

GLOBAL PX TOP

Ventilation unit with plate heat exchanger



Ventilation unit with counterflow heat exchanger, for commercial installations.

Suitable both for new construction and when renovating existing buildings.

Max. airflow 3600 m³/h (1001 l/s).

Temperature efficiency above 90% (-10°C/+22°C).

Temperature efficiency above 82% according to EN 308.

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

For installation indoors.

Top quality control system with touch screen.

Units up to GLOBAL PX TOP 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 (Total Airflow Control) 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.

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

Adjustable bypass flow, up to 100%, is a standard function in GLOBAL units with counterflow heat exchangers. This makes the free cooling function possible and is regulated automatically based on the indoor and outdoor temperature. The bypass function can also be configured for defrosting the heat exchanger.

HEATER

The GLOBAL units can be supplied with a factory-fitted, built-in, water or electric post-heating. 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 compact 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 ≥ 50%. 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 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 (05/08/10).
- 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 50% 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 PX TOP 10 have external dimensions that allow passage through a door.

OPTIONAL EXTRAS

Built-in electric post-heating
Built-in water post-heating coil
External post-heating/cooler
Motor-driven dampers
Flexible duct connection : circular 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

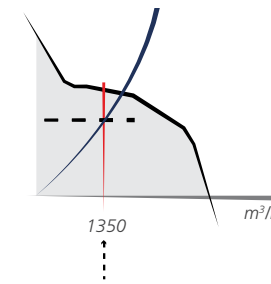
Alternatively, the airflow can be adjusted automatically according to the ventilation requirements and the wishes of the users with the aid of the 0-10 V signal input, for example with a CO₂ sensor or with the customer's automated building management system or equivalent.

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.

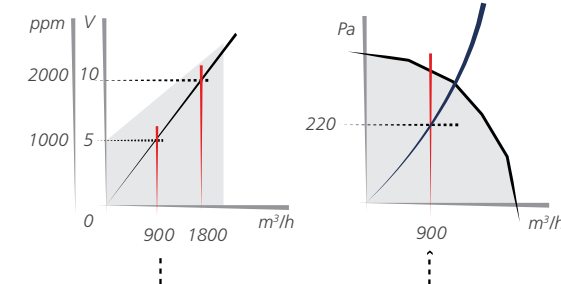
The airflow remains unchanged in all the other rooms, i.e. the ventilation system works constantly within its optimum operating range. Constant pressure operation requires an external pressure sensor.

THE 3 OPERATING MODES



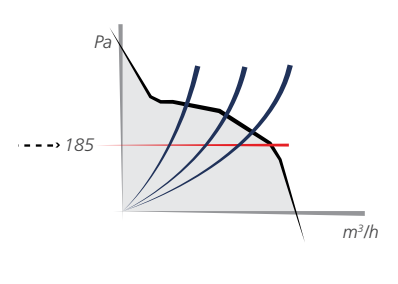
Constant airflow

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.



CIRCULAR DUCT CONNECTIONS

The duct connections for sizes 05, 08 and 10 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 12 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.

COUNTERFLOW HEAT EXCHANGER

The plate heat exchanger, which is a counterflow type, is made of salt-resistant aluminium and has a high temperature efficiency, above 90%. The bypass damper is regulated based on both the heating and the cooling requirement, and can be used as anti-frost protection. In order to reduce the risk of freezing up, the heat exchanger block is not installed horizontally. The incline makes the draining of condensation easier, thereby reducing the risk of ice forming in the heat exchanger. The heat exchangers are Eurovent certified (certificate no. 05.03.243) and VDI 6022 certified.

BUILT-IN WATER HEATING COIL

The unit can be equipped with a built-in waterborne air heater. 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

GLOBAL units with a counterflow heat exchanger can be supplied with a factory-fitted, built-in electric ppost-heating and/or post-heating. The post-heating’s output is adjusted in order to maintain a constant supply air or extract air temperature. The ppost-heating’s output is adjusted in order to prevent water from freezing in 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

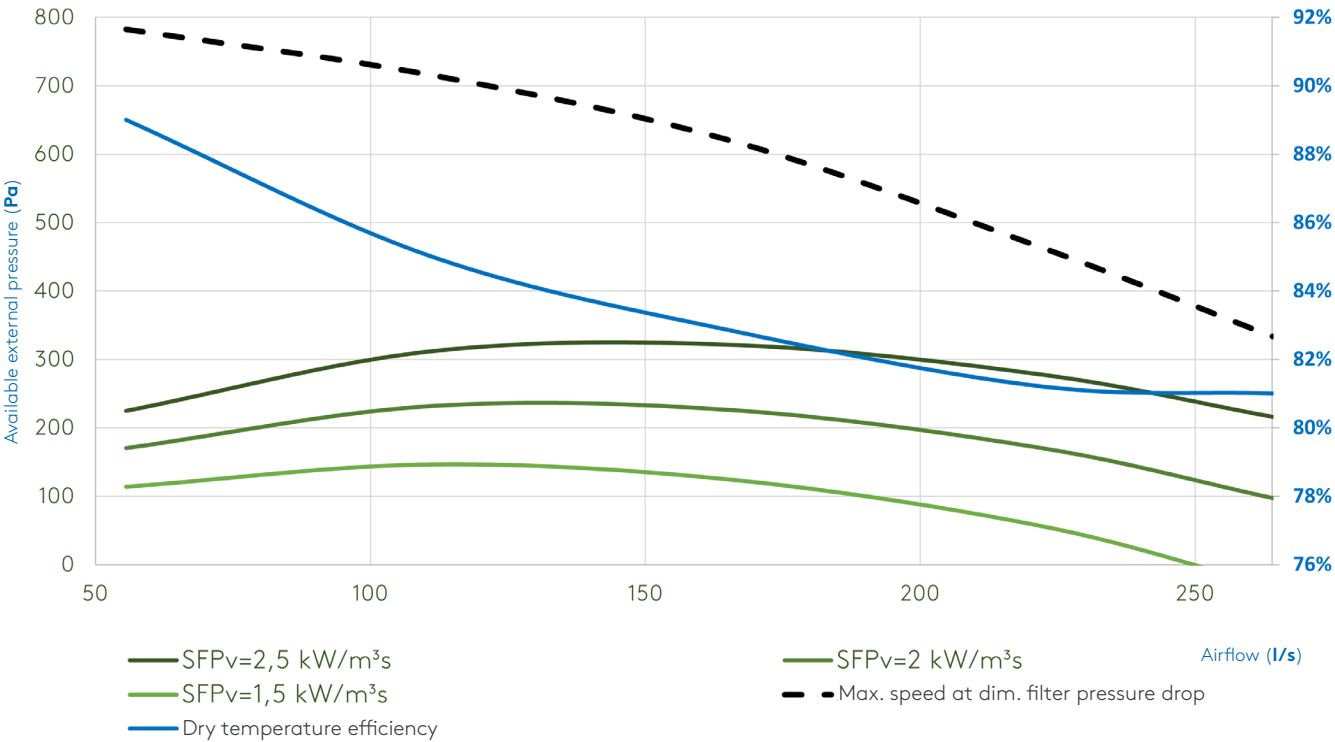
The control equipment is fully integrated in the GLOBAL units. The control unit monitors and regulates temperatures, airflows and other functions. The control unit is pre-configured with standard values on delivery from the factory. Many built-in functions are included in the system and are easy to activate. 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 CO₂ 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.

GLOBAL PX TOP 05

FAN DIAGRAMS



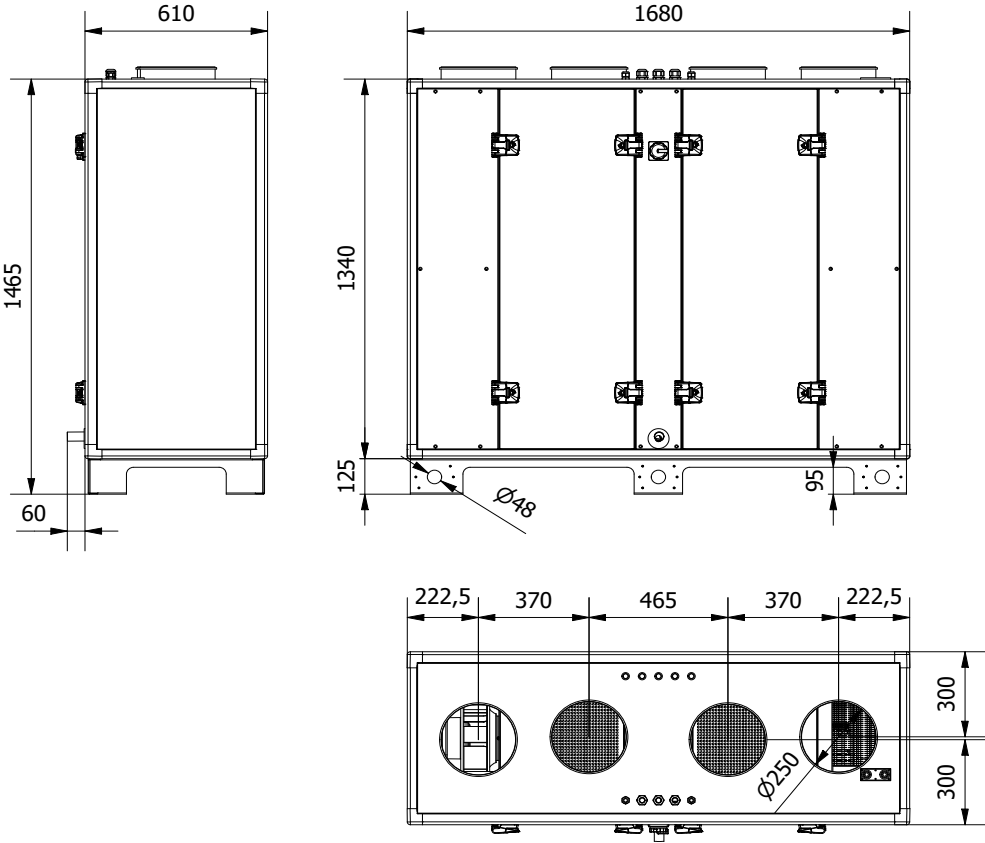
• AIRFLOW	200-950 m³/h
	56-264 l/s
• DIMENSIONS (L x W x H)	1680 x 610 x 1465
• WEIGHT	330 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	5.3 A
• RECOMMENDED FUSE PROTECTION	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 50%)
• CIRCULAR DUCT CONNECTIONS	Ø 250
• STANDARD DUCT CONNECTIONS (15 mm)	NOT APPLICABLE
• 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 CON- SUMPTION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	2,22	53	54	0,1	89%
400	111	200	1,79	61	61	0,2	85%
600	167	200	1,86	71	70	0,3	83%
800	222	200	2,13	83	81	0,5	81%
950	264	200	2,43	92	89	0,6	81%

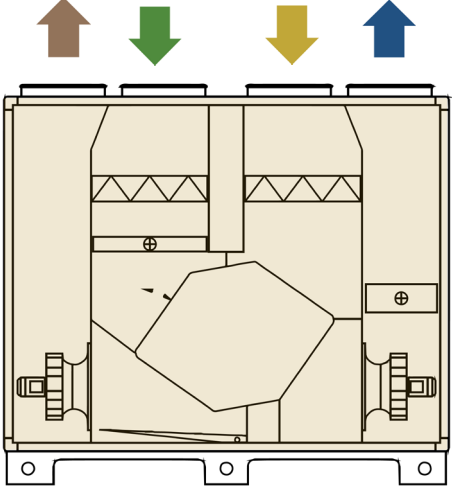
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

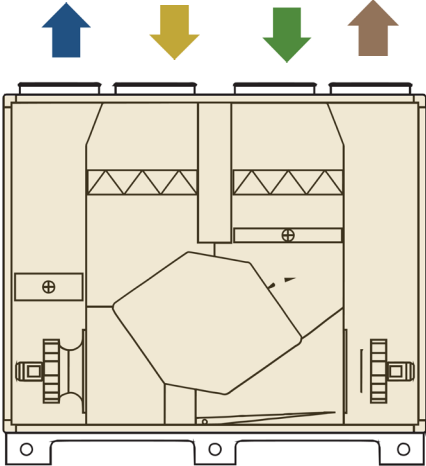
GLOBAL PX TOP 05



- Extract air
- Outdoor air
- Supply air
- Exhaust air



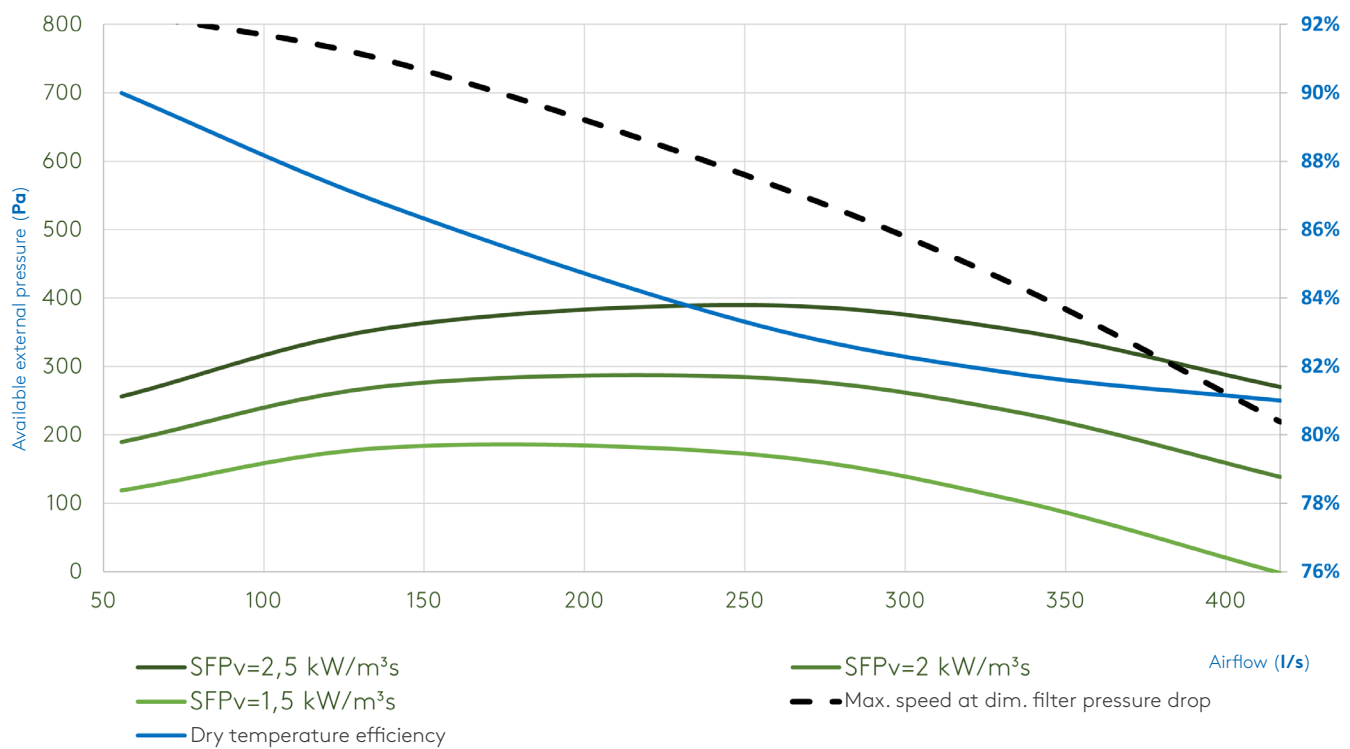
Right connection version



Left connection version

GLOBAL PX TOP 08

FAN DIAGRAMS



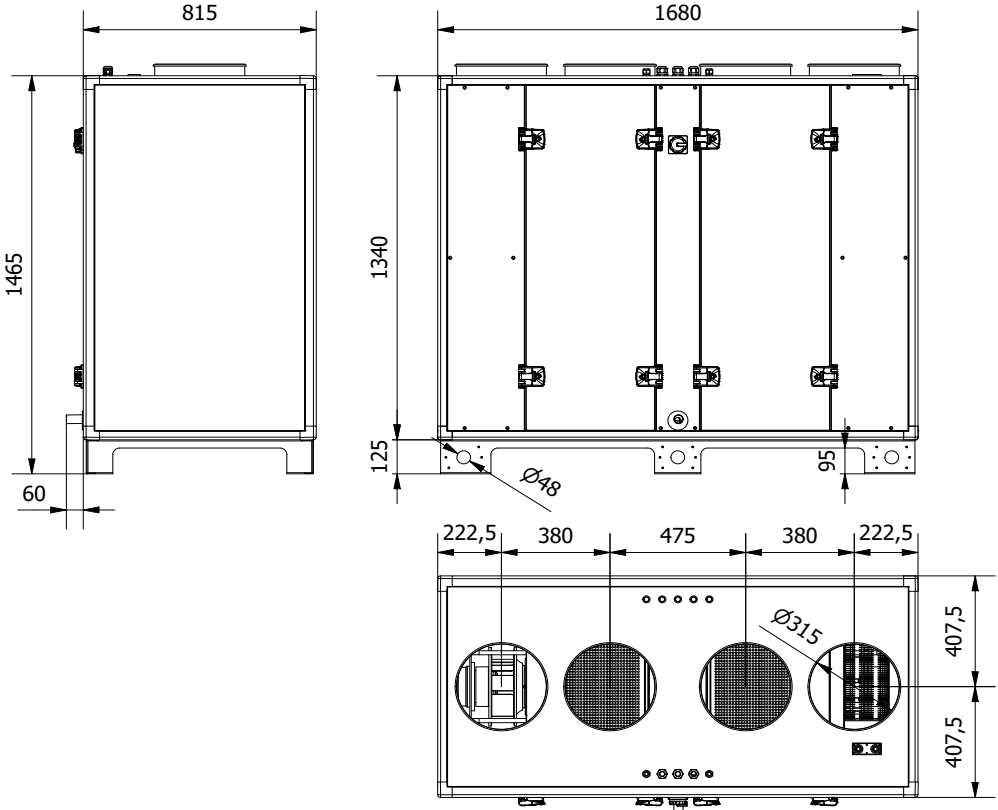
• AIRFLOW	200-1500 m³/h
	56-417 l/s
• DIMENSIONS (L x W x H)	1680 x 815 x 1465
• WEIGHT	380 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	5.3 A
• RECOMMENDED FUSE PROTECTION	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 50%)
• CIRCULAR DUCT CONNECTIONS	Ø 315
• STANDARD DUCT CONNECTIONS (15 mm)	NOT APPLICABLE
• 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 CONSUMP- TION	Dry temperature efficiency
m³/h	l/s		kW/m³/s	%	%	kW	%
200	56	200	1,95	49	48	0,1	90%
500	139	200	1,58	62	59	0,2	87%
900	250	200	1,62	75	73	0,4	83%
1200	334	200	1,86	87	86	0,6	82%
1500	417	200	2,23	99	99	0,9	81%

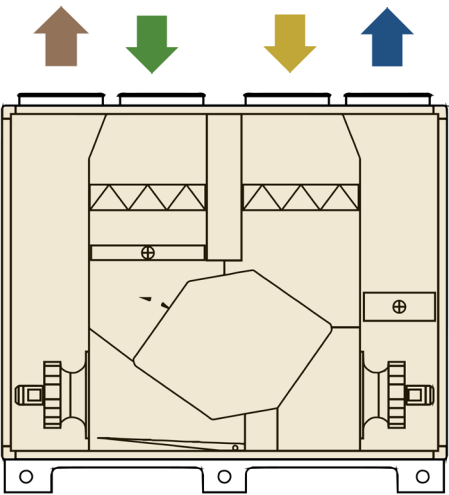
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

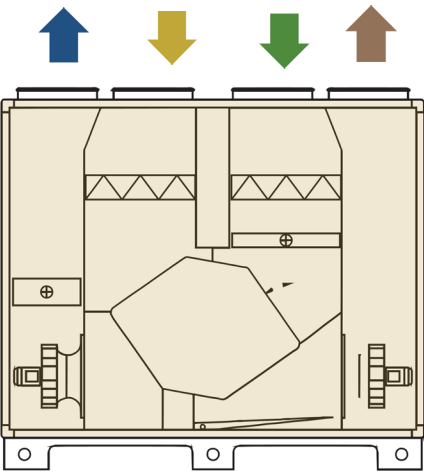
GLOBAL PX TOP 08



- Extract air
- Outdoor air
- Supply air
- Exhaust air



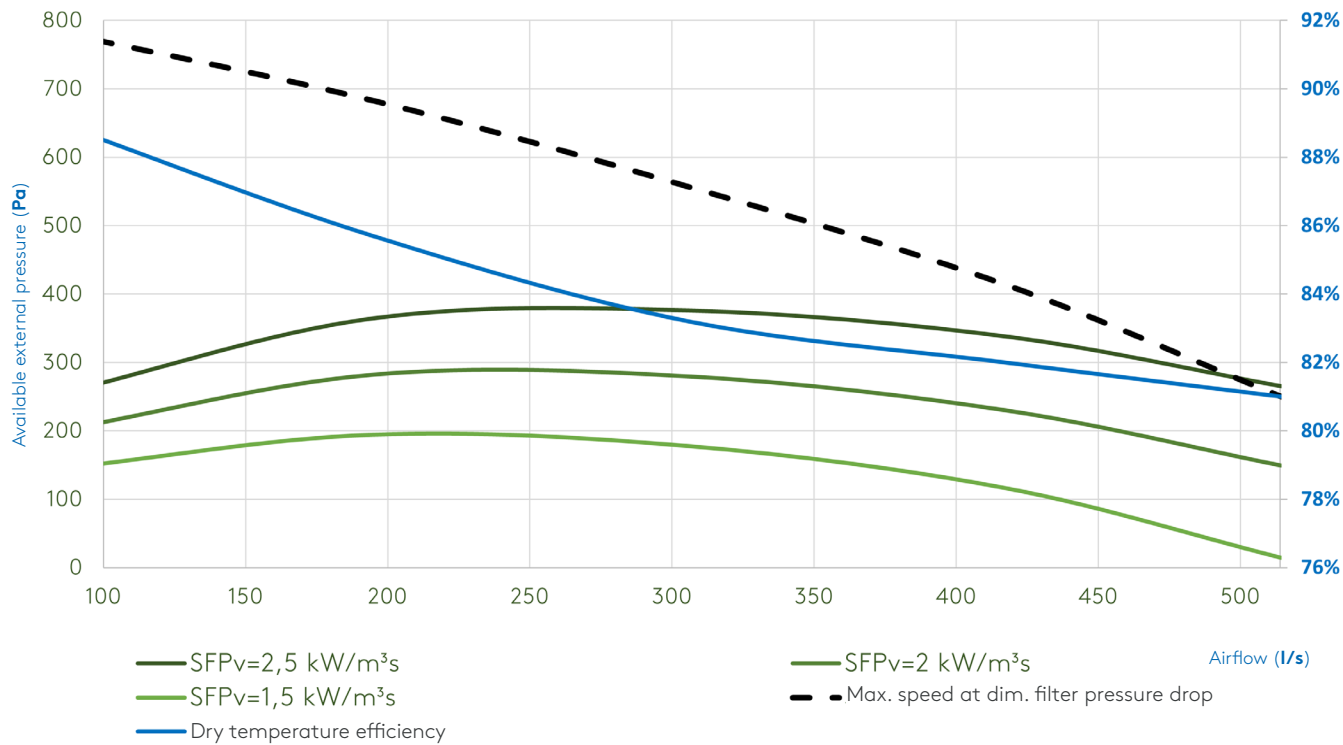
Right connection version



Left connection version

GLOBAL PX TOP 10

FAN DIAGRAMS



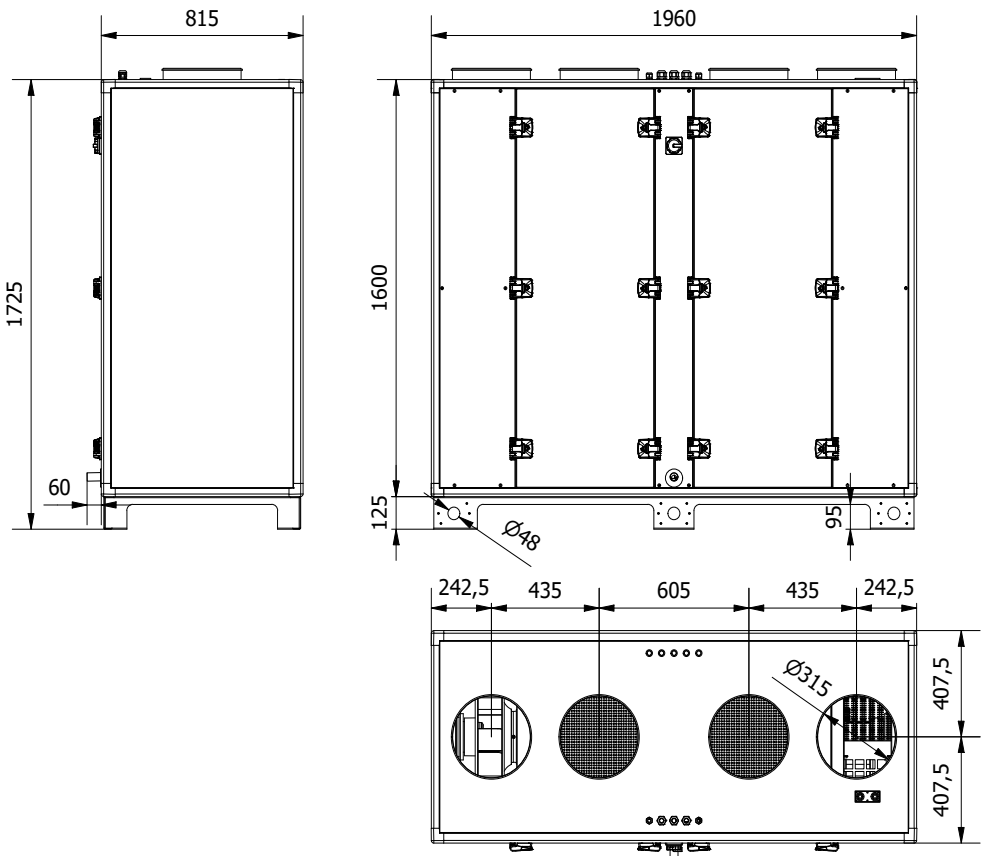
• AIRFLOW	300–1850 m³/h
• DIMENSIONS (L x W x H)	83–514 l/s
• WEIGHT	1960 x 815 x 1725
• ELECTRIC POWER SUPPLY	470 kg
• MAX. POWER CONSUMPTION	1 x 230 V
• RECOMMENDED FUSE PROTECTION	7.7 A
• FILTER CLASS (BAG FILTER)	D10A - 10kA - AC3
• CIRCULAR DUCT CONNECTIONS	F7 (ePM1 70%) / M5 (ePM10 50%)
• STANDARD DUCT CONNECTIONS (15 mm)	Ø 315
• GUIDE DUCT CONNECTIONS (20 mm)	NOT APPLICABLE
• AMBIENT TEMPERATURE	NOT APPLICABLE
• 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 CONSUMPTION	Dry temperature efficiency
m³/h	l/s	kW/m³/s	%	%	kW	%
300	83	200	1,95	55	0,2	89%
700	195	200	1,51	65	0,3	86%
1100	306	200	1,60	76	0,5	83%
1500	417	200	1,86	87	0,8	82%
1850	514	200	2,21	97	1,1	81%

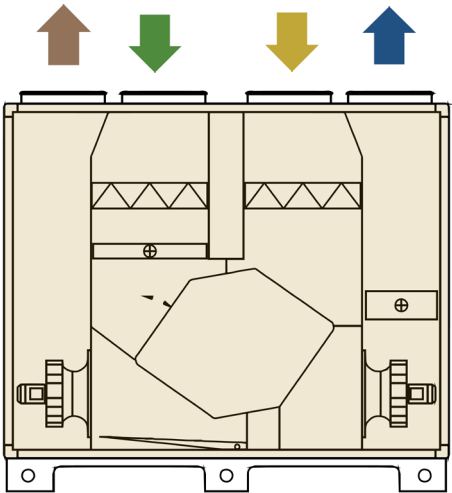
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

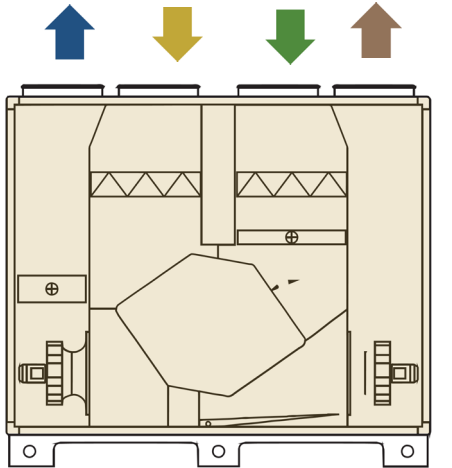
GLOBAL PX TOP 10



- Extract air
Outdoor air
Supply air
Exhaust air



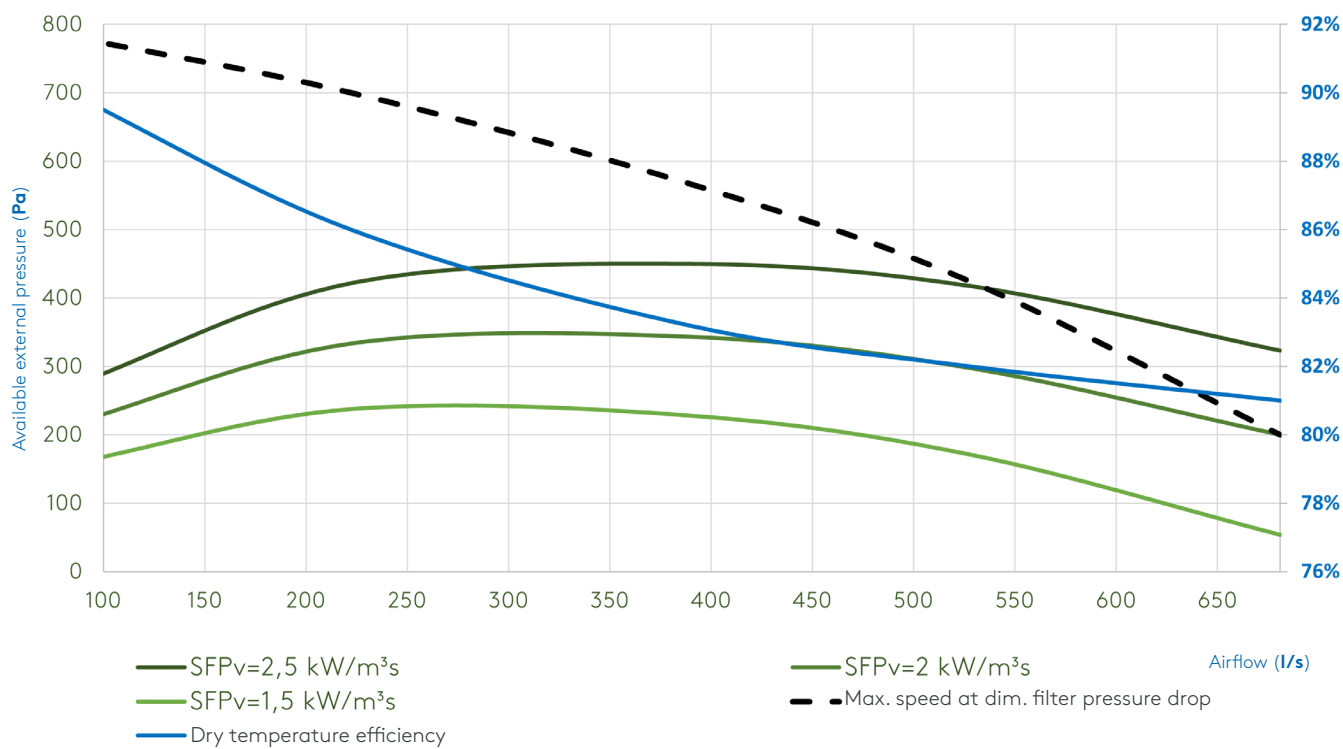
Right connection version



Left connection version

GLOBAL PX TOP 12

FAN DIAGRAMS



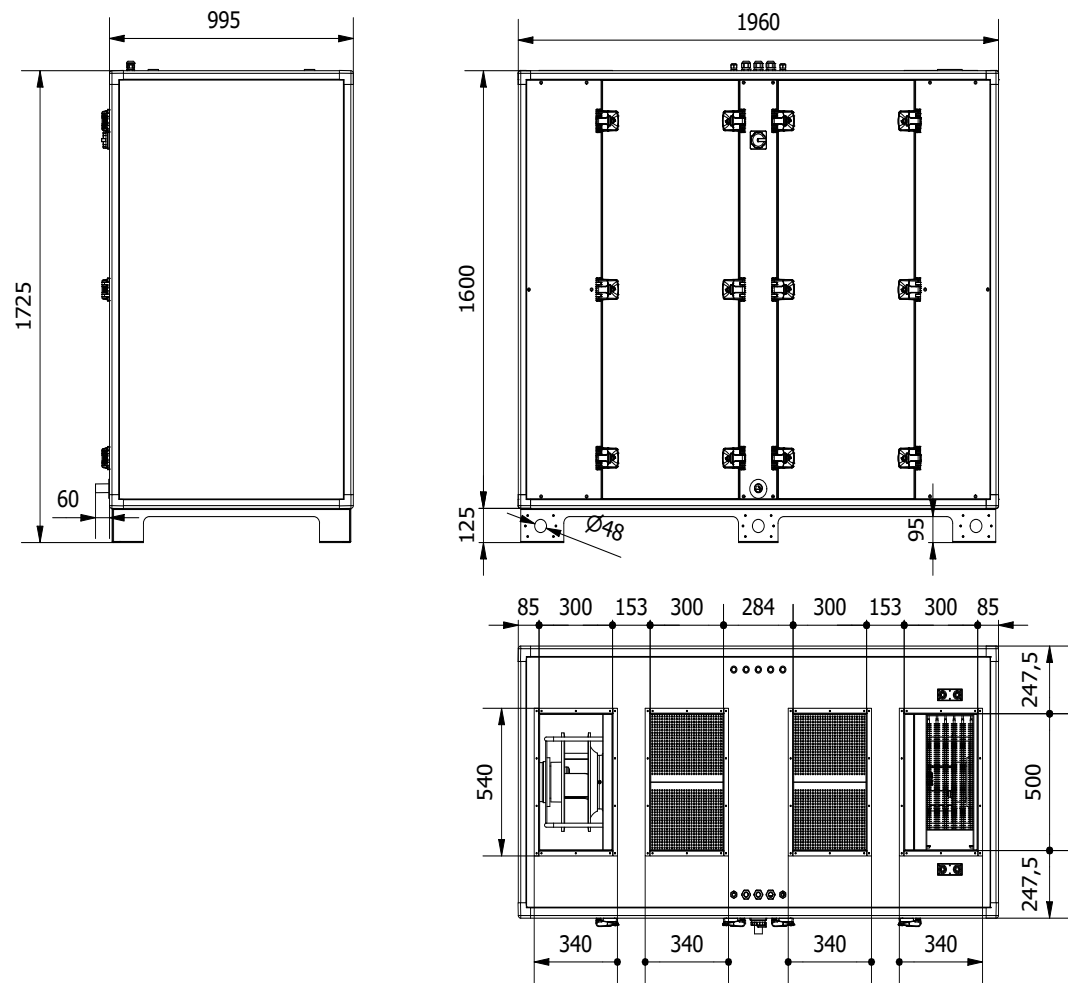
• AIRFLOW	300–2450 m³/h
• DIMENSIONS (L x W x H)	83–681 l/s
• WEIGHT	1960 x 995 x 1725
• ELECTRIC POWER SUPPLY	530 kg
• MAX. POWER CONSUMPTION	1 x 230 V
• RECOMMENDED FUSE PROTECTION	7.7 A
• FILTER CLASS (BAG FILTER)	D10A - AC3 - 10kA
• CIRCULAR DUCT CONNECTIONS	F7 (ePM1 70%) / M5 (ePM10 50%)
• STANDARD DUCT CONNECTIONS (15 mm)	NOT APPLICABLE
• GUIDE DUCT CONNECTIONS (20 mm)	500 x 300
• AMBIENT TEMPERATURE	500 x 300
• 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
m³/h	l/s		kW/m³/s	%	%	kW	%
300	83	200	1,81	54	51	0,2	90%
800	222	200	1,29	63	58	0,3	86%
1400	389	200	1,38	75	69	0,5	83%
1900	528	200	1,61	87	80	0,9	82%
2450	681	200	2,00	100	94	1,4	81%

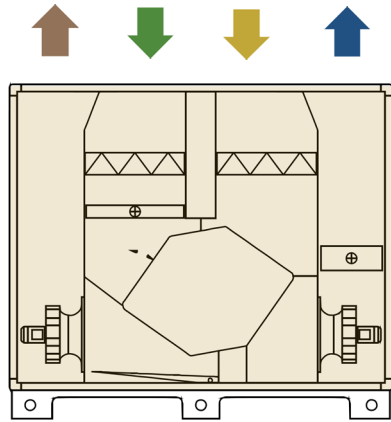
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

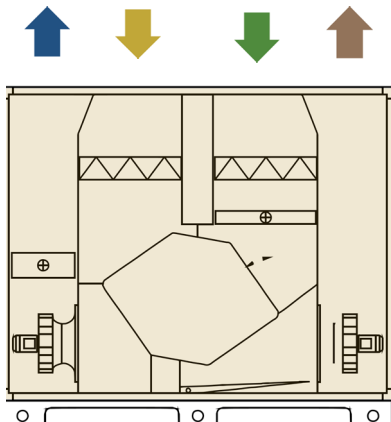
GLOBAL PX TOP 12



- Extract air
- Outdoor air
- Supply air
- Exhaust air



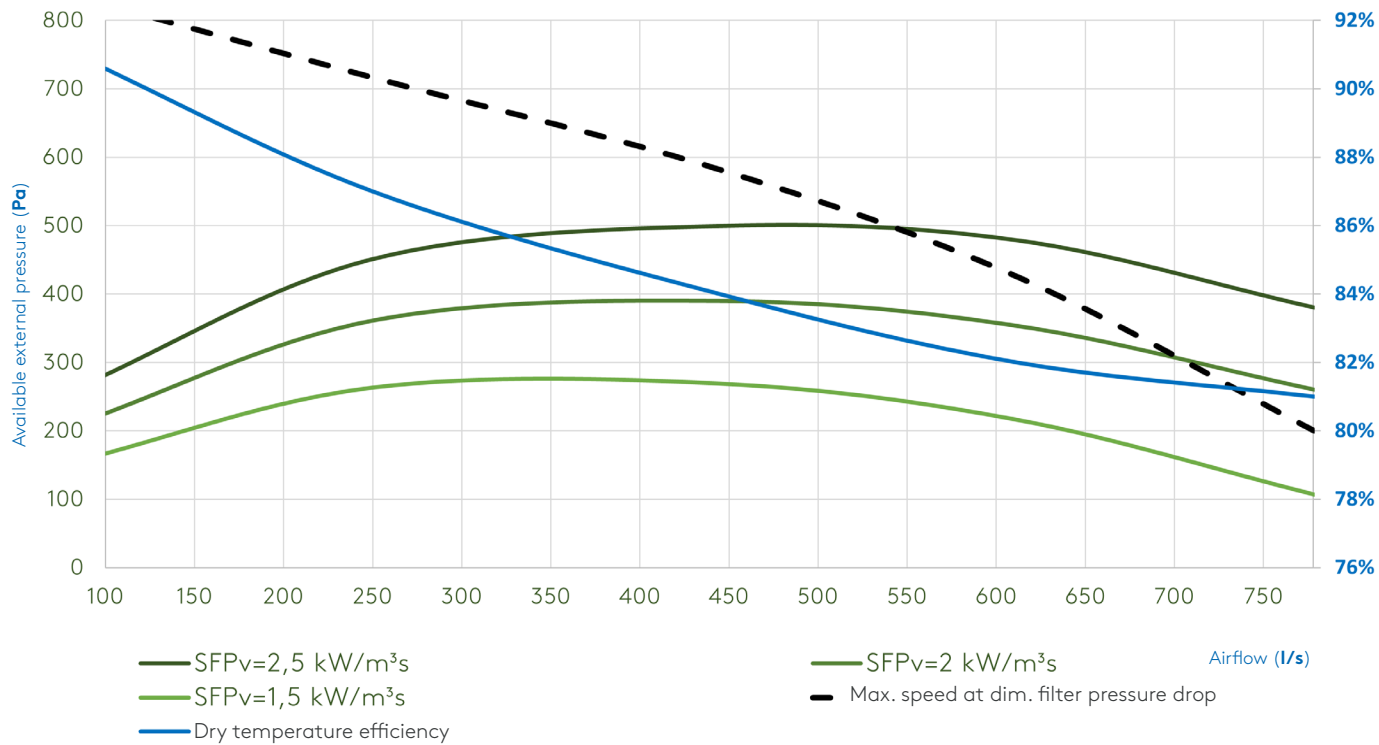
Right connection version



Left connection version

GLOBAL PX TOP 14

FAN DIAGRAMS



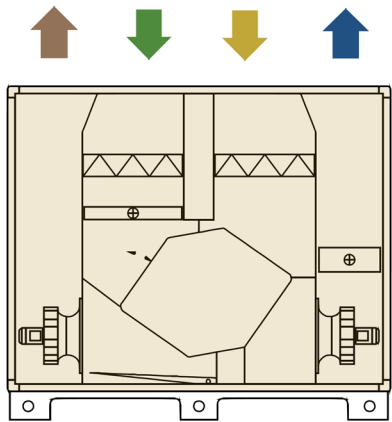
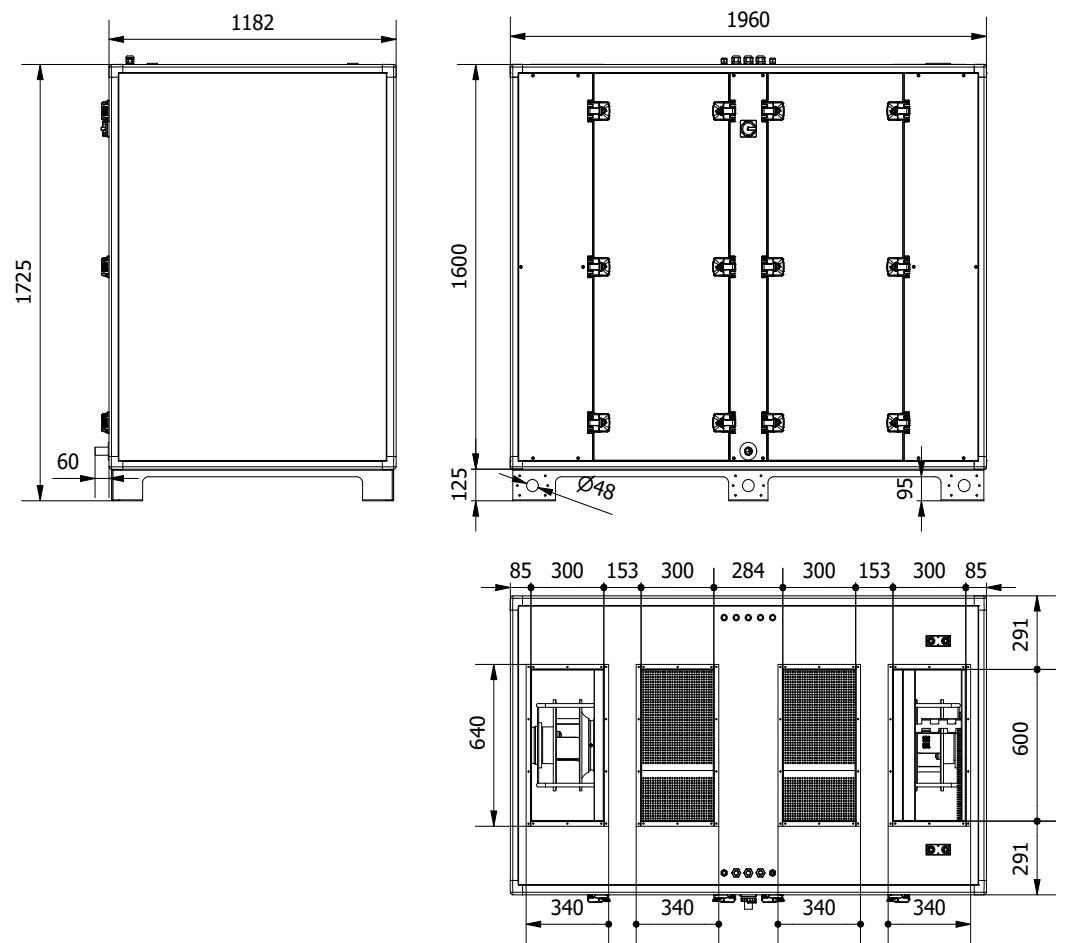
• AIRFLOW	300–2800 m³/h
• DIMENSIONS (L x W x H)	83–778 l/s
• WEIGHT	1960 x 1182 x 1725
• ELECTRIC POWER SUPPLY	540 kg
• MAX. POWER CONSUMPTION	1 x 230 V
• RECOMMENDED FUSE PROTECTION	7.7 A
• FILTER CLASS (BAG FILTER)	D10A - 10kA - AC3
• CIRCULAR DUCT CONNECTIONS	F7 (ePM1 70%) / M5 (ePM10 50%)
• STANDARD DUCT CONNECTIONS (15 mm)	NOT APPLICABLE
• GUIDE DUCT CONNECTIONS (20 mm) (W x H)	600 x 300
• AMBIENT TEMPERATURE	600 x 300
• 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
m³/h	l/s	kW/m³/s	%	%	kW	%	
300	83	200	1,85	52	50	0,2	91%
900	250	200	1,18	62	57	0,3	87%
1600	445	200	1,23	75	68	0,5	84%
2200	612	200	1,44	87	81	0,9	82%
2800	778	200	1,79	100	94	1,4	81%

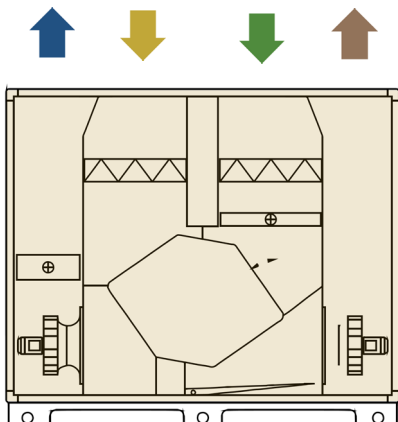
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

GLOBAL PX TOP 14



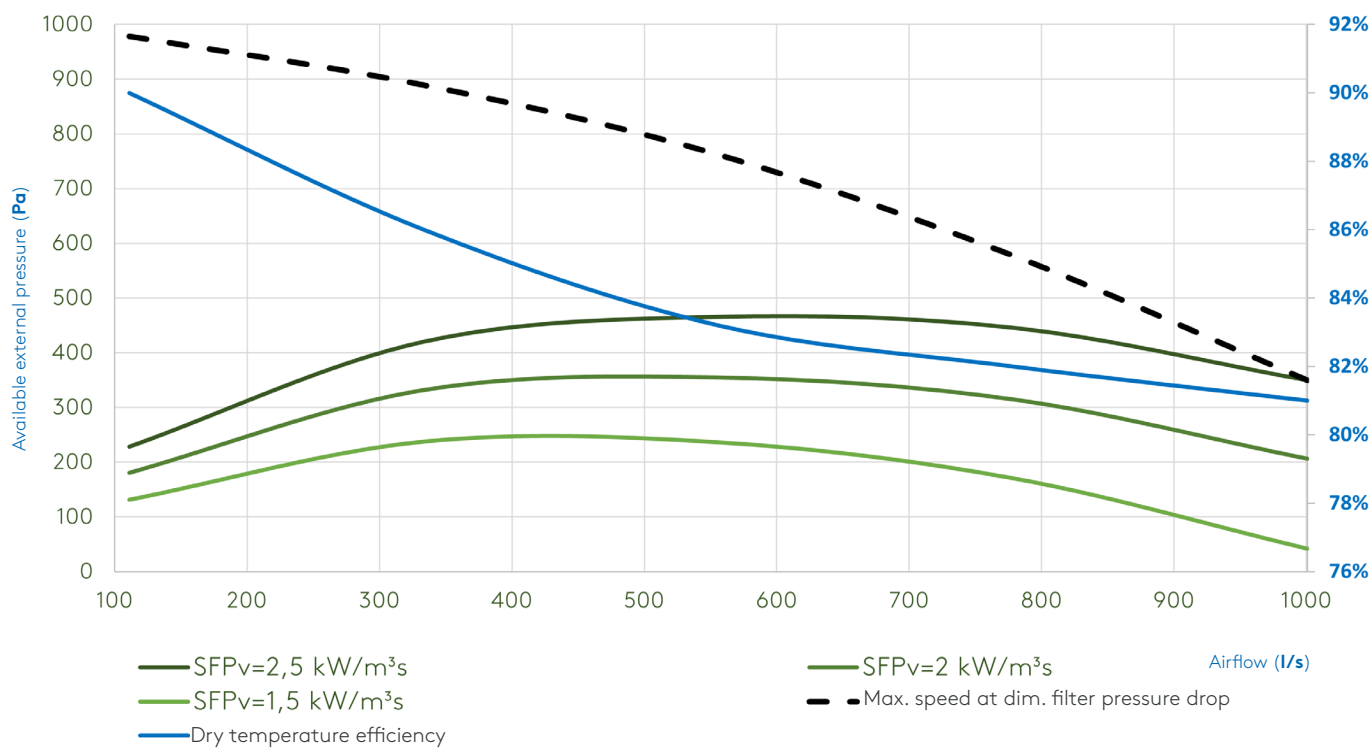
Right connection version



Left connection version

GLOBAL PX TOP 18

FAN DIAGRAMS



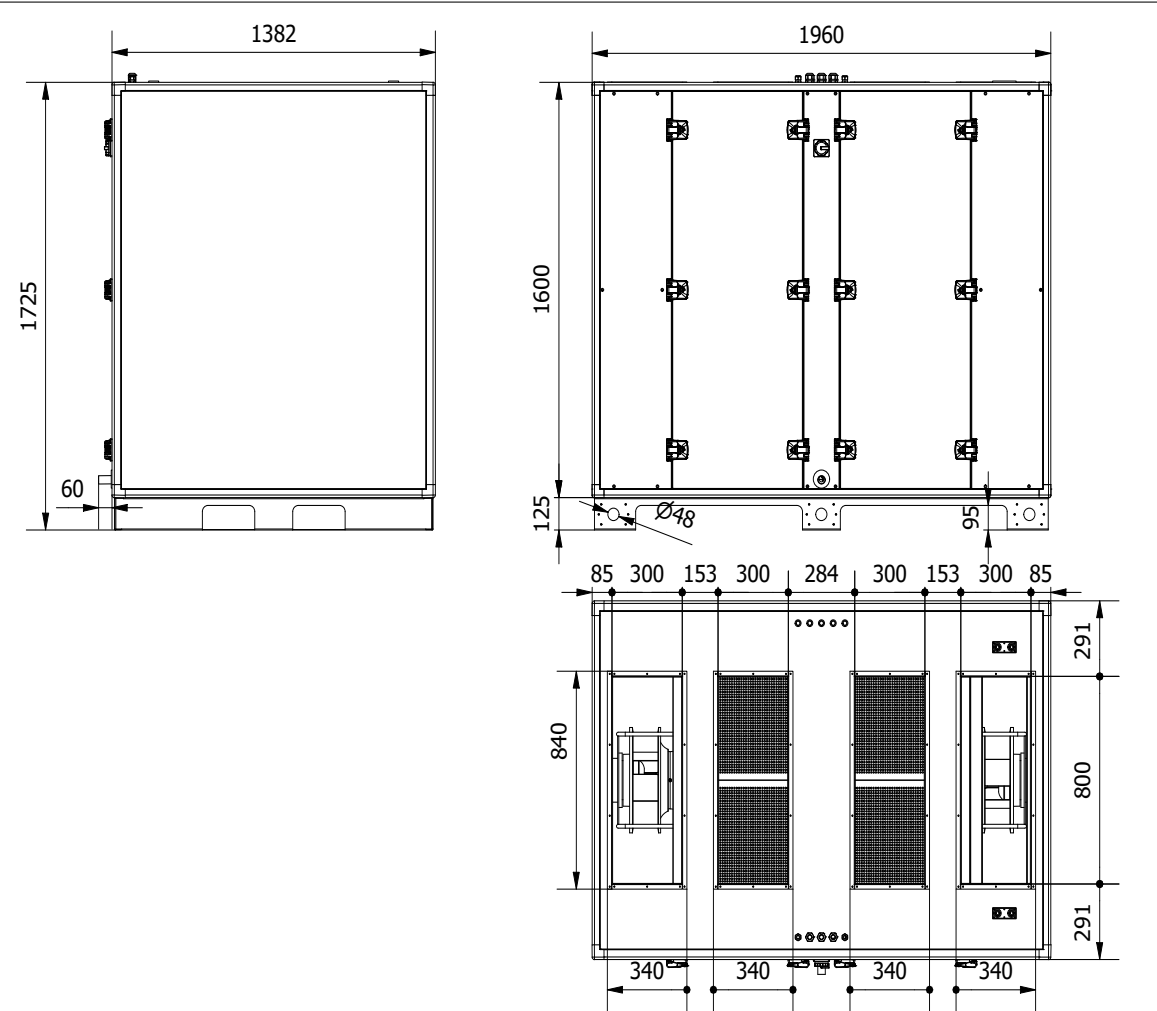
• AIRFLOW	400–3600 m³/h
	111–1001 l/s
• DIMENSIONS (L x W x H)	1960 x 1382 x 1725
• WEIGHT	600 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	12.7 A
• RECOMMENDED FUSE PROTECTION	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 50%)
• CIRCULAR DUCT CONNECTIONS	NOT APPLICABLE
• STANDARD DUCT CONNECTIONS (15 mm)	800 x 300
• GUIDE DUCT CONNECTIONS (20 mm) (W x H)	800 x 300
• 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
m³/h	l/s		kW/m³/s	%	%	kW	%
400	111	200	2,14	46	45	0,2	90%
1200	334	200	1,29	56	53	0,4	86%
2000	556	200	1,35	68	63	0,7	83%
2800	778	200	1,59	81	76	1,2	82%
3600	1001	200	1,98	95	89	2,0	81%

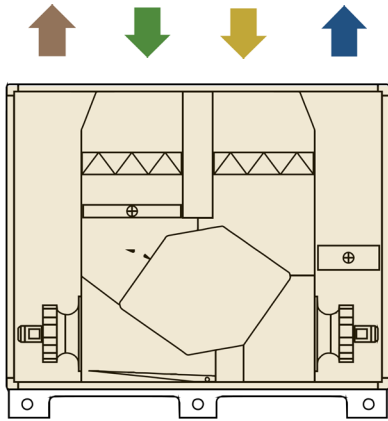
- 1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
- 2. All data applies to fans with composite fan impeller
- 3. SFP and absorbed power calculated with clean filter
- 4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

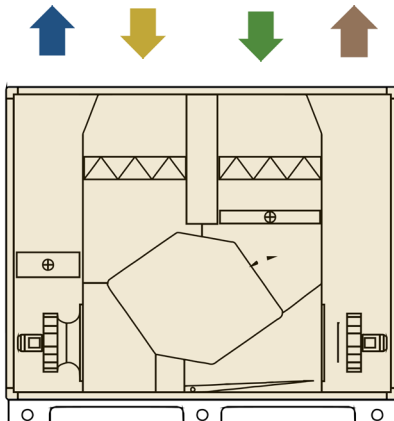
GLOBAL PX TOP 18



- Extract air
- Outdoor air
- Supply air
- Exhaust air



Right connection version



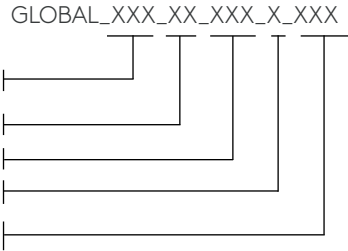
Left connection version

GLOBAL PX TOP



Designation key:

Heat exchanger: Plate heat exchanger (PX TOP)
Unit size: 04, 05, 08, 10, 12, 13, 14, 16, 20, 24, 26...
Duct connection:
Supply air: right (R) / left (L)
Fan type: none = composite, ALU = aluminium



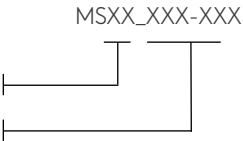
FLEXIBLE CONNECTION 20 MM



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	DUCT SIZE [MM]	EXTERNAL DIMENSIONS: [MM]	MARKING
GLOBAL PX 05 TOP	DN250	/	MS_250
GLOBAL PX 08 TOP	DN315	/	MS_315
GLOBAL PX 10 TOP	DN315	/	MS_315
GLOBAL PX 12 TOP	500 x 300	540 x 340	MS20_500-300
GLOBAL PX 14 TOP	600 x 300	640 x 340	MS20_600-300
GLOBAL PX 18 TOP	800 x 300	840 x 340	MS20_800-300

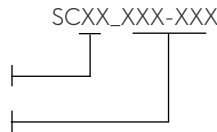
SLIP-CLAMP CONNECTIONS 20 MM



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.

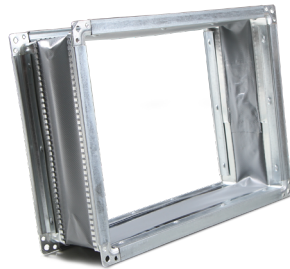
Designation key:

Connection frame width (mm)
Duct dimensions (mm)



MODEL	DUCT SIZE [MM]	MARKING
GLOBAL PX 12 TOP	500 x 300	SC20_500-300
GLOBAL PX 14 TOP	600 x 300	SC20_600-300
GLOBAL PX 18 TOP	800 x 300	SC20_800-300

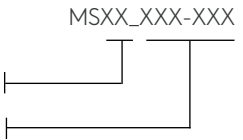
FLEXIBLE CONNECTION 30 MM



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:

Connection frame width (mm)
Duct dimensions (mm)



MODEL	DUCT SIZE [MM]	EXTERNAL DIMENSIONS: [MM]	MARKING
GLOBAL PX 12 TOP	480 x 280	540 x 340	MS30_480-280
GLOBAL PX 14 TOP	580 x 280	640 x 340	MS30_580-280
GLOBAL PX 18 TOP	780 x 280	840 x 340	MS30_780-280

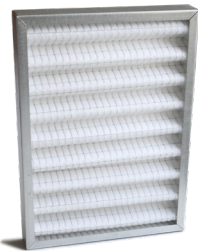
REPLACEMENT FILTER SETS



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 ≥ 50%. 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 ≥ 50% 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 FILTER [MM]	DIMENSIONS, EXTRACT AIR FILTER [MM]	NUMBER OF BAGS
GLOBAL PX 05 TOP	400 x 380 x 100	400 x 380 x 50	/
GLOBAL PX 08 TOP	510 x 400 x 100	510 x 400 x 50	/
GLOBAL PX 10 TOP	510 x 600 x 50	510 x 600 x 50	/
GLOBAL PX 12 TOP	510 x 400 x 50 (x2)	510 x 400 x 50 (x2)	/
GLOBAL PX 14 TOP	510 x 400 x 50 (x1) 510 x 600 x 50 (x1)	510 x 400 x 50 (x1) 510 x 600 x 50 (x1)	/
GLOBAL PX 18 TOP	510 x 600 x 50 (x2)	510 x 600 x 50 (x2)	/

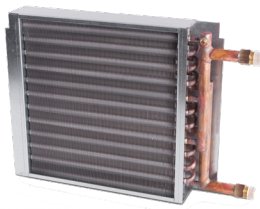
PRE-FILTER CLASS G4



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.

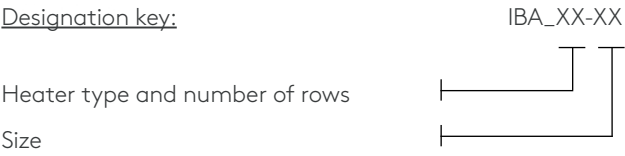
MODEL	DIMENSIONS [MM]
GLOBAL PX 05 TOP	400 x 380 x 50
GLOBAL PX 08 TOP	510 x 400 x 50
GLOBAL PX 10 TOP	510 x 600 x 50
GLOBAL PX 12 TOP	510 x 400 x 50 (x2)
GLOBAL PX 14 TOP	510 x 400 x 50 (x1) 510 x 600 x 50 (x1)
GLOBAL PX 18 TOP	510 x 600 x 50 (x2)

BUILT-IN WATER HEATING COIL



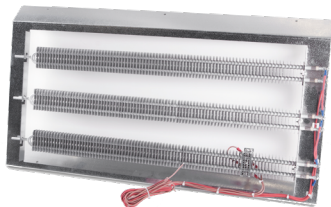
In the post-heating, hot water is used to reheat the supply air. The heater is integrated in the air handling unit, downstream of the heat exchanger. The heat exchanger is a tube heat exchanger, made of copper pipes supplied with surface-enlarging aluminium fins with a spacing of 2.5 mm. The pipes have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

Designation key:



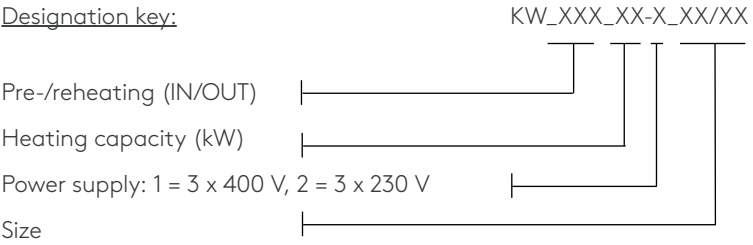
MODEL	Ø	MARKING
GLOBAL PX 05 TOP	1/2"	IBA_3H_PX 05 TOP
GLOBAL PX 05 TOP	1/2"	IBA_4H_PX 05 TOP
GLOBAL PX 08 TOP	1/2"	IBA_3H_PX 08 TOP
GLOBAL PX 08 TOP	1/2"	IBA_4H_PX 08 TOP
GLOBAL PX 10 TOP	1/2"	IBA_3H_PX 10 TOP
GLOBAL PX 10 TOP	1/2"	IBA_4H_PX 10 TOP
GLOBAL PX 12 TOP	1/2"	IBA_3H_PX 12 TOP
GLOBAL PX 12 TOP	1/2"	IBA_4H_PX 12 TOP
GLOBAL PX 14 TOP	1/2"	IBA_3H_PX 14 TOP
GLOBAL PX 18 TOP	1/2"	IBA_3H_PX 18 TOP
GLOBAL PX 18 TOP	1/2"	IBA_4H_PX 18 TOP

BUILT-IN ELECTRIC PRE- AND Post-heatingS



The electric heater is used to reheat the supply air and the ppost-heating is used to prevent water from freezing in the counterflow heat exchanger. They are equipped with two overheat-ing 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:



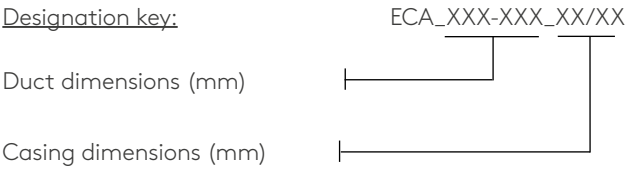
MODEL	POWER kWout	POWER kWin
GLOBAL PX 05 TOP	3.0 kW	3.0 kW
GLOBAL PX 08 TOP	6.0 kW	6.0 kW
GLOBAL PX 10 TOP	6.0 kW	6.0 kW
GLOBAL PX 12 TOP	9,0 kW	9,0 kW
GLOBAL PX 14 TOP	9,0 kW	9,0 kW
GLOBAL PX 18 TOP	12,0 kW	12,0 kW

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.

Designation key:



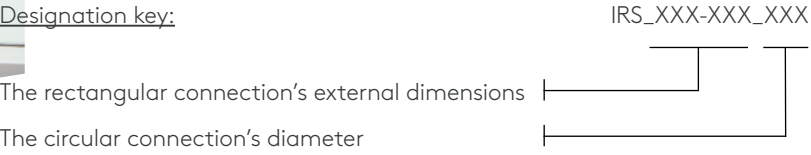
MODEL	DUCT CONNECTION	DIMENSIONS [MM]	MARKING
GLOBAL PX 05 TOP	DN250	400 x 600 x 700	ECA_250_08
GLOBAL PX 08 TOP	DN315	400 x 600 x 700	ECA_315_PX 08 TOP
GLOBAL PX 10 TOP	DN315	400 x 900x 800	ECA_315_PX 10 TOP
GLOBAL PX 12 TOP	655 x 250	400 x 900 x 800	ECA_655-250_PX 12 TOP
GLOBAL PX 14 TOP	755 x 350	500 x 1000x 800	ECA_755-350_PX 14/18 TOP
GLOBAL PX 18 TOP	755 x 350	500 x 1000x 800	ECA_755-350_PX 14/18 TOP

CIRCULAR/RECTANGULAR ADAPTER



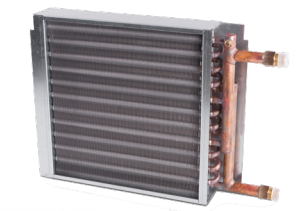
Uninsulated adapters for the transition between circular and rectangular connections are available for units and post-treatment sections with rectangular connections. The adapters are made of galvanised sheet steel. The circular duct connection is fitted with a rubber seal.

Designation key:



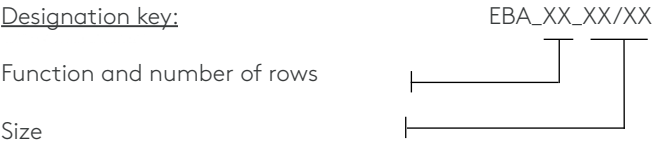
MODEL	DIMENSIONS [MM]	MARKING
GLOBAL PX 12 TOP	540 x 340 – DN400	IRS_540-340_400
GLOBAL PX 14 TOP	640 x 340 – DN400	IRS_640-340_400
GLOBAL PX 18 TOP	840 x 340 – DN400	IRS_840-340_400

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 pipes and aluminum fins with a spacing of 2.5 mm. The pipes have external threaded pipe connections made of brass. The heat exchanger is supplied with a venting plug (not for DX) . The pressure class is PN16.

Designation key:



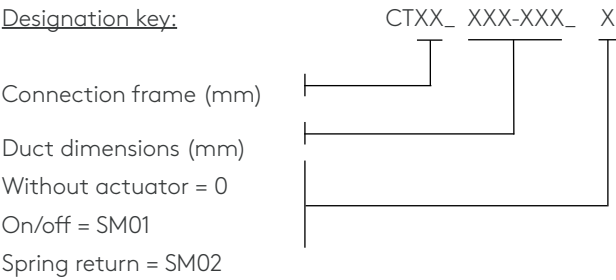
MODEL	FUNCTION	NUMBER OF ROWS	VOLUME	DIMENSIONS [MM]	Ø	MARKING
GLOBAL PX 05 TOP	HEATING	4	2.2 dm³	305 x 638 x 130	Ø3/4"	EBA_4H_08
GLOBAL PX 05 TOP	COOLING	4	2.2 dm³	305 x 638 x 130	Ø3/4"	EBA_4C_08
GLOBAL PX 05 TOP	DX	4	2.3 dm³	305 x 638 x 130	Ø28/Ø12	EBA_4X_08
GLOBAL PX 08 TOP	HEATING	4	2.2 dm³	305 x 638 x 130	Ø3/4"	EBA_4H_08
GLOBAL PX 08 TOP	COOLING	4	2.2 dm³	305 x 638 x 130	Ø3/4"	EBA_4C_08
GLOBAL PX 08 TOP	DX	4	2.3 dm³	305 x 638 x 130	Ø28/Ø12	EBA_4X_08
GLOBAL PX 10 TOP	HEATING	4	2.9 dm³	305 x 828 x 130	Ø3/4"	EBA_4H_13
GLOBAL PX 10 TOP	COOLING	4	2.9 dm³	305 x 828 x 130	Ø3/4"	EBA_4C_13
GLOBAL PX 10 TOP	DX	4	2.8 dm³	305 x 828 x 130	Ø28/Ø12	EBA_4X_13
GLOBAL PX 12 TOP	HEATING	4	2.9 dm³	305 x 828 x 130	Ø3/4"	EBA_4H_13
GLOBAL PX 12 TOP	COOLING	4	2.9 dm³	305 x 828 x 130	Ø3/4"	EBA_4C_13
GLOBAL PX 12 TOP	DX	4	2.8 dm³	305 x 828 x 130	Ø28/Ø12	EBA_4X_13
GLOBAL PX 14 TOP	HEATING	4	4.3 dm³	405 x 938 x 130	Ø3/4"	EBA_4H_16
GLOBAL PX 14 TOP	COOLING	4	4.3 dm³	405 x 938 x 130	Ø3/4"	EBA_4C_16
GLOBAL PX 14 TOP	DX	4	4.2 dm³	405 x 938 x 130	Ø28/Ø22	EBA_4X_16
GLOBAL PX 18 TOP	HEATING	4	4.3 dm³	405 x 938 x 130	Ø3/4"	EBA_4H_16
GLOBAL PX 18 TOP	COOLING	4	4.3 dm³	405 x 938 x 130	Ø3/4"	EBA_4C_16
GLOBAL PX 18 TOP	DX	4	4.2 dm³	405 x 938 x 130	Ø28/Ø22	EBA_4X_16

MOTOR-DRIVEN DAMPERS



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. 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:



MODEL	DUCT SIZE [MM]	EXTERNAL DIMENSIONS: [MM]	MARKING
GLOBAL PX 05 TOP	DN250	/	CT_250
GLOBAL PX 08 TOP	DN315	/	CT_315
GLOBAL PX 10 TOP	DN315	/	CT_315
GLOBAL PX 12 TOP	460 x 260	540 x 340	CT40_460-260
GLOBAL PX 14 TOP	560 x 260	640 x 340	CT40_560-260
GLOBAL PX 18 TOP	760 x 260	840 x 340	CT40_760-260

Feel good **inside**

