



## ECOEVO 2 AC



Plug &amp; Play



2 Levels of Filtration



Controlled unit



Structure Double-panel



25 mm panel

### DESCRIPTION

Industrial heat recovery unit, ECOEVO 2 AC model, sound-insulated equipment, for indoor or outdoor installation, with removable side panels for easy internal access, available with different accessories and configurations. Electrical control panel equipped with isolating switch.

Modular structure in extruded aluminium profile according to DIN 17615 with 30 mm thickness and reinforced nylon corners. Double-wall panels with 25 mm thickness, with outer face in Magnelis steel with corrosion class C5, inner face in galvanized steel sheet according to EN 10192. The intermediate insulation of the panels is filled with self-extinguishing polystyrene boards 25 mm thick, with a density of 30 kg/m<sup>3</sup>, providing high resistance to different mechanical stresses.

Available in 5 sizes, horizontal or vertical version and Smart or Smart CO<sub>2</sub> control.

### STANDARDS AND CERTIFICATIONS



### ADVANTAGES

- Plug & Play monoblock unit.
- Corrosion class C5.
- Multiple configurations.
- 3-way valve and actuator included.

### ACCESSORIES

- ePM10 50% / M5 filter
- ePM1 50% / F7 filter
- ePM1 80% / F9 filter
- Protection for rain
- Rain Roof
- Constant airflow control
- CO<sub>2</sub> Control

### COMPONENTS

#### FAN

Double-inlet centrifugal fans with direct drive, high-efficiency forward-curved impeller, statically and dynamically balanced. Driven directly by single-speed AC electric motors with permanent capacitor, built-in automatic reset thermal protection, insulation class B or F, with mechanical protection IP44 to IP55. Driven by a voltage regulator.

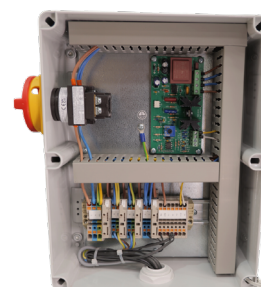
#### FILTERS

Filters of class ePM10 50% / M5, ePM1 50% / F7 or ePM1 80% / F9 according to EN 779 / ISO 16890. Filters are mounted in parallel in rails designed to maintain bypass leakage values within F9 class according to EN 1886.



#### HEAT EXCHANGER

High-efficiency parallel-flow heat exchangers with bypass, allowing sensible heat recovery from exhaust air to supply air with efficiencies up to 80% (Eurovent certified). Constructed with stamped aluminium plates with double-fold edges ensuring airtightness up to 1500 Pa.



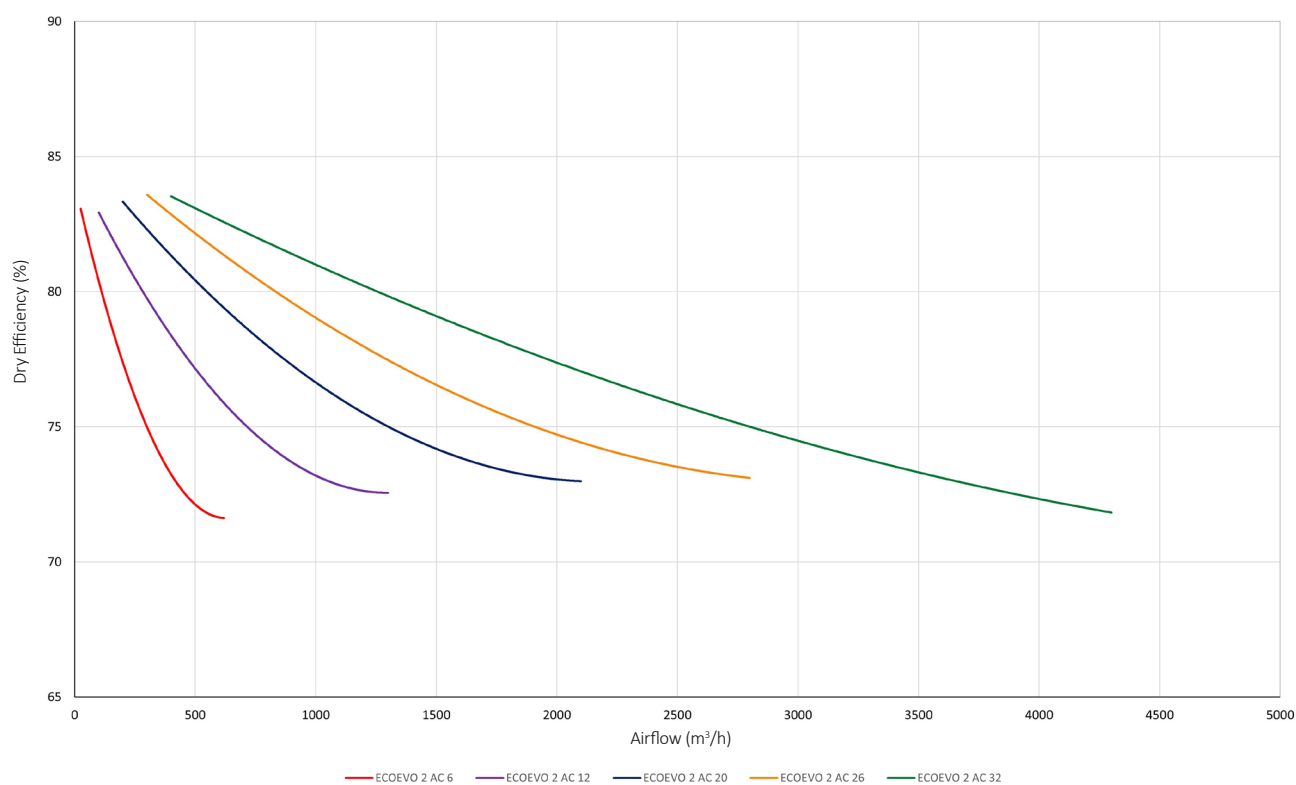
## CHARACTERISTICS

| ECOECO 2 AC               | 6            | 12       | 20       | 26       | 32       |
|---------------------------|--------------|----------|----------|----------|----------|
| Motor Power (kW)          | 2 x 0,29     | 2 x 0,35 | 2 x 0,59 | 2 x 0,59 | 2 x 0,59 |
| Power Supply (V   F   Hz) | 230   1   50 |          |          |          |          |
| IMAX (A)                  | 2,66         | 5,5      | 9,1      | 9,1      | 9,1      |
| Sound Pressure (dB(A)) ** | 39           | 33       | 37       | 43       | 52       |

\*\* Sound pressure level at 4 m, measured in open field according to ISO 3744

## PERFORMANCE CURVES

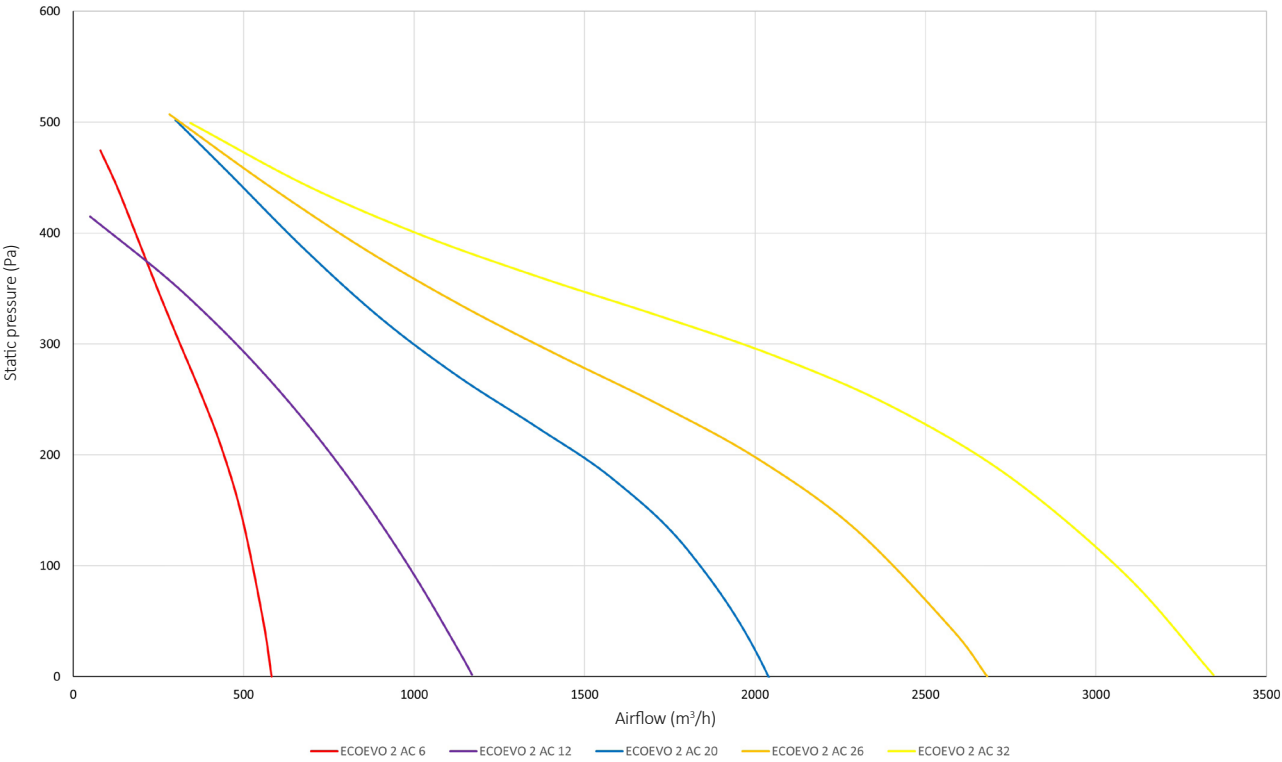
### RECOVERY EFFICIENCY CURVE



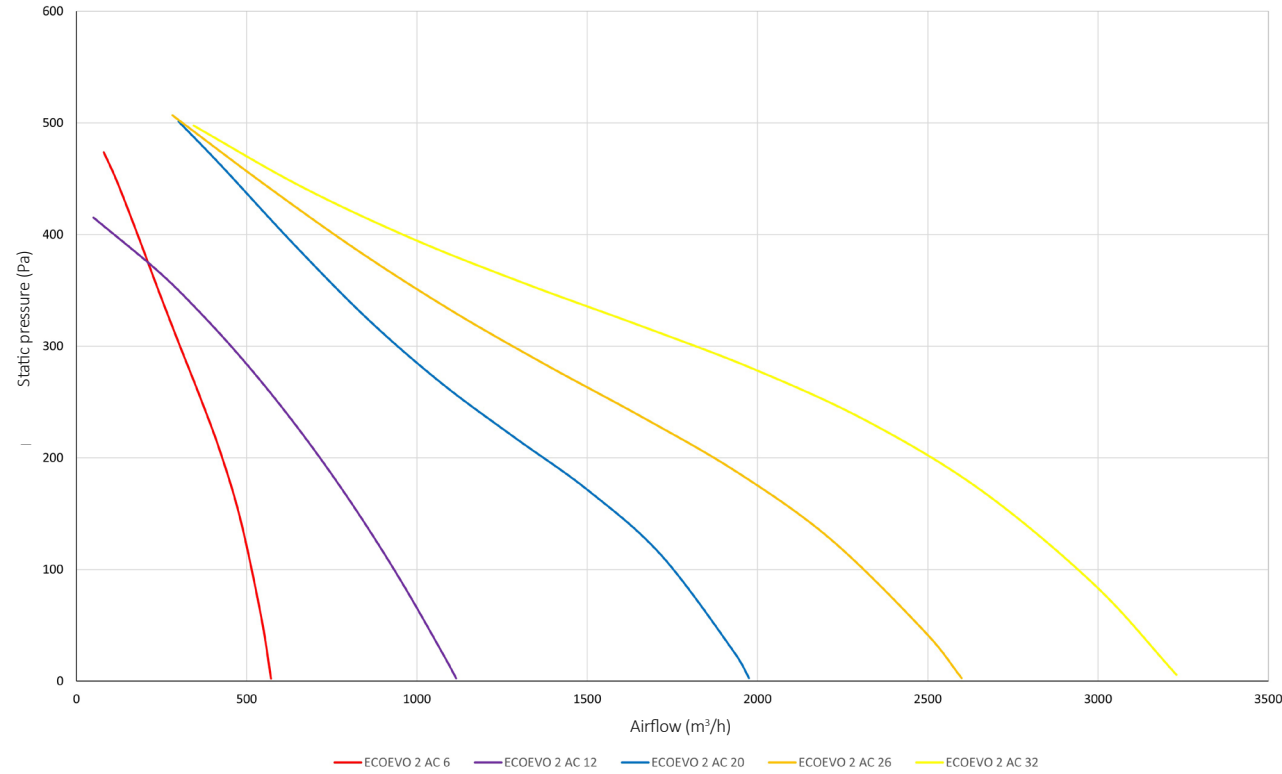


PERFORMANCE CURVES

ECOEOVO 2 AC ePM10 50%/M5

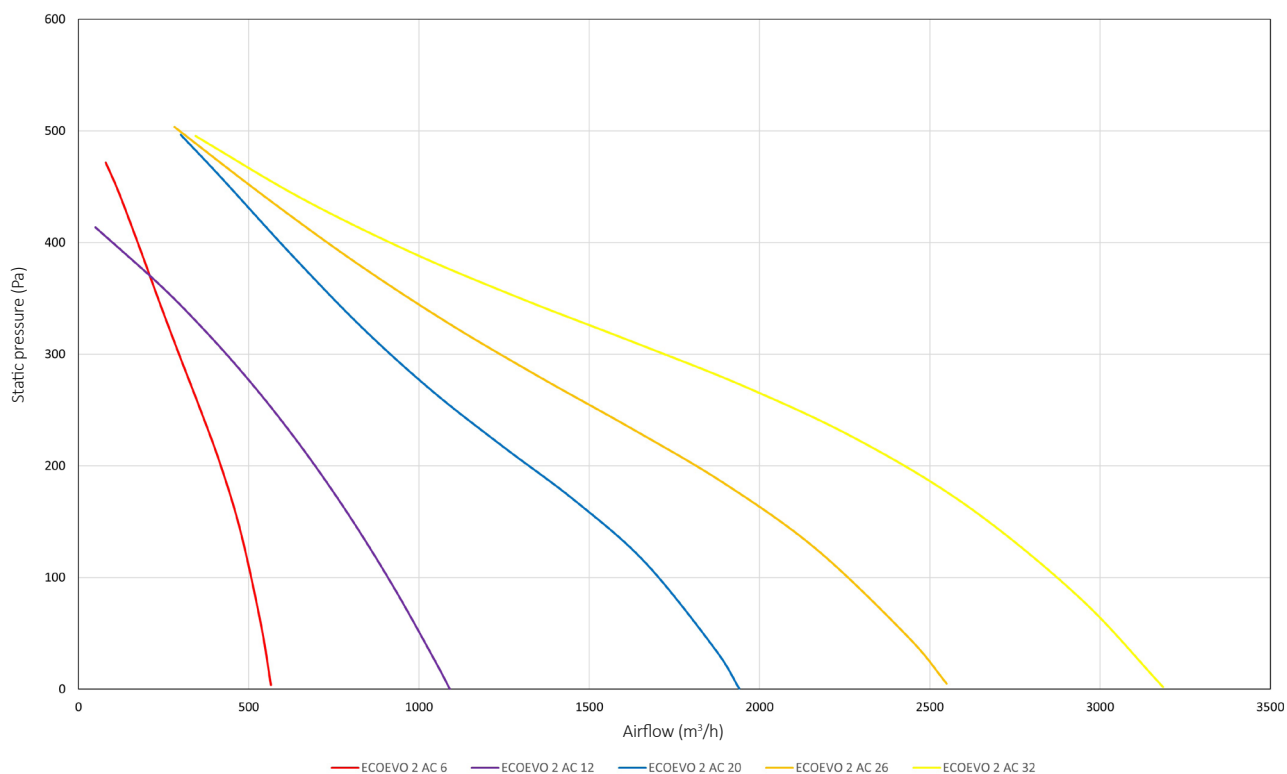


ECOEOVO 2 AC ePM1 50%/F7

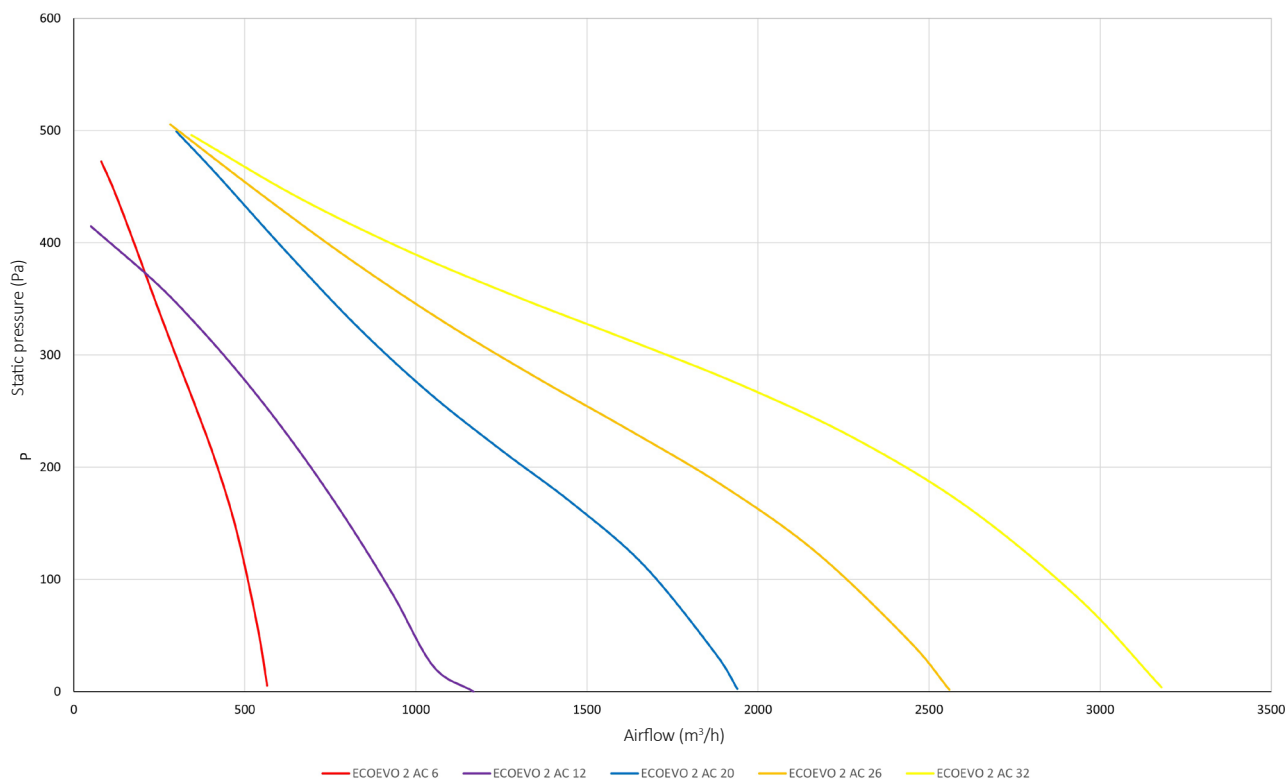


# PERFORMANCE CURVES

## ECOevo 2 AC ePM1 80%/F9



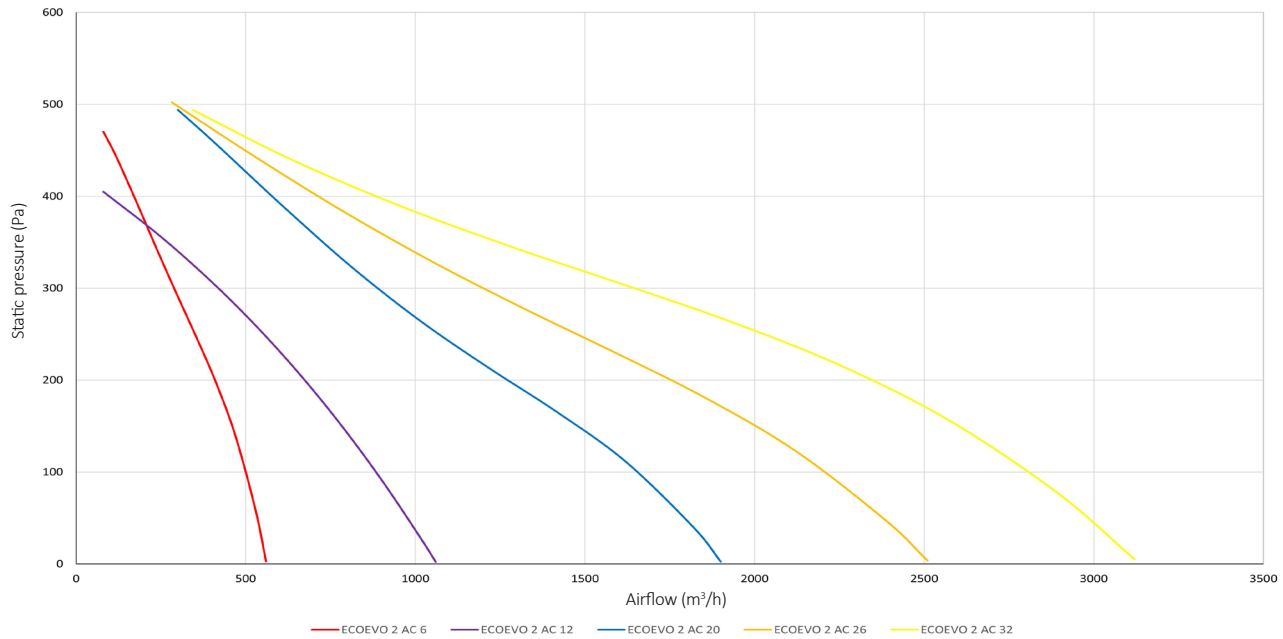
## ECOevo 2 AC ePM10 50%/M5 + ePM1 50%/F7



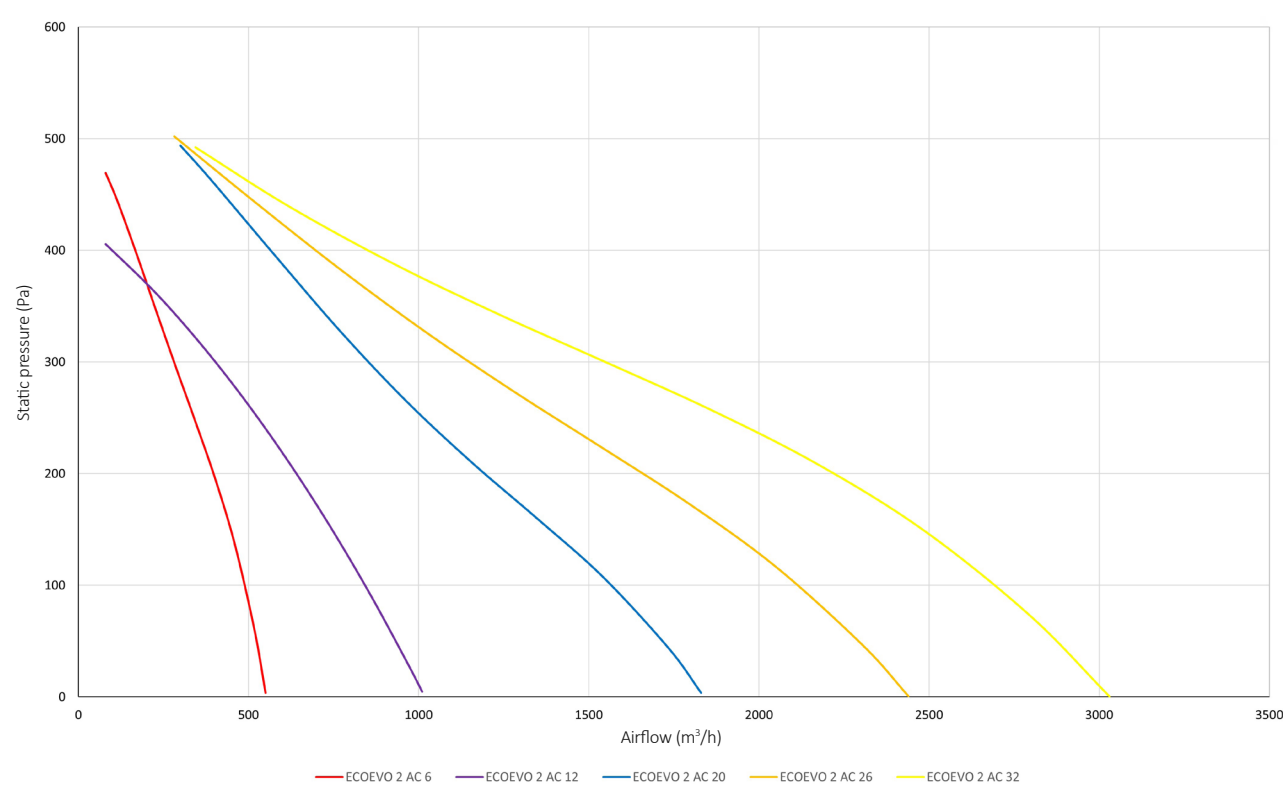


PERFORMANCE CURVES

ECOEOVO 2 AC ePM10 50%/M5 + ePM1 80%/F9



ECOEOVO 2 AC ePM1 50%/F7 + ePM1 80%/F9



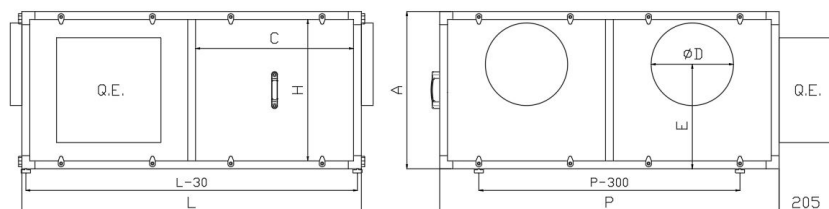
## DIMENSIONS

| ECOevo 2 AC H | 6   | 12   | 20   | 26   | 32   |
|---------------|-----|------|------|------|------|
| A (mm)        | 460 | 500  | 600  | 650  | 700  |
| L (mm)        | 900 | 1140 | 1300 | 1550 | 1600 |
| P (mm)        | 900 | 1140 | 1300 | 1550 | 1600 |
| ØD (mm)       | 200 | 315  | 355  | 355  | 355  |
| E (mm)        | 317 | 299  | 379  | 429  | 479  |
| C (mm)        | 405 | 525  | 605  | 730  | 755  |
| H (mm)        | 400 | 440  | 540  | 590  | 640  |
| Weight (kg)   | 77  | 130  | 181  | 224  | 247  |

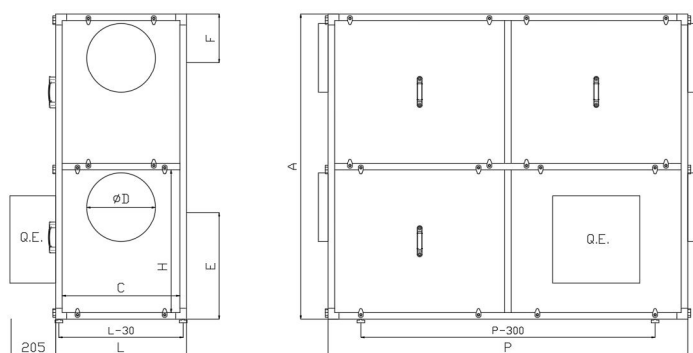
  

| ECOevo 2 AC V | 6    | 12   | 20   | 26   | 32   |
|---------------|------|------|------|------|------|
| A (mm)        | 900  | 1250 | 1400 | 1700 | 1700 |
| L (mm)        | 460  | 500  | 600  | 650  | 700  |
| P (mm)        | 1000 | 1500 | 1650 | 1850 | 2000 |
| ØD (mm)       | 200  | 315  | 355  | 355  | 355  |
| E (mm)        | 322  | 439  | 494  | 644  | 644  |
| F (mm)        | 143  | 202  | 221  | 221  | 221  |
| C (mm)        | 455  | 705  | 780  | 880  | 1005 |
| H (mm)        | 405  | 580  | 655  | 805  | 805  |
| Weight (kg)   | 92   | 156  | 217  | 268  | 296  |

### ECOevo 2 AC H



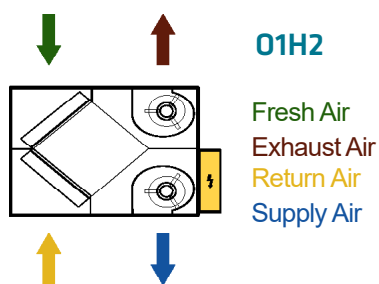
### ECOevo 2 AC V



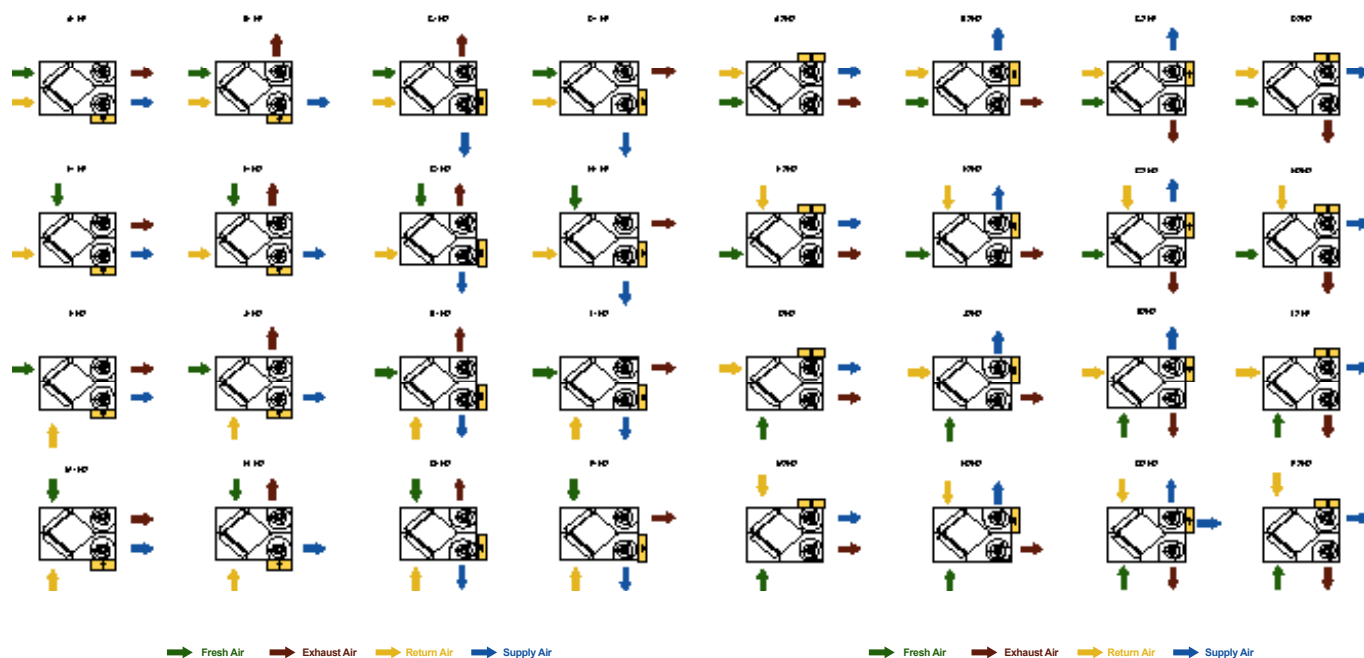
NOTE: MAINTENANCE CLEARANCE AND UNIT ACCESS DISTANCE | 750 MM



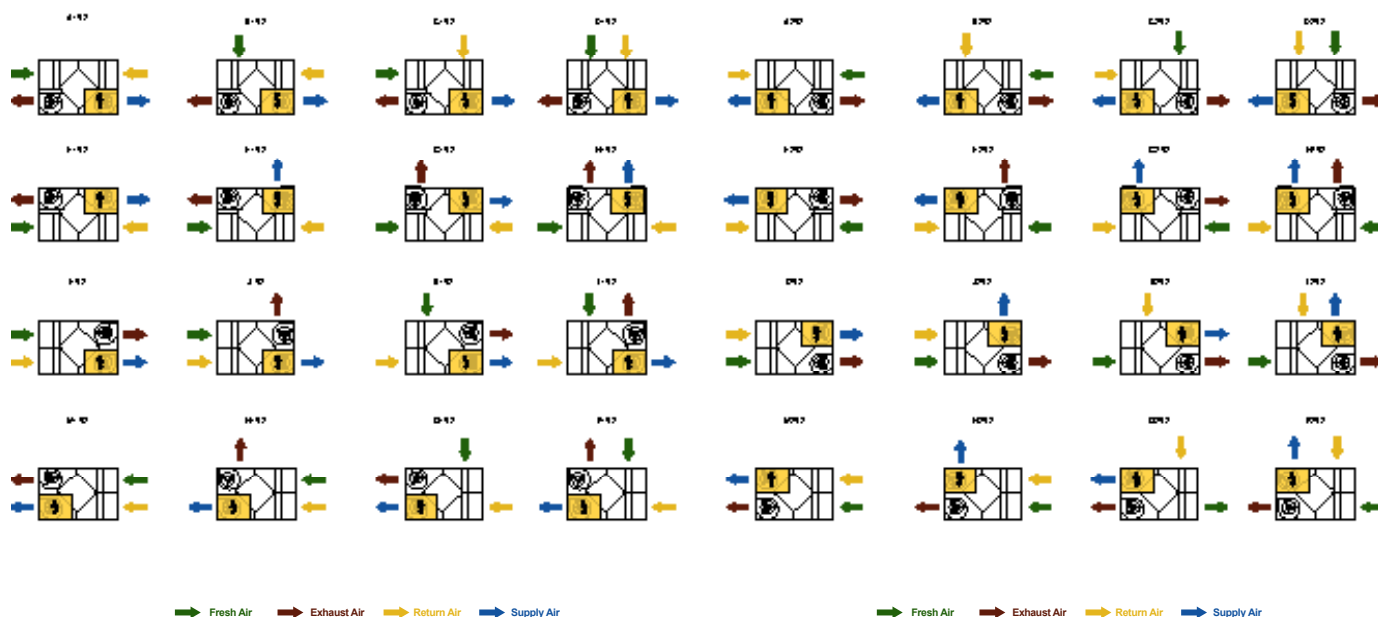
## STANDARD CONFIGURATIONS HORIZONTAL MODEL



## CONFIGURATIONS HORIZONTAL MODEL



## CONFIGURATIONS VERTICAL MODEL



## ERP VERIFICATION DOCUMENT

| MANUFACTURER                                    |           | ARFIT AIR CONDITIONING, S.A.                                                                                                                                                                                                                                                                                   |                |                |                |                |
|-------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|
| Model                                           |           | 6                                                                                                                                                                                                                                                                                                              | 12             | 20             | 26             | 32             |
| Type                                            |           | UVNR UVB                                                                                                                                                                                                                                                                                                       |                |                |                |                |
| Transmission Type                               |           | Variable Speed                                                                                                                                                                                                                                                                                                 | Variable Speed | Variable Speed | Variable Speed | Variable Speed |
| Heat Recovery System Type                       |           | OTHER                                                                                                                                                                                                                                                                                                          |                |                |                |                |
| Heat Recovery Thermal Efficiency                | %         | 73                                                                                                                                                                                                                                                                                                             | 74,5           | 74,9           | 74,8           | 75,2           |
| Nominal Airflow                                 | m³/s      | 0,125                                                                                                                                                                                                                                                                                                          | 0,228          | 0,408          | 0,639          | 0,842          |
| Input Power                                     | kW        | 0,17                                                                                                                                                                                                                                                                                                           | 0,32           | 0,57           | 0,67           | 0,85           |
| SPFint                                          | W<br>m³/s | 1579                                                                                                                                                                                                                                                                                                           | 1602,8         | 1594,3         | 1538,1         | 1536,9         |
| Frontal Velocity                                | m/s       | 1,02                                                                                                                                                                                                                                                                                                           | 1,39           | 1,57           | 1,69           | 1,91           |
| Nominal External Pressure                       | Pa        | 179                                                                                                                                                                                                                                                                                                            | 154            | 178            | 105            | 74             |
| Decrease in internal pressure (Ventilation)     | Pa        | 264                                                                                                                                                                                                                                                                                                            | 228            | 266            | 338            | 308            |
| Static Efficiency of Fans                       | %         | 32,6                                                                                                                                                                                                                                                                                                           | 27,2           | 31,9           | 42,2           | 37,8           |
| Maximum Declared Internal/External Leakage Rate | %         | 4,2/5,3                                                                                                                                                                                                                                                                                                        | 3,4/4,3        | 3,4/4,1        | 3,8/3,9        | 4,1/3,8        |
| Filter Classification                           |           | F7/M5                                                                                                                                                                                                                                                                                                          |                |                |                |                |
| Description: Visual notice regarding filters    |           | The filters warning is displayed on the unit's control system, either via a warning light or on-screen message, depending on the control system used. It is of the utmost importance to replace the filters regularly to improve the unit's performance and energy efficiency.e energy efficiency da unidade." |                |                |                |                |
| Sound Power Level (Lwa)                         | dB(A)     | 67                                                                                                                                                                                                                                                                                                             | 55             | 56             | 56             | 71             |
| Website                                         |           | www.arfit.pt                                                                                                                                                                                                                                                                                                   |                |                |                |                |