

GLOBAL PX LP

Ceiling-mounted ventilation unit with counterflow heat exchanger



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

Max. airflow 3500 m³/h (973 l/s).

Temperature efficiency: up to 85%.

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

For installation indoors in false ceiling.

Top quality control system with touch screen.

EUROVENT certified.

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. The doors run on slide rails to facilitate access, which means that the maintenance work can be performed by one person.

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. Both the fans are located on the cold side of the plate heat exchanger, which further reduces the supply air system's noise level. 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, including at high 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 of 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, waterborne or electric reheater. The heater's output is adjusted in order to maintain a constant temperature.

DAMPERS

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

AIR FILTERS

The GLOBAL units are supplied with bag filters made of glass fibre. The function of the filter is to keep both the air and the heat exchanger free from contaminants. As standard, the outdoor air filter has filter class ePM1 $\geq$ 70% and the extract air filter has ePM10 $\geq$ 50%. (LP02 and 04 have pleated filters ePM10 $\geq$ 55% for both outdoor air and extract air.) Extract air filters of class ePM1 $\geq$ 70% are not available as an option, as this would have a detrimental impact on energy efficiency. The filters are installed in lockable guide rails to make filter changing and cleaning of the filter section easier. The filter guide rails satisfy the requirements for airflow leakage according to filter class F9/ePM1 $\geq$ 80% (EN 1886). The filter monitoring function is integrated in the TAC control unit's standard configuration.

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 TACtouch, a 4.3" capacitive touch screen. The heat recovery 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 Wifi-Ethernet for configuration, indication and display as well as controlling the operation of the unit via MODBUS TCP/IP on Wifi network and also Ethernet network.

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

CHARACTERISTICS

- EN1886 classification: T3/TB2/F9/L2/D1.
- Eurovent certified heat exchanger with high temperature efficiency.
- Built-in electrical or waterborne reheater available as an option. Fully integrated control system.
- HMI with intuitive commissioning menu and integrated, con-text-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.
- Two sliding doors and quarter-turn locks for easy maintenance
- Inspection doors run on slide rails. Maintenance work can be carried out by a single service engineer.
- Made of galvanised sheet steel painted in colour RAL7016, with 30 mm mineral wool insulation.
- Circular duct connections with rubber seal (02/04/06/08).
- 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 50% for extract air.
- Tried and tested, preconfigured TAC control unit.
- Software for unit selection is available online.
- ERP-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.
- Right hand version is available for size 8 and 10 to match different air flow directions.

OPTIONAL EXTRAS

Built-in electric reheater
Built-in waterborne reheater
External reheater/cooler
Motor-driven dampers
Flexible duct connection 20 mm
Flexible duct connection 30 mm
Guide 20 mm



THE CORRECT OPERATING MODE IS IMPORTANT

AIRFLOW OR PRESSURE

Whether the ventilation system is to work with constant pressure, with a constant air-flow 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 air-flow requirement is relatively stable.

DEMAND CONTROL

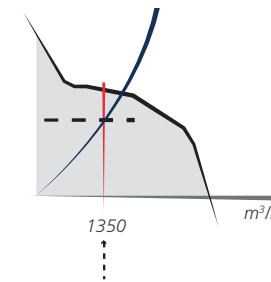
Alternatively, the airflow can be adjusted automatically according to the ventilation requirements and the wishes of the users with the aid of the 0–10 V signal input, for example with a CO₂ sensor or with the customer's automated building management system or equivalent.

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.

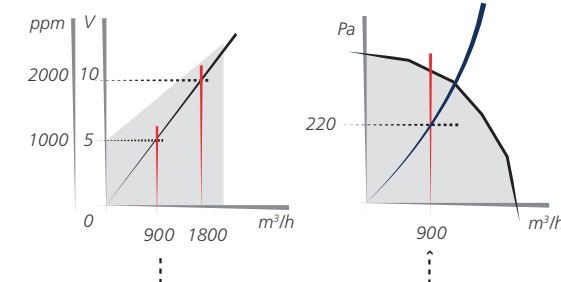
The airflow remains unchanged in all the other rooms, i.e. the ventilation system works constantly within its optimum operating range. Constant pressure operation requires an external pressure sensor.

THE 3 OPERATING MODES



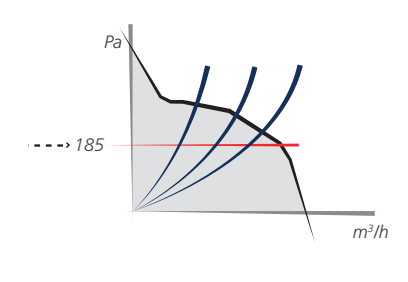
Constant airflow

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 WIFI - ETHERNET

The SAT WIFI-ETHERNET component is a communication interface with a TAC control board allowing exchange of information. The communication protocol used is Modbus TCP/IP on Wi-Fi network or Ethernet network.

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 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 PX LP – GENERAL

CIRCULAR DUCT CONNECTIONS

The duct connections for sizes 02, 04, 06 and 08 are circular and are fitted with a rubber seal. The units can be combined with motor-driven dampers.

RECTANGULAR DUCT CONNECTIONS

The standard duct connections for size 10 and above are rectangular and are fitted with a slip-clamp connection. For units with rectangular duct connections, there is a rectangular/circular adapter as an optional extra. The units can be combined with motor-driven dampers and flexible duct connections.

CASING

GLOBAL PX LP's casing is made of sheet metal panels. The casing panels are a 30 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 inspection doors run on slide rails to facilitate access to the unit's components. The panels can easily be removed fully if even better access is required.

Casing data according to EN1886

Air leakage class: L2 (R)

Thermal bridges: TB2

Thermal transmittance: T3 (Optimised insulation as optional extra)

Mechanical strength: D1 (MB)

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.

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 WATERBORNE HEATER

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

BUILT-IN ELECTRIC AIR HEATER

GLOBAL units with a counterflow heat exchanger can be supplied with a factory-fitted, built-in electric preheater and/or reheater. The reheater's output is adjusted in order to maintain a constant supply air or extract air temperature. The preheater'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.

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

1
- SUPPLY AIR FILTER

2
- BUILT-IN CONTROL UNIT

3
- GUIDE RAILS FOR EASY ACCESS

4
- BUILT-IN PREHEATER (ELECTRIC)

5
- HIGHLY EFFICIENT PLATE HEAT EXCHANGER

6
- BUILT-IN REHEATER (WATERBORNE/ELECTRIC)

7
- STAINLESS STEEL CONDENSATION TRAY

8
- EXTRACT AIR FILTER

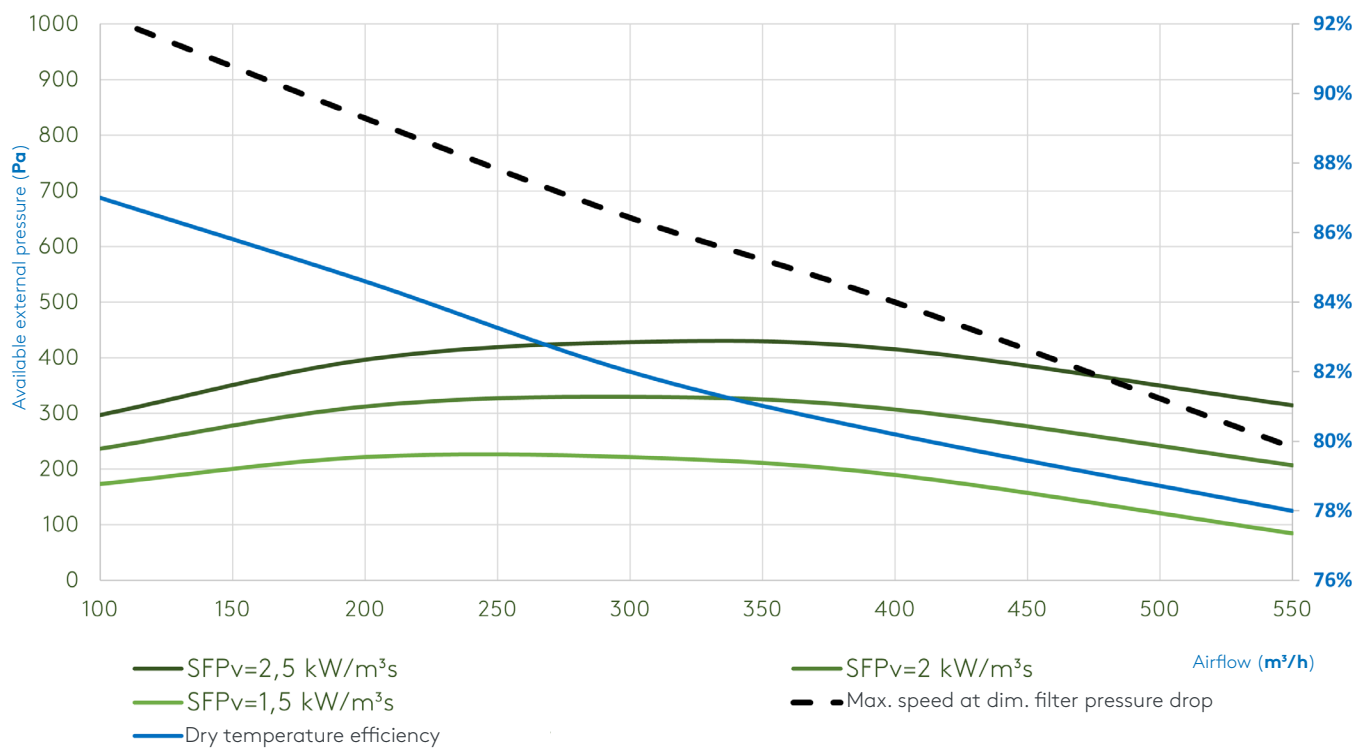
9
- 100 % BYPASS

10



GLOBAL PX LP 02

FAN DIAGRAMS



• AIRFLOW	100–550 m³/h
	28–153 l/s
• DIMENSIONS (L x W x H)	1300 x 890 x 350 mm
• WEIGHT	100 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	3.1 A
• RECOMMENDED FUSE PROTECTION	D4A - 10kA - AC3
• FILTER CLASS (MINI-PLEATED)	M5 (ePM10 50%) / M5 (ePM10 50%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	Ø 200 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	Ø 200 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

Airflow	Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s	kW/m³/s	%	%	kW	%	
100	28	200	1,70	50	49	0,0	87%
200	56	200	1,37	59	59	0,1	85%
300	83	200	1,39	69	71	0,1	82%
400	111	200	1,54	81	83	0,2	80%
550	153	200	1,97	98	100	0,3	78%

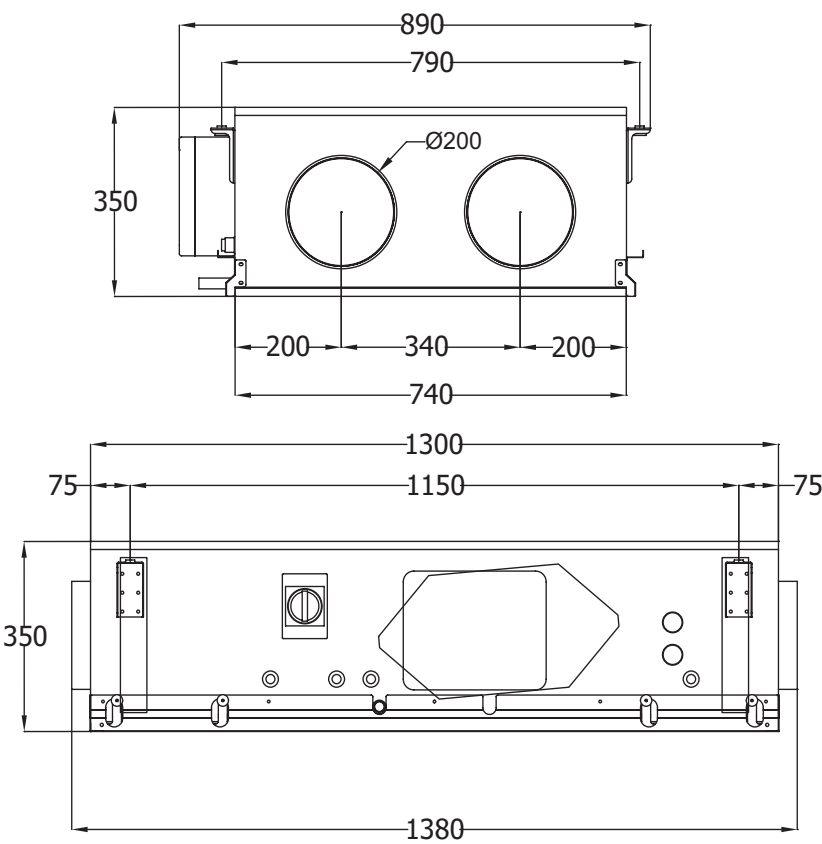
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)

2. All data applies to fans with composite fan impeller

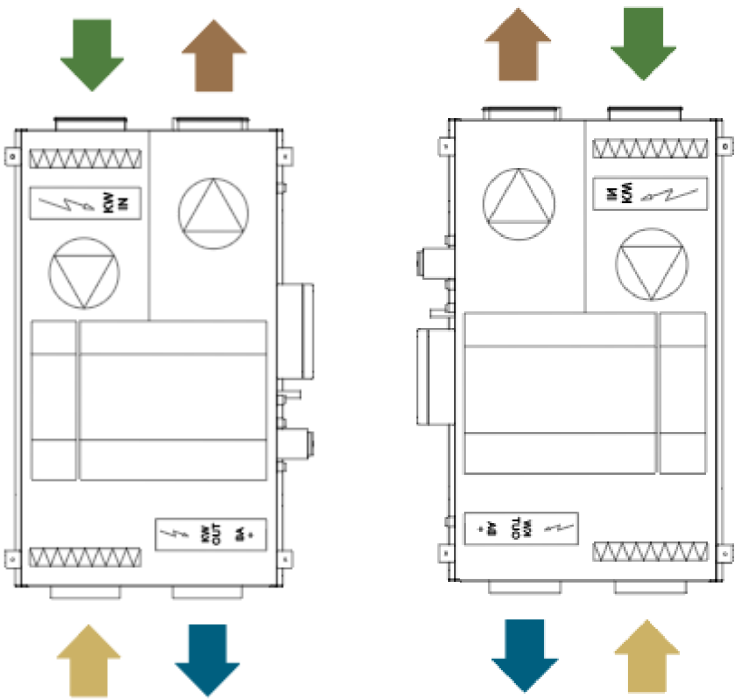
3. SFP and absorbed power calculated with clean filter

4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)



TOP VIEW

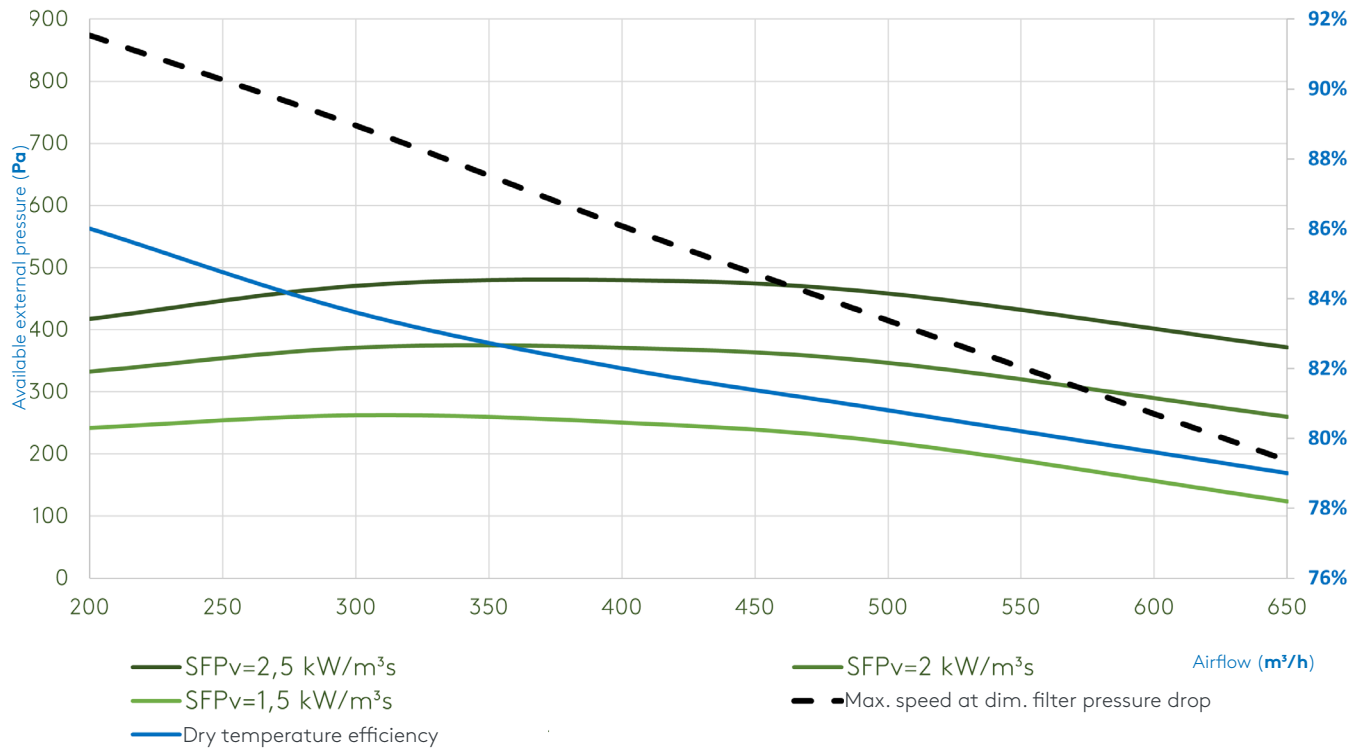


Left-hand version

Right-hand version

GLOBAL PX LP 04

FAN DIAGRAMS

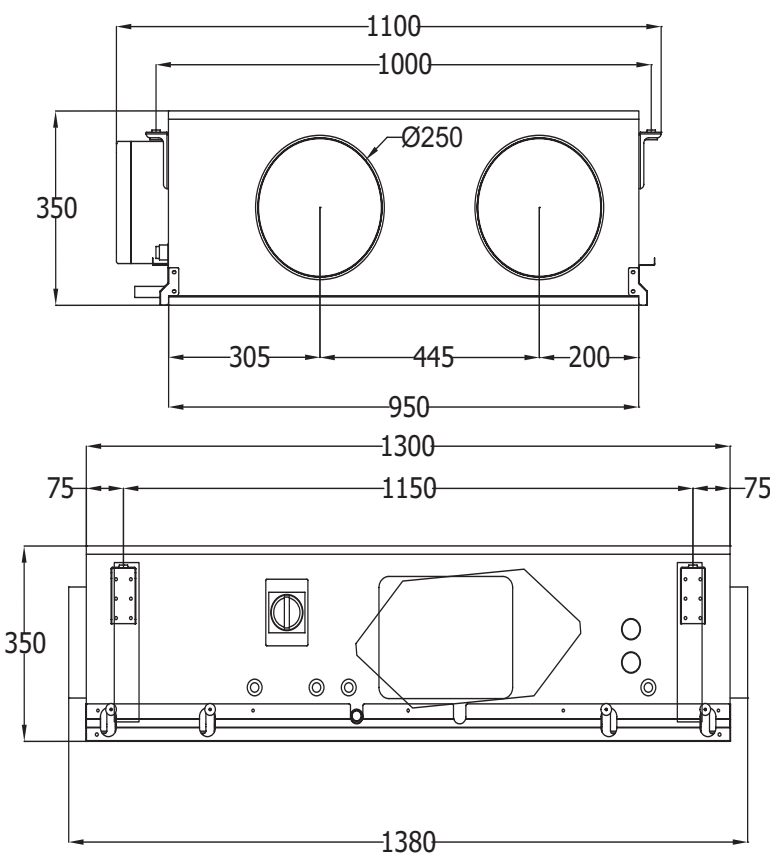


• AIRFLOW	200–650 m³/h
	56–181 l/s
• DIMENSIONS (L x W x H)	1300 x 1100 x 350 mm
• WEIGHT	125 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	3.1 A
• RECOMMENDED FUSE PROTECTION	D4A - 10kA - AC3
• FILTER CLASS (MINI-PLEATED)	M5 (ePM10 50%)/M5 (ePM10 50%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	Ø 250 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	Ø 250 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

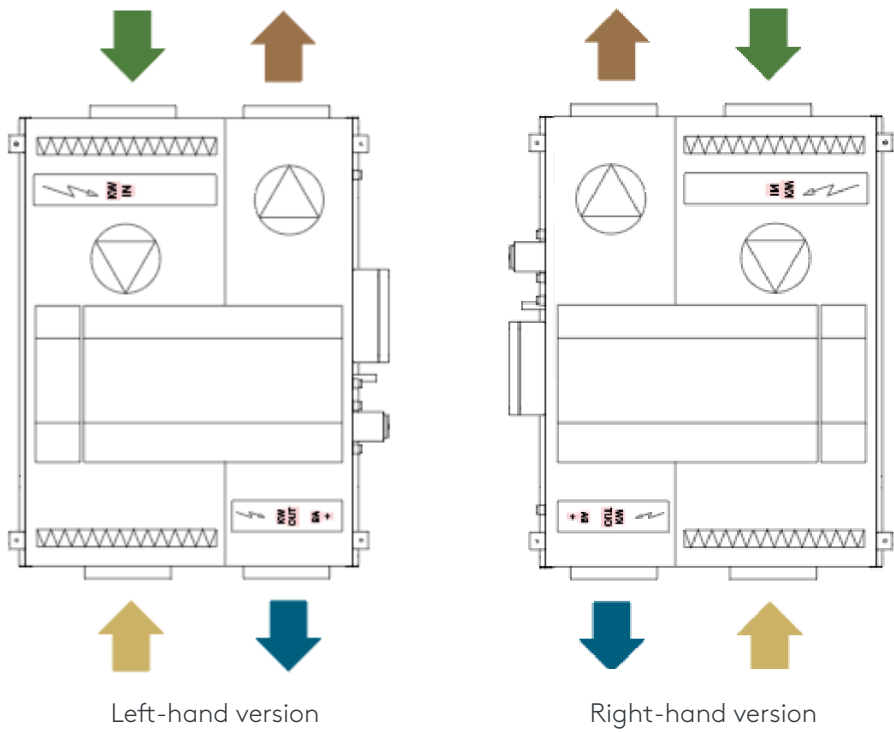
Airflow	Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s	kW/m³/s	%	%	kW	%	
200	56	200	1,26	56	57	0,1	86%
300	83	200	1,22	66	66	0,1	84%
400	111	200	1,30	75	77	0,1	82%
500	139	200	1,43	85	87	0,2	81%
650	181	200	1,77	101	103	0,3	79%

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)

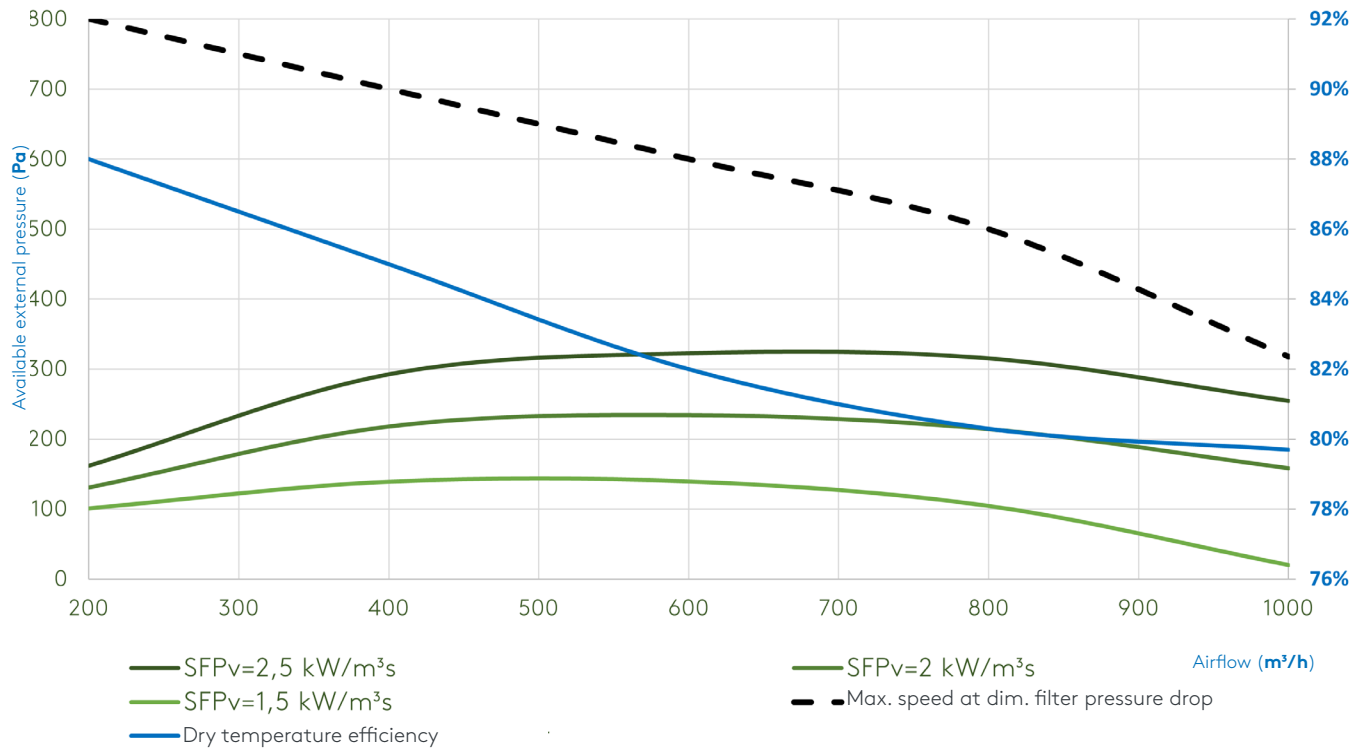


TOP VIEW



GLOBAL PX LP 06

FAN DIAGRAMS

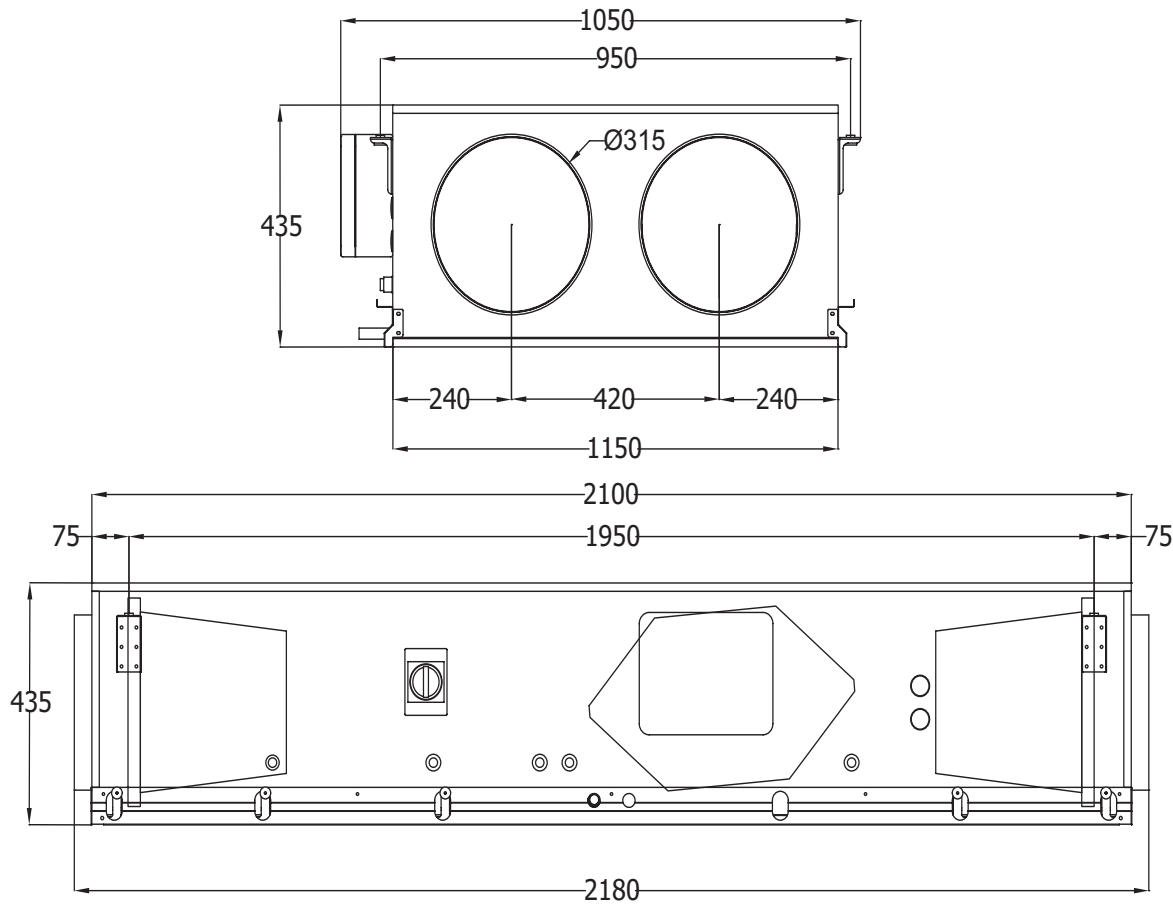


• AIRFLOW	200–1000 m³/h
	56–278 l/s
• DIMENSIONS (L x W x H)	2100 x 1050 x 435 mm
• WEIGHT	180 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	5.3 A
• RECOMMENDED FUSE PROTECTION	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	Ø315 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	Ø315 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

Airflow	Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s	kW/m³/s	%	%	kW	%	
200	56	200	3,03	60	57	0,2	88%
400	111	200	1,87	64	60	0,2	85%
600	167	200	1,80	72	68	0,3	82%
800	222	200	1,93	80	77	0,4	80%
1000	278	200	2,19	89	86	0,6	80%

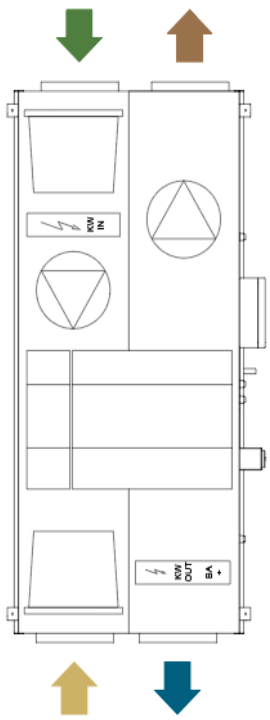
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)

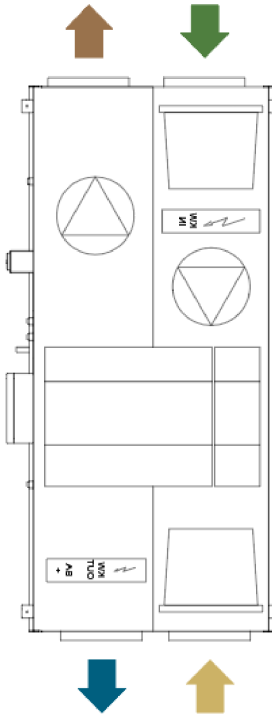


TOP VIEW

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



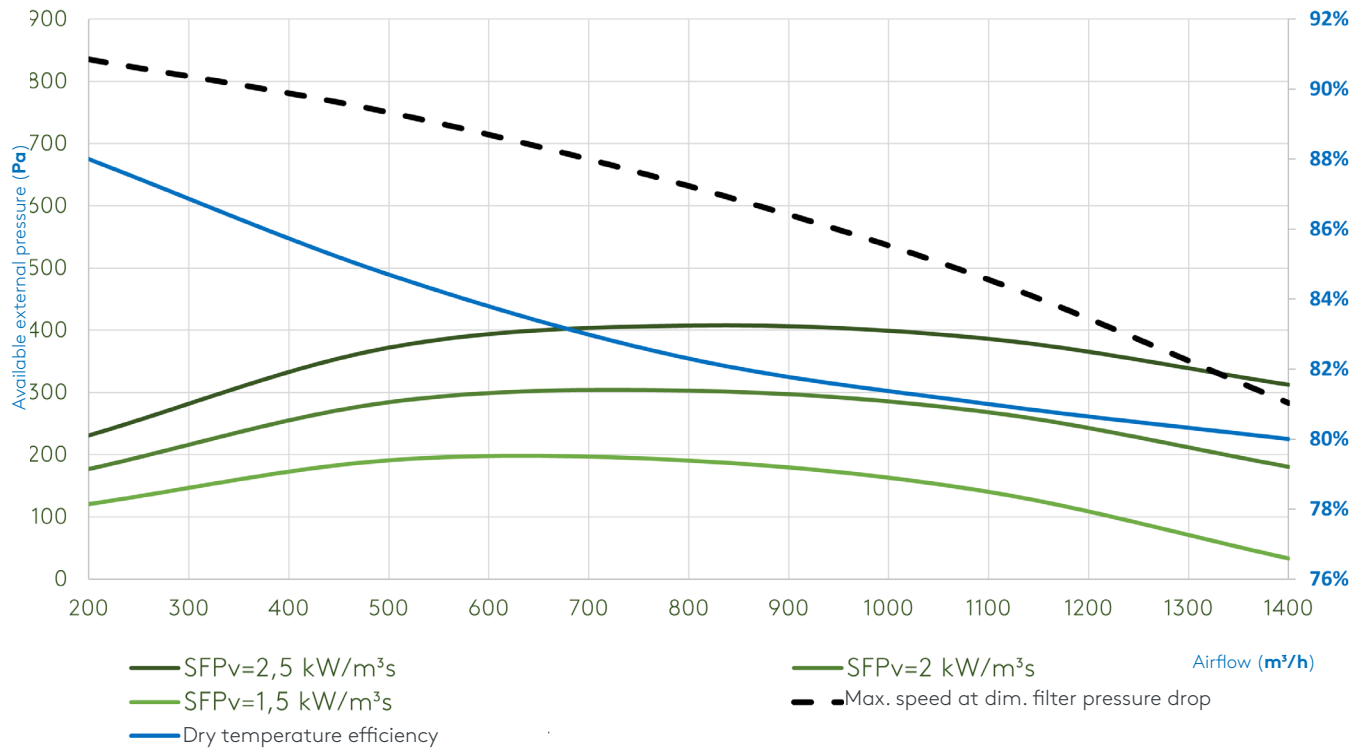
Left-hand version



Right-hand version

GLOBAL PX LP 08

FAN DIAGRAMS

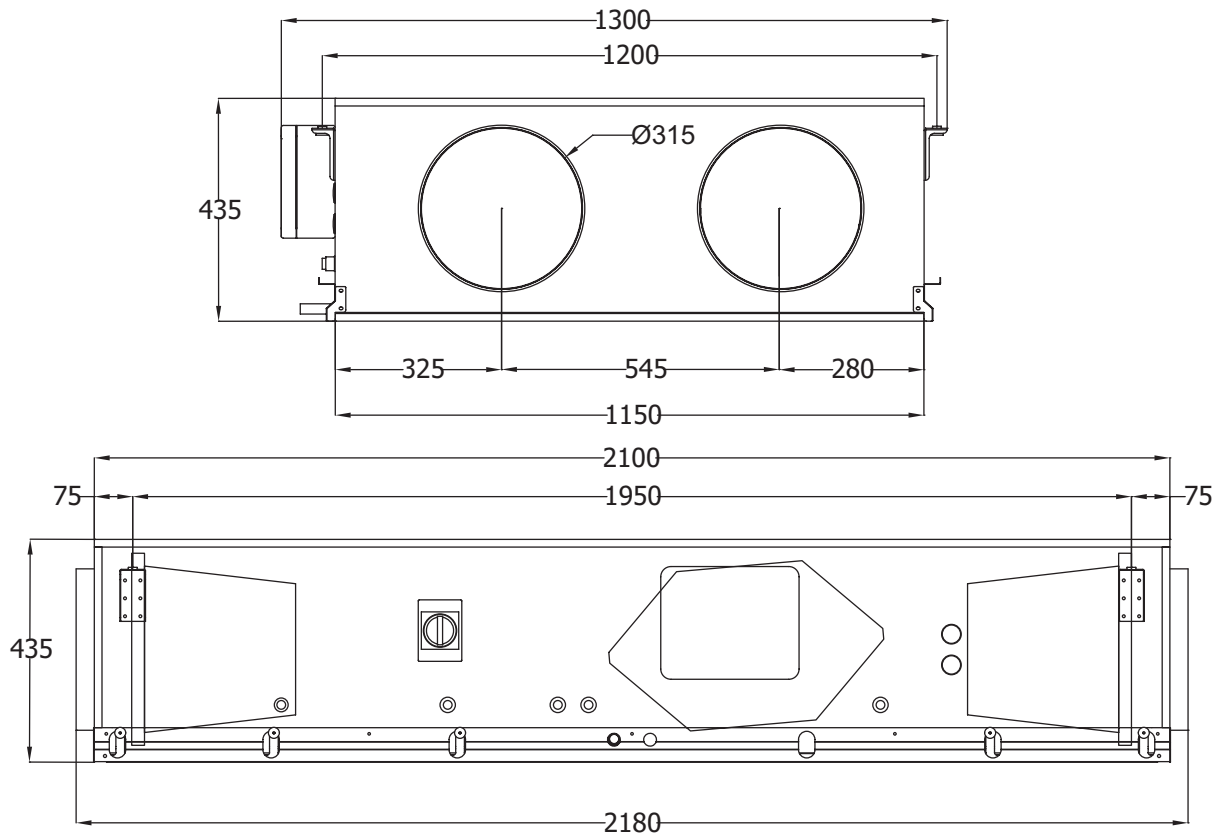


• AIRFLOW	200–1400 m³/h
	56–389 l/s
• DIMENSIONS (L x W x H)	2100 x 1300 x 435 mm
• WEIGHT	210 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	5.3 A
• RECOMMENDED FUSE PROTECTION	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	Ø315 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	Ø315 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

Airflow	Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s	kW/m³/s	%	%	kW	%	
200	56	200	2,16	52	52	0,1	88%
500	139	200	1,53	61	60	0,2	85%
800	222	200	1,53	72	69	0,3	82%
1100	306	200	1,72	83	81	0,5	81%
1400	389	200	2,07	95	94	0,8	80%

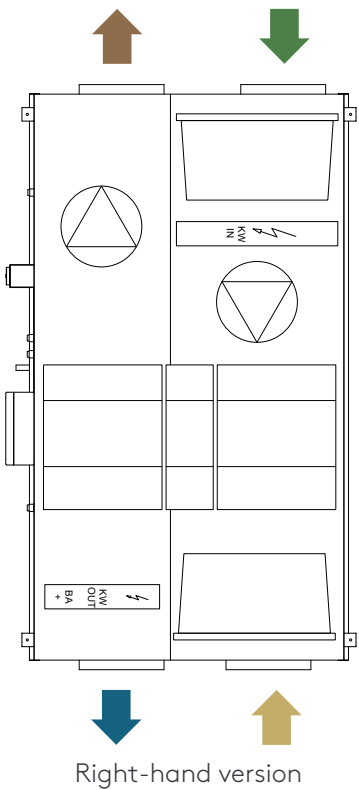
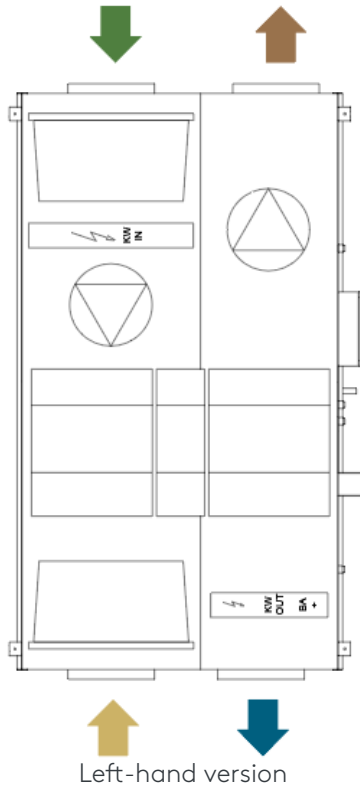
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)



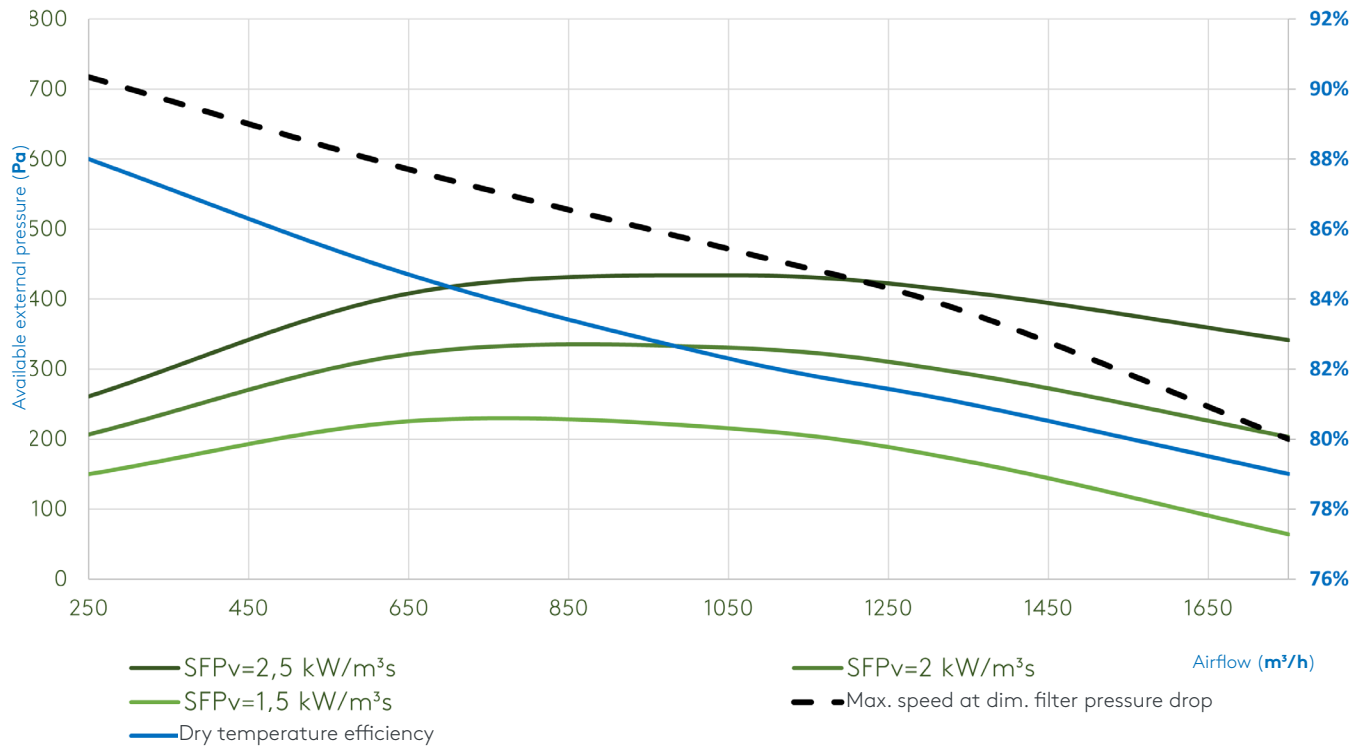
TOP VIEW

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



GLOBAL PX LP 10

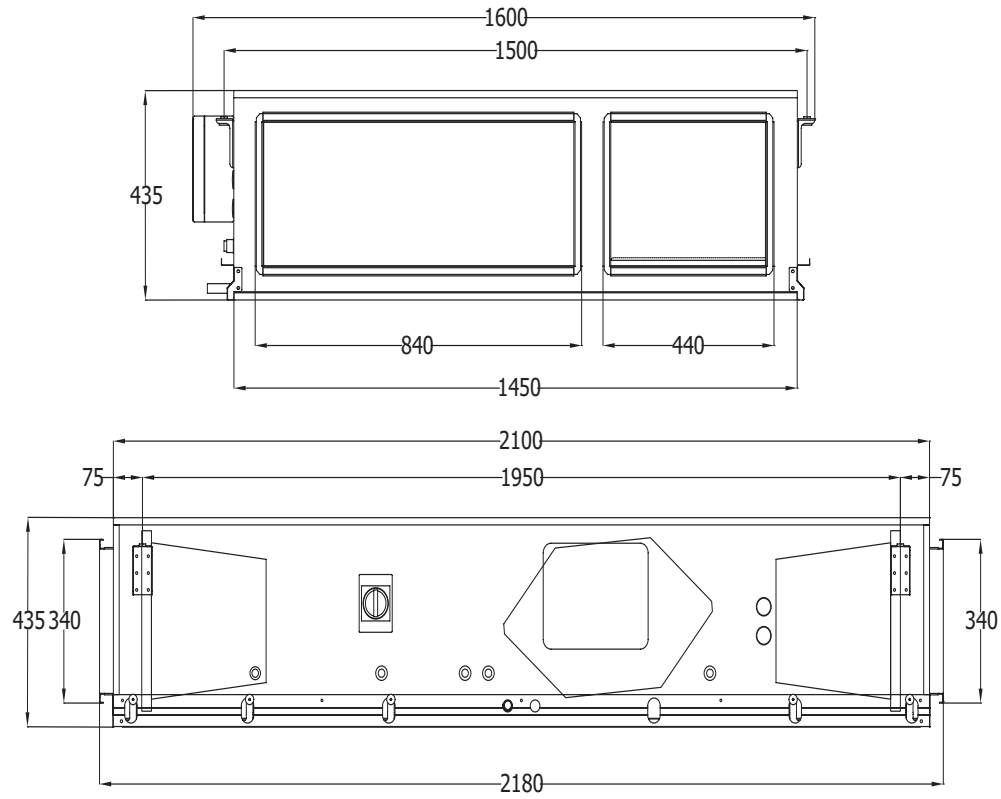
FAN DIAGRAMS



• AIRFLOW	200–1750 m³/h
	70–487 l/s
• DIMENSIONS (L x W x H)	2180 x 1600 x 435 mm
• WEIGHT	250 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	4.9 A
• RECOMMENDED FUSE PROTECTION	D6A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	400 x 300 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	800 x 300 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

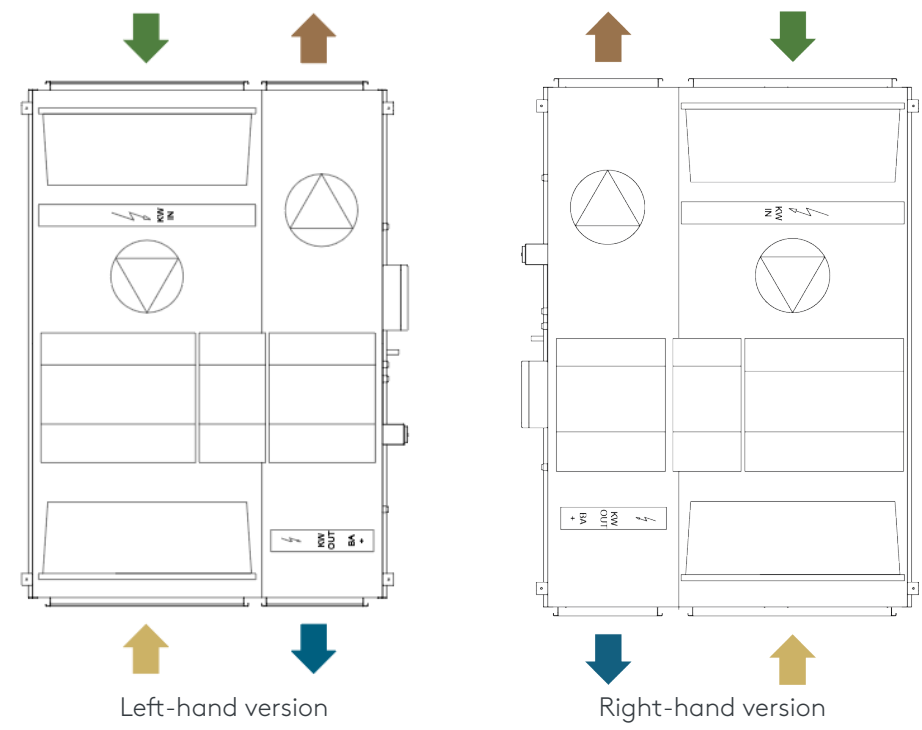
Airflow		Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions 1. Calculated values at 200 Pa ext. pressure (150/50 Pa) 2. All data applies to fans with composite fan impeller 3. SFP and absorbed power calculated with clean filter 4. Speed dim. calculated at dim. filter pressure drop
m³/h	l/s		kW/m³/s	%	%	kW	%	
250	70	200	1,92	58	56	0,1	88%	
650	181	200	1,35	68	64	0,2	85%	
1050	292	200	1,43	79	76	0,4	82%	
1350	375	200	1,62	88	86	0,6	81%	
1750	487	200	1,99	100	100	1,0	79%	

DIMENSIONS (mm)



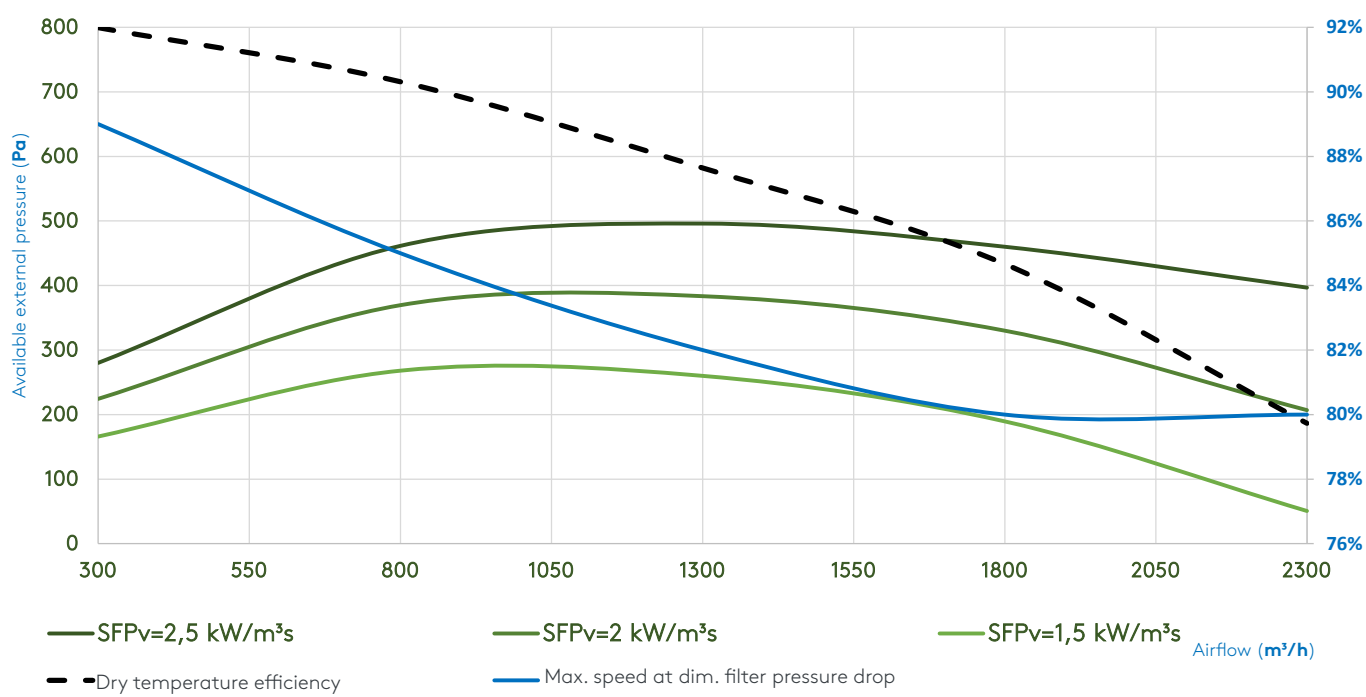
TOP VIEW

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



GLOBAL PX LP 11

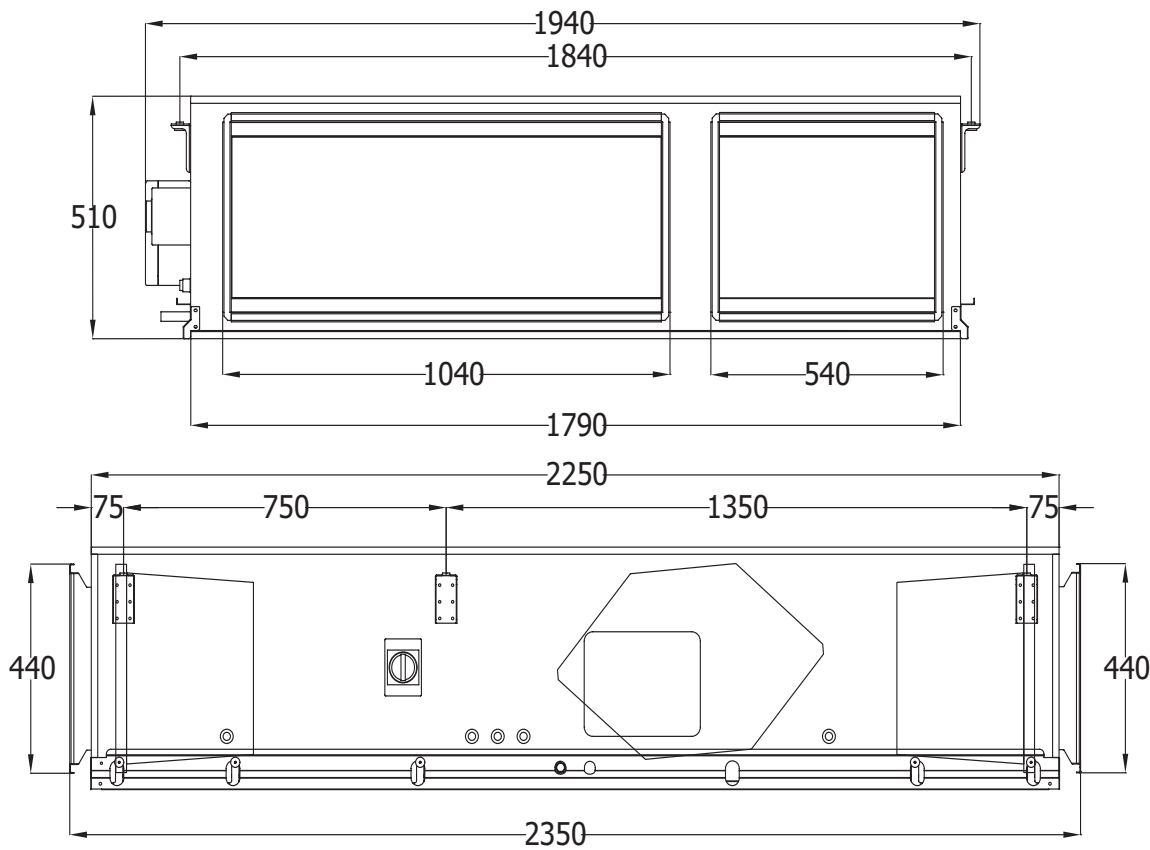
FAN DIAGRAMS



• AIRFLOW	300–2300 m³/h
	83–639 l/s
• DIMENSIONS (L x W x H)	2350 x 1940 x 510 mm
• WEIGHT	350 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%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	500 x 400 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	1000 x 400 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

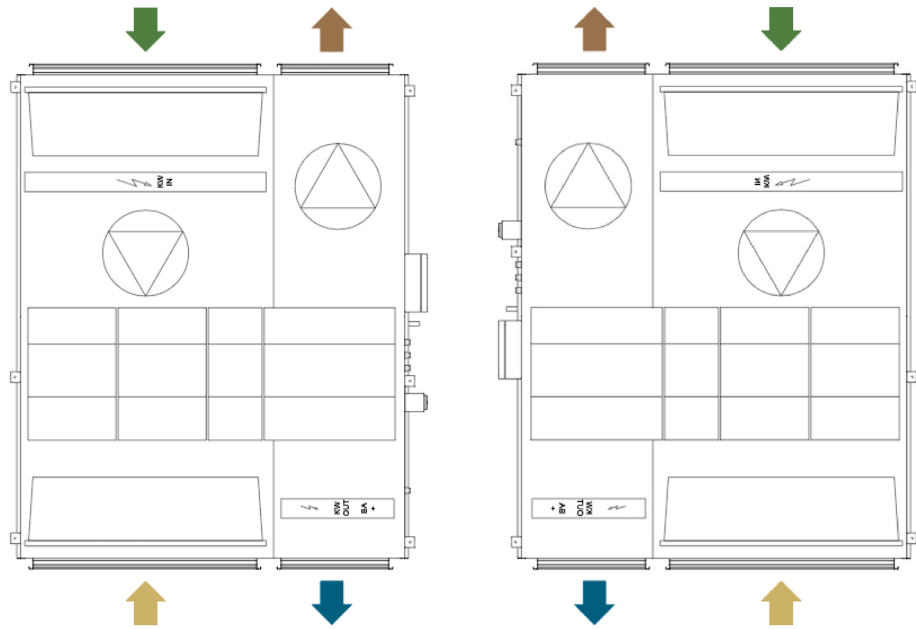
Airflow	Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s	kW/m³/s	%	%	kW	%	
300	83	200	1,73	52	0,1	89%	1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
900	250	200	1,17	61	0,3	85%	2. All data applies to fans with composite fan impeller
1600	445	200	1,27	74	0,6	82%	3. SFP and absorbed power calculated with clean filter
2200	612	200	1,54	86	0,9	80%	4. Speed dim. calculated at dim. filter pressure drop
2300	639	200	1,77	91	1,44	80%	

DIMENSIONS (mm)



TOP VIEW

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

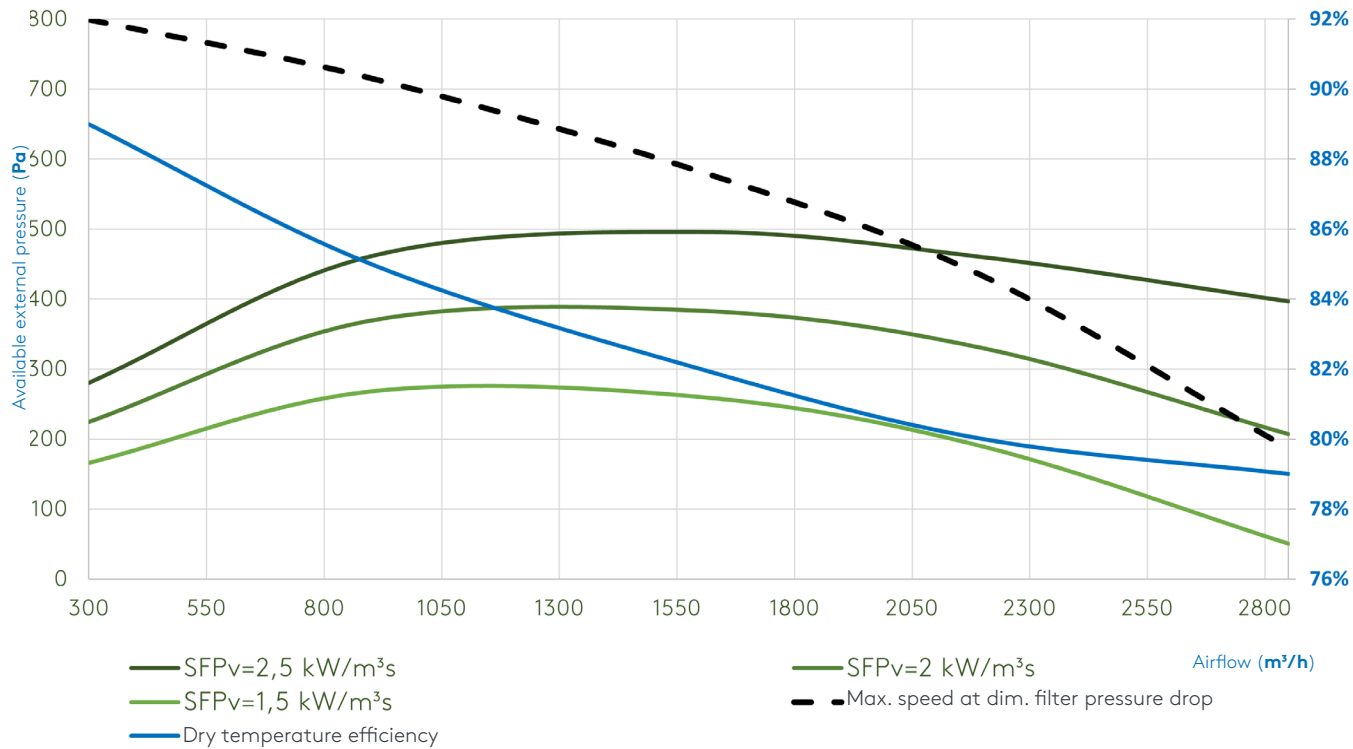


Left-hand version

Right-hand version

GLOBAL PX LP 14

FAN DIAGRAMS

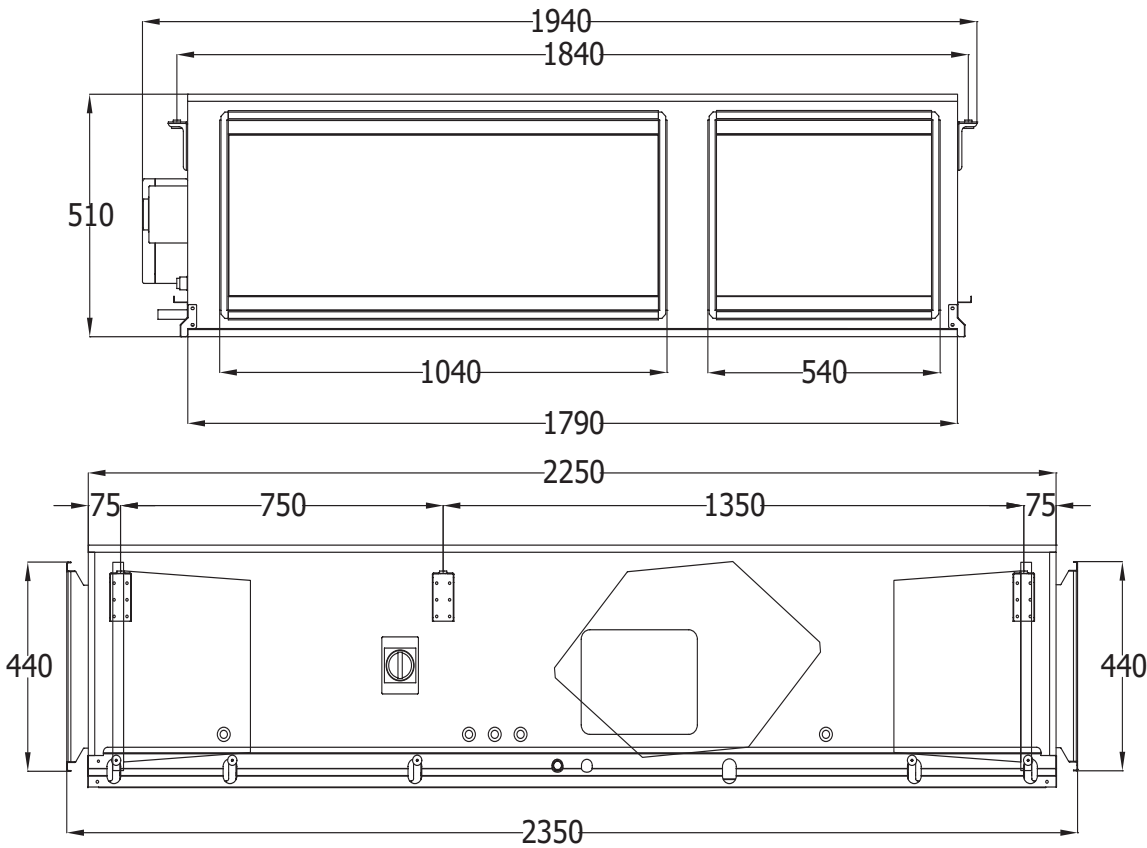


• AIRFLOW	300–2850 m³/h
	83–792 l/s
• DIMENSIONS (L x W x H)	2350 x 1940 x 510 mm
• WEIGHT	350 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	7.7 A
• RECOMMENDED FUSE PROTECTION	D10A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	500 x 400 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	1000 x 400 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

Airflow	Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s	kW/m³/s	%	%	kW	%	
300	83	200	1,73	52	50	0,1	89%
900	250	200	1,17	61	58	0,3	85%
1600	445	200	1,27	74	71	0,6	82%
2200	612	200	1,54	86	84	0,9	80%
2850	792	200	1,98	101	101	1,6	79%

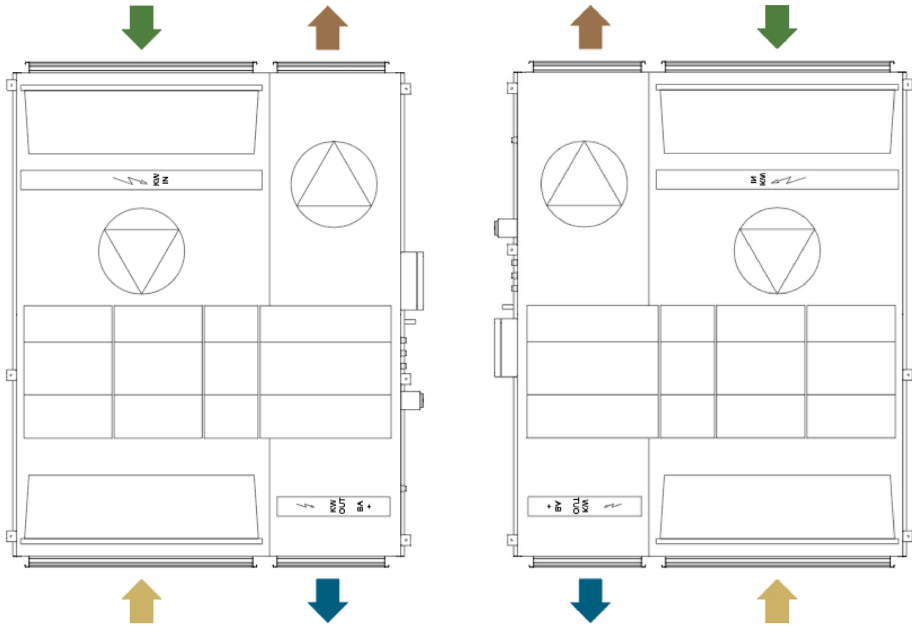
1. Calculated values at 200 Pa ext. pressure (150/50 Pa)
2. All data applies to fans with composite fan impeller
3. SFP and absorbed power calculated with clean filter
4. Speed dim. calculated at dim. filter pressure drop

DIMENSIONS (mm)



TOP VIEW

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

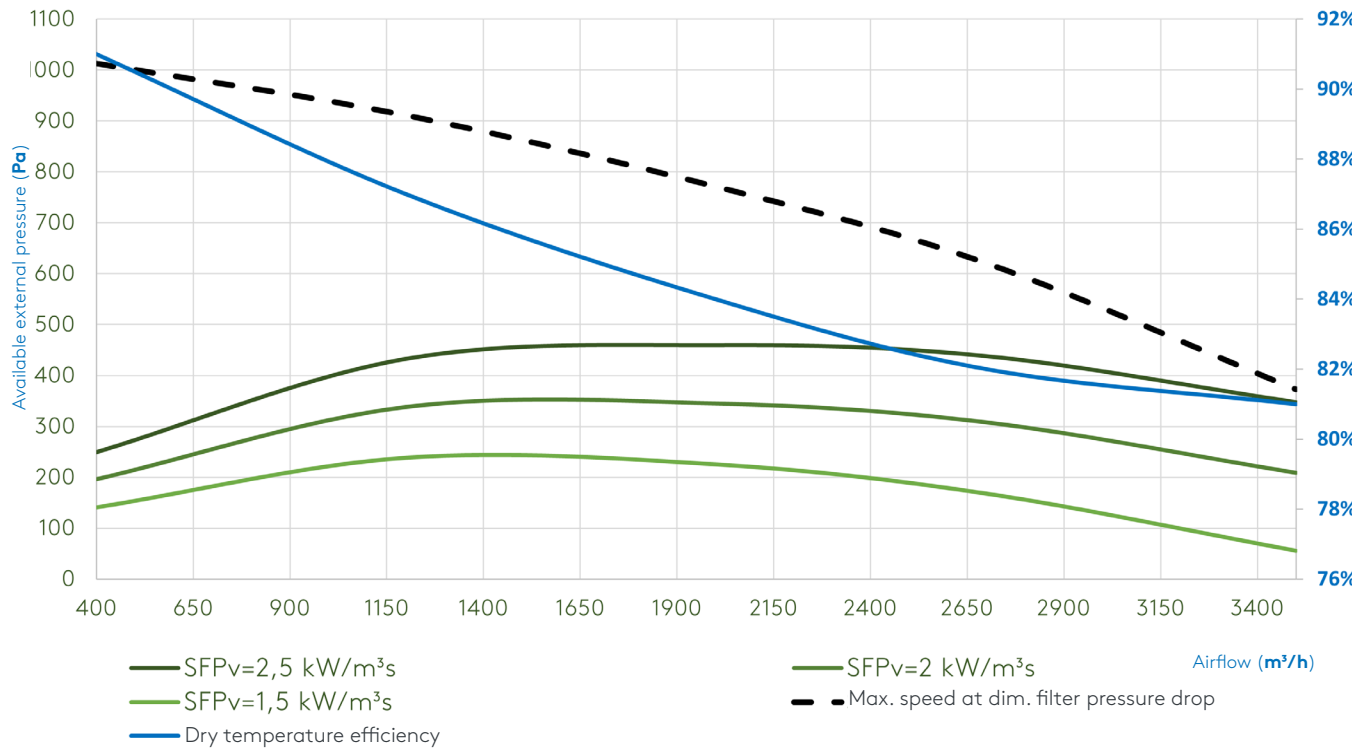


Left-hand version

Right-hand version

GLOBAL PX LP 18

FAN DIAGRAMS

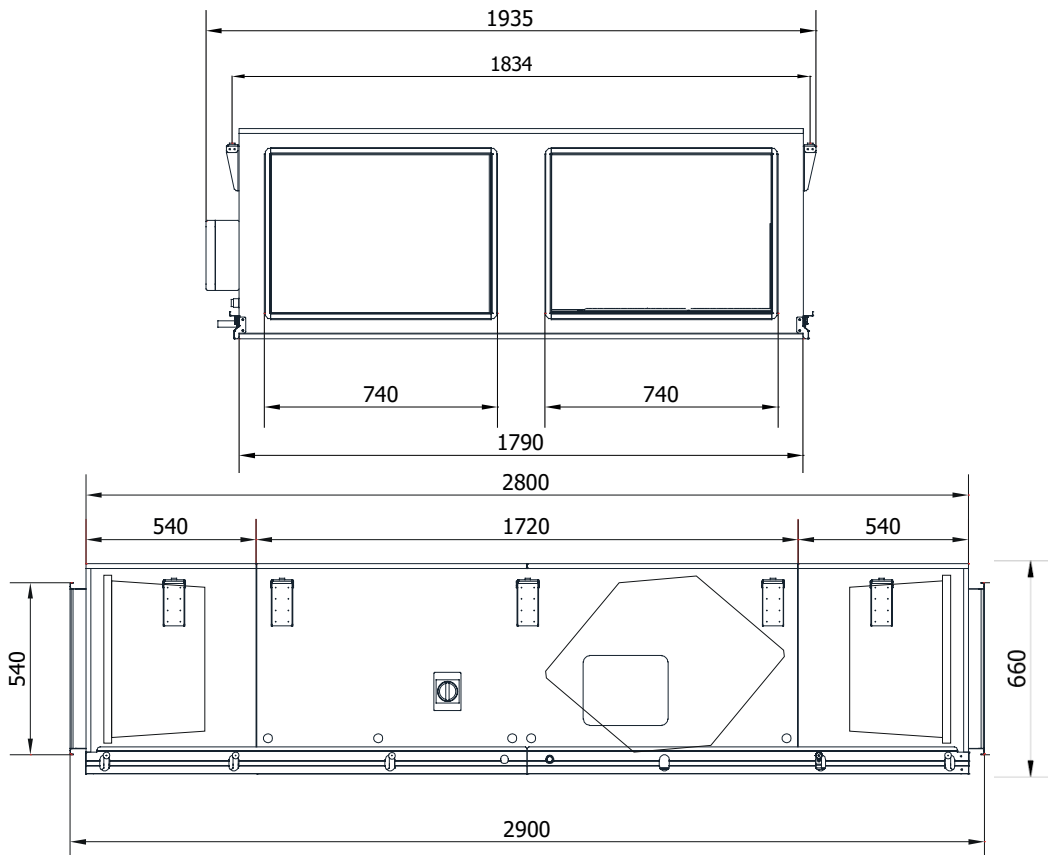


• AIRFLOW	400–3500 m³/h
	111–973 l/s
• DIMENSIONS (L x W x H)	2900 x 1935 x 660 mm
• WEIGHT	500 kg
• ELECTRIC POWER SUPPLY	1 x 230 V
• MAX. POWER CONSUMPTION	12.7 A
• RECOMMENDED FUSE PROTECTION	D16A - 10kA - AC3
• FILTER CLASS (BAG FILTER)	F7 (ePM1 70%) / M5 (ePM10 55%)
• DUCT CONNECTIONS SUPPLY AIR/EXTRACT AIR (INT)	700 x 500 mm
• DUCT CONNECTIONS EXHAUST AIR/OUTDOOR AIR (INT)	700 x 500 mm
• AMBIENT TEMPERATURE	-20 ... +40°C
• EN1886 CLASSIFICATION	T3/TB2/F9/L2/D1

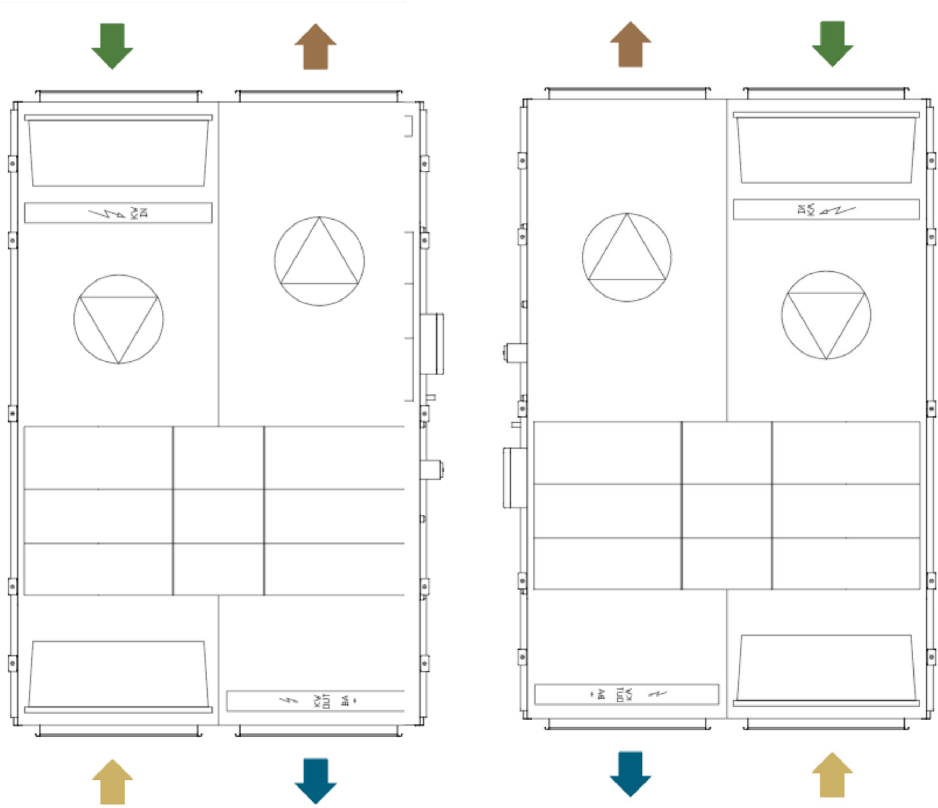
Airflow		Pa ext	SFPv	Speed dim. used/Max, supply air	Speed dim. used/Max, extract air	Power consumption	Dry temperature efficiency	Conditions
m³/h	l/s		kW/m³/s	%	%	kW	%	
400	111	200	1,98	47	46	0,2	91%	
1200	334	200	1,30	56	54	0,4	87%	
2000	556	200	1,39	69	66	0,8	84%	
2700	751	200	1,61	79	77	1,2	82%	
3500	973	200	1,97	92	91	1,9	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)



TOP VIEW



Left-hand version

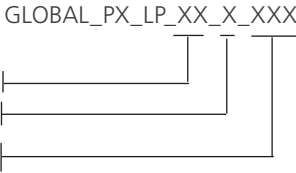
Right-hand version

GLOBAL PX LP



Designation key:

Unit size: 02, 04, 06, 08, 10, 11, 14, 18
Supply air: right (R) / left (L)
Fan type: none = composite, ALU = aluminium



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%/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 ≥ 50%/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	SUPPLY AIR	EXTRACT AIR	DIMENSIONS [MM]
GLOBAL PX LP 02	ePM10 50%	ePM10 50%	333 x 286 x 50
GLOBAL PX LP 02	ePM1 60%	ePM10 50%	333 x 286 x 50
GLOBAL PX LP 04	ePM10 50%	ePM10 50%	438 x 286 x 50
GLOBAL PX LP 04	ePM1 60%	ePM10 50%	438 x 286 x 50
GLOBAL PX LP 06	ePM1 70%	ePM10 55%	415 x 362 x 300
GLOBAL PX LP 08	ePM1 70%	ePM10 55%	585 x 362 x 300
GLOBAL PX LP 10	ePM1 70%	ePM10 55%	885 x 362 x 300
GLOBAL PX LP 11/14	ePM1 70%	ePM10 55%	1124 x 438 x 300
GLOBAL PX LP 18	ePM1 70%	ePM10 55%	872 x 592 x 300

FLEXIBLE CONNECTION 20 MM

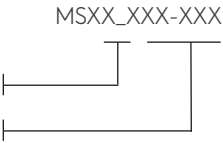


The flexible duct connections, type MS20, prevent vibrations from being propagated through the duct system. The connections are made of glass fibre-reinforced plastic and have fire resistance class M0 and air tightness class B (according to EN 15727 and EN 1751). They can handle operating temperatures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

Designation key:

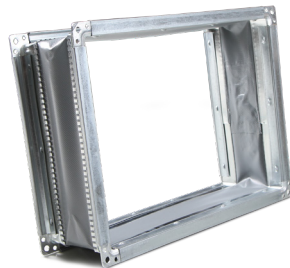
Connection frame width (mm)

Duct dimensions (mm)



MODEL	INTERNAL DIMENSIONS [MM]	EXTERNAL DIMENSIONS [MM]	MARKING
GLOBAL PX LP 02	Ø200	/	MS_200
GLOBAL PX LP 04	Ø250	/	MS_250
GLOBAL PX LP 06/08	Ø315	/	MS_315
GLOBAL PX LP 10	400 x 300	440 x 340	MS20_400-300
GLOBAL PX LP 10	800 x 300	840 x 340	MS20_800-300
GLOBAL PX LP 11/14	500 x 400	540 x 440	MS20_500-400
GLOBAL PX LP 14	1000 x 400	1040 x 440	MS20_1000-400
GLOBAL PX LP 18	700 x 500	740 x 540	MS20_700-500

FLEXIBLE CONNECTION 30 MM

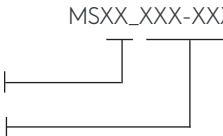


The flexible connections, type MS30, prevent vibrations from being propagated through the duct system. The connections are made of glass fibre-reinforced plastic and have fire resistance class M0 and air tightness class B (according to EN 15727 and EN 1751). They can handle operating temperatures from -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:

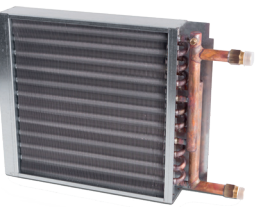
Connection frame width (mm)

Duct dimensions (mm)



MODEL	INTERNAL DIMENSIONS [MM]	EXTERNAL DIMENSIONS [MM]	MARKING
GLOBAL PX LP 10	380 x 280	440 x 340	MS30_380-280_LP 10
GLOBAL PX LP 10	780 x 280	840 x 340	MS30_780-280_LP 10 / PX 18 TOP
GLOBAL PX LP 11/14	480 x 380	540 x 440	MS30_480-380
GLOBAL PX LP 11/14	980 x 380	1040 x 440	MS30_980-380
GLOBAL PX LP 18	680 x 480	740 x 540	MS30_680-480

BUILT-IN WATERBORNE REHEATER

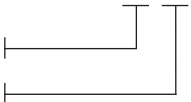


In the reheater, hot water is used to reheat the supply air. The heater is integrated in the air handling unit, downstream of the heat exchanger. The heat exchanger is a tube heat exchanger, made of copper pipes supplied with surface-enlarging aluminium fins with a spacing of 2.5 mm. The pipes have external 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	VARIANT	Ø	MARKING
GLOBAL PX LP 02/04	2-row heater	1/2''	IBA_2H_LP 02/04
GLOBAL PX LP 06	2-row heater	1/2''	IBA_2H_LP 06
GLOBAL PX LP 08/10	2-row heater	1/2''	IBA_2H_LP 08/10
GLOBAL PX LP 12/13/14	2-row heater	1/2''	IBA_2H_LP 12/13/14
GLOBAL PX LP 16/20	2-row heater	1/2''	IBA_2H_LP 16/20
GLOBAL PX LP 02/04	4-row heater	1/2''	IBA_4H_LP 02/04
GLOBAL PX LP 06	4-row heater	1/2''	IBA_4H_LP 06
GLOBAL PX LP 08/10	4-row heater	1/2''	IBA_4H_LP 08/10
GLOBAL PX LP 11/14	4-row heater	1/2''	IBA_4H_LP 12/13/14
GLOBAL PX LP 18	4-row heater	1/2''	IBA_4H_LP 16/20

BUILT-IN ELECTRIC PRE- AND REHEATERS



The electric heater is used to reheat the supply air and the preheater is used to prevent water from freezing in the counterflow heat exchanger. They are 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.

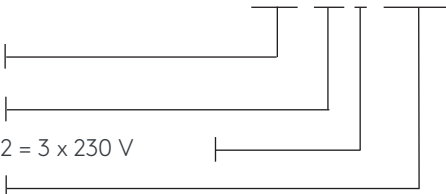
Designation key: KW_XXX_XX-X_XX/XX

Pre-/reheating (IN/OUT)

Heating capacity (kW)

Power supply: 1 = 3 x 400 V, 2 = 3 x 230 V

Size



MODEL	POWER KW _{out}	POWER KW _{in}	SUPPLY VOLTAGE	MARKING
GLOBAL PX LP 02	3.0 kW	3.0 kW	1 x 230 V	KW_IN/OUT_03_0
GLOBAL PX LP 04	3.0 kW	3.0 kW	1 x 230 V	KW_IN/OUT_03_0
GLOBAL PX LP 06	4.5 kW	4.5 kW	3 x 400 V	KW_IN/OUT_4,5_1
GLOBAL PX LP 08	6.0 kW	6.0 kW	3 x 400 V	KW_IN/OUT_06_1
GLOBAL PX LP 10	6.0 kW	6.0 kW	3 x 400 V	KW_IN/OUT_06_1
GLOBAL PX LP 11/14	9.0 kW	6.0 kW	3 x 400 V	KW_IN/OUT_09_1
GLOBAL PX LP 18	12.0 kW	12.0 kW	3 x 400 V	KW_IN/OUT_12_1

INSULATED INTEGRATED CASING FOR EXTERNAL HEATERS/COOLERS

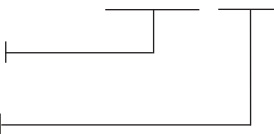


The insulated integrated casing has a sandwich construction, made of galvanised sheet steel with 30 mm thick mineral wool insulation between the outer and the inner sheet steel. The outer sheet steel is painted in colour RAL7016. The casings can be used for the integration of external heaters, coolers 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: ECA_XXX-XXX_XX/XX

Duct dimensions (mm)

Casing dimensions (mm)



MODEL	DUCT	SIZE [MM]	MARKING
GLOBAL PX LP 02/04	Ø250	320 x 600 x 400	ECA_250_02/04
GLOBAL PX LP 08	Ø250	400 x 600 x 700	ECA_250_08
GLOBAL PX LP 10	655 x 250	400 x 900 x 800	ECA_655-250_13
GLOBAL PX LP 11/14	755 x 350	500 x 1000 x 800	ECA_755-350_14

CIRCULAR/RECTANGULAR ADAPTER

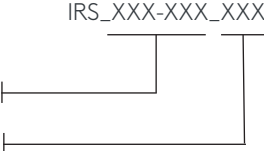


Uninsulated adapters for the transition between circular and rectangular connections are available for units and post-treatment sections with rectangular connections. The adapters are made of galvanised sheet steel. The circular duct connection is fitted with a rubber seal.

Designation key: IRS_XXX-XXX_XXX

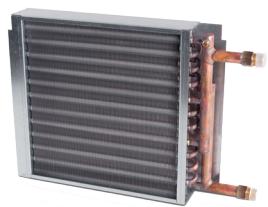
The rectangular connection's external dimensions

The circular connection's diameter

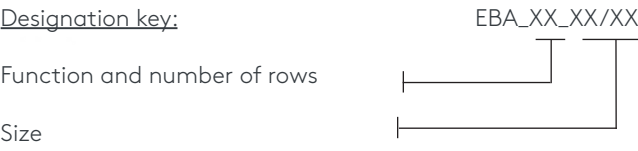


MODEL	DIMENSIONS [MM]	DUCT	MARKING
GLOBAL PX LP 10	400 x 300	Ø315	IRS_400-300_315
GLOBAL PX LP 10	800 x 300	Ø315	IRS_800-300_315
GLOBAL PX LP 11/14	500 x 400	Ø400	IRS_500-400_400
GLOBAL PX LP 11/14	1000 x 400	Ø400	IRS_1000-400_400
GLOBAL PX LP 18	700 x 500	Ø500	IRS_700-500_500

HEAT EXCHANGER FOR INTEGRATION IN INSULATED CASING



In the EBA heat exchanger, water or gas 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 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 supplied with a venting plug (not for DX) . The pressure class is PN16.

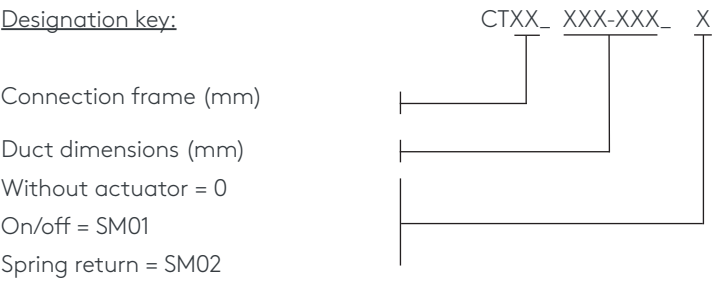


MODEL	MARKING
GLOBAL PX LP 02/04	EBA_XX_02/04
GLOBAL PX LP 08	EBA_XX_08
GLOBAL PX LP 10	EBA_XX_10
GLOBAL PX LP 11/14	EBA_XX_11/14

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 waterborne heater or cooler is used. Rectangular shut-off dampers are installed and connected to electricity in the factory, 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.



MODEL	INTERNAL DIMENSIONS [MM]	EXTERNAL DIMENSIONS [MM]	MARKING
GLOBAL PX LP 02	Ø200	not applicable	CT_200
GLOBAL PX LP 04	Ø250	not applicable	CT_250
GLOBAL PX LP 06/08	Ø315	not applicable	CT_315
GLOBAL PX LP 10	360 x 260	440 x 340	CT40_360-260
GLOBAL PX LP 10	760 x 260	840 x 340	CT40_760-260
GLOBAL PX LP 11/14	460 x 360	540 x 440	CT40_460-360
GLOBAL PX LP 11/14	960 x 360	1040 x 440	CT40_960-360
GLOBAL PX LP 18	660 x 460	740 x 540	CT40_660-460

Feel good **inside**

