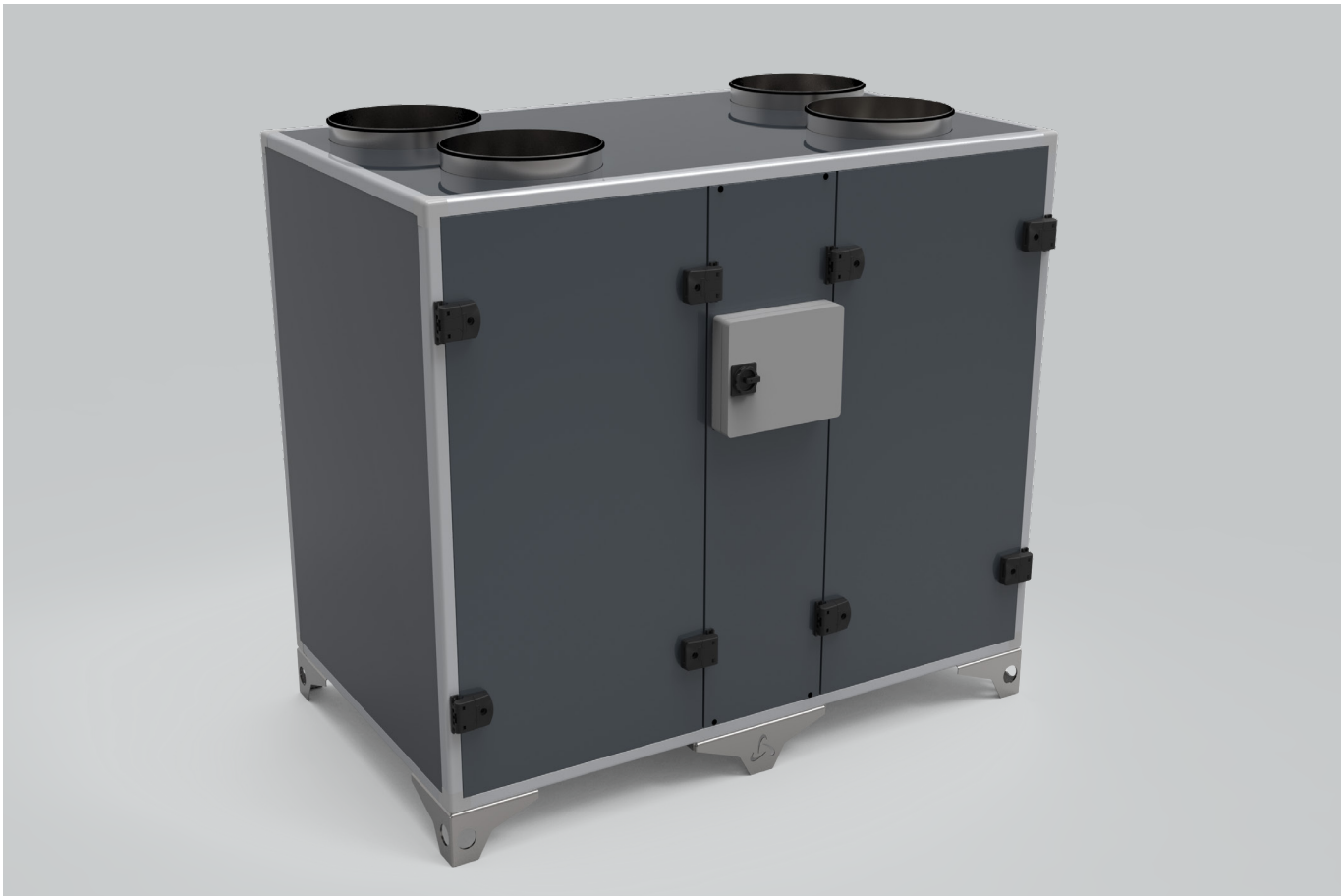
GLOBAL RX TOP

Ventilation unit with rotary heat exchanger and composite fans - TAC6



Ventilation unit with rotary heat exchanger for commercial applications. Well-suited for both newly constructed buildings and renovation projects.

Maximum airflow 3050 m³/h or 848 l/s.

Temperature efficiency: up to 85 %.

Energy-efficient and quiet fans with composite or aluminum blades

For installation indoors in a machine room, storage space, etc.

High efficiency and premium efficiency heat exchangers available

Premium control technique with touchscreen HMI.

Door compliant up to 2000 m³/h or 550 l/s

Swegon

DOUBLE FLOW HIGH PERFORMANCE VENTILATION UNITS

Given that each project has unique parameters and caters for different requirements, it follows that there can be no universal, 'one-size-fits-all' unit. This is why Swegon offers an unrivalled range of air handling units. Whether your project is large-scale or small-scale, whether it calls for basic or advanced products, whether the expectations regarding sound levels or space efficiency are tough to meet, we have a solution to match your requirements. In other words, we have the perfect unit for your project.

The company opted for the systematic integration of fans equipped with high performance DC motors (TAC technology). With this technology, the GLOBAL line anticipated the most demanding levels of energy requirements to come, such as those set by the new standards ErP2018.

Over time, it has developed more extensive and effective control. The most recent (TAC) is at the forefront of the technology, due both to its internal functionality and its opening via communication (Modbus, TCP/IP, BACnet, KNX).

PLUG-AND-PLAY UNITS

The GLOBAL ventilation units are supplied as plug and play devices. The basic functions are pre-programmed and accessories are pre-installed, pre-wired and pre-configured in factory. Once the remote control module has been connected, all that needs to be done is to switch the unit on and to change the pre-configured parameters if needed.

ACCESS – FOR OPERATORS

The units' generously sized doors ensure good access for maintenance work.

ROTARY HEAT EXCHANGER

The exchanger is a high efficiency (>80%) air/air rotary type made of seawater-resistant aluminium. The exchanger complies with standard EN 308 and is Eurovent certified.

HIGH-PERFORMANCE FANS

The powerful EC fans ensure that sufficient external pressure is available, even with high airflows. The compositet fan blades will ensure a better SFP and a higher fan efficiency, compared to aluminum fan blades. The efficiency level fulfills the ErP2018 requirements.

SUMMER AND NIGHT TIME COOLING

A 100% bypass is a standard feature on rotary heat exchangers. It allows us to ensure the freecooling function and is automatically regulated on the basis of indoor and outdoor temperatures.

HEATER ELEMENTS

The GLOBAL units can be factory-fitted with an integrated water or electric heater element for post-heating. The capacity of coil is modulated in order to maintain a constant temperature. The water heating coil is ready-to-connect and delivered with a 3-way valve controlled by the TAC controller. The built in control system allows for all GLOBAL units to control an additional external heating (electric or water) and/or cooling exchanger.

DAMPERS

The GLOBAL units can be factory-fitted with connected, motor-driven supply air and exhaust air dampers. In this case, the TAC control activates a fan start-up delay when the unit is started. As an option, a spring return actuator is available.

AIR FILTERS – FILTER CLASSES

As standard, the GLOBAL ventilation units are fitted with particularly effective and large-scale particulate matter bag filters, with filter class ePM1≥70% for the supply air and ePM10≥50% for the exhaust air (a G4 prefilter is available as an option).

CONTROL MODULES

The integrated TAC control system can be connected to:
Touchscreen HMI with 4,3" capacitive touchscreen. For configuring and controlling the operation of a heat recovery unit.
SAT MODBUS for configuration, visual display and controlling the operation via MODBUS RTU.
SAT KNX for configuration, visual display and controlling the operation via KNX.
TCP/IP module for communication via the internet (MODBUS TCP/IP protocol) and the heat recovery devices. Embedded web pages are used for the configuration, visual display and controlling the operation.
BACnet gateway for configuration, visual display and controlling the operation via BACnet IP.

GLOBAL RX TOP SERIES

CONTROL OPTIONS

TACTOUCH HMI

BACnet gateway

MODBUS RTU / ETHERNET

WIFI

KNX

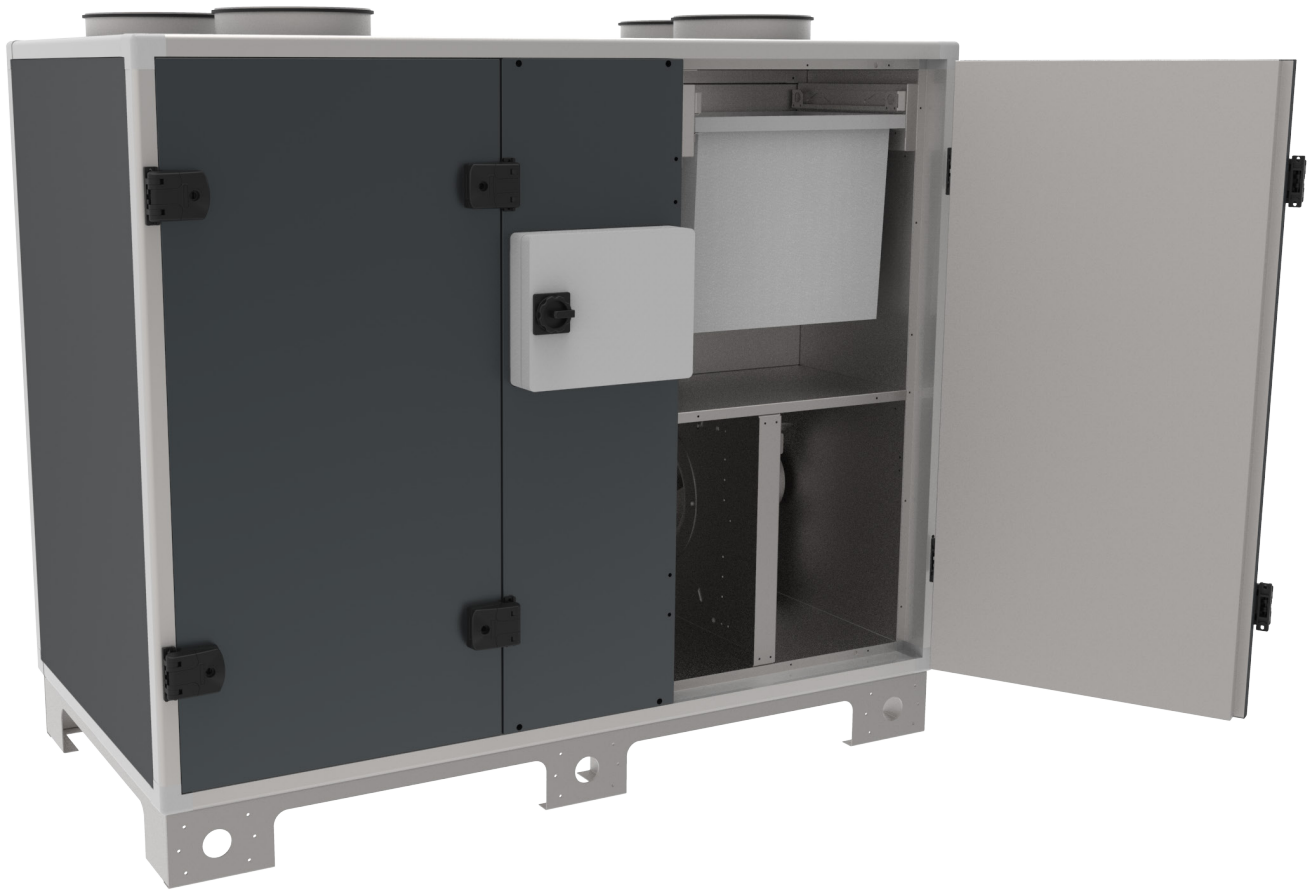
SAT IO

AVAILABLE OPTIONS

- Internal electrical post heating coil (KWout)
- Internal water post heating coil (IBA)
- Exteral post heating/cooling coil (EBA)
- Motorised dampers (CT)
- Flexible sleeve 20mm (MS20)
- Flexible sleeve 30mm (MS30)
- Slip clamps 20mm (SC20)

MAIN ADVANTAGES

- EN1886 classifiaction: T3/TB2/F9/L2/D2
- High or premium efficiency rotary heat exchanger with Eurovent certification.
- Integrated post heating coil; elecrtrical or water based. Fully integrated modulating capacity control.
- Innovative touchscreen interface with intuitive commissioning menu and integrated contextual aid.
- EC plug fans with composite blades for optimised efficiency and low noise levels. Aluminum fan blades available as an option.
- All doors are double-hinged. Thus facilitating access to all components in restricted spaces.
- RAL7016 galvanized steel sheet construction with 50mm mineral wool thermal insulation.
- Robust constuction with aluminum profiles.
- Circular duct connections with rubber seal.
- Plug-and-play prewired unit. The complete unit with all of its accessories are pre-installed, pre-wired and pre-configured in factory.
- Bag filters for both supply and extract air. ePM1≥70% for fresh air intake and ePM10≥50% for extract air. G4 prefilter on fresh air intake available as an option.
- Open structure base frame enabeling ease of transport on site.
- 48mm holes in 125mm high baseframe for lifting purposes.
- General high level of finishing; possibility to adjust allignement and pressure exerted by the hinges.
- Proven TAC controller with preconfiguration.
- Door compliant for airflows up to 2000 m³/h (550 l/s).
- Max airflow of 3050 m³/h (848 /s) for model "16"
- ERP2018 optimised design
- Selection software available for free download
- Standard VDI6022 compliant



Flexible for a wide variety of solutions
THE CORRECT OPERATING MODE IS AN IMPORTANT FACTOR

AIRFLOW OR PRESSURE

Whether the ventilation system is operated on the basis of constant pressure or constant airflow or via a 0–10V control system depends on the area of application and the specific on-site requirements. The integrated master/slave control system ensures that operation is always well-balanced.

THE ADVANTAGES IN DE-TAIL

- Sufficiently high reserve pressure
- Constant airflow
- Demand control: constant airflow linked to a 0–10 V signal
- Constant pressure via an external pressure sensor

Constant airflow mode

A typical area of application is non-residential buildings, e.g. offices and business premises as well as schools, nurseries and sports halls with stable volumes of air.

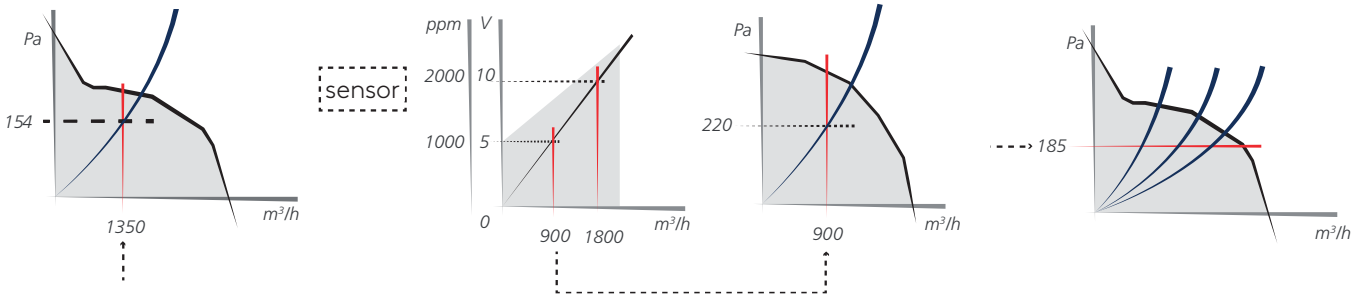
Demand control mode

Alternatively, the airflow can be automatically adapted in line with the ventilation requirements and on a user-specific basis via the 0–10 V input, e.g. by means of a CO2 sensor, or the control system can be used via the customer's building service management/ instrumentation and control system.

Constant pressure mode

A prime example is undoubtedly apartment buildings with the opportunity to control the ventilation in individual apartments separately. The pressure remains constant even when the ventilation is increased or decreased in one apartment as required, by means of an airflow control unit.
The airflow stays the same in all the other apartments, i.e. the ventilation system always runs within the ideal range. An external pressure sensor is required for constant pressure mode.

THE 3 MAIN OPERATING MODES:



Constant Airflow mode
The airflow is kept constant, irrespective of external changes in pressure.

Demand control mode
A linear voltage/airflow ratio. The airflow can be regulated, e.g. by a CO2 sensor, via a 0–10 Volt signal.

Constant pressure mode
The pressure is kept constant, irrespective of external changes in pressure. An external pressure sensor is required.

OPTIONAL CONTROL MODULES

TACtouch Touchscreen

Remote control with LCD display and integrated timer with 6 actions per day and 'off day' functionality. For configuring and controlling the operation of 1 heat recovery unit. All parameters are set and the unit can be operated via 4 buttons and all the operating parameters are displayed in plain characters. Error display. For stand-alone solutions.

4 POSITION SWITCH

With the four position switch, a unit can be switched to one its three configurable operating speeds and the off-position.

SAT MODBUS

Interface for configuration, visual display and controlling the operation via MODBUS RTU

SAT ETHERNET

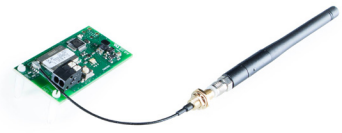
Interface for configuration, visual display and controlling the operation via MODBUS TCP/IP

BACnet gateway

For communicating with the heat recovery devices via a BACnet TCP/IP protocol. Up to four units can ben integrated through the interface. The optional SAT Ethernet interface is required.

SAT Wifi

The Wifi interface, combined with the TAC controller allows for a wireless connection to the air handling unit. Typically this accessory would be used in order to control the unit with the smart phone application.



SAT KNX

Interface for configuration, visual display and controlling the operation via KNX

SAT IO

SAT IO is a satellite circuit designed to be fitted on the main controlboard. It permits to extend the number of inputs and outputs.

EC PLUG FAN WITH COMPOSITE FAN BLADES (ALUMINUM BLADES OPTINAL) 1

FRESH AIR BAG FILTER ePM1≥70% (G4 PREFILTER OPTIONAL) 2

INTEGRATED CONTROLLER 3

EASY ACCESS HINGES 4

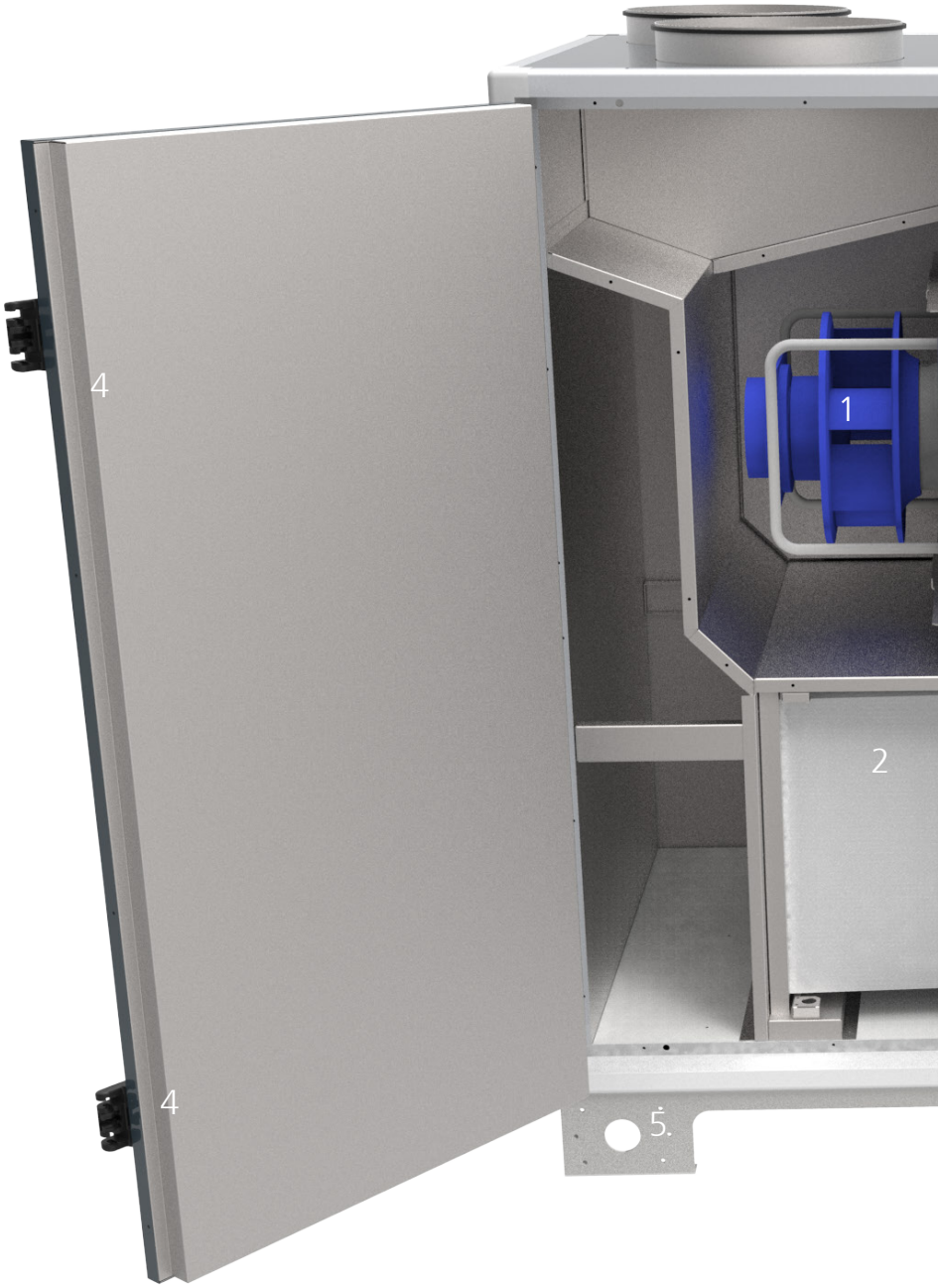
BASE FRAME FOR EASY ON SITE TRANSPORT 5

HIGH EFFICIENCY ROTARY HEAT EXCHANGER 6

INTEGRATED POST HEATING (WATER/ ELECTRICAL) 7

STEPLESS ROTOR DRIVE WITH SOLDERED BELT 8

EXTRACT AIR BAG FILTER ePM10≥50% 9



GLOBAL RX TOP SERIES

EN1886 CERTIFICATION

EN1886 classification: T3/TB2/F9/L2/D2. The selection software uses the Eurovent certified selection software as supplied by our supplier of the heat rotary heat exchanger. All relevant Eurovent certification diplomas are published on the technical datasheet as generated by our selection software. The selection software is availbable for free download.

CIRCULAR DUCT CONNECTIONS

The duct connections for sizes 05, 08 and 10 and circular and with rubber sealing. The duct connections are horizontally and vertically offset to enable ducts to be run in any direction without blocking one another. The units can be combined with motorised dampers.

RECTANGULAR DUCT CONNECTIONS

The standard duct connections (15mm) for sizes 12, 13, 14 and 16 are rectangular. For the units with rectangular duct connections, several optional accessories are available: Adapter rectangular/circular, 20mm slip clamps or even a 30mm connection frame (METU). The units can be combined with motorised dampers and flexible sleeves.

FILTERS

All GLOBAL RX TOP units are equipped with bag filters. The function of the filter is to keep both the air and the heat exchanger clean. the standard fresh air filter is of class ePM1≥70, the standard extract air filter is of class ePM10≥50. An ePM1≥50 filter on the extract air side is not available since this would have a negative influence on the energy consumption. The filters are mounted in locking guide rails in order to facilitate removal and inspection. The filters guiderials and compliant to the requirements for filter bypass leakage to Class F9. The filter monitoring function is integrated in the standard configuration of the TAC controller.

INTERNAL PRE-FILTERS

Prefilters installed inside the air handling unit can be ordered as optional accessory. Prefilters are used when the outdoor air is heavily polluted and it is desirable to prevent the fine filters inside the GLOBAL unit from becoming clogged after a short period of use. The prefilters are of Class G4 compact filters. The prefilters are mouted in locking guide rails in order to facilitated removal and inspection.The prefilters guiderials and compliant to the requirements for filter bypass leakage to Class F9. The prefilter monitoring function is integrated in the standard configuration of the TAC controller.

UNIT CASING

The casing of the GLOBAL RX TOP units is fabricated of aluminum profiled sections held together by synthetic corners. The outer skin is made of painted steel sheet, RAL7016. The inner skin is made of galvanized sheet steel. The panel thickness is 50mm with intervening insulation consisting of mineral wool. The doors are hung on four hinges, two on every side, with integrated handles. The doors can be opened in two directions.

EN1886 casing performance:

Air leakage, class:	L2
Thermal bridges:	TB2
Thermal transmission:	T3
Mechanical strength:	D2

BASE FRAME

The GLOBAL RX TOP units are prefitted with a base frame. The base frame is self supporting. The height of the base frame is 125mm. The base frame has 48mm holes to facilitate lifting by a crane; the base frame has openings in order to facilitate horizontal transport by means of a pallet truck.

EC FANS WITH COMPOSITE FAN BLADE

As standard, the EC fans are equipped with composite fan blades. Optionally, aluminum fan blades are available. The advantage of the composite fan blades are lower weight and aerodynamical shaping of the blades. All of this is finally resulting in a better SFP value.

ROTARY HEAT EXCHANGER

The rotary heat exchanger is a heat exchanger with thermal efficiency up to 85%. The speed of the impeller is proportionally regulated to meet the heating and cooling needs. The rotary condensing heat exchangers are available in 2 versions: in a premium version for high thermal efficiency and in a standard version for lower consumption and lower price. The purge sector, fitted on both versions, prevents any contamination of the air blown by the extracted air.

INTERNAL WATER HEATING COIL - IBA

The unit can be equipped with an internal water heating coil. The coil is physically located between the rotary heat exchanger and the supply air fan. The water coil has internal water connections and is deliverd with flexible connections in order to connect it to the hydraulical system on the outside of the unit. The water coil is equipped with an anti-frost protection temperature sensor, which is mounted on the surface of the coil.

INTERNAL ELECTRICAL HEATING COIL - KWOUT

The electrical post heating coil is physically located between the rotary heat exchanger and the supply air fan. The electrical coil has two overheating protections, one with manual reset and one with automatical reset. When the electrical post heating coil is configured correctly, the coil is stopped immediately when the unit is stoppped, however, the fans are kept running for 90 seconds in order to cool down the electrical coil.

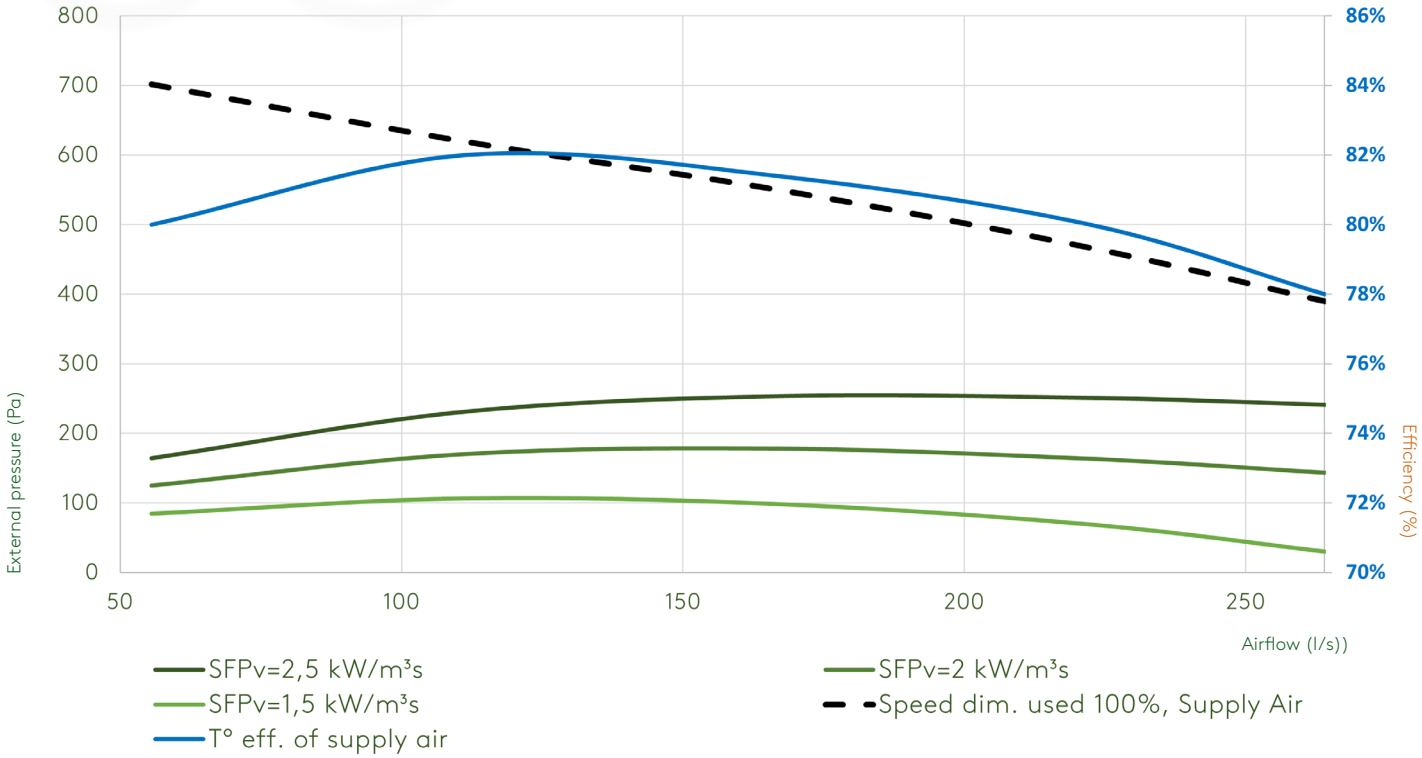
TAC CONTROLLER

The control equipment is completely integrated into the GLOBAL air handling unit. The controller controls and regulates the temperatures, airflows and other functions. The controller is pre-configured in factory with default settings.

TACtouch HMI

The hand-held user interface is a 4.3" touchscreen and is very user friendly. The HMI is rendering on-site commissioning intuitive and simple by means of the commissioning menu. The HMI is equipped with a 2 meter long connection cable and magnets. By means of the magnets, the HMI can be easily fixed on to any metallic surface.

GLOBAL RX 05 TOP



GENERAL TECHNICAL SPECIFICATIONS

• AIR VOLUME	200 – 950 m³/h
	56 – 264 l/s
• DIMENSIONS (L x W x H)	1530 x 815 x 1315
• WEIGHT	340 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	5.3 A
• RECOMMENDED FUSES	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	ePM1 70% / ePM10 50%
• FILTER SIZE SUPPLY AIR	640 x 385 x 380
• FILTER SIZE EXTRACT AIR	335 x 457 x 360
• STANDARD DUCT CONNECTIONS (15MM)	Ø 250
• SLIP CLAMP DUCT CONNECTIONS (20MM)	N.A.
• OPERATING RANGE	-20 ... +50 °C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

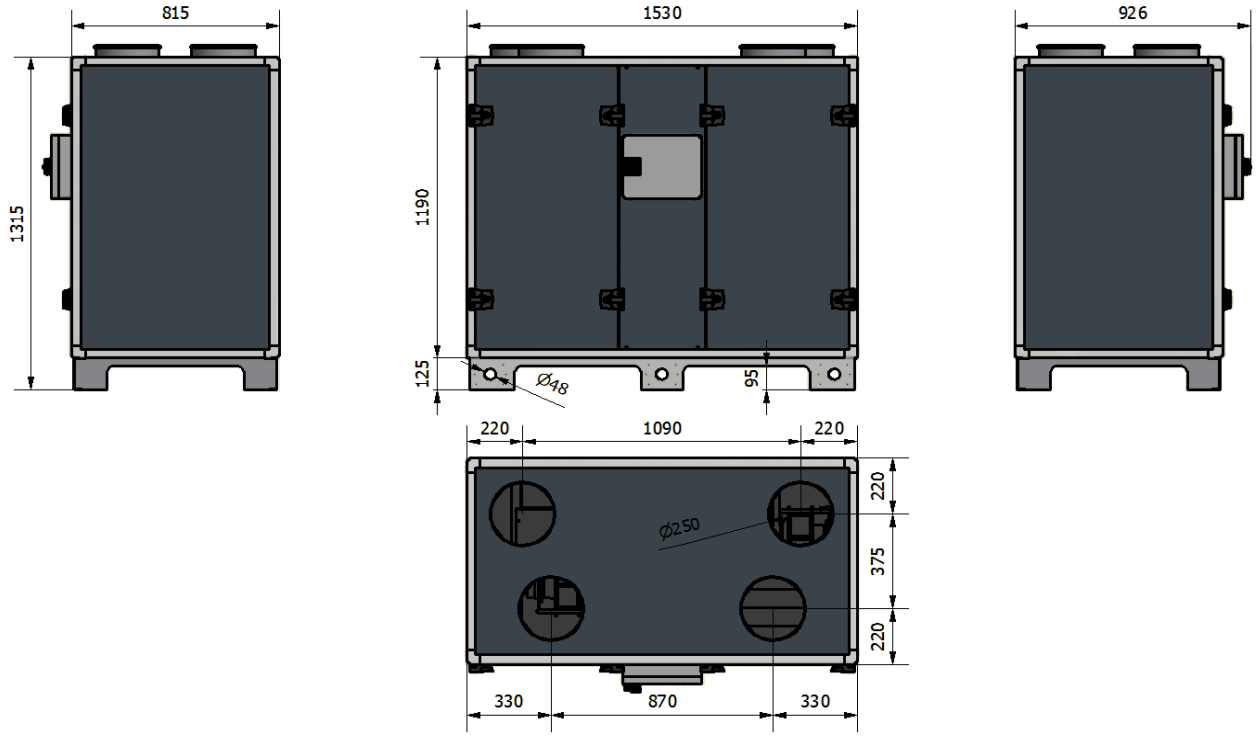
AIRFLOW		Pa ext	SFPv	Speed dim. used/max Supply Air	Speed dim. used/max Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	2,9	58	56	0,2	80%
400	111	200	2,2	65	65	0,2	82%
600	167	200	2,1	73	73	0,4	81%
800	222	200	2,2	81	82	0,5	80%
950	264	200	2,3	86	88	0,6	78%

Conditions

1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

DIMENSIONS (mm)

GLOBAL RX 05 TOP



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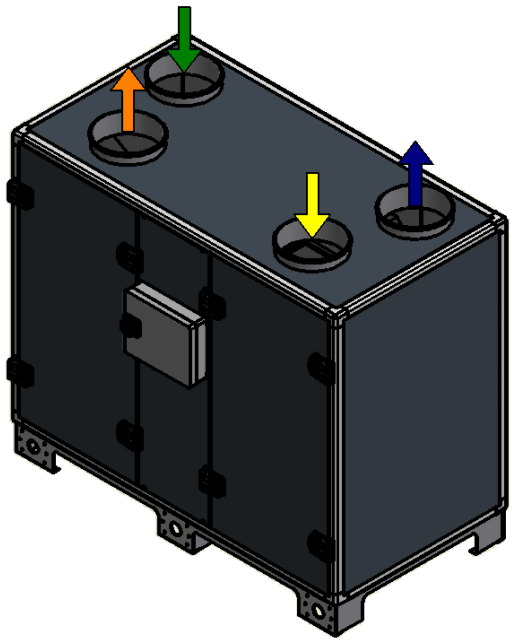
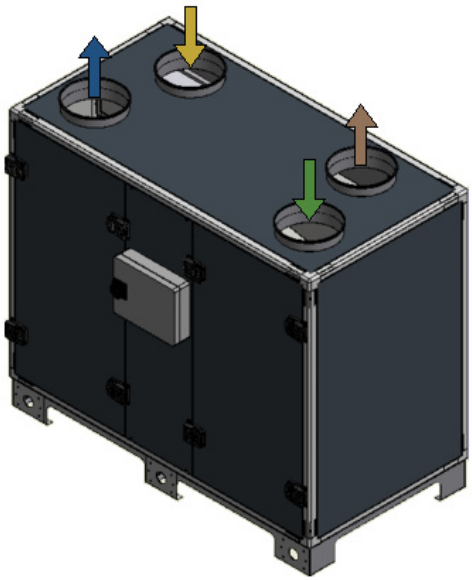




Extract air

Outdoor air

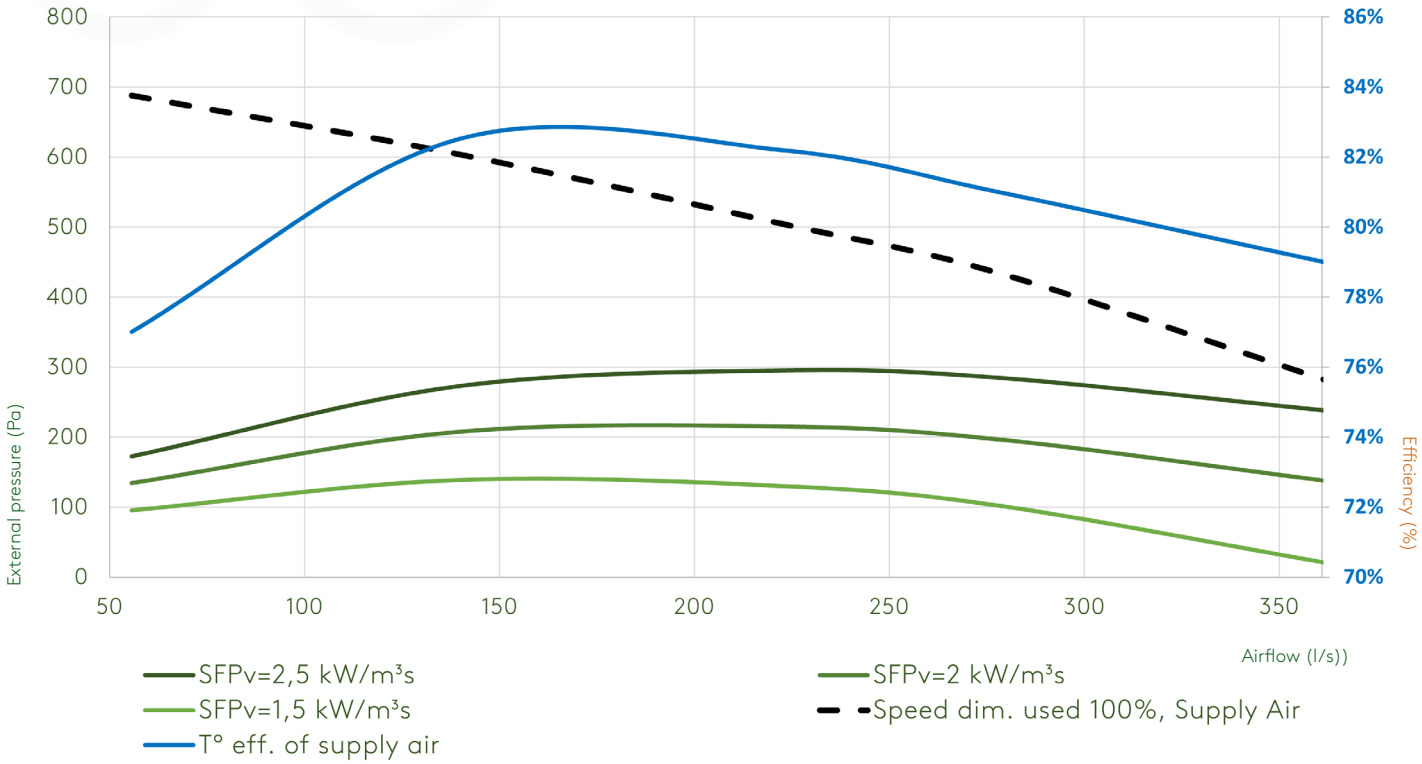
Supply air

Exhaust air

Right hand version

Left hand version

GLOBAL RX 08 TOP



GENERAL TECHNICAL SPECIFICATIONS

• AIR VOLUME	200 - 1300 m³/h
	56 - 361 l/s
• DIMENSIONS (L x W x H)	1530 x 815 x 1315
• WEIGHT	340 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	5.3 A
• RECOMMENDED FUSES	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	ePM1 70%/ePM10 50%
• FILTER SIZE SUPPLY AIR	640 x 385 x 380
• FILTER SIZE EXTRACT AIR	335 x 457 x 360
• STANDARD DUCT CONNECTIONS	Ø250
• SLIP CLAMP DUCT CONNECTIONS (20MM)	N.A.
• OPERATING RANGE	-20°C ... +50°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

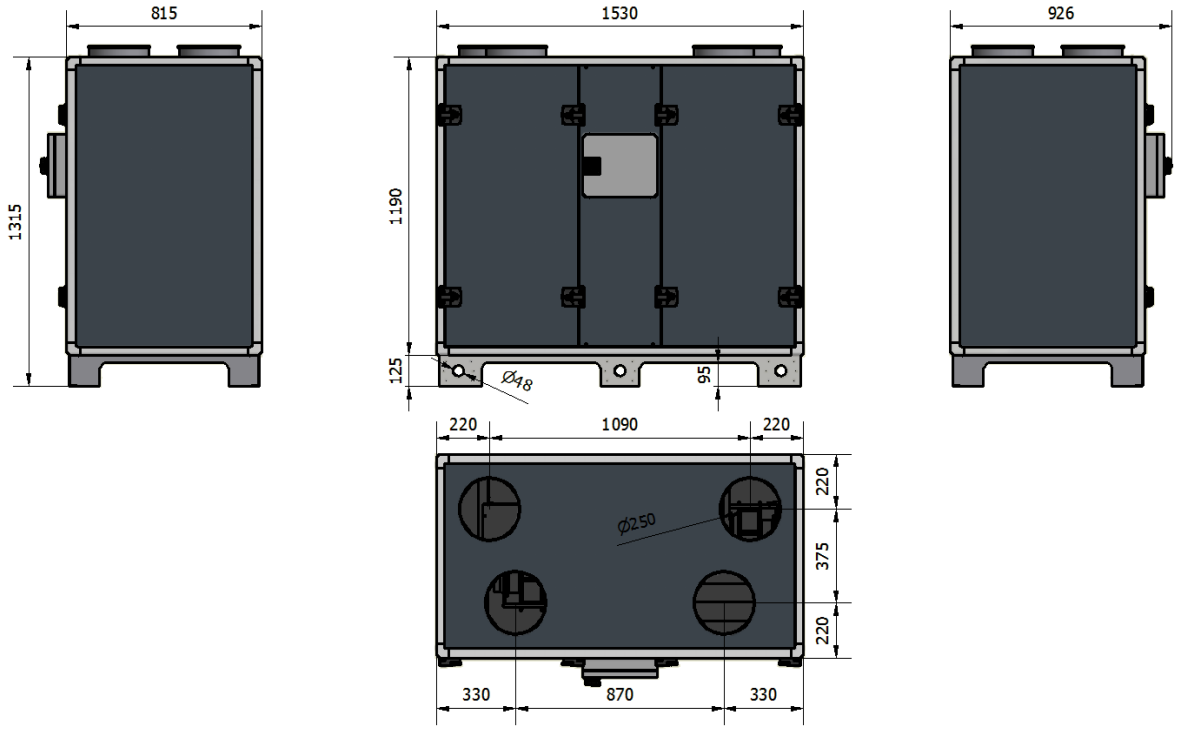
AIRFLOW		Pa ext	SFPv	Speed dim. used/max, Supply Air	Speed dim. used/max, Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	2,8	57	56	0,2	77%
500	139	200	1,9	67	66	0,3	83%
800	222	200	1,9	77	78	0,4	82%
1000	278	200	2,0	84	86	0,6	81%
1300	361	200	2,3	95	98	0,8	79%

Conditions

1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

DIMENSIONS (mm)

GLOBAL RX 08 TOP



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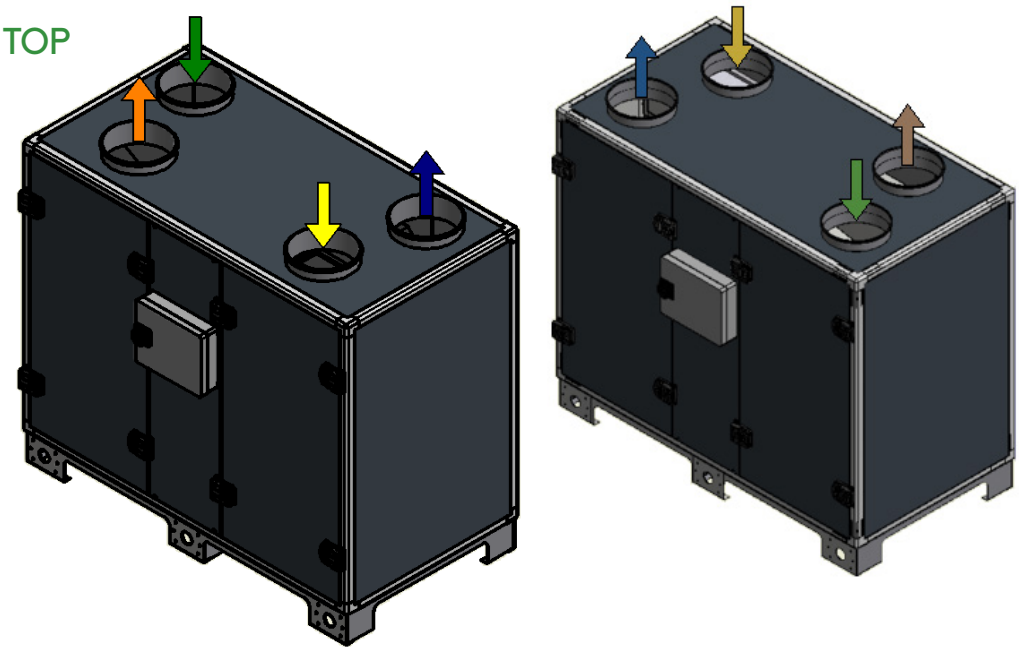


Extract air

Outdoor air

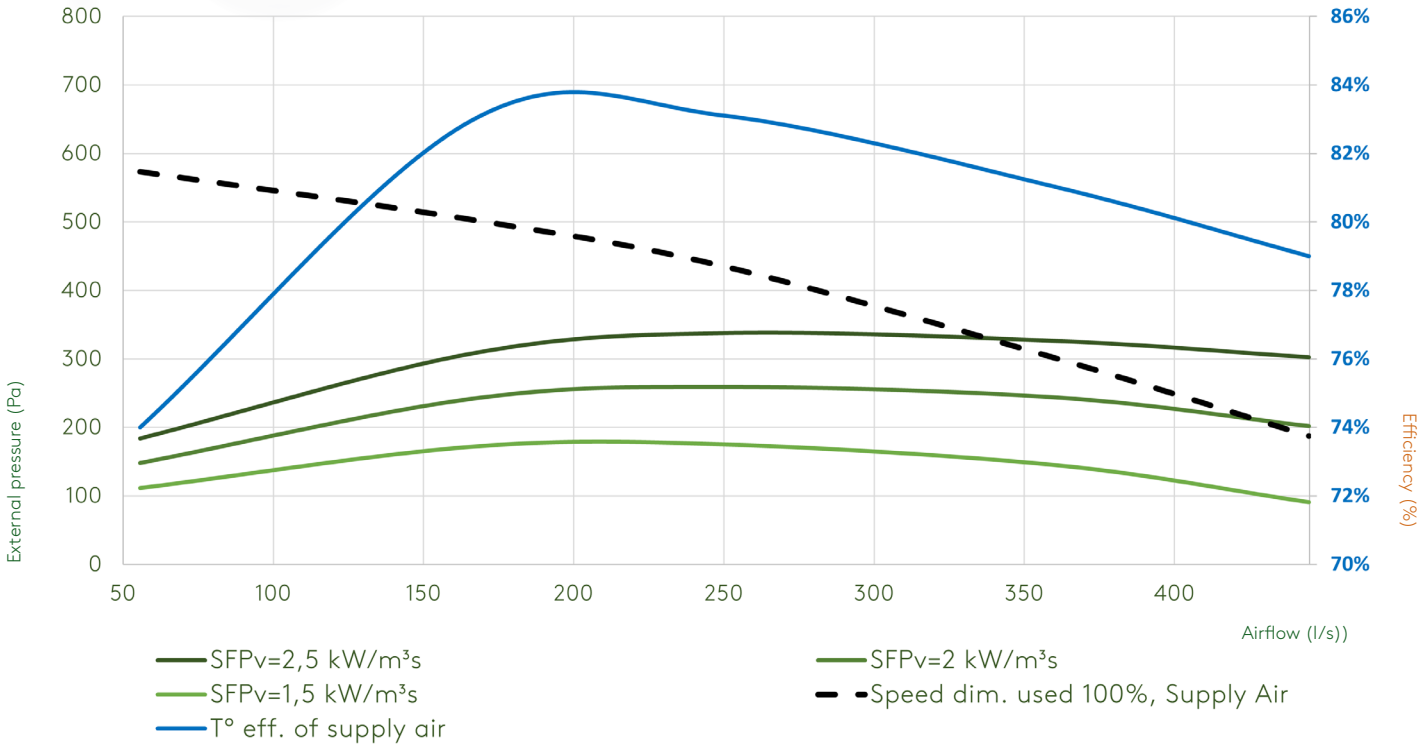
Supply air

Exhaust air

Right hand version

Left hand version

GLOBAL RX 10 TOP



GENERAL TECHNICAL SPECIFICATIONS

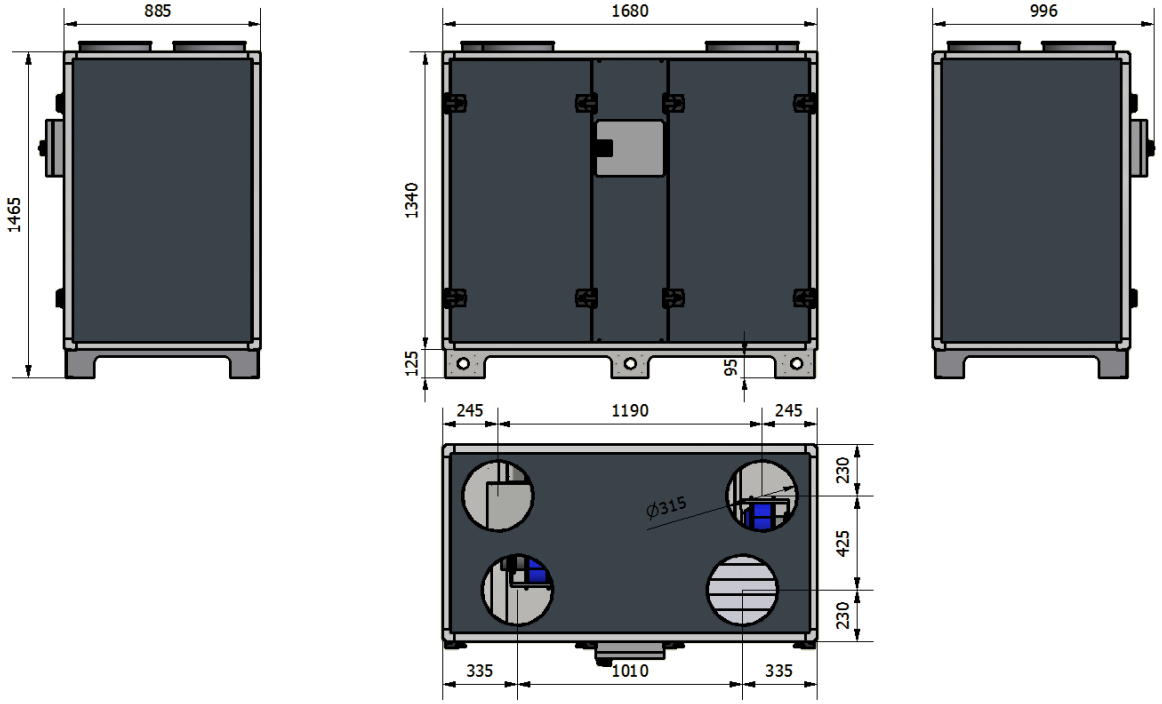
• AIR VOLUME	200 - 1600 m³/h
	56 - 445 l/s
• DIMENSIONS (L x W x H)	1680 x 885 x 1465
• WEIGHT	400 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	4.9 A
• RECOMMENDED FUSES	D6A/AC3/10kA
• FILTER CLASS (BAG FILTER)	ePM1 70%/ePM10 50%
• FILTER SIZE SUPPLY AIR	720 x 460 x 380
• FILTER SIZE EXTRACT AIR	378 x 532 x 360
• STANDARD DUCT CONNECTIONS	Ø315
• SLIP CLAMP DUCT CONNECTIONS (20MM)	N.A.
• OPERATING RANGE	-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, Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	2,6	60	59	0,1	74%
600	167	200	1,7	70	69	0,3	83%
900	250	200	1,6	79	78	0,4	83%
1300	361	200	1,8	91	89	0,6	81%
1600	445	200	2,0	101	98	0,9	79%

Conditions

1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

GLOBAL RX 10 TOP



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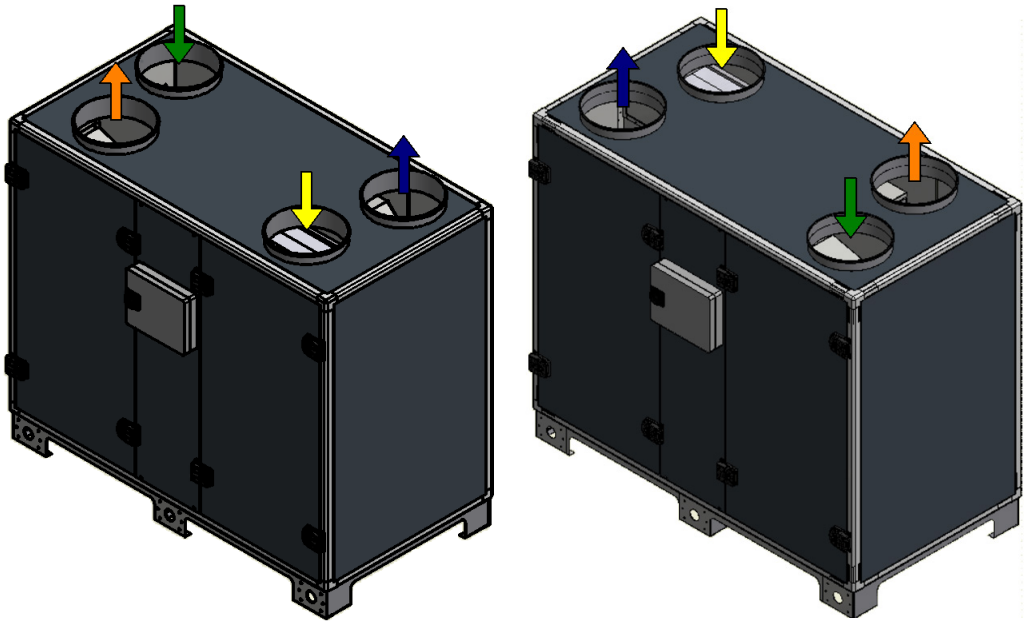


Extract air

Outdoor air

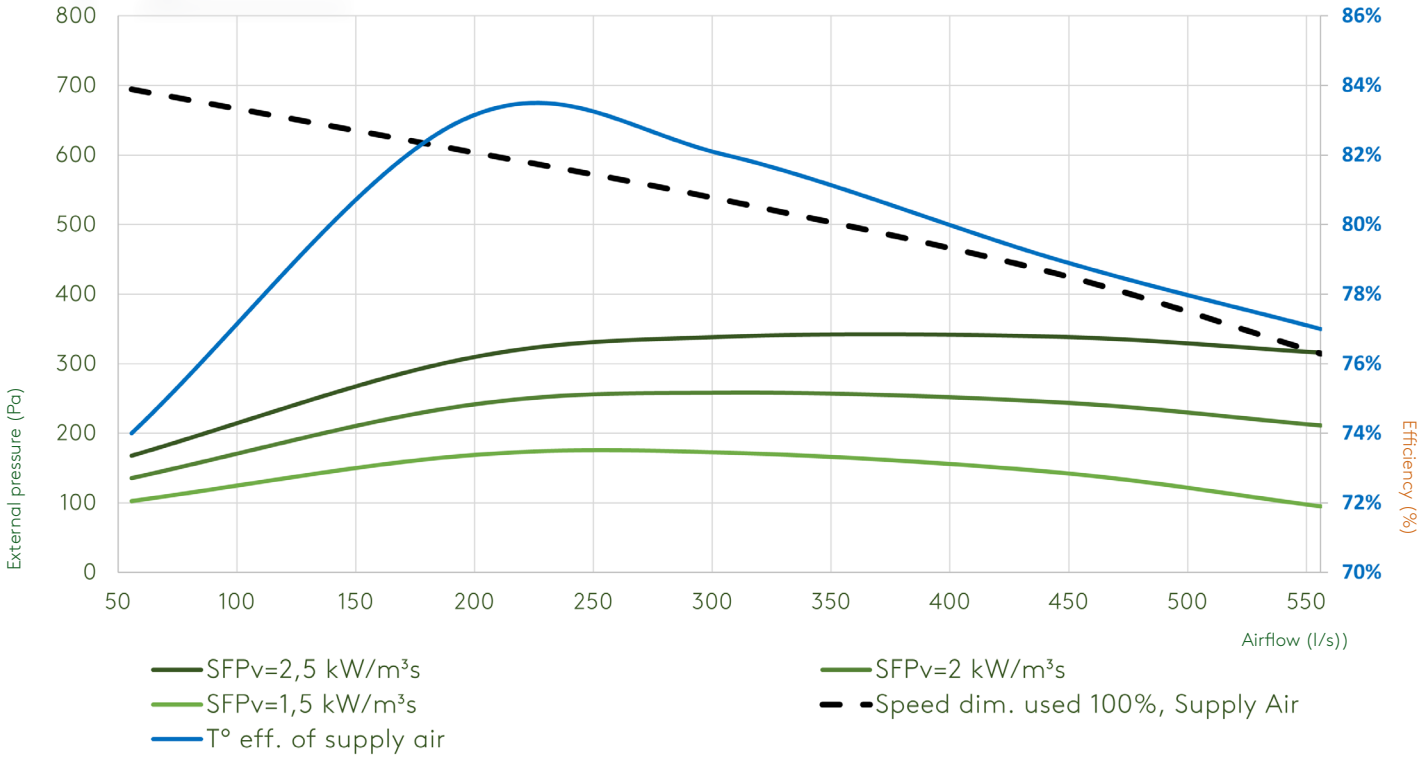
Supply air

Exhaust air

Right hand version

Left hand version

GLOBAL RX 12 TOP



GENERAL TECHNICAL SPECIFICATIONS

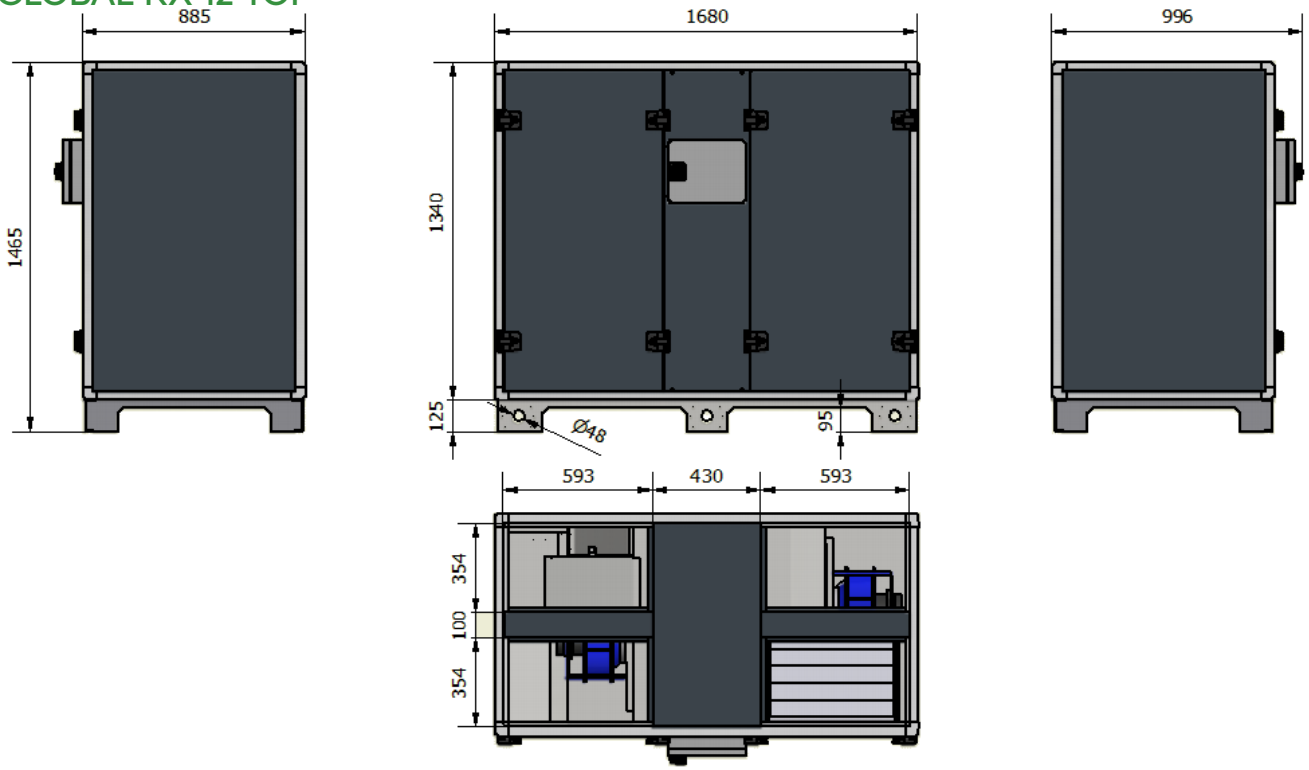
• AIR VOLUME	200 - 2000 m³/h
	56 - 556 l/s
• DIMENSIONS (L x W x H)	1680 x 885 x 1465
• WEIGHT	390 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	7.7 A
• RECOMMENDED FUSES	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	ePM1 70% / ePM10 50%
• FILTER SIZE SUPPLY AIR	720 x 460 x 380
• FILTER SIZE EXTRACT AIR	378 x 532 x 360
• STANDARD DUCT CONNECTIONS (15MM)	590 x 350
• SLIP CLAMP DUCT CONNECTIONS (20MM) (W X H)	600 x 300
• OPERATING RANGE	-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, Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	2,9	55	55	0,2	74%
700	195	200	1,7	65	65	0,3	83%
1100	306	200	1,6	74	74	0,5	82%
1600	445	200	1,8	84	85	0,8	79%
2000	556	200	2,0	92	93	1,1	77%

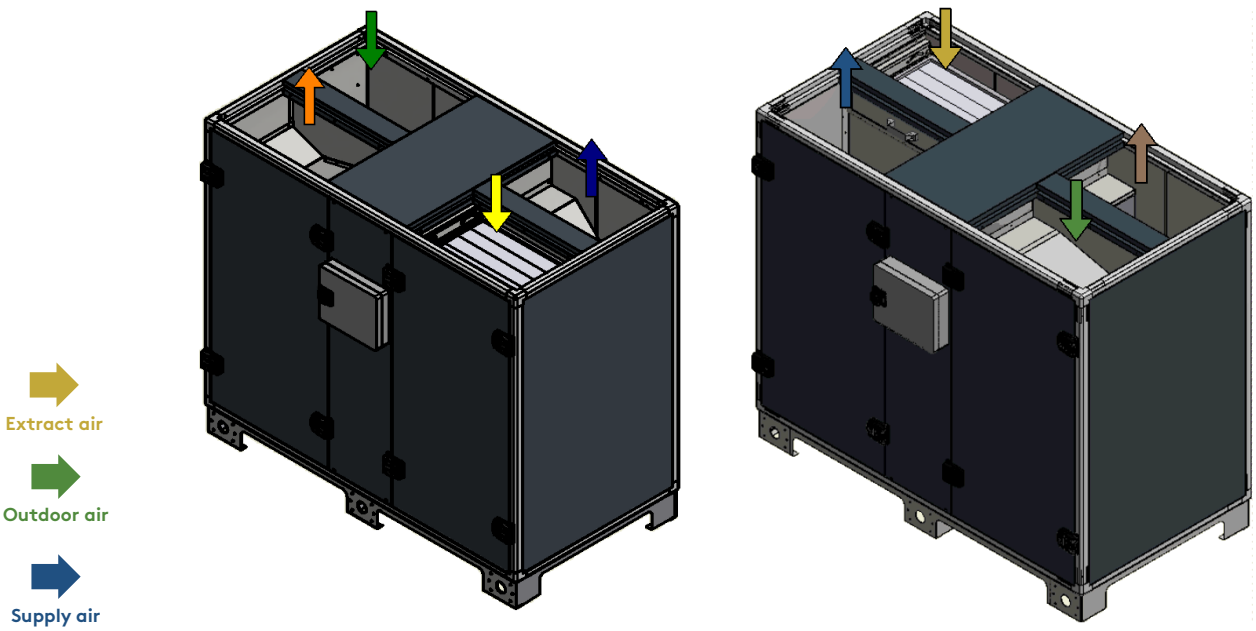
Conditions

1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

GLOBAL RX 12 TOP



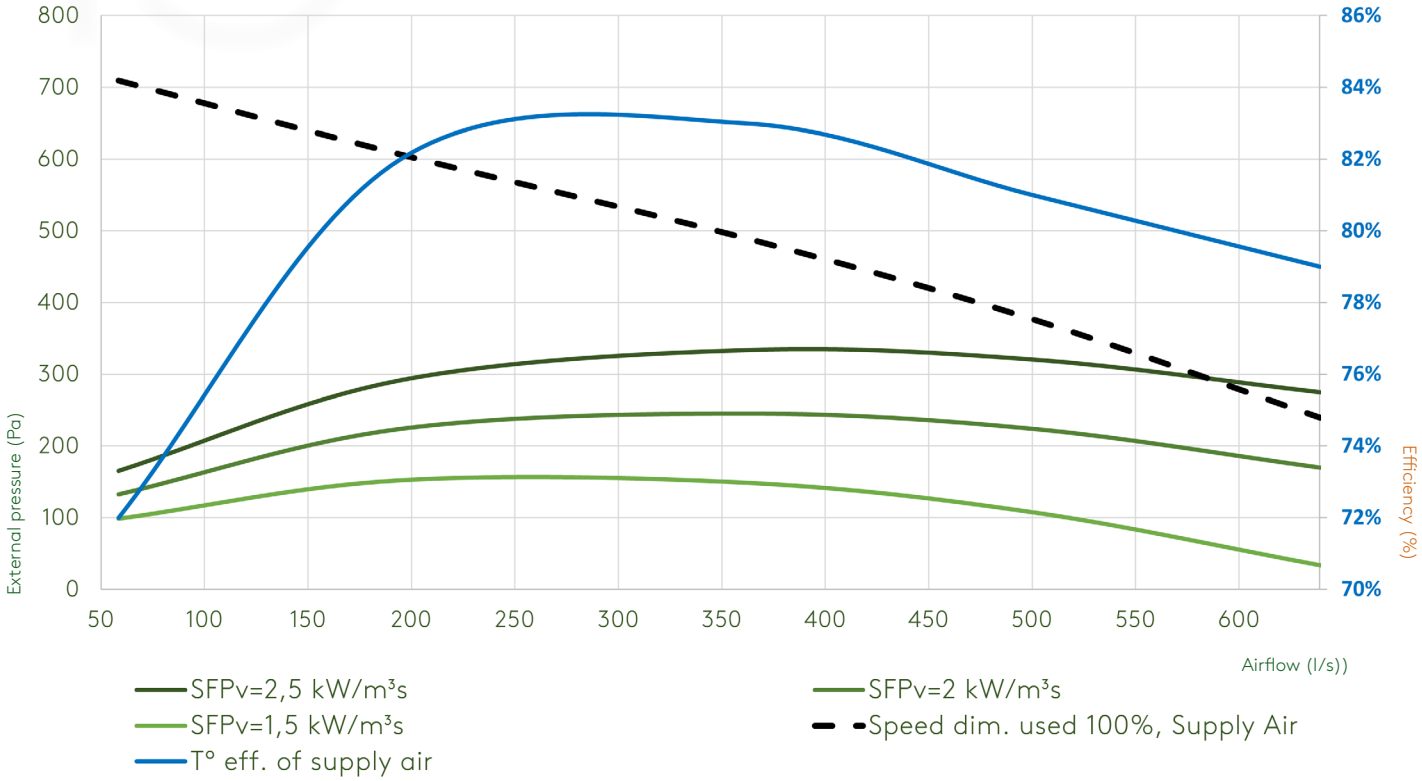
GLOBAL RX 12 TOP



Right hand version

Left hand version

GLOBAL RX 13 TOP



GENERAL TECHNICAL SPECIFICATIONS

• AIR VOLUME	210 – 2300 m³/h
	58 – 639 l/s
• DIMENSIONS (L x W x H)	1680 x 995 x 1465
• WEIGHT	420 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	7.7 A
• RECOMMENDED FUSES	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	ePM1 70% / ePM10 50%
• FILTER SIZE SUPPLY AIR	720 x 460 x 380
• FILTER SIZE EXTRACT AIR	433 x 532 x 360
• STANDARD DUCT CONNECTIONS (15MM)	590 x 400
• SLIP CLAMP DUCT CONNECTIONS (20MM) (W X H)	600 x 400
• OPERATING RANGE	-20°C ... +50°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

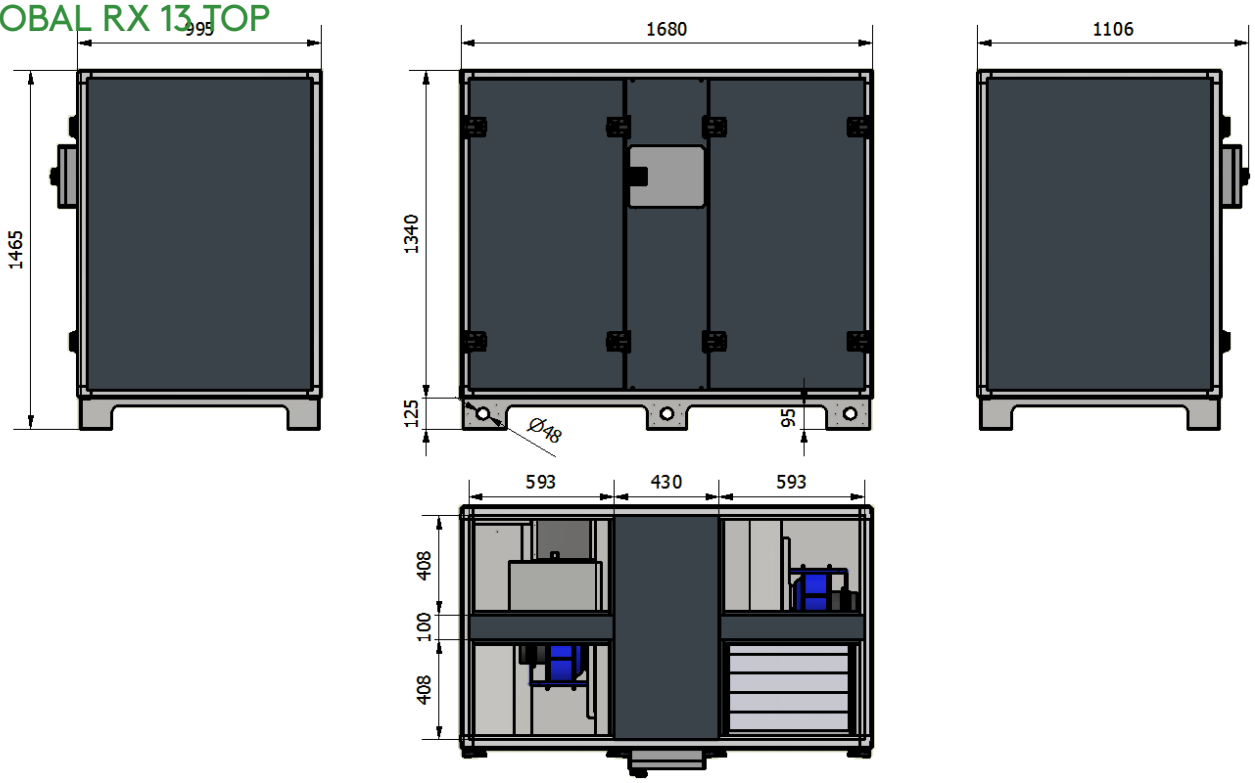
AIRFLOW		Pa ext	SFPv	Speed dim. used/max, Supply Air	Speed dim. used/max, Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
m³/h	l/s		kW/m³/s	%	%	kW	%
210	58	200	2,9	55	55	0,2	72%
700	195	200	1,8	65	65	0,3	82%
1300	361	200	1,7	77	77	0,6	83%
1800	500	200	1,9	87	88	0,9	81%
2300	639	200	2,1	98	98	1,4	79%

Conditions

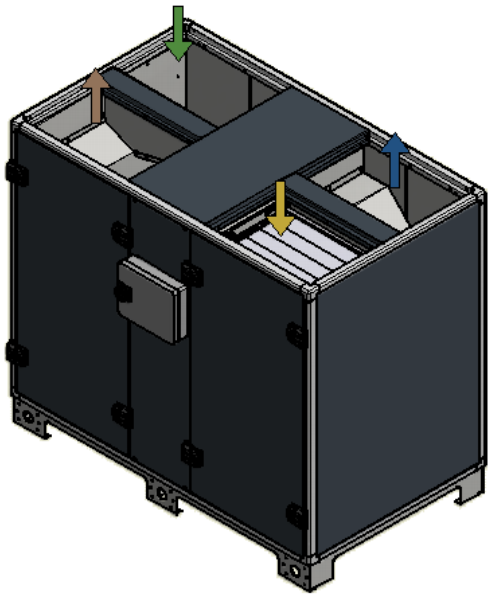
1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

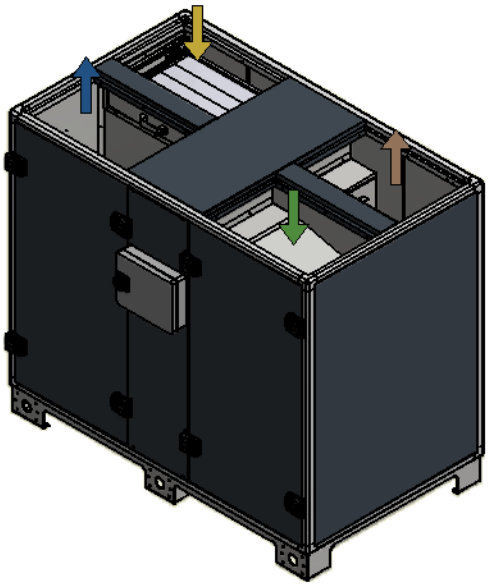
DIMENSIONS (mm)

GLOBAL RX 13 TOP



GLOBAL RX 13 TOP





Extract air

Outdoor air

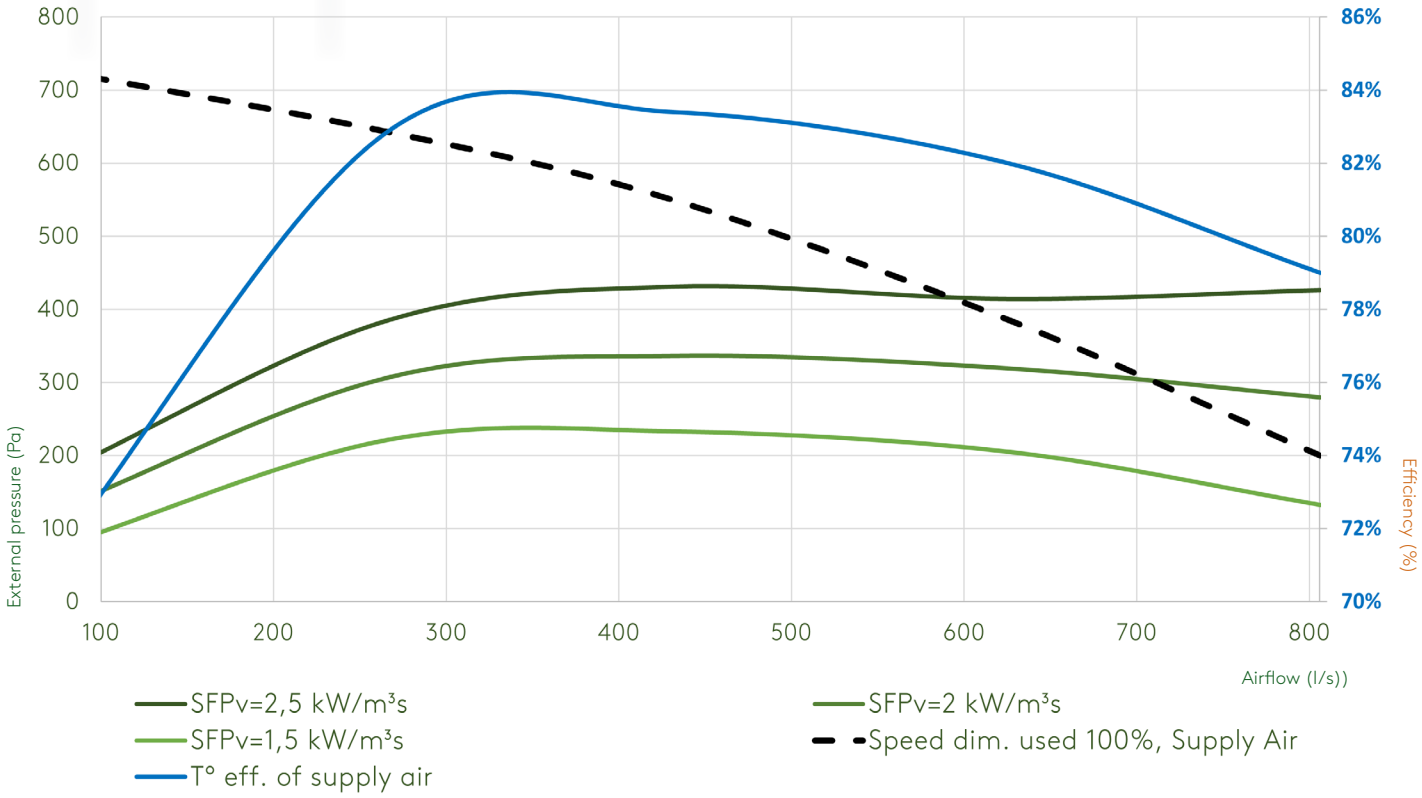
Supply air

Exhaust air

Right hand version

Left hand version

GLOBAL RX 14 TOP



GENERAL TECHNICAL SPECIFICATIONS

• AIR VOLUME	250 - 2900 m³/h
	70 - 806 l/s
• DIMENSIONS (L x W x H)	1680 x 1182 x 1465
• WEIGHT	460 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	7.7 A
• RECOMMENDED FUSES	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	ePM1 70% / ePM10 50%
• FILTER SIZE SUPPLY AIR	900 x 460 x 380
• FILTER SIZE EXTRACT AIR	527 x 532 x 360
• STANDARD DUCT CONNECTIONS (15MM)	590 x 500
• SLIP CLAMP DUCT CONNECTIONS (20MM) (W X H)	600 x 500
• OPERATING RANGE	-20°C ... +50°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D2

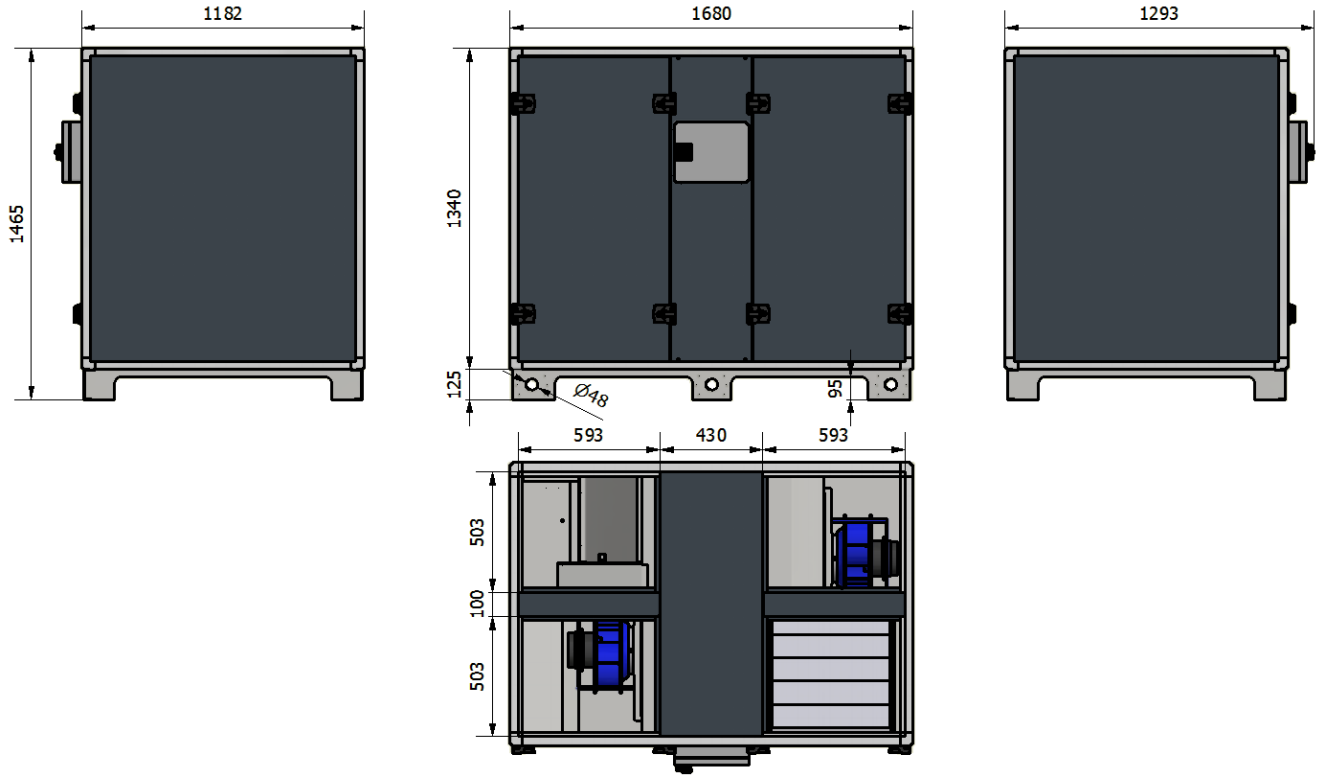
AIRFLOW		Pa ext	SFPv	Speed dim. used/max, Supply Air	Speed dim. used/max, Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
m³/h	l/s		kW/m³/s	%	%	kW	%
250	70	200	2,7	58	57	0,2	71%
950	264	200	1,4	64	64	0,4	83%
1550	431	200	1,3	75	74	0,6	83%
2250	626	200	1,5	87	86	0,9	82%
2900	806	200	1,7	100	98	1,4	79%

Conditions

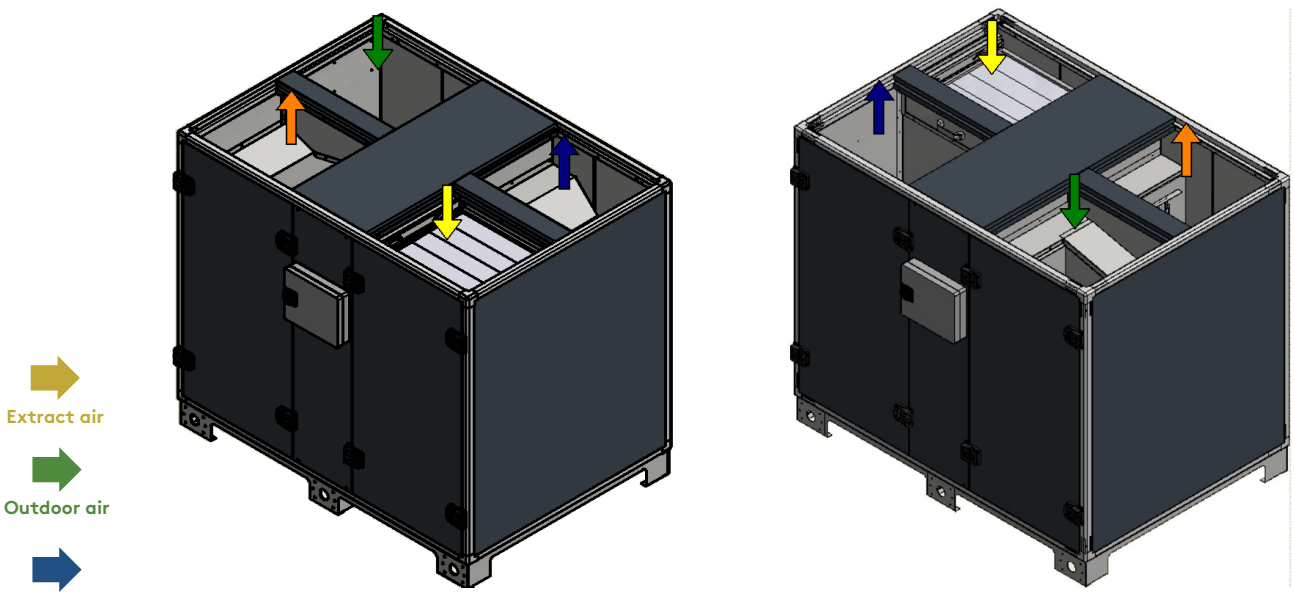
1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

DIMENSIONS (mm)

GLOBAL RX 14 TOP



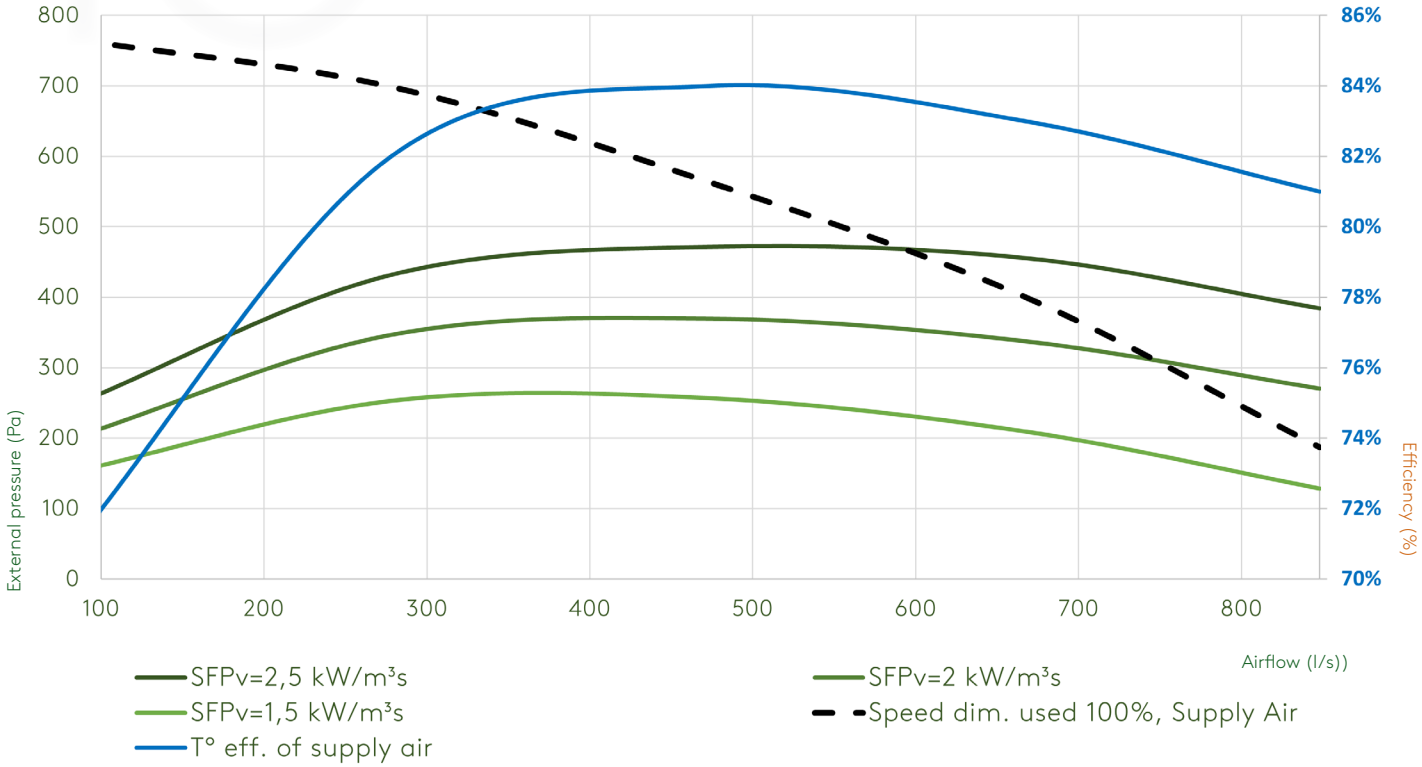
GLOBAL RX 14 TOP



Right hand version

Left hand version

GLOBAL RX 16 TOP



GENERAL TECHNICAL SPECIFICATIONS

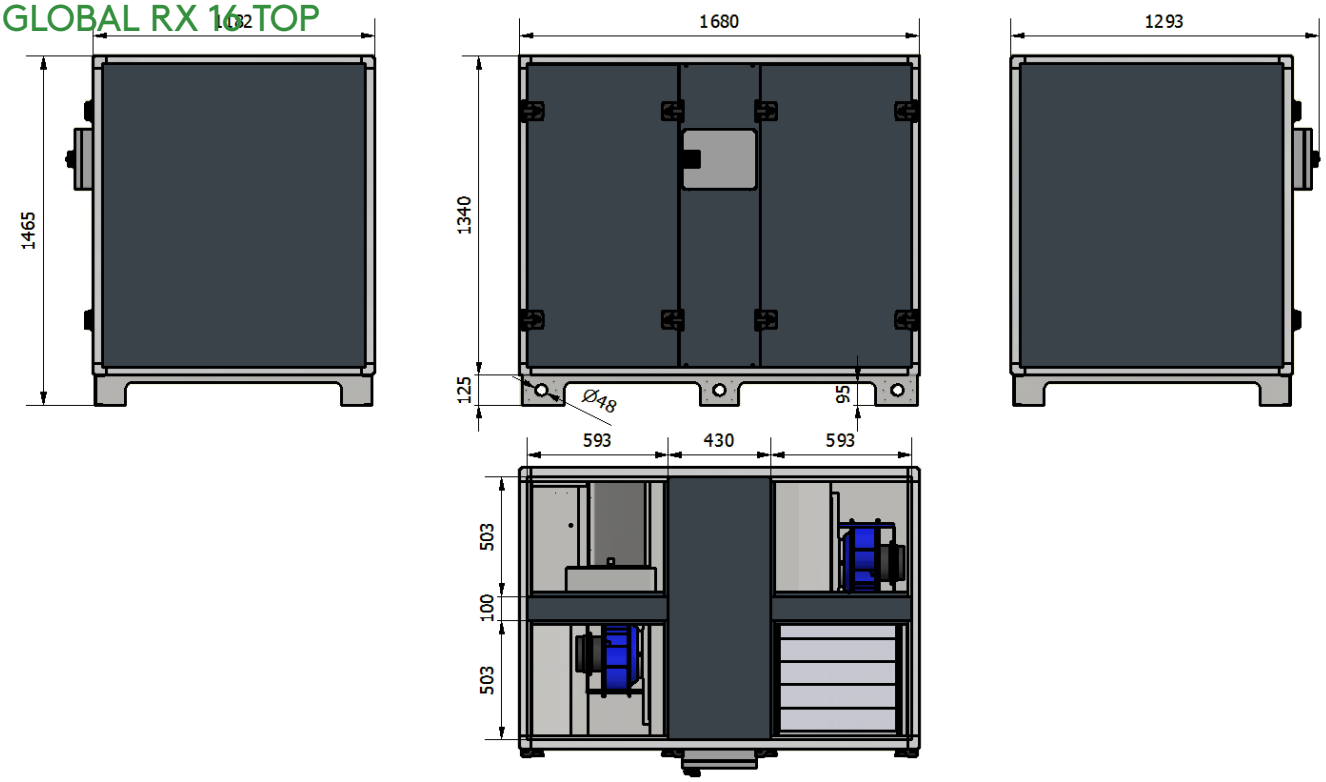
• AIR VOLUME	300 - 3050 m³/h
	83 - 848 l/s
• DIMENSIONS (L x W x H)	1680 x 1182 x 1465
• WEIGHT	470 kg
• POWER CONNECTION	1 x 230 V
• MAX CURRENT	7.7 A
• RECOMMENDED FUSES	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	ePM1 70% / ePM10 50%
• FILTER SIZE SUPPLY AIR	900 x 460 x 380
• FILTER SIZE EXTRACT AIR	527 x 532 x 360
• STANDARD DUCT CONNECTIONS (15MM)	590 x 500
• SLIP CLAMP DUCT CONNECTIONS (20MM) (W X H)	600 x 500
• OPERATING RANGE	-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, Exhaust Air	ABSORBED POWER	Dry T° eff. of supply air
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%

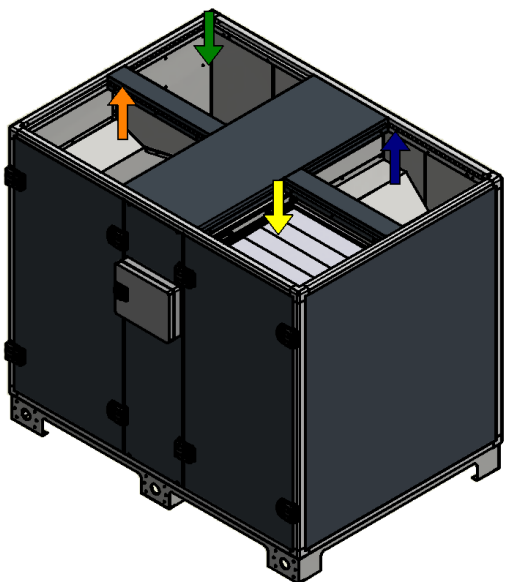
Conditions

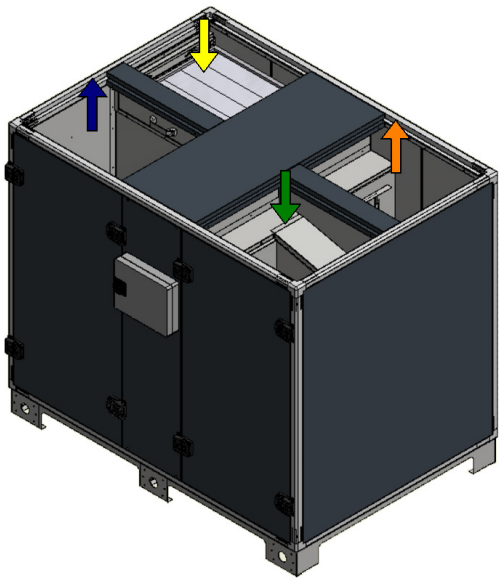
1. Calculated values at 200 Pa of external pressure (150 IN, 50 OUT)
2. All data for composite fan and premium heat exchanger
3. SFPv & Absorbed power calculated with clean filters
4. Speed dim. means with semi-dirty filters

GLOBAL RX 16 TOP



GLOBAL RX 16 TOP





Extract air

Outdoor air

Supply air

Exhaust air

Right hand version

Left hand version

GLOBAL RX TOP

Specification:

GLOBAL_XXX_XX_XXX_X_XXX

Heat exchanger efficiency: High (RX) / Premium (RX+)

Unit size: 05, 08, 10, 12, 13, 14, 16

Duct connections: TOP

Supply air: Right (R) / Left (L)

Fan type: none = Composite, ALU = Aluminum

FLEXIBLE SLEEVE 20mm - MS20

The flexible sleeves type MS20 prevents the transmission of vibrations and noise along the ventilation ductwork. The sleeve is made of fibreglass and are classified "M0" for fire resistance, "Class B" for air tightness (EN 15727 and EN 1751). The operating range is from -30°C up to +110°C and for pressures up to 2000Pa. The 20mm connection frame is made from 1mm thick galvanized steel.

Specification:

MSXX_XXX-XXX

Connection frame width [mm]

Duct dimensions [mm]

MODEL	INNER DIMENSIONS [mm]	OUTER DIMENSIONS [mm]	LABEL
GLOBAL RX 12 TOP	550x310	590x350	MS20_550-310
GLOBAL RX 13 TOP	550x360	590x400	MS20_550-360
GLOBAL RX 14/16 TOP	550x460	590x500	MS20_550-460
ECA 10/12	640x235	680x275	MS20_640-235
ECA 14/16	740x335	780x375	MS20_740-335

MOTORISED DAMPER - CT

The CT dampers are used as shut-off dampers. Shut-off dampers are used if the air handling unit is idle during some period or if a water coil is used. The damper is premounted and prewired in factory. The dampers are made of galvanized steel, the blades of the rectangular dampers are made of extruded aluminum. The blades have rubber seals. According EN 1751, air tightness of circular dampers is of class 3, the air tightness of rectangular dampers is of classe 2.

Specification: CTXX_XXX-XXX_SM01

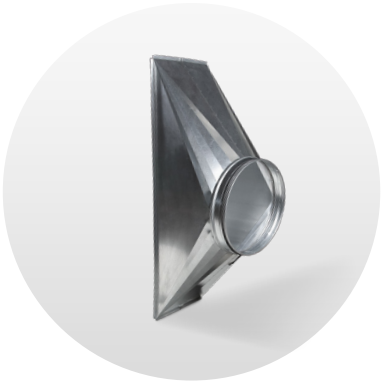
Connection frame [mm]

Duct dimensions [mm]

None =
On/off = SM01
Spring return = SM02

MODEL	INNER DIMENSIONS [mm]	OUTER DIMENSIONS [mm]	LABEL
GLOBAL RX 05/08 TOP	Ø250	Ø250	CT_250
GLOBAL RX 10 TOP	Ø315	Ø315	CT_315
GLOBAL RX 12/13 TOP	Ø355	Ø355	CT_355
GLOBAL RX 12 TOP	510x270	590x370	CT40_510-270_1
GLOBAL RX 14/16 TOP	510x420	590x500	CT40_510-420_1
GLOBAL RX 14/16 TOP	Ø400	Ø400	CT_400_1

CIRCULAR ADAPTER - IRS



For units (AHU's, external coils, ...) with rectangular connections, non insulated rectangular/ circular adapters are available. The adapter is fabricated in galvanized sheet metal. The circular duct connection is fitted with a rubber seal.

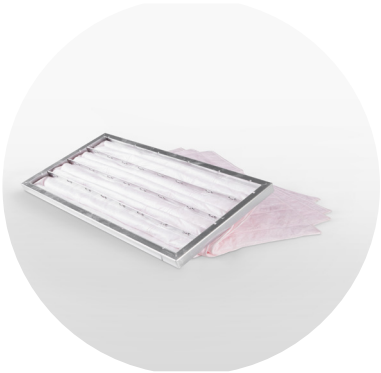
Specification: IRS_XXX-XXX_XXX

Frame outer dimensions

Circular size

MODEL	DIMENSIONS [mm]	LABEL
GLOBAL RX 12 TOP	625x385 - Ø355	IRS_625-385_355
GLOBAL RX 13 TOP	625x440 - Ø355	IRS_625-440_355
GLOBAL RX 14/16 TOP	625x535 - Ø400	IRS_625-535_400
ECA 10	680x275 - Ø315	IRS_680-275_315
ECA 12/13	680x275 - Ø355	IRS_680-275_355
ECA 14/16	780x375 - Ø400	IRS_780-375_400

FILTER REPLACEMENT SET



Filterclass supply air filter, according to EN-16890: ePM1≥70% or EN-779: EU7 (F7). Filterclass extract air filter, according to EN-16890: ePM10≥50% or EN-779: EU5 (M5). The function of the filter is to keep both the air and the heat exchanger clean. To keep the rotary heat exchanger clean, an ePM10≥50% filter class will suffice. Extract air ePM1≥70% filter sets are not available so that there is no negative influence on the energy consumtion of the air handling unit.

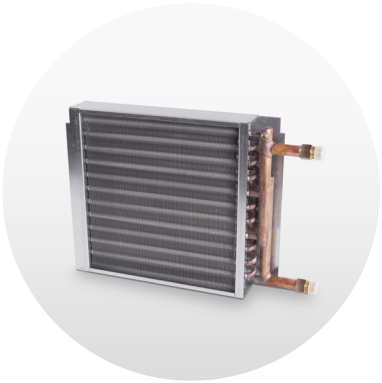
MODEL	AIR INTAKE		EXTRACT AIR	
GLOBAL RX 05/08 TOP	640 x 385 x 380	ePM1 70%	335 x 457 x 360	ePM10 50%
GLOBAL RX 10/12 TOP	720 x 460 x 380	ePM1 70%	387 x 532 x 360	ePM10 50%
GLOBAL RX 13 TOP	720 x 460 x 380	ePM1 70%	433 x 532 x 360	ePM10 50%
GLOBAL RX 14/16 TOP	900 x 460 x 380	ePM1 70%	527 x 532 x 360	ePM10 50%

PRE FILTER G4

The prefilter is installed in the outdoor air section and is physically located befor the ePM1≥70% (F7) fine filter. The prefilter is used in ventilation systems in which the outdoor air is heavily polluted and it is desirable to prevent the fine filter from becoming clogged after a short period of use. According EN-779, the prefilter is of class G4.

MODEL	DIMENSIONS [mm]
GLOBAL RX 05/08 TOP	640 x 385 x 23
GLOBAL RX 10/12/13 TOP	720 x 460 x 230
GLOBAL RX 14/16 TOP	900 x 460 x 23

INTERNAL WATER POST HEATING - IBA



The IBA coil uses hot water for post-heating the supply air. The coil is integrated inside the unit and is located between the rotary heat exchanger and the fan. The finned-tube heat exchangers consist of copper tubes and aluminum fins with 2,5mm spacing. The male threaded pipe is made of brass. The coils are equipped with a plug for venting. The coils are classified PN16.

Specification: IBA_XX-XX

Coil type & # of rows

Coil size

MODEL	Ø	LABEL
GLOBAL RX 05/08 TOP	1/2inch	IBA_2H_08
GLOBAL RX 10/12 TOP	1/2inch	IBA_2H_12
GLOBAL RX 13 TOP	1/2inch	IBA_2H_13
GLOBAL RX 14/16 TOP	1/2inch	IBA_2H_16

INTERNAL ELECTRICAL POST HEATING - KWout

The electrical coil is used for post-heating the supply air. The electrical coil is located between the rotary heat exchanger and the fan. There are two overheating protections, one with manual reset and one with automatic reset. All electrical connections are protected against electrocution.

Specification: KW_XXX_XX-X_XX/XX

Pre/Post heating [IN/OUT]

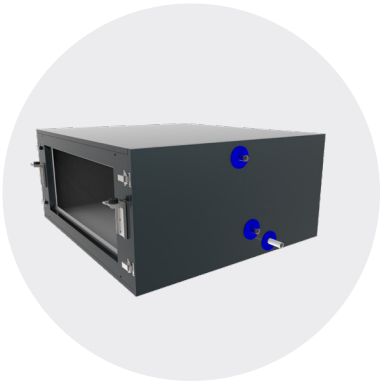
Heating capacity [kW]

Supply voltage: 1=3x400V / 2=3x230V

Coil size

MODEL	CAPACITY	LABEL
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 10/12 TOP	6.0 kW	KW_OUT_6-x_10/12
GLOBAL RX 13 TOP	9.0 kW	KW_OUT_9_x_13
GLOBAL RX 14 TOP	9.0 kW	KW_OUT_9_x_14
GLOBAL RX 16 TOP	12.0 kW	KW_OUT_12_x_16

EXTERNAL INSULATED CASING FOR COILS- ECA



The external insulated casings are fabricated in galvanized steel sheet. the outer sheet is painted in RAL7016. The double-skin panels contain 30mm mineral wool. The casings can be use to integrate external cooling, heating or direct expansion coils (EBA). The standard connection frame is 15mm, other connection frame types are available as an option: 20mm slip clamps, 30mm "METU" frame.

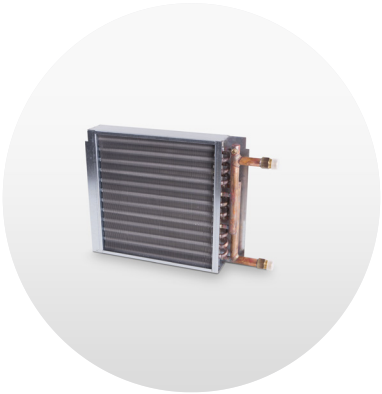
Specification: ECA_XXX-XXX_XX/XX

Duct size [mm]

Casing size[mm]

MODEL	DUCT CONNECTION	LABEL
GLOBAL RX 05/08 TOP	Ø250	ECA_250_08
GLOBAL RX 10/12/13 TOP	655x250	ECA_655-250_13
GLOBAL RX 14/16 TOP	755x350	ECA_755-350_16

COILS FOR EXTERNAL INSULATED CASING - EBA



The EBA coil uses hot water for post-heating the supply air. The coil is to be integrated in an insulated casing ECA. The finned-tube heat exchangers consist of copper tubes and aluminum fins with 2,5mm spacing. The male threaded pipe is made of brass. The coils are equipped with a plug for venting. The coils are classified PN16.

Specification: EBA_XX_XX/XX

Function & # of rows

Coil size

MODEL	FUNCTION	# ROWS	DIMENSIONS [mm]	LABEL
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 10/12/13 TOP	Heating	4	305305130828	EBA_4H_13
GLOBAL RX 10/12/13 TOP	Cooling	4	305 x 130 x 828	EBA_4C_13
GLOBAL RX 10/12/13 TOP	DX	4	303 x 130 x 828	EBA_4X_13
GLOBAL RX 14/16 TOP	Heating	4	405 x 130 x 938	EBA_4H_16
GLOBAL RX 14/16 TOP	Cooling	4	405 x 130 x 938	EBA_4C_16
GLOBAL RX 14/16 TOP	DX	4	405 x 130 x 938	EBA_4X_16

SLIP CLAMP CONNECTIONS 20mm- SC20

The external insulated casings are fabricated in galvanized steel sheet. the outer sheet is painted in RAL7016. The double-skin panels contain 50mm mineral wool. The casings can be use to integrate external cooling, heating or direct expansion coils (EBA). The standard connection frame is 15mm, other connection frame types are available as an option: 20mm slip clamps, 30mm METU frame.

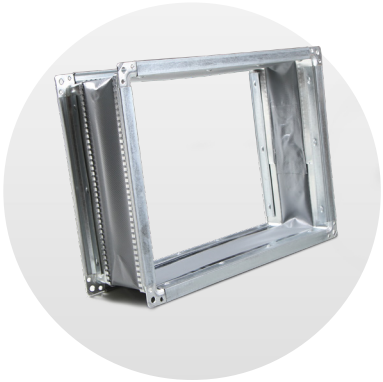
Specification: SCXX_XXX-XXX

Connection frame width [mm]

Duct size[mm]

MODEL	DUCT SIZE	LABEL
GLOBAL RX 12 TOP	600x300	SC20_600-300
GLOBAL RX 13 TOP	600x400	SC20_600-400
GLOBAL RX 14/16 TOP	600x500	SC20_600-500
ECA 10/12	700X300	SC20_700x300
ECA 14/16	800X400	SC20_800x400

FLEXIBLE SLEEVE 30mm - MS30



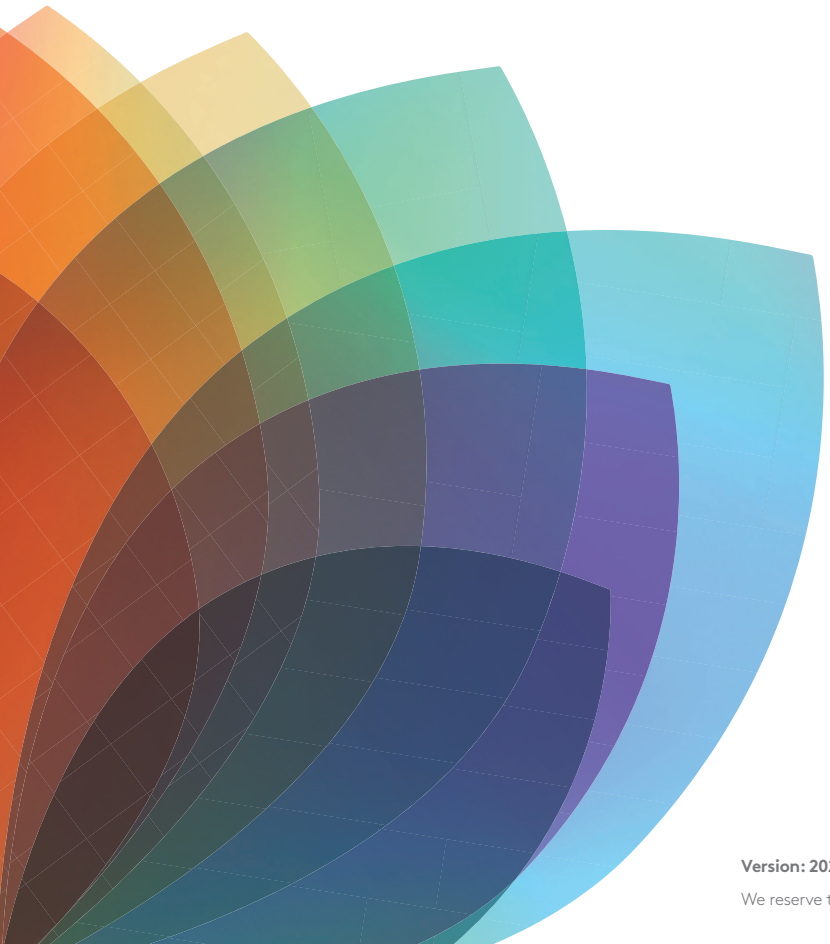
The flexible sleeves type MS30 prevents the transmission of vibrations and noise along the ventilation ductwork. The sleeve is made of fibreglass and are classified "M0" for fire resistance, "Class B" for air tightness (EN 15727 and EN 1751). The operating range is from -30°C up to +110°C and for pressures up to 2000Pa. The 30mm "METU" connection frame is made from 1mm thick galvanized steel.

Specification: MSXX_XXX-XXX

Connection frame width [mm]

Duct dimensions [mm]

MODEL	INNER DIMENSIONS [mm]	OUTER DIMENSIONS [mm]	LABEL
GLOBAL RX 12 TOP	530x290	590x350	MS30_530-290
GLOBAL RX 13 TOP	530x340	590x400	MS30_530-340
GLOBAL RX 14/16 TOP	530x440	590x500	MS30_530-440
ECA 10/12	650x215	710X275	MS30_620-215
ECA 14/16	720x315	780X375	MS30_720-315



Version: 20220407

We reserve the right for changes.

Swegon