# DUCTYS EC

Medium Static Pressure Ductable Fan Coil Units

**Models 1000, 1500, 2000, 2500 and 4000**

0.7 to 6.9kW

0.6 to 6.8kW

900 to 1400 $m^3/h$

systemair

# Specifications

## Presentation

The new ductable medium static pressure fan coil units **DUCTYS EC** have been designed to meet market needs for false-ceiling installations and for air distribution by ductwork.

This new range offers the following advantages :

- Range available **only with EC motor** for significant energy savings.
- Reduced overall dimensions with low height (223 mm) for easy concealed installation.
- In line or side air diffusion.
- Configuration flexibility thanks to a modular conception.

he range is composed of **5 models** : DUCTYS EC 1000, DUCTYS EC 1500, DUCTYS EC 2000, DUCTYS EC 2500 and DUCTYS EC 4000, to ensure air flows up to 1400 m3/h and 100 Pa available static pressure.

To cover all possible applications, they are available in the following systems :

- 2-pipe
- 2-pipe reversible
- 2-pipe / 2-wire
- 2-pipe / 2-wire reversible
- 4-pipe

## Aeraulic configurations

**DUCTYS EC** fan coil units are available in 3 configurations **:**

- With rectangular return and rectangular discharge duct connections.
- With rectangular return and circular discharge duct connections.
- With circular or oblong return and circular discharge duct connections.

And with **4 aeraulic arrangements** for air distribution according to the room configuration :

- I : In line return and discharge.
- U : Return and discharge at same side.
- J : In line return, side discharge.
- L : Side return and in line discharge.

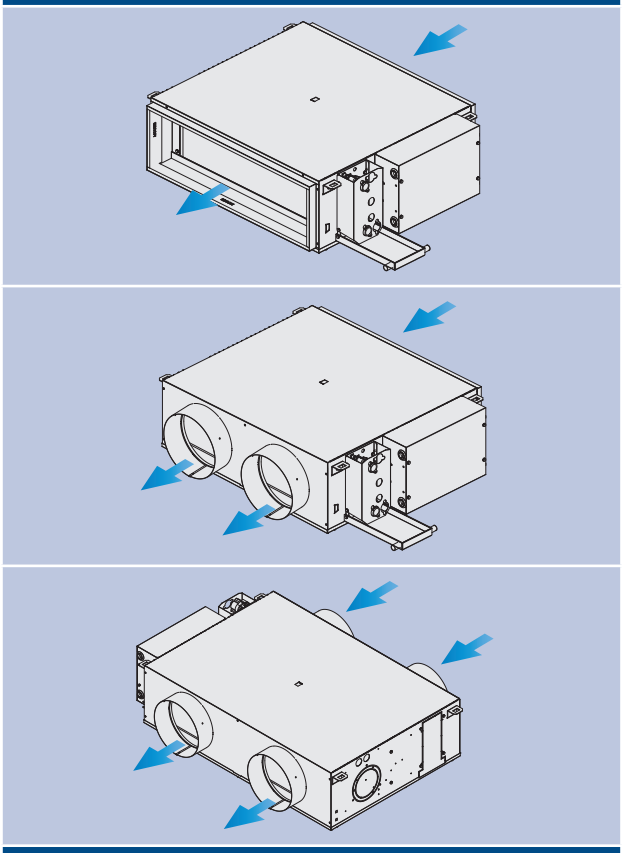
The duct connections are provided with 1, 2 or 3 circular (Ø200 mm or Ø250 mm) connecting collars according to the unit sizes and configurations.

The discharge duct connection is insulated with 10 mm thick closed cell polyethylene foam having M1 fire classification.

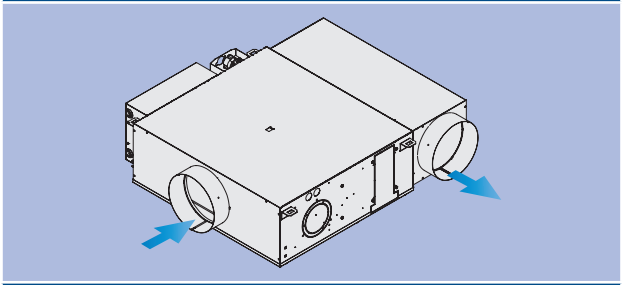
| Config. | Return | Discharge | 1000 | 1500 | 2000 | 2500 | 4000 |
|---|---|---|---|---|---|---|---|
| I | Rectangular | Rectangular | ✔ | ✔ | ✔ | ✔ | ✔ |
| | Rectangular | 1x Ø200mm | ✔ | ✔ | - | - | - |
| | Rectangular | 2x Ø200mm | - | ✔ | ✔ | ✔ | - |
| | Rectangular | 3x Ø200mm | - | - | - | - | ✔ |
| | 1x Ø200mm | 1x Ø200mm | ✔ | ✔ | ✔ | - | - |
| | 2x Ø200mm | 2x Ø200mm | - | ✔ | ✔ | ✔ | - |
| | 3x Ø200mm | 3x Ø200mm | - | - | - | - | ✔ |
| | 1x Ø250mm | 1x Ø250mm | - | - | AS* | AS* | - |
| J | 1x Ø200mm | 1x Ø200mm | ✔ | ✔ | ✔ | ✔ | - |
| | 3x Ø200mm | 1x Ø200mm | - | - | - | - | ✔ |
| | 1x Ø250mm | 1x Ø250mm | - | - | AS* | AS* | - |
| L | 1x Ø200mm | 1x Ø200mm | ✔ | ✔ | ✔ | ✔ | - |
| | 1x Ø200mm | 3x Ø200mm | - | - | - | - | ✔ |
| | 1x Ø250mm | 1x Ø250mm | - | - | AS* | AS* | - |
| U | 1x Ø200mm | 1x Ø200mm | ✔ | ✔ | ✔ | ✔ | ✔ |
| | 1x Ø250mm | 1x Ø250mm | - | - | AS* | AS* | - |

* Application

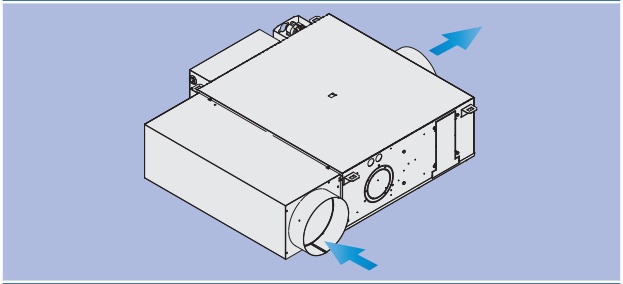
"I" configuration



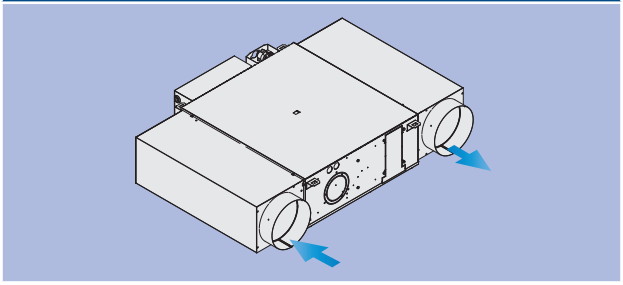
"J" configuration



"L" configuration



"U" configuration



# Specifications (continued)

## Casing

Casing is fabricated from 0.8 mm thick galvanized steel sheet lined with closed cell polyethylene foam at discharge side.
The casing is fitted, as standard equipment, with pre-punched holes provided for fresh air intake.
The intake of fresh air can be assured by mounting collars of Ø100 or Ø125 mm (optional) on the pre-punched hole located at the opposite side of electrical box.
The condensate drain pan is made from 1.0 mm thick galvanized sheet steel, painted to provide corrosion protection, and is externally insulated by 4 mm thick closed cell polyethylene foam, having M1 fire classification.
The condensate drain pan is of monobloc type with an extension in order to collect condensates from water connections and valves.
The condensate drain pan has 2 connecting pipes of 5/8" diameter.
Access to internal components (fan-motor assembly and coils) for service and maintenance works is facilitated by dismantling the bottom panel of the fan coil unit, without removing the distribution ducts.
The hydraulic and electrical connections can be carried out at the same service side or at the opposite service side.

## Fixation

Units fixation is done using 4 fixing brackets located at the upper side of the fan coil unit for a quick and easy installation and operation. Dismounting is facilitated with easy access to all components.

## Coil compartment

Coil compartment is lined with 10 mm thick closed cell polyethylene foam insulation, having M1 fire classification.
Coils are made of copper tubes, mechanically expanded into hydrophilic aluminium fins, assuring optimum heat transfer between air and water.
Each **DUCTYS EC** fan coil unit is equipped with a 3-row cooling coil for 2-pipe or 2-pipe/2-wire system, plus 1-row heating coil for 4-pipe system.
The water connection of each header is 1/2" or 3/4" gas female threaded type according to the unit sizes and configurations.
Each circuit is fed through a header fitted with drain plug and air vent.
Coils are leak tested under water (21 bar) and are suitable for a maximum working pressure of 10 bar.
For 2-pipe / 2-wire system, electric heater consists of heating rod type resistance directly inserted in the coil or heating elements according to the unit sizes and configurations.

## Fan compartment

The fan compartment is fitted with a fan-motor assembly of which the fan is composed of wheels with ABS plastic blades aero-dynamically profiled or of double inlet forward curved centrifugal type aluminium wheels. Scrolls are of ABS plastic type.
The fan-motor assembly is **exclusively of EC motor** type with high efficiency and low electrical consumption for a significant energy saving. The motor is suitable for 0-10V input, ensuring variable speed capability. It is fitted with Ecospeed 3 interface card (supplied as standard) for a 3-speed optimized running.
The ductable fan coil unis are of **A** or **B** energy class in cooling mode and of **A** energy class in heating mode according to Eurovent.

## Electrical connections

Fan-motor assembly and valves motors are electrically wired terminating in a junction block protected by a cap.
Technical spaces allow easy installation of optional control systems supplied by the factory or others.
Nominal voltage : 230 V±10%/1 Ph/50-60 Hz

## Options and accessories

### Air filter

Filter consists of cleanable synthetic media (sewn on wire frame), having G2 or G3 efficiency classification and M1 fire classification.
Filter is removable and is easily pulled out downward for cleaning or replacement, after removing the access metal plate.

### Electric heater for 2-pipe / 2-wire system

Electric heater consists of heating rod type resistances or heating elements according to the unit sizes and configurations equipped with a manual reset and an automatic reset high temperature cutout switches.

### Duct connections

Units can be equipped as standard with different duct connections at return and discharge side according to the model and aeraulic configuration (see table on page 1).
Other aeraulic configurations are available upon request.

### Regulation valves

On/Off (thermal type actuator), 2-way or 4-way type for 2-pipe or 4-pipe systems and are supplied mounted on the unit or loose.

# Specifications (continued)

## Controls

**DUCTYS EC** fan coil units can be factory fitted with the following optional controls :

- Electronic communicating Aqu@Net control with RCL remote control

### RCL remote control

Aqu@Net controller can be provided with NIU interface card to be used with µBMS or eNIU interface card for connection to a BMS via ModBus protocol.

### µBMS and NIU interface card

- Electronic communicating control with LonWorks protocol.

**DUCTYS EC** fan coil units can also be fitted, as accessory, with electromechanical or electronic control for wall mounting : TRM-FA, TRM-VP, TAE20, Aqu@Simp.

### TRM-FA - TRM-VP

### TAE20

### Aqu@Simp

## Condensate pump

A condensate pump is supplied factory mounted to pump out condensates.

## Fuse holder

A fuse holder with fuse can be supplied as optional to protect the unit.

## Fresh air intake

The intake of fresh air can be assured by a pre-cut opening of Ø100 or Ø125 mm.

## Change-over mechanical sensor

A change-over mechanical sensor for TRM control can be supplied as optional.

# Electrical Data

## Electrical data (except for controller and Ecospeed 3 board)

| Models | DUCTYS EC 1000 | | DUCTYS EC 1500 | | DUCTYS EC 2000 | | DUCTYS EC 2500 | | DUCTYS EC 4000 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Absorbed current (A) | Absorbed power (W) | Absorbed current (A) | Absorbed power (W) | Absorbed current (A) | Absorbed power (W) | Absorbed current (A) | Absorbed power (W) | Absorbed current (A) | Absorbed power (W) |
| SLS | / | / | 0,05 | 2 | 0,05 | 2 | 0,15 | 12 | / | / |
| V1 | 0,10 | 8 | 0,15 | 8 | 0,18 | 18 | 0,32 | 26 | 0,13 | 10 |
| V2 | 0,13 | 13 | 0,21 | 21 | 0,31 | 30 | 0,40 | 34 | 0,34 | 34 |
| V3 | 0,19 | 24 | 0,30 | 30 | 0,42 | 47 | 0,50 | 41 | 0,61 | 65 |
| V4 | 0,24 | 38 | 0,35 | 41 | 0,47 | 58 | 0,62 | 56 | 14 | 114 |
| V5 | 0,36 | 49 | 0,45 | 60 | 0,67 | 72 | 0,74 | 69 | 1,65 | 205 |
| Maximum | / | / | 0,8 | 100 | 0,8 | 100 | 1,4 | 182 | / | / |

Values at 50 Pa static pressure available in V3 speed

## Set-point voltage

| Models | DUCTYS EC 1000 | DUCTYS EC 1500 | DUCTYS EC 2000 | DUCTYS EC 2500 | DUCTYS EC 4000 |
|---|---|---|---|---|---|
| | Voltage (V) | Voltage (V) | Voltage (V) | Voltage (V) | Voltage (V) |
| SLS | 2,0 | 2,0 | 2,0 | 2,0 | 2,0 |
| V1 - LS* | 2,0 | 3,8 | 4,8 | 3,1 | 2,1 |
| V2 | 3,8 | 5,2 | 6,1 | 3,5 | 3,9 |
| V3 - MS | 7,35 | 6,0 | 7,1 | 3,9 | 5,5 |
| V4 | 8,2 | 6,9 | 7,6 | 4,4 | 7,1 |
| V5 - HS | 9,6 | 8,2 | 8,9 | 4,9 | 10,0 |
| Maximum | 10,0 | 10,0 | 10,0 | 10,0 | 10,0 |

(*) Minimum voltage, in case of use of electric heater (2-pipe/2-wire version).

## Energy class


| Energy class | | DUCTYS EC 1000 | DUCTYS EC 1500 | DUCTYS EC 2000 | DUCTYS EC 2500 | DUCTYS EC 4000 |
|---|---|---|---|---|---|---|
| 2-pipe | FCEER | A | B | B | B | A |
| | FCCOP | A | A | A | A | A |
| 4-pipe | FCEER | B | B | B | B | A |
| | FCCOP | A | A | A | A | A |

## Electric heating data

| Models | | DUCTYS EC 1000 | DUCTYS EC 1500 | DUCTYS EC 2000 | DUCTYS EC 2500 | DUCTYS EC 4000 |
|---|---|---|---|---|---|---|
| Capacity (W) | BE1 | 500 | 600 | 600 | 1000 | 1250 |
| | BE2 | / | 1000 | 1000 | 2000 | 2500 |

# Coil Water Volume

| Models | Water volume (l) | | |
|---|---|---|---|
| | 2-pipe | 4-pipe | |
| | | Cooling | Heating |
| DUCTYS EC 1000 | 0,64 | 0,62 | 0,19 |
| DUCTYS EC 1500 | 0,70 | 0,68 | 0,23 |
| DUCTYS EC 2000 | 0,80 | 077 | 0,27 |
| DUCTYS EC 2500 | 0,90 | 0,85 | 0,31 |
| DUCTYS EC 4000 | 1,50 | 1,80 | 0,45 |

# Acoustical Data

## DUCTYS EC 1000

| Speeds | Type | Acoustical power per octave band (dB(A)) | | | | | | Lw dB(A) | Lp global (1)dB(A) | NR (1) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | | | |
| V1 - LS | Return + Radiated | 17.0 | 21.9 | 16.5 | 17.9 | 15.6 | 22.1 | 27.1 | 20 | <15 |
| | Discharge | 10.9 | 19.7 | 18.0 | 15.8 | 19.1 | 23.3 | 27.0 | | |
| V3 - MS | Return + Radiated | 36.3 | 42.8 | 41.9 | 36.4 | 31.1 | 29.1 | 46.5 | 36 | 23 |
| | Discharge | 32.5 | 36.7 | 38.6 | 40.7 | 40.2 | 21.1 | 45.6 | | |
| V5 - HS | Return + Radiated | 41.1 | 48.6 | 47.5 | 45.5 | 41.9 | 32.8 | 52.9 | 41 | 30 |
| | Discharge | 37.3 | 42.7 | 43.0 | 48.1 | 47.3 | 36.9 | 52.2 | | |

| Speeds | Lw Return + Radiated dB(A) | Lw Discharge dB(A) | Lp global (1) dB(A) | NR (1) |
|---|---|---|---|---|
| V1 | 27 | 27 | 20 | < 15 |
| V2 | 36 | 36 | 27 | 17 |
| V3 | 47 | 46 | 36 | 23 |
| V4 | 49 | 48 | 38 | 25 |
| V5 | 53 | 52 | 41 | 30 |

**According to Eurovent 8/2, data given for a unit with :**
- 30 Pa external static pressure at medium speed.
- Rectangular return and discharge.
- Standard filter.

(**1**) Informative data, considering an hypothetical sound attenuation of the room and installation of 21 dB.

## DUCTYS EC 1500

| Speeds | Type | Acoustical power per octave band (dB(A)) | | | | | | Lw dB(A) | Lp global (1)dB(A) | NR (1) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | | | |
| V1 - LS | Return + Radiated | 28,6 | 37,2 | 38,4 | 40,3 | 35,4 | 28,6 | 44,4 | 26 | 21 |
| | Discharge | 25,9 | 32,1 | 36,6 | 42,7 | 38,6 | 27,9 | 45,2 | | |
| V3 - MS | Return + Radiated | 32,3 | 42,3 | 42,8 | 48,8 | 47,5 | 40,9 | 52,6 | 35 | 30 |
| | Discharge | 34,3 | 41,7 | 45,8 | 51,3 | 52,6 | 42,6 | 55,9 | | |
| V5 - HS | Return + Radiated | 40,1 | 50,8 | 49,8 | 55,8 | 54,1 | 48,1 | 59,7 | 42 | 37 |
| | Discharge | 38,4 | 47,2 | 50,3 | 56,5 | 59,0 | 50,2 | 61,8 | | |

| Speeds | Lw Return + Radiated dB(A) | Lw Discharge dB(A) | Lp global (1) dB(A) | NR (1) |
|---|---|---|---|---|
| SPV | 37,8 | 38,9 | 20 | < 18 |
| V1 | 44,4 | 45,2 | 26 | 21 |
| V2 | 50 | 52,5 | 32 | 27 |
| V3 | 52,6 | 55,9 | 35 | 30 |
| V4 | 55 | 58,5 | 38 | 33 |
| V5 | 59,7 | 61,8 | 42 | 37 |
| Maximum | 62 | 64 | 44 | 39 |

**According to Eurovent 8/2, data given for a unit with :**
- 50 Pa external static pressure at medium speed.
- Rectangular return and discharge.
- Standard filter.

(**1**) Informative data, considering an hypothetical sound attenuation of the room and installation of 21 dB.

# Acoustical Data (continued)

## DUCTYS EC 2000

| Speeds | Type | Acoustical power per octave band (dB(A)) | | | | | | Lw dB(A) | Lp global (1)dB(A) | NR (1) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | | | |
| V1 - LS | Return + Radiated | 32,1 | 39,5 | 39,3 | 41,4 | 37,3 | 31,2 | 46 | 28 | 23 |
| | Discharge | 29,1 | 35,3 | 40,0 | 46,0 | 41,8 | 31,2 | 48,5 | | |
| V3 - MS | Return + Radiated | 39,4 | 47,0 | 46,2 | 50,2 | 46,9 | 40,9 | 54,2 | 36 | 31 |
| | Discharge | 35,0 | 42,6 | 46,5 | 52,1 | 53,4 | 43,4 | 56,7 | | |
| V5 - HS | Return + Radiated | 42,6 | 51,0 | 49,1 | 54,6 | 51,5 | 45,9 | 58,4 | 40 | 35 |
| | Discharge | 37,3 | 46,3 | 49,4 | 55,5 | 58,1 | 49,1 | 60,9 | | |

| Vitesses | Lw Aspiration+ Rayonné dB(A) | Lw Soufflage dB(A) | Lp global (1) dB(A) | NR (1) |
|---|---|---|---|---|
| SPV | 38,5 | 39,4 | 21 | < 18 |
| V1 | 46 | 48,5 | 28 | 23 |
| V2 | 51 | 53,5 | 33 | 28 |
| V3 | 54,2 | 56,7 | 36 | 31 |
| V4 | 55,3 | 57,8 | 37 | 32 |
| V5 | 58,4 | 60,9 | 40 | 35 |
| Maximum | 62,2 | 64,3 | 44 | 39 |

**According to Eurovent 8/2, data given for a unit with :**
- 50 Pa external static pressure at medium speed.
- Rectangular return and discharge.
- Standard filter.

(**1**) Informative data, considering an hypothetical sound attenuation of the room and installation of 21 dB.

## DUCTYS EC 2500

| Speeds | Type | Acoustical power per octave band (dB(A)) | | | | | | Lw dB(A) | Lp global (1)dB(A) | NR (1) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | | | |
| V1 - LS | Return + Radiated | 36,7 | 43,3 | 40,6 | 46,1 | 42,0 | 35,5 | 49,9 | 32 | 27 |
| | Discharge | 33,1 | 38,0 | 42,4 | 46,6 | 44,3 | 30,2 | 50,0 | | |
| V3 - MS | Return + Radiated | 41,2 | 48,2 | 44,9 | 50,8 | 47,8 | 42,1 | 54,9 | 36 | 31 |
| | Discharge | 37,4 | 42,9 | 46,6 | 52,5 | 52,4 | 41,0 | 56,4 | | |
| V5 - HS | Return + Radiated | 48,2 | 55,4 | 51,4 | 55,7 | 52,4 | 54,3 | 61,4 | 43 | 38 |
| | Discharge | 41,6 | 47,5 | 50,5 | 56,4 | 56,9 | 47,1 | 60,7 | | |

| Speeds | Lw Return + Radiated dB(A) | Lw Discharge dB(A) | Lp global (1) dB(A) | NR (1) |
|---|---|---|---|---|
| SPV | 42,2 | 42,8 | 26 | 21 |
| V1 | 49,9 | 50 | 32 | 27 |
| V2 | 51,5 | 52,1 | 34 | 29 |
| V3 | 54,9 | 56,4 | 36 | 31 |
| V4 | 59,5 | 59 | 41 | 36 |
| V5 | 61,4 | 60,7 | 43 | 38 |
| Maximum | 65,9 | 65,1 | 48 | 43 |

**According to Eurovent 8/2, data given for a unit with :**
- 50 Pa external static pressure at medium speed.
- Rectangular return and discharge.
- Standard filter.

(**1**) Informative data, considering an hypothetical sound attenuation of the room and installation of 21 dB.

# Acoustical Data (continued)

## DUCTYS EC 4000

| Speeds | Type | Acoustical power per octave band (dB(A)) | | | | | | Lw dB(A) | Lp global (1)dB(A) | NR (1) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | | | |
| V1 - LS | Return + Radiated | 36.2 | 44.2 | 35.2 | 29.0 | 26.2 | 29.9 | 45.5 | 34.4 | 21 |
| | Discharge | 30.7 | 32.7 | 33.4 | 31.8 | 23.9 | 20.1 | 38.5 | | |
| V3 - MS | Return + Radiated | 41.8 | 48.1 | 46.2 | 44.2 | 32.6 | 30.6 | 51.8 | 44.1 | 35 |
| | Discharge | 41.6 | 47.8 | 53.9 | 54.8 | 53.6 | 42.7 | 59.4 | | |
| V5 - HS | Return + Radiated | 54.4 | 63.4 | 62.5 | 62.2 | 58.5 | 52.6 | 68.3 | 56.5 | 46 |
| | Discharge | 51.6 | 58.4 | 64.1 | 65.2 | 64.3 | 57.3 | 70.0 | | |

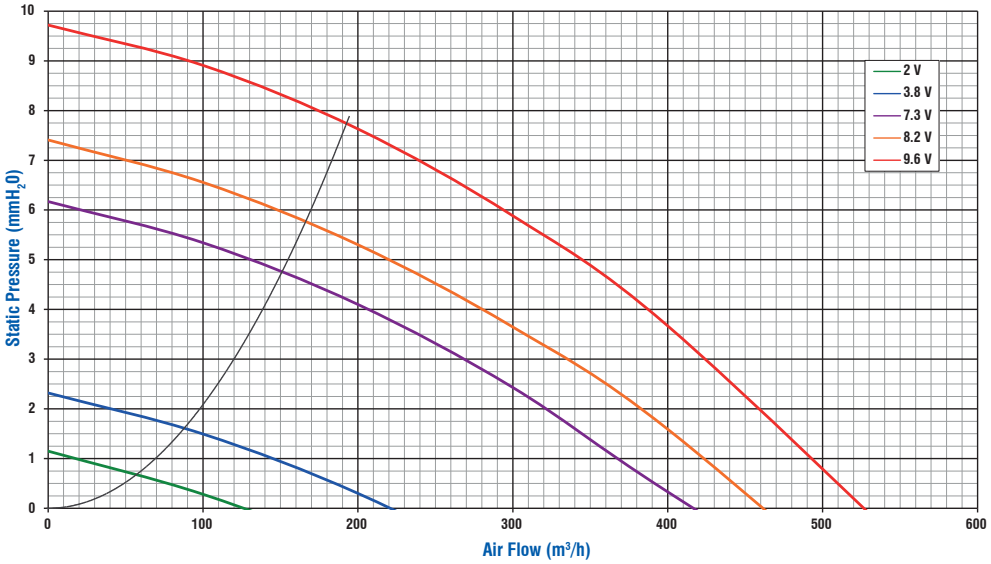
| Speeds | Lw Return + Radiated dB(A) | Lw Discharge dB(A) | Lp global (1) dB(A) | NR (1) |
|---|---|---|---|---|
| V1 | 45 | 38 | 34 | 21 |
| V2 | 48 | 52 | 40 | 30 |
| V3 | 52 | 59 | 44 | 35 |
| V4 | 57 | 64 | 50 | 40 |
| V5 | 68 | 70 | 56 | 46 |

**According to Eurovent 8/2, data given for a unit with :**
- 50 Pa external static pressure at medium speed.
- Rectangular return and discharge.
- Standard filter.

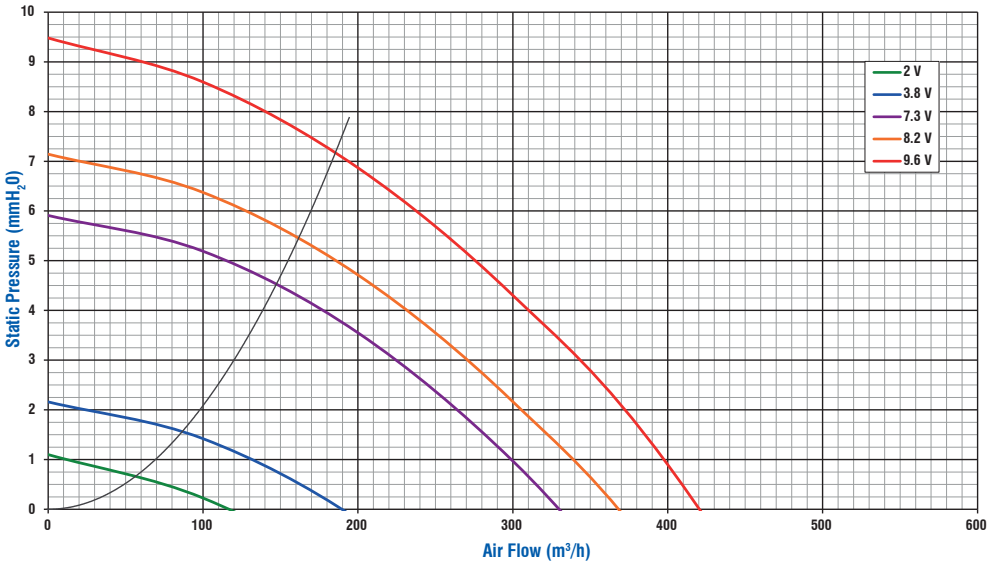
(**1**) Informative data, considering an hypothetical sound attenuation of the room and installation of 21 dB.

# Air Flow Data - DUCTYS EC 1000

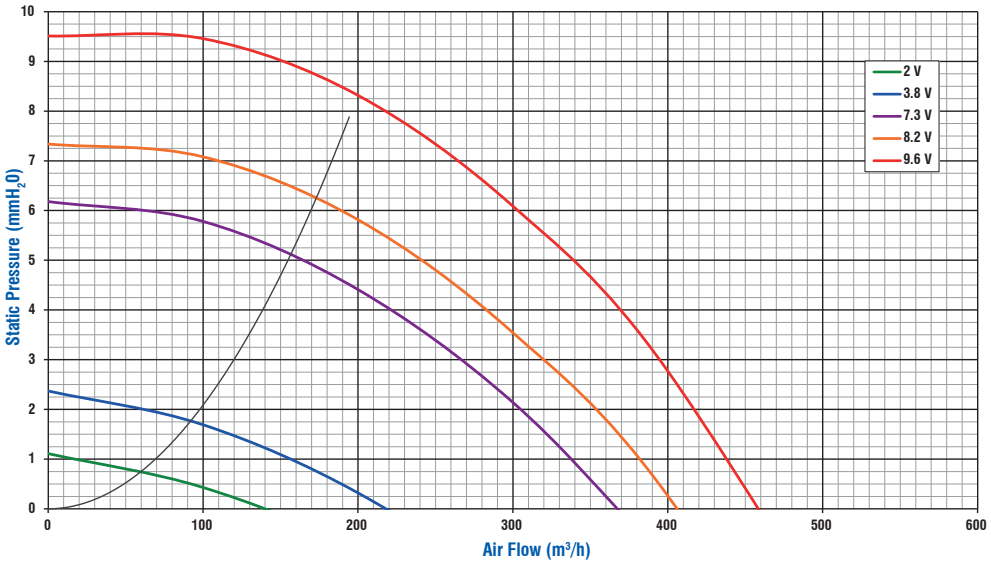
## In line I configuration - Rectangular return / Rectangular discharge - Air flow (m3/h)




## In line I configuration - Circular return / Circular discharge - Air flow (m3/h)




## U configuration - Circular return / Circular discharge - Air flow (m3/h)



# Air Flow Data - DUCTYS EC 1500

## In line I configuration - Rectangular return / Rectangular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Standard | 408 | 218 | - | - | - |
| V2 | Standard | 529 | 423 | 276 | - | - |
| V3 - MS | Standard | 584 | 514 | 401 | 245 | - |
| V4 | Standard | 638 | 584 | 498 | 380 | 228 |
| V5 - HS | Standard | 766 | 706 | 633 | 546 | 447 |

## In line I configuration - Circular return / Circular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Without | 326 | 174 | - | - | - |
| | Standard | 306 | 160 | - | - | - |
| V2 | Without | 430 | 341 | 222 | - | - |
| | Standard | 408 | 320 | 207 | - | - |
| V3 - MS | Without | 491 | 417 | 317 | 191 | - |
| | Standard | 467 | 393 | 296 | 177 | - |
| V4 | Without | 543 | 480 | 398 | 297 | 176 |
| | Standard | 518 | 454 | 373 | 276 | 163 |
| V5 - HS | Without | 627 | 573 | 511 | 439 | 358 |
| | Standard | 596 | 543 | 482 | 412 | 335 |

## U configuration - Circular return / Circular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Without | 297 | 155 | - | - | - |
| | Standard | 280 | 144 | - | - | - |
| V2 | Without | 393 | 309 | 199 | - | - |
| | Standard | 375 | 291 | 187 | - | - |
| V3 - MS | Without | 450 | 376 | 282 | 168 | - |
| | Standard | 428 | 355 | 265 | 158 | - |
| V4 | Without | 497 | 434 | 355 | 262 | 155 |
| | Standard | 475 | 411 | 335 | 246 | 145 |
| V5 - HS | Without | 571 | 519 | 459 | 392 | 318 |
| | Standard | 546 | 494 | 436 | 372 | 301 |

# Air Flow Data - DUCTYS EC 2000

## In line I configuration - Rectangular return / Rectangular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Standard | 492 | 377 | - | - | - |
| V2 | Standard | 592 | 506 | 360 | - | - |
| V3 - MS | Standard | 676 | 614 | 526 | 413 | - |
| V4 | Standard | 704 | 652 | 579 | 485 | 370 |
| V5 - HS | Standard | 794 | 744 | 675 | 586 | 478 |

## In line I configuration - Circular return / Circular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Without | 442 | 330 | - | - | - |
| | Standard | 420 | 308 | - | - | - |
| V2 | Without | 528 | 437 | 304 | - | - |
| | Standard | 502 | 408 | 280 | - | - |
| V3 - MS | Without | 605 | 540 | 457 | 355 | - |
| | Standard | 578 | 512 | 430 | 332 | - |
| V4 | Without | 635 | 579 | 507 | 419 | 317 |
| | Standard | 610 | 551 | 480 | 395 | 297 |
| V5 - HS | Without | 706 | 650 | 581 | 498 | 402 |
| | Standard | 675 | 617 | 548 | 467 | 375 |

## U configuration - Circular return / Circular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Without | 370 | 263 | - | - | - |
| | Standard | 353 | 248 | - | - | - |
| V2 | Without | 436 | 345 | 232 | - | - |
| | Standard | 416 | 327 | 219 | - | - |
| V3 - MS | Without | 508 | 443 | 367 | 281 | - |
| | Standard | 488 | 423 | 350 | 266 | - |
| V4 | Without | 538 | 480 | 412 | 336 | 250 |
| | Standard | 518 | 460 | 394 | 320 | 238 |
| V5 - HS | Without | 587 | 530 | 464 | 392 | 312 |
| | Standard | 563 | 506 | 442 | 372 | 295 |

# Air Flow Data - DUCTYS EC 2500

## In line I configuration - Rectangular return / Rectangular discharge - Air flow (m3/h)

| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Standard | 591 | 507 | 348 | - | - |
| V2 | Standard | 648 | 572 | 447 | - | - |
| V3 - MS | Standard | 707 | 645 | 548 | 415 | - |
| V4 | Standard | 789 | 732 | 649 | 538 | 400 |
| V5 - HS | Standard | 819 | 778 | 716 | 632 | 526 |

## In line I configuration - Circular return / Circular discharge - Air flow (m3/h)

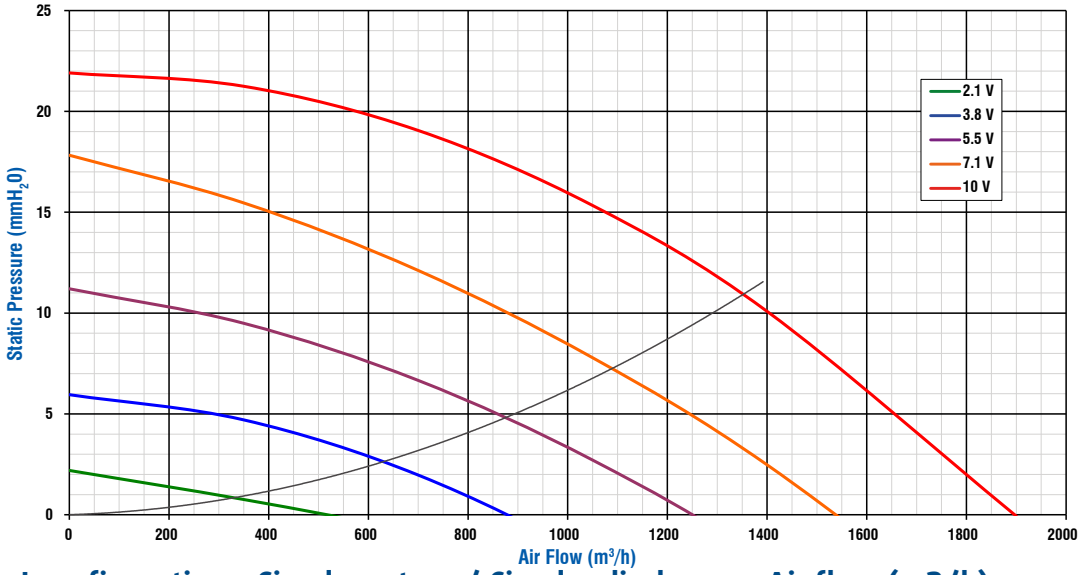
| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Without | 543 | 450 | 302 | - | - |
| | Standard | 523 | 426 | 282 | - | - |
| V2 | Without | 589 | 507 | 389 | - | - |
| | Standard | 567 | 482 | 366 | - | - |
| V3 - MS | Without | 645 | 576 | 480 | 359 | - |
| | Standard | 621 | 549 | 454 | 338 | - |
| V4 | Without | 713 | 650 | 567 | 464 | 341 |
| | Standard | 686 | 620 | 537 | 437 | 320 |
| V5 - HS | Without | 751 | 703 | 637 | 556 | 458 |
| | Standard | 728 | 676 | 609 | 528 | 433 |

## U configuration - Circular return / Circular discharge - Air flow (m3/h)

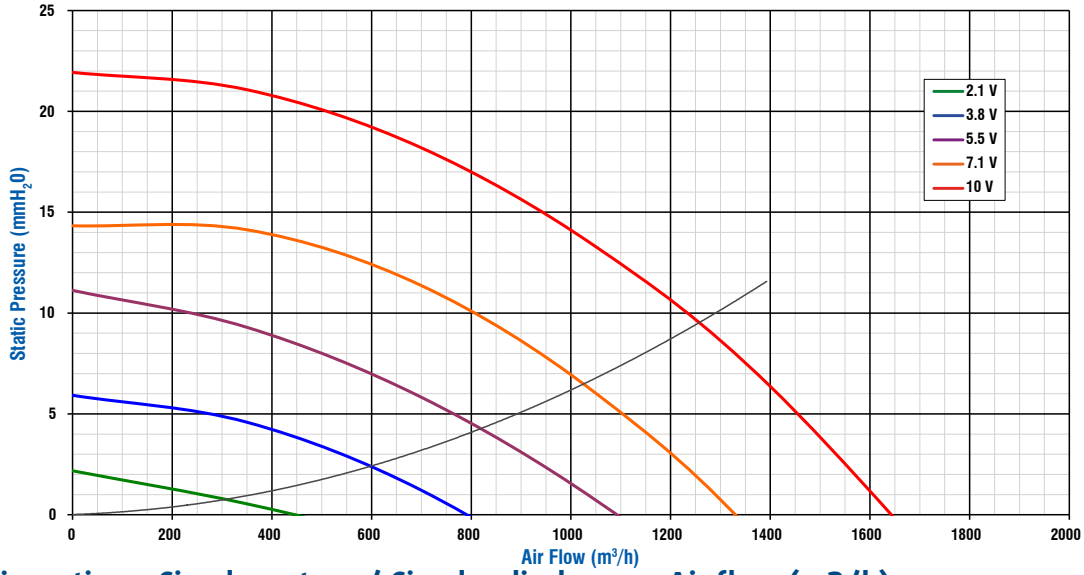
| Speeds | Filter | External static pressure (Pa) | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 25 | 50 | 75 | 100 |
| V1 - LS | Without | 502 | 414 | 282 | - | - |
| | Standard | 481 | 396 | 266 | - | - |
| V2 | Without | 526 | 459 | 354 | - | - |
| | Standard | 515 | 443 | 338 | - | - |
| V3 - MS | Without | 601 | 533 | 444 | 333 | - |
| | Standard | 563 | 508 | 428 | 323 | - |
| V4 | Without | 650 | 592 | 523 | 442 | 351 |
| | Standard | 631 | 573 | 505 | 428 | 342 |
| V5 - HS | Without | 674 | 629 | 571 | 499 | 414 |
| | Standard | 659 | 612 | 552 | 480 | 394 |

# Air Flow Data - DUCTYS EC 4000

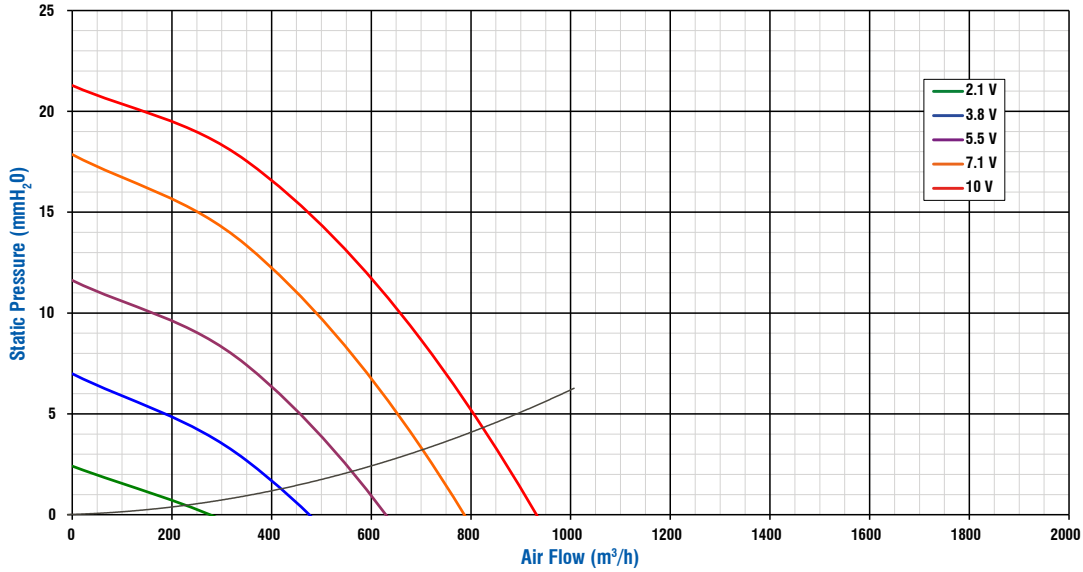
## In line I configuration - Rectangular return / Rectangular discharge - Air flow (m3/h)




## In line I configuration - Circular return / Circular discharge - Air flow (m3/h)




## U configuration - Circular return / Circular discharge - Air flow (m3/h)



# Performance Data - DUCTYS EC 1000

## 2-pipe - In line I configuration - Rectangular return / discharge - filter G3

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 90 | 103 | 597 | 497 | 672 |
| V2 | 150 | 163 | 946 | 791 | 1085 |
| V3 - MS | 270 | 263 | 1526 | 1287 | 1827 |
| V4 | 300 | 274 | 1646 | 1392 | 1995 |
| V5 - HS | 350 | 314 | 1826 | 1551 | 2259 |

## 4-pipe - In line I configuration - Rectangular return / discharge - filter G3

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 89 | 102 | 591 | 492 | 56 | 655 |
| V2 | 140 | 153 | 890 | 744 | 86 | 1004 |
| V3 - MS | 250 | 248 | 1440 | 1213 | 146 | 1696 |
| V4 | 280 | 263 | 1513 | 1276 | 155 | 1795 |
| V5 - HS | 326 | 300 | 1743 | 1477 | 183 | 2123 |

## 2-pipe - In line I configuration - Circular return / discharge 1x200 mm - filter G3

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 80 | 81 | 410 | 447 | 600 |
| V2 | 130 | 127 | 738 | 698 | 950 |
| V3 - MS | 225 | 205 | 1189 | 1117 | 1561 |
| V4 | 250 | 223 | 1296 | 1214 | 1711 |
| V5 - HS | 285 | 247 | 1436 | 1342 | 1912 |

## 4-pipe - In line I configuration - Circular discharge / discharge 1x200 mm - filter G3

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 78 | 79 | 459 | 436 | 50 | 577 |
| V2 | 120 | 118 | 686 | 650 | 75 | 869 |
| V3 - MS | 210 | 196 | 1123 | 1056 | 125 | 1454 |
| V4 | 235 | 212 | 1232 | 1157 | 138 | 1606 |
| V5 - HS | 275 | 241 | 1397 | 1306 | 159 | 1841 |

## 2-pipe - U configuration - Circular discharge / discharge 1x200 mm - without filter

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 92 | 92 | 537 | 509 | 686 |
| V2 | 155 | 149 | 864 | 816 | 1118 |
| V3 - MS | 270 | 237 | 1377 | 1288 | 1827 |
| V4 | 300 | 257 | 1493 | 1393 | 1995 |
| V5 - HS | 348 | 287 | 1663 | 1544 | 2249 |

## 4-pipe - U configuration - Circular discharge / discharge 1x200 mm - without filter

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 90 | 91 | 526 | 499 | 57 | 662 |
| V2 | 145 | 140 | 814 | 770 | 89 | 1038 |
| V3 - MS | 260 | 230 | 1337 | 1252 | 151 | 1754 |
| V4 | 289 | 250 | 1451 | 1355 | 165 | 1920 |
| V5 - HS | 329 | 275 | 1598 | 1487 | 184 | 2139 |

**For all tables, performance data based on :**

(1) Cooling mode : Air : 27°C (bs) /19°C (bh), Chilled water : 7/12°C

(2) Heating mode : Air : 20°C, Entering water temperature : 50°C, water flow is the same as that in cooling mode

(3) Heating mode : Air : 20°C, Heating water : 70/60°C.

Values for 30Pa in MV

# Performance Data - DUCTYS EC 1500

## 2-pipe - In line I configuration - Rectangular return / discharge - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 270 | 210 | 1230 | 1130 | 1600 |
| V3 - MS | 400 | 290 | 1700 | 1540 | 2260 |
| V5 - HS | 505 | 340 | 1900 | 1820 | 2790 |

## 4-pipe - In line I configuration - Rectangular return / discharge - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 260 | 205 | 1190 | 1080 | 190 | 2230 |
| V3 - MS | 380 | 280 | 1610 | 1470 | 250 | 2850 |
| V5 - HS | 480 | 330 | 1920 | 1750 | 280 | 3220 |

## 2-pipe - In line I configuration - Circular return / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 185 | 285 | 1128 | 137 | 1323 |
| V3 - MS | 272 | 246 | 1429 | 1293 | 1807 |
| V5 - HS | 366 | 301 | 1751 | 1544 | 2248 |

## 4-pipe - In line I configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 177 | 281 | 1106 | 1000 | 259 | 1846 |
| V3 - MS | 264 | 240 | 1396 | 1264 | 205 | 2342 |
| V5 - HS | 357 | 295 | 1721 | 1561 | 249 | 2834 |

## 2-pipe - U configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 179 | 173 | 1008 | 934 | 1267 |
| V3 - MS | 244 | 232 | 1349 | 1213 | 1674 |
| V5 - HS | 361 | 299 | 1741 | 1533 | 2228 |

## 4-pipe - U configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 172 | 170 | 989 | 903 | 150 | 1709 |
| V3 - MS | 237 | 226 | 1318 | 1187 | 190 | 2164 |
| V5 - HS | 353 | 293 | 1712 | 1552 | 247 | 2810 |

**For all tables, performance data based on :**
(1) According to Eurovent - Cooling mode : Air : 27°C (bs) /19°C (bh), Chilled water : 7/12°C
(2) According to Eurovent - Heating mode : Air : 20°C, Entering water temperature : 50°C, water flow is the same as that in cooling mode
(3) According to Eurovent - Heating mode : Air : 20°C, Heating water : 70/60°C.
According to Eurovent 6/11 (Thermal test method), 6/10 (Airflow test method)

# Performance Data - DUCTYS EC 2000

## 2-pipe - In line I configuration - Rectangular return / discharge - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 370 | 305 | 1720 | 1460 | 2410 |
| V3 - MS | 520 | 380 | 2230 | 1950 | 2930 |
| V5 - HS | 600 | 430 | 2460 | 2250 | 3100 |

## 4-pipe - In line I configuration - Rectangular return / discharge - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 355 | 290 | 1670 | 1420 | 270 | 3170 |
| V3 - MS | 495 | 380 | 2190 | 1930 | 300 | 3460 |
| V5 - HS | 570 | 410 | 2390 | 2150 | 310 | 3540 |

## 2-pipe - In line I configuration - Circular return / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 283 | 260 | 1515 | 1277 | 2083 |
| V3 - MS | 387 | 335 | 1956 | 1695 | 2558 |
| V5 - HS | 461 | 379 | 2208 | 1954 | 2820 |

## 4-pipe - In line I configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 270 | 254 | 1482 | 1248 | 180 | 2054 |
| V3 - MS | 380 | 332 | 1931 | 1669 | 223 | 2539 |
| V5 - HS | 449 | 376 | 2192 | 1936 | 244 | 2784 |

## 2-pipe - U configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 224 | 228 | 1331 | 1113 | 1767 |
| V3 - MS | 313 | 301 | 1756 | 150 | 2199 |
| V5 - HS | 342 | 328 | 1911 | 1648 | 2307 |

## 4-pipe - U configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 217 | 224 | 1304 | 1089 | 154 | 1749 |
| V3 - MS | 305 | 298 | 1734 | 1478 | 193 | 2203 |
| V5 - HS | 339 | 326 | 1896 | 1633 | 201 | 2293 |

**For all tables, performance data based on :**
(1) According to Eurovent - Cooling mode : Air : 27°C (bs) /19°C (bh), Chilled water : 7/12°C
(2) According to Eurovent - Heating mode : Air : 20°C, Entering water temperature : 50°C, water flow is the same as that in cooling mode
(3) According to Eurovent - Heating mode : Air : 20°C, Heating water : 70/60°C.
According to Eurovent 6/11 (Thermal test method), 6/10 (Airflow test method)

# Performance Data - DUCTYS EC 2500

## 2-pipe - In line I configuration - Rectangular return / discharge - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 440 | 420 | 2450 | 1990 | 3070 |
| V3 - MS | 550 | 480 | 2810 | 2280 | 3600 |
| V5 - HS | 640 | 565 | 3260 | 2690 | 4020 |

## 4-pipe - In line I configuration - Rectangular return / discharge - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 420 | 380 | 2200 | 1760 | 310 | 3580 |
| V3 - MS | 525 | 470 | 2730 | 2200 | 365 | 4220 |
| V5 - HS | 610 | 520 | 3010 | 2460 | 390 | 4540 |

## 2-pipe - In line I configuration - Circular return / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 369 | 369 | 2148 | 1666 | 2790 |
| V3 - MS | 418 | 411 | 2390 | 1899 | 3016 |
| V5 - HS | 527 | 481 | 2807 | 2239 | 3474 |

## 4-pipe - In line I configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 354 | 350 | 2039 | 1629 | 289 | 3287 |
| V3 - MS | 405 | 394 | 2295 | 1825 | 312 | 3561 |
| V5 - HS | 513 | 454 | 2646 | 2139 | 366 | 4171 |

## 2-pipe - U configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 360 | 364 | 2121 | 1644 | 2734 |
| V3 - MS | 408 | 404 | 2357 | 1872 | 2964 |
| V5 - HS | 496 | 468 | 2725 | 2163 | 3325 |

## 4-pipe - U configuration - Circular discharge / discharge 1x200 mm - filter G2

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 334 | 338 | 1971 | 1572 | 276 | 3152 |
| V3 - MS | 394 | 371 | 2163 | 1737 | 307 | 3495 |
| V5 - HS | 474 | 433 | 2526 | 2040 | 346 | 3949 |

**For all tables, performance data based on :**
(1) According to Eurovent - Cooling mode : Air : 27°C (bs) /19°C (bh), Chilled water : 7/12°C
(2) According to Eurovent - Heating mode : Air : 20°C, Entering water temperature : 50°C, water flow is the same as that in cooling mode
(3) According to Eurovent - Heating mode : Air : 20°C, Heating water : 70/60°C.
According to Eurovent 6/11 (Thermal test method), 6/10 (Airflow test method)

# Performance Data - DUCTYS EC 4000

## 2-pipe - In line I configuration - Rectangular return / discharge - filter G3

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 362 | 400 | 2324 | 1992 | 3075 |
| V2 | 660 | 679 | 3945 | 3406 | 5195 |
| V3 - MS | 877 | 854 | 4958 | 4307 | 6505 |
| V4 | 1090 | 1002 | 5816 | 5086 | 7599 |
| V5 - HS | 1392 | 1171 | 6801 | 6012 | 8826 |

## 4-pipe - In line I configuration - Rectangular return / discharge - filter G3

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 350 | 399 | 2253 | 1931 | 279 | 3235 |
| V2 | 613 | 638 | 3707 | 3197 | 430 | 4996 |
| V3 - MS | 812 | 804 | 4669 | 4049 | 512 | 5946 |
| V4 | 1008 | 948 | 5502 | 4799 | 565 | 6559 |
| V5 - HS | 1240 | 1092 | 6339 | 5573 | 592 | 6872 |

## 2-pipe - In line I configuration - Circular return / discharge 1x200 mm - filter G3

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 316 | 355 | 2060 | 1663 | 2608 |
| V2 | 575 | 611 | 3545 | 2901 | 4494 |
| V3 - MS | 777 | 791 | 4589 | 3799 | 5824 |
| V4 | 950 | 929 | 5393 | 4511 | 6851 |
| V5 - HS | 1191 | 1099 | 6379 | 5423 | 8119 |

## 4-pipe - In line I configuration - Circular discharge / discharge 1x200 mm - filter G3

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 348 | 348 | 2017 | 1628 | 251 | 2909 |
| V2 | 564 | 564 | 3277 | 2674 | 385 | 4471 |
| V3 - MS | 754 | 754 | 4377 | 3614 | 483 | 5613 |
| V4 | 900 | 900 | 5223 | 4359 | 542 | 6298 |
| V5 - HS | 1054 | 1054 | 6120 | 5179 | 583 | 6771 |

## 2-pipe - U configuration - Circular discharge / discharge 1x200 mm - without filter

| Speeds | Air flow ($m^3/h$) | Water flow (l/h) | Cooling mode (1) | | Heating mode (2) |
|---|---|---|---|---|---|
| | | | Total capacity (W) | Sensible capacity (W) | Heating capacity (W) |
| V1 - LS | 200 | 230 | 1335 | 1072 | 1688 |
| V2 | 357 | 398 | 2308 | 1867 | 2922 |
| V3 - MS | 457 | 498 | 2894 | 2353 | 3665 |
| V4 | 570 | 607 | 3521 | 2883 | 4466 |
| V5 - HS | 662 | 691 | 4011 | 3298 | 5087 |

## 4-pipe - U configuration - Circular discharge / discharge 1x200 mm - without filter

| Speeds | Air flow ($m^3/h$) | Cooling mode (1) | | | Heating mode (3) | |
|---|---|---|---|---|---|---|
| | | Water flow (l/h) | Total capacity (W) | Sensible capacity (W) | Water flow (l/h) | Heating capacity (W) |
| V1 - LS | 198 | 228 | 1322 | 1061 | 168 | 1956 |
| V2 | 328 | 367 | 2133 | 1723 | 264 | 3062 |
| V3 - MS | 449 | 491 | 2848 | 2315 | 342 | 3966 |
| V4 | 557 | 595 | 3453 | 2823 | 402 | 4669 |
| V5 - HS | 640 | 671 | 3897 | 3200 | 443 | 5144 |

**For all tables, performance data based on :**

(1) According to Eurovent - Cooling mode : Air : 27°C (bs) /19°C (bh), Chilled water : 7/12°C

(2) According to Eurovent - Heating mode : Air : 20°C, Entering water temperature : 50°C, water flow is the same as that in cooling mode

(3) According to Eurovent - Heating mode : Air : 20°C, Heating water : 70/60°C.

According to Eurovent 6/11 (Thermal test method), 6/10 (Airflow test method)

# Eurovent Performance Data

## 2-pipe system

| Models | Fan speed | Air flow (m³/h) | External static pressure (Pa) | Cooling mode | | | Heating mode | | Electric capacity (W) | Sound power levels | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total capacity (kW) | Sensible capacity (kW) | Water pressure drop (kPa) | Heating capacity (kW) | Water pressure drop (kPa) | | Return + Radiated dB(A) | Discharge dB(A) |
| DUCTYS EC 1000 | LS | 125 | 19 | 0.81 | 0.67 | 1 | 0.92 | 1 | 7 | 33 | 32 |
| | MS | 200 | 50 | 1.21 | 1.01 | 3 | 1.41 | 3 | 18 | 41 | 40 |
| | HS | 218 | 59 | 1.29 | 1.09 | 3 | 1.52 | 3 | 23 | 43 | 42 |
| DUCTYS EC 1500 | LS | 270 | 19 | 1,23 | 1,13 | 4 | 1,60 | 4 | 8 | 44 | 45 |
| | MS | 400 | 50 | 1,70 | 1,54 | 7 | 2,26 | 7 | 30 | 52 | 56 |
| | HS | 505 | 80 | 1,97 | 1,82 | 9 | 2,79 | 9 | 60 | 60 | 62 |
| DUCTYS EC 2000 | LS | 370 | 26 | 1,70 | 1,46 | 8 | 2,41 | 8 | 18 | 46 | 48 |
| | MS | 520 | 50 | 2,23 | 1,95 | 13 | 2,93 | 13 | 47 | 54 | 57 |
| | HS | 600 | 66 | 2,46 | 2,25 | 15 | 3,10 | 15 | 72 | 58 | 61 |
| DUCTYS EC 2500 | LS | 455 | 32 | 2,45 | 1,99 | 16 | 3,07 | 16 | 26 | 50 | 50 |
| | MS | 550 | 50 | 2,81 | 2,28 | 21 | 3,60 | 21 | 41 | 55 | 56 |
| | HS | 640 | 66 | 3,26 | 2,69 | 28 | 4,02 | 28 | 64 | 61 | 61 |
| DUCTYS EC 4000 | LS | 362 | 7 | 2.32 | 1.99 | 7 | 3.08 | 7 | 10 | 45 | 38 |
| | MS | 877 | 50 | 4.96 | 4.31 | 27 | 6.51 | 27 | 65 | 51 | 59 |
| | HS | 1090 | 72 | 5.82 | 5.09 | 36 | 7.6 | 36 | 114 | 57 | 64 |

**Performance data based on :**
- Cooling mode : Air : 27 °C (dry bulb) / 19 °C (wet bulb) - Chilled water : 7/12 °C.
- Heating mode : Air : 20 °C - Entering water temperature : 50 °C, water flow identical to chilled water flow.
- According to Eurovent 6/11 (Thermal test method), 6/10 (Airflow test method) and 8/12 (Sound test method).
- Configuration : Rectangular return / Rectangular discharge.

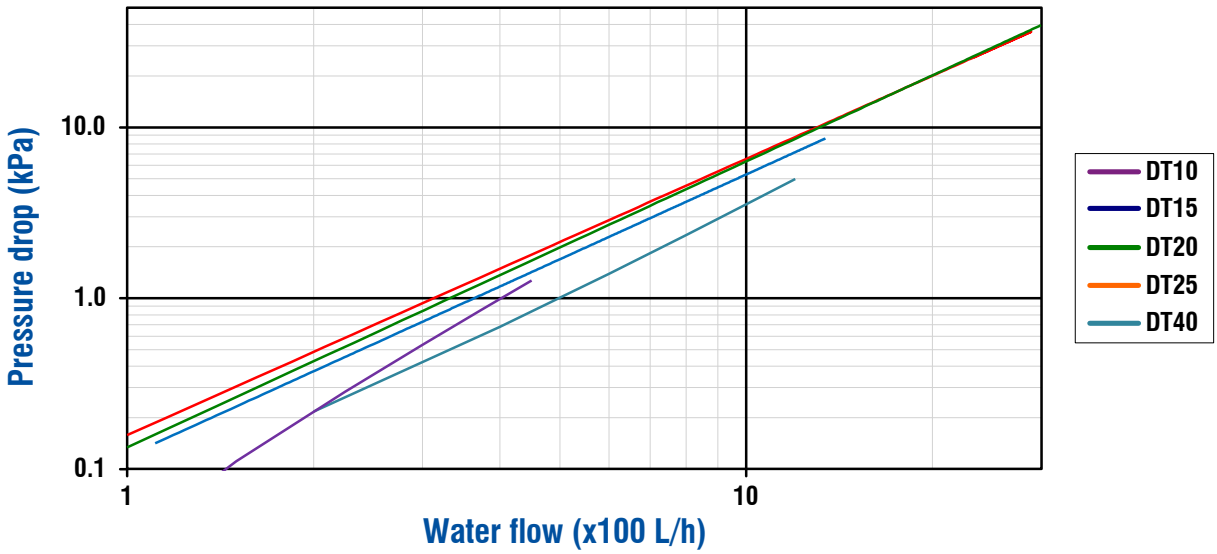
## 4-pipe system

| Models | Fan speed | Air flow (m³/h) | External static pressure (Pa) | Cooling mode | | | Heating mode | | Electric capacity (W) | Sound power levels | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total capacity (kW) | Sensible capacity (kW) | Water pressure drop (kPa) | Heating capacity (kW) | Water pressure drop (kPa) | | Return + Radiated dB(A) | Discharge dB(A) |
| DUCTYS EC 1000 | LS | 106 | 18 | 0.69 | 0.58 | 1 | 0.77 | 3 | 7 | 31 | 30 |
| | MS | 180 | 50 | 1.11 | 0.93 | 2 | 1.27 | 7 | 18 | 39 | 38 |
| | HS | 195 | 57 | 1.18 | 0.99 | 3 | 1.36 | 8 | 22 | 41 | 40 |
| DUCTYS EC 1500 | LS | 265 | 18 | 1,19 | 1,08 | 4 | 2,23 | 6 | 8 | 44 | 45 |
| | MS | 380 | 50 | 1,61 | 1,47 | 7 | 2,85 | 9 | 30 | 52 | 56 |
| | HS | 480 | 72 | 1,92 | 1,75 | 9 | 3,22 | 12 | 60 | 60 | 62 |
| DUCTYS EC 2000 | LS | 360 | 25 | 1,67 | 1,42 | 8 | 3,17 | 11 | 18 | 46 | 48 |
| | MS | 507 | 50 | 2,19 | 1,93 | 13 | 3,46 | 14 | 47 | 54 | 57 |
| | HS | 575 | 64 | 2,39 | 2,15 | 15 | 3,54 | 15 | 72 | 58 | 61 |
| DUCTYS EC 2500 | LS | 410 | 31 | 2,22 | 1,76 | 13 | 3,58 | 15 | 26 | 50 | 50 |
| | MS | 525 | 50 | 2,73 | 2,20 | 20 | 4,22 | 21 | 41 | 55 | 56 |
| | HS | 595 | 65 | 3,01 | 2,46 | 23 | 4,54 | 24 | 69 | 61 | 61 |
| DUCTYS EC 4000 | LS | 350 | 6 | 2.25 | 1.93 | 7 | 3.24 | 2 | 10 | 45 | 38 |
| | MS | 812 | 50 | 4.67 | 4.05 | 24 | 5.95 | 16 | 62 | 50 | 57 |
| | HS | 1008 | 77 | 5.5 | 4.8 | 31 | 6.56 | 18 | 108 | 55 | 62 |

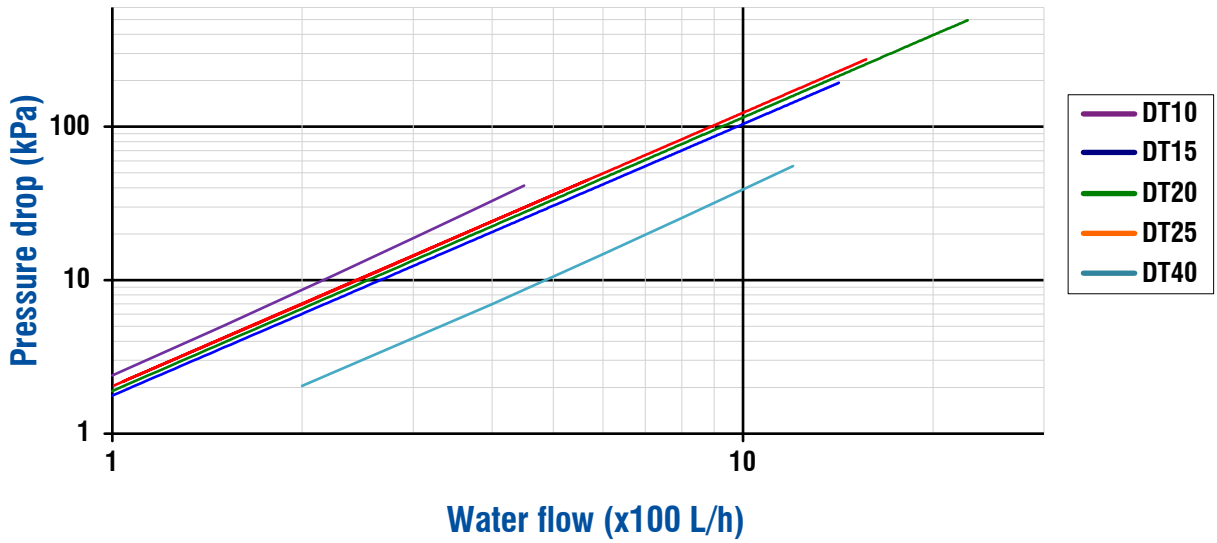
**Performance data based on :**
- Cooling mode : Air : 27 °C (dry bulb) / 19 °C (wet bulb) - Chilled water : 7/12 °C.
- Heating mode : Air : 20 °C - Heating water : 70/60°C.
- According to Eurovent 6/11 (Thermal test method), 6/10 (Airflow test method) and 8/12 (Sound test method).
- Configuration : Rectangular return / Rectangular discharge.

# Water Pressure Drop Curves

## 2-pipe units - Cooling coil

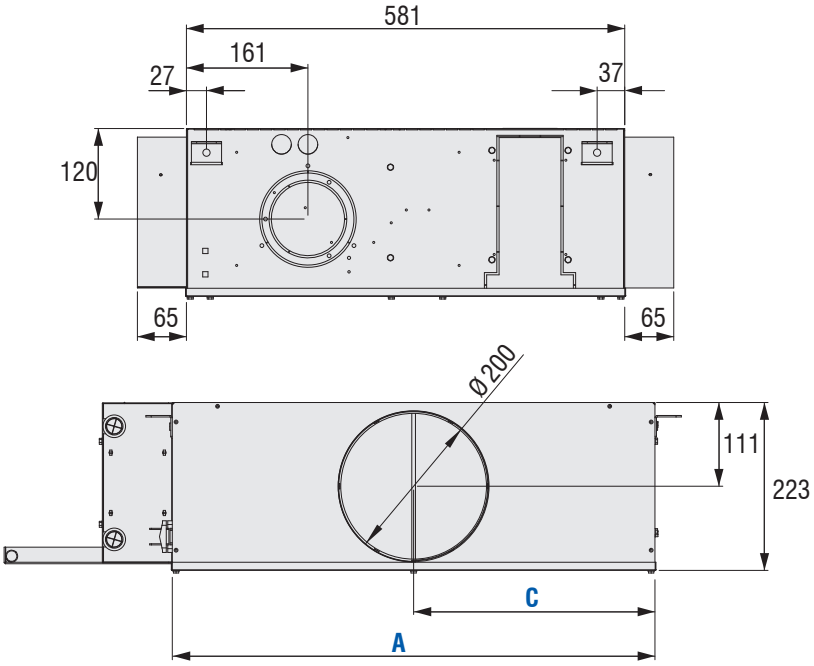


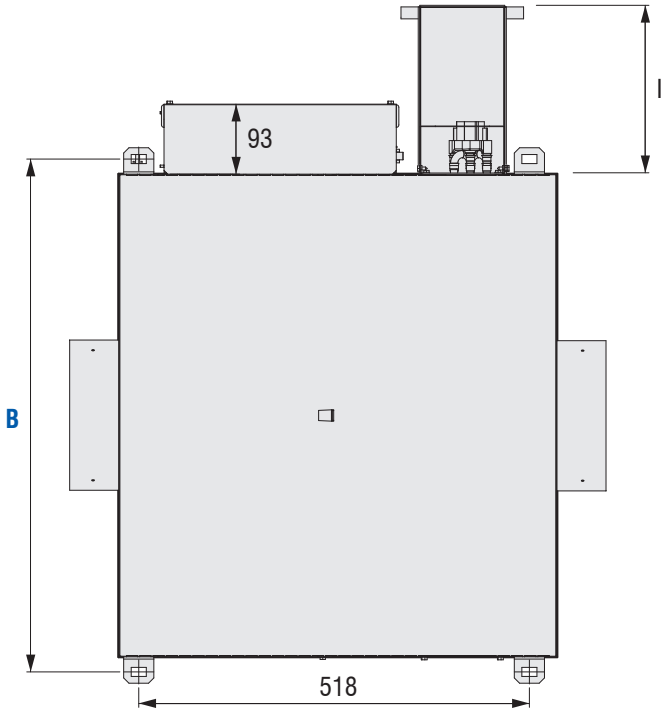

## 4-pipe units - Heating coil

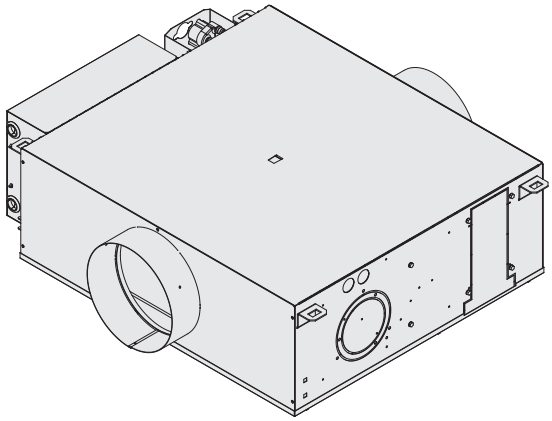


# Dimensions

## DUCTYS EC with one Ø200 mm Circular Duct Collars - Diffusion en I



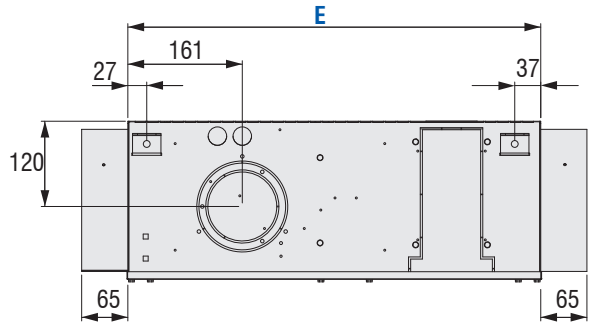



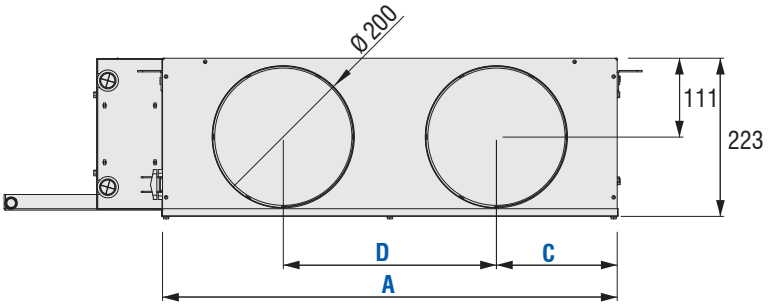



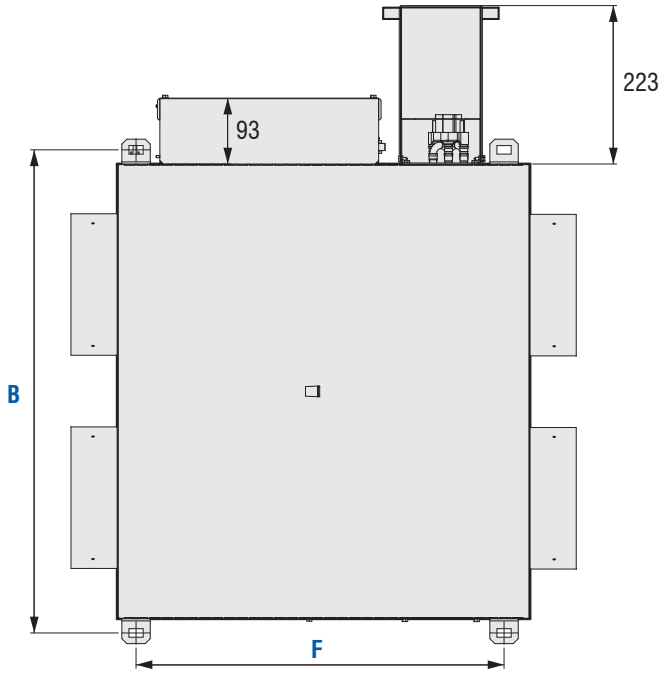
| | | A | B | C | I |
|---|---|---|---|---|---|
| DUCTYS EC 1000 | mm | 540 | 580 | 270 | 256 |
| DUCTYS EC 1500 | mm | 640 | 680 | 320 | 223 |
| DUCTYS EC 2000 | mm | 740 | 780 | 370 | 223 |

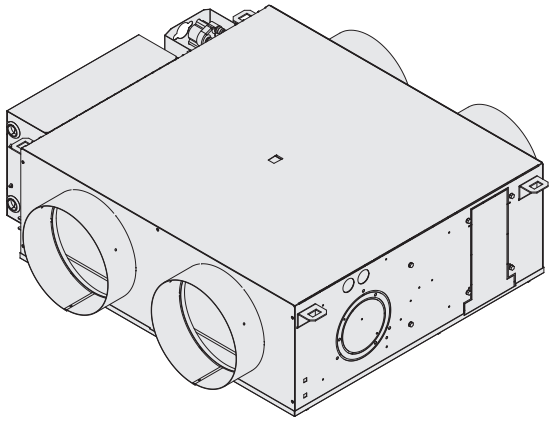
# Dimensions (continued)

## DUCTYS EC with two Ø200 mm Circular Duct Collars - Diffusion en I



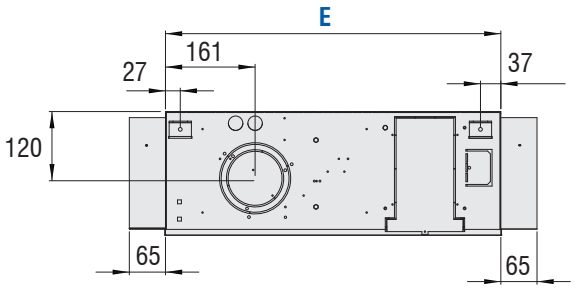



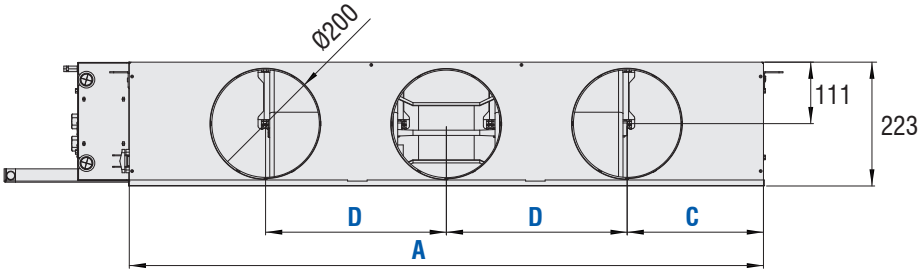



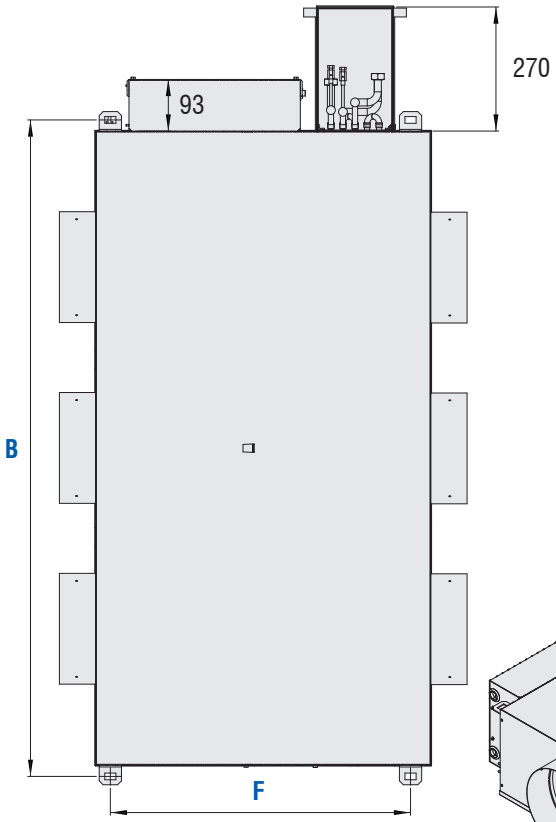
| | | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| DUCTYS EC 1500 | mm | 640 | 680 | 170 | 300 | 581 | 518 |
| DUCTYS EC 2000 | mm | 740 | 780 | 195 | 350 | 581 | 518 |
| DUCTYS EC 2500 | mm | 840 | 880 | 210 | 420 | 581 | 518 |

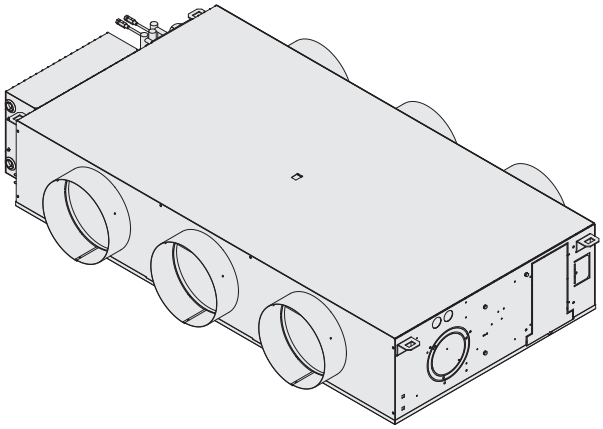
# Dimensions (continued)

## DUCTYS EC with three Ø200 mm Circular Duct Collars - Diffusion en I



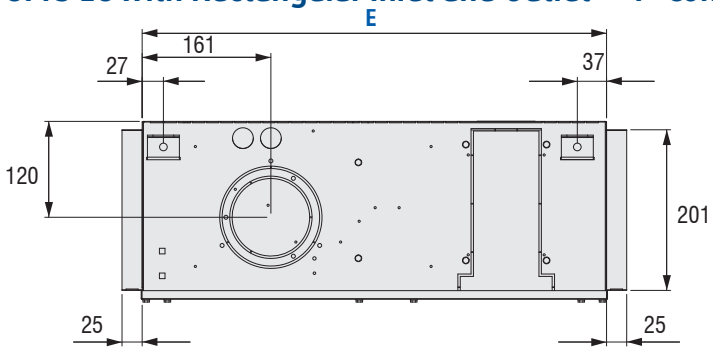



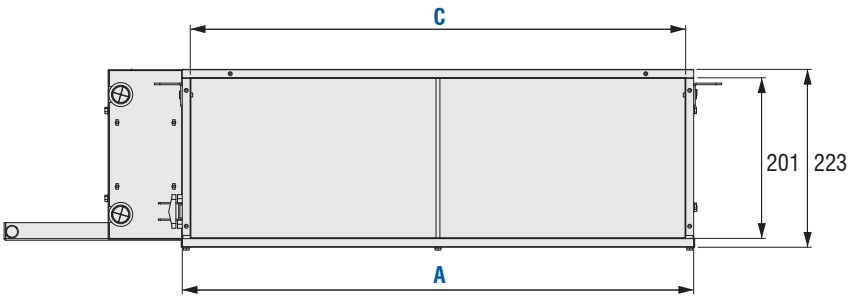



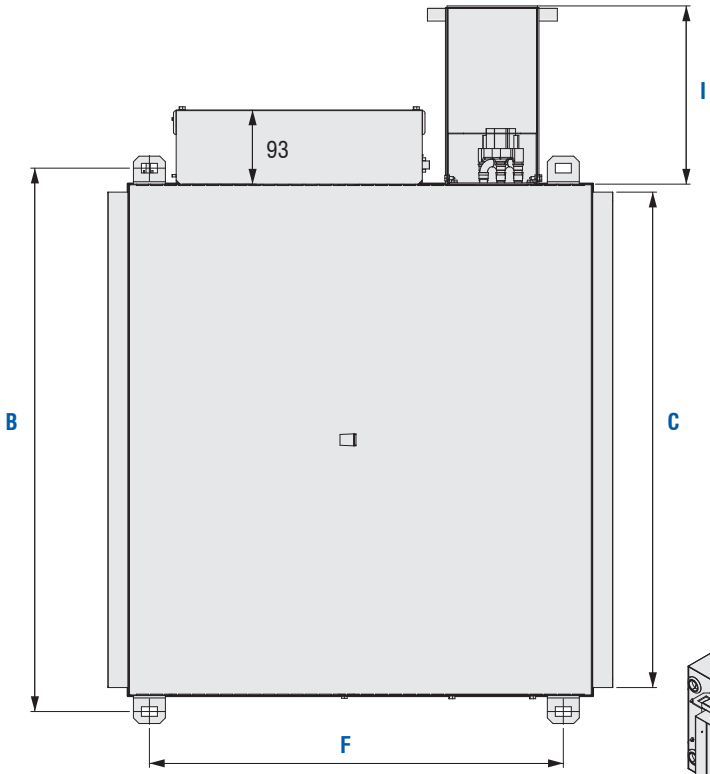
| | | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| DUCTYS EC 4000 | mm | 1140 | 1180 | 245 | 325 | 603 | 540 |

# Dimensions (continued)

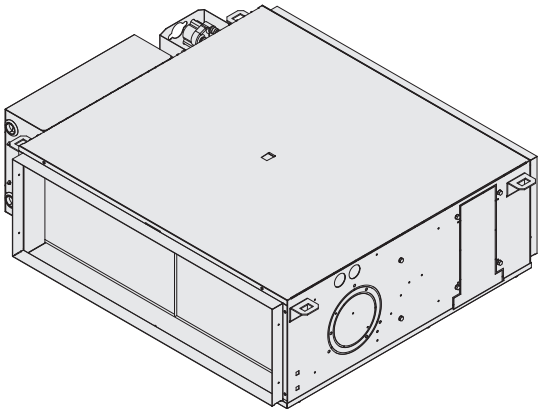
## DUCTYS EC with Rectangular Inlet and Outlet - "I" Configuration



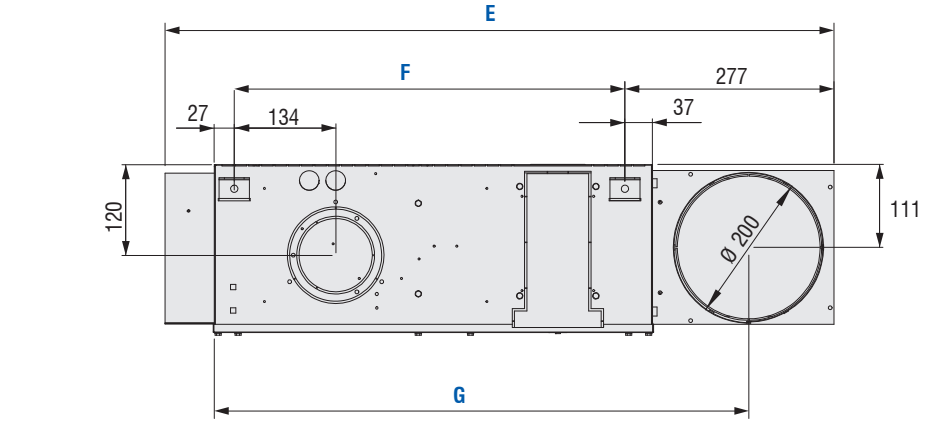



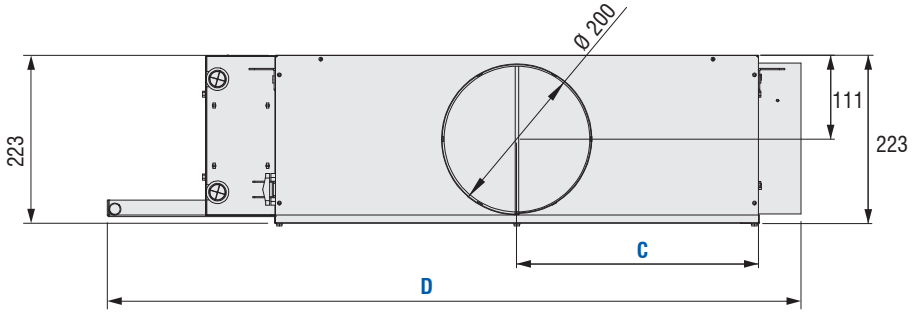

| | | A | B | C | E | F | I |
|---|---|---|---|---|---|---|---|
| DUCTYS EC 1000 | mm | 540 | 580 | 520 | 581 | 518 | 256 |
| DUCTYS EC 1500 | mm | 640 | 680 | 620 | 581 | 518 | 223 |
| DUCTYS EC 2000 | mm | 740 | 780 | 720 | 581 | 518 | 223 |
| DUCTYS EC 2500 | mm | 840 | 880 | 820 | 581 | 518 | 223 |
| DUCTYS EC 4000 | mm | 1140 | 1180 | 1120 | 603 | 540 | 270 |

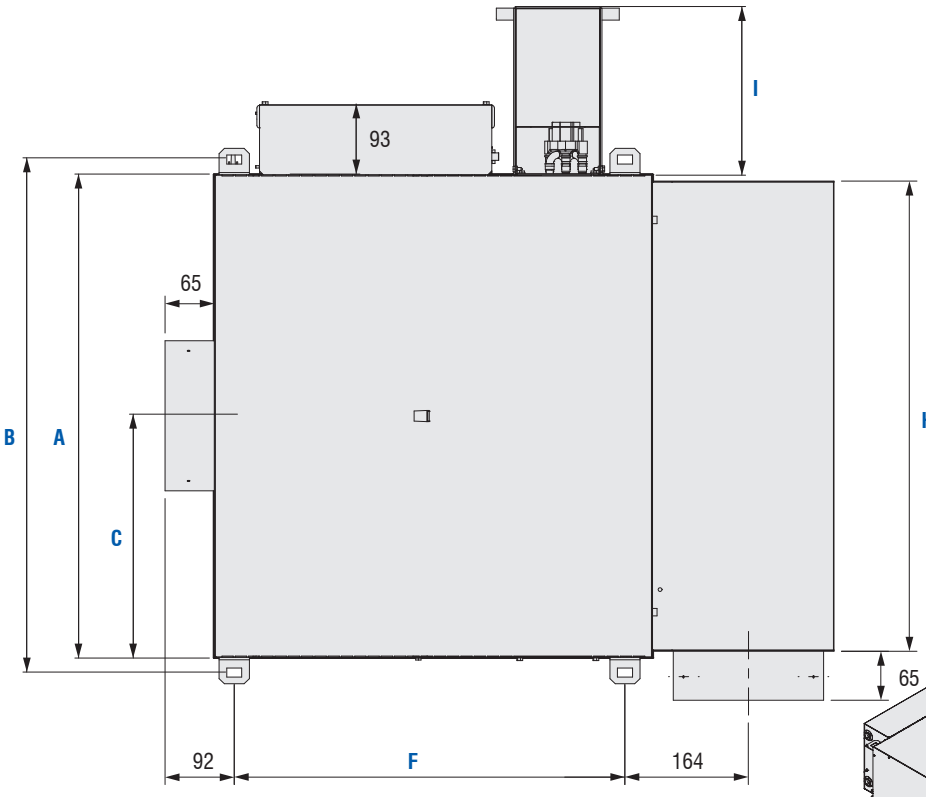


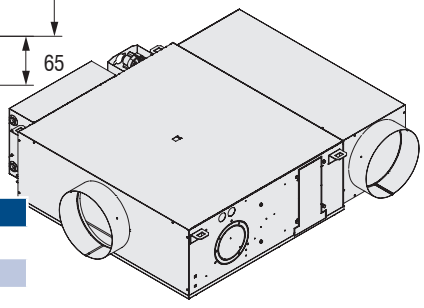
# Dimensions (continued)

## DUCTYS EC with one Ø200 mm Circular Duct Collars - "J" Configuration



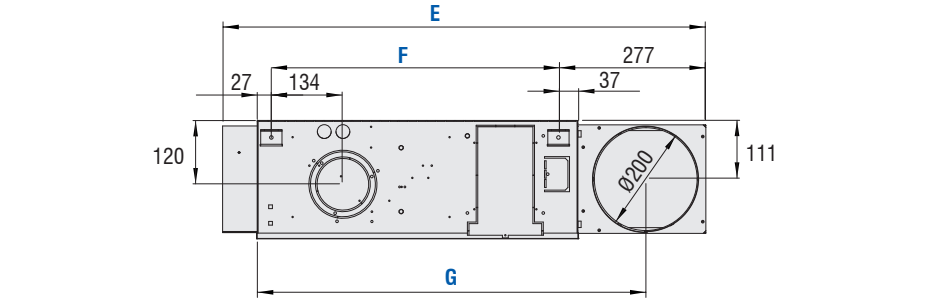



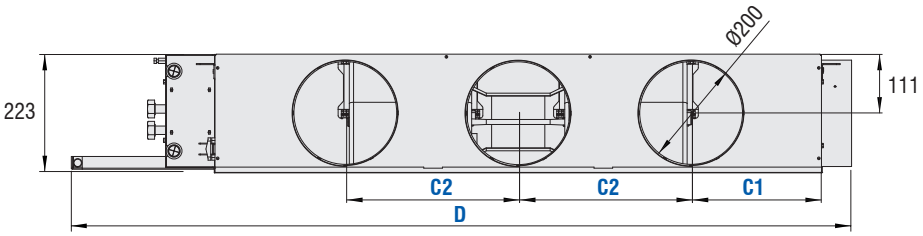



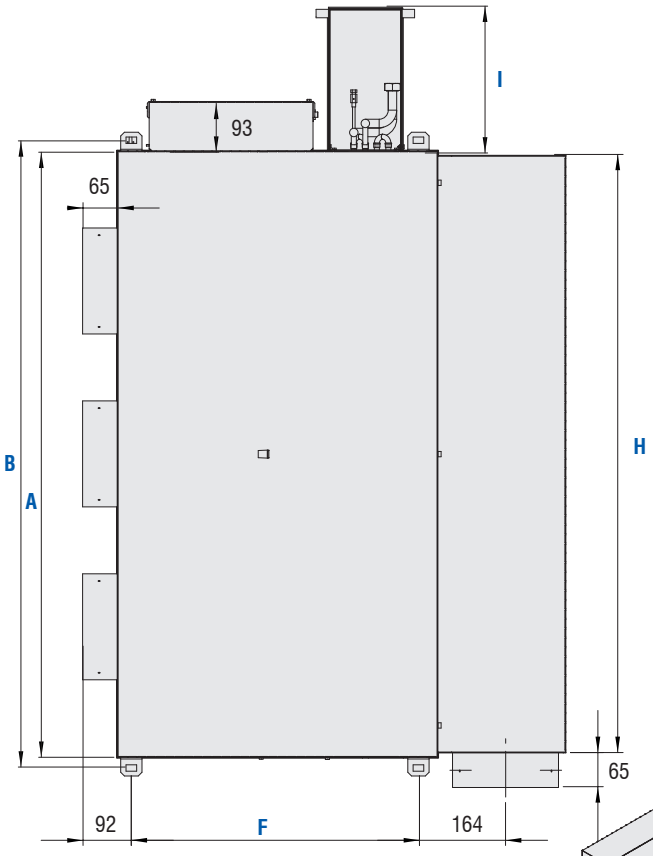
| | | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|---|
| DUCTYS EC 1000 | mm | 540 | 580 | 270 | 820 | 887 | 518 | 709 | 523 | 256 |
| DUCTYS EC 1500 | mm | 640 | 680 | 320 | 920 | 887 | 518 | 709 | 623 | 223 |
| DUCTYS EC 2000 | mm | 740 | 780 | 370 | 1020 | 887 | 518 | 709 | 723 | 223 |
| DUCTYS EC 2500 | mm | 840 | 880 | 420 | 1120 | 887 | 518 | 709 | 823 | 223 |

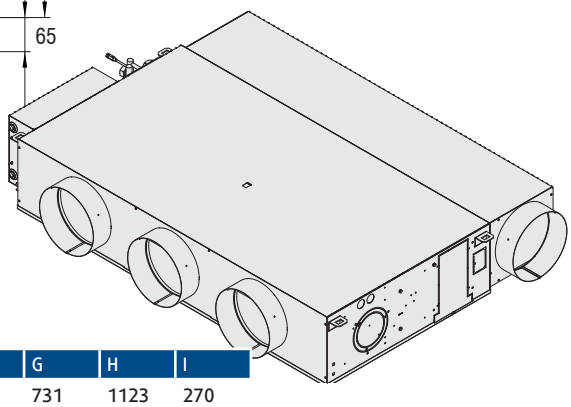
# Dimensions (continued)

## DUCTYS EC with three Ø200 mm Circular Duct Collars - "J" Configuration



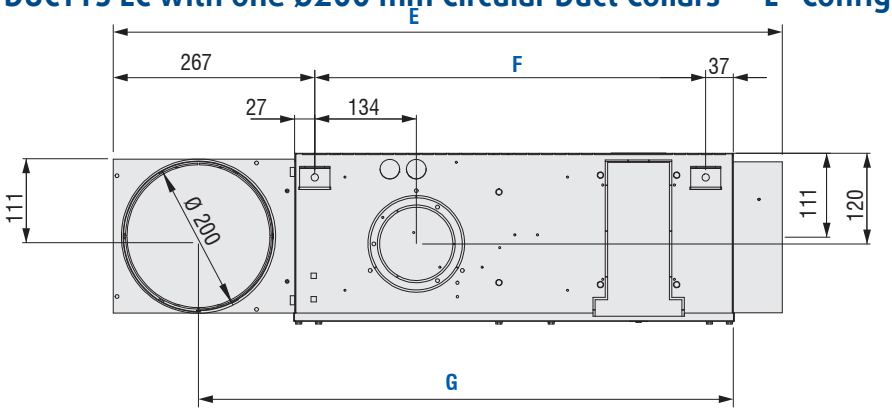



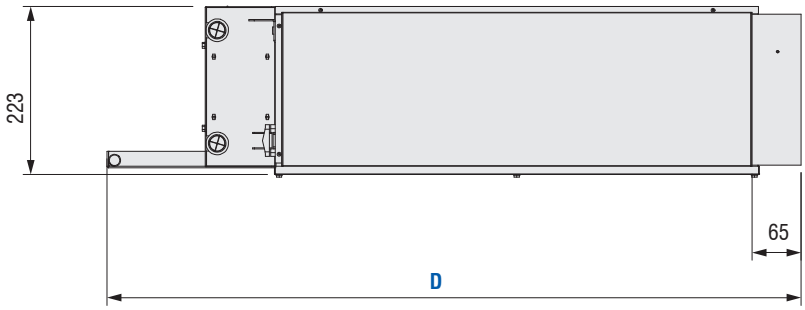



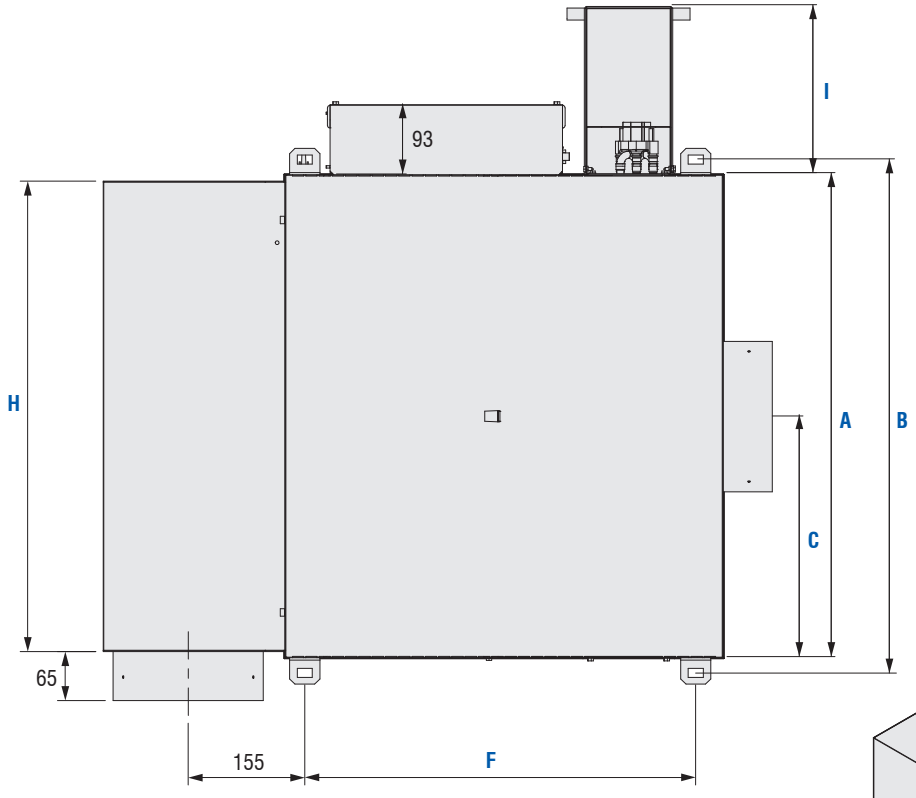
| | | A | B | C1 | C2 | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DUCTYS EC 4000 | mm | 1140 | 1180 | 245 | 325 | 1420 | 909 | 540 | 731 | 1123 | 270 |

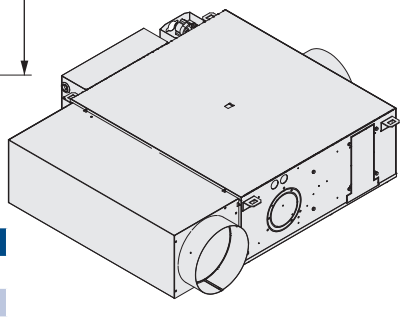
# Dimensions (continued)

## DUCTYS EC with one Ø200 mm Circular Duct Collars - "L" Configuration



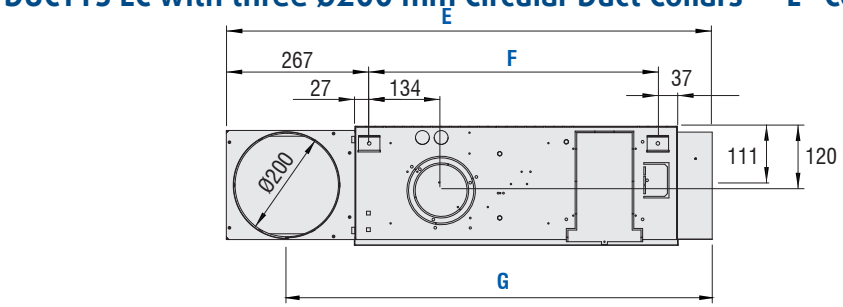



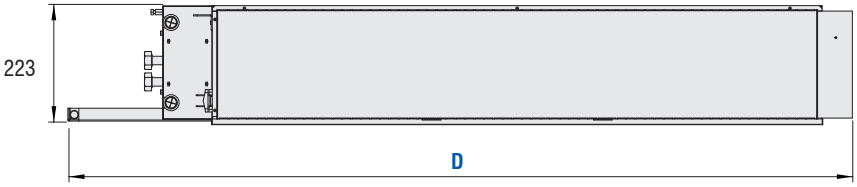



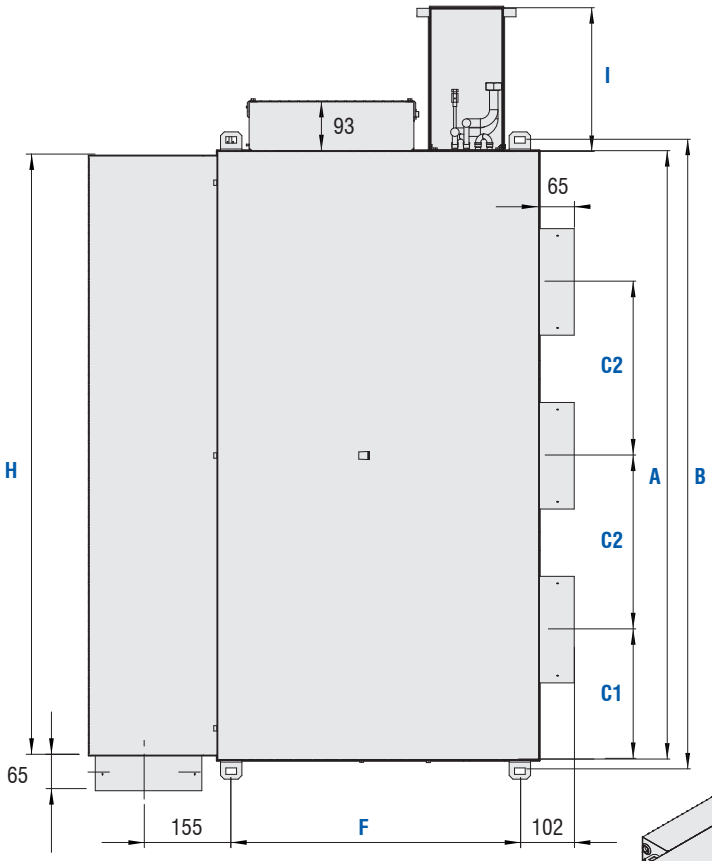
| | | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|---|
| DUCTYS EC 1000 | mm | 540 | 580 | 270 | 820 | 887 | 518 | 709 | 523 | 256 |
| DUCTYS EC 1500 | mm | 640 | 680 | 320 | 920 | 887 | 518 | 709 | 623 | 223 |
| DUCTYS EC 2000 | mm | 740 | 780 | 370 | 1020 | 887 | 518 | 709 | 723 | 223 |
| DUCTYS EC 2500 | mm | 840 | 880 | 420 | 1120 | 887 | 518 | 709 | 823 | 223 |

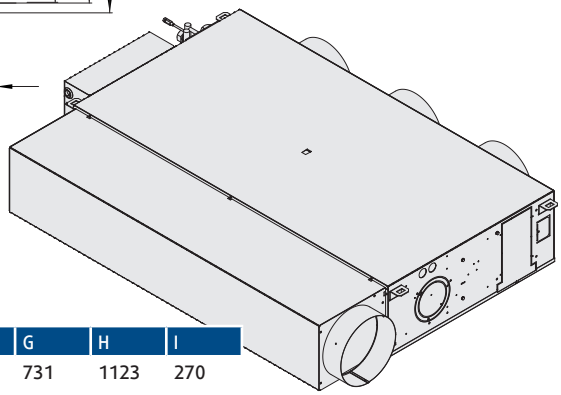
# Dimensions (continued)

## DUCTYS EC with three Ø200 mm Circular Duct Collars - "L" Configuration



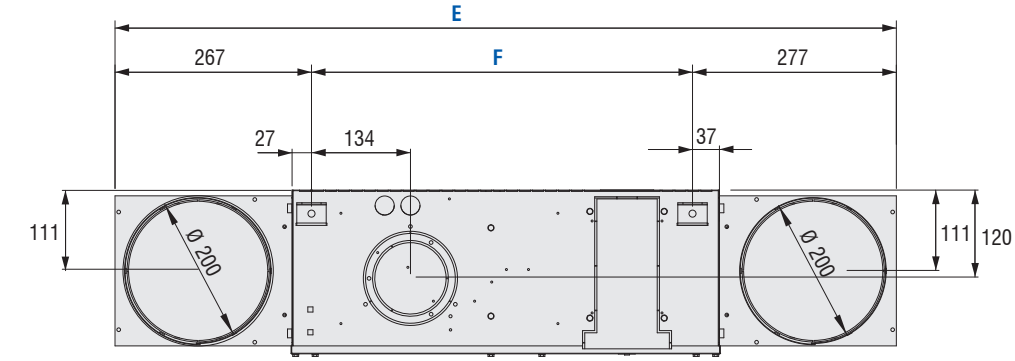



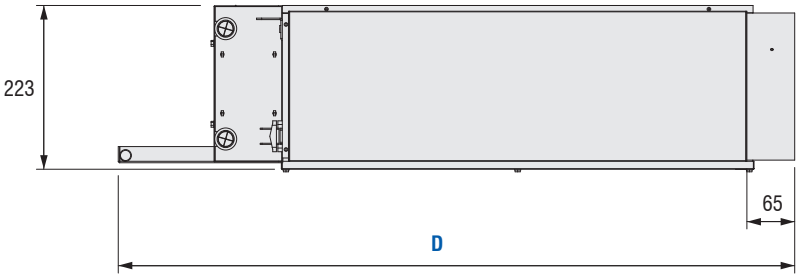



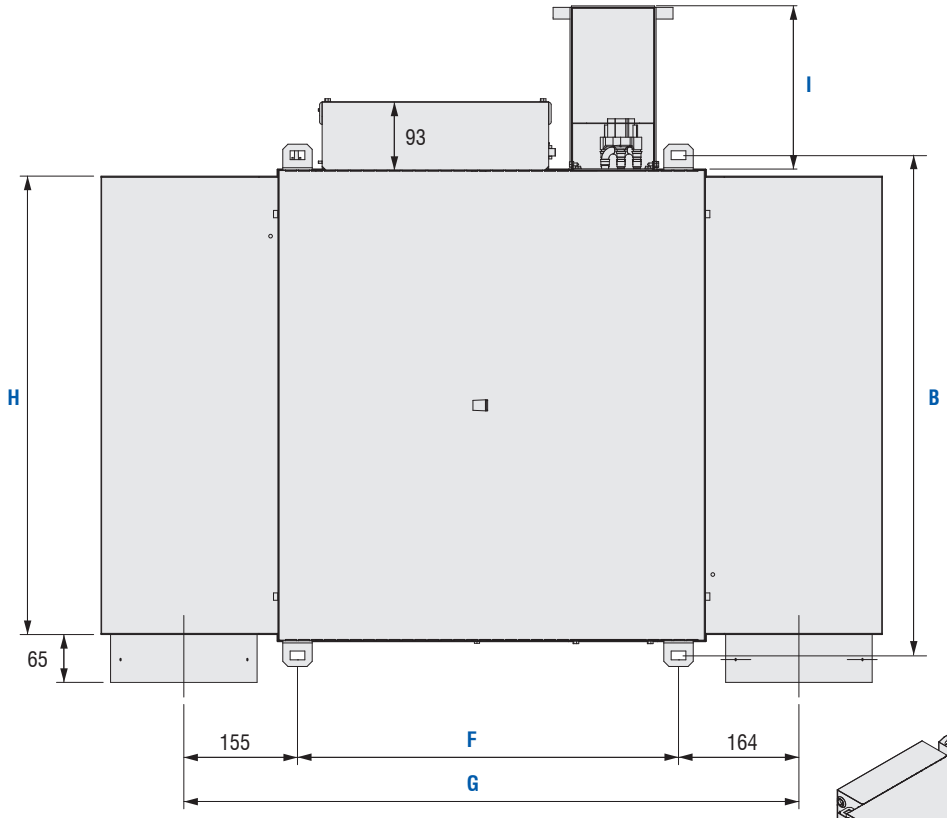
| | | A | B | C1 | C2 | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DUCTYS EC 4000 | mm | 1140 | 1180 | 245 | 325 | 1420 | 909 | 540 | 731 | 1123 | 270 |

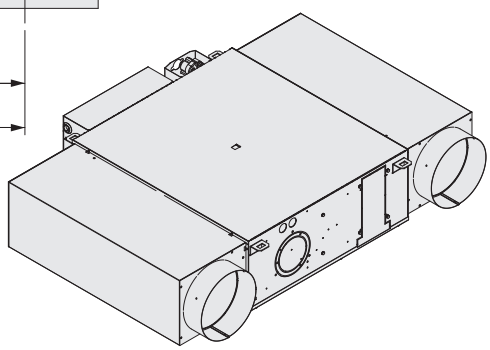
# Dimensions (continued)

## DUCTYS EC with Ø200 mm Circular Duct Collars - "U" Configuration



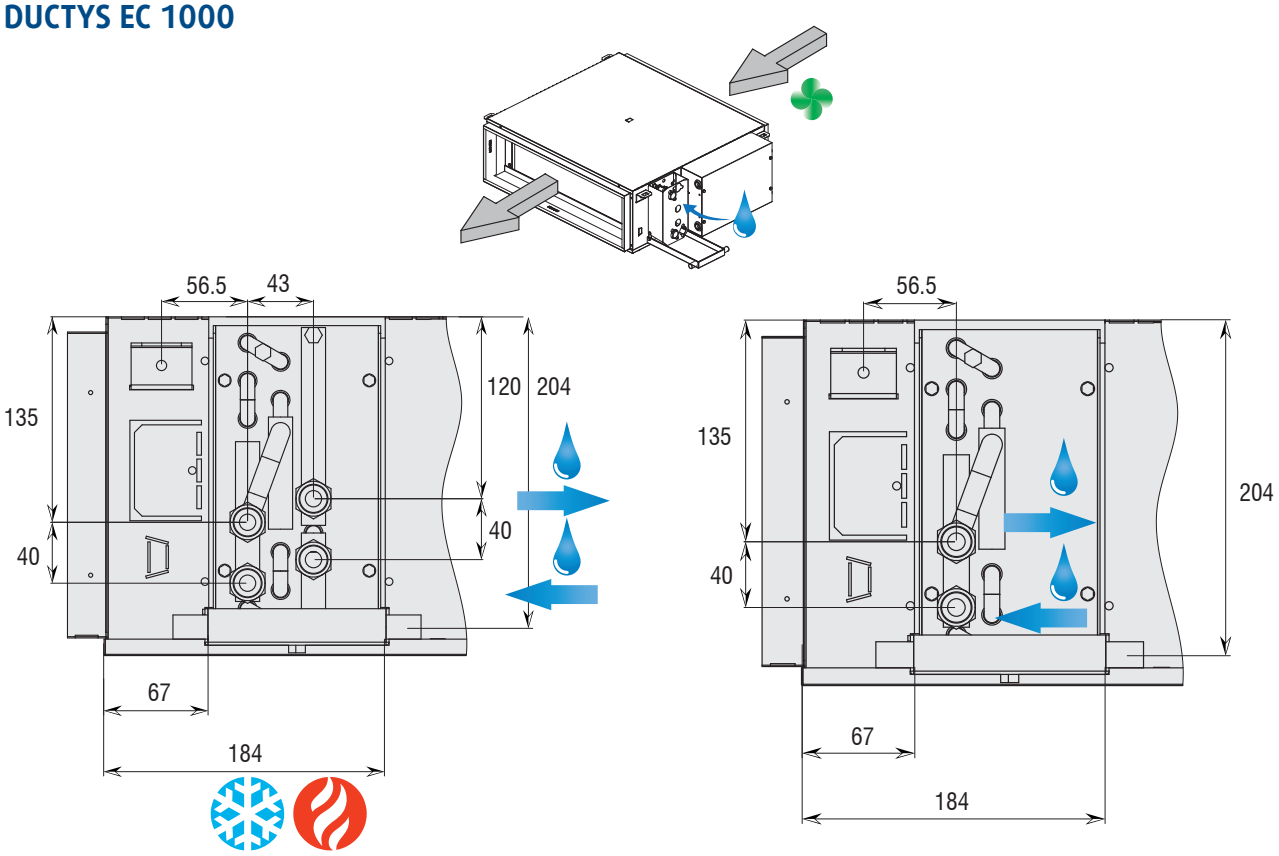



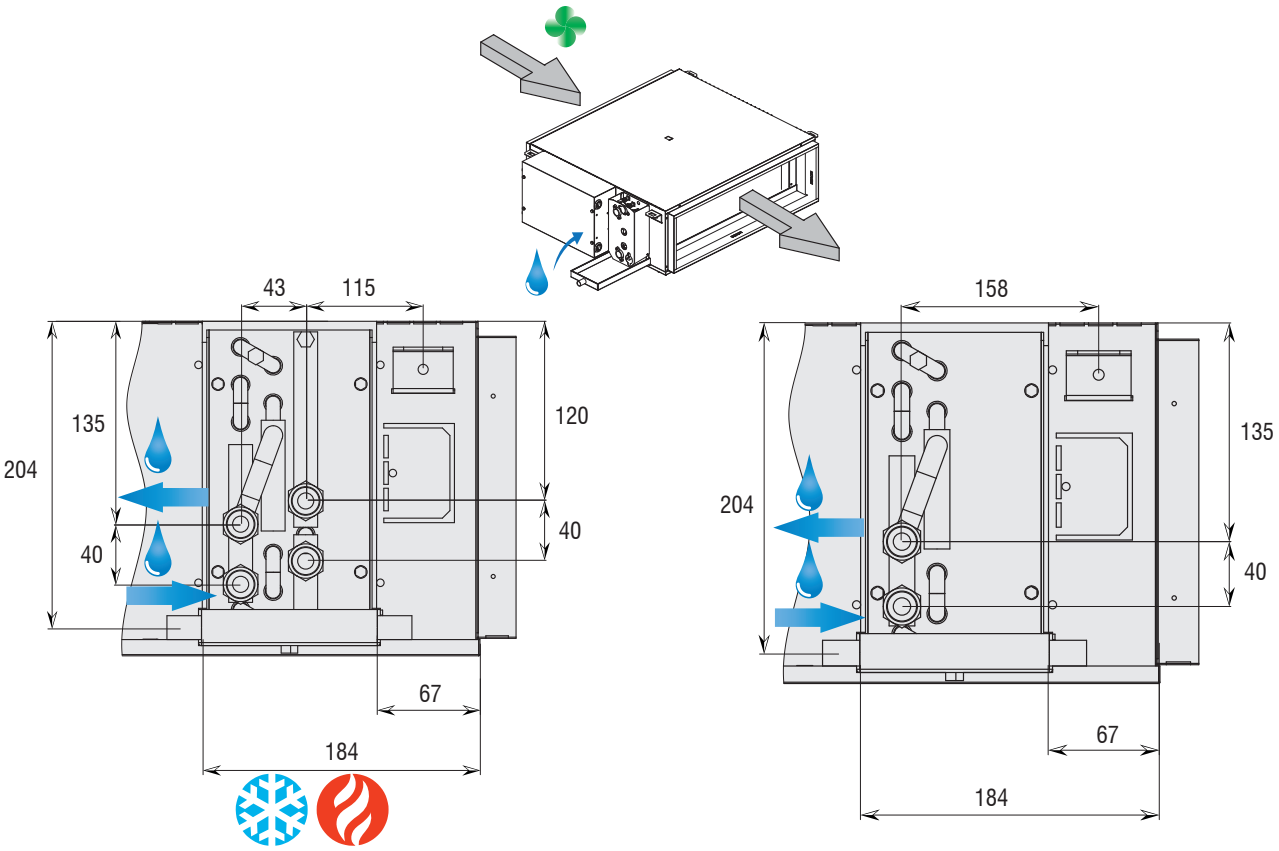



| | | B | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|
| DUCTYS EC 1000 | mm | 580 | 820 | 1062 | 518 | 836 | 523 | 256 |
| DUCTYS EC 1500 | mm | 680 | 920 | 1062 | 518 | 836 | 623 | 223 |
| DUCTYS EC 2000 | mm | 780 | 1020 | 1062 | 518 | 836 | 723 | 223 |
| DUCTYS EC 2500 | mm | 880 | 1120 | 1062 | 518 | 836 | 823 | 223 |
| DUCTYS EC 4000 | mm | 1180 | 1420 | 1084 | 540 | 859 | 1123 | 270 |

# Dimensions - Water Connections

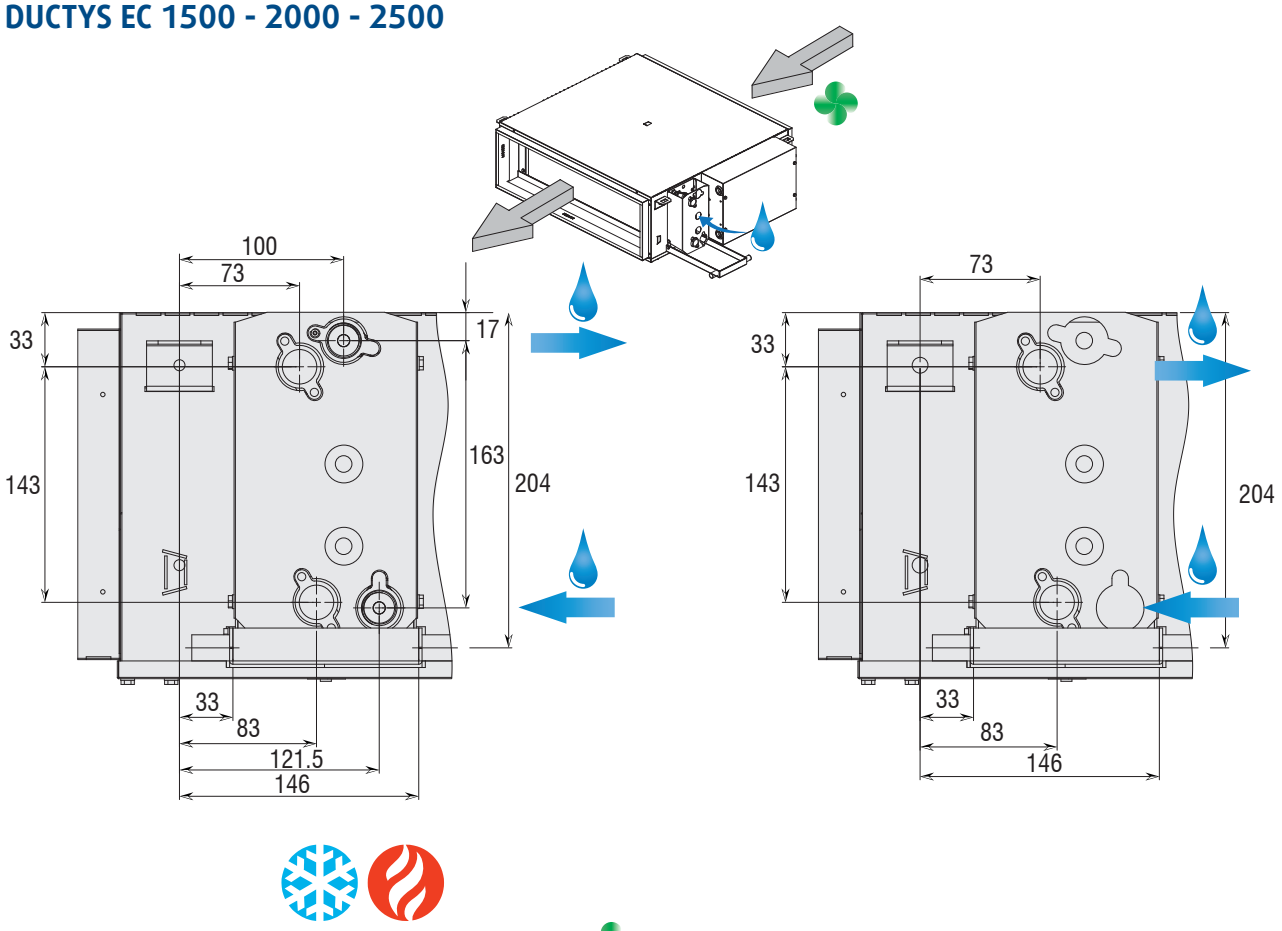
## DUCTYS EC 1000

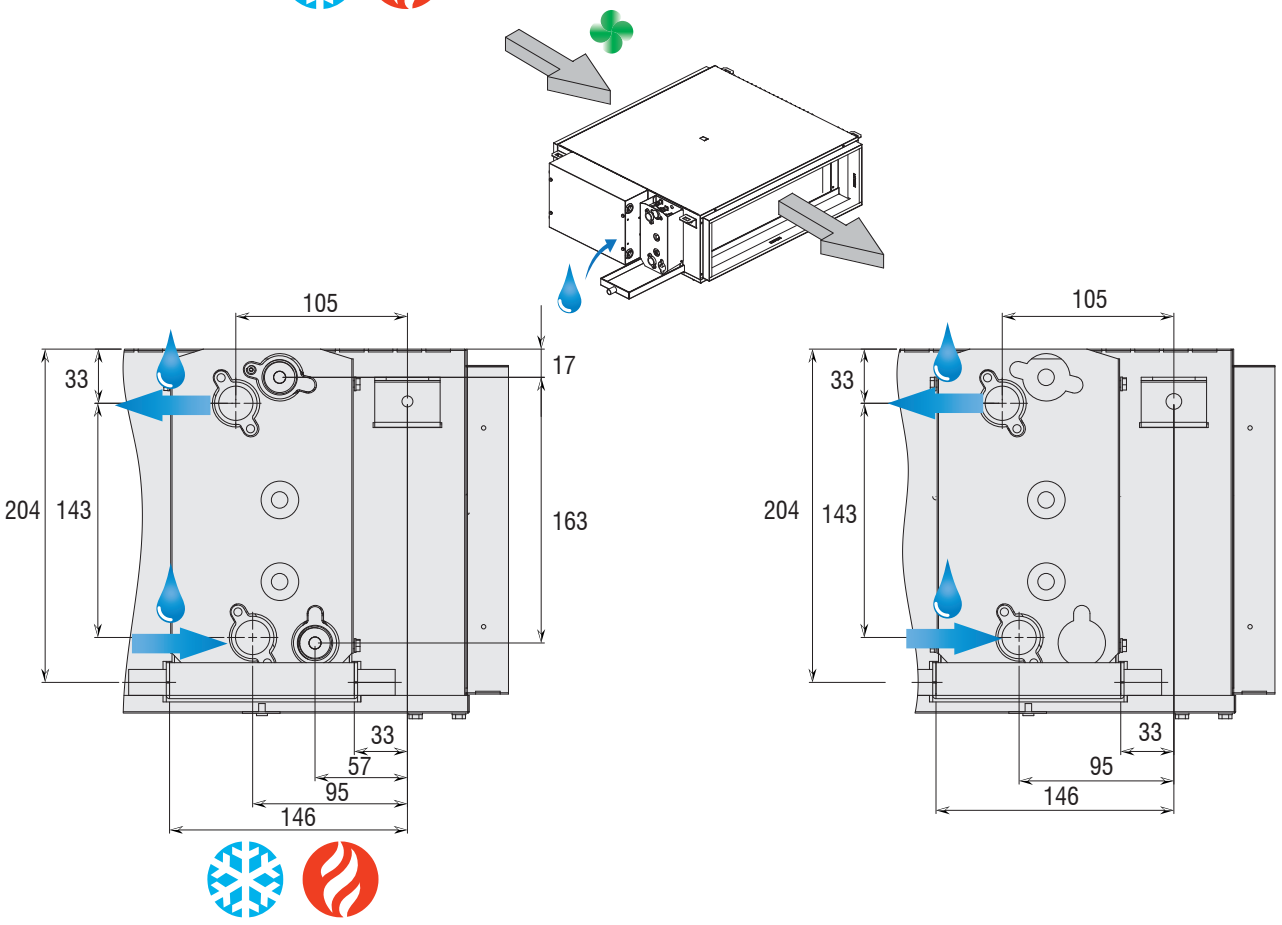


# Dimensions - Water Connections (continued)

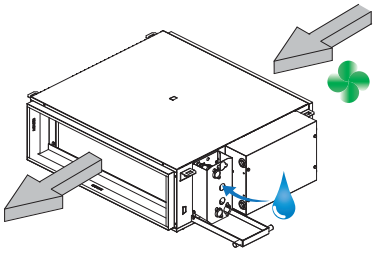
## DUCTYS EC 1500 - 2000 - 2500

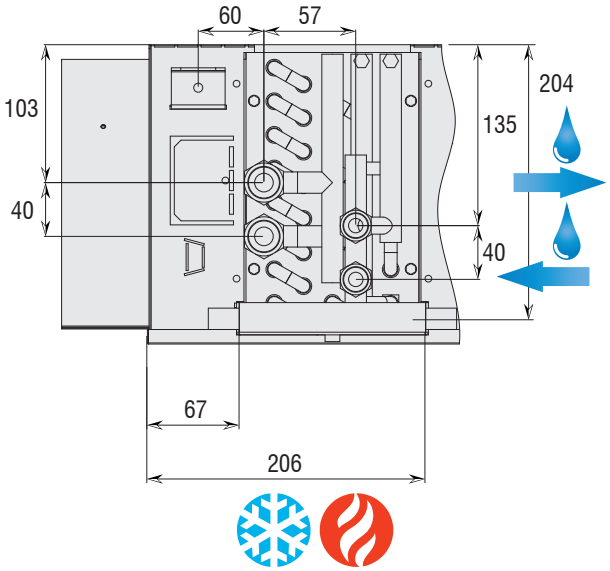


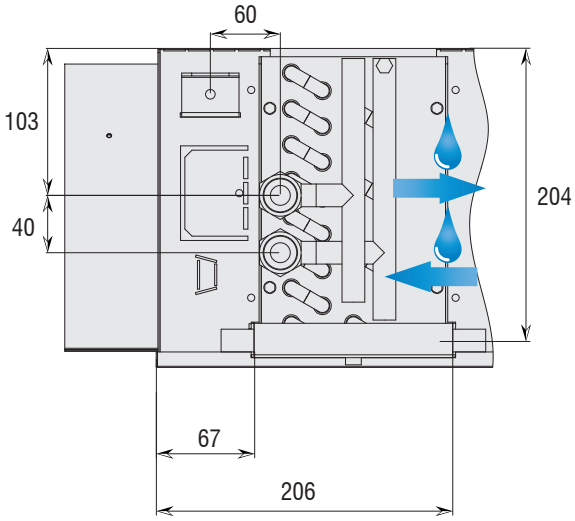



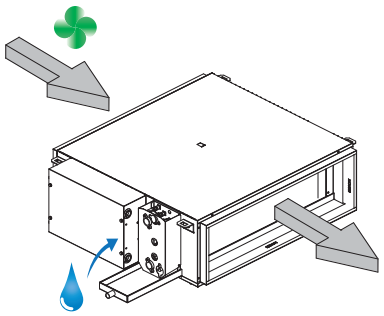
# Dimensions - Water Connections (continued)

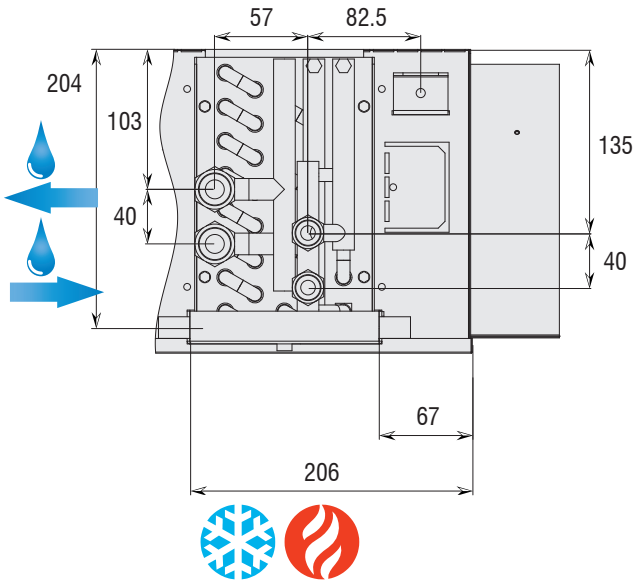
## DUCTYS EC 4000

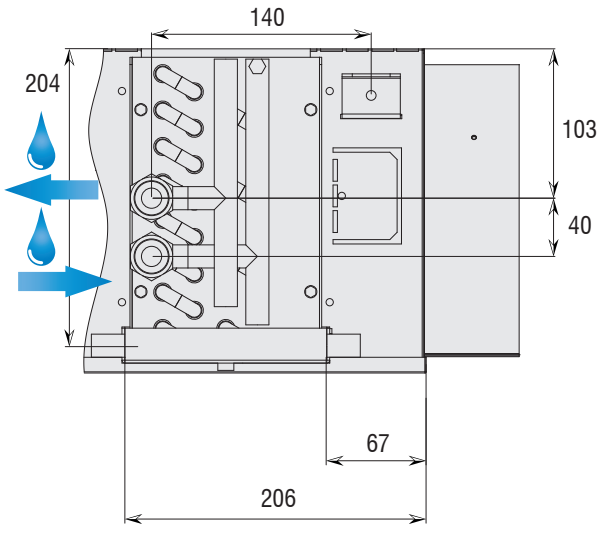




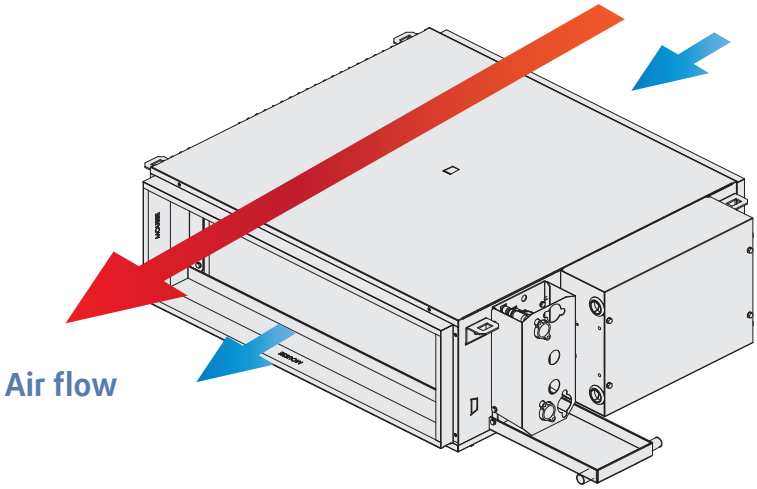


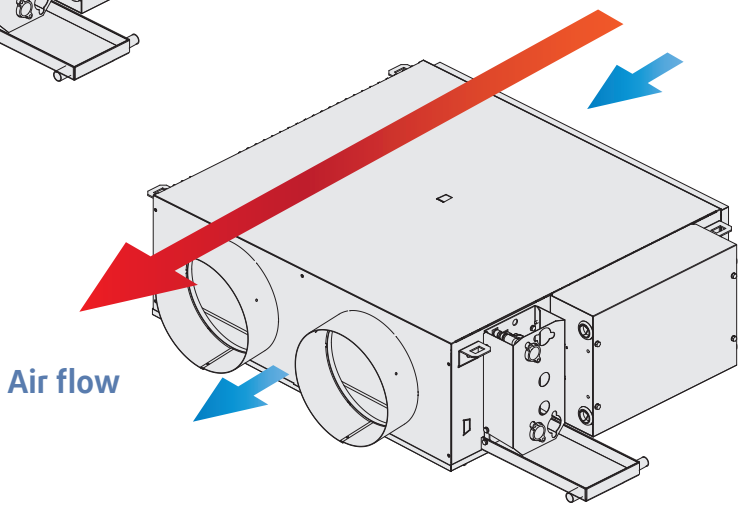



# Definition of the Service Sides

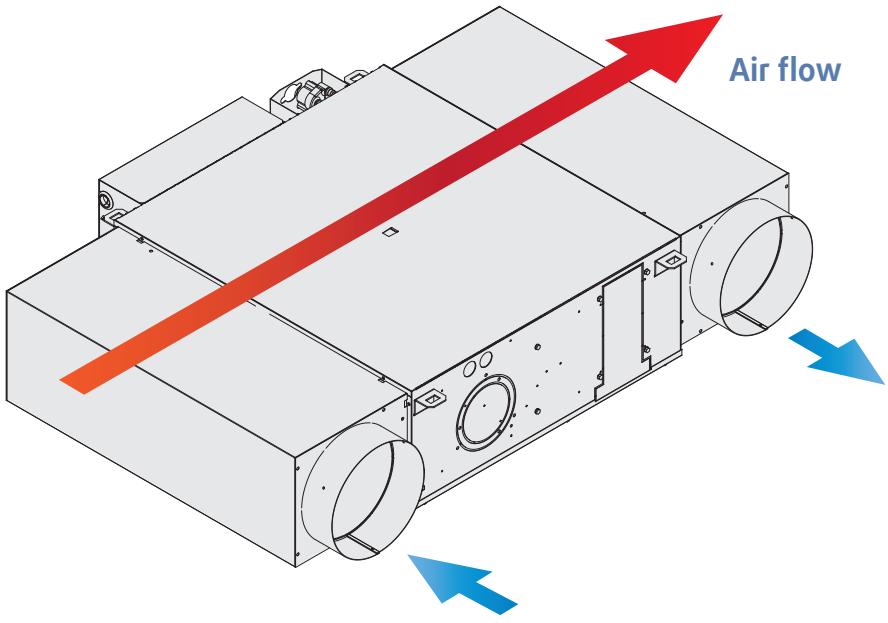
The service side is defined by the position of the water and electrical connections when facing front of air flow.

## RIGHT-HAND service side for water and electrical connections - "I" configuration




## RIGHT-HAND service side for water and electrical connections - "U" configuration



# Notes

# Notes

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