GLOBAL RX

Ventilation unit with rotary heat exchanger

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

Max. airflow 6900 m³/h (1918 l/s).

Temperature efficiency: up to 85%.

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

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

Top quality control system with touch screen.

For installation indoors or outdoors.

Units up to GLOBAL RX 16 have external dimensions that allow passage through a door.

Swegon

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 (Total Airflow Control technology) that meet the most stringent requirements regarding energy performance, such as the ErP2018. The latest control system (TAC) 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, water heating 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 ≥ 70% and the extract air filter has ePM10 ≥ 55%. Extract air filters of class ePM1 ≥ 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 ≥ 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 water post-heating coil 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 (RX 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 high 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 12 have external dimensions that allow passage through a door.

OPTIONAL EXTRAS

Built-in electric post-heater
Built-in water post-heating coil
External post-heater/cooler
Motor-driven dampers
Rectangular flexible duct connection 20 mm
Rectangular flexible duct connection 30 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

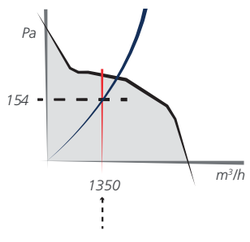
Alternatively, the airflow can be adjusted automatically according to the ventilation requirements and the wishes of the users with the aid of the 0–10 V signal input, for example with a CO_2 sensor or with the customer's automated building management system or equivalent.

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.

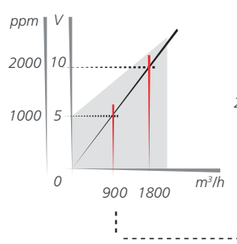
The airflow remains unchanged in all the other rooms, i.e. the ventilation system works constantly within its optimum operating range. Constant pressure operation requires an external pressure sensor.

THE 3 OPERATING MODES



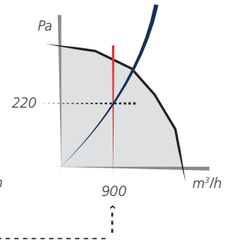
Constant airflow

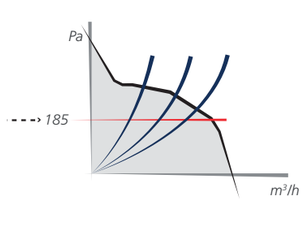
The airflow is kept constant, regardless of changes in pressure.



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 – GENERAL

CIRCULAR DUCT CONNECTIONS

The duct connections for sizes 08 are circular and are fitted with a rubber seal. The duct connections are horizontally and vertically offset to enable the ducts to be run in any direction without being in the way of one another. The units can be combined with motor-driven dampers.

RECTANGULAR DUCT CONNECTIONS

The standard duct connections (15 mm) for size 08 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 WATER HEATING COIL

The unit can be equipped with a built-in water air heating coil. The heater is placed downstream of the heat exchanger. The water heating coil 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 water heating coil 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_2 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

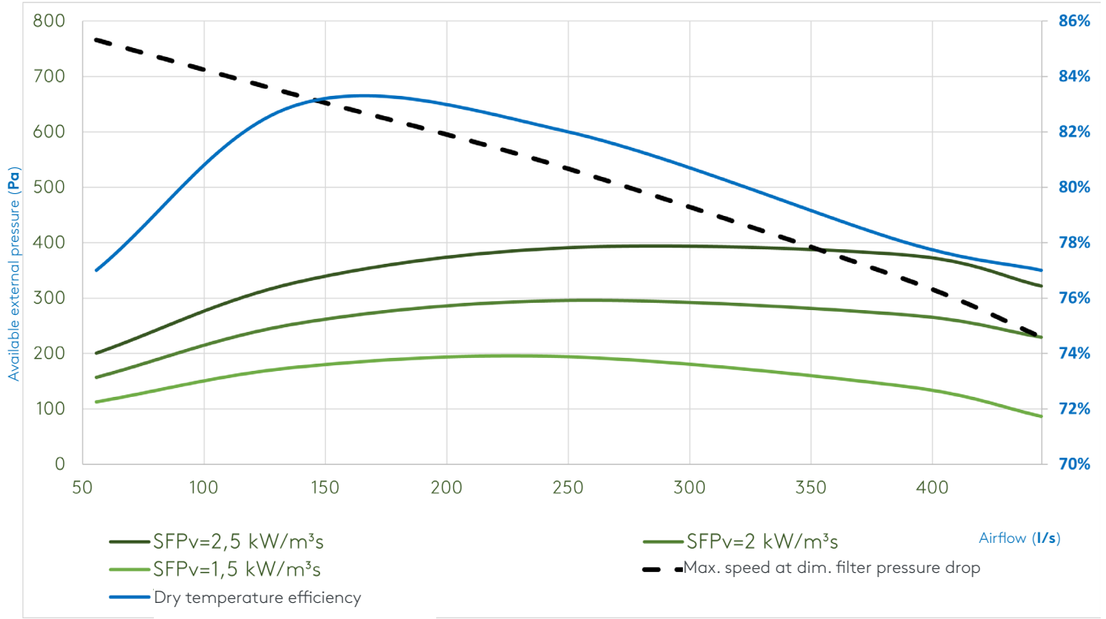
BUILT-IN POST-HEATER (WATER/ELECTRIC) 7

STEPLESS ROTOR DRIVE UNIT WITH WELDED BELT 8

BAG FILTER FOR EXTRACT AIR, CLASS M5 9

GLOBAL RX 08

FAN DIAGRAMS

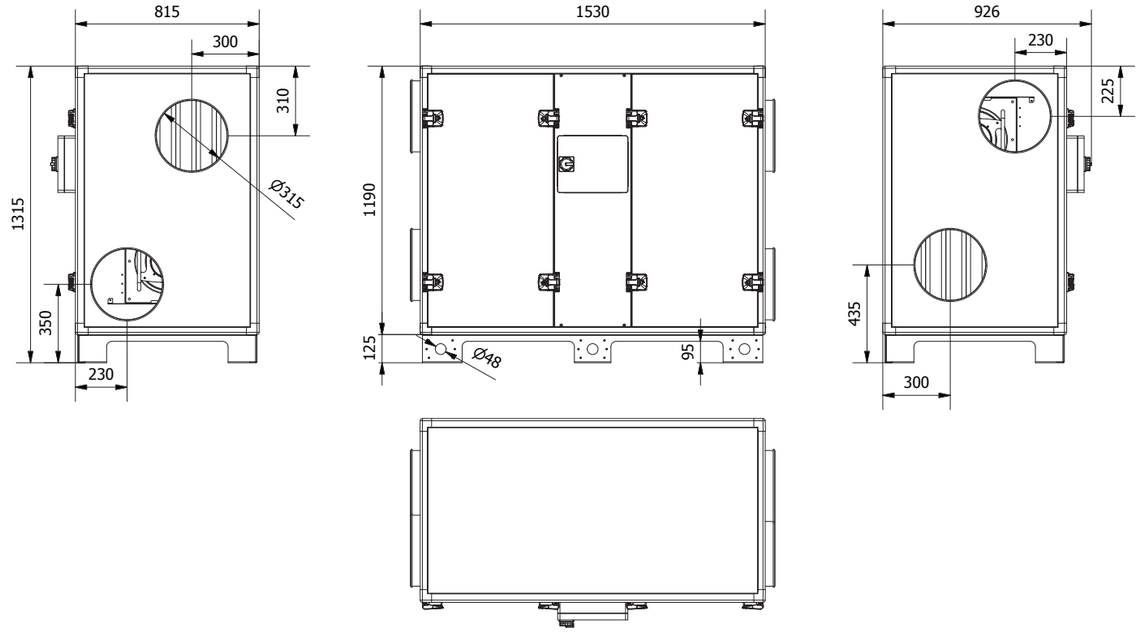


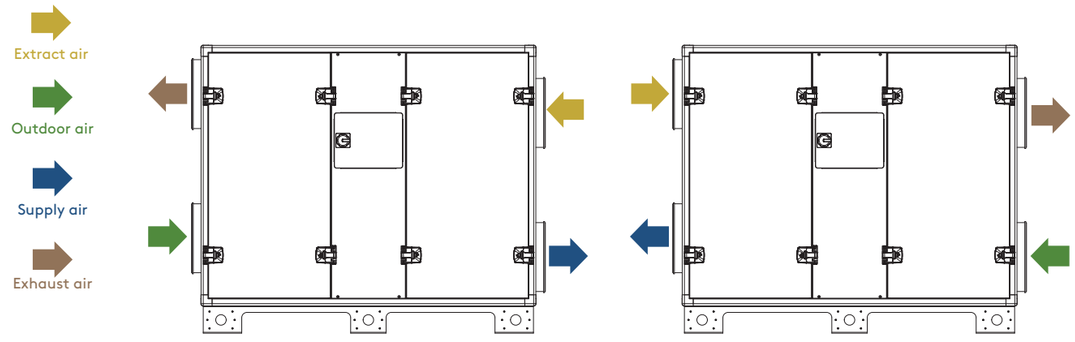
• AIRFLOW	200–1600 m³/h 56–445 l/s
• DIMENSIONS (L x W x H)	1530 x 815 x 1315
• WEIGHT	310 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	5.3 A
• RECOMMENDED FUSE PROTECTION	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• STANDARD DUCT CONNECTIONS (15 mm)	Ø 315
• 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. used/Max, supply air	Speed dim. used/Max, extract air	POWER CONSUMPTION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	2.4	54	53	0.1	77%
500	139	200	1.6	63	63	0.2	83%
900	250	200	1.5	76	76	0.4	82%
1400	389	200	1.7	92	91	0.7	78%
1600	445	200	1.9	99	99	0.8	77%

Conditions

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





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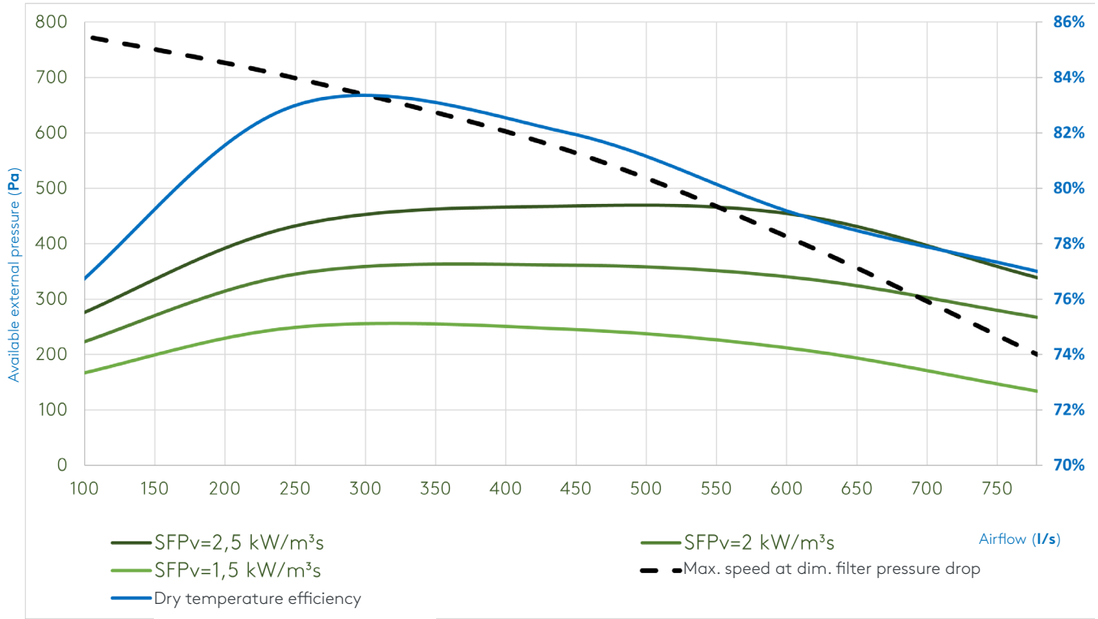
GLOBAL RX 13

FAN DIAGRAMS



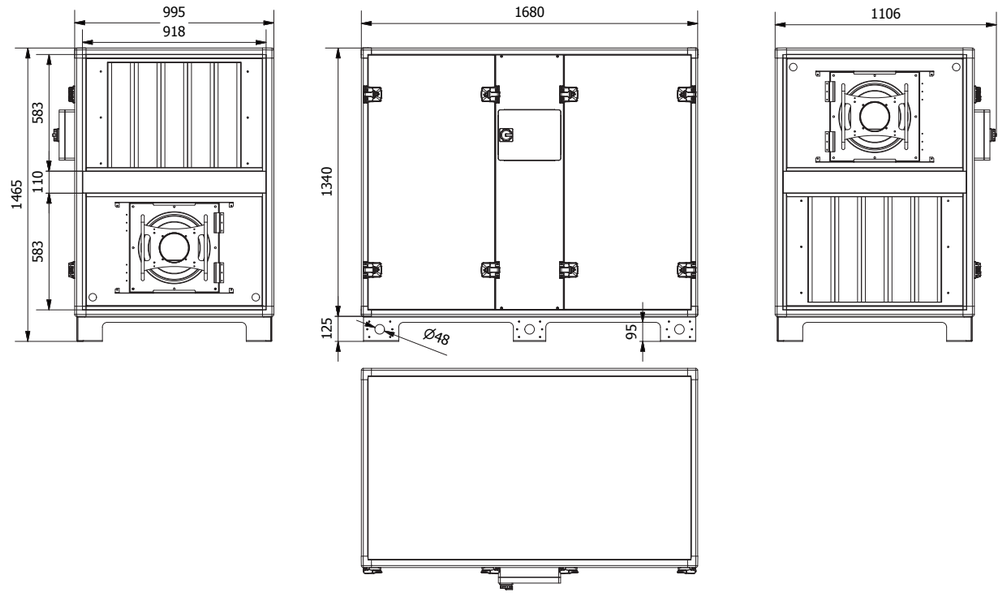
• AIRFLOW	300–2800 m³/h 83–778 l/s
• DIMENSIONS (L x W x H)	1680 x 995 x 1465
• WEIGHT	380 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	7.7 A
• RECOMMENDED FUSE PROTECTION	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• STANDARD DUCT CONNECTIONS (15 mm)	918 x 583
• GUIDE DUCT CONNECTIONS (20 mm) (W x H)	900 x 600
• AMBIENT TEMPERATURE	-20 ... +50°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

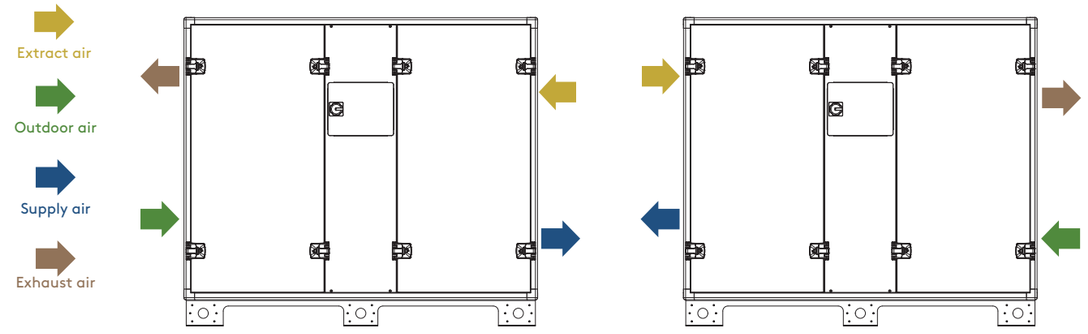
AIRFLOW		Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	POWER CONSUMPTION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
300	83	200	1.8	52	51	0.2	76%
900	250	200	1.2	63	61	0.3	83%
1600	445	200	1.3	77	73	0.6	82%
2200	612	200	1.5	88	85	0.9	79%
2800	778	200	1.7	100	98	1.3	77%

Conditions

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)





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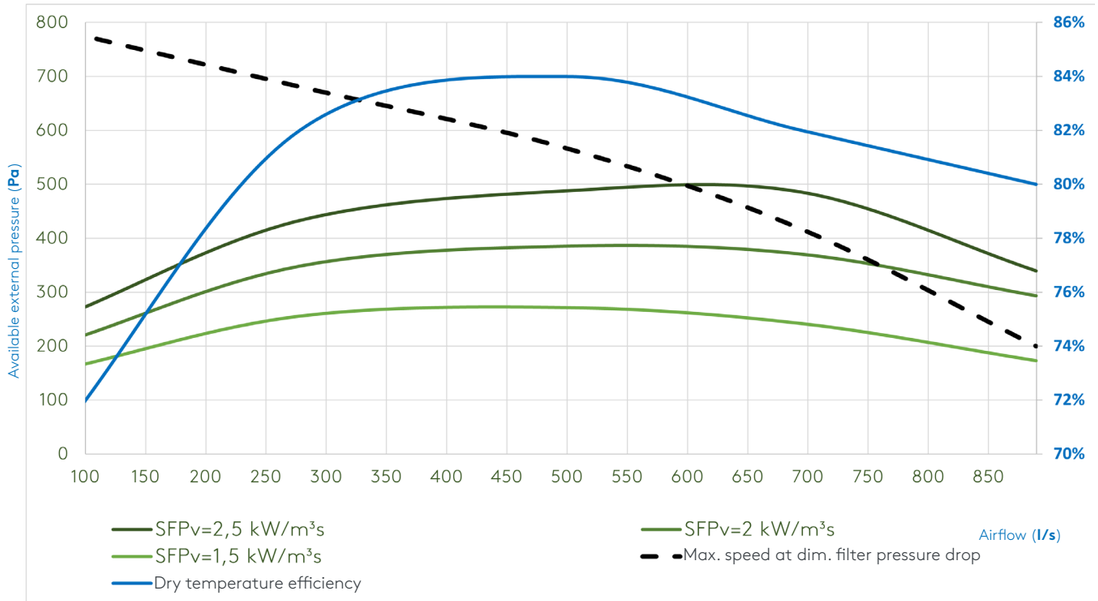
This document is an overview of technical data. For detailed and updated technical information, see our selection program.

GLOBAL RX 16

FAN DIAGRAMS



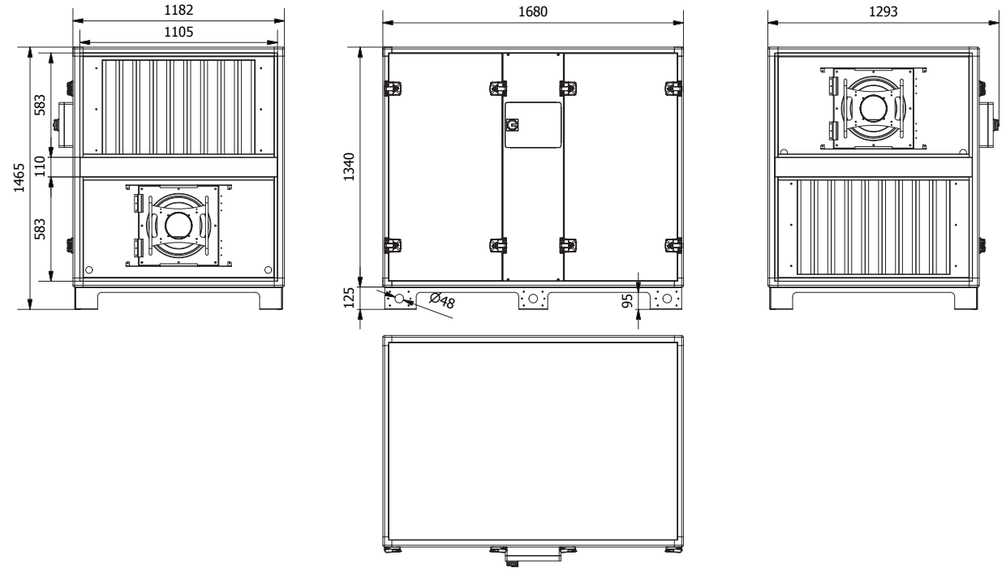
• AIRFLOW	3200 m³/h 83–890 l/s
• DIMENSIONS (L x W x H)	1680 x 1182 x 1465
• WEIGHT	395 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	7.7 A
• RECOMMENDED FUSE PROTECTION	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• STANDARD DUCT CONNECTIONS (15 mm)	1105 x 583
• GUIDE DUCT CONNECTIONS (20 mm) (W x H)	1100 x 600
• AMBIENT TEMPERATURE	-20°C ... +50°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

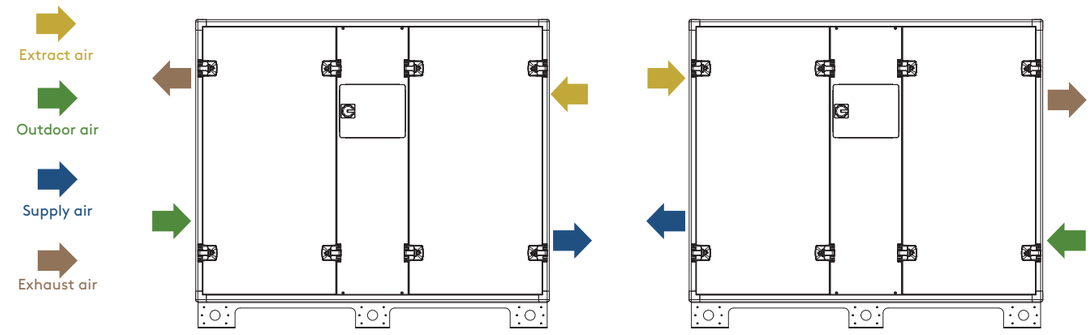
AIRFLOW		Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	POWER CONSUMPTION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
300	83	200	1.8	52	52	0.2	71%
1000	278	200	1.2	62	60	0.3	82%
1800	500	200	1.2	75	71	0.6	84%
2500	695	200	1.3	87	84	0.9	82%
3200	890	200	1.6	100	97	1.4	80%

Conditions

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)





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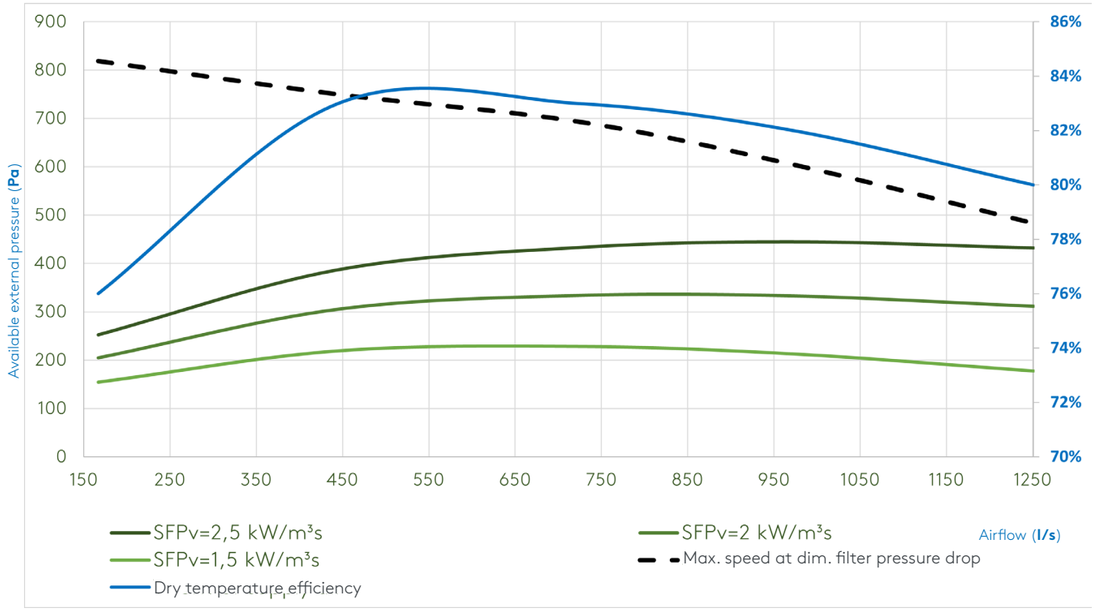
GLOBAL RX 18

FAN DIAGRAMS



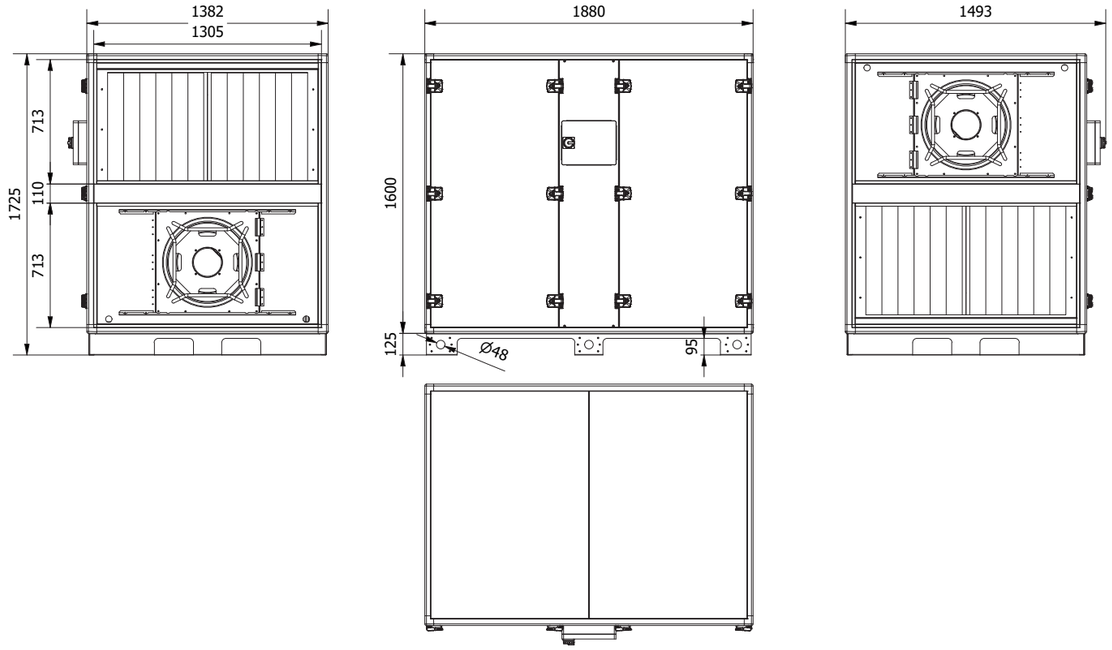
- AIRFLOW 600–4500 m³/h
  167–1251 l/s
- DIMENSIONS (L x W x H) 1880 x 1382 x 1725
- WEIGHT 650 kg
- ELECTRIC POWER SUPPLY 3 x 400 V + N
- MAX. POWER CONSUMPTION 6.5 A
- RECOMMENDED FUSE PROTECTION D10A - 10kA - AC3
- FILTER CLASS (BAG FILTER) F7 (ePM1 70%) / M5 (ePM10 55%)
- STANDARD DUCT CONNECTIONS (15 mm) 1305 x 713
- GUIDE DUCT CONNECTIONS (20 mm) (W x H) 1300 x 700
- AMBIENT TEMPERATURE -20°C ... +50°C
- EN1886 CLASSIFICATION T3/TB2/F9/L2/D2

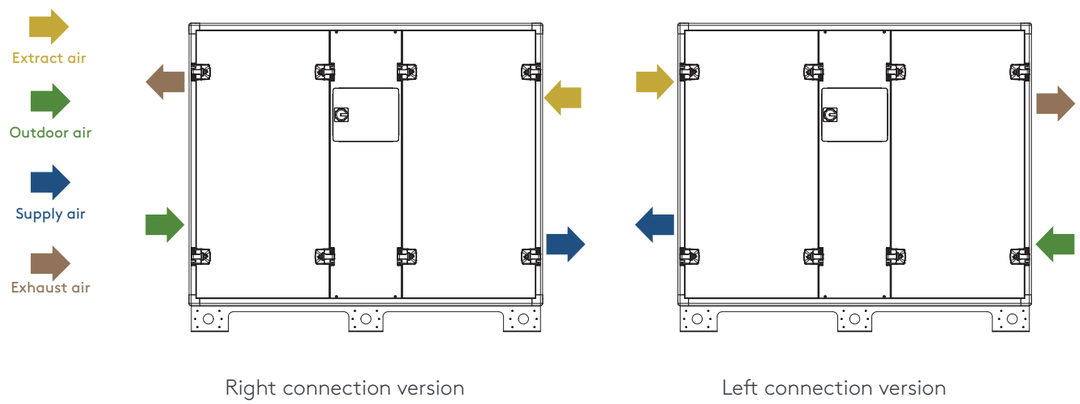
AIRFLOW		Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	POWER CONSUMPTION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
600	167	200	1.9	53	50	0.3	76%
1600	445	200	1.4	61	56	0.6	83%
2600	723	200	1.4	69	63	1.0	83%
3500	973	200	1.4	75	70	1.4	82%
4500	1251	200	1.6	83	79	2.0	80%

Conditions

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)





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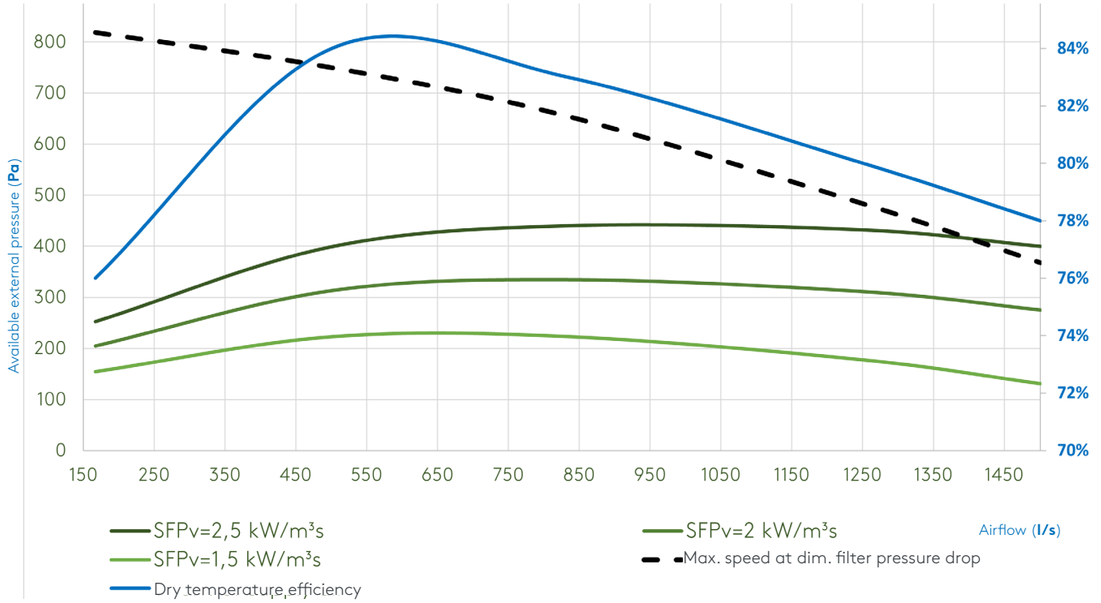
This document is an overview of technical data. For detailed and updated technical information, see our selection program.

GLOBAL RX 20

FAN DIAGRAMS

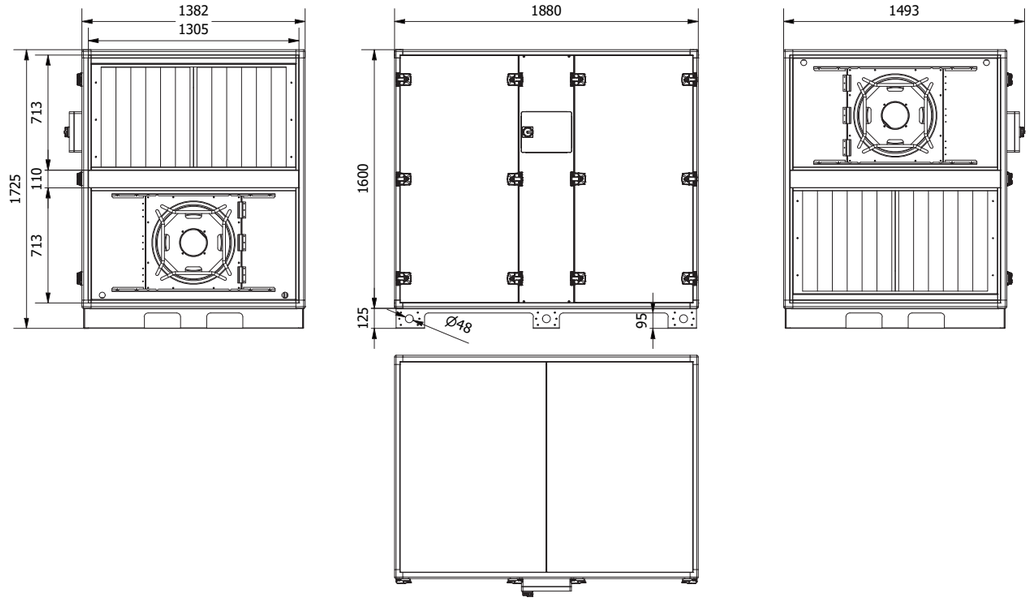


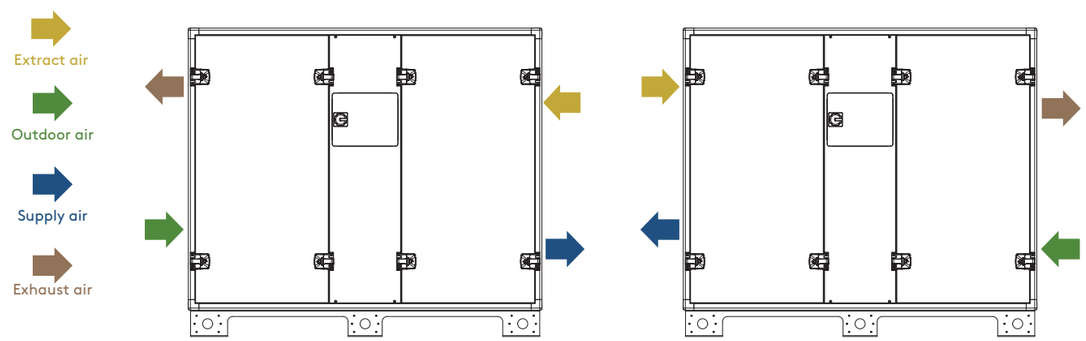
• AIRFLOW	600–5400 m³/h
	167–1501 l/s
• DIMENSIONS (L x W x H)	1880 x 1382 x 1725
• WEIGHT	450 kg
• ELECTRIC POWER SUPPLY	3 x 400 V + N
• MAX. POWER CONSUMPTION	6.5 A
• RECOMMENDED FUSE PROTECTION	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• STANDARD DUCT CONNECTIONS (15 mm)	1305 x 713
• GUIDE DUCT CONNECTIONS (20 mm) (W x H)	1300 x 700
• 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 CONSUMP-TION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
600	167	200	1.9	53	50	0.3	76%
1800	500	200	1.4	62	57	0.7	84%
3000	834	200	1.4	72	66	1.2	83%
4500	1251	200	1.6	83	79	2.0	80%
5400	1501	200	1.7	91	87	2.6	78%

Conditions

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





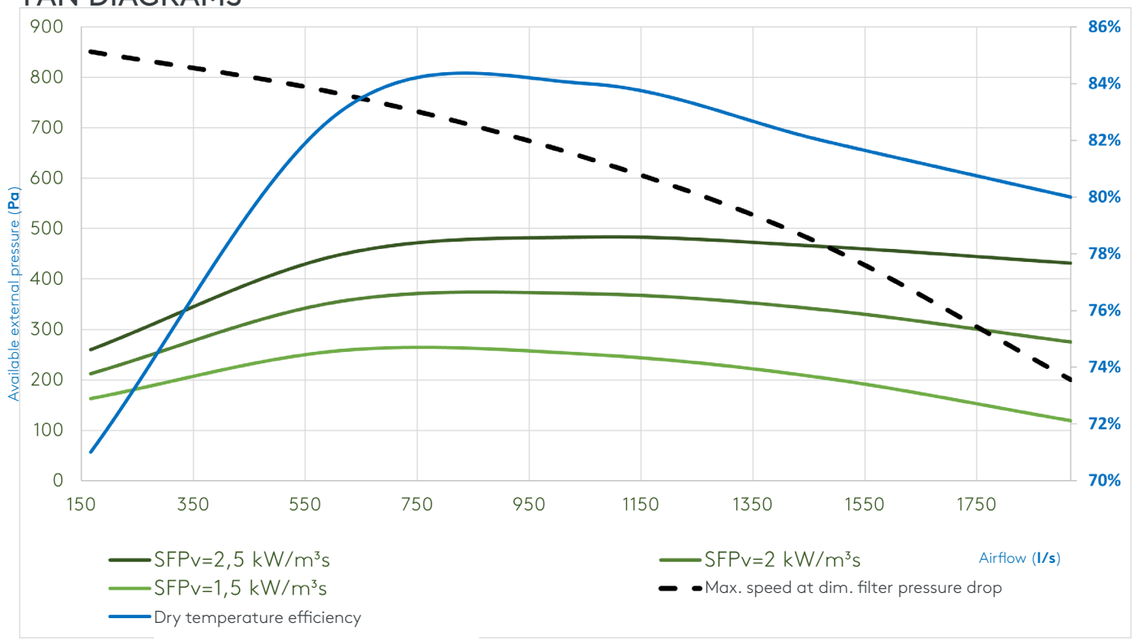
Right connection version

Left connection version

This document is an overview of technical data. For detailed and updated technical information, see our selection program.

GLOBAL RX 26

FAN DIAGRAMS



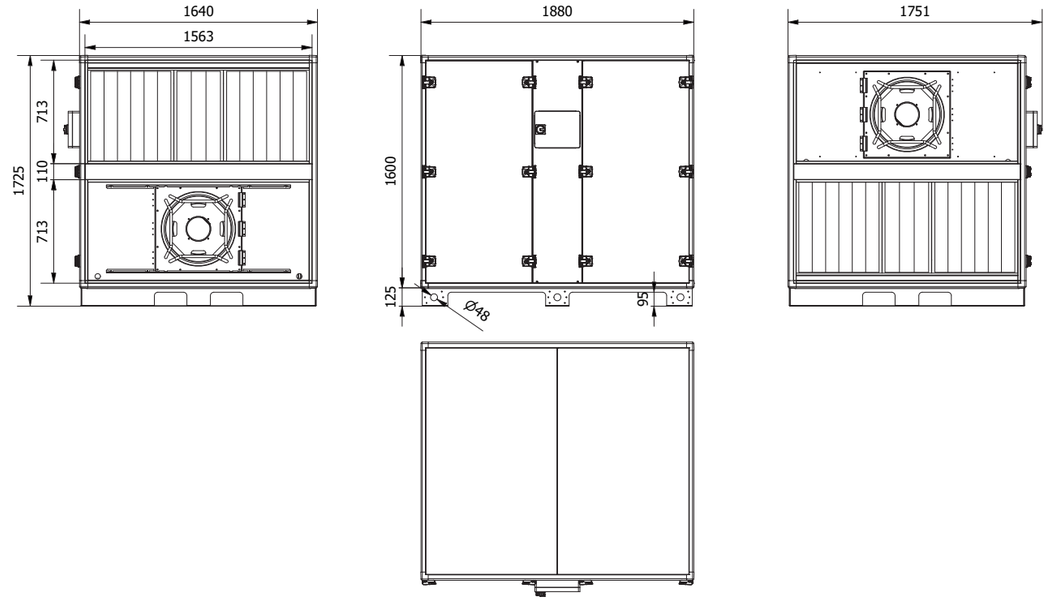
• AIRFLOW	600–6900 m³/h
	167–1918 l/s
• DIMENSIONS (L x W x H)	1880 x 1640 x 1725
• WEIGHT	680 kg
• ELECTRIC POWER SUPPLY	3 x 400 V + N
• MAX. POWER CONSUMPTION	6.5 A
• RECOMMENDED FUSE PROTECTION	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• STANDARD DUCT CONNECTIONS (15 mm)	1563 x 713
• GUIDE DUCT CONNECTIONS (20 mm) (W x H)	1600 x 700
• AMBIENT TEMPERATURE	-20°C ... +50°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

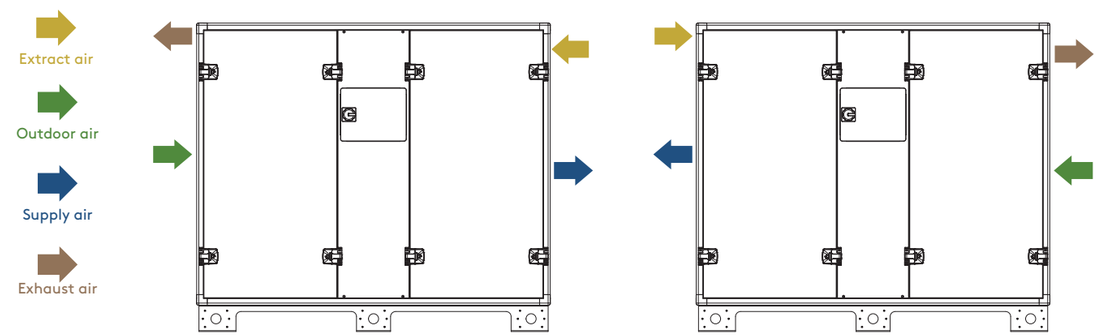
AIRFLOW		Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	POWER CONSUMPTION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
600	167	200	1.8	49	49	0.3	71%
2200	612	200	1.2	60	58	0.7	83%
3800	1056	200	1.3	73	71	1.4	84%
5300	1473	200	1.5	86	84	2.2	82%
6900	1918	200	1.8	100	98	3.4	80%

Conditions

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)





Right connection version

Left connection version

This document is an overview of technical data. For detailed and updated technical information, see our selection program.

GLOBAL RX

Designation key:

GLOBAL_XXX_XX_XXX_X

Efficiency, heat exchanger: RX

Unit size: 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 standard 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:

SCXX_XXX-XXX

Connection frame width (mm)

Duct dimensions (mm)

MODEL	DUCT CONNECTION [MM]	MARKING
GLOBAL RX 13	900 x 600	SC20_900-600
GLOBAL RX 16	1100 x 600	SC20_1100-600
GLOBAL RX 18/20	1300 x 700	SC20_1300-700
GLOBAL RX 26	1600 x 700	SC20_1600-700

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:

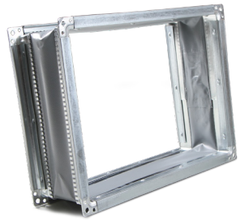
MSXX_XXX-XXX

Connection frame width (mm)

Duct dimensions (mm)

MODEL	INTERNAL DIMENSIONS [MM]	EXTERNAL DIMENSIONS [MM]	MARKING
GLOBAL RX13	875 x 540	915 x 580	MS20_875-540
GLOBAL RX 16	1060 x 540	1100 x 580	MS20_1060-540
GLOBAL RX18/20	1265 x 670	1305 x 710	MS20_ 1265-670
GLOBAL RX 26	1520 x 670	1560 x 710	MS20_1520-670

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 pressure up to 2000 Pa. The 30 mm wide “METU” sleeve connection is made of 1 mm thick, galvanised sheet steel.

Designation key:

MSXX_XXX-XXX

Connection frame width (mm)

Duct dimensions (mm)

MODEL	INTERNAL DIMENSIONS [MM]	EXTERNAL DIMENSIONS [MM]	MARKING
GLOBAL RX 13	855 x 520	915 x 580	MS30_855-520
GLOBAL RX 16	1060 x 540	1100 x 580	MS30_1040-520
GLOBAL RX 18/20	1245 x 650	1305 x 710	MS30_1245-650
GLOBAL RX 26	1500 x 650	1560 x 710	MS30_1500-650

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.

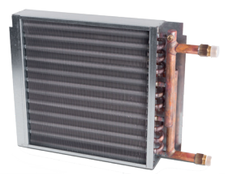
MODEL	DIMENSIONS, SUPPLY AIR [MM]	DIMENSIONS, EXTRACT AIR [MM]
GLOBAL RX 08	490 x 517 x 380	490 x 517 x 517
GLOBAL RX 13	705 x 592 x 380	705 x 592 x 360
GLOBAL RX 16	892 x 592 x 380	892 x 592 x 360
GLOBAL RX 18/20	592 x 692 x 380 (x2)	592 x 692 x 360 (x2)
GLOBAL RX 26	592 x 692 x 380 (x2) + 340 x 692 x 380	592 x 692 x 360 (x2) + 340 x 692 x 360

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 08	490 x 517 x 50
GLOBAL RX 13	705 x 592 x 50
GLOBAL RX 16	892 x 592 x 50
GLOBAL RX 18/20	592 x 692 x 50 (x2)
GLOBAL RX 26	340 x 692 x 50 (x2) + 340 x 692 x 50

BUILT-IN WATER HEATING COIL 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.

Designation key: IBA_XX-XX

Heater type and number of rows

Size

MODEL	Ø	MARKING
GLOBAL RX 08	1/2	IBA_2H_H08
GLOBAL RX 13	1/2	IBA_2H_H13
GLOBAL RX 16	1/2	IBA_2H_H16
GLOBAL RX 18/20	3/4	IBA_2H_H20
GLOBAL RX 26	3/4	IBA_2H_H24

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.

Designation key: KW_XXX_XX-X_XX/XX

Pre-/reheating (IN/OUT)

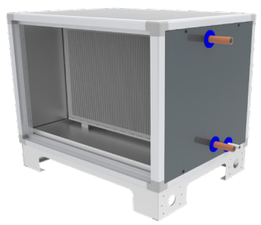
Heating capacity (kW)

Power supply: 1 = 3*400 V/2=3*230 V

Size

MODEL	CAPACITY	MARKING
GLOBAL RX 08	6.0 KW	KW_OUT_6_x_08
GLOBAL RX 13	9.0 KW	KW_OUT_9_x_12
GLOBAL RX 16	12.0 KW	KW_OUT_12_x_14/16
GLOBAL RX 18	15.0 kW	KW_OUT_15_x_18
GLOBAL RX 20	18.0 kW	KW_OUT_18_x_20
GLOBAL RX 26	22.5 kW	KW_OUT_22.5_x_26

INSULATED INTEGRATED CASING FOR EXTERNAL HEATERS/COOLERS



The insulated integrated casing has a sandwich construction, made of galvanised sheet steel, with 50 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. The unit is fitted with a 125 mm base frame.

Designation key: ECA_XXX-XXX_XX/XX

Duct dimensions (mm)

Unit size

MODEL	DUCT CONNECTION [MM]	GUIDE RAIL [MM]	DIMENSIONS [MM]	MARKING
GLOBAL RX 08	Ø 400	N.A.	697 x 670 x 815	ECAd_315_08
GLOBAL RX 13	915 x 580	900 x 600	772 x 670 x 995	ECAd_915-580_13
GLOBAL RX 16	1105 x 580	1100 x 600	772 x 670 x 1182	ECAd_1105-580_16
GLOBAL RX 18/20	1305 x 710	1300 x 700	902 x 670 x 1382	ECAd_1305-710_20
GLOBAL RX 26	1305 x 580	1300 x 600	772 x 670 x 1382	ECAd_1560-710_26

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.

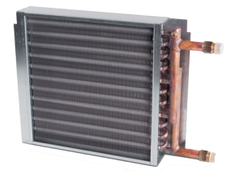
Designation key: IRS_XXX-XXX_XXX

The rectangular connection's external dimensions

The circular connection's diameter

MODEL	DIMENSIONS [MM]	MARKING
GLOBAL RX 13	945 x 615 - Ø400	IRS_945-615_400
GLOBAL RX 16	1140 x 615 - Ø500	IRS_1140-615_500

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 pipes 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.

Designation key: EBA_XX_XX/XX

Function and number of rows

Size

MODEL	FUNCTION	NUMBER OF ROWS	MARKING
GLOBAL RX 08	Heating	4	EBA_4H_H08
GLOBAL RX 08	Cooling	4	EBA_4C_H08
GLOBAL RX 08	DX	4	EBA_4X_H08
GLOBAL RX 13	Heating	4	EBA_4H_H13
GLOBAL RX 13	Cooling	4	EBA_4C_H13
GLOBAL RX 13	DX	4	EBA_4X_H13
GLOBAL RX 16	Heating	4	EBA_4H_H16
GLOBAL RX 16	Cooling	4	EBA_4C_H16
GLOBAL RX 16	DX	4	EBA_4X_H16
GLOBAL RX 18/20	Heating	4	EBA_4H_H20
GLOBAL RX 18/20	Cooling	4	EBA_4C_H20
GLOBAL RX 18/20	DX	4	EBA_4X_H20
GLOBAL RX 26	Heating	4	EBA_4H_H26
GLOBAL RX 26	Cooling	4	EBA_4C_H26
GLOBAL RX 26	DX	4	EBA_4X_H26

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 water heating coil or cooler is used. Rectangular shut-off dampers are factory installed and wired, circular ones are supplied separately. 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.

Designation key: CTXX_XXX-XXX_SM01

- Connection frame (mm)
- Duct dimensions (mm)
- Without actuator =
  On/off = SM01
  Spring return = SM02

MODEL	INTERNAL DIMENSIONS (MM)	EXTERNAL DIMENSIONS (MM)	MARKING
GLOBAL RX 08	Ø315		CT_315
GLOBAL RX 13	835 x 500	915 x 580	CT40_835-500
GLOBAL RX 16	1020 x 500	1100 x 580	CT40_1020-500
GLOBAL RX 18/20	1225 x 630	1305 x 710	CT40_1225-630
GLOBAL RX 26	1480 x 630	1560 x 710	CT40_1480-630

ROOF FOR OUTDOOR INSTALLATION

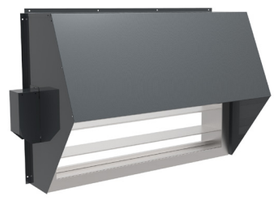
The roof for outdoor installation is supplied as a complete kit for assembling the unit at the installation site.

Designation key: OUT_XXX-XXX

- Size of the roof (mm)

MODEL	SIZE OF THE ROOF	MARKING
GLOBAL RX 08	1670 x 955	OUT_1670-955
GLOBAL RX 13	1820 x 1135	OUT_1820-1135
GLOBAL RX 16	1820 x 1320	OUT_1820-1320
GLOBAL RX 18/20	2020 x 1520	OUT_2020-1520
GLOBAL RX 26	2020 x 1780	OUT_2020-1780

INTAKE HOOD WITH PROTECTIVE GRILLE



The intake section is screwed onto the air handling unit's duct connection. With a damper as an optional extra, its motor is weatherproof. The air intake is equipped with a mesh grille to protect the unit. Short-circuit from exhaust air is avoided combination with exhaust air hood (AUe). The accessory is supplied from the factory, fully assembled with complete electrical connections.

Designation key: AUi_ XX / XX

- Size of the hood (mm)

MODEL	DIMENSIONS	MARKING	MARKING
GLOBAL RX 08	340 x 600	AUi_315	AUCTi_315
GLOBAL RX 13	925 x 585	AUi_925-585	AUCTi_925-585
GLOBAL RX 16	1110 x 585	AUi_1110-585	AUCTi_1110-585
GLOBAL RX 18/20	1310 x 715	AUi_1310-715	AUCTi_1310-715
GLOBAL RX 26	1565 x 715	AUi_1110-585	AUCTi_1110-585

EXHAUST AIR HOOD WITH PROTECTIVE GRILLE

The exhaust air section is screwed onto the air handling unit's duct connection. With a damper as an optional extra, its motor is weatherproof. The hood is equipped with a mesh grille to protect the unit. Short-circuit to outdoor air is avoided in combination with intake hood (AUi). The accessory is supplied from the factory, full assembled with complete electrical connections.

Designation key: AUe_ XX / XX

- Size of the hood (mm)

MODEL	DIMENSIONS	MARKING	MARKING
GLOBAL RX 08	340 x 600	AUe_315	AUCTe_315
GLOBAL RX 13	925 x 585	AUe_925-585	AUCTe_925-585
GLOBAL RX 16	1110 x 585	AUe_1110-585	AUCTe_1110-585
GLOBAL RX 18/20	1310 x 715	AUe_1310-715	AUCTe_1310-715
GLOBAL RX 26	1565 x 715	AUe_1110-585	AUCTe_1110-585

Swegon reserves the right to make changes. 07/08/2024

Feel good **inside**

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