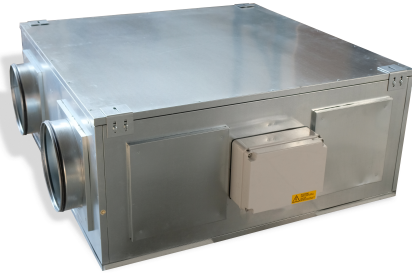


# EVHRN EC Heat exchanger cross flow up to 4500m<sup>3</sup>/h and 80% efficiency

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## Description

Non-residential dual flow ventilation unit with medium efficiency for heat recovery ( $\eta > 73\%$ ). Ideal solution to get the highest energy certification of buildings in the tertiary, industrial and collective residential sector (centralized condominium systems).

All sizes of the evhrn ec recovery unit can be installed both horizontally and vertical as inside they all have a double condensate collection tank.

The installation can be done both indoors and outdoors (with protective roof), with an ambient temperature between  $-15^{\circ}\text{C}$  and  $+50^{\circ}\text{C}$ .

## Characteristics

Structure made of self-supporting galvanized sheet metal frame with double paneling 25 mm thick and injected polyurethane foam insulation 42 kg/m<sup>3</sup> density. Condensate collection tank in galvanized sheet metal, Eurovent certified counter-current aluminum static heat exchanger, automatic by-pass, automatic defrosting of the exchanger (via anti-freeze strategy), backward curved radial fans with EC motors with electronic speed control, low consumption (Erp 2018), single-phase (up to size 200) and three-phase (size 250, 350 and 450) which guarantee high static pressure values available to the ducting. Circular inlets for connection to the air ducts, configuration that can be modified on site, possibility to change the position of the air ducts (by changing the position of the panels). Low pressure drop filters (EN 779) class ePM 10 50% (M5) for extract air and ePM class 1 70% (F7) for supply air. Side access doors and internal technical spaces for easy filter inspection / maintenance. Horizontal or vertical installation.

## use

Offices, shops, bars and restaurants, collective residential buildings. Ideal for air exchange with efficiencies up to 80%.

## Electronic control device

Version IN2: with electronic card for 3-step speed management, anti-freeze function and automatic bypass. Wall-mounted touch remote panel on 503 box. Temperature sensors on the machine and the possibility of managing the auxiliary hot water coil.

Humidity / air quality sensors integrated in the remote display:

- EVCNV2-N: advanced remote control with integrated humidity and VOC / CO<sub>2</sub> sensors, black color.
- EVCNV2-B: advanced remote control with integrated humidity and VOC / CO<sub>2</sub> sensors, white color.
- EVCNW2-N: advanced remote control with integrated humidity and VOC / CO<sub>2</sub> sensors, with integrated black Wi-Fi.
- EVCNW2-B: advanced remote control with integrated humidity and VOC / CO<sub>2</sub> sensors with integrated white Wi-Fi.

Version E: Solution with electrical panel on board the unit complete with microprocessor and dedicated regulation. Management of the modulating fans, display for the temperature probes inside the machine, dirty filters management with pressure switches, freecooling management with temperature probes. Pre and post heating coil management, water and electric cooling. Management of on / off and modulating valves at 2-3 points. Dehumidification management through external batteries and humidity probes. Fan operation with variable speed, constant flow or constant pressure. Wide graphic interface with configuration menu and multilingual user menu. Possibility of simplified or advanced remote keyboard connection.

## Adjustment configuration IN2

The machine will be delivered with H5-A or V1-A configuration. Air attacks are configurable during the installation phase through the removable panels. A B configurations selectable by electronics.

## Accessories

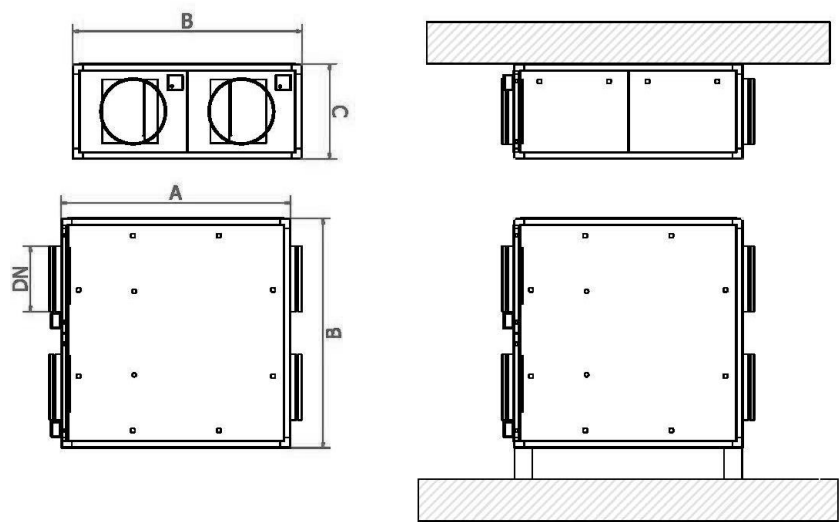
- EVBE - ON/OFF duct electric heater.
- EVBER - Duct electric heater with integrated control.
- EVBAC - Pre-heating or post-heating coil.

- EVBAF - Pre-cooling or post-cooling coil.

List of possible configurations within the "Documentation" section.

Dimension

| Dimensions                |      | EVHRN EC 40 | EVHRN EC 70 | EVHRN EC 100 | EVHRN EC 150 | EVHRN EC 200 | EVHRN EC 250 | EVHRN EC 350 | EVHRN EC 450 |
|---------------------------|------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Width A                   | mm   | 750         | 1050        | 1050         | 1250         | 1390         | 1390         | 1900         | 1900         |
| Depht B                   | mm   | 750         | 1050        | 1050         | 1250         | 1390         | 1390         | 1900         | 1900         |
| Altezza C                 | mm   | 390         | 400         | 400          | 550          | 610          | 610          | 710          | 860          |
| Air Connection Diameter   | Ø mm | 160         | 200         | 200          | 315          | 355          | 355          | 400          | 450          |
| Weight - H Version        | kg   | 75          | 98          | 103          | 155          | 220          | 231          | 245          | 275          |
| Weight - V Version        | kg   | 78          | 101         | 106          | 158          | 223          | 234          | 248          | 278          |
| Water Connection Diameter | Ø mm | 16          | 16          | 16           | 16           | 16           | 16           | 16           | 16           |



| Models                                                                                                                                                                                                                                         |       | EVHRN EC 40                                                                                                                                   | EVHRN EC 70 | EVHRN EC 100 | EVHRN EC 150 | EVHRN EC 200 | EVHRN EC 250    | EVHRN EC 350 | EVHRN EC 450 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|--------------|--------------|-----------------|--------------|--------------|
| Fan Type                                                                                                                                                                                                                                       |       | rushless fans with electronically commutated motor (EC motor) and modulating control                                                          |             |              |              |              |                 |              |              |
| Nr. Funs                                                                                                                                                                                                                                       | Nr    | 2                                                                                                                                             |             |              |              |              |                 |              |              |
| Nominal Air Flow                                                                                                                                                                                                                               | m³/h  | 400                                                                                                                                           | 600         | 1000         | 1400         | 1900         | 2500            | 3400         | 4500         |
| Available External Static Pressure                                                                                                                                                                                                             | Pa    | 148                                                                                                                                           | 117         | 124          | 122          | 102          | 255             | 121          | 114          |
| Sound Power Level Lw (EN 3747) Radiated from the Casing                                                                                                                                                                                        | dB(A) | 61,2                                                                                                                                          | 63,6        | 66,5         | 67,3         | 71,1         | 72,2            | 75,2         | 77,3         |
| Sound Pressure Level Lp at 3 m (EN 3744) Radiated from the Casing                                                                                                                                                                              | dB(A) | 39,6                                                                                                                                          | 41,8        | 44,5         | 45,2         | 48,4         | 49,7            | 52,5         | 54,1         |
| Sound Power Level Lw (EN 3747) Radiated from the Duct                                                                                                                                                                                          | dB(A) | 69,6                                                                                                                                          | 72,6        | 77,8         | 78,4         | 82,5         | 86,9            | 86,5         | 87,4         |
| Recovery Efficiency                                                                                                                                                                                                                            |       | Piastre in alluminio controcorrente                                                                                                           |             |              |              |              |                 |              |              |
| Heat Recovery Efficiency                                                                                                                                                                                                                       | %     | 73,1                                                                                                                                          | 79,8        | 73,0         | 74,5         | 74,8         | 73,9            | 77,5         | 74,8         |
|                                                                                                                                                                                                                                                |       | Dati Riferiti alle seguenti condizioni (UNI EN 13141-7) :<br>-Nominal Air Flow<br>-aria esterna 5°C con 72% ur / aria espulsa 25°C con 28% ur |             |              |              |              |                 |              |              |
| Filter Type                                                                                                                                                                                                                                    |       | Rinnovo ePM 1 - 70 % (F7) / Estrazione ePM 10 - 50 % (M5)                                                                                     |             |              |              |              |                 |              |              |
| Supply Voltage                                                                                                                                                                                                                                 | V     | 230V / 1 / 50 Hz                                                                                                                              |             |              |              |              | 400V / 3 / 50Hz |              |              |
| Maximum Power Consumption                                                                                                                                                                                                                      | kw    | 0,20                                                                                                                                          | 0,29        | 0,61         | 0,61         | 0,61         | 1,98            | 1,98         | 2,2          |
| Protection Rating                                                                                                                                                                                                                              |       | IP 20                                                                                                                                         | IP 20       | IP 20        | IP 20        | IP 20        | IP 20           | IP 20        | IP 20        |
| Dati riferiti ai valori nominali dichiarati dal costruttore dei ventilatori<br>Le unità devono essere collegate ai canali di distribuzione<br>Le prestazioni sono state verificate con filtri a bassa perdita di carico in dotazione "puliti". |       |                                                                                                                                               |             |              |              |              |                 |              |              |

Price List of Recuperators and Accessories - Version IN2

| Modello | EVHRN EC  | EVCNV2-N - Black | EVCNV2-B - White | EVCNW2-N - Wi-Fi - Black | EVCNW2-B - Wi-Fi - White | KP-EVHRN - Foot Kit (4 pcs) | EVFHRN - Pair Filter Kit |
|---------|-----------|------------------|------------------|--------------------------|--------------------------|-----------------------------|--------------------------|
|         | Eur       | Eur              | Eur              | Eur                      | Eur                      | Eur                         | Eur                      |
| 40      | 4.378,40  | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 251,00                   |
| 70      | 5.309,35  | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 305,18                   |
| 100     | 6.638,69  | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 305,18                   |
| 150     | 7.502,57  | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 306,50                   |
| 200     | 10.263,22 | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 507,30                   |
| 250     | 12.778,39 | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 507,30                   |
| 350     | 14.904,54 | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 653,94                   |
| 450     | 17.351,29 | 240,12           | 240,12           | 296,45                   | 296,45                   | 223,94                      | 1.177,09                 |



Roof Protection

| Models       | Horizontal Version | Vertical Version |
|--------------|--------------------|------------------|
|              | Eur                | Eur              |
| EVHRN EC 40  | 191,57             | 168,63           |
| EVHRN EC 70  | 260,36             | 184,82           |
| EVHRN EC 100 | 260,36             | 184,82           |
| EVHRN EC 150 | 311,63             | 215,85           |
| EVHRN EC 200 | 356,15             | 236,08           |
| EVHRN EC 250 | 356,15             | 236,08           |
| EVHRN EC 350 | 458,67             | 284,65           |
| EVHRN EC 450 | 458,67             | 308,93           |