

# GLOBAL RX TOP

Ventilation unit with rotary heat exchanger



Ventilation unit with rotary heat exchanger, for commercial premises. Suitable both for new construction and when renovating existing buildings.

Max. airflow 3050 m<sup>3</sup>/h (848 l/s).

Temperature efficiency: up to 85%.

Energy-efficient and quiet fans with fan impeller made of composite material or aluminium.

For installation indoors in building service rooms, storage areas, etc.

Heat exchangers with temperature efficiency class Standard or Premium are available.

Top quality control system with touch screen.

Units up to GLOBAL RX 10 have external dimensions that allow passage through a door.

## HIGHLY EFFICIENT VENTILATION UNIT WITH ENERGY RECOVERY

Each project has unique parameters and must satisfy different requirements. That is why Swegon offers a wide selection of air handling units and always has a solution to match your needs.

The GLOBAL series includes fans equipped with high performance direct-current motors (TAC technology) that meet the most stringent requirements regarding energy performance, such as the ErP2018. The latest control system (Total Airflow Control) is at the technical forefront, thanks both to its internal functionality and its open communication (Modbus, TCP/IP, BACnet, KNX).

## PLUG-AND-PLAY UNIT

The GLOBAL ventilation units are supplied as plug-and-play units. The basic functions are factory programmed and the accessories are installed, connected and configured prior to delivery from the factory. When the display has been connected, you only need to turn on the power to the unit and, if necessary, alter the preconfigured parameter values.

## ACCESSIBILITY FOR MAINTENANCE

The unit has large inspection doors that make the maintenance work easier. All components, including bypass dampers and actuators, are easily accessible and can be cleaned with mild detergent.

## ROTARY HEAT EXCHANGER

The rotary heat exchanger has a high temperature efficiency, above 80%, and is made of salt-resistant aluminium. It satisfies the requirements in standard EN 308 and is Eurovent certified.

## FANS

The direct-driven EC fans have fan impellers made of composite material as standard. Aluminium fan impellers are available as an option. The benefits of composite fan impellers are their low weight and more aerodynamic form, which results in low noise levels and provides the fan with lower specific fan power (SFP). The impellers are made of bio-polyamides that are fully recyclable. The fan motor is of the EC type (electronically commutated) with an integrated EC control unit. The motor conforms to enclosure class IP 54. The powerful EC fans ensure that sufficient external pressure is available, even at higher airflows. The efficiency conforms to the requirements in ErP2018. The fans are dynamically balanced in accordance with ISO 1940, class G6.3.

## FREE COOLING

The reduction in the speed of the rotary heat exchanger utilises the cooler outdoor air to cool the premises if necessary. This makes the free cooling function possible and is regulated automatically based on the indoor and outdoor temperature.

## HEATER

The GLOBAL units can be supplied with a factory-fitted, built-in, waterborne or electric post-heater. The heater's output is adjusted in order to maintain a constant temperature.

## DAMPERS

The GLOBAL units can be supplied with factory-fitted, motor-driven outdoor air and exhaust air dampers. In units fitted with dampers, the TAC control unit activates a fan start delay when the unit is started up. Spring return actuators are available as optional equipment. For units with a circular connection, the dampers are supplied separately.

## AIR FILTERS

The GLOBAL units are supplied with bag filters made of glass fibre. The function of the filter is to keep both the air and the heat exchanger free from contaminants. As standard, the outdoor air filter has filter class ePM1  $\geq$  70% and the extract air filter has ePM10  $\geq$  55%. Extract air filters of class ePM1  $\geq$  70% are not available as an option, as this would have a detrimental impact on energy efficiency. The filters are installed in lockable guide rails to make filter changing and cleaning of the filter section easier. The filter guide rails satisfy the requirements for airflow leakage according to filter class F9/ePM1  $\geq$  80% (EN 1886). The filter monitoring function is integrated in the TAC control unit's standard configuration.

Pre-filter of class G4/COARSE, installed inside the air handling unit, can be ordered as an optional extra. A pre-filter is used when the outdoor air is heavily contaminated, in order to prevent the fine filters in the GLOBAL unit from clogging up unreasonably quickly. All filters are classified in accordance with both ISO EN 16890 and ISO EN 779, and are Eurovent certified: 08.10.44.

## CONTROL UNITS

The integrated control system TAC is connected to HMI TAC-touch, a 4.3" capacitive touch screen. The air handling units can be configured and controlled from the touch screen.

SAT MODBUS for configuration, indication and display as well as controlling the operation of the unit via MODBUS RTU.

SAT KNX for configuration, indication and display as well as controlling the operation of the unit via KNX.

SAT Ethernet for configuration, indication and display as well as controlling the operation of the unit via MODBUS TCP/IP.

BACnet gateway for configuration, indication and display as well as controlling the operation of the unit via BACnet IP.

SAT Wifi for configuration, indication and display as well as controlling the operation of the unit via wireless communication.

## CHARACTERISTICS

- EN1886 classification: T3/TB2/F9/L2/D2.
- Eurovent certified heat exchanger with high temperature efficiency.
- Built-in electrical or waterborne post-heater available as an option. Fully integrated control system.
- HMI with intuitive commissioning menu and integrated, context-based assistance.
- EC plenum fans with fan impellers made of composite material for high efficiency and low noise levels. Aluminium fan impellers are available as an option.
- All doors can be hung on hinges on both sides. This makes it easier to access all components, including in installations where space is limited.
- Made of galvanised sheet steel painted in colour RAL7016, with 50 mm mineral wool insulation.
- Robust design with aluminium profiles.
- Designed so that it can be dismantled and reassembled on site.
- Circular duct connections with rubber seal (05/08).
- Plug-and-play unit with complete electrical connections. The unit and all the accessories are installed, connected and configured prior to delivery from the factory.
- Filter class ePM1 70% for outdoor air and ePM10 55% for extract air. Class G4 pre-filter for outdoor air intake available as an option.
- Base frame with openings facilitates transport and handling at the installation site.
- The base frame is 125 mm tall and has 48 mm lifting holes.
- Installation and detailed work of high quality; the hinge's closing force and alignment can be adjusted.

- Tried and tested, preconfigured TAC control unit.
- Software for unit selection is available online.
- ERP2018-optimised design.
- Conforms to the requirements in hygiene standard VDI6022.
- Conforms to the requirements in standard ISO EN 16890.
- Conforms to the requirements in standard ISO EN 16798-3.
- Units up to GLOBAL RX TOP 12 have external dimensions that allow passage through a door.

## OPTIONAL EXTRAS

Built-in electric post-heater  
Built-in waterborne post-heater  
External post-heater/cooler  
Motor-driven dampers  
Flexible duct connection : cricular or rectangular (20/30 mm)  
Slip clamp 20 mm



## THE CORRECT OPERATING MODE IS IMPORTANT

### AIRFLOW OR PRESSURE

Whether the ventilation system is to work with constant pressure, with a constant airflow or be controlled with voltage signal 0–10 V from a control system is dependent on the application and the requirements stipulated by the installation in question. The built-in control system ensures that the operation is always well-balanced.

### CONSTANT AIRFLOW

This operating mode is often used in buildings that do not require variable airflows, such as office buildings and commercial properties, schools, daycare centres, sports halls, etc., where the airflow requirement is relatively stable.

### DEMAND CONTROL

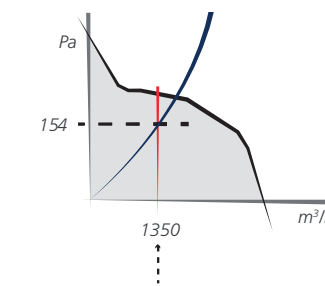
Alternatively, the airflow can be adjusted automatically according to the ventilation requirements and the wishes of the users with the aid of the 0–10 V signal input, for example with a CO<sub>2</sub> sensor or with the customer's automated building management system or equivalent.

### CONSTANT PRESSURE

This operating mode is very well suited to premises where you ideally want to have the potential to control the airflow individually in the various rooms. A pressure sensor ensures that the pressure remains constant, even when the airflow is increased or decreased in accordance with the ventilation requirement in the room.

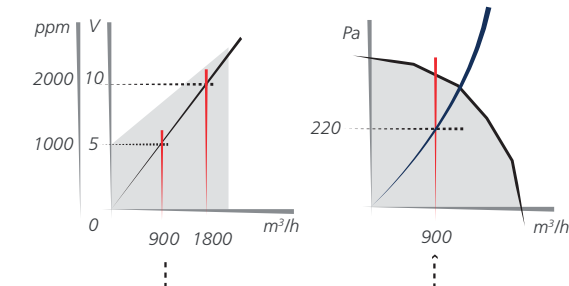
The airflow remains unchanged in all the other rooms, i.e. the ventilation system works constantly within its optimum operating range. Constant pressure operation requires an external pressure sensor.

## THE 3 OPERATING MODES



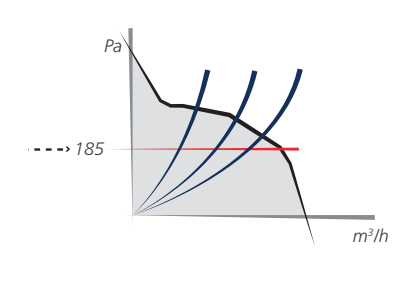
Constant airflow

The airflow is kept constant, regardless of changes in pressure.



Demand control

The airflow is a linear function of the control voltage. The airflow is regulated with a control voltage of 0–10 V.



Constant pressure

The pressure is kept constant, regardless of changes in the external pressure. Constant pressure operation requires an external pressure sensor.

## CONTROL UNIT ALTERNATIVES

### TACTOUCH HMI

HMI with an LCD display and built-in timer control of 6 events per day. All parameters can be set and the unit can be controlled via the touch screen. Commissioning menu, alarm history, operating parameters and error messages are presented in plain text.

### 4-MODE SELECTOR

With the 4-mode selector, the unit can be set to one of its three configured operating speeds, or be turned off.

### SAT MODBUS

Interfaces for configuration, indication and display as well as controlling the operation of the unit via MODBUS RTU.

### SAT ETHERNET

Interfaces for configuration, indication and display as well as controlling the operation of the unit via MODBUS TCP/IP.

### BACNET GATEWAY

For communication with the ventilation unit via BACnet TCP/IP protocol. The interface can handle up to four units. BACnet gateway requires the installation of the SAT Ethernet interface.

### SAT WIFI

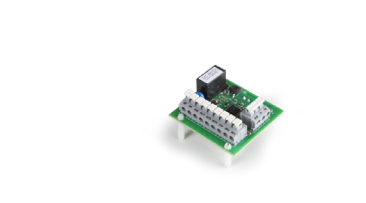
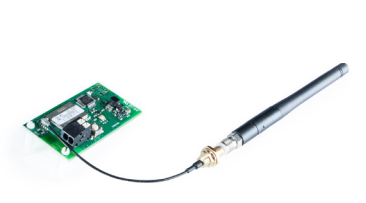
Wifi interface that, together with the TAC control unit, facilitates wireless communication with the air handling unit. The Wifi interface is normally used when you want to control the unit from a mobile phone.

### SAT KNX

Interfaces for configuration, indication and display as well as controlling the operation of the unit via KNX.

### SAT IO

SAT IO is a satellite circuit, intended to be mounted on the main control card. It is used to expand the number of inputs and outputs.



## GLOBAL RX TOP – GENERAL

### CIRCULAR DUCT CONNECTIONS

The duct connections for sizes 05 and 08 are circular and are fitted with a rubber seal. The units can be combined with motor-driven dampers.

### RECTANGULAR DUCT CONNECTIONS

The standard duct connections (15 mm) for size 13 and above are rectangular. For units with rectangular duct connections, there are several options: rectangular/circular adapter, 20 mm slip-clamp connections or 30 mm sleeve connections (METU). The units can be combined with motor-driven dampers and flexible duct connections.

### CASING

The GLOBAL unit's casing has a frame made of aluminium profiles, held together by plastic corner pieces. The casing panels are a 50 mm thick sandwich construction made of sheet steel with intervening mineral wool insulation. The outer sheet steel is painted in colour RAL7016, while the inner sheet steel is galvanised. The doors are hung from four hinges supplied with handles, two on either side. The doors can therefore be opened in both directions.

Casing data according to EN1886:

Air leakage class: L2 (R)

Thermal bridges: TB2

Thermal transmittance: T3 (Optimised insulation as optional extra)

Mechanical strength: D2 (M)

Airflow leakage filter: F9/ePM1 ≥ 80 %

### EC FANS WITH FAN IMPELLERS MADE OF COMPOSITE MATERIAL

The EC fans have fan impellers made of composite material as standard, which provides the fan with lower specific fan power (SFP). The benefits of composite fan impellers are their low weight and more aerodynamic form. Aluminium fan impellers are available as an option.

### BASE FRAME

A base frame is pre-installed under all GLOBAL units. The base frame is self-supporting. The frame is 125 mm high and is fitted both with 48 mm lifting holes for lifting with a crane as well as with notches for forklift truck forks.

### ROTARY HEAT EXCHANGER

The rotary heat exchanger has a thermal efficiency of up to 85%. The speed of the rotor is adjusted steplessly to satisfy heating and cooling requirements. The purging sector, mounted on both versions, prevents extract air and impurities being transferred to the supply air. The heat exchanger satisfies the requirements in standard EN 308 and is Eurovent certified.

### BUILT-IN WATERBORNE HEATER

The unit can be equipped with a built-in waterborne air heater. The heater is placed downstream of the heat exchanger. The waterborne heater has built-in water connections and is supplied with flexible connections made of stainless steel in order to connect to the existing water system outside the unit. The waterborne heater is fitted with a temperature sensor for freeze protection, installed on the surface of the heater. Three-way valve and actuator are supplied with the heater.

### BUILT-IN ELECTRIC AIR HEATER

The heater is placed downstream of the heat exchanger. The electric heater has two overheating protection units, one with manual resetting and the other with automatic resetting. When stopping the unit, the electric heater is immediately turned off, but the fans continue to run for 90 seconds to cool the heater.

### EXTERNAL AIR HEATER/COOLER

The GLOBAL units can be configured with external heaters/coolers, fitted in an insulated casing. Water-based or directly expanding (DX) heaters/coolers can be used. Its output is adjusted in order to maintain a constant supply air or extract air temperature. The waterborne unit is supplied ready-to-connect, such as a 3-way valve, which is controlled from the TAC control unit. With the TAC control system, GLOBAL units can control any combination of heater/cooler (water or DX) for cooling alone, heating alone or cooling and heating in sequence.

### CONTROL UNIT TAC

The control equipment is fully integrated in the GLOBAL units. The control unit monitors and regulates temperatures, airflows and other functions. The control unit is pre-configured with standard values on delivery from the factory. Many built-in functions are included in the system and are easy to activate. The air handling units can be regulated automatically in several different ways, with the aid of the built-in timer control or with the main control system, but also with the aid of e.g. a CO<sub>2</sub> sensor. Manual control is also possible.

### HMI

User-friendly 4.3" touch screen. The interface includes a menu that makes commissioning easy and intuitive. The touch screen has a 2-metre long connection cable and a magnetic bracket, which means that it can be attached anywhere on the unit. The set values are stored in the memory, which means they are not lost in the event of a power failure.



EC PLENUM FAN MADE OF COMPOSITE MATERIAL  
(ALUMINIUM IS AVAILABLE AS AN OPTION)

1

BAG FILTER FOR OUTDOOR AIR, CLASS F7  
(PRE-FILTER CLASS G4 AVAILABLE AS AN OPTIONAL  
EXTRA)

2

BUILT-IN CONTROL UNIT

3

HINGES FOR GOOD ACCESSIBILITY

4

BASE FRAME DESIGNED SIMPLE TRANSPORT

5

HIGHLY EFFICIENT ROTARY HEAT EXCHANGER

6

BUILT-IN POST-HEATER (WATERBORNE/ELECTRIC)

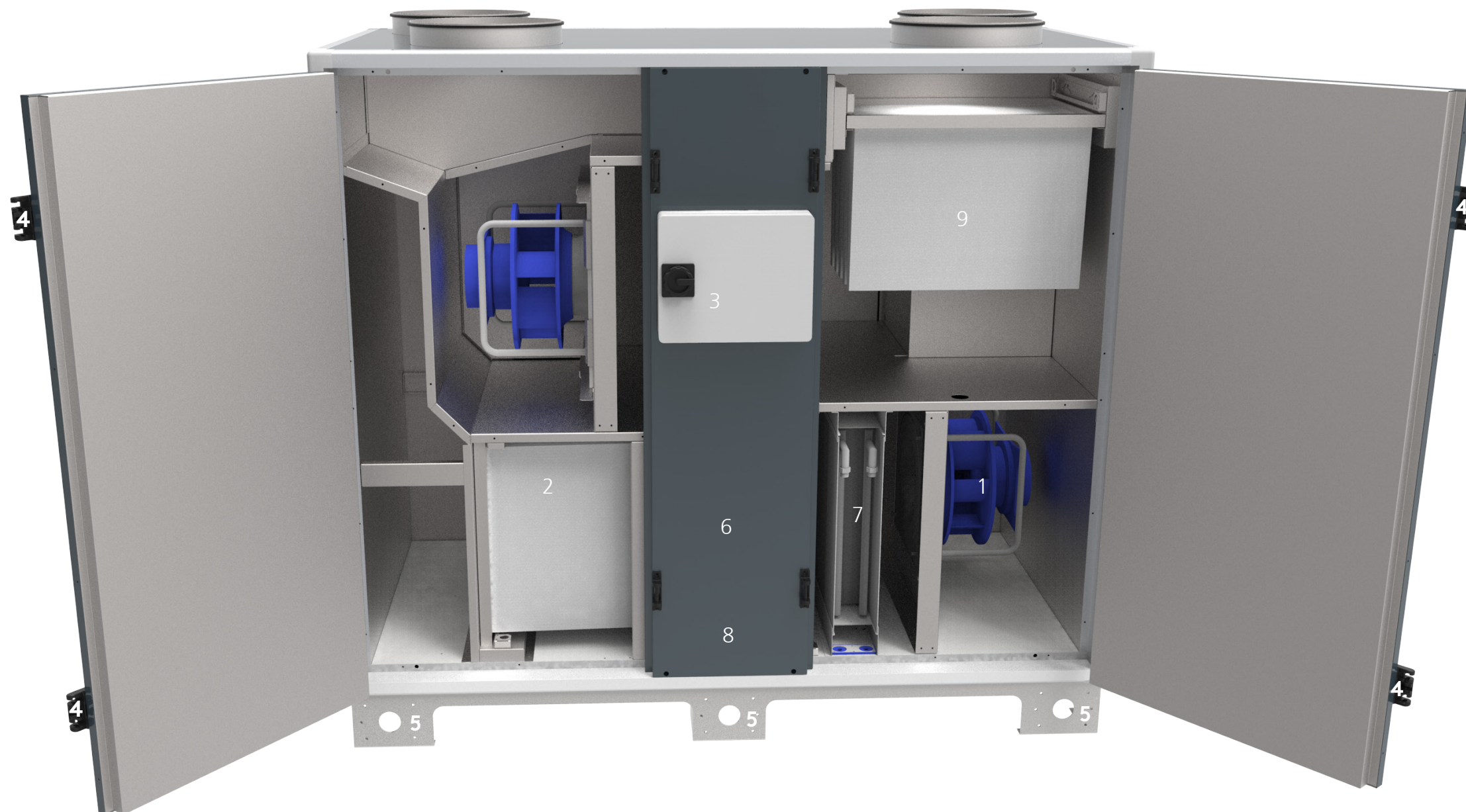
7

STEPLESS ROTOR DRIVE UNIT WITH  
WELDED BELT

8

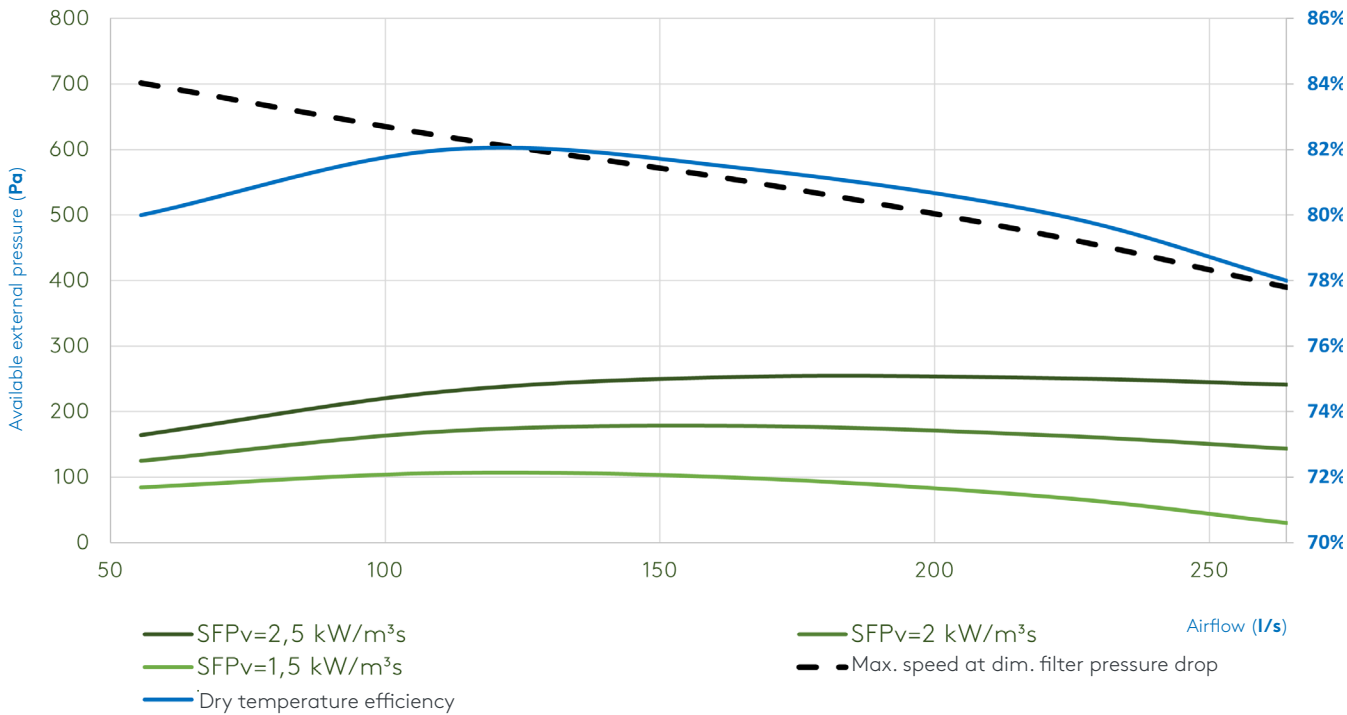
BAG FILTER FOR EXTRACT AIR, CLASS M5

9



# GLOBAL RX TOP 05

## FAN DIAGRAMS



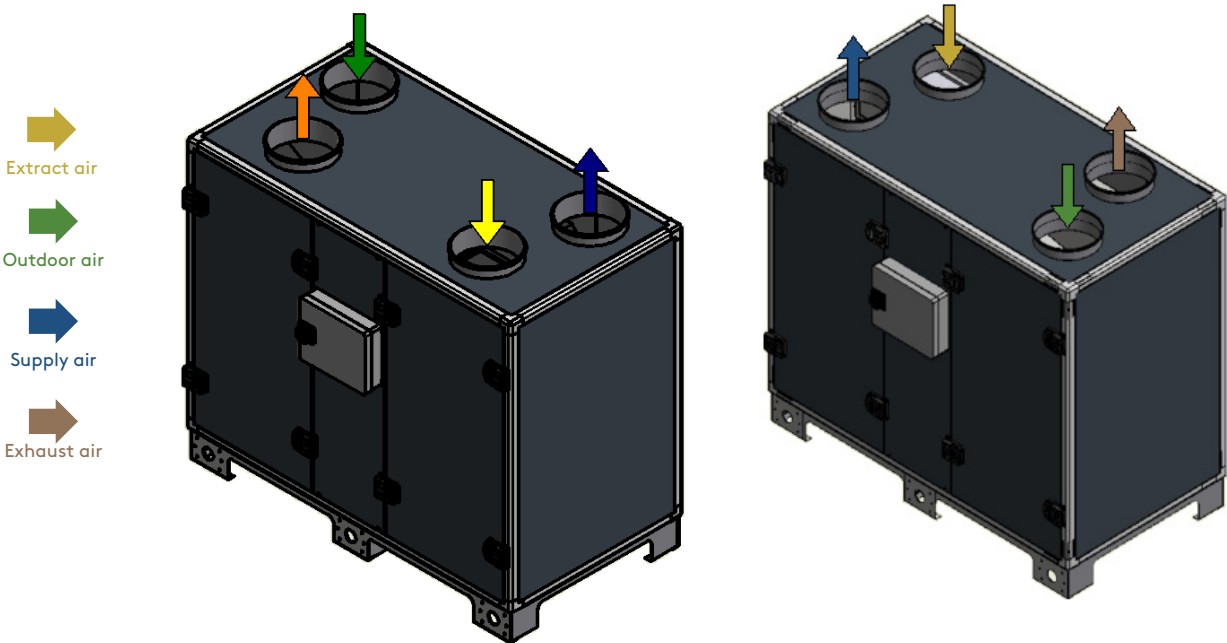
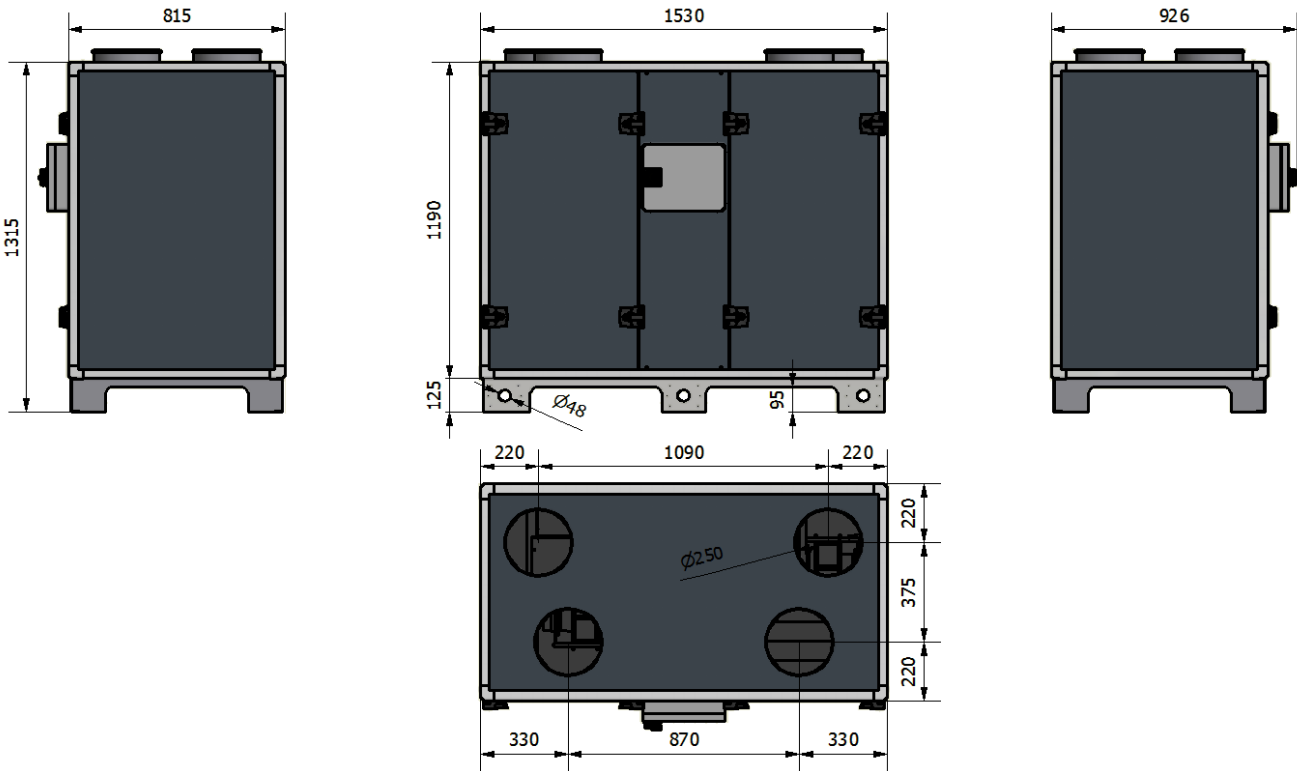
|                                     |                                |
|-------------------------------------|--------------------------------|
| • AIRFLOW                           | 200-950 m³/h                   |
|                                     | 56-264 l/s                     |
| • DIMENSIONS (L x W x H)            | 1530 x 815 x 1315              |
| • WEIGHT                            | 340 kg                         |
| • ELECTRIC POWER SUPPLY             | 1 x 230 V                      |
| • MAX. POWER CONSUMPTION            | 5.3 A                          |
| • RECOMMENDED FUSE PROTECTION       | D6A - 10kA - AC3               |
| • FILTER CLASS (BAG FILTER)         | F7 (ePM1 70%) / M5 (ePM10 55%) |
| • STANDARD DUCT CONNECTIONS (15 mm) | Ø 250                          |
| • GUIDE DUCT CONNECTIONS (20 mm)    | NOT APPLICABLE                 |
| • AMBIENT TEMPERATURE               | -20 ... +50°C                  |
| • EN1886 CLASSIFICATION             | T3/TB2/F9/L2/D2                |

| AIRFLOW |     | Pa ext | SFPv    | Speed dim.<br>used/Max,<br>supply air | Speed dim.<br>used/Max,<br>extract air | POWER CON-<br>SUMPTION | Dry temperature<br>efficiency |
|---------|-----|--------|---------|---------------------------------------|----------------------------------------|------------------------|-------------------------------|
| m³/h    | l/s |        | kW/m³/s | %                                     | %                                      | kW                     | %                             |
| 200     | 56  | 200    | 2.9     | 58                                    | 56                                     | 0.2                    | 80%                           |
| 400     | 111 | 200    | 2.2     | 65                                    | 65                                     | 0.2                    | 82%                           |
| 600     | 167 | 200    | 2.1     | 73                                    | 73                                     | 0.4                    | 81%                           |
| 800     | 222 | 200    | 2.2     | 81                                    | 82                                     | 0.5                    | 80%                           |
| 950     | 264 | 200    | 2.3     | 86                                    | 88                                     | 0.6                    | 78%                           |

1. Calculated values at 200 Pa ext. pressure (150/50 Pa)  
2. All data applies to fans with composite fan impeller and heat exchangers with efficiency class Premium  
3. SFP and absorbed power calculated with clean filter  
4. Speed dim. calculated at dim. filter pressure drop

## DIMENSIONS (mm)

## GLOBAL RX TOP 05

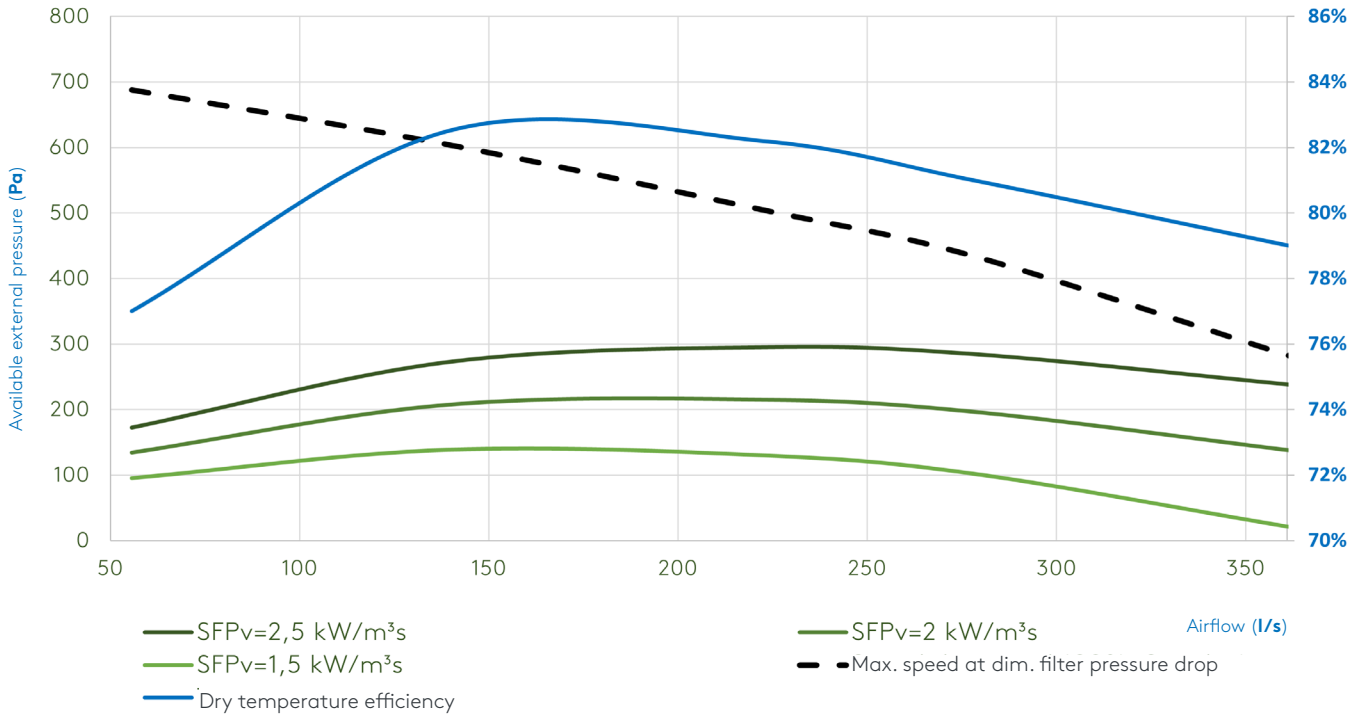


Right connection version

Left connection version

# GLOBAL RX TOP 08

## FAN DIAGRAMS



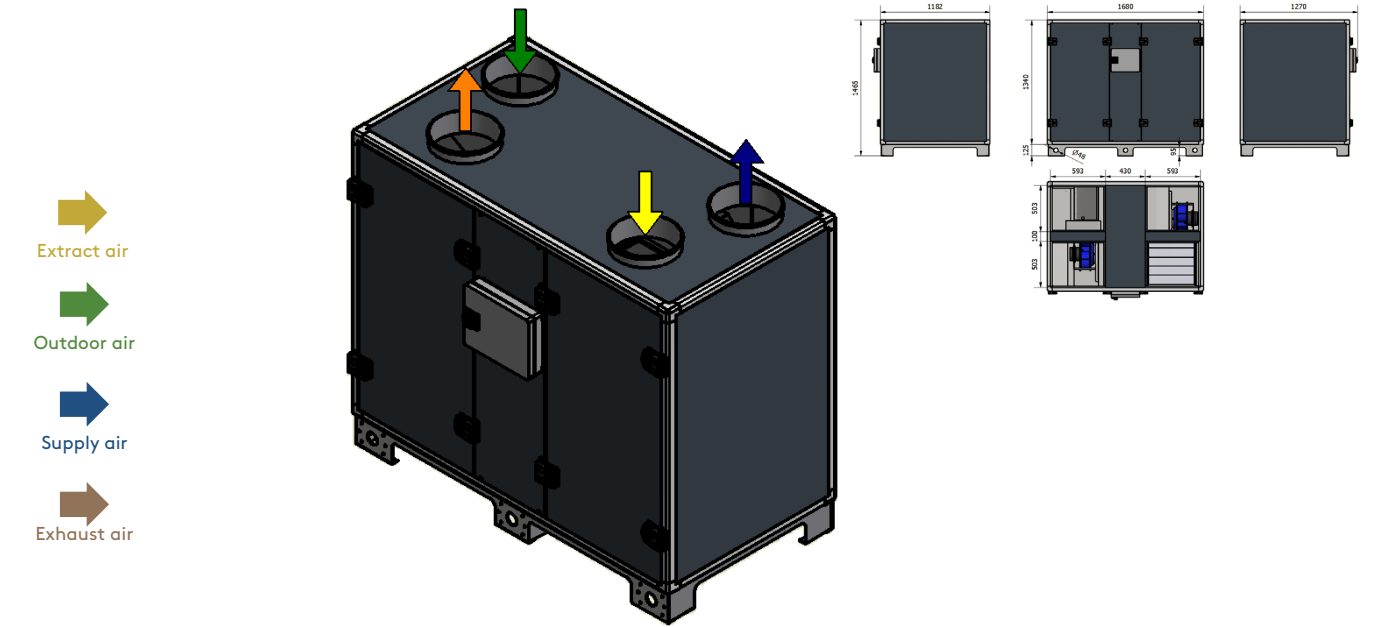
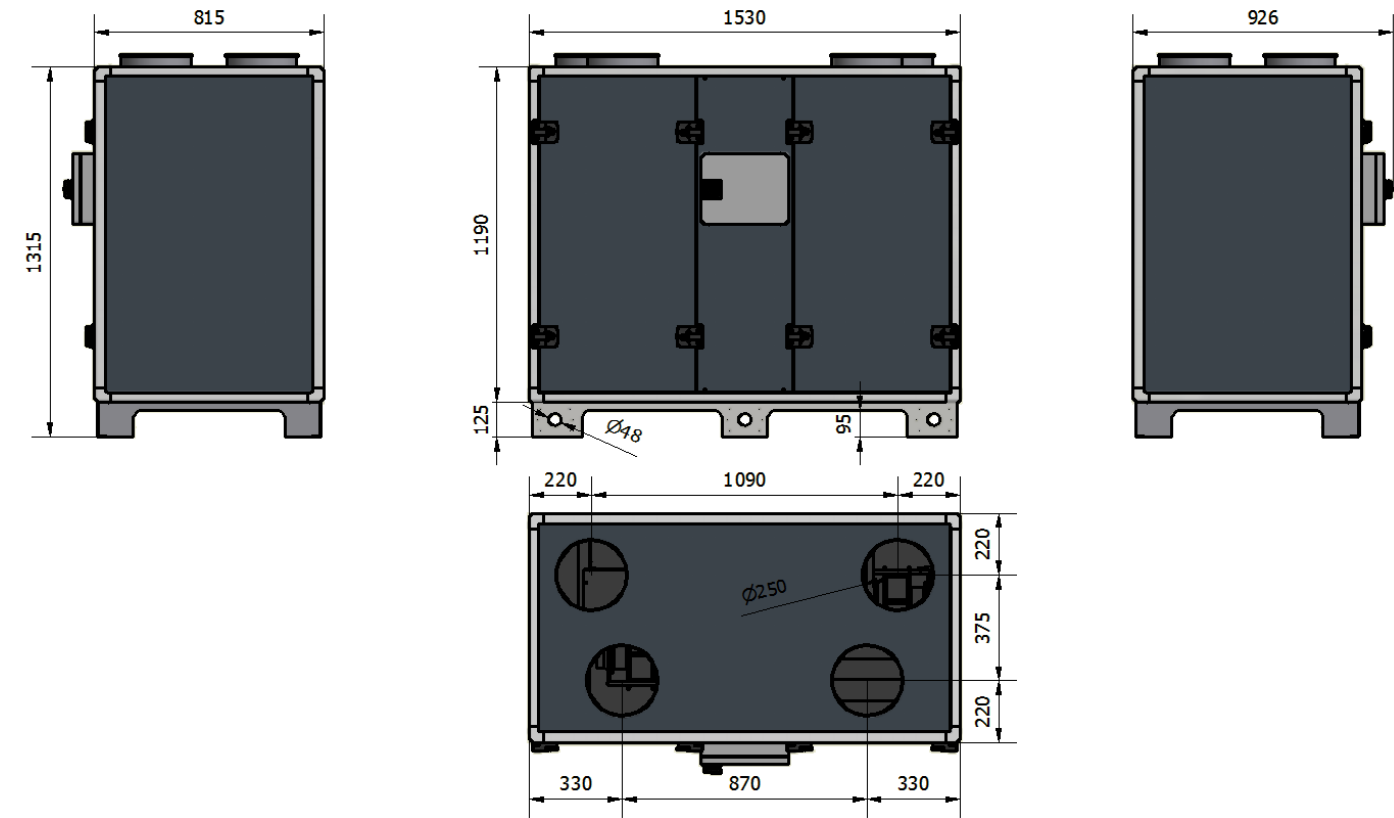
|                                  |                                |
|----------------------------------|--------------------------------|
| • AIRFLOW                        | 200–1300 m³/h                  |
| • DIMENSIONS (L x W x H)         | 1530 x 815 x 1315              |
| • WEIGHT                         | 340 kg                         |
| • ELECTRIC POWER SUPPLY          | 1 x 230 V                      |
| • MAX. POWER CONSUMPTION         | 5.3 A                          |
| • RECOMMENDED FUSE PROTECTION    | D6A - 10kA - AC3               |
| • FILTER CLASS (BAG FILTER)      | F7 (ePM1 70%) / M5 (ePM10 55%) |
| • STANDARD DUCT CONNECTIONS      | Ø250                           |
| • GUIDE DUCT CONNECTIONS (20 mm) | NOT APPLICABLE                 |
| • AMBIENT TEMPERATURE            | -20°C ... +50°C                |
| • EN1886 CLASSIFICATION          | T3/TB2/F9/L2/D2                |

| AIRFLOW | Pa ext | SFPv   | Speed dim. used/Max, supply air | Speed dim. used/Max, extract air | POWER CONSUMPTION | Dry temperature efficiency | Conditions |
|---------|--------|--------|---------------------------------|----------------------------------|-------------------|----------------------------|------------|
| m³/h    | l/s    | kW/m³s | %                               | %                                | kW                | %                          |            |
| 200     | 56     | 200    | 2.8                             | 57                               | 56                | 0.2                        | 77%        |
| 500     | 139    | 200    | 1.9                             | 67                               | 66                | 0.3                        | 83%        |
| 800     | 222    | 200    | 1.9                             | 77                               | 78                | 0.4                        | 82%        |
| 1000    | 278    | 200    | 2.0                             | 84                               | 86                | 0.6                        | 81%        |
| 1300    | 361    | 200    | 2.3                             | 95                               | 98                | 0.8                        | 79%        |

1. Calculated values at 200 Pa ext. pressure (150/50 Pa)  
2. All data applies to fans with composite fan impeller and heat exchangers with efficiency class Premium  
3. SFP and absorbed power calculated with clean filter  
4. Speed dim. calculated at dim. filter pressure drop

## DIMENSIONS (mm)

## GLOBAL RX TOP 08

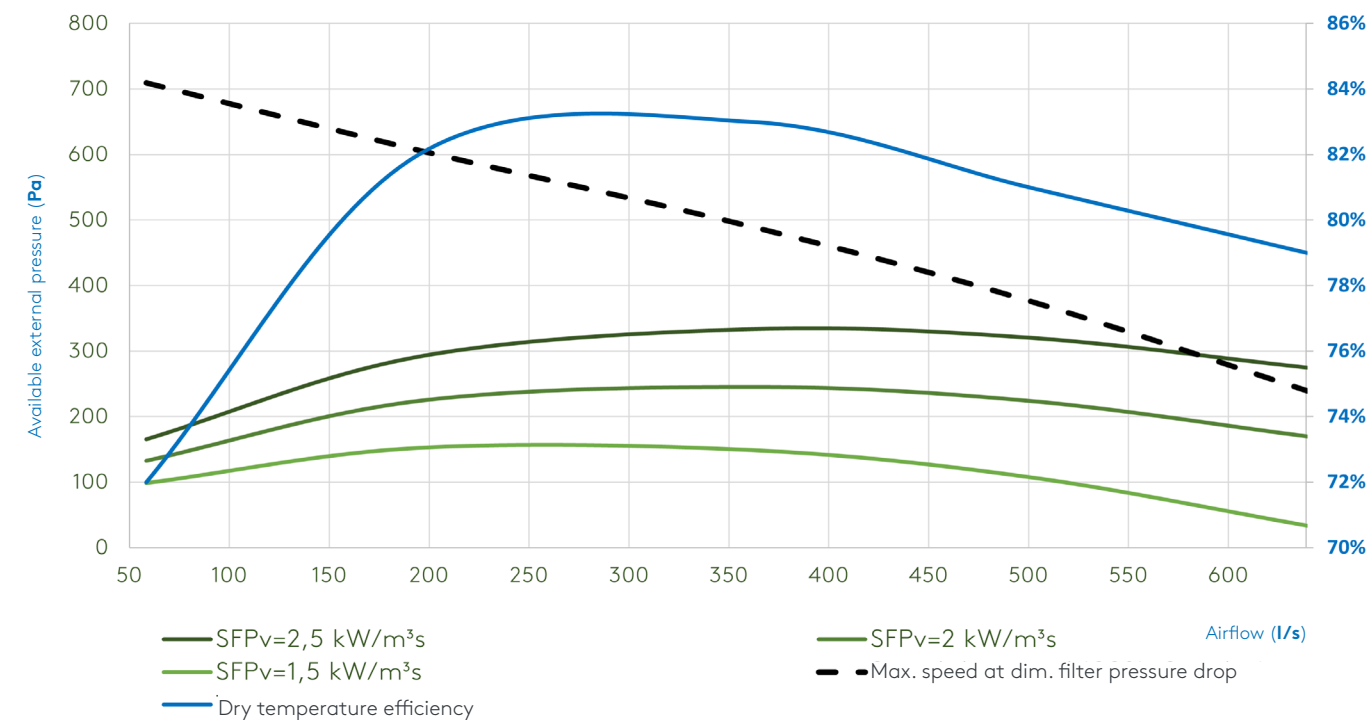


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# GLOBAL RX TOP 13

## FAN DIAGRAMS



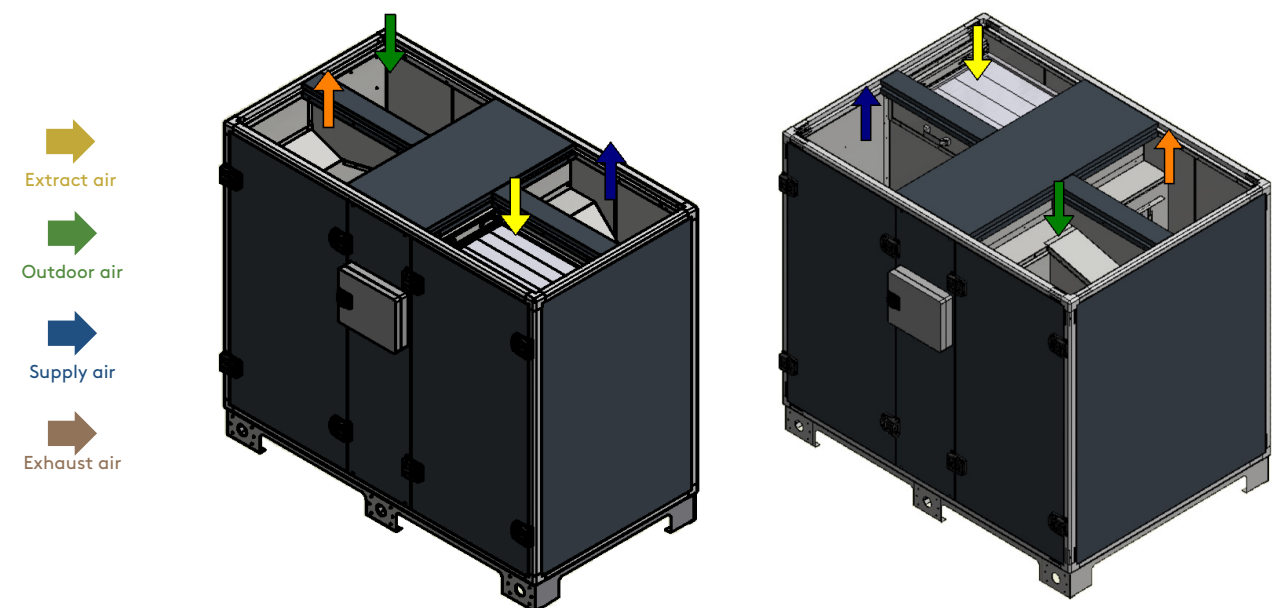
|                                          |                                |
|------------------------------------------|--------------------------------|
| • AIRFLOW                                | 210–2300 m³/h                  |
|                                          | 58–639 l/s                     |
| • DIMENSIONS (L x W x H)                 | 1680 x 995 x 1465              |
| • WEIGHT                                 | 385 kg                         |
| • ELECTRIC POWER SUPPLY                  | 1 x 230 V                      |
| • MAX. POWER CONSUMPTION                 | 7.7 A                          |
| • RECOMMENDED FUSE PROTECTION            | D10A - 10kA - AC3              |
| • FILTER CLASS (BAG FILTER)              | F7 (ePM1 70%) / M5 (ePM10 55%) |
| • STANDARD DUCT CONNECTIONS (15 mm)      | 590 x 400                      |
| • GUIDE DUCT CONNECTIONS (20 mm) (W x H) | 600 x 400                      |
| • AMBIENT TEMPERATURE                    | -20 ... +50°C                  |
| • EN1886 CLASSIFICATION                  | T3/TB2/F9/L2/D2                |

| AIRFLOW | Pa ext | SFPv    | Speed dim. used/Max, supply air | Speed dim. used/Max, extract air | POWER CON-SUMPTION | Dry temperature efficiency | Conditions |
|---------|--------|---------|---------------------------------|----------------------------------|--------------------|----------------------------|------------|
| m³/h    | l/s    | kW/m³/s | %                               | %                                | kW                 | %                          |            |
| 210     | 58     | 200     | 2.9                             | 55                               | 55                 | 0.2                        | 72%        |
| 700     | 195    | 200     | 1.8                             | 65                               | 65                 | 0.3                        | 82%        |
| 1300    | 361    | 200     | 1.7                             | 77                               | 77                 | 0.6                        | 83%        |
| 1800    | 500    | 200     | 1.9                             | 87                               | 88                 | 0.9                        | 81%        |
| 2300    | 639    | 200     | 2.1                             | 98                               | 98                 | 1.4                        | 79%        |

1. Calculated values at 200 Pa ext. pressure (150/50 Pa)  
2. All data applies to fans with composite fan impeller and heat exchangers with efficiency class Premium  
3. SFP and absorbed power calculated with clean filter  
4. Speed dim. calculated at dim. filter pressure drop

## DIMENSIONS (mm)

## GLOBAL RX TOP 13



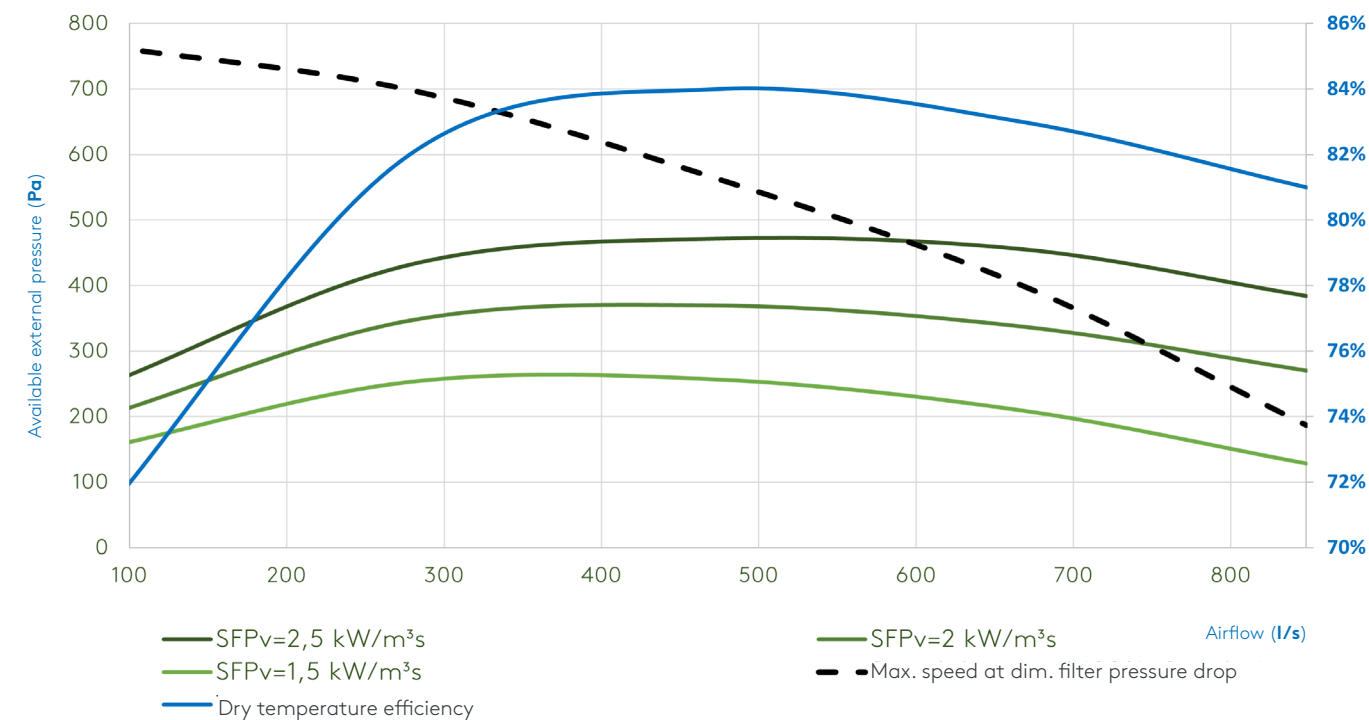
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# GLOBAL RX TOP 16

## FAN DIAGRAMS

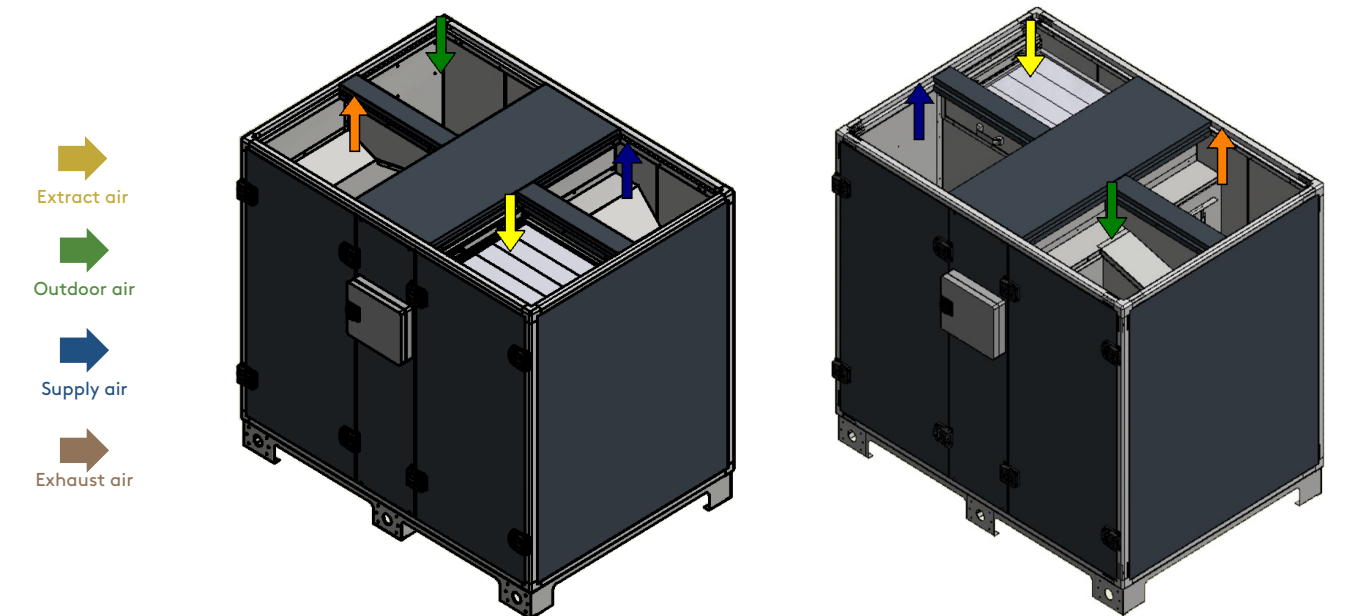
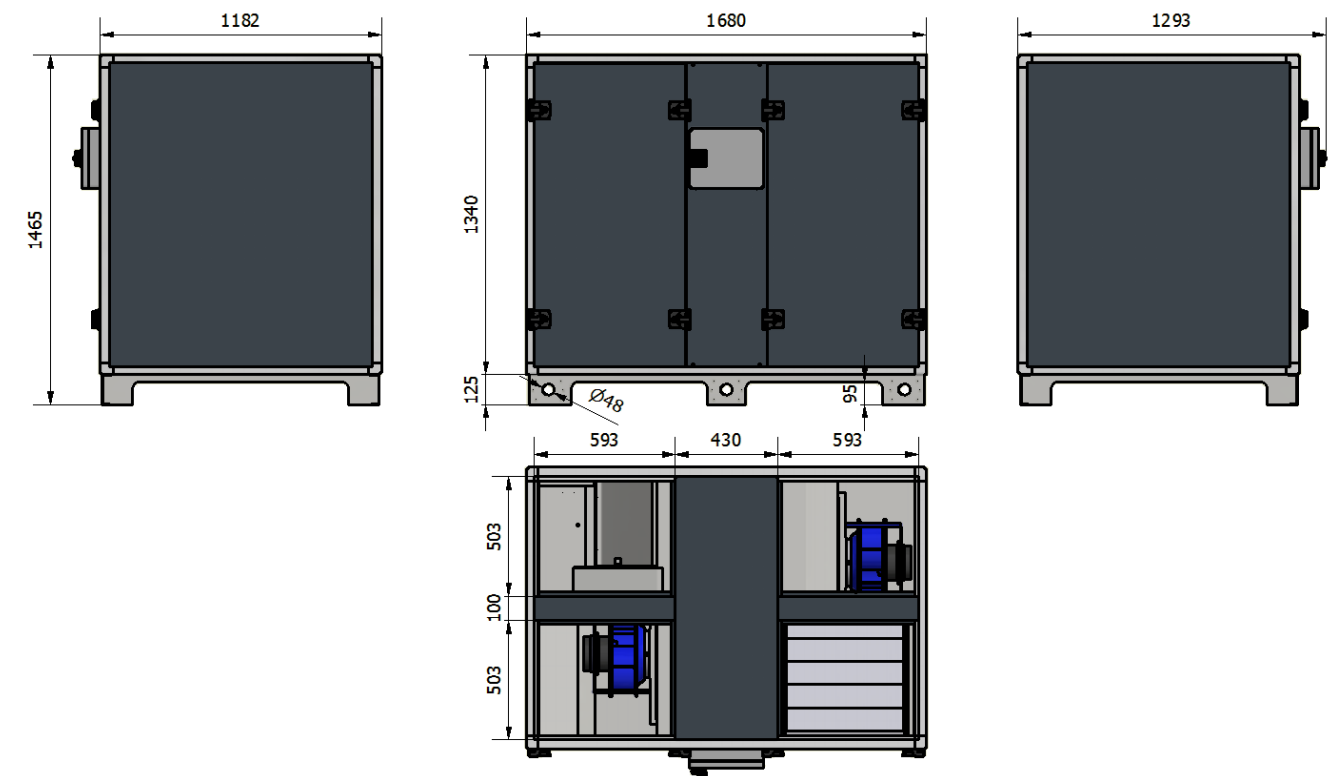


|                                          |                                |
|------------------------------------------|--------------------------------|
| • AIRFLOW                                | 300–3050 m³/h                  |
| • DIMENSIONS (L x W x H)                 | 83–848 l/s                     |
| • WEIGHT                                 | 1680 x 1182 x 1465             |
| • ELECTRIC POWER SUPPLY                  | 470 kg                         |
| • MAX. POWER CONSUMPTION                 | 1 x 230 V                      |
| • RECOMMENDED FUSE PROTECTION            | 7.7 A                          |
| • FILTER CLASS (BAG FILTER)              | D10A - 10kA - AC3              |
| • STANDARD DUCT CONNECTIONS (15 mm)      | F7 (ePM1 70%) / M5 (ePM10 55%) |
| • GUIDE DUCT CONNECTIONS (20 mm) (W x H) | 590 x 500                      |
| • AMBIENT TEMPERATURE                    | 600 x 500                      |
| • EN1886 CLASSIFICATION                  | -20°C ... +50°C                |
|                                          | T3/TB2/F9/L2/D2                |

| AIRFLOW |     | Pa ext | SFPv    | Speed dim. used/Max, supply air | Speed dim. used/Max, extract air | POWER CON-SUMPTION | Dry temperature efficiency | Conditions<br><br>1. Calculated values at 200 Pa ext. pressure (150/50 Pa)<br>2. All data applies to fans with composite fan impeller and heat exchangers with efficiency class Premium<br>3. SFP and absorbed power calculated with clean filter<br>4. Speed dim. calculated at dim. filter pressure drop |
|---------|-----|--------|---------|---------------------------------|----------------------------------|--------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| m³/h    | l/s |        | kW/m³/s | %                               | %                                | kW                 | %                          |                                                                                                                                                                                                                                                                                                            |
| 300     | 83  | 200    | 1.9     | 53                              | 53                               | 0.2                | 71%                        |                                                                                                                                                                                                                                                                                                            |
| 1000    | 278 | 200    | 1.2     | 63                              | 63                               | 0.3                | 82%                        |                                                                                                                                                                                                                                                                                                            |
| 1700    | 473 | 200    | 1.3     | 75                              | 76                               | 0.6                | 84%                        |                                                                                                                                                                                                                                                                                                            |
| 2400    | 667 | 200    | 1.5     | 88                              | 89                               | 1.0                | 83%                        |                                                                                                                                                                                                                                                                                                            |
| 3050    | 848 | 200    | 1.7     | 101                             | 101                              | 1.5                | 81%                        |                                                                                                                                                                                                                                                                                                            |

## DIMENSIONS (mm)

## GLOBAL RX TOP 16



GLOBAL RX TOP



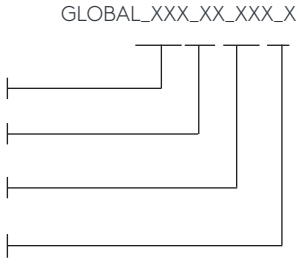
Designation key:

Efficiency, heat exchanger:  
Standard (RX TOP) / Premium (RX TOP+)

Unit size: 05, 08, 13, 16, ...

Supply air: right (R) /left (L)

Fan type: none = composite, ALU = aluminium



SLIP-CLAMP CONNECTIONS 20 MM

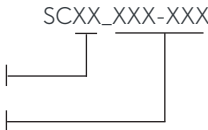


Slip-clamp connections mean that the duct is connected to the unit with a stand-ard guide and guide rail. The connection frame is made of 1 mm thick, galvanised sheet steel. Slip-clamp connections can only be supplied with fixed dimensions with a 100 mm interval, see the table below.

Designation key:

Connection frame width (mm)

Duct dimensions (mm)



| MODEL            | DUCT CONNECTION [MM] | SYMBOL       |
|------------------|----------------------|--------------|
| GLOBAL RX 13 TOP | 600 x 400            | SC20_600-400 |
| GLOBAL RX 16 TOP | 600 x 500            | SC20_600-500 |
| ECA 10/12        | 700 x 300            | SC20_700x300 |
| ECA 14/16        | 800 x 400            | SC20_800x400 |

FLEXIBLE CONNECTION 20 MM

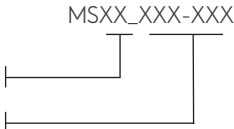


The flexible duct connections, type MS20, prevent vibrations from being propagated through the duct system. The connections are made of glass fibre-reinforced plastic and have fire resistance class M0 and air tightness class B (according to EN 15727 and EN 1751). They can handle operating temperatures from -30 to +110°C and pressure up to 2000 Pa. The 20 mm wide sleeve connection is made of 1 mm thick, galvanised sheet steel.

Designation key:

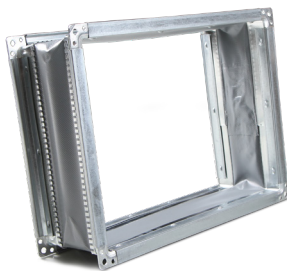
Connection frame width (mm)

Duct dimensions (mm)



| MODEL            | INTERNAL DIMENSIONS [MM] | EXTERNAL DIMENSIONS [MM] | SYMBOL       |
|------------------|--------------------------|--------------------------|--------------|
| GLOBAL RX 13 TOP | 550 x 360                | 590 x 400                | MS20_550-360 |
| GLOBAL RX 16 TOP | 550 x 460                | 590 x 500                | MS20_550-460 |
| ECA 10/12        | 640 x 235                | 680 x 275                | MS20_640-235 |
| ECA 14/16        | 740 x 335                | 780 x 375                | MS20_740-335 |

FLEXIBLE CONNECTION 30 MM

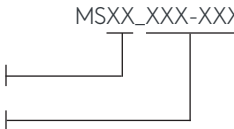


The flexible connections, type MS30, prevent vibrations from being propagated through the duct system. The connections are made of glass fibre-reinforced plastic and have fire resistance class M0 and air tightness class B (according to EN 15727 and EN 1751). They can handle operating temperatures from -30 to +110°C and pres-ure up to 2000 Pa. The 30 mm wide “METU” sleeve connection is made of 1 mm thick, galvanised sheet steel.

Designation key:

Connection frame width (mm)

Duct dimensions (mm)



| MODEL            | INTERNAL DIMENSIONS [MM] | EXTERNAL DIMENSIONS [MM] | SYMBOL       |
|------------------|--------------------------|--------------------------|--------------|
| GLOBAL RX 13 TOP | 530 x 340                | 590 x 400                | MS30_530-340 |
| GLOBAL RX 16 TOP | 530 x 440                | 590x500                  | MS30_530-440 |
| ECA 10/12        | 650 x 215                | 710 x 275                | MS30_620-215 |
| ECA 14/16        | 720 x 315                | 780 x 375                | MS30_720-315 |

REPLACEMENT FILTER SETS



The function of the filter is to keep both the air and the heat exchanger free from contaminants. Outdoor air filter class: ePM1 ≥ 70% Extract air filter class: ePM10 ≥ 55%. All filters are classified in accordance with both ISO EN 779 and ISO EN 16890. In order to keep the heat exchanger clean, filters of class ePM10 ≥ 55% are sufficient. In order to avoid impaired energy efficiency in the air handling unit, extract air filter sets of class ePM1 ≥ 70% are not supplied.

| MODEL               |  | DIMENSIONS, SUPPLY AIR [MM] |          | DIMENSIONS, EXTRACT AIR [MM] |           |
|---------------------|--|-----------------------------|----------|------------------------------|-----------|
| GLOBAL RX 05/08 TOP |  | 640 x 385 x 380             | ePM1 70% | 335 x 457 x 360              | ePM10 55% |
| GLOBAL RX 13 TOP    |  | 720 x 460 x 380             | ePM1 70% | 433 x 532 x 360              | ePM10 55% |
| GLOBAL RX 16 TOP    |  | 900 x 460 x 380             | ePM1 70% | 527 x 532 x 360              | ePM10 55% |

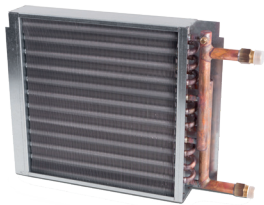
PRE-FILTER CLASS G4



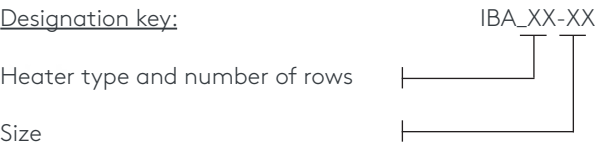
The pre-filter is installed in the outdoor air section, upstream of the fine filter. A pre-filter is used when the outdoor air is heavily contaminated, in order to prevent the fine filter from clogging up unreasonably quickly. The pre-filter has filter class G4 according to EN-779.

| MODEL               | DIMENSIONS [MM] |
|---------------------|-----------------|
| GLOBAL RX 05/08 TOP | 640 x 385 x 23  |
| GLOBAL RX 13 TOP    | 720 x 460 x 230 |
| GLOBAL RX 16 TOP    | 900 x 460 x 23  |

BUILT-IN WATERBORNE POST-HEATER



In the post-heater, hot water is used to reheat the supply air. The heater is integrated in the air handling unit, downstream of the heat exchanger. The heat exchanger is a tube heat exchanger, made of copper pipes supplied with surface-enlarging aluminium fins with a spacing of 2.5 mm. The pipes have external threaded pipe connections are made of brass. The heat exchanger is equipped with a venting plug. The pressure class is PN16.

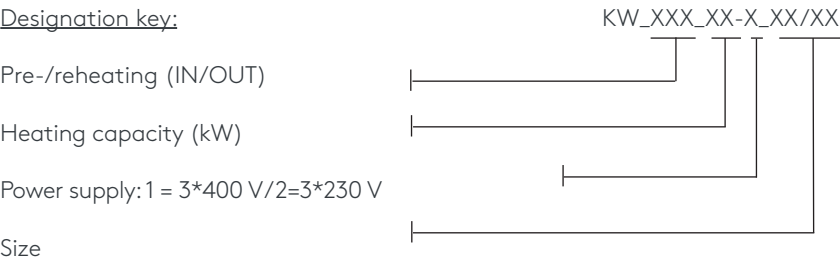


| MODEL               | Ø        | SYMBOL    |
|---------------------|----------|-----------|
| GLOBAL RX 05/08 TOP | 1/2-Zoll | IBA_2H_08 |
| GLOBAL RX 13 TOP    | 1/2-Zoll | IBA_2H_13 |
| GLOBAL RX 16 TOP    | 1/2-Zoll | IBA_2H_16 |

BUILT-IN ELECTRIC POST-HEATER

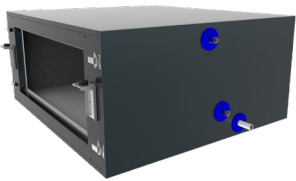


The electric heater is used to reheat the supply air. The heater is placed between the rotary heat exchanger and the supply air fan. The electric heater is equipped with two overheating protection units, one with manual resetting (110°C) and the other with automatic resetting (75°C). All electrical connections are protected to prevent people from touching them.



| MODEL            | CAPACITY | SYMBOL          |
|------------------|----------|-----------------|
| GLOBAL RX 05 TOP | 4.5 kW   | KW_OUT_4.5_x_05 |
| GLOBAL RX 08 TOP | 6.0 kW   | KW_OUT_6_x_08   |
| GLOBAL RX 13 TOP | 9.0 kW   | KW_OUT_9_x_13   |
| GLOBAL RX 16 TOP | 12.0 kW  | KW_OUT_12_x_16  |

INSULATED INTEGRATED CASING FOR EXTERNAL HEATERS/COOLERS



The insulated integrated casing has a sandwich construction, made of galvanised sheet steel with 30 mm thick mineral wool insulation between the outer and the inner sheet steel. The outer sheet steel is painted in colour RAL7016. The casings can be used for the integration of external heaters, coolers and direct expansion units (EBA), and can be installed directly on the unit or in the duct system. The standard sleeve connection is 15 mm. Other connection types are available as options: 20 mm guide rails, 30 mm “METU” connections.

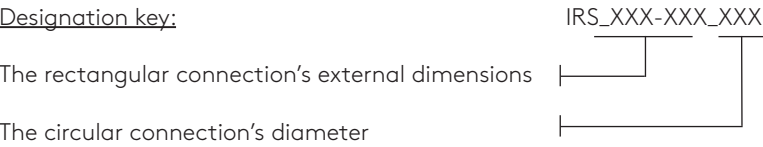


| MODEL               | DUCT CONNECTION [MM] | SYMBOL         |
|---------------------|----------------------|----------------|
| GLOBAL RX 05/08 TOP | Ø 250                | ECA_250_08     |
| GLOBAL RX 13 TOP    | 655 x 250            | ECA_655-250_13 |
| GLOBAL RX 16 TOP    | 755 x 350            | ECA_755-350_16 |

CIRCULAR/RECTANGULAR ADAPTER

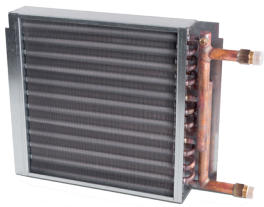


Uninsulated adapters for the transition between circular and rectangular connections are available for units and post-treatment sections with rectangular connections. The adapters are made of galvanised sheet steel. The circular duct connection is fitted with a rubber seal.

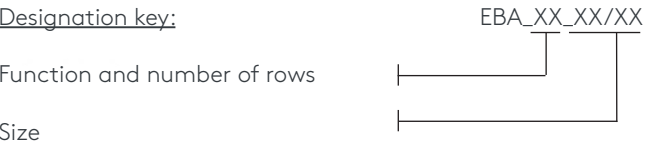


| MODEL            | DIMENSIONS        | SYMBOL          |
|------------------|-------------------|-----------------|
| GLOBAL RX 13 TOP | 625 x 440 - Ø 355 | IRS_625-440_355 |
| GLOBAL RX 16 TOP | 625 x 535 - Ø 400 | IRS_625-535_400 |
| ECA 10           | 680 x 275 - Ø 315 | IRS_680-275_315 |
| ECA 12/13        | 680 x 275 - Ø 355 | IRS_680-275_355 |
| ECA 14/16        | 780 x 375 - Ø 400 | IRS_780-375_400 |

HEAT EXCHANGER FOR INTEGRATION IN INSULATED CASING



In the EBA heat exchanger, water or refrigerant is used to post-treat the supply air. The heat exchanger is designed for integration in insulated casing ECA. The heat exchanger is a tube heat exchanger, made of copper pipe and aluminum fins with a spacing of 2.5 mm. The pipes have external threaded pipe connections are made of brass. The heat exchanger is supplied with a venting plug (not for DX) . The pressure class is PN16.

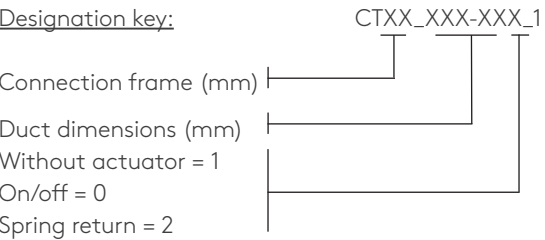


| MODEL               | FEATURES | # NUMBER OF ROWS | DIMENSIONS [MM] | SYMBOL    |
|---------------------|----------|------------------|-----------------|-----------|
| GLOBAL RX 05/08 TOP | HEATING  | 4                | 305 x 130 x 638 | EBA_4H_08 |
| GLOBAL RX 05/08 TOP | COOLING  | 4                | 305 x 130 x 638 | EBA_4C_08 |
| GLOBAL RX 05/08 TOP | DX       | 4                | 305 x 130 x 638 | EBA_4X_08 |
| GLOBAL RX 13 TOP    | HEATING  | 4                | 305305130828    | EBA_4H_13 |
| GLOBAL RX 13 TOP    | COOLING  | 4                | 305 x 130 x 828 | EBA_4C_13 |
| GLOBAL RX 13 TOP    | DX       | 4                | 303 x 130 x 828 | EBA_4X_13 |
| GLOBAL RX 16 TOP    | HEATING  | 4                | 405 x 130 x 938 | EBA_4H_16 |
| GLOBAL RX 16 TOP    | COOLING  | 4                | 405 x 130 x 938 | EBA_4C_16 |
| GLOBAL RX 16 TOP    | DX       | 4                | 405 x 130 x 938 | EBA_4X_16 |

MOTOR-DRIVEN DAMPER



The CT dampers are used as shut-off dampers. Shut-off dampers are used if the air handling unit is not going to be used for a period of time, or if a waterborne heater or cooler is used. Rectangular shut-off dampers are factory installed and wired. The damper frame is made of galvanised steel, the damper blade in rectangular dampers is made of extruded aluminium. The damper blades have rubber seals. Air-tightness according to EN 1751 is class 3 for circular dampers and class 2 for rectangular dampers.



| MODEL               | INTERNAL DIMENSIONS [MM] | EXTERNAL DIMENSIONS [MM] | SYMBOL         |
|---------------------|--------------------------|--------------------------|----------------|
| GLOBAL RX 05/08 TOP | Ø250                     | Ø250                     | CT_250_x       |
| GLOBAL RX 10 TOP    | Ø315                     | Ø315                     | CT_315_x       |
| GLOBAL RX 13 TOP    | Ø355                     | Ø355                     | CT_355_x       |
| GLOBAL RX 13 TOP    | 510 x 320                | 590 x 400                | CT40_510-230_x |
| GLOBAL RX 16 TOP    | 510 x 420                | 590x500                  | CT40_510-420_x |
| GLOBAL RX 16 TOP    | Ø400                     | Ø400                     | CT_400_x       |



Feel good **inside**

