

# KOMFORT GRE EC Series

## KOMFORT GRE EC

65<sup>dB</sup> Noise Level    5000 m<sup>3</sup>/h Maximum Airflow    ≤3% Internal Leakage Rate



The parameters are for the 5000m<sup>3</sup>/h unit

The KOMFORT GRE series total heat recovery unit is designed specifically for ultra-low energy consumption buildings.

## 6 Advantages

1



### 3-Level Noise Reduction Design Powered by High-Performance EC Fans

- (1) Utilization of efficient EC fans, optimizing airflow passages through principles of aerodynamics, resulting in low resistance, high static pressure, and lower noise levels.
- (2) Stringent dynamic balance verification, ensuring lower operational noise of the fan.
- (3) Implementation of shock absorbers between the fan and chassis, effectively reducing overall operational vibrations.

2



### RS485 Communication Functionality Integration with Smart Building Management Systems

The control panel comes with a reserved RS485 interface, allowing seamless integration with smart building management systems (BMS).

3



### Standard Bypass Function for Rapid Ventilation in Transitional Seasons

The entire series comes equipped with a bypass function. During the mild temperatures of spring and autumn, the bypass mode operates without engaging the heat recovery unit. This not only extends the lifespan of the heat exchanger but also facilitates faster whole-house ventilation, as there is no need for heat recovery.

4



### Efficient Total Heat Exchanger

Utilizing a total heat exchanger, the system facilitates physical exchange of temperature and humidity between indoor and outdoor air. With a total heat recovery efficiency of up to 72%, it effectively captures and recycles indoor thermal energy, reducing the thermal load of the fresh air. This results in energy conservation and environmental friendliness, ensuring a more comfortable temperature for the fresh air supply.

5



### High-Efficiency Composite Filter Ensuring a Continuous Supply of Clean Air

Utilizing a dual-layer composite filter comprised of medical-grade G4 and H11 materials, our filtration system achieves an impressive 99.5% purification efficiency for PM2.5 particles.

6



### Air Quality Monitoring 24h

The entire series comes standard with environmental sensors, capable of real-time monitoring of environmental parameters such as temperature, humidity, CO<sub>2</sub>, PM<sub>2.5</sub>, VOC, etc. This ensures constant vigilance over the air quality around you, providing peace of mind and healthier living conditions.



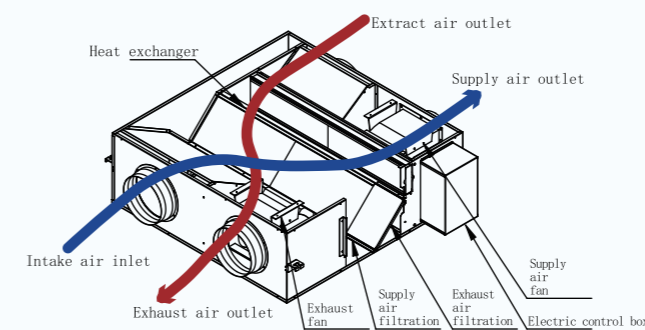
## Human-centered design, convenient installation, suitable for complex spaces.

- Models with an airflow of 800-1000CMH can be installed with a 180° flip mirror image to adapt to different maintenance spaces.
- Models with an airflow of 1500-5000CMH are available in both left and right structures to adapt to different installation and maintenance spaces.

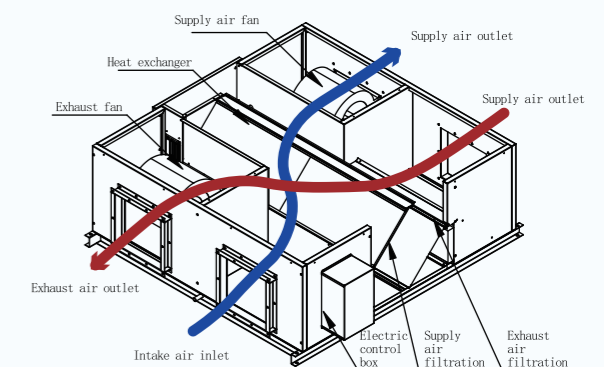


## Multiple operating modes suitable for various application scenarios

- **Intelligent mode**  
Automatically adjusts operation based on air quality sensor data.
- **Fresh air mode**  
Simultaneous opening of supply and exhaust air, with air passing through the heat exchange core.
- **Bypass mode**  
In bypass mode, the bypass valve is open, and both supply and exhaust air are simultaneously opened, bypassing the heat exchange core for rapid ventilation and air exchange.



KOMFORT GRE EC800-1000

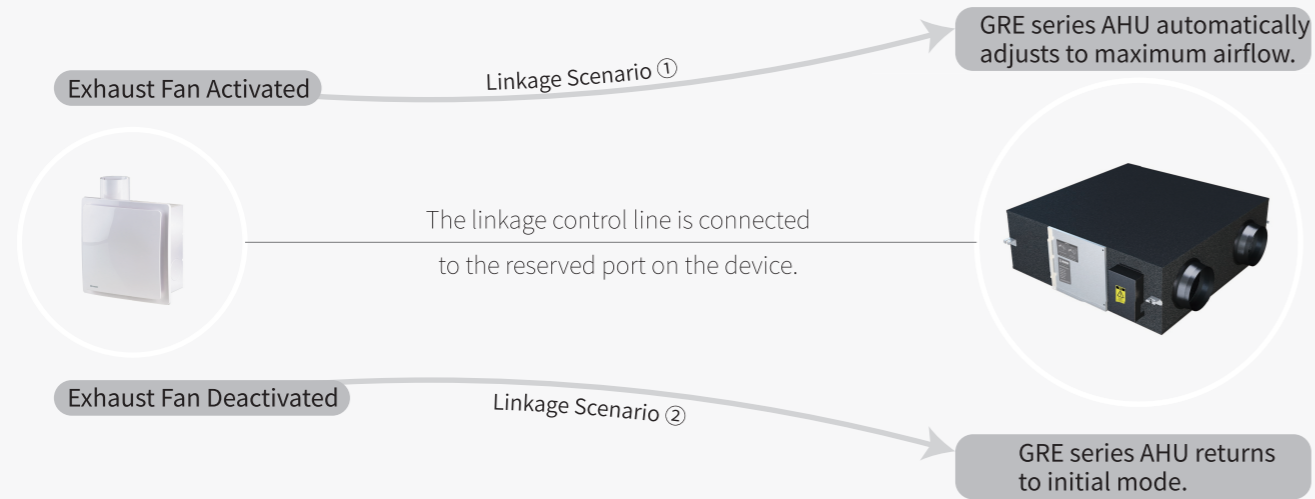


KOMFORT GRE EC1500-5000

## Reserved linkage ports for intelligent exhaust ventilation

The fresh air valve is linked with the supply air fan. After the supply air fan is turned off, the fresh air valve synchronously closes to prevent air backflow into the indoor space during high temperatures or extremely cold weather. Reserved exhaust linkage ports enable on-off linkage with exhaust equipment to balance indoor airflow.

### Linkage Diagram

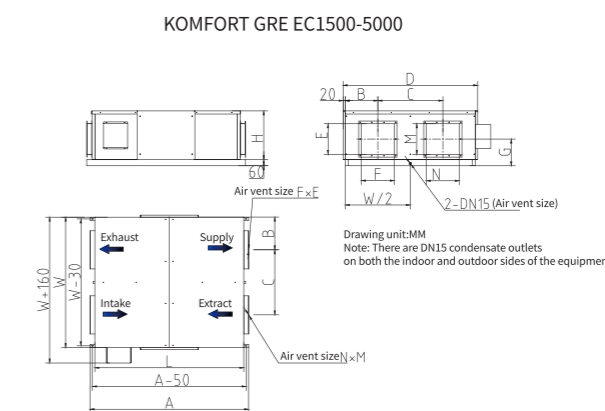
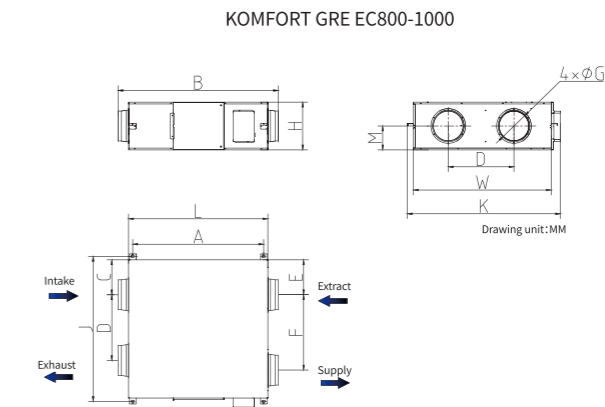


## Optional Electric Heating Module (Optional), Suitable for a Wider Range of Climate Zones

The optional electric heating module allows the product to be used in extremely cold or humid climates. In regions where the outdoor temperature drops below -5°C in winter or the relative humidity exceeds 85%, it is recommended to choose the optional fresh air preheating device to prevent the possibility of freezing damage to the heat exchanger.

## GRE Series - Product Dimensions

| Full Dimensions Size[mm] |      |      |     |      |      |     |     |     |     |     |      |      |     |
|--------------------------|------|------|-----|------|------|-----|-----|-----|-----|-----|------|------|-----|
| Model                    | L    | W    | H   | A    | B    | C   | D   | E   | F   | G   | J    | K    | M   |
| KOMFORT GRE EC800        | 1140 | 1130 | 390 | 1070 | 1310 | 285 | 578 | 285 | 578 | 245 | 1185 | 1340 | 195 |
| KOMFORT GRE EC1000       | 1140 | 1375 | 390 | 1070 | 1310 | 385 | 680 | 285 | 680 | 245 | 1430 | 1585 | 195 |

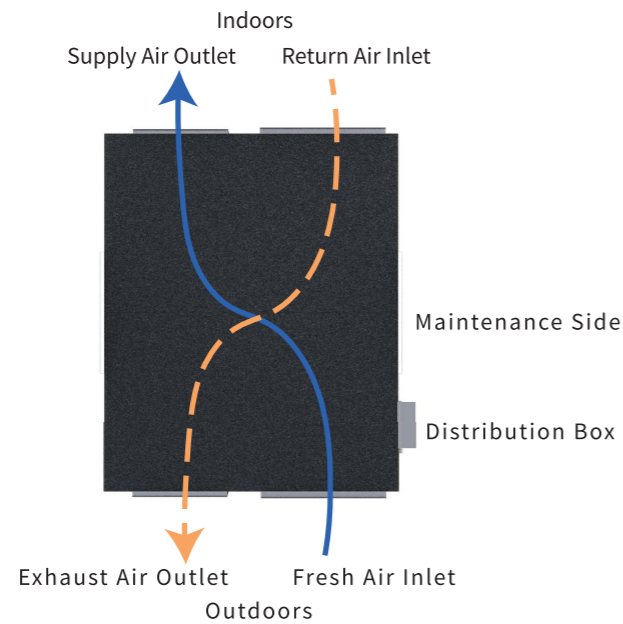


| Full Dimensions Size[mm] |      |      |      |      |     |     |      |     |     |     |     |     |
|--------------------------|------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|
| Model                    | L    | W    | H    | A    | B   | C   | D    | E   | F   | G   | M   | N   |
| KOMFORT GRE EC1500       | 1450 | 1270 | 540  | 1550 | 318 | 635 | 1450 | 300 | 320 | 260 | 300 | 320 |
| KOMFORT GRE EC2000       | 1495 | 1470 | 580  | 1595 | 368 | 735 | 1650 | 300 | 320 | 260 | 300 | 320 |
| KOMFORT GRE EC2500       | 1495 | 1470 | 580  | 1595 | 368 | 735 | 1650 | 300 | 320 | 260 | 300 | 320 |
| KOMFORT GRE EC3000       | 1625 | 1470 | 665  | 1725 | 368 | 735 | 1650 | 275 | 435 | 270 | 420 | 500 |
| KOMFORT GRE EC4000       | 1785 | 1470 | 665  | 1885 | 368 | 735 | 1650 | 275 | 435 | 360 | 420 | 500 |
| KOMFORT GRE EC5000       | 1785 | 1470 | 1090 | 1885 | 368 | 735 | 1650 | 395 | 434 | 580 | 690 | 585 |

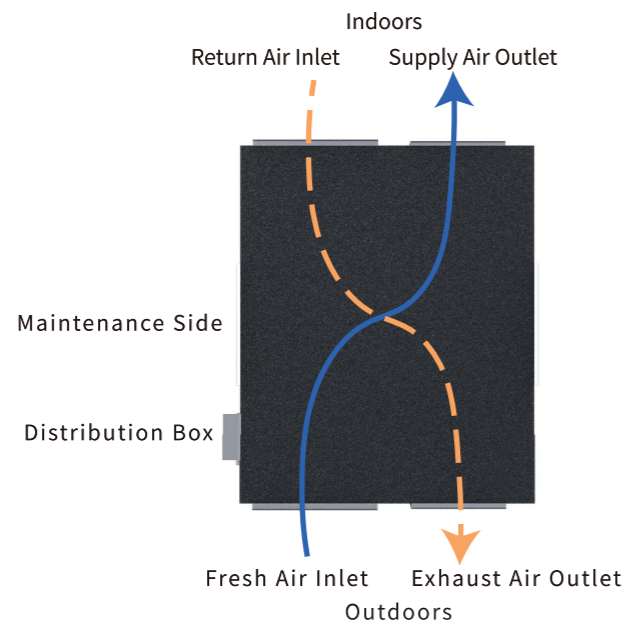
### Left and Right Model Distinction

The models with airflow ranging from 1500 to 5000m<sup>3</sup>/h are available in both left and right configurations.

When viewing the unit from above, along the direction of the airflow entering the room, if the maintenance side is on the right side of the unit, it is defined as "right"; conversely, if the maintenance side is on the left side of the unit, it is defined as "left."



Right Configuration



Left Configuration

### GRE Series - Technical Parameters

| KOMFORT GRE                                  | EC800 L/R        | EC1000 L/R | EC1500 L/R | EC2000 L/R | EC2500 L/R | EC3000 L/R | EC4000 L/R | EC5000 L/R |
|--|------------------|------------|------------|------------|------------|------------|------------|------------|
| Voltage Input                                | 220V-50Hz        |            |            |            |            |            | 380V-50Hz  |            |
| Rated Fresh Air Volume [m <sup>3</sup> /h]   | 800              | 1000       | 1500       | 2000       | 2500       | 3000       | 4000       | 5000       |
| Fresh Air External Static Pressure [Pa]      | 120              | 120        | 160        | 180        | 210        | 250        | 250        | 280        |
| Rated Exhaust Air Volume [m <sup>3</sup> /h] | 800              | 1000       | 1500       | 2000       | 2500       | 3000       | 4000       | 5000       |
| Exhaust Air External Static Pressure [Pa]    | 100              | 100        | 160        | 180        | 200        | 200        | 200        | 200        |
| Rated Power [W]                              | 355              | 440        | 675        | 890        | 1120       | 1325       | 1800       | 2245       |
| Total Heat Exchange Efficiency [%]           | 70.3             | 70.5       | 70.4       | 70.8       | 71.5       | 71.3       | 71.6       | 72         |
| Noise [dB(A)]                                | 46               | 48         | 52         | 55         | 57         | 59         | 62         | 65         |
| Casing Material                              | Galvanized Sheet |            |            |            |            |            |            |            |
| Insulation Material                          | NBR Rubber       |            |            |            |            |            |            |            |
| Exhaust Air Filter                           | G4               |            |            |            |            |            |            |            |
| Fresh Air Filter                             | G4+H11           |            |            |            |            |            |            |            |
| PM2.5 Filtration Efficiency                  | 99.5%            |            |            |            |            |            |            |            |
| Weight [kg]                                  | 74               | 84         | 172        | 190        | 194        | 218        | 275        | 335        |

Note:

1. All products in this series come standard with fresh air bypass function.
2. The products come standard with environmental sensors, which can display environmental parameters such as temperature, humidity, CO<sub>2</sub>, PM<sub>2.5</sub>, VOC, etc., and can intelligently control the fresh air volume based on CO<sub>2</sub> and PM<sub>2.5</sub>.

### Optional Electric Heating Box Parameter Table

| Model             | Electric heating parameters |                      | Unit shell size(mm)<br>Excluding electronic control,<br>flange, and suspension foot dimensions | Size of air inlet and outlet(mm) |
|-------------------|-----------------------------|----------------------|--|----------------------------------|
|                   | Electric heating power (kW) | Configure contactors |  |                                  |
| KOMFORT GRE 800E  | 1.5                         | CJX2-1210            | 420×400×420  | Ø245                             |
| KOMFORT GRE 1000E | 2.5                         | CJX2-1810            | 420×400×420  | Ø245                             |
| KOMFORT GRE 1500E | 4.5                         | CJX2-1810            | 520×460×520  | 320×300                          |
| KOMFORT GRE 2000E | 5.8                         | CJX2-2510            | 520×460×520  | 320×300                          |
| KOMFORT GRE 2500E | 7                           | CJX2-4011            | 600×560×620  | 320×300                          |
| KOMFORT GRE 3000E | 8                           | CJX2-4011            | 600×560×620  | 500×420                          |
| KOMFORT GRE 4000E | 10.5                        | CJX2-5011            | 600×610×620  | 500×420                          |
| KOMFORT GRE 5000E | 13                          | CJX2-5011            | 720×810×770  | 690×585                          |

Note:

The fresh air electric preheating module adopts PTC electric heating and can be installed on the outdoor side of the fresh air duct (electrical wiring needs to be reserved).

It is recommended to choose the fresh air electric preheating module based on the environmental conditions of the product application. For example, model EC500 L/R E is equipped with a fresh air electric preheating module, while EC500 L/R does not come with a fresh air electric preheating module.