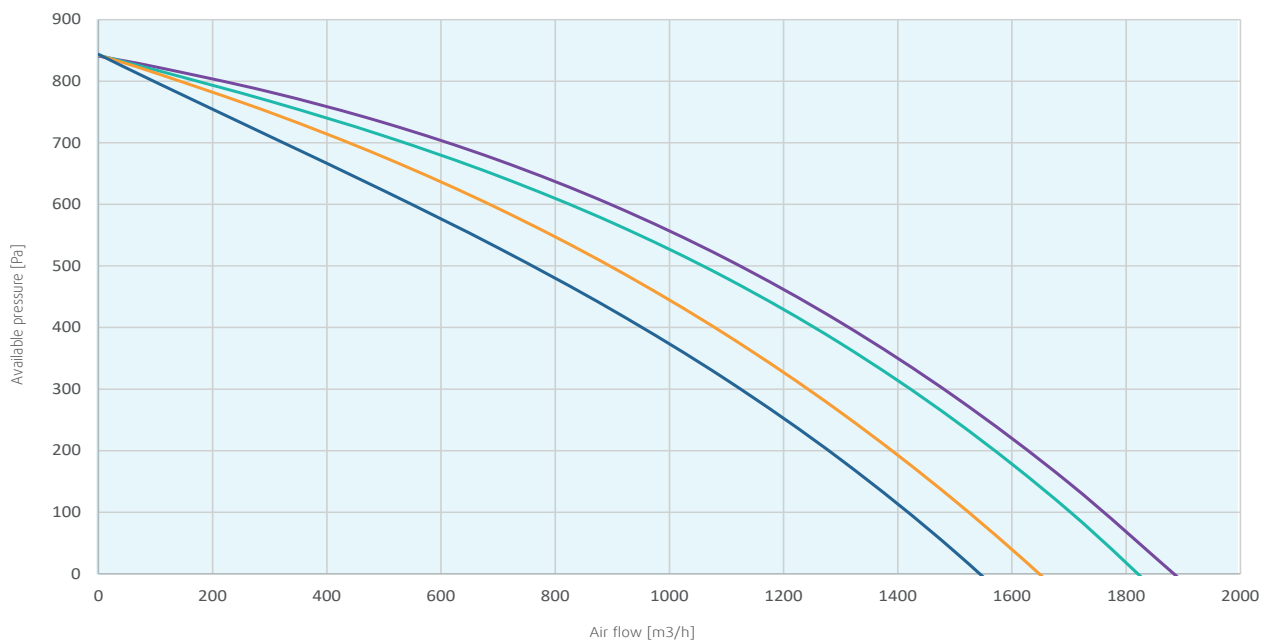


Cleva 1000

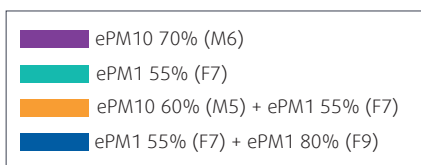
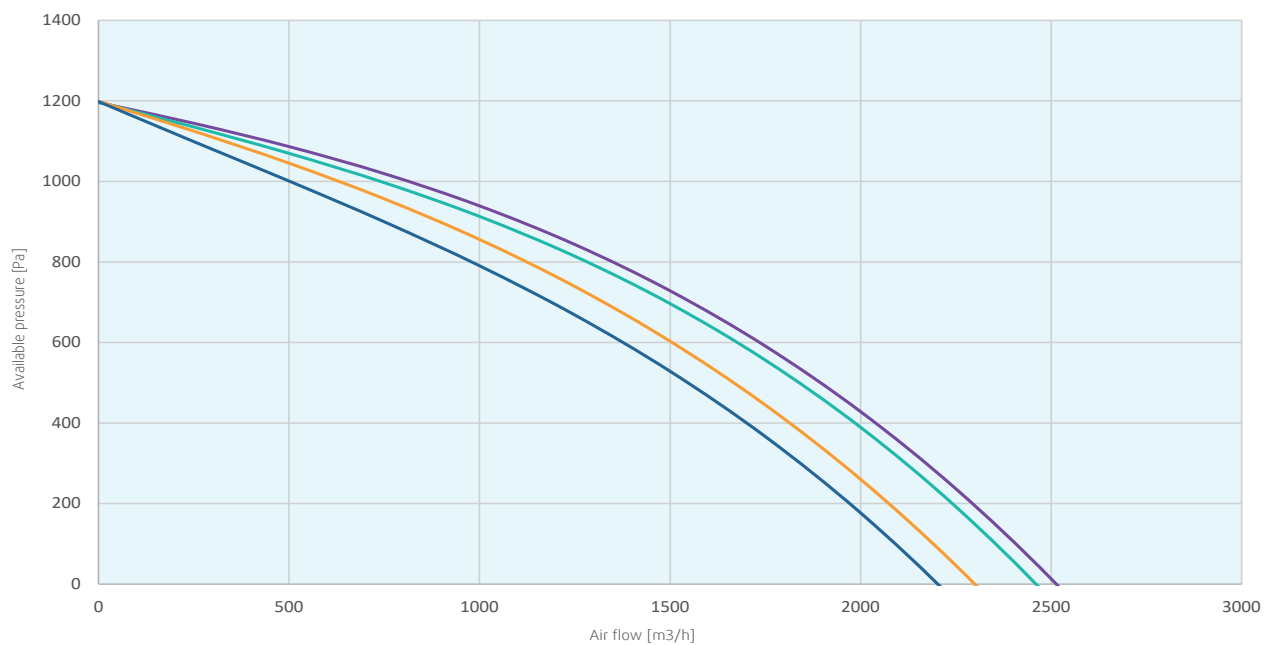


- ePM10 70% (M6)
- ePM1 55% (F7)
- ePM10 60% (M5) + ePM1 55% (F7)
- ePM1 55% (F7) + ePM1 80% (F9)

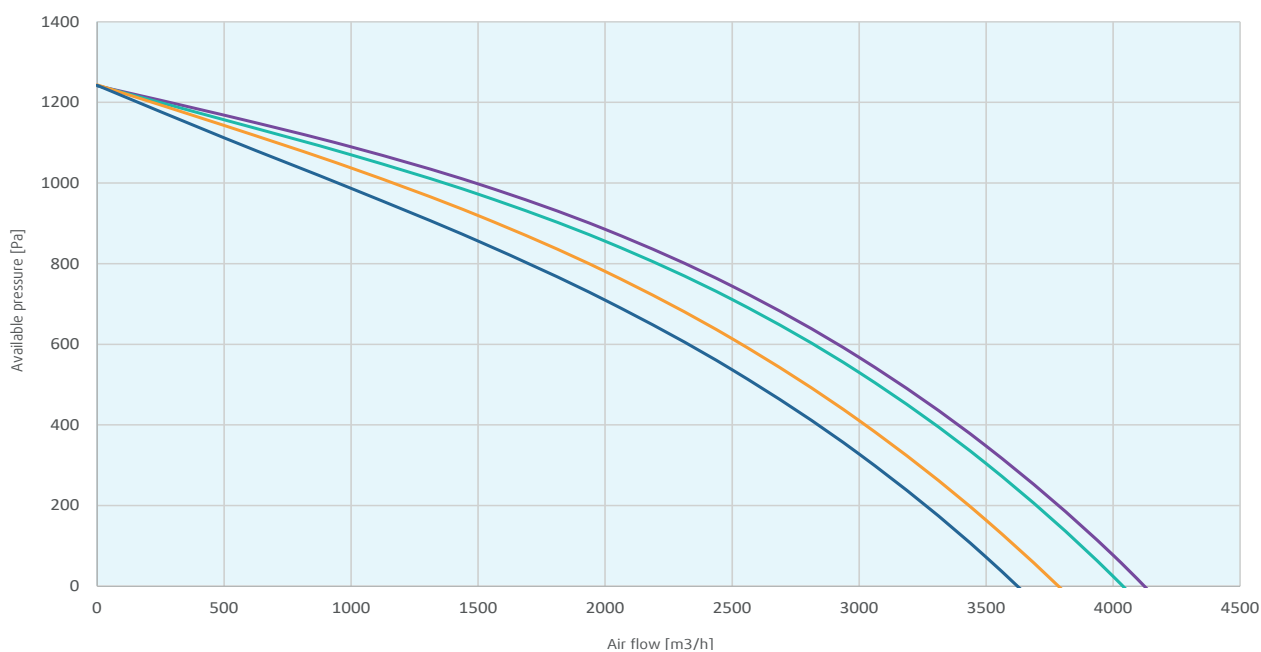
Cleva 1500



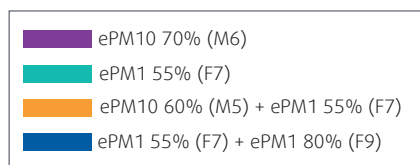
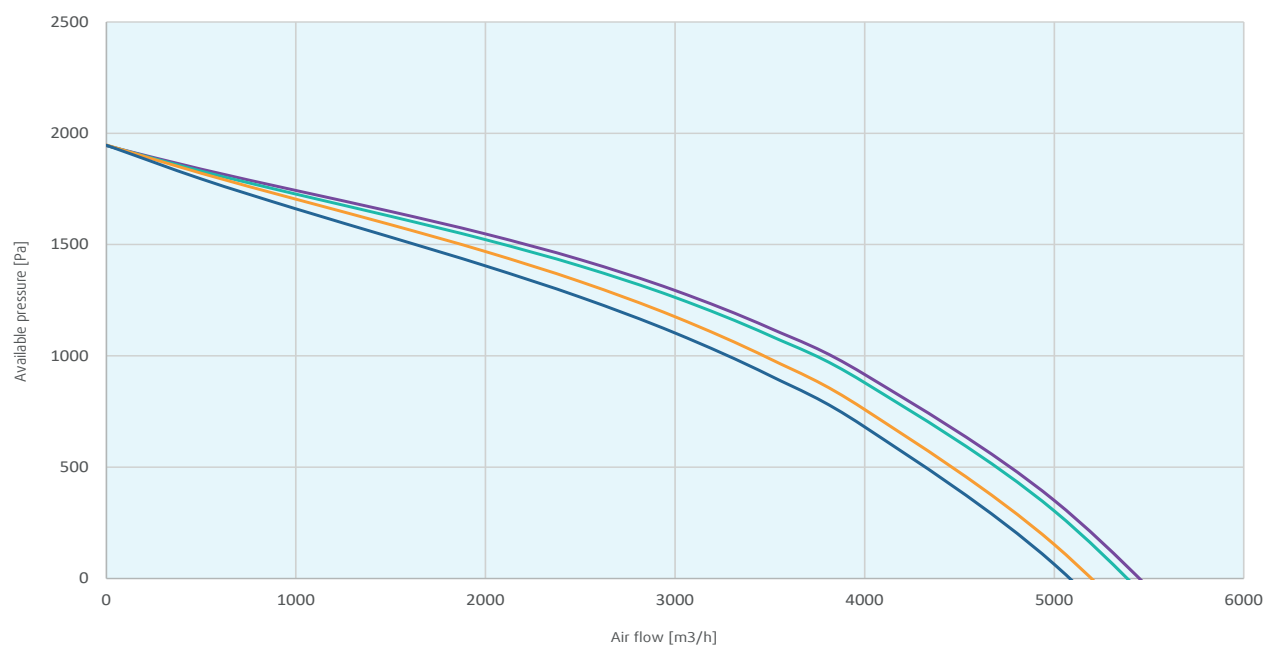
Cleva 2000



Cleva 3000



Cleva 4000



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