# ELFODuct HP

New generation horizontal and vertical
built-in water-source ductable terminal
for medium and large system

**ELFODuct HP 015.0 - 071.0**

- ► **SERIES RECOMMENDED FOR ESP UP TO 150 PA**
  with a large number of accessories it solves every
  application requirement with ducted distribution

- ► **VERY LOW SOUND LEVELS**
  thanks to the double air inlet centrifugal fans
  directly coupled to the electric motor

- ► **REDUCED DIMENSIONS**
  both in the false ceiling horizontal installation or in
  the wall vertical one

- ► **HIGH ENERGY EFFICIENCY**
  in the configuration with fan deck with DC motor

- ► **AVAILABLE FOR 2 AND 4 PIPE SYSTEMS**

Nominal cooling capacity from 6,82 to 25,5 kW
Nominal heating capacity from 15,2 to 53,7 kW

# Terminal unit Clivet

The hydronic terminal units are very diffused for their versatility and reliability. The Clivet range includes many versions that simplify the application in differents type of installation and building.

| | Commercial | | | |
|---|---|---|---|---|
| | ELFOSpace | ELFODuct MP ELFODuct HP | ELFOSpace BOX3 | ELFOSpace WALL3 |
| Capacities (A27/W7) | 1,5 ÷ 11 kW | 6 ÷ 25 kW | 3 ÷ 11 kW | 2 ÷ 4,5 kW |
| Vertical cased | ☑ | | | ☑ |
| Horizontal cased | ☑ | | ☑ | |
| Vertical uncased | ☑ | ☑ | | |
| Horizontal uncased | ☑ | ☑ | | |
| 2 pipes | ✔ | ✔ | ✔ | ✔ |
| 4 pipes | ✔ | ✔ | ✔ | |
| DC Motor | ✔ | ✔ | ✔ | ✔ |
| High head | | ✔ | | |
| RS485 Connection | ✔ | ✔ | ✔ | ✔ |

# Standard unit technical specifications

## Structure

Main casing (= Bearing structure) made of extremely thick steel-sheet, resistant to rust, corrosion, chemical agents, solvents, aliphatics and alcohols. Single skin panel made of galvanized steel + internal thermal-acoustic insulation (class M1) of all parts in contact with the coil.

Self-supporting and removable panels provided with holes (buttonholes) for ceiling/wall mounting directly through the main casing.

Pre-cuts slots and prearranged holes to configure the unit on request, to install the accessories, to reverse the unit even on-site.

Assembled with self-threading screws for fast, total and easy check/maintenance.

Reduced sizes, optimised volumes.

## Internal exchanger

Heat exchanger coil in copper tubes and aluminium fins, with large surface to increase performances. Each coil is tested under water at 30 bar.
Suitable to work with water at max 15 Bar pressure.

Standard connections on the right side (references for position standing in the airflow with the air blowing on your back) and on request connections on the left side, anyway the unit can be easily reversed even on constuction site.

Coil connections are provided with anti torsion system, manual air vent valves, manual water drain valves.

1 coil (3 or 4 row coils according to the size) for a 2 pipe system and 2 coils (3+2 rows for all sizes) for a 4 pipe system.

## Fan

Fan deck including 1, 2 or 3 centrifugal fans with double air inlet aluminium blades (forward curved fins) directly coupled to the electric motor.

Mounted on elastic and anti vibration supports.

Fan statically and dynamically balanced. Extensive diameter fans with low revolutions.

Electric motor are provided with at least 3 speeds, with heat protection, running capacitor permanently switched on, IP 42, B Class, electric cables protected by double insulation.

Manufactured according to the international standards, 230V–1Ph–50Hz.

Fan deck easy to remove (fixed by just 4 screws).

## Drain pan

Drain pan with double inclination to ensure optimal evacuation of condensation, provided with a discharge (standard on the same side of the water fittings) + external thermal insulation (M1 class).

## Electrical panel

In all series the electrical panel is composed of a simple terminal board for connection to the motor type "Mamut" IP20 (min. 7 poles: 1 Ground + 3 speed + 1 Common + 2 for Bridge) installed outside the unit (for horizontal units, on the same side of the water connections; for vertical units on the opposite side).
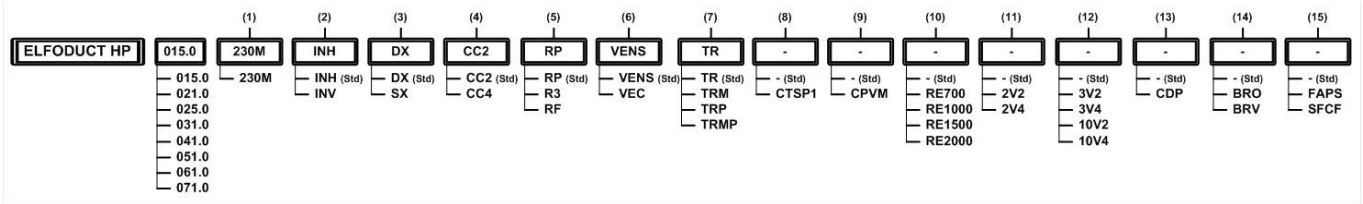
## Configuration options

- INV - Vertical uncased version
- SX - Water fittings to the left
- CC4 - Coil configuration for 4 pipe system (size 015.0 ÷ 021.0, 031.0 ÷ 061.0)
- R3 - Floor air inlet
- RF - Front air inlet (available only with options: INV)
- VEC - High efficiency EC fan (available with options: TR, TRM, TRP, TRMP, CTSP1 + CPVM)
- TRM - Terminal block with minimum water temperature clickson
- TRP - Terminal block with closing cover IP40
- TRMP - Terminal block with closing cover IP40 and minimum water temperature clickson
- CTSP1 - CLIVET TALK TERMINAL SPACE electronics with RS485 Modbus serial port
- CPVM - CPVM - Control additional card of 0-10V valve and EC fan (available only with options: CTSP1)

- RE700 - 0.7 kW integrated electric heater with safety thermostat and power electric panel
- RE1000 - 1.0 kW integrated electric heater with safety thermostat and power electric panel
- RE1500 - 1.5 kW integrated electric heater with safety thermostat and power electric panel
- RE2000 - 2.0 kW integrated electric heater with safety thermostat and power electric panel
- 2V2 - on/off 2-way valve kit for 2 pipe system (available only with options: CC2)
- 2V4 - on/off 2-way valve kit for 4 pipe system (available only with options: CC4)
- 3V2 - Three-way valve kit for 2 pipe system type "on/off" (available only with options: CC2)
- 3V4 - Three-way valve kit for 4 pipe system type "on/off" (available only with options: CC4)
- 10V2 - 0-10V 3 way valve kit for 2 pipe system (available only with options: CC2)
- 10V4 - 0-10V 3 way valve kit for 4 pipe system (available only with options: CC4)
- CDP - Condensate pump
- BRO - Auxiliary drain pan in galvanized steel with thermal insulation (available only with options: INH)
- BRV - Auxiliary drain pan (vertical installation) (available only with options: INV)
- FAPS - EU3 flat air filter (Eurovent 4/5) not ductable
- SFCF - Air filter section (ductable) with EU3 flat air filter (Eurovent 4/5)

## Accessories separately supplied

- HIDE2X - Remote control with E/I + 3V + on/off for wall installation
- HIDE3X - Plurifunctional remote control for wall installation
- HIDE4X - Plurifunctional room control for 0-10V valves
- HIDT2X - HID-T2 electronic room control
- HIDT3X - HID-T3 electronic room control
- HIDTI8X - HID-TI8X electronic room control for 3-speed or 0-10V fan and on/off or 0-10V valve
- DCPX - Control device for more units with a single room control
- PTABX - Remote probe for room air temperature for electromechanical thermostats
- TMX - Hot water min. temperature thermostat
- EH2QX - Heating section with 230V electric heaters, safety thermostat and power electric panel
- EH4QX - Heating section with 400V electric heaters, safety thermostat and power electric panel
- KIB22X - Water and balancing kit for 2-way valve and 2-pipe installation (available only with options: CC2)
- KIB24X - Water and balancing kit for 2-way valve and 4-pipe installation (available only with options: CC4)
- KIB32X - Water and balancing kit for 3-way valve and 2-pipe installation (available only with options: CC2)
- KIB34X - Water and balancing kit for 3-way valve and 4-pipe installation (available only with options: CC4)
- SFHEX - Air filter section (ductable) with EU5 air filter (Eurovent 4/5)
- CUFMX - Air outlet casing with bird-proof grill
- CUFAX - Air intake casing with bird-proof grill and EU3 air filter (Eurovent 4/5)
- PCCMAX - Section with spigots "Ø" with variable diameter and internal insulation for both air supply outlets
- PCCRIX - Section with spigots "Ø" with variable diameter and internal insulation for air intake outlets.
- P90MAX - 90° section for both air supply outlets
- PR90AX - 90° air intake plenum
- SILMAX - Labyrinth noise level attenuator section for both air intake / supply outlets
- MCRX - Mixing and recirculating chamber
- S230X - ON/OFF 230V servomotor for mixing and recirculation chamber (available only with options: MCRX)
- GMX - Supply grille
- GRAX - Return grille with filter
- PMAX - Straight section for both air intake / supply outlets
- PGFMAX - Anti-vibration section for both air supply outlets
- PGFRIX - Anti-vibration section for air intake outlets.

# Configuration Code

| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ELFODUCT HP | 015.0 | 230M | INH | DX | CC2 | RP | VENS | TR | - | - | - | - | - | - | - | - |
| | 015.0 | 230M | INH (Std) | DX (Std) | CC2 (Std) | RP (Std) | VENS (Std) | TR (Std) | - (Std) | - (Std) | - (Std) | - (Std) | - (Std) | - (Std) | - (Std) | - (Std) |
| | 021.0 | | INV | SX | CC4 | R3 | VEC | TRM | CTSP1 | CPVM | RE700 | 2V2 | 3V2 | CDP | BRO | FAPS |
| | 025.0 | | | | | RF | | TRP | | | RE1000 | 2V4 | 3V4 | | BRV | SFCF |
| | 031.0 | | | | | | | TRMP | | | RE1500 | | 10V2 | | | |
| | 041.0 | | | | | | | | | | RE2000 | | 10V4 | | | |
| | 051.0 | | | | | | | | | | | | | | | |
| | 061.0 | | | | | | | | | | | | | | | |
| | 071.0 | | | | | | | | | | | | | | | |

**(1) Voltage**
- Supply voltage 230/1/50

**(2) Versions**
- INH - Uncased horizontal version (standard)
- INV - Vertical uncased version

**(3) Water fittings**
- DX - Water connection to the right (standard)
- SX - Water connections to the left

**(4) Coil configuration**
- CC2 - Coil configuration for 2 pipe system (standard)
- CC4 - Coil configuration for 4 pipe system
  (sizes 015.0 ÷ 021.0, 031.0 ÷ 061.0)

**(5) Air inlet**
- RP - Rear intake (standard)
- R3 - Floor air inlet
- RF - Front air inlet (available only with options: INV)

**(6) Fans**
- VENS - AC fans (standard)
- VEC - High efficiency EC fan (available with options: TR, TRM, TRP, TRMP, CTSP1 + CPVM)

**(7) Electrical panel**
- TR - Terminal boards for connection motor (standard)
- TRM - Terminal block with minimum water temperature clickson
- TRP - Terminal block with closing cover IP40
- TRMP - Terminal block with closing cover IP40 and minimum water temperature clickson

**(8) Electronic version**
- (-) Not required (standard)
- CTSP1 - CLIVET TALK TERMINAL SPACE electronics with RS485 Modbus serial port

**(9) Additional cards**
- (-) Not required (standard)
- CPVM - Control additional card of 0-10V valve and EC fan
  (available only with options: CTSP1)

**(10) Electric heaters**
- (-) Not required (standard)
- RE700 - 0.7 kW integrated electric heater with safety thermostat and power electric panel
- RE1000 - 1.0 kW integrated electric heater with safety thermostat and power electric panel
- RE1500 - 1.5 kW integrated electric heater with safety thermostat and power electric panel
- RE2000 - 2.0 kW integrated electric heater with safety thermostat and power electric panel

**(11) 2-way valves**
- (-) Not required (standard)
- 2V2 - on/off 2-way valve kit for 2 pipe system
  (available only with options: CC2)
- 2V4 - on/off 2-way valve kit for 4 pipe system
  (available only with options: CC4)

**(12) 3-way valves**
- (-) Not required (standard)
- 3V2 - Three-way valve kit for 2 pipe system type "on/off"
  (available only with options: CC2)
- 3V4 - Three-way valve kit for 4 pipe system type "on/off"
  (available only with options: CC4)
- 10V2 - 0-10V 3 way valve kit for 2 pipe system
  (available only with options: CC2)
- 10V4 - 0-10V 3 way valve kit for 4 pipe system
  (available only with options: CC4)

**(13) Condensate pump**
- (-) Not required (standard)
- CDP - Condensate pump

**(14) Auxiliary condensate collection tray**
- (-) Not required (standard)
- BRO - Auxiliary drain pan in galvanized steel with thermal insulation
  (available only with options: INH)
- BRV - Auxiliary drain pan (vertical installation)
  (available only with options: INV)

**(15) Air filter**
- (-) Not required (standard)
- FAPS - EU3 flat air filter (Eurovent 4/5) not ductable
- SFCF - Air filter section (ductable) with EU3 flat air filter (Eurovent 4/5)

# Ductable uncased horizontal version (INH)

**RP - Rear intake (standard)**



DX – Water connection to the right (standard)

**R3 - Floor air inlet**
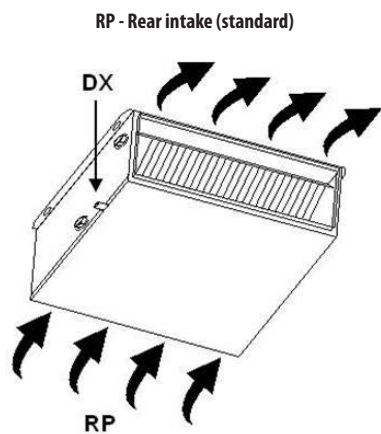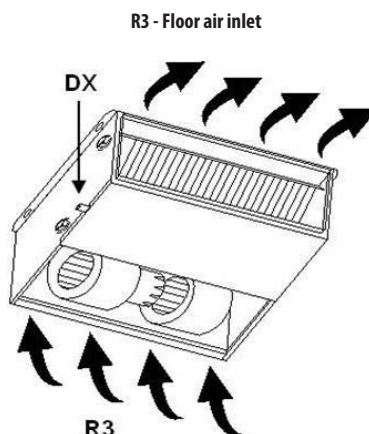


DX - Water connection to the right (standard)

# Ductable uncased vertical version (INV)

**R3 - Floor air inlet**



DX - Water connection to the right (standard)

**RF - Front air intake**
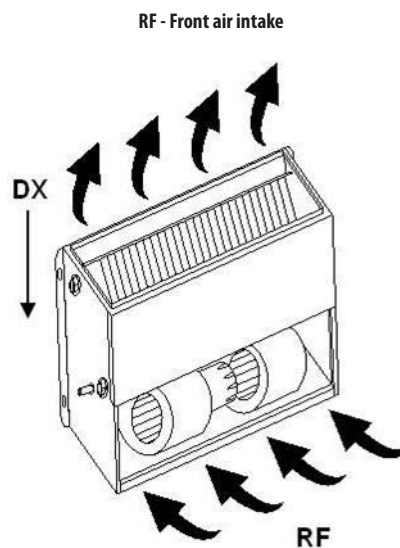


DX - Water connection to the right (standard)

⚠ References for position of fittings: right and left defined by standing in the airflow (with the air blowing on your back).

# General technical data - 2 pipe system (CC2)

## AC fans (standard)

| Size | | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Cooling** | | | | | | | | | | |
| Cooling capacity | (1) | [kW] | 6,82 | 8,65 | 10,1 | 12,0 | 15,2 | 17,8 | 21,2 | 25,5 |
| Sensible capacity | (1) | [kW] | 5,3 | 6,58 | 7,38 | 9,78 | 12,1 | 13,5 | 17,2 | 19,4 |
| Total power input | (1) | [kW] | 0,29 | 0,29 | 0,29 | 0,56 | 0,56 | 0,56 | 0,65 | 0,65 |
| **Heating** | | | | | | | | | | |
| Heating capacity | (2) | [kW] | 15,2 | 18,9 | 20,0 | 28,4 | 35,2 | 37,2 | 50,3 | 53,7 |
| **Internal exchanger** | | | | | | | | | | |
| Number of rows | | [Nr] | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 |
| Water volume | | [l] | 1,9 | 2 | 2,7 | 2,9 | 3 | 4 | 4 | 5,3 |
| Water flow-rate | (1) | [l/s] | 0,33 | 0,41 | 0,48 | 0,57 | 0,73 | 0,85 | 1,01 | 1,22 |
| Water pressure drops | (1) | [kPa] | 35,7 | 39,4 | 38,4 | 28 | 38,3 | 30,6 | 29,7 | 25,0 |
| Water pressure drops | (2) | [kPa] | 34,6 | 36,6 | 29,4 | 31 | 40,0 | 26,1 | 32,6 | 21,6 |
| **Air Handling Section Fans (Supply)** | | | | | | | | | | |
| Type of fans | (3) | | CFG | CFG | CFG | CFG | CFG | CFG | CFG | CFG |
| Number of fans | | [Nr] | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 |
| Airflow | (4) | [l/s] | 375 | 417 | 403 | 764 | 833 | 792 | 1222 | 1167 |
| Airflow | (4) | [m³/h] | 1350 | 1500 | 1450 | 2750 | 3000 | 2850 | 4400 | 4200 |
| Max external static pressure | | [Pa] | 184 | 194 | 194 | 182 | 192 | 192 | 196 | 196 |
| **Connections** | | | | | | | | | | |
| Water fittings | | " | 3/4"F | 3/4"F | 3/4"F | 3/4"F | 3/4"F | 3/4"F | 3/4"F | 3/4"F |
| Condensate drain | (5) | [mm] | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| **Noise levels** | | | | | | | | | | |
| Sound press. level (1m) | (6) | [dB(A)] | 58 | 59 | 59 | 61 | 62 | 62 | 63 | 63 |
| Sound Power Level | (6) | [dB(A)] | 69 | 70 | 70 | 72 | 73 | 73 | 74 | 74 |
| **Power supply STD** | | | | | | | | | | |
| Power supply STD | | [V] | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 |

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
'Contains fluorinated greenhouse gases'(GWP 2087,5)

(1) Indoor air at 27°C D.B/19° C W.B.
Water temperature in / out 7°C / 12°C
Air flow at maximum speed (ESP = 0Pa)
(2) Indoor air temperature at 20°C
Water inlet 70°C and outlet 60°C
Air flow at maximum speed (ESP = 0Pa)

(3) CFG = AC centrifugal fan
(4) Air flow at maximum speed - (ESP = 0Pa)
(5) Intended as an external diameter
(6) The sound levels refer to ceiling units without false ceiling, with nominal air flow, fan supply 220V, at maximum speed. Sound pressure levels referred to 1 m from unit external surface. Measurement maded with intake plenum and air filter mounted.


# Electrical data - 2 pipe system (CC2)

## AC fans (standard)                                          Voltage 230/1/50 ± 10%

| Size | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| **F.L.A. - Full load current at max admissible conditions** | | | | | | | | | |
| FLA Total | [A] | 1,3 | 1,3 | 1,3 | 2,6 | 2,6 | 2,6 | 3 | 3 |
| **F.L.I. - Full load power input at max admissible conditions** | | | | | | | | | |
| FLI Total | [kW] | 0,29 | 0,29 | 0,29 | 0,56 | 0,56 | 0,56 | 0,65 | 0,65 |

(1) Indoor air at 27°C D.B. /19° C W.B.
Water temperature in / out 7°C / 12°C
Air flow at maximum speed (ESP = 0Pa)

(2) Indoor air temperature at 20°C
Water inlet 70°C and outlet 60°C
Air flow at maximum speed (ESP = 0Pa)

# General technical data - 4 pipe system (CC4)

## AC fans (standard)

| Size | | | 015.0 | 021.0 | 031.0 | 041.0 | 051.0 | 061.0 |
|---|---|---|---|---|---|---|---|---|
| **Cooling** | | | | | | | | |
| Cooling capacity | (1) | [kW] | 6,57 | 8,28 | 11,5 | 14,6 | 16,1 | 20,3 |
| Sensible capacity | (1) | [kW] | 5,07 | 6,25 | 9,33 | 11,5 | 13,3 | 16,4 |
| Total power input | (1) | [kW] | 0,29 | 0,29 | 0,56 | 0,56 | 0,65 | 0,65 |
| **Heating** | | | | | | | | |
| Heating capacity | (2) | [kW] | 12,1 | 12,9 | 22,3 | 23,6 | 31,9 | 33,6 |
| **Internal exchanger** | | | | | | | | |
| Number of rows | | [Nr] | 3 + 2 | 3 + 2 | 3 + 2 | 3 + 2 | 3 + 2 | 3 + 2 |
| Water volume | | [l] | 1,9 + 1,1 | 2 + 1,1 | 2,9 + 1,7 | 3 + 1,7 | 4 + 2,3 | 4 + 2,3 |
| Water flow-rate | (1) | [l/s] | 0,31 | 0,4 | 0,55 | 0,7 | 0,77 | 0,97 |
| Water pressure drops | (1) | [kPa] | 33,1 | 36,1 | 25,7 | 35,3 | 19,5 | 27,2 |
| Water pressure drops | (2) | [kPa] | 35,5 | 39,2 | 32,3 | 35,6 | 29,7 | 32,4 |
| **Air Handling Section Fans (Supply)** | | | | | | | | |
| Type of fans | (3) | | CFG | CFG | CFG | CFG | CFG | CFG |
| Number of fans | | [Nr] | 1 | 1 | 2 | 2 | 3 | 3 |
| Airflow | (4) | [l/s] | 353 | 389 | 714 | 778 | 1056 | 1139 |
| Airflow | (4) | [m³/h] | 1270 | 1400 | 2570 | 2800 | 3800 | 4100 |
| Max external static pressure | | [Pa] | 186 | 196 | 184 | 192 | 186 | 196 |
| **Connections** | | | | | | | | |
| Water fittings | | " | 3/4"F+ 1/2"F | 3/4"F+ 1/2"F | 3/4"F+ 1/2"F | 3/4"F+ 1/2"F | 3/4"F+ 1/2"F | 3/4"F+ 1/2"F |
| Condensate drain | (5) | [mm] | 20 | 20 | 20 | 20 | 20 | 20 |
| **Noise levels** | | | | | | | | |
| Sound pressure level (1m) | (6) | [dB(A)] | 58 | 59 | 61 | 62 | 62 | 63 |
| Sound Power Level | (6) | [dB(A)] | 69 | 70 | 72 | 73 | 73 | 74 |
| **Power supply STD** | | | | | | | | |
| Power supply STD | | [V] | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 |

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
'Contains fluorinated greenhouse gases' (GWP 2087,5)

(1) Indoor air at 27°C D.B/19° C W.B.
Water temperature in / out 7°C / 12°C
Air flow at maximum speed (ESP = 0Pa)
(2) Indoor air temperature at 20°C
Water inlet 70°C and outlet 60°C
Air flow at maximum speed (ESP = 0Pa)

(3) CFG = AC centrifugal fan
(4) Air flow at maximum speed - (ESP = 0Pa)
(5) Intended as an external diameter
(6) The sound levels refer to ceiling units without false ceiling, with nominal air flow, fan supply 220V, at maximum speed. Sound pressure levels referred to 1 m from unit external surface. Measurement maded with intake plenum and air filter mounted.

# Electrical data - 4 pipe system (CC4)

## AC fans (standard)                                    Voltage 230/1/50 ± 10%

| Size | | 015.0 | 021.0 | 031.0 | 041.0 | 051.0 | 061.0 |
|---|---|---|---|---|---|---|---|
| **F.L.A. - Full load current at max admissible conditions** | | | | | | | |
| FLA Total | [A] | 1,3 | 1,3 | 2,6 | 2,6 | 3 | 3 |
| **F.L.I. - Full load power input at max admissible conditions** | | | | | | | |
| FLI Total | [kW] | 0,29 | 0,29 | 0,56 | 0,56 | 0,65 | 0,65 |

(1) Indoor air at 27°C D.B/19° C W.B.
Water temperature in / out 7°C / 12°C
Air flow at maximum speed (ESP = 0Pa)

(2) Indoor air temperature at 20°C
Water inlet 70°C and outlet 60°C
Air flow at maximum speed (ESP = 0Pa)

# Operating limits

## 2 pipe system (CC2)

| Size | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| **Heating** | | | | | | | | | |
| Max inlet water temperature | [°C] | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Min inlet water temperature | [°C] | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Max D.B. air inlet temperature | [°C] | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Min D.B. air inlet temperature | [°C] | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **Cooling** | | | | | | | | | |
| Max W.B. air inlet temperature | [°C] | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Min W.B. air inlet temperature | [°C] | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Maximum water side pressure | [bar] | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |

⚠ Max water side pressure = Coil max pressure. In presence of accessories (for example 2-3 way valves) the max water side pressure is 15 bar.

## 4-pipe system (CC4)

| Size | | 015.0 | 021.0 | 031.0 | 041.0 | 051.0 | 061.0 |
|---|---|---|---|---|---|---|---|
| **Heating** | | | | | | | |
| Max inlet water temperaturet | [°C] | 100 | 100 | 100 | 100 | 100 | 100 |
| Min inlet water temperature | [°C] | 3 | 3 | 3 | 3 | 3 | 3 |
| Max D.B. air inlet temperature | [°C] | 40 | 40 | 40 | 40 | 40 | 40 |
| Min D.B. air inlet temperature | [°C] | 2 | 2 | 2 | 2 | 2 | 2 |
| **Cooling** | | | | | | | |
| Max W.B. air inlet temperature | [°C] | 40 | 40 | 40 | 40 | 40 | 40 |
| Min W.B. air inlet temperature | [°C] | 2 | 2 | 2 | 2 | 2 | 2 |
| Maximum water side pressure | [bar] | 30 | 30 | 30 | 30 | 30 | 30 |

⚠ Max water side pressure = Coil max pressure. In presence of accessories (for example 2-3 way valves) the max water side pressure is 15 bar.

# Sound levels
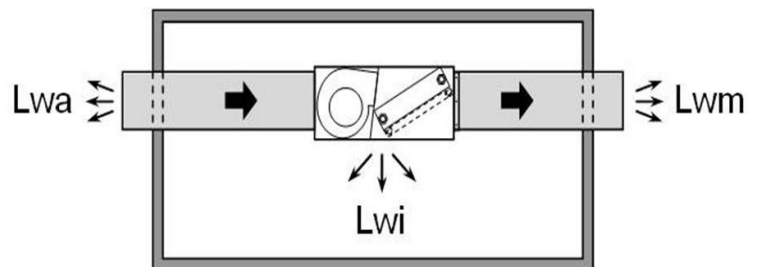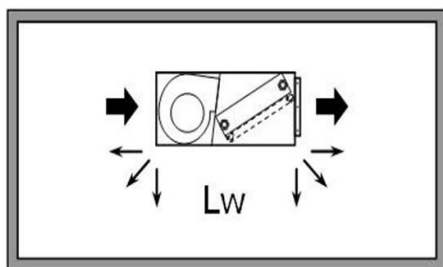


| | |
|---|---|
| **Lw** | Total sound power emitted by the unit |
| **Lwi** | Radiated sound power, emitted by the lateral surfaces of the unit |
| **Lwm** | Sound power emitted by the air supply side of the unit |
| **Lwa** | Sound power emitted by the air intake side of the unit |

# Sound levels - Size 015.0 (CC2-CC4)

| Static pressure | Sound power | Fan speed | Sound power level (dB) Octave band (Hz) | | | | | | | Sound pressure level | Sound power level |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | dB(A) | dB(A) |
| 0 Pa | Lw | Min | 53,1 | 55,2 | 51,9 | 50,2 | 46,8 | 40,9 | 32,2 | 44 | 55 |
| | | Med | 60,7 | 62,9 | 59,2 | 58,7 | 54,7 | 51,7 | 44,6 | 52 | 63 |
| | | Max | 64,6 | 68,8 | 64,1 | 65,0 | 60,8 | 58,3 | 53,0 | 58 | 69 |
| | Lwi | Min | 35,3 | 34,7 | 26,4 | 21,9 | 12,4 | n.m. | n.m. | 18 | 29 |
| | | Med | 42,9 | 42,4 | 33,6 | 30,5 | 20,2 | 11,7 | n.m. | 26 | 37 |
| | | Max | 46,8 | 48,3 | 38,5 | 36,7 | 26,4 | 18,3 | 7,7 | 32 | 43 |
| | Lwm | Min | 49,5 | 51,3 | 45,4 | 45,1 | 43,8 | 37,4 | 28,6 | 39 | 50 |
| | | Med | 57,0 | 59,0 | 52,6 | 53,7 | 51,6 | 48,2 | 41,0 | 48 | 59 |
| | | Max | 60,9 | 64,9 | 57,6 | 60,0 | 57,8 | 54,8 | 49,4 | 54 | 65 |
| | Lwa | Min | 50,5 | 52,8 | 50,8 | 48,5 | 43,8 | 38,3 | 29,6 | 42 | 53 |
| | | Med | 58,1 | 60,6 | 58,1 | 57,1 | 51,7 | 49,1 | 42,1 | 50 | 61 |
| | | Max | 62,0 | 66,4 | 63,0 | 63,4 | 57,8 | 55,7 | 50,4 | 56 | 67 |
| 50 Pa | Lw | Min | 54,8 | 56,8 | 53,6 | 51,8 | 48,5 | 42,5 | 33,8 | 46 | 57 |
| | | Med | 62,3 | 64,6 | 60,8 | 60,4 | 56,3 | 53,4 | 46,3 | 54 | 65 |
| | | Max | 66,2 | 70,4 | 65,7 | 66,7 | 62,5 | 59,9 | 54,6 | 60 | 71 |
| | Lwi | Min | 36,9 | 36,3 | 28,0 | 23,6 | 14,0 | n.m. | n.m. | 20 | 31 |
| | | Med | 44,5 | 44,1 | 35,3 | 32,1 | 21,9 | 13,4 | n.m. | 28 | 39 |
| | | Max | 48,4 | 49,9 | 40,2 | 38,4 | 28,1 | 20,0 | 9,3 | 33 | 44 |
| | Lwm | Min | 51,1 | 52,9 | 47,0 | 46,8 | 45,4 | 39,0 | 30,3 | 41 | 52 |
| | | Med | 58,7 | 60,7 | 54,3 | 55,4 | 53,3 | 49,9 | 42,7 | 49 | 60 |
| | | Max | 62,6 | 66,5 | 59,2 | 61,6 | 59,5 | 56,4 | 51,0 | 55 | 66 |
| | Lwa | Min | 52,2 | 54,5 | 52,4 | 50,2 | 45,5 | 40,0 | 31,3 | 44 | 55 |
| | | Med | 59,7 | 62,3 | 59,7 | 58,8 | 53,3 | 50,8 | 43,8 | 52 | 63 |
| | | Max | 63,6 | 68,1 | 64,6 | 65,0 | 59,5 | 57,3 | 52,1 | 58 | 69 |
| 100 Pa | Lw | Min | 56,4 | 58,5 | 55,2 | 53,5 | 50,1 | 44,2 | 35,5 | 47 | 58 |
| | | Med | 64,0 | 66,3 | 62,5 | 62,1 | 58,0 | 55,0 | 47,9 | 55 | 66 |
| | | Max | 67,9 | 72,1 | 67,4 | 68,3 | 64,2 | 61,6 | 56,3 | 61 | 72 |
| | Lwi | Min | 38,6 | 38,0 | 29,7 | 25,2 | 15,7 | n.m. | n.m. | 22 | 33 |
| | | Med | 46,2 | 45,7 | 37,0 | 33,8 | 23,5 | 15,1 | n.m. | 30 | 41 |
| | | Max | 50,1 | 51,6 | 41,9 | 40,1 | 29,7 | 21,6 | 11,0 | 35 | 46 |
| | Lwm | Min | 52,8 | 54,6 | 48,7 | 48,4 | 47,1 | 40,7 | 31,9 | 43 | 54 |
| | | Med | 60,4 | 62,4 | 56,0 | 57,0 | 55,0 | 51,5 | 44,4 | 51 | 62 |
| | | Max | 64,3 | 68,2 | 60,9 | 63,3 | 61,1 | 58,1 | 52,7 | 57 | 68 |
| | Lwa | Min | 53,8 | 56,2 | 54,1 | 51,9 | 47,1 | 41,6 | 33,0 | 45 | 56 |
| | | Med | 61,4 | 63,9 | 61,4 | 60,4 | 55,0 | 52,4 | 45,4 | 53 | 64 |
| | | Max | 65,3 | 69,8 | 66,3 | 66,7 | 61,2 | 59,0 | 53,8 | 59 | 70 |
| 150 Pa | Lw | Min | 58,1 | 60,2 | 56,9 | 55,2 | 51,8 | 45,9 | 37,1 | 49 | 60 |
| | | Med | 65,6 | 67,9 | 64,1 | 63,7 | 59,6 | 56,7 | 49,6 | 57 | 68 |
| | | Max | 69,6 | 73,8 | 69,1 | 70,0 | 65,8 | 63,2 | 57,9 | 63 | 74 |
| | Lwi | Min | 40,3 | 39,6 | 31,4 | 26,9 | 17,4 | 5,9 | n.m. | 23 | 34 |
| | | Med | 47,8 | 47,4 | 38,6 | 35,5 | 25,2 | 16,7 | n.m. | 31 | 42 |
| | | Max | 51,7 | 53,2 | 43,5 | 41,7 | 31,4 | 23,3 | 12,6 | 37 | 48 |
| | Lwm | Min | 54,4 | 56,3 | 50,4 | 50,1 | 48,8 | 42,4 | 33,6 | 44 | 55 |
| | | Med | 62,0 | 64,0 | 57,6 | 58,7 | 56,6 | 53,2 | 46,0 | 53 | 64 |
| | | Max | 65,9 | 69,9 | 62,5 | 64,9 | 62,8 | 59,7 | 54,4 | 59 | 70 |
| | Lwa | Min | 55,5 | 57,8 | 55,8 | 53,5 | 48,8 | 43,3 | 34,6 | 47 | 58 |
| | | Med | 63,1 | 65,6 | 63,0 | 62,1 | 56,6 | 54,1 | 47,1 | 55 | 66 |
| | | Max | 67,0 | 71,4 | 67,9 | 68,4 | 62,8 | 60,7 | 55,4 | 61 | 72 |

The sound levels refer to ceiling units without false ceiling, fan supply 220V.
Sound pressure levels referred to 1 m from unit external surface.
Measurement maded with intake plenum and air filter mounted.
n.m. = not measurable

# Sound levels - Size 021.0 (CC2-CC4) and 025.0 (CC2)

| Static pressure | Sound power | Fan speed | Sound power level (dB) Octave band (Hz) | | | | | | | Sound pressure level | Sound power level |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | dB(A) | dB(A) |
| 0 Pa | Lw | Min | 54,1 | 56,2 | 52,9 | 51,2 | 47,8 | 41,9 | 33,2 | 45 | 56 |
| | | Med | 61,7 | 63,9 | 60,2 | 59,7 | 55,7 | 52,7 | 45,6 | 53 | 64 |
| | | Max | 65,6 | 69,8 | 65,1 | 66,0 | 61,8 | 59,3 | 54,0 | 59 | 70 |
| | Lwi | Min | 36,3 | 35,7 | 27,4 | 22,9 | 13,4 | n.m. | n.m. | 19 | 30 |
| | | Med | 43,9 | 43,4 | 34,6 | 31,5 | 21,2 | 12,7 | n.m. | 27 | 38 |
| | | Max | 47,8 | 49,3 | 39,5 | 37,7 | 27,4 | 19,3 | 8,7 | 33 | 44 |
| | Lwm | Min | 50,5 | 52,3 | 46,4 | 46,1 | 44,8 | 38,4 | 29,6 | 40 | 51 |
| | | Med | 58,0 | 60,0 | 53,6 | 54,7 | 52,6 | 49,2 | 42,0 | 49 | 60 |
| | | Max | 61,9 | 65,9 | 58,6 | 61,0 | 58,8 | 55,8 | 50,4 | 55 | 66 |
| | Lwa | Min | 51,5 | 53,8 | 51,8 | 49,5 | 44,8 | 39,3 | 30,6 | 43 | 54 |
| | | Med | 59,1 | 61,6 | 59,1 | 58,1 | 52,7 | 50,1 | 43,1 | 51 | 62 |
| | | Max | 63,0 | 67,4 | 64,0 | 64,4 | 58,8 | 56,7 | 51,4 | 57 | 68 |
| 50 Pa | Lw | Min | 55,8 | 57,8 | 54,6 | 52,8 | 49,5 | 43,5 | 34,8 | 47 | 58 |
| | | Med | 63,3 | 65,6 | 61,8 | 61,4 | 57,3 | 54,4 | 47,3 | 55 | 66 |
| | | Max | 67,2 | 71,4 | 66,7 | 67,7 | 63,5 | 60,9 | 55,6 | 61 | 72 |
| | Lwi | Min | 37,9 | 37,3 | 29,0 | 24,6 | 15,0 | n.m. | n.m. | 21 | 32 |
| | | Med | 45,5 | 45,1 | 36,3 | 33,1 | 22,9 | 14,4 | n.m. | 29 | 40 |
| | | Max | 49,4 | 50,9 | 41,2 | 39,4 | 29,1 | 21,0 | 10,3 | 34 | 45 |
| | Lwm | Min | 52,1 | 53,9 | 48,0 | 47,8 | 46,4 | 40,0 | 31,3 | 42 | 53 |
| | | Med | 59,7 | 61,7 | 55,3 | 56,4 | 54,3 | 50,9 | 43,7 | 50 | 61 |
| | | Max | 63,6 | 67,5 | 60,2 | 62,6 | 60,5 | 57,4 | 52,0 | 56 | 67 |
| | Lwa | Min | 53,2 | 55,5 | 53,4 | 51,2 | 46,5 | 41,0 | 32,3 | 45 | 56 |
| | | Med | 60,7 | 63,3 | 60,7 | 59,8 | 54,3 | 51,8 | 44,8 | 53 | 64 |
| | | Max | 64,6 | 69,1 | 65,6 | 66,0 | 60,5 | 58,3 | 53,1 | 59 | 70 |
| 100 Pa | Lw | Min | 57,4 | 59,5 | 56,2 | 54,5 | 51,1 | 45,2 | 36,5 | 48 | 59 |
| | | Med | 65,0 | 67,3 | 63,5 | 63,1 | 59,0 | 56,0 | 48,9 | 56 | 67 |
| | | Max | 68,9 | 73,1 | 68,4 | 69,3 | 65,2 | 62,6 | 57,3 | 62 | 73 |
| | Lwi | Min | 39,6 | 39,0 | 30,7 | 26,2 | 16,7 | 5,2 | n.m. | 23 | 34 |
| | | Med | 47,2 | 46,7 | 38,0 | 34,8 | 24,5 | 16,1 | n.m. | 31 | 42 |
| | | Max | 51,1 | 52,6 | 42,9 | 41,1 | 30,7 | 22,6 | 12,0 | 36 | 47 |
| | Lwm | Min | 53,8 | 55,6 | 49,7 | 49,4 | 48,1 | 41,7 | 32,9 | 44 | 55 |
| | | Med | 61,4 | 63,4 | 57,0 | 58,0 | 56,0 | 52,5 | 45,4 | 52 | 63 |
| | | Max | 65,3 | 69,2 | 61,9 | 64,3 | 62,1 | 59,1 | 53,7 | 58 | 69 |
| | Lwa | Min | 54,8 | 57,2 | 55,1 | 52,9 | 48,1 | 42,6 | 34,0 | 46 | 57 |
| | | Med | 62,4 | 64,9 | 62,4 | 61,4 | 56,0 | 53,4 | 46,4 | 54 | 65 |
| | | Max | 66,3 | 70,8 | 67,3 | 67,7 | 62,2 | 60,0 | 54,8 | 60 | 71 |
| 150 Pa | Lw | Min | 59,1 | 61,2 | 57,9 | 56,2 | 52,8 | 46,9 | 38,1 | 50 | 61 |
| | | Med | 66,6 | 68,9 | 65,1 | 64,7 | 60,6 | 57,7 | 50,6 | 58 | 69 |
| | | Max | 70,6 | 74,8 | 70,1 | 71,0 | 66,8 | 64,2 | 58,9 | 64 | 75 |
| | Lwi | Min | 41,3 | 40,6 | 32,4 | 27,9 | 18,4 | 6,9 | n.m. | 24 | 35 |
| | | Med | 48,8 | 48,4 | 39,6 | 36,5 | 26,2 | 17,7 | 5,3 | 32 | 43 |
| | | Max | 52,7 | 54,2 | 44,5 | 42,7 | 32,4 | 24,3 | 13,6 | 38 | 49 |
| | Lwm | Min | 55,4 | 57,3 | 51,4 | 51,1 | 49,8 | 43,4 | 34,6 | 45 | 56 |
| | | Med | 63,0 | 65,0 | 58,6 | 59,7 | 57,6 | 54,2 | 47,0 | 54 | 65 |
| | | Max | 66,9 | 70,9 | 63,5 | 65,9 | 63,8 | 60,7 | 55,4 | 60 | 71 |
| | Lwa | Min | 56,5 | 58,8 | 56,8 | 54,5 | 49,8 | 44,3 | 35,6 | 48 | 59 |
| | | Med | 64,1 | 66,6 | 64,0 | 63,1 | 57,6 | 55,1 | 48,1 | 56 | 67 |
| | | Max | 68,0 | 72,4 | 68,9 | 69,4 | 63,8 | 61,7 | 56,4 | 62 | 73 |

The sound levels refer to ceiling units without false ceiling, fan supply 220V.
Sound pressure levels referred to 1 m from unit external surface.
Measurement maded with intake plenum and air filter mounted.
n.m. = not measurable

# Sound levels - Size 031.0 (CC2-CC4)

| Static pressure | Sound power | Fan speed | Sound power level (dB) Octave band (Hz) | | | | | | | Sound pressure level | Sound power level |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | dB(A) | dB(A) |
| 0 Pa | Lw | Min | 53,6 | 57,6 | 54,6 | 51,4 | 49,7 | 43,4 | 35,3 | 46 | 57 |
| | | Med | 63,3 | 67,3 | 64,8 | 63,4 | 59,7 | 57,5 | 51,3 | 57 | 68 |
| | | Max | 66,0 | 70,4 | 68,1 | 67,7 | 63,1 | 60,9 | 55,8 | 61 | 72 |
| | Lwi | Min | 35,7 | 37,1 | 29,1 | 23,1 | 15,2 | n.m. | n.m. | 21 | 32 |
| | | Med | 45,5 | 46,7 | 39,2 | 35,1 | 25,3 | 17,6 | 6,0 | 31 | 42 |
| | | Max | 48,2 | 49,9 | 42,5 | 39,4 | 28,7 | 20,9 | 10,5 | 34 | 45 |
| | Lwm | Min | 49,8 | 53,6 | 48,0 | 46,2 | 46,5 | 39,8 | 31,7 | 41 | 52 |
| | | Med | 59,6 | 63,2 | 58,1 | 58,2 | 56,6 | 53,9 | 47,7 | 52 | 63 |
| | | Max | 62,2 | 66,4 | 61,4 | 62,5 | 60,0 | 57,3 | 52,1 | 56 | 67 |
| | Lwa | Min | 51,1 | 55,4 | 53,6 | 49,8 | 46,8 | 40,9 | 32,9 | 44 | 55 |
| | | Med | 60,8 | 65,0 | 63,7 | 61,8 | 56,9 | 55,0 | 48,9 | 55 | 66 |
| | | Max | 63,5 | 68,2 | 67,0 | 66,2 | 60,3 | 58,4 | 53,3 | 59 | 70 |
| 50 Pa | Lw | Min | 55,3 | 59,4 | 56,4 | 53,2 | 51,5 | 45,2 | 37,1 | 48 | 59 |
| | | Med | 65,1 | 69,0 | 66,6 | 65,2 | 61,5 | 59,3 | 53,1 | 59 | 70 |
| | | Max | 67,8 | 72,2 | 69,9 | 69,5 | 64,9 | 62,7 | 57,6 | 63 | 74 |
| | Lwi | Min | 37,5 | 38,9 | 30,9 | 24,9 | 17,0 | 5,2 | n.m. | 22 | 33 |
| | | Med | 47,3 | 48,5 | 41,0 | 36,9 | 27,1 | 19,3 | 7,8 | 33 | 44 |
| | | Max | 50,0 | 51,7 | 44,3 | 41,2 | 30,5 | 22,7 | 12,3 | 36 | 47 |
| | Lwm | Min | 51,6 | 55,4 | 49,8 | 47,9 | 48,3 | 41,6 | 33,5 | 43 | 54 |
| | | Med | 61,4 | 65,0 | 59,9 | 60,0 | 58,4 | 55,7 | 49,5 | 54 | 65 |
| | | Max | 64,0 | 68,2 | 63,2 | 64,3 | 61,7 | 59,1 | 53,9 | 58 | 69 |
| | Lwa | Min | 52,9 | 57,1 | 55,4 | 51,6 | 48,6 | 42,7 | 34,7 | 46 | 57 |
| | | Med | 62,6 | 66,8 | 65,5 | 63,6 | 58,7 | 56,8 | 50,7 | 57 | 68 |
| | | Max | 65,3 | 70,0 | 68,8 | 67,9 | 62,1 | 60,2 | 55,1 | 61 | 72 |
| 100 Pa | Lw | Min | 57,1 | 61,2 | 58,2 | 54,9 | 53,2 | 47,0 | 38,9 | 50 | 61 |
| | | Med | 66,9 | 70,8 | 68,3 | 67,0 | 63,3 | 61,1 | 54,9 | 61 | 72 |
| | | Max | 69,6 | 74,0 | 71,6 | 71,3 | 66,7 | 64,5 | 59,3 | 64 | 75 |
| | Lwi | Min | 39,3 | 40,7 | 32,7 | 26,7 | 18,8 | 7,0 | n.m. | 24 | 35 |
| | | Med | 49,1 | 50,3 | 42,8 | 38,7 | 28,9 | 21,1 | 9,6 | 34 | 45 |
| | | Max | 51,8 | 53,5 | 46,1 | 43,0 | 32,3 | 24,5 | 14,0 | 38 | 49 |
| | Lwm | Min | 53,4 | 57,1 | 51,6 | 49,7 | 50,1 | 43,4 | 35,2 | 45 | 56 |
| | | Med | 63,1 | 66,8 | 61,7 | 61,7 | 60,1 | 57,5 | 51,2 | 56 | 67 |
| | | Max | 65,8 | 70,0 | 65,0 | 66,1 | 63,5 | 60,9 | 55,7 | 60 | 71 |
| | Lwa | Min | 54,6 | 58,9 | 57,1 | 53,4 | 50,4 | 44,5 | 36,5 | 48 | 59 |
| | | Med | 64,4 | 68,6 | 67,3 | 65,4 | 60,5 | 58,6 | 52,5 | 59 | 70 |
| | | Max | 67,1 | 71,8 | 70,6 | 69,7 | 63,9 | 62,0 | 56,9 | 63 | 74 |
| 150 Pa | Lw | Min | 58,9 | 63,0 | 60,0 | 56,7 | 55,0 | 48,8 | 40,7 | 51 | 62 |
| | | Med | 68,7 | 72,6 | 70,1 | 68,8 | 65,1 | 62,9 | 56,7 | 62 | 73 |
| | | Max | 71,4 | 75,8 | 73,4 | 73,1 | 68,5 | 66,3 | 61,1 | 66 | 77 |
| | Lwi | Min | 41,1 | 42,4 | 34,5 | 28,5 | 20,6 | 8,8 | n.m. | 26 | 37 |
| | | Med | 50,9 | 52,1 | 44,6 | 40,5 | 30,7 | 22,9 | 11,4 | 36 | 47 |
| | | Max | 53,6 | 55,3 | 47,9 | 44,8 | 34,1 | 26,3 | 15,8 | 40 | 51 |
| | Lwm | Min | 55,2 | 58,9 | 53,4 | 51,5 | 51,8 | 45,2 | 37,0 | 47 | 58 |
| | | Med | 64,9 | 68,6 | 63,5 | 63,5 | 61,9 | 59,3 | 53,0 | 58 | 69 |
| | | Max | 67,6 | 71,8 | 66,8 | 67,9 | 65,3 | 62,6 | 57,5 | 62 | 73 |
| | Lwa | Min | 56,4 | 60,7 | 58,9 | 55,2 | 52,2 | 46,3 | 38,3 | 50 | 61 |
| | | Med | 66,2 | 70,4 | 69,1 | 67,2 | 62,3 | 60,4 | 54,2 | 61 | 72 |
| | | Max | 68,9 | 73,5 | 72,3 | 71,5 | 65,7 | 63,8 | 58,7 | 64 | 75 |

The sound levels refer to ceiling units without false ceiling, fan supply 220V.
Sound pressure levels referred to 1 m from unit external surface.
Measurement maded with intake plenum and air filter mounted.
n.m. = not measurable

## Sound levels - Size 041.0 (CC2-CC4) and 051.0 (CC2)

| Static pressure | Sound power | Fan speed | Sound power level (dB) | | | | | | | Sound pressure level | Sound power level |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Octave band (Hz) | | | | | | | | |
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | dB(A) | dB(A) |
| **0 Pa** | Lw | Min | 54,6 | 58,6 | 55,6 | 52,4 | 50,7 | 44,4 | 36,3 | **47** | **58** |
| | | Med | 64,3 | 68,3 | 65,8 | 64,4 | 60,7 | 58,5 | 52,3 | **58** | **69** |
| | | Max | 67,0 | 71,4 | 69,1 | 68,7 | 64,1 | 61,9 | 56,8 | **62** | **73** |
| | Lwi | Min | 36,7 | 38,1 | 30,1 | 24,1 | 16,2 | n.m. | n.m. | **22** | **33** |
| | | Med | 46,5 | 47,7 | 40,2 | 36,1 | 26,3 | 18,6 | 7,0 | **32** | **43** |
| | | Max | 49,2 | 50,9 | 43,5 | 40,4 | 29,7 | 21,9 | 11,5 | **35** | **46** |
| | Lwm | Min | 50,8 | 54,6 | 49,0 | 47,2 | 47,5 | 40,8 | 32,7 | **42** | **53** |
| | | Med | 60,6 | 64,2 | 59,1 | 59,2 | 57,6 | 54,9 | 48,7 | **53** | **64** |
| | | Max | 63,2 | 67,4 | 62,4 | 63,5 | 61,0 | 58,3 | 53,1 | **57** | **68** |
| | Lwa | Min | 52,1 | 56,4 | 54,6 | 50,8 | 47,8 | 41,9 | 33,9 | **45** | **56** |
| | | Med | 61,8 | 66,0 | 64,7 | 62,8 | 57,9 | 56,0 | 49,9 | **56** | **67** |
| | | Max | 64,5 | 69,2 | 68,0 | 67,2 | 61,3 | 59,4 | 54,3 | **60** | **71** |
| **50 Pa** | Lw | Min | 56,3 | 60,4 | 57,4 | 54,2 | 52,5 | 46,2 | 38,1 | **49** | **60** |
| | | Med | 66,1 | 70,0 | 67,6 | 66,2 | 62,5 | 60,3 | 54,1 | **60** | **71** |
| | | Max | 68,8 | 73,2 | 70,9 | 70,5 | 65,9 | 63,7 | 58,6 | **64** | **75** |
| | Lwi | Min | 38,5 | 39,9 | 31,9 | 25,9 | 18,0 | 6,2 | n.m. | **23** | **34** |
| | | Med | 48,3 | 49,5 | 42,0 | 37,9 | 28,1 | 20,3 | 8,8 | **34** | **45** |
| | | Max | 51,0 | 52,7 | 45,3 | 42,2 | 31,5 | 23,7 | 13,3 | **37** | **48** |
| | Lwm | Min | 52,6 | 56,4 | 50,8 | 48,9 | 49,3 | 42,6 | 34,5 | **44** | **55** |
| | | Med | 62,4 | 66,0 | 60,9 | 61,0 | 59,4 | 56,7 | 50,5 | **55** | **66** |
| | | Max | 65,0 | 69,2 | 64,2 | 65,3 | 62,7 | 60,1 | 54,9 | **59** | **70** |
| | Lwa | Min | 53,9 | 58,1 | 56,4 | 52,6 | 49,6 | 43,7 | 35,7 | **47** | **58** |
| | | Med | 63,6 | 67,8 | 66,5 | 64,6 | 59,7 | 57,8 | 51,7 | **58** | **69** |
| | | Max | 66,3 | 71,0 | 69,8 | 68,9 | 63,1 | 61,2 | 56,1 | **62** | **73** |
| **100 Pa** | Lw | Min | 58,1 | 62,2 | 59,2 | 55,9 | 54,2 | 48,0 | 39,9 | **51** | **62** |
| | | Med | 67,9 | 71,8 | 69,3 | 68,0 | 64,3 | 62,1 | 55,9 | **62** | **73** |
| | | Max | 70,6 | 75,0 | 72,6 | 72,3 | 67,7 | 65,5 | 60,3 | **65** | **76** |
| | Lwi | Min | 40,3 | 41,7 | 33,7 | 27,7 | 19,8 | 8,0 | n.m. | **25** | **36** |
| | | Med | 50,1 | 51,3 | 43,8 | 39,7 | 29,9 | 22,1 | 10,6 | **35** | **46** |
| | | Max | 52,8 | 54,5 | 47,1 | 44,0 | 33,3 | 25,5 | 15,0 | **39** | **50** |
| | Lwm | Min | 54,4 | 58,1 | 52,6 | 50,7 | 51,1 | 44,4 | 36,2 | **46** | **57** |
| | | Med | 64,1 | 67,8 | 62,7 | 62,7 | 61,1 | 58,5 | 52,2 | **57** | **68** |
| | | Max | 66,8 | 71,0 | 66,0 | 67,1 | 64,5 | 61,9 | 56,7 | **61** | **72** |
| | Lwa | Min | 55,6 | 59,9 | 58,1 | 54,4 | 51,4 | 45,5 | 37,5 | **49** | **60** |
| | | Med | 65,4 | 69,6 | 68,3 | 66,4 | 61,5 | 59,6 | 53,5 | **60** | **71** |
| | | Max | 68,1 | 72,8 | 71,6 | 70,7 | 64,9 | 63,0 | 57,9 | **64** | **75** |
| **150 Pa** | Lw | Min | 59,9 | 64,0 | 61,0 | 57,7 | 56,0 | 49,8 | 41,7 | **52** | **63** |
| | | Med | 69,7 | 73,6 | 71,1 | 69,8 | 66,1 | 63,9 | 57,7 | **63** | **74** |
| | | Max | 72,4 | 76,8 | 74,4 | 74,1 | 69,5 | 67,3 | 62,1 | **67** | **78** |
| | Lwi | Min | 42,1 | 43,4 | 35,5 | 29,5 | 21,6 | 9,8 | n.m. | **27** | **38** |
| | | Med | 51,9 | 53,1 | 45,6 | 41,5 | 31,7 | 23,9 | 12,4 | **37** | **48** |
| | | Max | 54,6 | 56,3 | 48,9 | 45,8 | 35,1 | 27,3 | 16,8 | **41** | **52** |
| | Lwm | Min | 56,2 | 59,9 | 54,4 | 52,5 | 52,8 | 46,2 | 38,0 | **48** | **59** |
| | | Med | 65,9 | 69,6 | 64,5 | 64,5 | 62,9 | 60,3 | 54,0 | **59** | **70** |
| | | Max | 68,6 | 72,8 | 67,8 | 68,9 | 66,3 | 63,6 | 58,5 | **63** | **74** |
| | Lwa | Min | 57,4 | 61,7 | 59,9 | 56,2 | 53,2 | 47,3 | 39,3 | **51** | **62** |
| | | Med | 67,2 | 71,4 | 70,1 | 68,2 | 63,3 | 61,4 | 55,2 | **62** | **73** |
| | | Max | 69,9 | 74,5 | 73,3 | 72,5 | 66,7 | 64,8 | 59,7 | **65** | **76** |

The sound levels refer to ceiling units without false ceiling, fan supply 220V.
Sound pressure levels referred to 1 m from unit external surface.
Measurement maded with intake plenum and air filter mounted.
n.m = not measurable

## Sound levels - Size 051.0 (CC4)

| Static pressure | Sound power | Fan speed | Sound power level (dB) Octave band (Hz) | | | | | | | Sound pressure level | Sound power level |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | dB(A) | dB(A) |
| 0 Pa | Lw | Min | 61,5 | 65,5 | 65,8 | 61,0 | 57,3 | 53,4 | 46,9 | 56 | 67 |
| | | Med | 67,1 | 70,1 | 68,4 | 67,2 | 63,1 | 59,4 | 54,3 | 61 | 72 |
| | | Max | 70,0 | 72,7 | 70,2 | 69,1 | 65,1 | 61,0 | 56,7 | 62 | 73 |
| | Lwi | Min | 43,7 | 45,0 | 40,3 | 32,7 | 22,9 | 13,5 | n.m. | 30 | 41 |
| | | Med | 49,3 | 49,6 | 42,9 | 38,9 | 28,7 | 19,4 | 9,0 | 34 | 45 |
| | | Max | 52,2 | 52,2 | 44,7 | 40,8 | 30,6 | 21,0 | 11,4 | 36 | 47 |
| | Lwm | Min | 57,6 | 61,4 | 59,0 | 55,6 | 54,0 | 49,7 | 43,2 | 51 | 62 |
| | | Med | 63,2 | 65,9 | 61,7 | 61,8 | 59,8 | 55,6 | 50,5 | 56 | 67 |
| | | Max | 66,1 | 68,5 | 63,4 | 63,7 | 61,7 | 57,3 | 52,9 | 58 | 69 |
| | Lwa | Min | 59,1 | 63,4 | 64,8 | 59,5 | 54,6 | 51,1 | 44,6 | 54 | 65 |
| | | Med | 64,7 | 68,0 | 67,4 | 65,7 | 60,5 | 57,0 | 51,9 | 59 | 70 |
| | | Max | 67,6 | 70,5 | 69,1 | 67,6 | 62,4 | 58,6 | 54,3 | 61 | 72 |
| 50 Pa | Lw | Min | 63,4 | 67,5 | 67,7 | 62,9 | 59,3 | 55,4 | 48,8 | 58 | 69 |
| | | Med | 69,0 | 72,0 | 70,4 | 69,1 | 65,1 | 61,3 | 56,2 | 62 | 73 |
| | | Max | 71,9 | 74,6 | 72,1 | 71,0 | 67,0 | 62,9 | 58,6 | 64 | 75 |
| | Lwi | Min | 45,6 | 46,9 | 42,2 | 34,7 | 24,8 | 15,4 | n.m. | 32 | 43 |
| | | Med | 51,2 | 51,5 | 44,8 | 40,8 | 30,6 | 21,3 | 10,9 | 36 | 47 |
| | | Max | 54,1 | 54,1 | 46,6 | 42,7 | 32,5 | 23,0 | 13,3 | 38 | 49 |
| | Lwm | Min | 59,5 | 63,3 | 61,0 | 57,5 | 55,9 | 51,6 | 45,1 | 52 | 63 |
| | | Med | 65,1 | 67,8 | 63,6 | 63,7 | 61,7 | 57,6 | 52,4 | 58 | 69 |
| | | Max | 68,0 | 70,4 | 65,3 | 65,6 | 63,6 | 59,2 | 54,8 | 60 | 71 |
| | Lwa | Min | 61,1 | 65,3 | 66,7 | 61,4 | 56,6 | 53,0 | 46,5 | 56 | 67 |
| | | Med | 66,6 | 69,9 | 69,3 | 67,6 | 62,4 | 58,9 | 53,8 | 61 | 72 |
| | | Max | 69,5 | 72,5 | 71,0 | 69,5 | 64,3 | 60,5 | 56,2 | 63 | 74 |
| 100 Pa | Lw | Min | 65,4 | 69,4 | 69,6 | 64,8 | 61,2 | 57,3 | 50,8 | 59 | 70 |
| | | Med | 70,9 | 73,9 | 72,3 | 71,0 | 67,0 | 63,2 | 58,1 | 64 | 75 |
| | | Max | 73,9 | 76,5 | 74,0 | 72,9 | 68,9 | 64,8 | 60,5 | 66 | 77 |
| | Lwi | Min | 47,5 | 48,9 | 44,1 | 36,6 | 26,7 | 17,3 | 5,5 | 34 | 45 |
| | | Med | 53,1 | 53,4 | 46,7 | 42,8 | 32,5 | 23,3 | 12,8 | 38 | 49 |
| | | Max | 56,0 | 56,0 | 48,5 | 44,6 | 34,4 | 24,9 | 15,2 | 40 | 51 |
| | Lwm | Min | 61,5 | 65,2 | 62,9 | 59,4 | 57,8 | 53,5 | 47,0 | 54 | 65 |
| | | Med | 67,0 | 69,8 | 65,5 | 65,6 | 63,6 | 59,5 | 54,4 | 59 | 70 |
| | | Max | 69,9 | 72,3 | 67,3 | 67,5 | 65,5 | 61,1 | 56,7 | 61 | 72 |
| | Lwa | Min | 63,0 | 67,2 | 68,6 | 63,4 | 58,5 | 54,9 | 48,4 | 58 | 69 |
| | | Med | 68,5 | 71,8 | 71,2 | 69,5 | 64,3 | 60,8 | 55,7 | 63 | 74 |
| | | Max | 71,5 | 74,4 | 73,0 | 71,4 | 66,2 | 62,4 | 58,1 | 65 | 76 |
| 150 Pa | Lw | Min | 67,3 | 71,3 | 71,5 | 66,8 | 63,1 | 59,2 | 52,7 | 61 | 72 |
| | | Med | 72,8 | 75,8 | 74,2 | 72,9 | 68,9 | 65,1 | 60,0 | 66 | 77 |
| | | Max | 75,8 | 78,4 | 75,9 | 74,8 | 70,8 | 66,7 | 62,4 | 68 | 79 |
| | Lwi | Min | 49,5 | 50,8 | 46,0 | 38,5 | 28,6 | 19,2 | 7,4 | 36 | 47 |
| | | Med | 55,0 | 55,3 | 48,7 | 44,7 | 34,5 | 25,2 | 14,7 | 40 | 51 |
| | | Max | 57,9 | 57,9 | 50,4 | 46,5 | 36,4 | 26,8 | 17,1 | 42 | 53 |
| | Lwm | Min | 63,4 | 67,1 | 64,8 | 61,4 | 59,7 | 55,4 | 48,9 | 56 | 67 |
| | | Med | 68,9 | 71,7 | 67,4 | 67,5 | 65,5 | 61,4 | 56,3 | 61 | 72 |
| | | Max | 71,9 | 74,3 | 69,2 | 69,4 | 67,4 | 63,0 | 58,6 | 63 | 74 |
| | Lwa | Min | 64,9 | 69,1 | 70,5 | 65,3 | 60,4 | 56,8 | 50,3 | 60 | 71 |
| | | Med | 70,5 | 73,7 | 73,1 | 71,5 | 66,2 | 62,7 | 57,7 | 65 | 76 |
| | | Max | 73,4 | 76,3 | 74,9 | 73,3 | 68,1 | 64,3 | 60,0 | 66 | 77 |

The sound levels refer to ceiling units without false ceiling, fan supply 220V.
Sound pressure levels referred to 1 m from unit external surface.
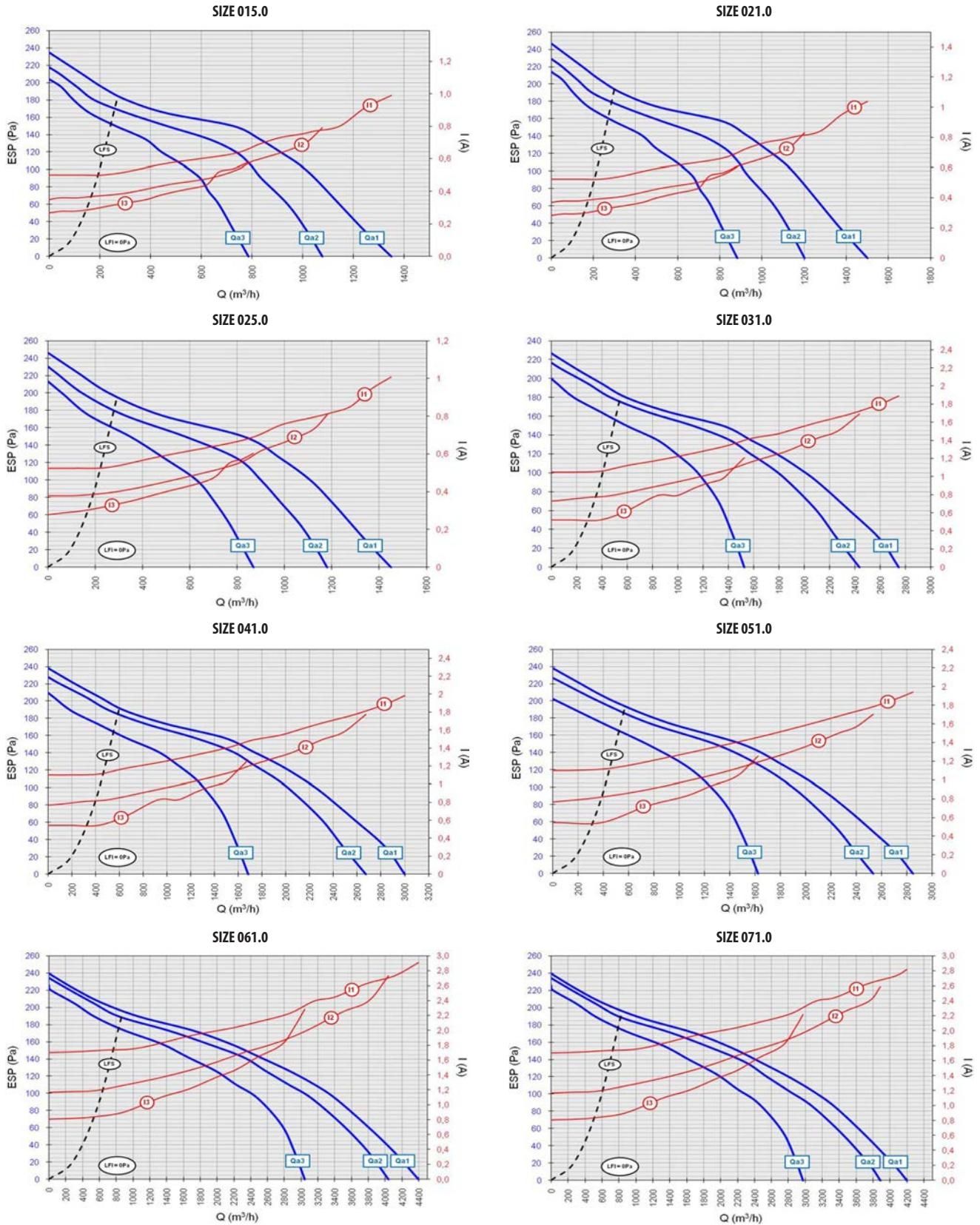Measurement maded with intake plenum and air filter mounted.
n.m. = not measurable

# Sound levels - Size 061.0 (CC2-CC4) and 071.0 (CC2)

| Static pressure | Sound power | Fan speed | Sound power level (dB) Octave band (Hz) 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | Sound pressure level dB(A) | Sound power level dB(A) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **0 Pa** | Lw | Min | 62,5 | 66,5 | 66,8 | 62,0 | 58,3 | 54,4 | 47,9 | **57** | **68** |
| | | Med | 68,1 | 71,1 | 69,4 | 68,2 | 64,1 | 60,4 | 55,3 | **62** | **73** |
| | | Max | 71,0 | 73,7 | 71,2 | 70,1 | 66,1 | 62,0 | 57,7 | **63** | **74** |
| | Lwi | Min | 44,7 | 46,0 | 41,3 | 33,7 | 23,9 | 14,5 | n.m. | **31** | **42** |
| | | Med | 50,3 | 50,6 | 43,9 | 39,9 | 29,7 | 20,4 | 10,0 | **35** | **46** |
| | | Max | 53,2 | 53,2 | 45,7 | 41,8 | 31,6 | 22,0 | 12,4 | **37** | **48** |
| | Lwm | Min | 58,6 | 62,4 | 60,0 | 56,6 | 55,0 | 50,7 | 44,2 | **52** | **63** |
| | | Med | 64,2 | 66,9 | 62,7 | 62,8 | 60,8 | 56,6 | 51,5 | **57** | **68** |
| | | Max | 67,1 | 69,5 | 64,4 | 64,7 | 62,7 | 58,3 | 53,9 | **59** | **70** |
| | Lwa | Min | 60,1 | 64,4 | 65,8 | 60,5 | 55,6 | 52,1 | 45,6 | **55** | **66** |
| | | Med | 65,7 | 69,0 | 68,4 | 66,7 | 61,5 | 58,0 | 52,9 | **60** | **71** |
| | | Max | 68,6 | 71,5 | 70,1 | 68,6 | 63,4 | 59,6 | 55,3 | **62** | **73** |
| **50 Pa** | Lw | Min | 64,4 | 68,5 | 68,7 | 63,9 | 60,3 | 56,4 | 49,8 | **59** | **70** |
| | | Med | 70,0 | 73,0 | 71,4 | 70,1 | 66,1 | 62,3 | 57,2 | **63** | **74** |
| | | Max | 72,9 | 75,6 | 73,1 | 72,0 | 68,0 | 63,9 | 59,6 | **65** | **76** |
| | Lwi | Min | 46,6 | 47,9 | 43,2 | 35,7 | 25,8 | 16,4 | n.m. | **33** | **44** |
| | | Med | 52,2 | 52,5 | 45,8 | 41,8 | 31,6 | 22,3 | 11,9 | **37** | **48** |
| | | Max | 55,1 | 55,1 | 47,6 | 43,7 | 33,5 | 24,0 | 14,3 | **39** | **50** |
| | Lwm | Min | 60,5 | 64,3 | 62,0 | 58,5 | 56,9 | 52,6 | 46,1 | **53** | **64** |
| | | Med | 66,1 | 68,8 | 64,6 | 64,7 | 62,7 | 58,6 | 53,4 | **59** | **70** |
| | | Max | 69,0 | 71,4 | 66,3 | 66,6 | 64,6 | 60,2 | 55,8 | **61** | **72** |
| | Lwa | Min | 62,1 | 66,3 | 67,7 | 62,4 | 57,6 | 54,0 | 47,5 | **57** | **68** |
| | | Med | 67,6 | 70,9 | 70,3 | 68,6 | 63,4 | 59,9 | 54,8 | **62** | **73** |
| | | Max | 70,5 | 73,5 | 72,0 | 70,5 | 65,3 | 61,5 | 57,2 | **64** | **75** |
| **100 Pa** | Lw | Min | 66,4 | 70,4 | 70,6 | 65,8 | 62,2 | 58,3 | 51,8 | **60** | **71** |
| | | Med | 71,9 | 74,9 | 73,3 | 72,0 | 68,0 | 64,2 | 59,1 | **65** | **76** |
| | | Max | 74,9 | 77,5 | 75,0 | 73,9 | 69,9 | 65,8 | 61,5 | **67** | **78** |
| | Lwi | Min | 48,5 | 49,9 | 45,1 | 37,6 | 27,7 | 18,3 | 6,5 | **35** | **46** |
| | | Med | 54,1 | 54,4 | 47,7 | 43,8 | 33,5 | 24,3 | 13,8 | **39** | **50** |
| | | Max | 57,0 | 57,0 | 49,5 | 45,6 | 35,4 | 25,9 | 16,2 | **41** | **52** |
| | Lwm | Min | 62,5 | 66,2 | 63,9 | 60,4 | 58,8 | 54,5 | 48,0 | **55** | **66** |
| | | Med | 68,0 | 70,8 | 66,5 | 66,6 | 64,6 | 60,5 | 55,4 | **60** | **71** |
| | | Max | 70,9 | 73,3 | 68,3 | 68,5 | 66,5 | 62,1 | 57,7 | **62** | **73** |
| | Lwa | Min | 64,0 | 68,2 | 69,6 | 64,4 | 59,5 | 55,9 | 49,4 | **59** | **70** |
| | | Med | 69,5 | 72,8 | 72,2 | 70,5 | 65,3 | 61,8 | 56,7 | **64** | **75** |
| | | Max | 72,5 | 75,4 | 74,0 | 72,4 | 67,2 | 63,4 | 59,1 | **66** | **77** |
| **150 Pa** | Lw | Min | 68,3 | 72,3 | 72,5 | 67,8 | 64,1 | 60,2 | 53,7 | **62** | **73** |
| | | Med | 73,8 | 76,8 | 75,2 | 73,9 | 69,9 | 66,1 | 61,0 | **67** | **78** |
| | | Max | 76,8 | 79,4 | 76,9 | 75,8 | 71,8 | 67,7 | 63,4 | **69** | **80** |
| | Lwi | Min | 50,5 | 51,8 | 47,0 | 39,5 | 29,6 | 20,2 | 8,4 | **37** | **48** |
| | | Med | 56,0 | 56,3 | 49,7 | 45,7 | 35,5 | 26,2 | 15,7 | **41** | **52** |
| | | Max | 58,9 | 58,9 | 51,4 | 47,5 | 37,4 | 27,8 | 18,1 | **43** | **54** |
| | Lwm | Min | 64,4 | 68,1 | 65,8 | 62,4 | 60,7 | 56,4 | 49,9 | **57** | **68** |
| | | Med | 69,9 | 72,7 | 68,4 | 68,5 | 66,5 | 62,4 | 57,3 | **62** | **73** |
| | | Max | 72,9 | 75,3 | 70,2 | 70,4 | 68,4 | 64,0 | 59,6 | **64** | **75** |
| | Lwa | Min | 65,9 | 70,1 | 71,5 | 66,3 | 61,4 | 57,8 | 51,3 | **61** | **72** |
| | | Med | 71,5 | 74,7 | 74,1 | 72,5 | 67,2 | 63,7 | 58,7 | **66** | **77** |
| | | Max | 74,4 | 77,3 | 75,9 | 74,3 | 69,1 | 65,3 | 61,0 | **67** | **78** |

The sound levels refer to ceiling units without false ceiling, fan supply 220V.
Sound pressure levels referred to 1 m from unit external surface.
Measurement maded with intake plenum and air filter mounted.
n.m = not measurable

# Aeraulic performance graphics - 2 pipe system (CC2)

### SIZE 015.0



### SIZE 021.0



### SIZE 025.0



### SIZE 031.0



### SIZE 041.0



### SIZE 051.0



### SIZE 061.0



### SIZE 071.0



Q = Air flow [m³/h]

ESP = External static pressure (Pa)

I (A) = Full load current (A) with 230V-1Ph-50Hz power supply

LFS = Higher operating limit

LFI = Lower operating limit

Qa1 = Air flow / Static pressure curve at MAX speed

Qa2 = Air flow / Static pressure curve at MID speed

Qa3 = Air flow / Static pressure curve at MIN speed

I1 = Air flow / Full load current curve at MAX speed

I2 = Air flow / Full load current curve at MID speed

I3 = Air flow / Full load current curve at MIN speed

# Aeraulic performance graphics - 4 pipe system (CC4)
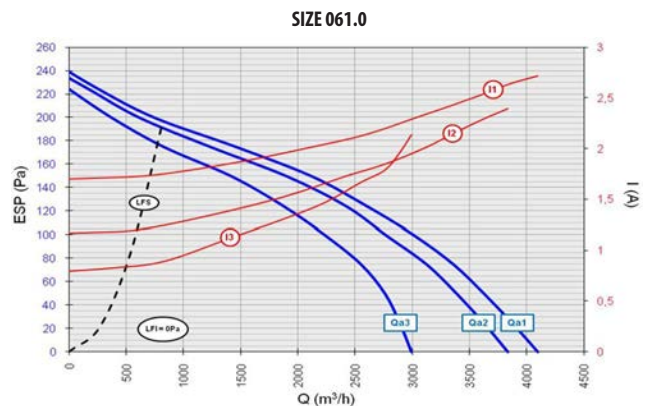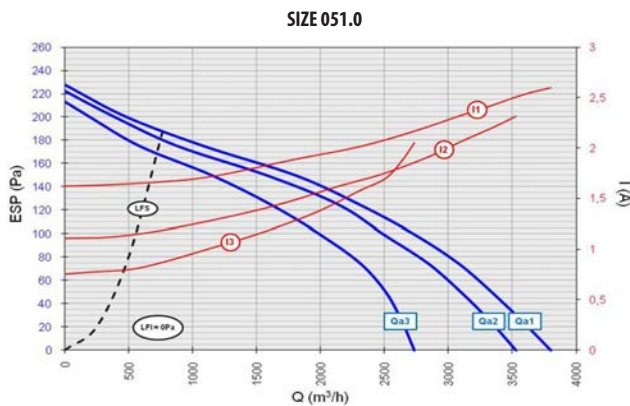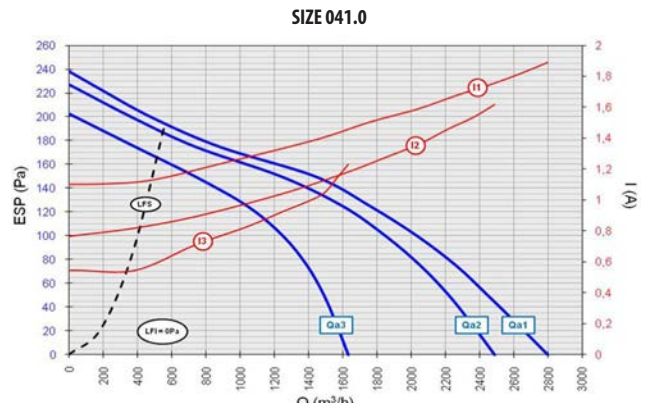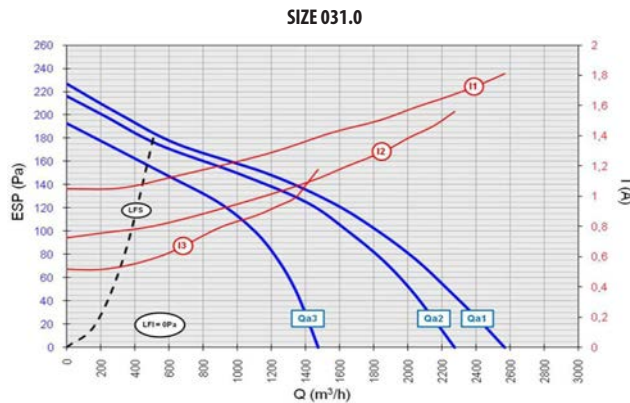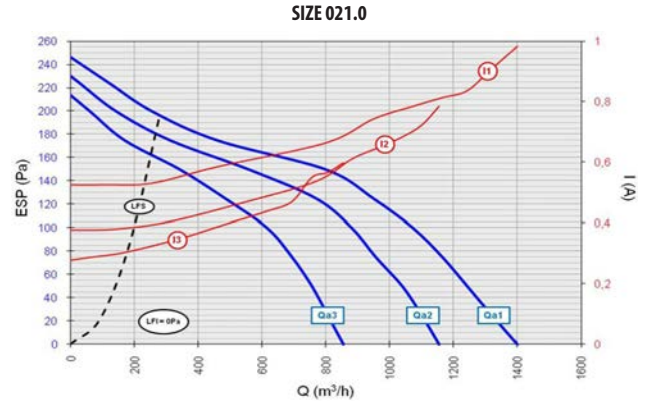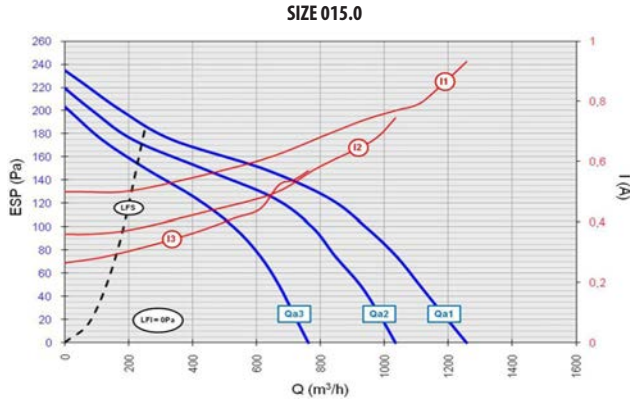
**SIZE 015.0**



**SIZE 021.0**



**SIZE 031.0**



**SIZE 041.0**



**SIZE 051.0**



**SIZE 061.0**



Q = Air flow [m³/h]
ESP = External static pressure (Pa)
I (A) = Full load current (A) with 230V-1Ph-50Hz power supply
LFS = Higher operating limit
LFI = Lower operating limit

Qa1 = Air flow / Static pressure curve at MAX speed
Qa2 = Air flow / Static pressure curve at MID speed
Qa3 = Air flow / Static pressure curve at MIN speed
I1 = Air flow / Full load current curve at MAX speed
I2 = Air flow / Full load current curve at MID speed
I3 = Air flow / Full load current curve at MIN speed

# Performance - 2 pipe system (CC2)

## Cooling

| Size | Ta (°C) D.B. / W.B. | Inlet exchanger water temperature (°) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5 | | 7 | | 10 | | 13 | | 15 | |
| | | Total capacity | Sensible capacity | Total capacity | Sensible capacity | Total capacity | Sensible capacity | Total capacity | Sensible capacity | Total capacity | Sensible capacity |
| | | [kW$_r$] | [kW$_s$] | [kW$_r$] | [kW$_s$] | [kW$_r$] | [kW$_s$] | [kW$_r$] | [kW$_s$] | [kW$_r$] | [kW$_s$] |
| 015.0 | 22 / 16 | 6,10 | 4,39 | 4,67 | 3,79 | 2,88 | 2,88 | 1,97 | 1,97 | 1,36 | 1,36 |
| | 24 / 17 | 6,82 | 5,00 | 5,38 | 4,39 | 3,48 | 3,48 | 2,57 | 2,57 | 1,97 | 1,97 |
| | 26 / 18 | 7,54 | 5,60 | 6,10 | 5,00 | 4,09 | 4,09 | 3,18 | 3,18 | 2,57 | 2,57 |
| | 27 / 19 | 8,26 | 5,91 | 6,82 | 5,30 | 4,67 | 4,39 | 3,48 | 3,48 | 2,88 | 2,88 |
| | 28 / 20 | 8,97 | 6,21 | 7,54 | 5,60 | 5,38 | 4,69 | 3,79 | 3,79 | 3,18 | 3,18 |
| | 30 / 22 | 10,41 | 6,81 | 8,97 | 6,21 | 6,82 | 5,30 | 4,67 | 4,39 | 3,79 | 3,79 |
| 021.0 | 22 / 16 | 7,74 | 5,45 | 5,92 | 4,70 | 3,57 | 3,57 | 2,44 | 2,44 | 1,69 | 1,69 |
| | 24 / 17 | 8,65 | 6,20 | 6,83 | 5,45 | 4,32 | 4,32 | 3,20 | 3,20 | 2,44 | 2,44 |
| | 26 / 18 | 9,56 | 6,96 | 7,74 | 6,20 | 5,08 | 5,08 | 3,95 | 3,95 | 3,20 | 3,20 |
| | 27 / 19 | 10,47 | 7,33 | 8,65 | 6,58 | 5,92 | 5,45 | 4,32 | 4,32 | 3,57 | 3,57 |
| | 28 / 20 | 11,38 | 7,71 | 9,56 | 6,96 | 6,83 | 5,83 | 4,70 | 4,70 | 3,95 | 3,95 |
| | 30 / 22 | 13,20 | 8,46 | 11,38 | 7,71 | 8,65 | 6,58 | 5,92 | 5,45 | 4,70 | 4,70 |
| 025.0 | 22 / 16 | 9,04 | 6,11 | 6,91 | 5,27 | 4,01 | 4,01 | 2,74 | 2,74 | 1,90 | 1,90 |
| | 24 / 17 | 10,10 | 6,96 | 7,97 | 6,11 | 4,85 | 4,85 | 3,58 | 3,58 | 2,74 | 2,74 |
| | 26 / 18 | 11,16 | 7,80 | 9,04 | 6,96 | 5,85 | 5,69 | 4,43 | 4,43 | 3,58 | 3,58 |
| | 27 / 19 | 12,23 | 8,22 | 10,10 | 7,38 | 6,91 | 6,11 | 4,85 | 4,85 | 4,01 | 4,01 |
| | 28 / 20 | 13,29 | 8,65 | 11,16 | 7,80 | 7,97 | 6,54 | 5,27 | 5,27 | 4,43 | 4,43 |
| | 30 / 22 | 15,42 | 9,49 | 13,29 | 8,65 | 10,10 | 7,38 | 6,91 | 6,11 | 5,27 | 5,27 |
| 031.0 | 22 / 16 | 10,74 | 8,10 | 8,21 | 6,99 | 5,31 | 5,31 | 3,63 | 3,63 | 2,51 | 2,51 |
| | 24 / 17 | 12,00 | 9,22 | 9,47 | 8,10 | 6,43 | 6,43 | 4,75 | 4,75 | 3,63 | 3,63 |
| | 26 / 18 | 13,26 | 10,34 | 10,74 | 9,22 | 7,54 | 7,54 | 5,87 | 5,87 | 4,75 | 4,75 |
| | 27 / 19 | 14,53 | 10,90 | 12,00 | 9,78 | 8,21 | 8,10 | 6,43 | 6,43 | 5,31 | 5,31 |
| | 28 / 20 | 15,79 | 11,46 | 13,26 | 10,34 | 9,47 | 8,66 | 6,99 | 6,99 | 5,87 | 5,87 |
| | 30 / 22 | 18,32 | 12,57 | 15,79 | 11,46 | 12,00 | 9,78 | 8,21 | 8,10 | 6,99 | 6,99 |
| 041.0 | 22 / 16 | 13,60 | 10,03 | 10,40 | 8,64 | 6,57 | 6,57 | 4,49 | 4,49 | 3,11 | 3,11 |
| | 24 / 17 | 15,20 | 11,41 | 12,00 | 10,03 | 7,95 | 7,95 | 5,88 | 5,88 | 4,49 | 4,49 |
| | 26 / 18 | 16,80 | 12,79 | 13,60 | 11,41 | 9,33 | 9,33 | 7,26 | 7,26 | 5,88 | 5,88 |
| | 27 / 19 | 18,40 | 13,48 | 15,20 | 12,10 | 10,40 | 10,03 | 7,95 | 7,95 | 6,57 | 6,57 |
| | 28 / 20 | 20,00 | 14,17 | 16,80 | 12,79 | 12,00 | 10,72 | 8,64 | 8,64 | 7,26 | 7,26 |
| | 30 / 22 | 23,20 | 15,56 | 20,00 | 14,17 | 15,20 | 12,10 | 10,40 | 10,03 | 8,64 | 8,64 |
| 051.0 | 22 / 16 | 15,93 | 11,19 | 12,18 | 9,64 | 7,33 | 7,33 | 5,01 | 5,01 | 3,47 | 3,47 |
| | 24 / 17 | 17,80 | 12,73 | 14,05 | 11,19 | 8,87 | 8,87 | 6,56 | 6,56 | 5,01 | 5,01 |
| | 26 / 18 | 19,67 | 14,27 | 15,93 | 12,73 | 10,41 | 10,41 | 8,10 | 8,10 | 6,56 | 6,56 |
| | 27 / 19 | 21,55 | 15,04 | 17,80 | 13,50 | 12,18 | 11,19 | 8,87 | 8,87 | 7,33 | 7,33 |
| | 28 / 20 | 23,42 | 15,81 | 19,67 | 14,27 | 14,05 | 11,96 | 9,64 | 9,64 | 8,10 | 8,10 |
| | 30 / 22 | 27,17 | 17,36 | 23,42 | 15,81 | 17,80 | 13,50 | 12,18 | 11,19 | 9,64 | 9,64 |
| 061.0 | 22 / 16 | 18,97 | 14,25 | 14,51 | 12,29 | 9,34 | 9,34 | 6,39 | 6,39 | 4,42 | 4,42 |
| | 24 / 17 | 21,20 | 16,22 | 16,74 | 14,25 | 11,30 | 11,30 | 8,35 | 8,35 | 6,39 | 6,39 |
| | 26 / 18 | 23,43 | 18,18 | 18,97 | 16,22 | 13,27 | 13,27 | 10,32 | 10,32 | 8,35 | 8,35 |
| | 27 / 19 | 25,66 | 19,17 | 21,20 | 17,20 | 14,51 | 14,25 | 11,30 | 11,30 | 9,34 | 9,34 |
| | 28 / 20 | 27,89 | 20,15 | 23,43 | 18,18 | 16,74 | 15,23 | 12,29 | 12,29 | 10,32 | 10,32 |
| | 30 / 22 | 32,36 | 22,11 | 27,89 | 20,15 | 21,20 | 17,20 | 14,51 | 14,25 | 12,29 | 12,29 |
| 071.0 | 22 / 16 | 22,82 | 16,07 | 17,45 | 13,86 | 10,53 | 10,53 | 7,21 | 7,21 | 4,99 | 4,99 |
| | 24 / 17 | 25,50 | 18,29 | 20,13 | 16,07 | 12,75 | 12,75 | 9,42 | 9,42 | 7,21 | 7,21 |
| | 26 / 18 | 28,18 | 20,51 | 22,82 | 18,29 | 14,97 | 14,97 | 11,64 | 11,64 | 9,42 | 9,42 |
| | 27 / 19 | 30,87 | 21,62 | 25,50 | 19,40 | 17,45 | 16,07 | 12,75 | 12,75 | 10,53 | 10,53 |
| | 28 / 20 | 33,55 | 22,73 | 28,18 | 20,51 | 20,13 | 17,18 | 13,86 | 13,86 | 11,64 | 11,64 |
| | 30 / 22 | 38,92 | 24,94 | 33,55 | 22,73 | 25,50 | 19,40 | 17,45 | 16,07 | 13,86 | 13,86 |

Technical data referred to the following conditions:
Nominal air flow at MAX speed and with ESP = 0Pa
Water temperature differential = 5°C
Ta = Air intake temperature
W.B. = Wet bulb
D.B. = Dry bulb
KW$_r$ = Cooling capacity (KW)
KW$_s$ = Sensible capacity (kW)

# Performance - 2 pipe system (CC2)

## Heating

| Size | Ta (°C) | Inlet exchanger water temperature (°) | | | | | | | |
|------|---------|------|------|------|------|------|------|------|------|
| | | **35** | **40** | **45** | **50** | **55** | **60** | **70** | **80** |
| | | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity |
| | | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] |
| **015.0** | 10 | 6,76 | 8,44 | 10,13 | 11,82 | 13,51 | 15,20 | 18,58 | 21,96 |
| | 15 | 5,07 | 6,76 | 8,44 | 10,13 | 11,82 | 13,51 | 16,89 | 20,27 |
| | 18 | 4,05 | 5,74 | 7,43 | 9,12 | 10,81 | 12,50 | 15,88 | 19,25 |
| | 20 | 3,38 | 5,07 | 6,76 | 8,44 | 10,13 | 11,82 | 15,20 | 18,58 |
| | 22 | 2,70 | 4,39 | 6,08 | 7,77 | 9,46 | 11,15 | 14,52 | 17,90 |
| | 25 | 1,69 | 3,38 | 5,07 | 6,76 | 8,44 | 10,13 | 13,51 | 16,89 |
| **021.0** | 10 | 8,40 | 10,50 | 12,60 | 14,70 | 16,80 | 18,90 | 23,10 | 27,30 |
| | 15 | 6,30 | 8,40 | 10,50 | 12,60 | 14,70 | 16,80 | 21,00 | 25,20 |
| | 18 | 5,04 | 7,14 | 9,24 | 11,34 | 13,44 | 15,54 | 19,74 | 23,94 |
| | 20 | 4,20 | 6,30 | 8,40 | 10,50 | 12,60 | 14,70 | 18,90 | 23,10 |
| | 22 | 3,36 | 5,46 | 7,56 | 9,66 | 11,76 | 13,86 | 18,06 | 22,26 |
| | 25 | 2,10 | 4,20 | 6,30 | 8,40 | 10,50 | 12,60 | 16,80 | 21,00 |
| **025.0** | 10 | 8,89 | 11,11 | 13,33 | 15,56 | 17,78 | 20,00 | 24,44 | 28,89 |
| | 15 | 6,67 | 8,89 | 11,11 | 13,33 | 15,56 | 17,78 | 22,22 | 26,67 |
| | 18 | 5,33 | 7,56 | 9,78 | 12,00 | 14,22 | 16,44 | 20,89 | 25,33 |
| | 20 | 4,44 | 6,67 | 8,89 | 11,11 | 13,33 | 15,56 | 20,00 | 24,44 |
| | 22 | 3,56 | 5,78 | 8,00 | 10,22 | 12,44 | 14,67 | 19,11 | 23,56 |
| | 25 | 2,22 | 4,44 | 6,67 | 8,89 | 11,11 | 13,33 | 17,78 | 22,22 |
| **031.0** | 10 | 12,62 | 15,78 | 18,93 | 22,09 | 25,24 | 28,40 | 34,71 | 41,02 |
| | 15 | 9,47 | 12,62 | 15,78 | 18,93 | 22,09 | 25,24 | 31,56 | 37,87 |
| | 18 | 7,57 | 10,73 | 13,88 | 17,04 | 20,20 | 23,35 | 29,66 | 35,97 |
| | 20 | 6,31 | 9,47 | 12,62 | 15,78 | 18,93 | 22,09 | 28,40 | 34,71 |
| | 22 | 5,05 | 8,20 | 11,36 | 14,52 | 17,67 | 20,83 | 27,14 | 33,45 |
| | 25 | 3,16 | 6,31 | 9,47 | 12,62 | 15,78 | 18,93 | 25,24 | 31,56 |
| **041.0** | 10 | 15,64 | 19,56 | 23,47 | 27,38 | 31,29 | 35,20 | 43,02 | 50,84 |
| | 15 | 11,73 | 15,64 | 19,56 | 23,47 | 27,38 | 31,29 | 39,11 | 46,93 |
| | 18 | 9,39 | 13,30 | 17,21 | 21,12 | 25,03 | 28,94 | 36,76 | 44,59 |
| | 20 | 7,82 | 11,73 | 15,64 | 19,56 | 23,47 | 27,38 | 35,20 | 43,02 |
| | 22 | 6,26 | 10,17 | 14,08 | 17,99 | 21,90 | 25,81 | 33,64 | 41,46 |
| | 25 | 3,91 | 7,82 | 11,73 | 15,64 | 19,56 | 23,47 | 31,29 | 39,11 |
| **051.0** | 10 | 16,53 | 20,67 | 24,80 | 28,93 | 33,07 | 37,20 | 45,47 | 53,73 |
| | 15 | 12,40 | 16,53 | 20,67 | 24,80 | 28,93 | 33,07 | 41,33 | 49,60 |
| | 18 | 9,92 | 14,05 | 18,19 | 22,32 | 26,45 | 30,59 | 38,85 | 47,12 |
| | 20 | 8,27 | 12,40 | 16,53 | 20,67 | 24,80 | 28,93 | 37,20 | 45,47 |
| | 22 | 6,61 | 10,75 | 14,88 | 19,01 | 23,15 | 27,28 | 35,55 | 43,81 |
| | 25 | 4,13 | 8,27 | 12,40 | 16,53 | 20,67 | 24,80 | 33,07 | 41,33 |
| **061.0** | 10 | 22,36 | 27,94 | 33,53 | 39,12 | 44,71 | 50,30 | 61,48 | 72,66 |
| | 15 | 16,77 | 22,36 | 27,94 | 33,53 | 39,12 | 44,71 | 55,89 | 67,07 |
| | 18 | 13,41 | 19,00 | 24,59 | 30,18 | 35,77 | 41,36 | 52,54 | 63,71 |
| | 20 | 11,18 | 16,77 | 22,36 | 27,94 | 33,53 | 39,12 | 50,30 | 61,48 |
| | 22 | 8,94 | 14,53 | 20,12 | 25,71 | 31,30 | 36,89 | 48,06 | 59,24 |
| | 25 | 5,59 | 11,18 | 16,77 | 22,36 | 27,94 | 33,53 | 44,71 | 55,89 |
| **071.0** | 10 | 23,87 | 29,83 | 35,80 | 41,77 | 47,73 | 53,70 | 65,63 | 77,57 |
| | 15 | 17,90 | 23,87 | 29,83 | 35,80 | 41,77 | 47,73 | 59,67 | 71,60 |
| | 18 | 14,32 | 20,29 | 26,25 | 32,22 | 38,19 | 44,15 | 56,09 | 68,02 |
| | 20 | 11,93 | 17,90 | 23,87 | 29,83 | 35,80 | 41,77 | 53,70 | 65,63 |
| | 22 | 9,55 | 15,51 | 21,48 | 27,45 | 33,41 | 39,38 | 51,31 | 63,25 |
| | 25 | 5,97 | 11,93 | 17,90 | 23,87 | 29,83 | 35,80 | 47,73 | 59,67 |

Technical data referred to the following conditions:
Nominal air flow at MAX speed and with ESP = 0Pa
Water temperature differential = 10°C
Ta = Air intake temperature
kW$_T$ = Heating capacity (kW)

# Performance - 4 pipe system (CC4)

## Cooling

| Size | Ta (°C) D.B. / W.B. | Inlet exchanger water temperature (°) | | | | | | | | | |
| | | 5 | | 7 | | 10 | | 13 | | 15 | |
| | | Total capacity | Sensible capacity | Total capacity | Sensible capacity | Total capacity | Sensible capacity | Total capacity | Sensible capacity | Total capacity | Sensible capacity |
| | | [kW$_F$] | [kW$_S$] | [kW$_F$] | [kW$_S$] | [kW$_F$] | [kW$_S$] | [kW$_F$] | [kW$_S$] | [kW$_F$] | [kW$_S$] |
| 015.0 | 22 / 16 | 5,88 | 4,20 | 4,50 | 3,62 | 2,75 | 2,75 | 1,88 | 1,88 | 1,30 | 1,30 |
| | 24 / 17 | 6,57 | 4,78 | 5,19 | 4,20 | 3,33 | 3,33 | 2,46 | 2,46 | 1,88 | 1,88 |
| | 26 / 18 | 7,26 | 5,36 | 5,88 | 4,78 | 3,91 | 3,91 | 3,04 | 3,04 | 2,46 | 2,46 |
| | 27 / 19 | 7,95 | 5,65 | 6,57 | 5,07 | 4,50 | 4,20 | 3,33 | 3,33 | 2,75 | 2,75 |
| | 28 / 20 | 8,64 | 5,94 | 7,26 | 5,36 | 5,19 | 4,49 | 3,62 | 3,62 | 3,04 | 3,04 |
| | 30 / 22 | 10,03 | 6,52 | 8,64 | 5,94 | 6,57 | 5,07 | 4,50 | 4,20 | 3,62 | 3,62 |
| 021.0 | 22 / 16 | 7,41 | 5,18 | 5,67 | 4,46 | 3,39 | 3,39 | 2,32 | 2,32 | 1,61 | 1,61 |
| | 24 / 17 | 8,28 | 5,89 | 6,54 | 5,18 | 4,11 | 4,11 | 3,04 | 3,04 | 2,32 | 2,32 |
| | 26 / 18 | 9,15 | 6,61 | 7,41 | 5,89 | 4,82 | 4,82 | 3,75 | 3,75 | 3,04 | 3,04 |
| | 27 / 19 | 10,02 | 6,96 | 8,28 | 6,25 | 5,67 | 5,18 | 4,11 | 4,11 | 3,39 | 3,39 |
| | 28 / 20 | 10,89 | 7,32 | 9,15 | 6,61 | 6,54 | 5,54 | 4,46 | 4,46 | 3,75 | 3,75 |
| | 30 / 22 | 12,64 | 8,04 | 10,89 | 7,32 | 8,28 | 6,25 | 5,67 | 5,18 | 4,46 | 4,46 |
| 031.0 | 22 / 16 | 10,29 | 7,73 | 7,87 | 6,66 | 5,06 | 5,06 | 3,47 | 3,47 | 2,40 | 2,40 |
| | 24 / 17 | 11,50 | 8,80 | 9,08 | 7,73 | 6,13 | 6,13 | 4,53 | 4,53 | 3,47 | 3,47 |
| | 26 / 18 | 12,71 | 9,86 | 10,29 | 8,80 | 7,20 | 7,20 | 5,60 | 5,60 | 4,53 | 4,53 |
| | 27 / 19 | 13,92 | 10,40 | 11,50 | 9,33 | 7,87 | 7,73 | 6,13 | 6,13 | 5,06 | 5,06 |
| | 28 / 20 | 15,13 | 10,93 | 12,71 | 9,86 | 9,08 | 8,26 | 6,66 | 6,66 | 5,60 | 5,60 |
| | 30 / 22 | 17,55 | 12,00 | 15,13 | 10,93 | 11,50 | 9,33 | 7,87 | 7,73 | 6,66 | 6,66 |
| 041.0 | 22 / 16 | 13,06 | 9,53 | 9,99 | 8,21 | 6,24 | 6,24 | 4,27 | 4,27 | 2,96 | 2,96 |
| | 24 / 17 | 14,60 | 10,84 | 11,53 | 9,53 | 7,56 | 7,56 | 5,59 | 5,59 | 4,27 | 4,27 |
| | 26 / 18 | 16,14 | 12,16 | 13,06 | 10,84 | 8,87 | 8,87 | 6,90 | 6,90 | 5,59 | 5,59 |
| | 27 / 19 | 17,67 | 12,81 | 14,60 | 11,50 | 9,99 | 9,53 | 7,56 | 7,56 | 6,24 | 6,24 |
| | 28 / 20 | 19,21 | 13,47 | 16,14 | 12,16 | 11,53 | 10,19 | 8,21 | 8,21 | 6,90 | 6,90 |
| | 30 / 22 | 22,28 | 14,79 | 19,21 | 13,47 | 14,60 | 11,50 | 9,99 | 9,53 | 8,21 | 8,21 |
| 051.0 | 22 / 16 | 14,41 | 11,02 | 11,02 | 9,50 | 7,22 | 7,22 | 4,94 | 4,94 | 3,42 | 3,42 |
| | 24 / 17 | 16,10 | 12,54 | 12,71 | 11,02 | 8,74 | 8,74 | 6,46 | 6,46 | 4,94 | 4,94 |
| | 26 / 18 | 17,79 | 14,06 | 14,41 | 12,54 | 10,26 | 10,26 | 7,98 | 7,98 | 6,46 | 6,46 |
| | 27 / 19 | 19,49 | 14,82 | 16,10 | 13,30 | 11,02 | 11,02 | 8,74 | 8,74 | 7,22 | 7,22 |
| | 28 / 20 | 21,18 | 15,58 | 17,79 | 14,06 | 12,71 | 11,78 | 9,50 | 9,50 | 7,98 | 7,98 |
| | 30 / 22 | 24,57 | 17,10 | 21,18 | 15,58 | 16,10 | 13,30 | 11,02 | 11,02 | 9,50 | 9,50 |
| 061.0 | 22 / 16 | 18,16 | 13,59 | 13,89 | 11,71 | 8,90 | 8,90 | 6,09 | 6,09 | 4,22 | 4,22 |
| | 24 / 17 | 20,30 | 15,46 | 16,03 | 13,59 | 10,78 | 10,78 | 7,97 | 7,97 | 6,09 | 6,09 |
| | 26 / 18 | 22,44 | 17,34 | 18,16 | 15,46 | 12,65 | 12,65 | 9,84 | 9,84 | 7,97 | 7,97 |
| | 27 / 19 | 24,57 | 18,27 | 20,30 | 16,40 | 13,89 | 13,59 | 10,78 | 10,78 | 8,90 | 8,90 |
| | 28 / 20 | 26,71 | 19,21 | 22,44 | 17,34 | 16,03 | 14,53 | 11,71 | 11,71 | 9,84 | 9,84 |
| | 30 / 22 | 30,98 | 21,09 | 26,71 | 19,21 | 20,30 | 16,40 | 13,89 | 13,59 | 11,71 | 11,71 |

Technical data referred to the following conditions:
Nominal air flow at MAX speed and with ESP = 0Pa
Water temperature differential = 5°C
Ta = Air intake temperature
W.B. = Wet bulb
D.B. = Dry bulb
KW$_F$ = Cooling capacity (KW)
KW$_S$ = Sensible capacity (kW)

# Performance - 4 pipe system (CC4)

## Heating

| Size | Ta (°C) | Inlet exchanger water temperature (°) | | | | | | | |
|------|---------|------|------|------|------|------|------|------|------|
| | | **35** | **40** | **45** | **50** | **55** | **60** | **70** | **80** |
| | | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity | Total capacity |
| | | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kW$_T$] | [kWT] | [kW$_T$] |
| **015.0** | 10 | 5,38 | 6,72 | 8,07 | 9,41 | 10,76 | 12,10 | 14,79 | 17,48 |
| | 15 | 4,03 | 5,38 | 6,72 | 8,07 | 9,41 | 10,76 | 13,44 | 16,13 |
| | 18 | 3,23 | 4,57 | 5,92 | 7,26 | 8,60 | 9,95 | 12,64 | 15,33 |
| | 20 | 2,69 | 4,03 | 5,38 | 6,72 | 8,07 | 9,41 | 12,10 | 14,79 |
| | 22 | 2,15 | 3,50 | 4,84 | 6,18 | 7,53 | 8,87 | 11,56 | 14,25 |
| | 25 | 1,34 | 2,69 | 4,03 | 5,38 | 6,72 | 8,07 | 10,76 | 13,44 |
| **021.0** | 10 | 5,73 | 7,17 | 8,60 | 10,03 | 11,47 | 12,90 | 15,77 | 18,63 |
| | 15 | 4,30 | 5,73 | 7,17 | 8,60 | 10,03 | 11,47 | 14,33 | 17,20 |
| | 18 | 3,44 | 4,87 | 6,31 | 7,74 | 9,17 | 10,61 | 13,47 | 16,34 |
| | 20 | 2,87 | 4,30 | 5,73 | 7,17 | 8,60 | 10,03 | 12,90 | 15,77 |
| | 22 | 2,29 | 3,73 | 5,16 | 6,59 | 8,03 | 9,46 | 12,33 | 15,19 |
| | 25 | 1,43 | 2,87 | 4,30 | 5,73 | 7,17 | 8,60 | 11,47 | 14,33 |
| **031.0** | 10 | 9,91 | 12,39 | 14,87 | 17,34 | 19,82 | 22,30 | 27,26 | 32,21 |
| | 15 | 7,43 | 9,91 | 12,39 | 14,87 | 17,34 | 19,82 | 24,78 | 29,73 |
| | 18 | 5,95 | 8,42 | 10,90 | 13,38 | 15,86 | 18,34 | 23,29 | 28,25 |
| | 20 | 4,96 | 7,43 | 9,91 | 12,39 | 14,87 | 17,34 | 22,30 | 27,26 |
| | 22 | 3,96 | 6,44 | 8,92 | 11,40 | 13,88 | 16,35 | 21,31 | 26,26 |
| | 25 | 2,48 | 4,96 | 7,43 | 9,91 | 12,39 | 14,87 | 19,82 | 24,78 |
| **041.0** | 10 | 10,49 | 13,11 | 15,73 | 18,36 | 20,98 | 23,60 | 28,84 | 34,09 |
| | 15 | 7,87 | 10,49 | 13,11 | 15,73 | 18,36 | 20,98 | 26,22 | 31,47 |
| | 18 | 6,29 | 8,92 | 11,54 | 14,16 | 16,78 | 19,40 | 24,65 | 29,89 |
| | 20 | 5,24 | 7,87 | 10,49 | 13,11 | 15,73 | 18,36 | 23,60 | 28,84 |
| | 22 | 4,20 | 6,82 | 9,44 | 12,06 | 14,68 | 17,31 | 22,55 | 27,80 |
| | 25 | 2,62 | 5,24 | 7,87 | 10,49 | 13,11 | 15,73 | 20,98 | 26,22 |
| **051.0** | 10 | 14,18 | 17,72 | 21,27 | 24,81 | 28,36 | 31,90 | 38,99 | 46,08 |
| | 15 | 10,63 | 14,18 | 17,72 | 21,27 | 24,81 | 28,36 | 35,44 | 42,53 |
| | 18 | 8,51 | 12,05 | 15,60 | 19,14 | 22,68 | 26,23 | 33,32 | 40,41 |
| | 20 | 7,09 | 10,63 | 14,18 | 17,72 | 21,27 | 24,81 | 31,90 | 38,99 |
| | 22 | 5,67 | 9,22 | 12,76 | 16,30 | 19,85 | 23,39 | 30,48 | 37,57 |
| | 25 | 3,54 | 7,09 | 10,63 | 14,18 | 17,72 | 21,27 | 28,36 | 35,44 |
| **061.0** | 10 | 14,93 | 18,67 | 22,40 | 26,13 | 29,87 | 33,60 | 41,07 | 48,53 |
| | 15 | 11,20 | 14,93 | 18,67 | 22,40 | 26,13 | 29,87 | 37,33 | 44,80 |
| | 18 | 8,96 | 12,69 | 16,43 | 20,16 | 23,89 | 27,63 | 35,09 | 42,56 |
| | 20 | 7,47 | 11,20 | 14,93 | 18,67 | 22,40 | 26,13 | 33,60 | 41,07 |
| | 22 | 5,97 | 9,71 | 13,44 | 17,17 | 20,91 | 24,64 | 32,11 | 39,57 |
| | 25 | 3,73 | 7,47 | 11,20 | 14,93 | 18,67 | 22,40 | 29,87 | 37,33 |

Technical data referred to the following conditions:
Nominal air flow at MAX speed and with ESP = 0Pa
Water temperature differential = 10°C
Ta = Air intake temperature
kW$_T$ = Heating capacity (kW)

# Performance correction coefficients as a function of air flow and external static pressure
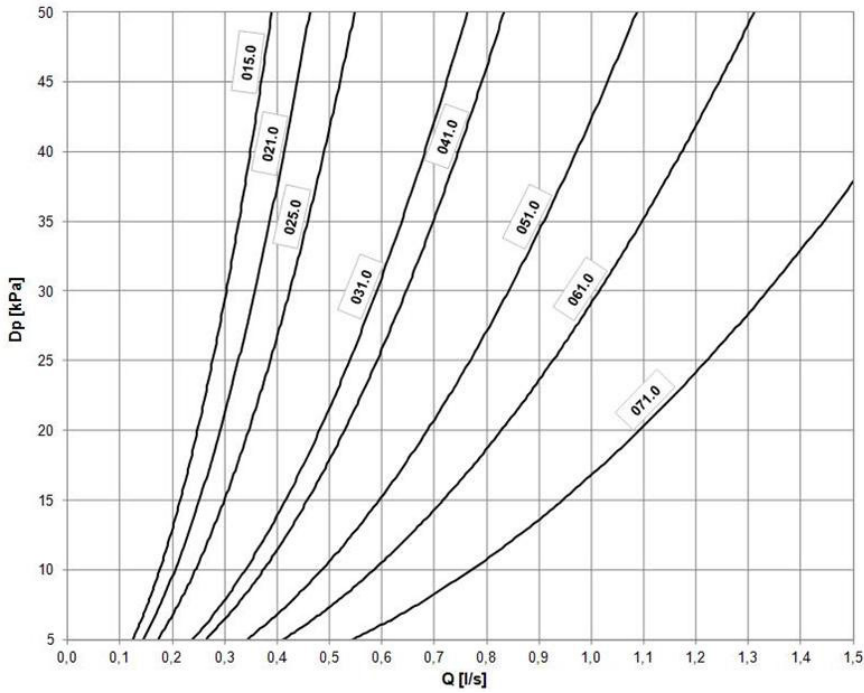
## 2 pipe system (CC2)

| ESP (Pa) | Fan speed | 015.0 | | | 021.0 | | | 025.0 | | | 031.0 | | | 041.0 | | | 051.0 | | | 061.0 | | | 071.0 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ |
| 0 | Max | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| | Mid | 0,87 | 0,85 | 0,86 | 0,87 | 0,85 | 0,86 | 0,88 | 0,86 | 0,87 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 | 0,95 | 0,94 | 0,95 | 0,96 | 0,95 | 0,95 |
| | Min | 0,71 | 0,68 | 0,70 | 0,72 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 | 0,70 | 0,66 | 0,68 | 0,70 | 0,66 | 0,68 | 0,71 | 0,67 | 0,69 | 0,79 | 0,77 | 0,78 | 0,81 | 0,78 | 0,80 |
| 10 | Max | 0,98 | 0,98 | 0,98 | 0,98 | 0,98 | 0,98 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 |
| | Mid | 0,86 | 0,84 | 0,85 | 0,86 | 0,84 | 0,86 | 0,87 | 0,85 | 0,86 | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,91 | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,94 |
| | Min | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 | 0,72 | 0,69 | 0,71 | 0,69 | 0,65 | 0,67 | 0,69 | 0,65 | 0,67 | 0,70 | 0,66 | 0,68 | 0,79 | 0,76 | 0,78 | 0,80 | 0,77 | 0,79 |
| 20 | Max | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,98 | 0,97 | 0,97 | 0,98 | 0,98 | 0,98 | 0,98 | 0,97 | 0,97 | 0,98 | 0,97 | 0,97 | 0,98 | 0,97 | 0,97 |
| | Mid | 0,85 | 0,83 | 0,84 | 0,85 | 0,83 | 0,84 | 0,86 | 0,84 | 0,86 | 0,90 | 0,88 | 0,89 | 0,90 | 0,89 | 0,90 | 0,90 | 0,89 | 0,90 | 0,92 | 0,91 | 0,92 | 0,93 | 0,92 | 0,93 |
| | Min | 0,69 | 0,65 | 0,67 | 0,70 | 0,66 | 0,68 | 0,71 | 0,67 | 0,69 | 0,68 | 0,64 | 0,67 | 0,68 | 0,64 | 0,67 | 0,69 | 0,65 | 0,67 | 0,78 | 0,75 | 0,77 | 0,79 | 0,77 | 0,78 |
| 30 | Max | 0,95 | 0,94 | 0,95 | 0,95 | 0,94 | 0,95 | 0,96 | 0,95 | 0,95 | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,96 | 0,96 | 0,96 | 0,96 | 0,96 | 0,96 | 0,96 | 0,96 | 0,96 |
| | Mid | 0,84 | 0,81 | 0,83 | 0,84 | 0,82 | 0,83 | 0,85 | 0,83 | 0,84 | 0,88 | 0,87 | 0,88 | 0,89 | 0,88 | 0,88 | 0,89 | 0,88 | 0,88 | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,91 |
| | Min | 0,68 | 0,64 | 0,67 | 0,69 | 0,65 | 0,67 | 0,70 | 0,66 | 0,68 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 | 0,68 | 0,64 | 0,67 | 0,78 | 0,75 | 0,77 | 0,79 | 0,76 | 0,78 |
| 40 | Max | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,94 | 0,95 | 0,94 | 0,95 | 0,95 | 0,94 | 0,95 | 0,94 | 0,93 | 0,94 | 0,94 | 0,93 | 0,94 | 0,94 | 0,93 | 0,94 |
| | Mid | 0,82 | 0,80 | 0,81 | 0,83 | 0,81 | 0,82 | 0,84 | 0,81 | 0,83 | 0,87 | 0,85 | 0,86 | 0,88 | 0,86 | 0,87 | 0,88 | 0,86 | 0,87 | 0,90 | 0,89 | 0,90 | 0,90 | 0,89 | 0,90 |
| | Min | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 | 0,68 | 0,64 | 0,67 | 0,67 | 0,63 | 0,65 | 0,67 | 0,63 | 0,65 | 0,67 | 0,63 | 0,66 | 0,77 | 0,74 | 0,76 | 0,78 | 0,75 | 0,77 |
| 50 | Max | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,92 | 0,92 | 0,91 | 0,92 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 |
| | Mid | 0,82 | 0,79 | 0,81 | 0,82 | 0,79 | 0,81 | 0,82 | 0,80 | 0,81 | 0,86 | 0,84 | 0,85 | 0,86 | 0,84 | 0,86 | 0,86 | 0,84 | 0,86 | 0,88 | 0,87 | 0,88 | 0,89 | 0,88 | 0,88 |
| | Min | 0,66 | 0,62 | 0,64 | 0,67 | 0,63 | 0,65 | 0,67 | 0,63 | 0,66 | 0,66 | 0,62 | 0,64 | 0,66 | 0,62 | 0,64 | 0,67 | 0,63 | 0,65 | 0,76 | 0,73 | 0,75 | 0,77 | 0,74 | 0,76 |
| 60 | Max | 0,90 | 0,89 | 0,90 | 0,91 | 0,90 | 0,91 | 0,91 | 0,90 | 0,91 | 0,91 | 0,90 | 0,91 | 0,92 | 0,91 | 0,91 | 0,91 | 0,90 | 0,91 | 0,92 | 0,91 | 0,91 | 0,91 | 0,90 | 0,91 |
| | Mid | 0,80 | 0,77 | 0,79 | 0,81 | 0,78 | 0,80 | 0,81 | 0,78 | 0,80 | 0,84 | 0,82 | 0,83 | 0,85 | 0,83 | 0,84 | 0,85 | 0,83 | 0,84 | 0,87 | 0,85 | 0,86 | 0,87 | 0,85 | 0,86 |
| | Min | 0,65 | 0,61 | 0,63 | 0,66 | 0,62 | 0,64 | 0,67 | 0,63 | 0,65 | 0,64 | 0,60 | 0,62 | 0,65 | 0,61 | 0,63 | 0,66 | 0,62 | 0,64 | 0,75 | 0,72 | 0,74 | 0,76 | 0,73 | 0,75 |
| 70 | Max | 0,88 | 0,87 | 0,88 | 0,89 | 0,88 | 0,88 | 0,90 | 0,88 | 0,89 | 0,89 | 0,88 | 0,88 | 0,90 | 0,88 | 0,89 | 0,89 | 0,88 | 0,88 | 0,90 | 0,88 | 0,89 | 0,90 | 0,88 | 0,89 |
| | Mid | 0,78 | 0,75 | 0,77 | 0,79 | 0,76 | 0,78 | 0,79 | 0,77 | 0,78 | 0,83 | 0,81 | 0,82 | 0,84 | 0,81 | 0,83 | 0,84 | 0,81 | 0,83 | 0,86 | 0,84 | 0,85 | 0,86 | 0,84 | 0,85 |
| | Min | 0,63 | 0,59 | 0,62 | 0,64 | 0,60 | 0,62 | 0,65 | 0,61 | 0,63 | 0,63 | 0,59 | 0,62 | 0,64 | 0,60 | 0,62 | 0,65 | 0,61 | 0,63 | 0,74 | 0,71 | 0,73 | 0,74 | 0,71 | 0,73 |
| 80 | Max | 0,87 | 0,85 | 0,86 | 0,88 | 0,86 | 0,87 | 0,88 | 0,87 | 0,88 | 0,87 | 0,85 | 0,86 | 0,88 | 0,86 | 0,87 | 0,87 | 0,85 | 0,86 | 0,88 | 0,86 | 0,87 | 0,88 | 0,86 | 0,87 |
| | Mid | 0,77 | 0,73 | 0,75 | 0,77 | 0,74 | 0,76 | 0,78 | 0,75 | 0,77 | 0,81 | 0,78 | 0,80 | 0,82 | 0,79 | 0,81 | 0,82 | 0,79 | 0,81 | 0,84 | 0,81 | 0,83 | 0,84 | 0,81 | 0,83 |
| | Min | 0,62 | 0,57 | 0,60 | 0,63 | 0,58 | 0,61 | 0,63 | 0,59 | 0,62 | 0,62 | 0,57 | 0,60 | 0,63 | 0,58 | 0,61 | 0,63 | 0,59 | 0,62 | 0,72 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 |
| 90 | Max | 0,86 | 0,84 | 0,85 | 0,86 | 0,84 | 0,86 | 0,86 | 0,84 | 0,86 | 0,85 | 0,83 | 0,84 | 0,86 | 0,84 | 0,85 | 0,85 | 0,83 | 0,84 | 0,86 | 0,84 | 0,86 | 0,86 | 0,84 | 0,85 |
| | Mid | 0,74 | 0,71 | 0,73 | 0,75 | 0,72 | 0,74 | 0,76 | 0,73 | 0,75 | 0,79 | 0,76 | 0,78 | 0,80 | 0,77 | 0,79 | 0,80 | 0,77 | 0,79 | 0,82 | 0,79 | 0,81 | 0,82 | 0,79 | 0,81 |
| | Min | 0,60 | 0,56 | 0,58 | 0,61 | 0,56 | 0,59 | 0,62 | 0,57 | 0,60 | 0,60 | 0,56 | 0,58 | 0,62 | 0,57 | 0,60 | 0,62 | 0,57 | 0,60 | 0,71 | 0,67 | 0,69 | 0,71 | 0,68 | 0,70 |
| 100 | Max | 0,84 | 0,81 | 0,83 | 0,84 | 0,82 | 0,83 | 0,85 | 0,83 | 0,84 | 0,82 | 0,80 | 0,81 | 0,84 | 0,81 | 0,83 | 0,83 | 0,81 | 0,82 | 0,84 | 0,81 | 0,83 | 0,84 | 0,81 | 0,83 |
| | Mid | 0,73 | 0,69 | 0,71 | 0,74 | 0,70 | 0,72 | 0,74 | 0,71 | 0,73 | 0,77 | 0,73 | 0,75 | 0,78 | 0,75 | 0,77 | 0,78 | 0,75 | 0,77 | 0,79 | 0,77 | 0,78 | 0,79 | 0,76 | 0,78 |
| | Min | 0,58 | 0,53 | 0,56 | 0,59 | 0,55 | 0,57 | 0,59 | 0,55 | 0,57 | 0,58 | 0,54 | 0,56 | 0,60 | 0,56 | 0,58 | 0,60 | 0,56 | 0,58 | 0,68 | 0,64 | 0,67 | 0,68 | 0,64 | 0,67 |
| 110 | Max | 0,81 | 0,78 | 0,80 | 0,82 | 0,80 | 0,81 | 0,82 | 0,80 | 0,81 | 0,79 | 0,77 | 0,78 | 0,81 | 0,78 | 0,80 | 0,80 | 0,77 | 0,79 | 0,82 | 0,79 | 0,81 | 0,81 | 0,78 | 0,80 |
| | Mid | 0,71 | 0,68 | 0,70 | 0,72 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 | 0,74 | 0,70 | 0,72 | 0,76 | 0,73 | 0,75 | 0,75 | 0,72 | 0,74 | 0,77 | 0,73 | 0,75 | 0,76 | 0,73 | 0,75 |
| | Min | 0,54 | 0,49 | 0,52 | 0,57 | 0,52 | 0,55 | 0,57 | 0,52 | 0,55 | 0,56 | 0,51 | 0,54 | 0,58 | 0,53 | 0,56 | 0,58 | 0,54 | 0,56 | 0,66 | 0,62 | 0,64 | 0,66 | 0,62 | 0,64 |
| 120 | Max | 0,79 | 0,76 | 0,78 | 0,80 | 0,77 | 0,79 | 0,80 | 0,77 | 0,79 | 0,77 | 0,73 | 0,75 | 0,78 | 0,75 | 0,77 | 0,77 | 0,74 | 0,76 | 0,79 | 0,76 | 0,78 | 0,78 | 0,75 | 0,77 |
| | Mid | 0,69 | 0,65 | 0,67 | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 | 0,73 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 | 0,74 | 0,70 | 0,72 | 0,74 | 0,70 | 0,72 |
| | Min | 0,50 | 0,45 | 0,48 | 0,53 | 0,48 | 0,51 | 0,53 | 0,48 | 0,51 | 0,53 | 0,48 | 0,51 | 0,55 | 0,50 | 0,53 | 0,56 | 0,51 | 0,54 | 0,63 | 0,58 | 0,61 | 0,63 | 0,59 | 0,62 |
| 130 | Max | 0,76 | 0,73 | 0,75 | 0,77 | 0,74 | 0,76 | 0,77 | 0,74 | 0,76 | 0,73 | 0,69 | 0,71 | 0,75 | 0,72 | 0,74 | 0,74 | 0,71 | 0,73 | 0,75 | 0,72 | 0,74 | 0,74 | 0,71 | 0,73 |
| | Mid | 0,64 | 0,60 | 0,62 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 | 0,70 | 0,66 | 0,68 | 0,70 | 0,66 | 0,68 | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 |
| | Min | 0,47 | 0,42 | 0,45 | 0,49 | 0,44 | 0,47 | 0,50 | 0,45 | 0,48 | 0,49 | 0,44 | 0,47 | 0,52 | 0,47 | 0,50 | 0,52 | 0,47 | 0,50 | 0,59 | 0,55 | 0,57 | 0,59 | 0,55 | 0,57 |
| 140 | Max | 0,72 | 0,69 | 0,71 | 0,74 | 0,71 | 0,73 | 0,74 | 0,71 | 0,73 | 0,69 | 0,65 | 0,67 | 0,71 | 0,68 | 0,70 | 0,71 | 0,67 | 0,69 | 0,71 | 0,68 | 0,70 | 0,71 | 0,67 | 0,69 |
| | Mid | 0,59 | 0,55 | 0,57 | 0,63 | 0,59 | 0,62 | 0,63 | 0,59 | 0,62 | 0,63 | 0,59 | 0,62 | 0,67 | 0,63 | 0,65 | 0,66 | 0,62 | 0,64 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 |
| | Min | 0,42 | 0,37 | 0,40 | 0,46 | 0,41 | 0,44 | 0,46 | 0,41 | 0,44 | 0,45 | 0,40 | 0,43 | 0,48 | 0,43 | 0,46 | 0,49 | 0,44 | 0,47 | 0,56 | 0,51 | 0,54 | 0,56 | 0,51 | 0,54 |
| 150 | Max | 0,68 | 0,64 | 0,67 | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 | 0,64 | 0,60 | 0,62 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,65 |
| | Mid | 0,52 | 0,47 | 0,50 | 0,58 | 0,53 | 0,56 | 0,57 | 0,52 | 0,55 | 0,58 | 0,53 | 0,56 | 0,62 | 0,57 | 0,60 | 0,61 | 0,57 | 0,59 | 0,63 | 0,59 | 0,62 | 0,63 | 0,58 | 0,61 |
| | Min | 0,36 | 0,30 | 0,33 | 0,41 | 0,36 | 0,39 | 0,41 | 0,36 | 0,39 | 0,39 | 0,34 | 0,37 | 0,43 | 0,38 | 0,41 | 0,43 | 0,38 | 0,41 | 0,51 | 0,46 | 0,49 | 0,51 | 0,46 | 0,49 |

Technical data referred to the following conditions:
Cooling: Indoor air temperature at 27°C D.B./19°C W.B
Water temperature in / out 7°C / 12°C

Heating: Indoor air temperature at 20°C
Water temperature in / out = 70°C / 60°C

# Performance correction coefficients as a function of air flow and external static pressure

## 4 pipe system (CC4)

| ESP (Pa) | Fan speed | 015.0 | | | 021.0 | | | 031.0 | | | 041.0 | | | 051.0 | | | 061.0 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ | $P_F$ | $P_S$ | $P_T$ |
| **0** | Max | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| | Mid | 0,88 | 0,87 | 0,88 | 0,89 | 0,88 | 0,88 | 0,92 | 0,91 | 0,92 | 0,93 | 0,92 | 0,93 | 0,96 | 0,95 | 0,95 | 0,96 | 0,96 | 0,96 |
| | Min | 0,73 | 0,69 | 0,71 | 0,74 | 0,70 | 0,72 | 0,71 | 0,67 | 0,69 | 0,71 | 0,68 | 0,70 | 0,82 | 0,79 | 0,81 | 0,82 | 0,80 | 0,81 |
| **10** | Max | 0,98 | 0,98 | 0,98 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 | 0,99 |
| | Mid | 0,87 | 0,85 | 0,86 | 0,88 | 0,86 | 0,87 | 0,91 | 0,90 | 0,91 | 0,92 | 0,91 | 0,91 | 0,94 | 0,93 | 0,94 | 0,94 | 0,93 | 0,94 |
| | Min | 0,72 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 | 0,81 | 0,78 | 0,80 | 0,82 | 0,79 | 0,81 |
| **20** | Max | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,97 | 0,96 | 0,97 | 0,98 | 0,97 | 0,97 |
| | Mid | 0,86 | 0,84 | 0,86 | 0,87 | 0,85 | 0,86 | 0,90 | 0,89 | 0,90 | 0,90 | 0,89 | 0,90 | 0,93 | 0,92 | 0,93 | 0,93 | 0,92 | 0,93 |
| | Min | 0,71 | 0,67 | 0,69 | 0,71 | 0,68 | 0,70 | 0,70 | 0,66 | 0,68 | 0,70 | 0,66 | 0,68 | 0,80 | 0,77 | 0,79 | 0,81 | 0,78 | 0,80 |
| **30** | Max | 0,96 | 0,95 | 0,95 | 0,96 | 0,95 | 0,95 | 0,95 | 0,94 | 0,95 | 0,96 | 0,95 | 0,95 | 0,96 | 0,95 | 0,95 | 0,96 | 0,95 | 0,95 |
| | Mid | 0,85 | 0,83 | 0,84 | 0,86 | 0,84 | 0,85 | 0,89 | 0,88 | 0,88 | 0,89 | 0,88 | 0,88 | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,91 |
| | Min | 0,70 | 0,66 | 0,68 | 0,71 | 0,67 | 0,69 | 0,68 | 0,64 | 0,67 | 0,69 | 0,65 | 0,67 | 0,79 | 0,77 | 0,78 | 0,80 | 0,77 | 0,79 |
| **40** | Max | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,94 | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,93 | 0,94 | 0,93 | 0,94 |
| | Mid | 0,84 | 0,81 | 0,83 | 0,84 | 0,82 | 0,83 | 0,88 | 0,86 | 0,87 | 0,88 | 0,87 | 0,88 | 0,90 | 0,88 | 0,89 | 0,90 | 0,89 | 0,90 |
| | Min | 0,68 | 0,64 | 0,67 | 0,69 | 0,65 | 0,67 | 0,67 | 0,63 | 0,66 | 0,68 | 0,64 | 0,67 | 0,79 | 0,76 | 0,78 | 0,79 | 0,77 | 0,78 |
| **50** | Max | 0,92 | 0,91 | 0,92 | 0,93 | 0,92 | 0,93 | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,91 | 0,92 | 0,91 | 0,92 | 0,92 | 0,91 | 0,92 |
| | Mid | 0,83 | 0,81 | 0,82 | 0,83 | 0,81 | 0,82 | 0,86 | 0,84 | 0,85 | 0,86 | 0,84 | 0,86 | 0,88 | 0,87 | 0,88 | 0,89 | 0,88 | 0,88 |
| | Min | 0,67 | 0,63 | 0,66 | 0,68 | 0,64 | 0,67 | 0,67 | 0,63 | 0,65 | 0,67 | 0,63 | 0,66 | 0,77 | 0,74 | 0,76 | 0,78 | 0,75 | 0,77 |
| **60** | Max | 0,91 | 0,90 | 0,91 | 0,92 | 0,91 | 0,91 | 0,90 | 0,88 | 0,89 | 0,90 | 0,89 | 0,90 | 0,90 | 0,89 | 0,90 | 0,91 | 0,90 | 0,91 |
| | Mid | 0,81 | 0,78 | 0,80 | 0,82 | 0,79 | 0,81 | 0,84 | 0,82 | 0,83 | 0,85 | 0,83 | 0,84 | 0,86 | 0,84 | 0,86 | 0,87 | 0,85 | 0,86 |
| | Min | 0,66 | 0,62 | 0,64 | 0,67 | 0,63 | 0,65 | 0,66 | 0,62 | 0,64 | 0,67 | 0,63 | 0,65 | 0,76 | 0,73 | 0,75 | 0,77 | 0,73 | 0,75 |
| **70** | Max | 0,89 | 0,88 | 0,88 | 0,90 | 0,88 | 0,89 | 0,88 | 0,86 | 0,87 | 0,88 | 0,87 | 0,88 | 0,89 | 0,88 | 0,88 | 0,90 | 0,88 | 0,89 |
| | Mid | 0,79 | 0,76 | 0,78 | 0,80 | 0,77 | 0,79 | 0,82 | 0,80 | 0,81 | 0,84 | 0,81 | 0,83 | 0,84 | 0,82 | 0,83 | 0,86 | 0,84 | 0,85 |
| | Min | 0,64 | 0,60 | 0,62 | 0,65 | 0,61 | 0,63 | 0,64 | 0,60 | 0,62 | 0,66 | 0,62 | 0,64 | 0,74 | 0,71 | 0,73 | 0,75 | 0,72 | 0,74 |
| **80** | Max | 0,88 | 0,86 | 0,87 | 0,88 | 0,87 | 0,88 | 0,86 | 0,84 | 0,85 | 0,86 | 0,84 | 0,86 | 0,86 | 0,84 | 0,86 | 0,87 | 0,85 | 0,86 |
| | Mid | 0,77 | 0,74 | 0,76 | 0,78 | 0,75 | 0,77 | 0,81 | 0,78 | 0,80 | 0,82 | 0,79 | 0,81 | 0,82 | 0,80 | 0,81 | 0,83 | 0,81 | 0,82 |
| | Min | 0,63 | 0,58 | 0,61 | 0,64 | 0,60 | 0,62 | 0,63 | 0,58 | 0,61 | 0,64 | 0,60 | 0,62 | 0,73 | 0,69 | 0,71 | 0,74 | 0,70 | 0,72 |
| **90** | Max | 0,86 | 0,84 | 0,85 | 0,87 | 0,85 | 0,86 | 0,84 | 0,81 | 0,83 | 0,84 | 0,82 | 0,83 | 0,84 | 0,82 | 0,83 | 0,85 | 0,83 | 0,84 |
| | Mid | 0,76 | 0,73 | 0,75 | 0,77 | 0,73 | 0,75 | 0,79 | 0,76 | 0,78 | 0,79 | 0,77 | 0,78 | 0,79 | 0,77 | 0,78 | 0,81 | 0,78 | 0,80 |
| | Min | 0,61 | 0,56 | 0,59 | 0,63 | 0,58 | 0,61 | 0,61 | 0,56 | 0,59 | 0,63 | 0,58 | 0,61 | 0,70 | 0,66 | 0,68 | 0,71 | 0,68 | 0,70 |
| **100** | Max | 0,84 | 0,81 | 0,83 | 0,85 | 0,83 | 0,84 | 0,81 | 0,78 | 0,80 | 0,82 | 0,80 | 0,81 | 0,82 | 0,79 | 0,81 | 0,82 | 0,80 | 0,81 |
| | Mid | 0,74 | 0,71 | 0,73 | 0,75 | 0,72 | 0,74 | 0,76 | 0,73 | 0,75 | 0,77 | 0,74 | 0,76 | 0,77 | 0,74 | 0,76 | 0,79 | 0,76 | 0,78 |
| | Min | 0,58 | 0,54 | 0,56 | 0,60 | 0,56 | 0,58 | 0,59 | 0,55 | 0,57 | 0,61 | 0,56 | 0,59 | 0,67 | 0,63 | 0,65 | 0,69 | 0,65 | 0,67 |
| **110** | Max | 0,81 | 0,78 | 0,80 | 0,82 | 0,80 | 0,81 | 0,78 | 0,75 | 0,77 | 0,79 | 0,77 | 0,78 | 0,79 | 0,76 | 0,78 | 0,80 | 0,77 | 0,79 |
| | Mid | 0,72 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 | 0,73 | 0,69 | 0,71 | 0,75 | 0,72 | 0,74 | 0,74 | 0,71 | 0,73 | 0,76 | 0,73 | 0,75 |
| | Min | 0,55 | 0,50 | 0,53 | 0,57 | 0,52 | 0,55 | 0,57 | 0,52 | 0,55 | 0,58 | 0,54 | 0,56 | 0,64 | 0,60 | 0,62 | 0,66 | 0,62 | 0,64 |
| **120** | Max | 0,78 | 0,75 | 0,77 | 0,80 | 0,77 | 0,79 | 0,75 | 0,72 | 0,74 | 0,77 | 0,73 | 0,75 | 0,75 | 0,72 | 0,74 | 0,77 | 0,73 | 0,75 |
| | Mid | 0,68 | 0,64 | 0,67 | 0,71 | 0,67 | 0,69 | 0,71 | 0,67 | 0,69 | 0,72 | 0,69 | 0,71 | 0,71 | 0,68 | 0,70 | 0,74 | 0,70 | 0,72 |
| | Min | 0,51 | 0,46 | 0,49 | 0,53 | 0,48 | 0,51 | 0,54 | 0,49 | 0,52 | 0,56 | 0,51 | 0,54 | 0,61 | 0,56 | 0,59 | 0,63 | 0,59 | 0,62 |
| **130** | Max | 0,75 | 0,72 | 0,74 | 0,77 | 0,74 | 0,76 | 0,71 | 0,68 | 0,70 | 0,74 | 0,70 | 0,72 | 0,71 | 0,68 | 0,70 | 0,74 | 0,70 | 0,72 |
| | Mid | 0,64 | 0,60 | 0,62 | 0,67 | 0,63 | 0,66 | 0,67 | 0,63 | 0,65 | 0,69 | 0,65 | 0,67 | 0,68 | 0,64 | 0,67 | 0,71 | 0,67 | 0,69 |
| | Min | 0,48 | 0,43 | 0,46 | 0,50 | 0,45 | 0,48 | 0,50 | 0,45 | 0,48 | 0,52 | 0,47 | 0,50 | 0,57 | 0,52 | 0,55 | 0,59 | 0,55 | 0,57 |
| **140** | Max | 0,72 | 0,69 | 0,71 | 0,74 | 0,71 | 0,73 | 0,67 | 0,63 | 0,66 | 0,70 | 0,66 | 0,68 | 0,67 | 0,63 | 0,66 | 0,71 | 0,67 | 0,69 |
| | Mid | 0,58 | 0,54 | 0,56 | 0,63 | 0,58 | 0,61 | 0,62 | 0,57 | 0,60 | 0,65 | 0,61 | 0,63 | 0,63 | 0,59 | 0,62 | 0,67 | 0,63 | 0,65 |
| | Min | 0,43 | 0,38 | 0,41 | 0,47 | 0,42 | 0,45 | 0,45 | 0,40 | 0,43 | 0,49 | 0,44 | 0,47 | 0,52 | 0,47 | 0,50 | 0,56 | 0,51 | 0,54 |
| **150** | Max | 0,64 | 0,60 | 0,62 | 0,71 | 0,67 | 0,69 | 0,62 | 0,57 | 0,60 | 0,66 | 0,62 | 0,64 | 0,63 | 0,58 | 0,61 | 0,67 | 0,63 | 0,65 |
| | Mid | 0,51 | 0,46 | 0,49 | 0,57 | 0,52 | 0,55 | 0,56 | 0,51 | 0,54 | 0,60 | 0,56 | 0,58 | 0,58 | 0,54 | 0,56 | 0,62 | 0,57 | 0,60 |
| | Min | 0,37 | 0,32 | 0,35 | 0,41 | 0,36 | 0,39 | 0,39 | 0,34 | 0,37 | 0,43 | 0,38 | 0,41 | 0,47 | 0,42 | 0,45 | 0,52 | 0,47 | 0,50 |

Technical data referred to the following conditions:
Cooling: Indoor air temperature at 27°C D.B./19°C W.B
Water temperature in / out 7°C / 12°C

Heating: Indoor air temperature at 20°C
Water temperature in / out = 70°C / 60°C

# Exchanger pressure drops

## 2 pipe system (CC2)

Q = Water flow rate (l/s)
DP = Pressure drops [kPa]

## 4 pipe system (CC4)
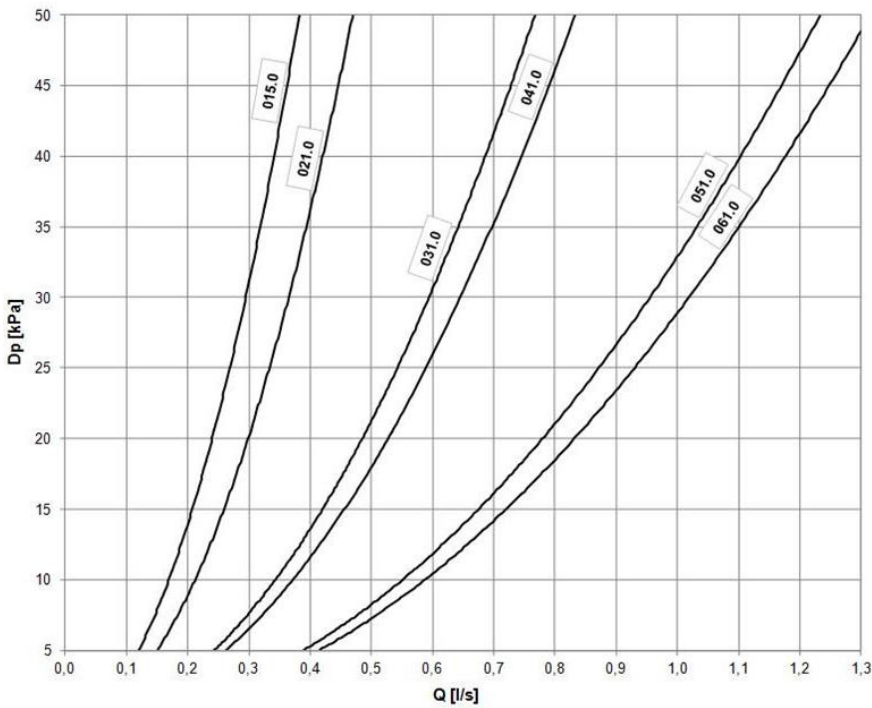
Q = Water flow rate (l/s)
DP = Pressure drops [kPa]

# Configuration options

## TRM - Terminal block with minimum water temperature clickson

"Mammoth" type terminal board (min. 7 poles) IP20 with minimum hot water temperature thermostat (T. SET = 32°C).

This function disable the fan operation when, in heating mode, the water on the coil is not hot enough.

Function to prevent ventilation, of cold air in the room (because the water is too cold), which in winter it can be particularly annoying.

The probe which measures the minimum temperature is usually installed in contact with the heating coil, but according to the controllers maybe required the intallation on the inlet pipe unit (before any possible valve).

The "minimum hot water temperature" works only in heating mode. In cooling it is by-passed.

⚠ If electronic CTS (CLIVET TALK TERMINAL SPACE) is present, isn't longer necessary this option because already included.

(MV) Fan motor
(TM) Minimum water
temperature clickson

## TRP - Terminal block with closing cover IP40

Terminal block type "mamut" (min. 7 poles) with closing cover IP40.

⚠ If electronic CTS (CLIVET TALK TERMINAL SPACE) is present, isn't longer necessary this option because already included.
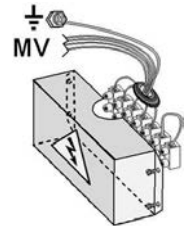
(MV) Fan motor

## TRMP - Terminal block with closing cover IP40 and minimum water temperature clickson

Terminal block type "mamut" (min. 7 poles) with closing cover IP40 and minimum water temperature clickson.

⚠ If electronic CTS (CLIVET TALK TERMINAL SPACE) is present, isn't longer necessary this option because already included.
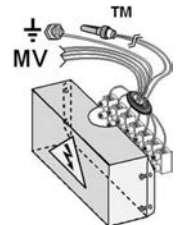
(MV) Fan motor
(TM) Minimum water
temperature clickson

## CTSP1 - CLIVET TALK TERMINAL SPACE electronics with RS485 Modbus serial port

This is a card for control of the unit which, in addition to basic functions, allows it to be connected to a network of similar units managed centrally by ELFOControl or B.M.S.

This type of electronic card is suited for communicating via RS485 if connected to SP1 devices.

The microprocessor control installed in the unit receives operating settings from one of the following thermostats:

- HID-T2 - Electronic room control for wall installation
- HID-T3 - Electronic room control for wall installation with humidity probe

With CTSP1 electronics is provided also a return air probe for the reading of the room temperature. By default is expected that the air probe of the room thermostat (HIDT...), when present, is priority respect to the return air probe, even if it is connected. When there isn't room thermostat, the unit adjusts on its return air probe. Through the setting of a parameter it's possible that this priority can be reversed and therefore the reading of temperature by the return air probe is priority respect to the air probe of the room thermostat (HIDT...), even though this is simultaneously connected.

When it isn't present, the return air probe of the unit will adjust on the value detected by the thermostat.

Its functionalities are:

- control of minimum temperature of system water temperature
- Control of manual or automatic speed fan
- control of on/off water valve
- control card of 0-10V valve and fan through the additional card CPVM
- digital input for remote on/off function or winter/summer
- fan control / fresh air damper actuator
- on/off control of electrical heating element or cumulative alarm relay.

The serial port with MODBUS protocol. Allows the cable connection betweem the units and the ELFOControl or B.M.S. It allow to create mini networks (a single HIDT... thermostat that controls up to 9 units).
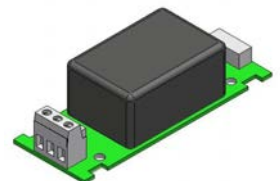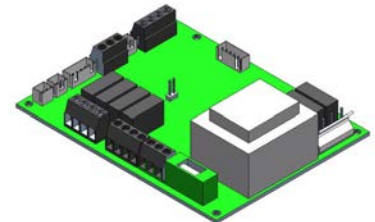
## CPVM - Control additional card of 0-10V valve and EC fan (available only with options: CTSP1)

Control card of fan and 0-10V valve.

# VEC - High efficiency EC fan (available with options: TR, TRM, TRP, TRMP, CTSP1 + CPVM)

The ELFODuct HP series can be configured with an innovative DC Brushless motor fan and ensures reduced consumption thanks to the modulation of the ventilation.

The air flow can be varied continuously with a 0-10V signal.

The estreme efficiency, also at low speed, makes possible a great reduction in electric consumption and the operating costs in comparison to a traditional fan coil with AC motor.

The main advantages are:

- Large reduction in energy consumption, thanks to an optimal response to the thermal load of the environment during every moment of the day
- Operating silence at all rotation speeds
- Ability to operate at any rotation speed
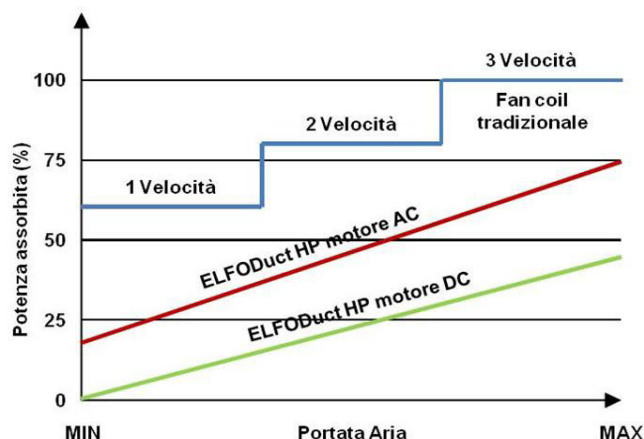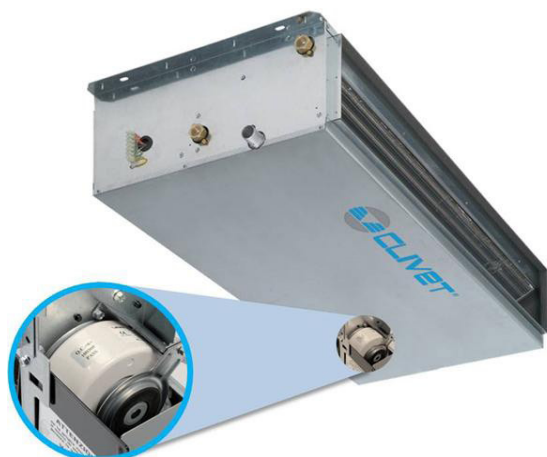


# RE700 - 0.7 kW integrated electric heater with safety thermostat and power electric panel

# RE1000 - 1.0 kW integrated electric heater with safety thermostat and power electric panel

# RE1500 - 1.5 kW integrated electric heater with safety thermostat and power electric panel

# RE2000 - 2.0 kW integrated electric heater with safety thermostat and power electric panel

Single-stage electrical heater integrated inside the unit with automatic reset safety thermostat (without power relay) and power electric panel for heaters supplied installed external to the section containing the electrical heaters, also including the terminal board wiring.

Heating element for air insertable any size, checked for compatibility of the dimensions.
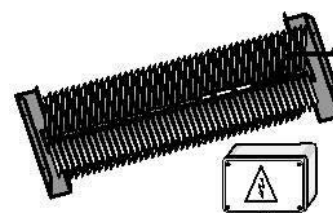


## Main technical specifications of the electric heaters

| Model | Compatibility | Pwer supply | Heating capacity | Current input (Max) | Dimensions (Lenght x Height x Depth) |
|-------|---------------|-------------|------------------|---------------------|--------------------------------------|
| RE700 | All sizes | 230Vac | 700W | 3,05A | 400x115x30mm |
| RE1000 | All sizes | 230Vac | 1000W | 4,35A | 500x115x30mm |
| RE1500 | All sizes | 230Vac | 1500W | 6,53A | 750x115x30mm |
| RE2000 | All sizes | 230Vac | 2000W | 8,70A | 950x115x30mm |

![CLIVET logo]

## 2V2 - on/off 2-way valve kit for 2 pipe system (available only with options: CC2)

## 2V4 - on/off 2-way valve kit for 4 pipe system (available only with options: CC4)

## 3V2 - Three-way valve kit for 2 pipe system type "on/off" (available only with options: CC2)

## 3V4 - Three-way valve kit for 4 pipe system type "on/off" (available only with options: CC4)

## 10V2 - 0-10V 3 way valve kit for 2 pipe system (available only with options: CC2)

## 10V4 - 0-10V 3 way valve kit for 4 pipe system (available only with options: CC4)

ON/OFF 2 or 3-way valve kit (power 230Vac) complete with thermoelectric actuator or modulating 0-10V 3-way valve kit (power 24Vac), suitable for all versions (horizontal and vertical units) and for units with connections either on right or left.

Technical data

- DN = 3/4" M
- PN = 16 bar
- Kv = 2,5 (CC2: size 015.0 - 021.0 - 025.0 / CC4: size 015.0 - 021.0); 4 (CC2: size 031.0 - 041.0 - 051.0 / CC4: size 031.0 - 041.0); 6 (CC2: size 061.0 - 071.0 / CC4: size 051.0 - 061.0)
- ΔP = 70 kPa.

⚠ Accessory also available separately supplied

**Pressure drop**
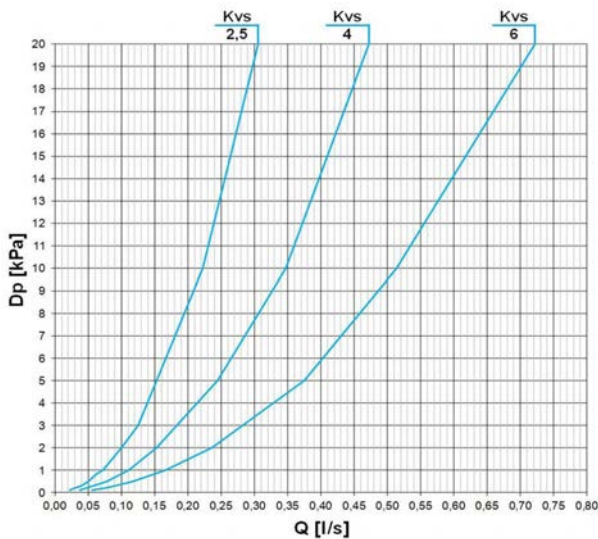



2V2
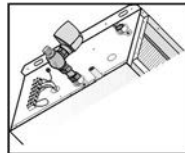

2V4
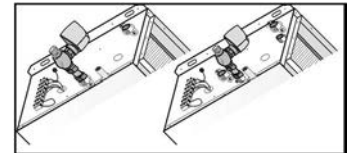

3V2 o 10V2
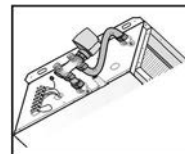

3V4 o 10V4
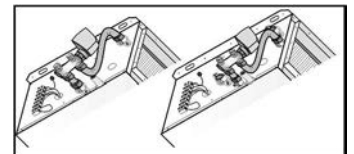
Q = Water flow rate (l/s)
DP = Pressure drop [kPa]

## CDP - Condensate pump

Condensate pump provided with 8A (250V) alarm contact, suitable for all vertical versions (INV) and horizontal version (INH).

Water flow:

- 8 l/h con 0 m.w.c. (max);
- 6,5 l/h con 1 m.w.c.;
- 4 l/h con 3 m.w.c.;
- 0 l/h con 6 m.w.c.

⚠ Accessory also available separately supplied



## BRO - Auxiliary drain pan in galvanized steel with thermal insulation (available only with options: INH)

The auxiliary drain pan for horizontal version makes it possible to collect the condensation of the unit's connection tubes and valves.

Realized of galvanized steel and internal thermal-acoustic insulation (class M1).

This accessory is suitable for:

- installation on all sizes;
- for units with connections either on right or left.

⚠ Accessory also available separately supplied
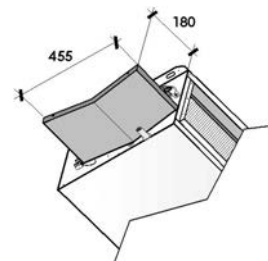
## BRV - Auxiliary drain pan (vertical installation) (available only with options: INV)

The auxiliary drain pan for vertical version makes it possible to collect the condensation of the unit's connection tubes and valves.

It's made in plastic material.

This accessory is suitable for:

- installation on all sizes;
- for units with connections either on right or left.
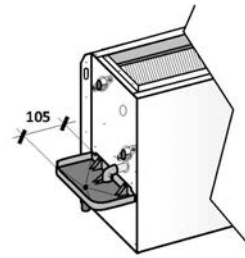
⚠ Accessory also available separately supplied

## FAPS - EU3 flat air filter (Eurovent 4/5) not ductable

Flat EU3 (Eurovent 4/5) air filter removable from any side (not ductable).

It can be regenerated by water-washing, blowing, vacuuming.
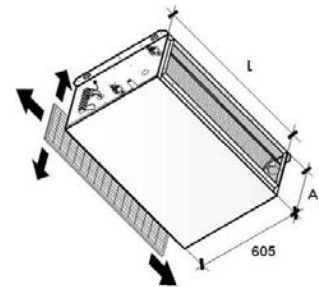
⚠ Accessory also available separately supplied

| FAPS | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop (clean filter) | Pa | 18 (CC2-CC4) | 22 (CC2-CC4) | 20 (CC2) | 31 (CC2-CC4) | 37 (CC2-CC4) | 34 (CC2)37 (CC4) | 44 (CC2-CC4) | 40 (CC2) |

Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## SFCF - Air filter section (ductable) with EU3 flat air filter (Eurovent 4/5)

Ductable EU3 (Eurovent 4/5) air filter section made of false frame in 4 parts in galvanized steel and flat air filter.

Air filter removable from any side

It can be regenerated by water-washing, blowing, vacuuming.
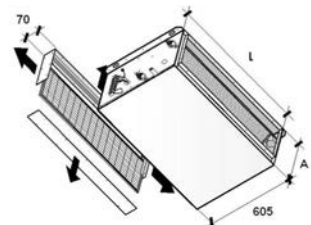
⚠ Accessory also available separately supplied

| SFCF | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop (clean filter) | Pa | 18 (CC2-CC4) | 22 (CC2-CC4) | 20 (CC2) | 31 (CC2-CC4) | 37 (CC2-CC4) | 34 (CC2)37 (CC4) | 44 (CC2-CC4) | 40 (CC2) |

Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

⚠ The EU5 high-efficiency air filter (Eurovent 4/5) can be provided only separately. For the description of the accessory, see the next section dedicated to the 'ACCESSORY SEPARATELY SUPPLIED'.

# Accessories separately supplied

## HIDE2X - Remote control with E/I + 3V + on/off for wall installation

HID-E2 electro mechanical room thermostat for wall installation

It allows:

- setting the desired temperature (10-30°C)
- selection of the 3 speeds (MIN - MED - MAX)
- ON/OFF
- manual Summer / Winter change
- continuous or thermostat-based ventilation
- control of on/off water valve

It can be connected to the remote air probe (PTABX).

The hot water minimum temperature Clickson can be connected.

Dimensions: 184x82x27 mm
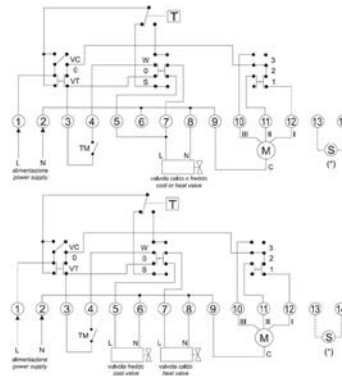
## HIDE3X - Plurifunctional remote control for wall installation

HID-E3 electro mechanical room thermostat for wall installation

It allows:

- automatic fan speed adjustment (MIN - MED - MAX)
- silent operation (minimum fan speed)
- ON/OFF
- ambient temperature adjustment via the control knob: the knob's central position corresponds to the comfort condition (20°C in heating mode, 24°C in cooling mode). The temperature can be changed by +/- 5°C in relation to the comfort condition by turning the knob
- automatic selection of the Summer/Winter season: the heating or cooling mode is selected automatically by detecting the water temperature supplied to the fan-coil (water temperature below 17°C=operation in cooling mode, water temperature above 21°C=operation in heating mode)
- Hot Start function: in heating mode the fan does not start until the thermal coil is not hot enough
- destratification cycle
- dirty filter warning
- minimum water temperature probe

Dimensions: 184x82x27 mm
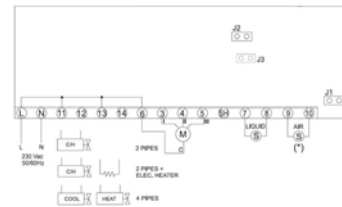
## HIDE4X - Plurifunctional room control for 0-10V valves

Electro-mechanical room thermostat HID-E4 for wall mounting with proportional outlets for 2 or 4 pipe systems.

It allows:

- power supply 24V
- setting the desired temperature (10-30°C)
- manual Summer / Winter change
- fan speed selection (MIN - MED - MAX)
- control 0-10V coil valves for hot/cold water for thermostat controlled 2 or 4 pipe systems with adjustable working range and neutral zone (respectively 1-5°C and 1-4°C)

Set up for connection of remote air probe (PTABX).

Dimensions: 184x82x27 mm
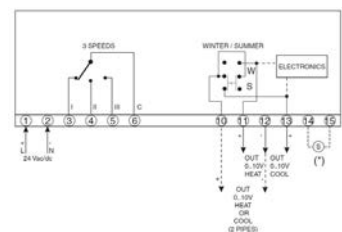
## HIDT2X - HID-T2 electronic room control

The HID-T2 room thermostat makes it possible to interface with the control module of units equipped with CLIVET TALK TERMINAL SPACE electronics (CTSP1) and to manage one or more thermostat units.

The room thermostat allows the following functions:

- setting of the desidered temperature
- selection of the 3 speeds (MIN - MED - MAX) either manually or automatically
- ON/OFF
- change summer/winter automatically or manually with digital input
- select operation in economy mode
- set the unit's operating parameters
- setting of ventilation-only mode
- control of external air shutter and control of motorized air outlet grille
- management of diagnostics with specific code for type of error

Dimensions: 123x86x27 mm

The thermostat is connected to the unit via a shielded twisted pair at a maximum distance of 15 m.

## HIDT3X - HID-T3 electronic room control

The HID-T3 room thermostat makes it possible to interface with the control module of units equipped with CLIVET TALK TERMINAL SPACE electronics (CTSP1) and to manage one or more thermostat units.

The room thermostat allows the following functions:

- setting of the desidered temperature
- selection of the 3 speeds (MIN - MED - MAX) either manually or automatically
- ON/OFF
- change summer/winter automatically, manually or remote with digital input
- select operation in economy mode
- set the unit's operating parameters
- setting of ventilation-only mode
- control of external air shutter and control of motorized air outlet grille
- humidity probe management
- humidity display
- management of diagnostics with specific code for type of error

Dimensions: 123x86x27 mm

The thermostat is connected to the unit via a shielded twisted pair at a maximum distance of 15 m.

## HIDTI8X - HID-TI8X electronic room control for 3-speed or 0-10V fan and on/off or 0-10V valve

This digital controller is intended for temperature regulation in environments equipped with fan-coil heat-cool exchangers. It controls in continuous proportional fashion the speed of high efficiency EC fan (VEC), in order to adjust the room temperature in the most suitable way. Equipped with LCD display, pre-programmable, configurable to meet the requirements of different installations. Multi-functions, with remote room air temperature sensor, for the full control of 2-4 pipes unit, with or without valves.

The HIDYI8X allows the following functions:

- digital thermostat settable with manual or automatic selection of the 3 fan speeds
- manual, automatic or centralized summer/winter selection by an input, neutral zone and changeover on the supply water
- temperature control system on valves, fan or both
- LCD display with all functions displayed
- driving of On/Off valves, PWM, 3-point servo-control, 0-10V actuators, heaters, heat pumps
- special functions: economy, dirty filter warning, window contact or presence
- set-up for external and supply probe
- driving of the fan motor by 3 relays or proportional by 0-10V signal
- possibility to drive the fan motor at 230V~, the thermostat and the actuators at 24V~.

## DCPX - Control device for more units with a single room control

Control device from single thermostat for max. 4 units compatible with HID-E electromechanical thermostats. (Order 1 device every 4 units).
DIN rail mounting.

Dimensions: 104 X 90 X 70 mm.

## PTABX - Remote probe for room air temperature for electromechanical thermostats

Sensors and thermostats should be located in the reference rooms, in a position enabling the actualy measurement of the temperature, without any external factors influence.

Best technical solution to measure the correctly room temperature is to install the sensor in the room, on the wall of the same.

The remote room air sensor can be connected to the HID-E_ room thermostats complete with sensor input and is 1m long.

## TMX - Hot water min. temperature thermostat

The minimum water temperature clickson stops ventilation in winter mode when the water temperature of the unit is less than 40°, thus preventing air that is not particularly warm from being placed in the room.

Also applicable to wall thermostats HIDE2, HIDE3 and HIDE4.

## EH2QX - Heating section with 230V electric heaters, safety thermostat and power electric panel

If hot water is not available, the electric heater section can be used for the utilities described above.

The electrical heater are supplied with safety thermostat with automatic reset and power electric panel supplied installed external to the section containing the electrical heaters, also including the terminal board wiring.

It is made with a galvanised plate frame and finned aluminium heating elements that allow rapid and uniform diffusion of the heat.

Power supply 230/1/50.

For the power values available, power input and the air pressure drop, refer to the tables below.

| EH2QX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Heating capacity | [kW] | 6,0 (CC2-CC4) | 6,0 (CC2-CC4) | 6,0 (CC2) | 9,0 (CC2-CC4) | 9,0 (CC2-CC4) | 9,0 (CC2-CC4) | 9,0 (CC2-CC4) | 9,0 (CC2) |
| Current input | [A] | 26,1 (CC2-CC4) | 26,1 (CC2-CC4) | 26,1 (CC2) | 39,2 (CC2-CC4) | 39,2 (CC2-CC4) | 39,2 (CC2-CC4) | 39,2 (CC2-CC4) | 39,2 (CC2) |
| Air pressure drop | [Pa] | 13 (CC2-CC4) | 16 (CC2-CC4) | 15 (CC2) | 23 (CC2-CC4) | 27 (CC2-CC4) | 24 (CC2) 27 (CC4) | 32 (CC2-CC4) | 29 (CC2) |

Technical data referred to the following conditions:
Standard unit
Atmospheric pressure 1013 mbar
Indoor air temperature at 20°C
Water temperature in / out = 70°C / 60°C

Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## EH4QX - Heating section with 400V electric heaters, safety thermostat and power electric panel

If hot water is not available, the electric heater section can be used for the utilities described above.

The electrical heater are supplied with safety thermostat with automatic reset and power electric panel supplied installed external to the section containing the electrical heaters, also including the terminal board wiring.

It is made with a galvanised plate frame and finned aluminium heating elements that allow rapid and uniform diffusion of the heat.

Power supply 400/3/50.

For the power values available, power input and the air pressure drop, refer to the tables below.

| EH4QX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Heating capacity | [kW] | 3x2,0 (CC2-CC4) | 3x2,0 (CC2-CC4) | 3x2,0 (CC2) | 3x3,0 (CC2-CC4) | 3x3,0 (CC2-CC4) | 3x3,0 (CC2-CC4) | 3x3,0 (CC2-CC4) | 3x3,0 (CC2) |
| Current input | [A] | 3x8,7 (CC2-CC4) | 3x8,7 (CC2-CC4) | 3x8,7 (CC2) | 3x13,1 (CC2-CC4) | 3x13,1 (CC2-CC4) | 3x13,1 (CC2-CC4) | 3x13,1 (CC2-CC4) | 3x13,1 (CC2) |
| Air pressure drop | [Pa] | 13 (CC2-CC4) | 16 (CC2-CC4) | 15 (CC2) | 23 (CC2-CC4) | 27 (CC2-CC4) | 24 (CC2) 27 (CC4) | 32 (CC2-CC4) | 29 (CC2) |

Technical data referred to the following conditions:
Standard unit
Atmospheric pressure 1013 mbar
Indoor air temperature at 20°C
Water temperature in/out = 70°C/60°C

Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## KIB22X - Water and balancing kit for 2-way valve and 2 pipe installation (available only with options: CC2)

Water and balancing kit for 2-way valve and 2-pipe system composed by:

- Copper pipes 90° kit
- N°1 shut-off (ball) 3/4" (Kv = 23,5) valves for main coil
- N°1 balancing 3/4" (Kv = 4,6) valves for main coil
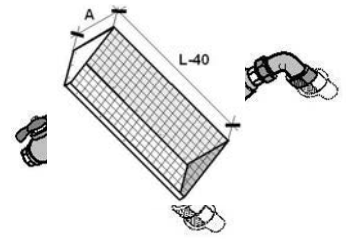
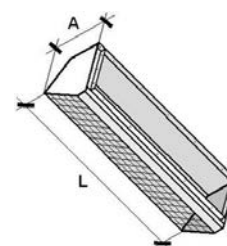## KIB24X - Water and balancing kit for 2-way valve and 4 pipe installation (available only with options: CC4)

Water and balancing kit for 2-way valve and 4-pipe system composed by:

- N°2 copper pipes 90° kit
- N°1 shut-off (ball) 3/4" (Kv = 23,5) valves for main coil
- N°1 balancing 3/4" (Kv = 4,6) valves for main coil
- N°1 shut-off (ball) 1/2" (Kv = 14,6) valves for additional coil
- N°1 balancing 1/2" (Kv = 2,5) valves for additional coil
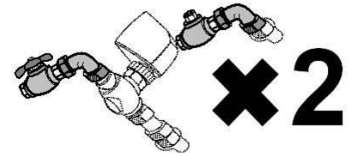
## KIB32X - Water and balancing kit for 3-way valve and 2 pipe installation (available only with options: CC2)

Water and balancing kit for 3-way valve and 2-pipe system composed by:

- Copper pipes 90° kit
- N°1 shut-off (ball) 3/4" (Kv = 23,5) valves for main coil
- N°1 balancing 3/4" (Kv = 4,6) valves for main coil
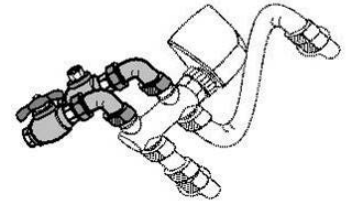
## KIB34X - Water and balancing kit for 3-way valve and 4 pipe installation (available only with options: CC4)

Water and balancing kit for 3-way valve and 4-pipe system composed by:

- N°2 copper pipes 90° kit
- N°1 shut-off (ball) 3/4" (Kv = 23,5) valves for main coil
- N°1 balancing 3/4" (Kv = 4,6) valves for main coil
- N°1 shut-off (ball) 1/2" (Kv = 14,6) valves for additional coil
- N°1 balancing 1/2" (Kv = 2,5) valves for additional coil
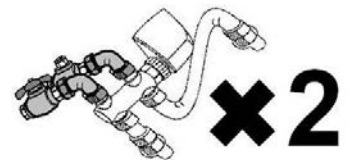
## SFHEX - Air filter section (ductable) with EU5 air filter (Eurovent 4/5)

Ductable air filter section made of false frame in 4 parts in galvanized steel and high efficiency undulated air filter H=100mm EU5 (Eurovent 4/5).

Air filter removable from any side.

It can be regenerated by water-washing, blowing, vacuuming.

| SFHEX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop (clean filter) | Pa | 25 (CC2-CC4) | 30 (CC2-CC4) | 28 (CC2) | 44 (CC2-CC4) | 52 (CC2-CC4) | 47 (CC2) 51 (CC4) | 62 (CC2-CC4) | 57 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## CUFMX - Air outlet casing with bird-proof grill

Supply galvanized steel section with bird- proof grill for outdoor installation just of the unit ventilating section used like ventilating box.

Only suitable for air supply.

| CUFMX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop | Pa | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## CUFAX - Air intake casing with bird-proof grill and EU3 air filter (Eurovent 4/5)

Air intake casing with bird-proof grill and flat air filter for outdoor installation.

Only suitable for air intake.

| CUFAX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop (clean filter) | Pa | 18 (CC2-CC4) | 22 (CC2-CC4) | 20 (CC2) | 31 (CC2-CC4) | 37 (CC2-CC4) | 34 (CC2) 37 (CC4) | 44 (CC2-CC4) | 40 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## PCCMAX - Section with spigots "Ø" with variable diameter and internal insulation for both air supply outlets

Steel supply section with spigots "Ø" with variable diameter made of plastic material (internal insulation).

Diameter of spigots:

- Ø max: 200mm
- Ø med: 180mm
- Ø min: 160mm
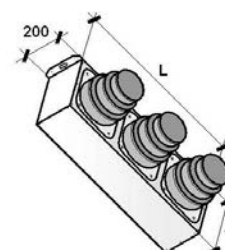
## PCCRIX - Section with spigots "Ø" with variable diameter and internal insulation for air intake outlets.

Differs that supply air sections (PCCMAX) only plenum/unit connection.

| PCCMAX - PCCRIX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Spigots | [n] | 3 (CC2-CC4) | 3 (CC2-CC4) | 3 (CC2) | 5 (CC2-CC4) | 5 (CC2-CC4) | 5 (CC2) 6 (CC4) | 6 (CC2-CC4) | 6 (CC2) |
| Air pressure drop | Pa | 21 (CC2-CC4) | 26 (CC2-CC4) | 24 (CC2) | 38 (CC2-CC4) | 45 (CC2-CC4) | 40 (CC2) 44 (CC4) | 53 (CC2-CC4) | 49 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration

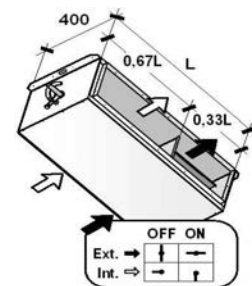CC4 = 4 pipe system configuration

## P90MAX - 90° section for both air supply outlets

90° section (galvanized steel) for air supply suitable for horizontal and vertical installations.
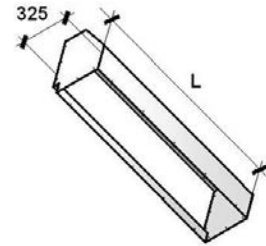
## PR90AX - 90° air intake plenum

Differs that supply air plenum (P90MAX) only plenum/unit connection.

| P90MAX - PR90AX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| Air pressure drop | Pa | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) | 13 (CC2-CC4) | 15 (CC2-CC4) | 13 (CC2) 15 (CC4) | 18 (CC2-CC4) | 16 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## SILMAX - Labyrinth noise level attenuator section for both air intake / supply outlets

The silencing sections in galvanised sheet metal contribute to noise reduction that occurs and propagates in ventilation and air conditioning systems, due to the presence of components such as fans and various types of dampers

The control of noise produced by the installations requires a proper use of these sections in order to obtain, in environment, sound pressure levels in accordance with the standards and specifications of the project.
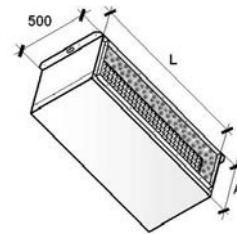
| SILMAX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Noise attenuation | [dBA] | 6 (CC2-CC4) | 6 (CC2-CC4) | 6 (CC2) | 7 (CC2-CC4) | 7 (CC2-CC4) | 7 (CC2) 8 (CC4) | 8 (CC2-CC4) | 8 (CC2) |
| Air pressure drop | Pa | 28 (CC2-CC4) | 35 (CC2-CC4) | 33 (CC2) | 50 (CC2-CC4) | 60 (CC2-CC4) | 54 (CC2) 60 (CC4) | 71 (CC2-CC4) | 65 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## MCRX - Mixing and recirculating chamber

External/Internal ON/OFF mixing section in galvanized steel (external air 0-33% - internal air 100-67% or vice versa) with manual controls.

When the system needs fresh air flow, this section allows the connections of return air from the ambient duct with the intake fresh air duct.

The renewal air regulation is obtained by a coupled air lock, eventually motorized.

The plenum is suitable to be installed with fresh air intake on both sides (right and left) rotating it of 180° before the coupling with the base unit. The regulating handle is an optional supplied on the indoor air inlet side. On the opposite side a bolt suitable for servo-control is supplied (S230X, supplied separately).

Can be used for horizontal/vertical ductable units.

| MCRX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop | Pa | 15 (CC2-CC4) | 19 (CC2-CC4) | 18 (CC2) | 28 (CC2-CC4) | 33 (CC2-CC4) | 30 (CC2) 32 (CC4) | 39 (CC2-CC4) | 36 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## S230X - ON/OFF 230V servomotor for mixing and recirculation chamber (available only with options: MCRX)
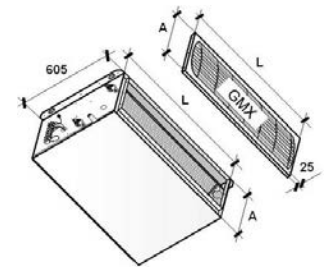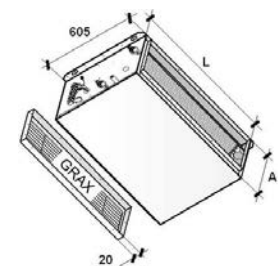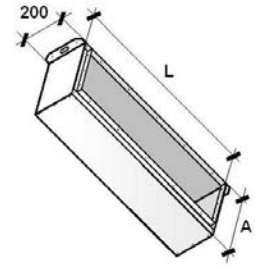
Servomotor with adjustable connection and spring return having the following features:

- required torque for operating = 5 Nxm/m$^2$
- servomotor power = 2 Nxm
- power supply = 230Vac ON/OFF

## GMX - Supply grille

Steel panel with ABS air supply grill, without air filter. Only for air supply outlet.

| GMX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop | Pa | 14 (CC2-CC4) | 17 (CC2-CC4) | 16 (CC2) | 25 (CC2-CC4) | 30 (CC2-CC4) | 27 (CC2) 29 (CC4) | 35 (CC2-CC4) | 32 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## GRAX - Return grille with filter

Steel panel with ABS air intake grill + flat air filter, EU3 filtering level (Eurovent 4/5). Only for air intake outlet.

| GRAX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop (clean filter) | Pa | 32 (CC2-CC4) | 39 (CC2-CC4) | 36 (CC2) | 56 (CC2-CC4) | 67 (CC2-CC4) | 61 (CC2) 66 (CC4) | 80 (CC2-CC4) | 73 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

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## PMAX - Straight section for both air intake / supply outlets

Straight section (empty section) in galvanized steel suitable for horizontal and vertical versions.



| PMAX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| A (height) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| Air pressure drop | Pa | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

## PGFMAX - Anti-vibration section for both air supply outlets

The supply air sections in galvanized sheet metal with flexible joint, may be particularly indicated for simplifying the matching of the units with fixed ducts or with grids.

Height for all sizes in 2 or 4 pipe system = 275 mm.
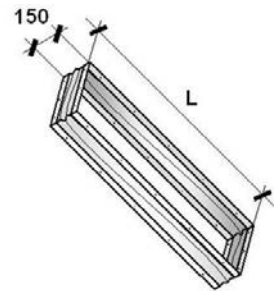
## PGFRIX - Anti-vibration section for air intake outlets

Differs that supply air sections with flexible joint (PGFMAX) only plenum/unit connection.



| PGFMAX - PGFRIX | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
|---|---|---|---|---|---|---|---|---|---|
| L (lenght) | [mm] | 800 (CC2-CC4) | 800 (CC2-CC4) | 800 (CC2) | 1200 (CC2-CC4) | 1200 (CC2-CC4) | 1200 (CC2) 1600 (CC4) | 1600 (CC2-CC4) | 1600 (CC2) |
| Air pressure drop | Pa | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2-CC4) | < 10 (CC2) |

Technical data referred to the following conditions:
Nominal air flow rate = at maximum speed
Air pressure drop (Pa) referred to nominal air flow of the 2 pipe unit
CC2 = 2 pipe system configuration
CC4 = 4 pipe system configuration

# Dimensional drawings

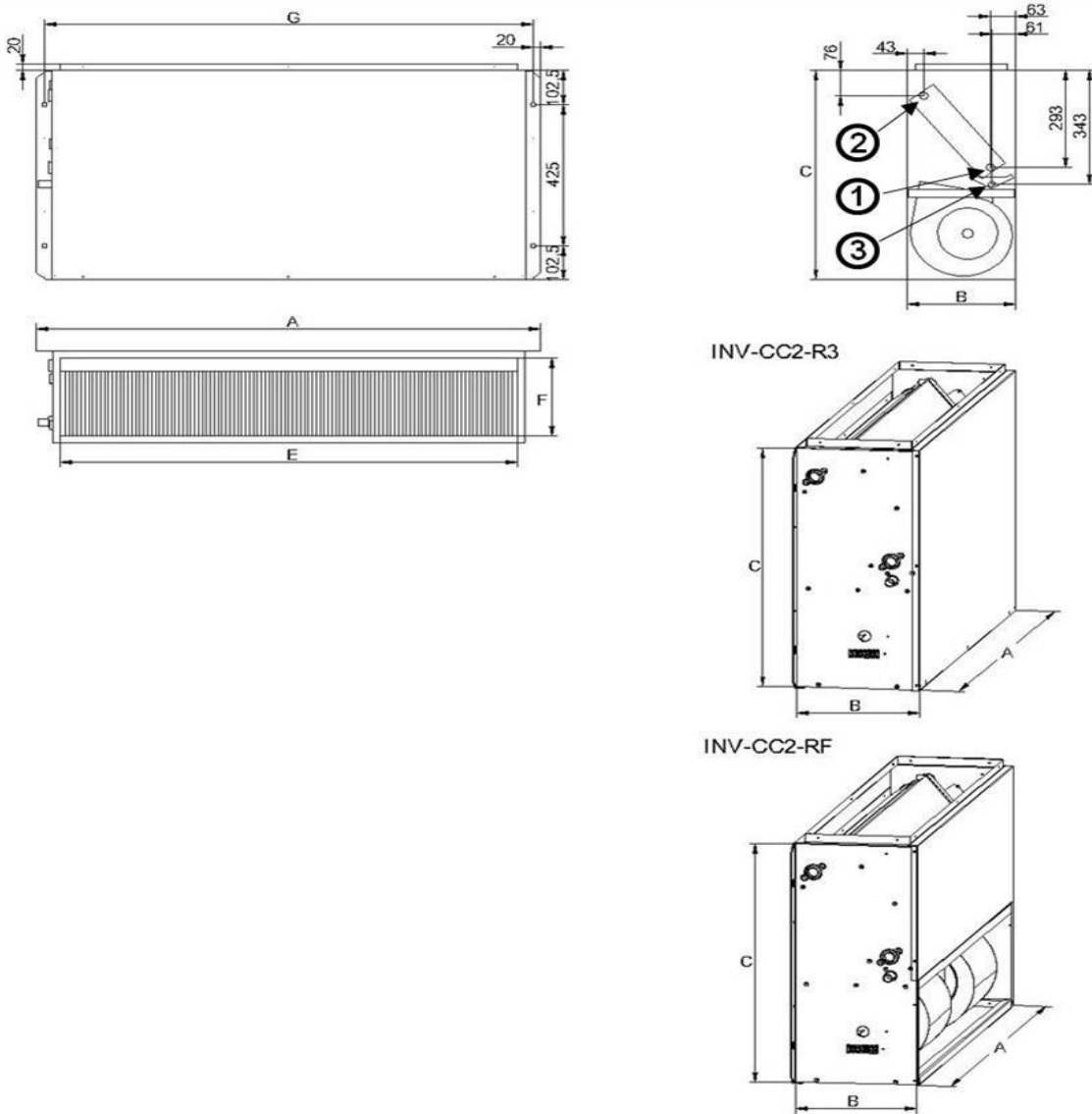## ELFODuct HP INH CC2 - Horizontal unit concealed - 2 pipe system
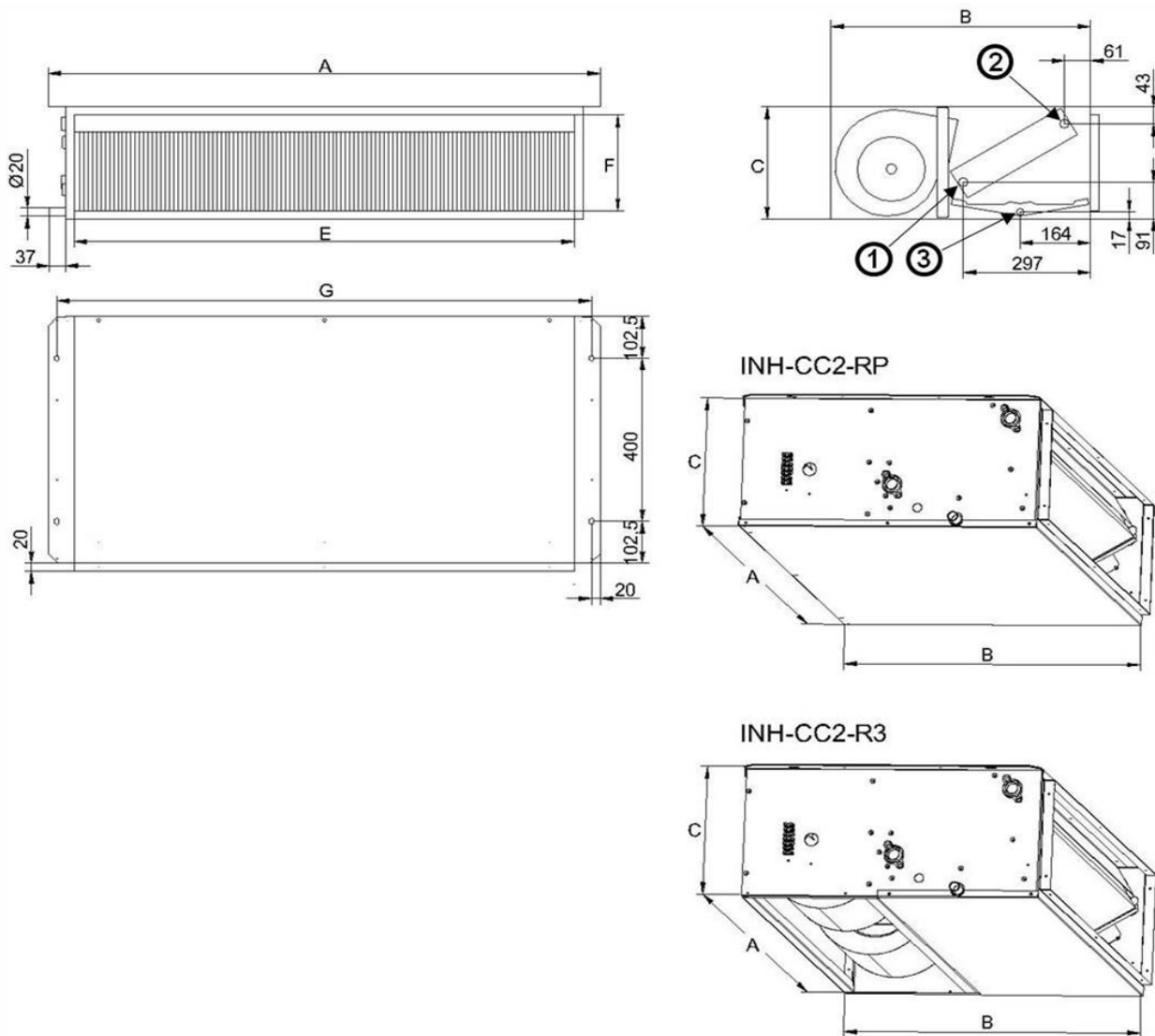


INH-CC2-RP

INH-CC2-R3

1. Water inlet (main coil) 3/4"F
2. Water outlet (main coil) 3/4"F
3. Condensation drainage Ø 20 mm
RP = Rear intake
R3 = Floor air inlet

| ELFODUCT HP - INH - CC2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Size** | | **015.0** | **021.0** | **025.0** | **031.0** | **041.0** | **051.0** | **061.0** | **071.0** |
| **A (Lenght)** | [mm] | 880 | 880 | 880 | 1280 | 1280 | 1280 | 1680 | 1680 |
| **B (Depth)** | [mm] | 625 | 625 | 625 | 625 | 625 | 625 | 625 | 625 |
| **C (Height)** | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| **E** | [mm] | 760 | 760 | 760 | 1160 | 1160 | 1160 | 1560 | 1560 |
| **F** | [mm] | 235 | 235 | 235 | 235 | 235 | 235 | 235 | 235 |
| **G** | [mm] | 840 | 840 | 840 | 1240 | 1240 | 1240 | 1640 | 1640 |
| **Operating weight** | [kg] | 37 | 38 | 40 | 52 | 54 | 57 | 70 | 73 |
| **Shipping weight** | [kg] | 40 | 41 | 43 | 55 | 57 | 60 | 73 | 76 |

⚠️ Duct NESTING connection: Male air supply outlet; Female air intake suction.

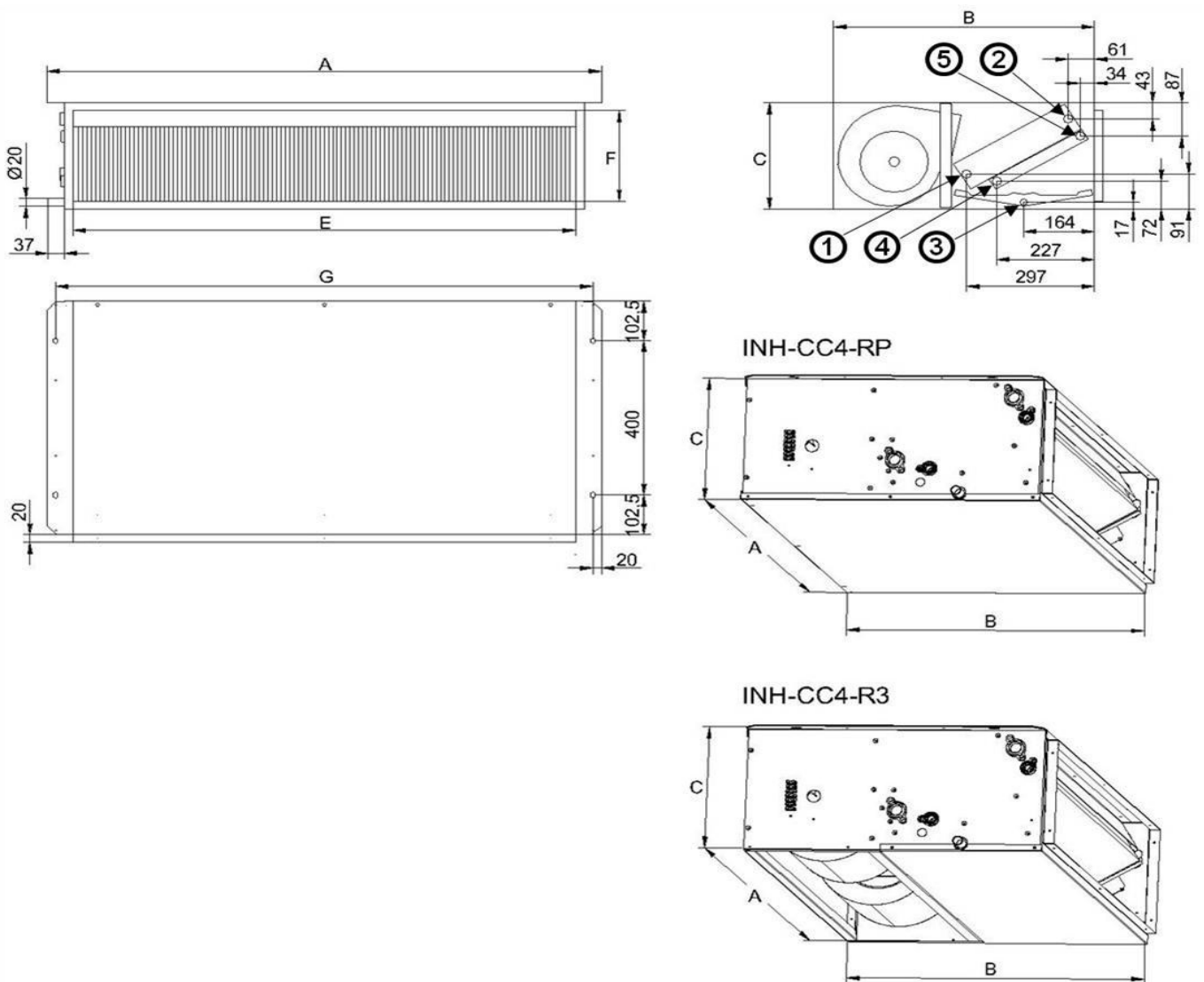# ELFODuct HP INV CC2 - Vertical unit concealed - 2 pipe system



INV-CC2-R3



INV-CC2-RF



1. Water inlet (main coil) 3/4"F
2. Water outlet (main coil) 3/4"F
3. Condensation drainage Ø 20 mm
R3 = Floor air inlet
RF = Front air intake

| ELFODUCT HP - INV - CC2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Size | | 015.0 | 021.0 | 025.0 | 031.0 | 041.0 | 051.0 | 061.0 | 071.0 |
| A (Lenght) | [mm] | 880 | 880 | 880 | 1280 | 1280 | 1280 | 1680 | 1680 |
| B (Depth) | [mm] | 275 | 275 | 275 | 275 | 275 | 275 | 275 | 275 |
| C (Height) | [mm] | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 |
| E | [mm] | 760 | 760 | 760 | 1160 | 1160 | 1160 | 1560 | 1560 |
| F | [mm] | 235 | 235 | 235 | 235 | 235 | 235 | 235 | 235 |
| G | [mm] | 840 | 840 | 840 | 1240 | 1240 | 1240 | 1640 | 1640 |
| Operating weight | [kg] | 37 | 38 | 40 | 52 | 54 | 57 | 70 | 73 |
| Shipping weight | [kg] | 40 | 41 | 43 | 55 | 57 | 60 | 73 | 76 |

⚠️ Duct NESTING connection: Male air supply outlet; Female air intake suction.

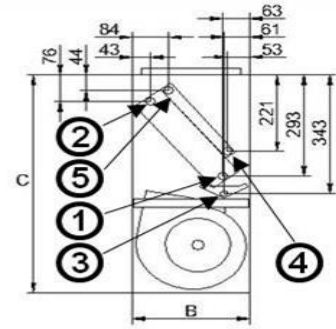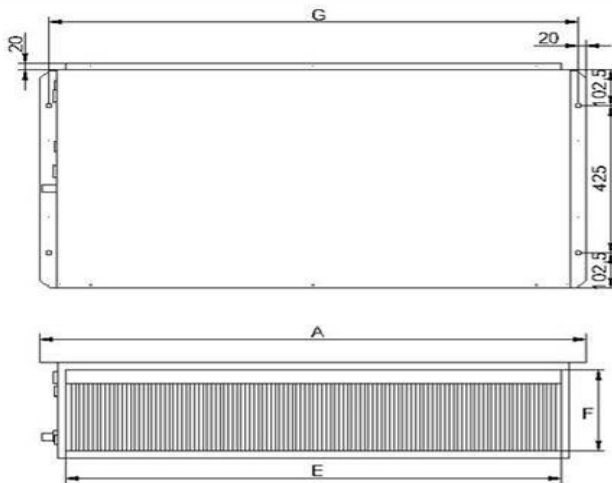# ELFODuct HP INH CC4 - Horizontal unit concealed - 4 pipe system



INH-CC4-RP



INH-CC4-R3



1. Water inlet (main coil) 3/4"F
2. Water outlet (main coil) 3/4"F
3. Condensation drainage Ø 20 mm
4. Additional coil water inlet (4 pipe system)1/2"F
5. Additional coil water outlet (4 pipe system)1/2"F
RP = Rear intake
R3 = Floor air inlet

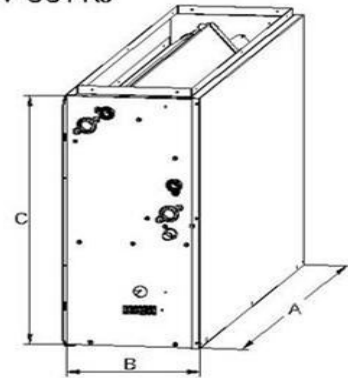| ELFODUCT HP - INH - CC4 | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Size** | | **015.0** | **021.0** | **031.0** | **041.0** | **051.0** | **061.0** |
| **A (Lenght)** | [mm] | 880 | 880 | 1280 | 1280 | 1680 | 1680 |
| **B (Depth)** | [mm] | 625 | 625 | 625 | 625 | 625 | 625 |
| **C (Height)** | [mm] | 275 | 275 | 275 | 275 | 275 | 275 |
| **E** | [mm] | 760 | 760 | 1160 | 1160 | 1560 | 1560 |
| **F** | [mm] | 235 | 235 | 235 | 235 | 235 | 235 |
| **G** | [mm] | 840 | 840 | 1240 | 1240 | 1640 | 1640 |
| **Operating weight** | [kg] | 40 | 41 | 56 | 58 | 73 | 75 |
| **Shipping weight** | [kg] | 43 | 44 | 59 | 61 | 76 | 78 |

⚠️ Duct NESTING connection: Male air supply outlet; Female air intake suction.

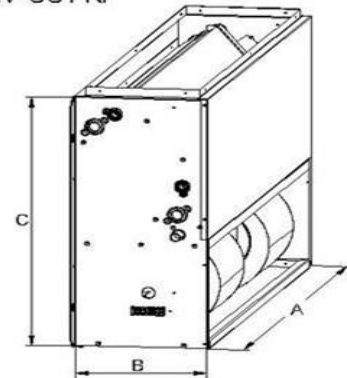# ELFODuct HP INV CC4 - Vertical unit concealed - 4 pipe system



INV-CC4-R3

INV-CC4-RF

1. Water inlet (main coil) 3/4"F
2. Water outlet (main coil) 3/4"F
3. Condensation drainage Ø 20 mm
4. Additional coil water inlet (4 pipe system)1/2"F
5. Additional coil water outlet (4 pipe system)1/2"F
R3 = Floor air inlet
RF = Front air intake

| ELFODUCT HP - INV - CC4 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Size | | 015.0 | 021.0 | 031.0 | 041.0 | 051.0 | 061.0 |
| A (Lenght) | mm | 880 | 880 | 1280 | 1280 | 1680 | 1680 |
| B (Depth) | mm | 275 | 275 | 275 | 275 | 275 | 275 |
| C (Height) | mm | 650 | 650 | 650 | 650 | 650 | 650 |
| E | mm | 760 | 760 | 1160 | 1160 | 1560 | 1560 |
| F | mm | 235 | 235 | 235 | 235 | 235 | 235 |
| G | mm | 840 | 84 | 1240 | 1240 | 1640 | 1640 |
| Operating weight | kg | 40 | 41 | 56 | 58 | 73 | 75 |
| Shipping weight | kg | 43 | 44 | 59 | 61 | 76 | 78 |

⚠ Duct NESTING connection: Male air supply outlet; Female air intake suction.

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