



PA4200

Stylish air curtain for commercial and industrial premises, with intelligent control

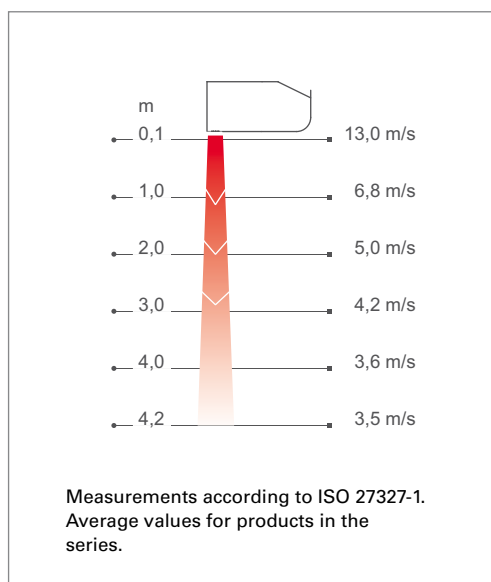
- Horizontal mounting
 - Installation height up to 4,2 metres*
 - Lengths: 1, 1,5, 2 and 2,5 metres
- Vertical mounting
 - Installation width up to 6 metres* (2 units), one on each side
 - Lengths: 1,5, 2 and 2,5 metres

- ✿ Ambient, no heat
- ⚡ Electrical heat: 12–30 kW
- 💧 Water heat WH, WL, WLL



Optimized airflow with Thermozone technology.

Air velocity profile



Application

With air curtain PA4200 there are more opportunities than ever before, packed into the same product. There are therefore many areas of use. PA4200 is specifically designed for doorways in for example, large commercial installations or industrial and warehouse buildings.

The air curtain has many intelligent and energy saving features which provide fully automatic protection for the entrance, adaptable to each area of use.

Design

Through its timeless design and its many accessories, it's easy to get PA4200 to blend well into the premises. Front and service hatch can be finished in any colour to perfectly match the environment. The air curtain is available for horizontal, vertical and recessed installation.

Product specifications

- Prepared for the SIRE control system whose pre-programmed default settings and many features make it easy to install and use the air curtain. Read more about the SIRE controls package in the "Controls" section.
- Model WLL is equipped with water coil for very low water temperatures.
- The front is easy to open and lock in the open position, which facilitates installation and allows easy maintenance.
- The air curtain is complemented with a vertical pack for vertical installation.
- Outlet extension for recessed installation is available as an accessory.
- The accessory Design kit enables a neat installation with concealed mountings, pipes and cables.
- Corrosion proof housing made of hot zinc-plate and powder enamelled steel panels. Colour front and service hatch: white, RAL 9016, NCS 0500. Colour grille, rear section and ends: grey, RAL 7046.

2 *) Recommended installation height and width varies depending on the relevant premises.

Technical specifications

✿ Ambient, no heat - PA4200 A

| Type | Output [kW] | Airflow*1 [m³/h] | Sound level*2 [dB(A)] | Output- motor [W] | Voltage motor [V] | Amperage motor [A] | Length [mm] | Weight [kg] |
|---------|----------------|---------------------|-----------------------------|-------------------------|-------------------------|--------------------------|----------------|----------------|
| PA4210A | 0 | 1280/2700 | 46/63,5 | 830 | 230V~ | 3,6 | 1039 | 43 |
| PA4215A | 0 | 1760/3700 | 46/64 | 1150 | 230V~ | 5,0 | 1549 | 56 |
| PA4220A | 0 | 2520/5300 | 47/64,5 | 1610 | 230V~ | 7,0 | 2039 | 75 |
| PA4225A | 0 | 3020/6350 | 48,5/67 | 1990 | 230V~ | 8,6 | 2549 | 91 |

⚡ Electrical heat - PA4200 E

| Type | Output step [kW] | Airflow*1 [m³/h] | Δt^{*3} [°C] | Sound level*2 [dB(A)] | Output- motor [W] | Voltage motor [V] | Amperage motor [A] | Voltage [V] Amperage [A] (heat) | Length [mm] | Weight [kg] |
|-----------|------------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------|--------------------------|---------------------------------------|----------------|----------------|
| PA4210E12 | 3,9/7,8/12,0 | 1280/2700 | 37/14 | 46/63,5 | 830 | 230V~ | 3,6 | 400V3~/17,3 | 1039 | 50 |
| PA4215E18 | 6,0/12,0/18,0 | 1760/3700 | 40/15 | 46/64 | 1150 | 230V~ | 5,0 | 400V3~/26,0 | 1549 | 71 |
| PA4220E24 | 7,8/15,6/24,0 | 2520/5300 | 37/14 | 47/64,5 | 1610 | 230V~ | 7,0 | 400V3~/34,6 | 2039 | 94 |
| PA4225E30 | 9,9/19,8/30,0 | 3020/6350 | 38/15 | 48,5/67 | 1990 | 230V~ | 8,6 | 400V3~/30,0 | 2549 | 113 |

💧 Water heat - PA4200 WH, coil for high temperature water (≥ 80 °C)

| Type | Output*4 [kW] | Airflow*1 [m³/h] | $\Delta t^{*3,4}$ [°C] | Water volume [l] | Sound level*2 [dB(A)] | Output- motor [W] | Voltage motor [V] | Amperage motor [A] | Length [mm] | Weight [kg] |
|----------|------------------|---------------------|---------------------------|------------------------|-----------------------------|-------------------------|-------------------------|--------------------------|----------------|----------------|
| PA4210WH | 14,4 | 1280/2700 | 21/16 | 1,3 | 46/63,5 | 830 | 230V~ | 3,6 | 1039 | 49 |
| PA4215WH | 20,7 | 1760/3700 | 22/17 | 2,0 | 46/64 | 1150 | 230V~ | 5,0 | 1549 | 65 |
| PA4220WH | 29,9 | 2520/5300 | 22/17 | 2,7 | 47/64,5 | 1610 | 230V~ | 7,0 | 2039 | 87 |
| PA4225WH | 35,6 | 3020/6350 | 22/17 | 3,8 | 48,5/67 | 1990 | 230V~ | 8,6 | 2549 | 105 |

💧 Water heat - PA4200 WL, coil for low water temperature (≤ 80 °C)

| Type | Output*5 [kW] | Airflow*1 [m³/h] | $\Delta t^{*3,5}$ [°C] | Water volume [l] | Sound level*2 [dB(A)] | Output- motor [W] | Voltage motor [V] | Amperage motor [A] | Length [mm] | Weight [kg] |
|----------|------------------|---------------------|---------------------------|------------------------|-----------------------------|-------------------------|-------------------------|--------------------------|----------------|----------------|
| PA4210WL | 16,9 | 1280/2700 | 23/18 | 1,9 | 46/63,5 | 830 | 230V~ | 3,6 | 1039 | 50 |
| PA4215WL | 24,7 | 1760/3700 | 25/20 | 3,0 | 46/64 | 1150 | 230V~ | 5,0 | 1549 | 67 |
| PA4220WL | 34,8 | 2520/5300 | 24/19 | 4,1 | 47/64,5 | 1610 | 230V~ | 7,0 | 2039 | 90 |
| PA4225WL | 43,8 | 3020/6350 | 25/20 | 5,2 | 48,5/67 | 1990 | 230V~ | 8,6 | 2549 | 109 |

💧 Water heat - PA4200 WLL, coil for very low temperature water (≤ 60 °C)

| Type | Output*6 [kW] | Airflow*1 [m³/h] | $\Delta t^{*3,6}$ [°C] | Water volume [l] | Sound level*2 [dB(A)] | Output- motor [W] | Voltage motor [V] | Amperage motor [A] | Length [mm] | Weight [kg] |
|-----------|------------------|---------------------|---------------------------|------------------------|-----------------------------|-------------------------|-------------------------|--------------------------|----------------|----------------|
| PA4210WLL | 9,8 | 1150/2400 | 15/12 | 2,5 | 46/63,5 | 830 | 230V~ | 3,6 | 1039 | 52 |
| PA4215WLL | 15,5 | 1700/3600 | 15/13 | 4,0 | 46/64 | 1150 | 230V~ | 5,0 | 1549 | 70 |
| PA4220WLL | 20,2 | 2320/4800 | 15/12 | 5,7 | 47/64,5 | 1610 | 230V~ | 7,0 | 2039 | 95 |
| PA4225WLL | 25,8 | 2820/6000 | 12/13 | 7,1 | 48,5/67 | 1990 | 230V~ | 8,6 | 2549 | 115 |

*1) Lowest/highest airflow of totally 5 fan steps.

*2) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

*3) Δt = temperature rise of passing air at maximum heat output and lowest/highest airflow.

*4) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

*5) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

*6) Applicable at water temperature 40/30 °C, air temperature, in +18 °C.

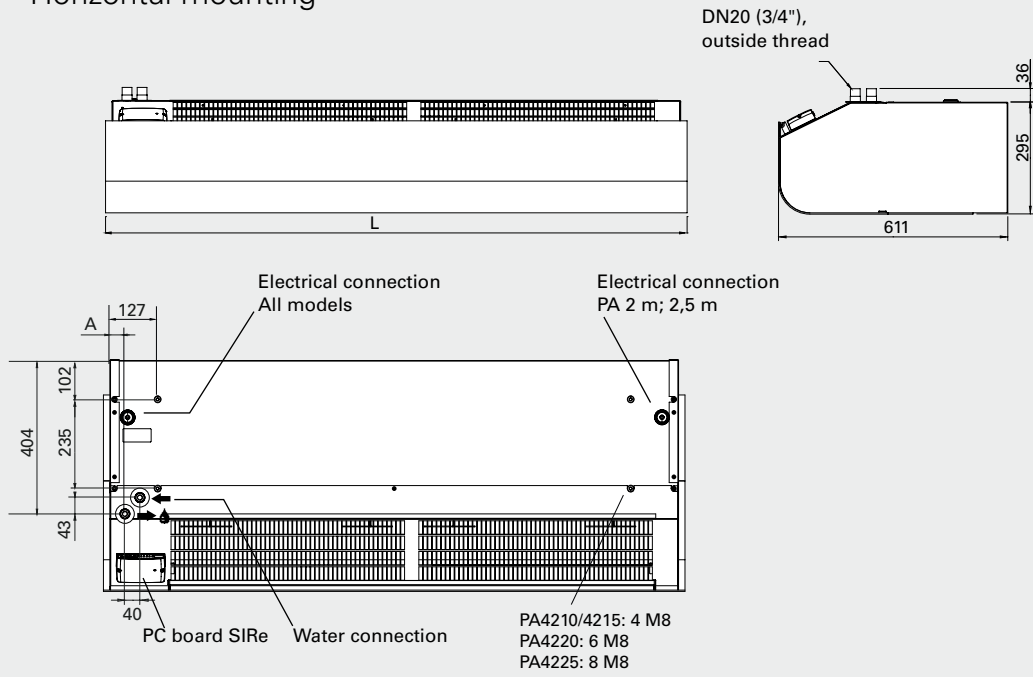
Protection class for units with electrical heating: IP20.

Protection class for units without heating and units with water heating: IP21.

CE compliant.

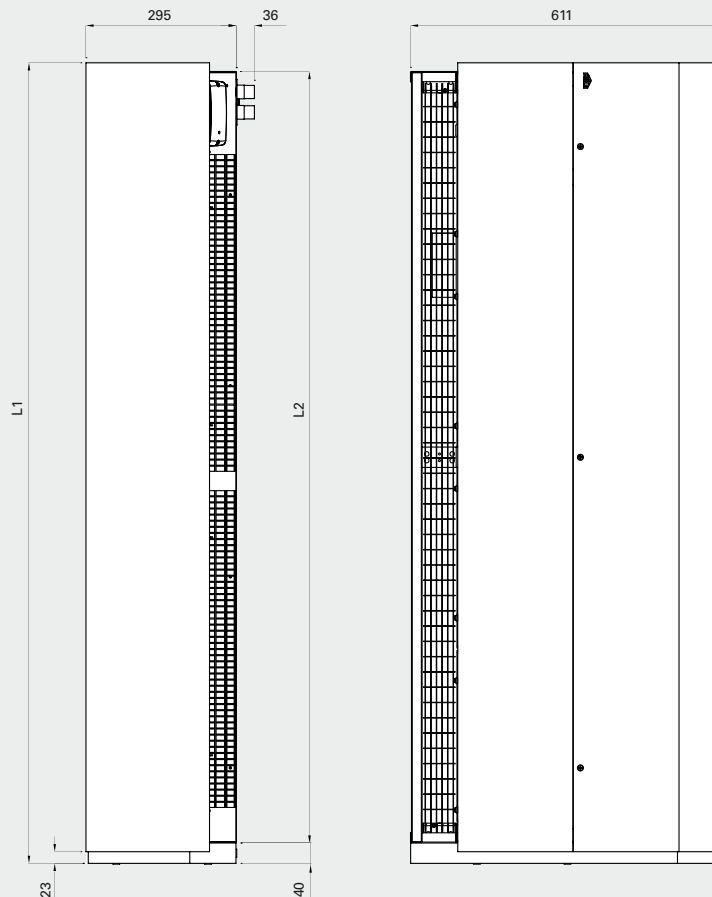
Dimensions

Horizontal mounting



Vertical mounting

The unit can be reversed and placed on either side of the door. Connections and PC Board SIRE are positioned near floor level when the air curtain is placed to the left of the door and at the top when it is placed to the right (seen from the inside).



Mounting

The air curtain range can be adapted for vertical or horizontal installation. The units can also be installed recessed into suspended ceilings.

Horizontal mounting

The air curtain is installed horizontally with the supply air grille facing downwards as close to the door as possible.

A variety of installation options are available; brackets for wall mounting, threaded bars or cables for ceiling mounting. An outlet extension is used for recessed installation.

The design kit that conceals cables, pipes and mountings is available for both wall and ceiling installations.

For the protection of wider openings, several units can be mounted next to each other using a joining kit.

Minimum distance from outlet to floor for electrically heated units is 1800 mm.

Vertical mounting

Units from 1,5 metres and longer may be used vertically. The air curtain is mounted vertically as close as possible to the door. For the best effect air curtains should be placed on both sides of the opening.

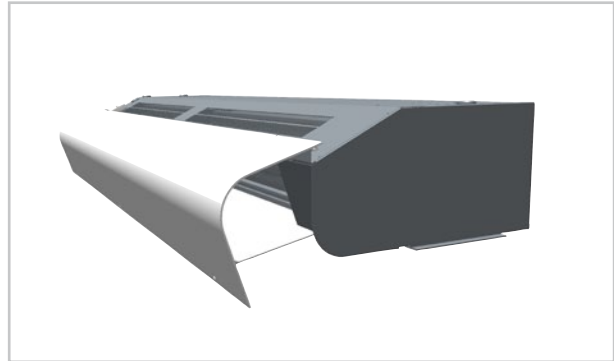
For vertical mounting, each unit must be supplemented with a vertical kit. The design kit for vertical mounting is used to hide pipes and cables.

By using an extension hood, the gap between the air curtain and the ceiling is filled in.

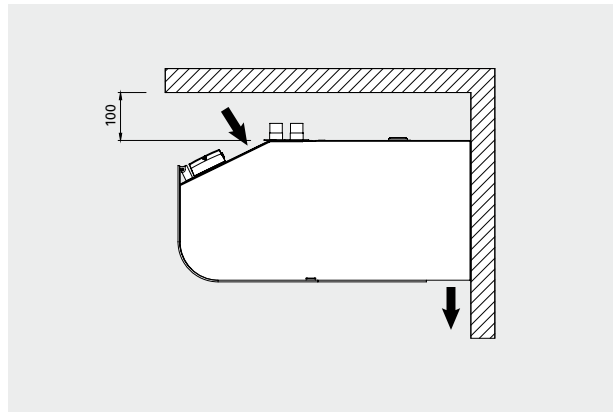
Two units can be mounted directly on top of each other.

The unit can be reversed and placed on either side of the door. Connections and PC Board SIRE are positioned near floor level when the air curtain is placed to the left of the door and at the top when it is placed to the right (seen from the inside).

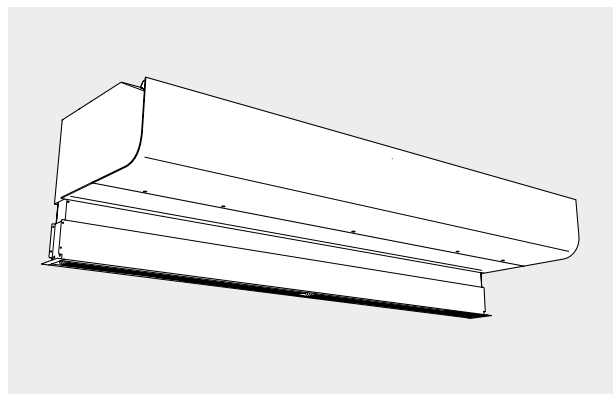
The air curtain is mounted on a floor frame that is included in the vertical kit. The edging is attached horizontal to the floor using fasteners appropriate for the surface. The air curtain must always be secured at the top.



The front is easy to open and lock in the open position, which facilitates installation and allows easy maintenance.



Minimum distances



Outlet extension for recessed installation

Connection

The PC board SIRE is built into the air curtain on delivery and is equipped with modular connectors for easy connection of external components. Read more about the SIRE control system in the "Controls" section.

Unit without heating

Connected via the built-in control board with 2 m cord and plug.

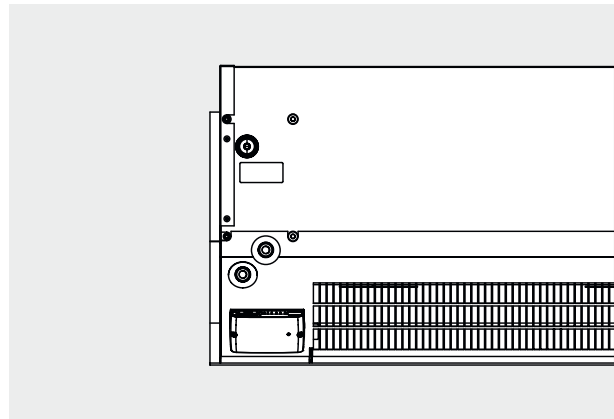
Unit with electrical heating

The electrical connection is made on the top of the unit (horizontal) or on the reverse (vertical). Control supply is 230V~ and cable is routed from the built-in SIRE control board. Power supply for heating (400V3 ~) is connected to terminal block in the internal connection box. 2-metre units require dual power supplies.

Unit with water heating

Connected via the built-in control board with 2 m cord and plug.

The water coil is connected on top of the unit (horizontal mounting) or on the reverse (vertical mounting) via connections DN20 (3/4"), external thread. Flexible hoses are available as an accessory.

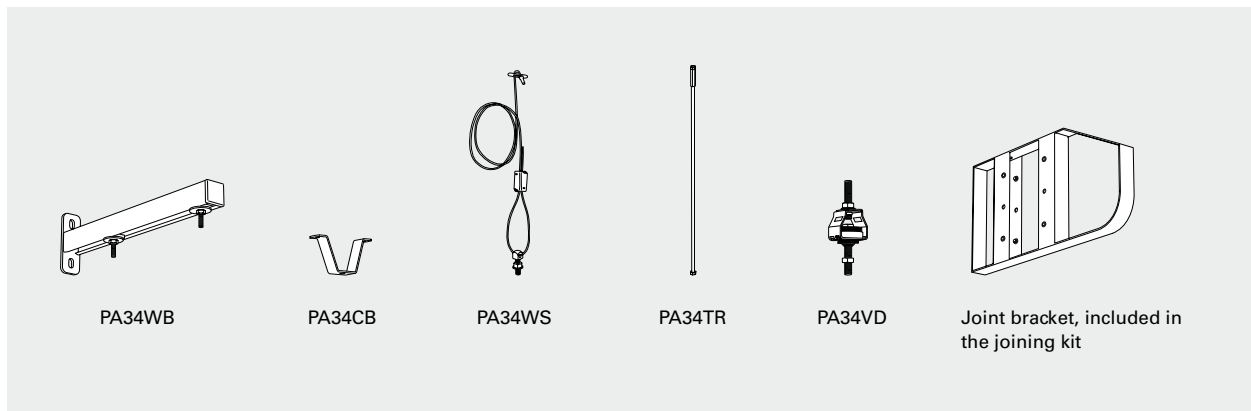


PC board SIRE is built in to the air curtain.



Accessories

Horizontal mounting

**PA34WB, wall brackets**

Brackets for installing unit horizontally on a wall.

PA34CB, ceiling brackets

Ceiling brackets for installing the unit from the ceiling using wires or threaded bars (not included). Best combined with vibration dampers (PA34VD) when using threaded bars.

PA34WS, wire suspension kit

Galvanized wires with wire locks to secure the unit from the ceiling. Length 3 m. Used together with ceiling brackets (PA34CB).

PA34TR, threaded bars

Threaded bars for installing unit on to a ceiling. Length 1 m. Used together with ceiling brackets (PA34CB). Supplemented with vibration dampers (PA34VD) for reduced vibration.

PA34VD, vibration dampers

Reduces vibrations for ceiling installations with threaded bars.

PA4JK, joining kit

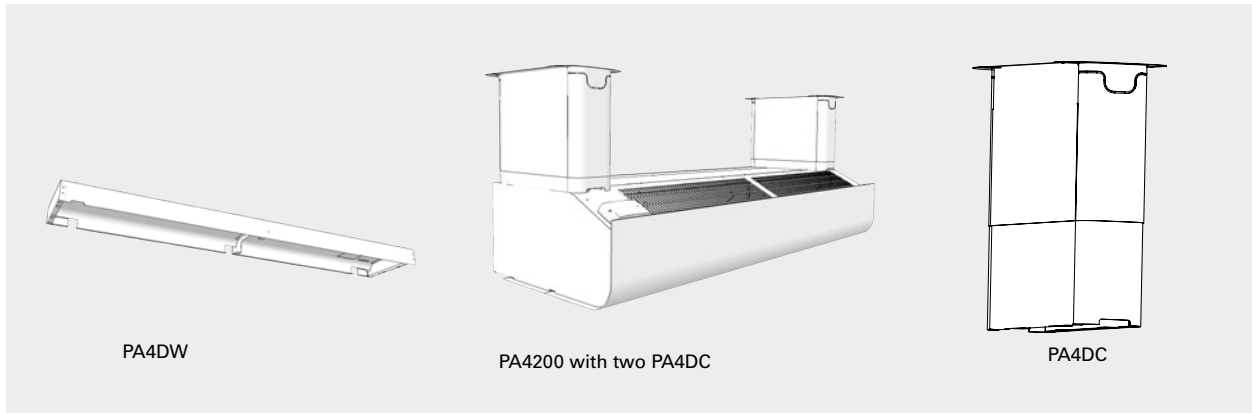
Used to join horizontal units together for a sleek and unified installation. Consists of joint bracket and mounting parts.

| Type | Description | Quantity included | Length |
|-----------------|---|-------------------|--------|
| PA34WB15 | Wall brackets for 1 and 1,5 metre units | 2 pcs | 400 mm |
| PA34WB20 | Wall brackets for 2 metre units | 3 pcs | 400 mm |
| PA34WB30 | Wall brackets for 2,5 metre units | 4 pcs | 400 mm |
| PA34CB15 | Ceiling brackets for 1 and 1,5 metre units | 4 pcs | |
| PA34CB20 | Ceiling brackets for 2 metre units | 6 pcs | |
| PA34CB30 | Ceiling brackets for 2,5 metre units | 8 pcs | |
| PA34WS15 | Wire suspension kit for 1 and 1,5 metre units | 4 pcs | 3 m |
| PA34WS20 | Wire suspension kit for 2 metre units | 6 pcs | 3 m |
| PA34WS30 | Wire suspension kit for 2,5 metre units | 8 pcs | 3 m |
| PA34TR15 | Threaded bars for 1 and 1,5 metre units | 4 pcs | 1 m |
| PA34TR20 | Threaded bars for 2 metre units | 6 pcs | 1 m |
| PA34TR30 | Threaded bars for 2,5 metre units | 8 pcs | 1 m |
| PA34VD15 | Vibration dampers for 1 and 1,5 metre units | 4 pcs | |
| PA34VD20 | Vibration dampers for 2 metre units | 6 pcs | |
| PA34VD30 | Vibration dampers for 2,5 metre units | 8 pcs | |
| PA4JK | Joining kit | | |

PA4200

Accessories

Horizontal mounting



PA4DW, design kit for wall mounting
Used to conceal mountings, cables and pipes. Used together with ceiling brackets PA34WB.

PA4DC, design kit for ceiling mounting
Used to conceal mountings, cables and pipes. The design kit has a telescope function that can be adapted for the installation. It can also be extended with one or more extension parts.

Two design kits are required for 1 and 1.5 metre units, while 2 metre units need three kits and 2.5 metre units needed four kits.

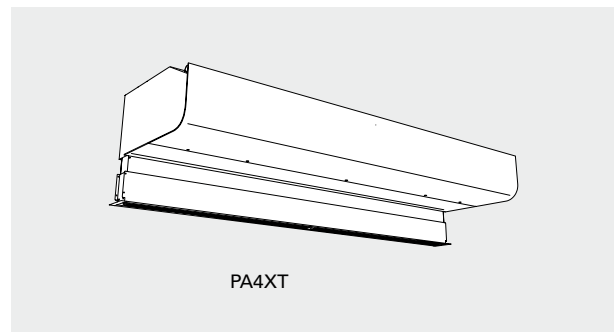
| Type | Description | LxHxW [mm] |
|---------|-------------------------------------|-------------|
| PA4DW10 | Design kit for wall mounting PA4210 | 87x424x1006 |
| PA4DW15 | Design kit for wall mounting PA4215 | 87x424x1516 |
| PA4DW20 | Design kit for wall mounting PA4220 | 87x424x2006 |
| PA4DW25 | Design kit for wall mounting PA4225 | 87x424x2516 |

| Type | Description |
|--------|--|
| PA4DCS | Design kit for ceiling mounting PA4200, small, 200-300 mm (1 piece) |
| PA4DCM | Design kit for ceiling mounting PA4200, medium, 300-500 mm (1 piece) |
| PA4DCL | Design kit for ceiling mounting PA4200, large, 500-900 mm (1 piece) |
| PA4DXT | Design kit for ceiling mounting PA4200, extension, 420 mm (1 piece) |

Recessed mounting in suspended ceilings

PA4XT, outlet extension
Outlet extension with telescopic function. Used for recessed installation of units in suspended ceilings.

| Type | Description |
|---------|---|
| PA4XT10 | Outlet extension for PA4210, 130-200 mm |
| PA4XT15 | Outlet extension for PA4215, 130-200 mm |
| PA4XT20 | Outlet extension for PA4220, 130-200 mm |
| PA4XT25 | Outlet extension for PA4225, 130-200 mm |



Accessories

Vertical mounting



PA4JK, vertical kit

Used to adapt a horizontal unit for vertical installation. Includes floor frame and mounting parts to support the top. Vertical kit allows two units to be installed on top of each other. One vertical kit is needed per unit.

PA4VDW, design kit for vertical mounting

Used to conceal cables and pipes.

PA4HE, extension hood

Fills the space between the unit and the ceiling for vertical mounting and provides a neater installation. Special order to required dimension.

AXP300, collision protection

Floor placed protection against impact from e.g. shopping trolleys.

| Type | Description |
|----------|---|
| PA4JK | Vertical kit PA4200 |
| PA4VDW15 | Design kit for vertical mounting PA4215 |
| PA4VDW20 | Design kit for vertical mounting PA4220 |
| PA4VDW25 | Design kit for vertical mounting PA4225 |

| Type | Description |
|--------|-----------------------|
| PA4HE | Extension hood PA4200 |
| AXP300 | Collision protection |

Unit with water heating

PA34EF , external intake filter

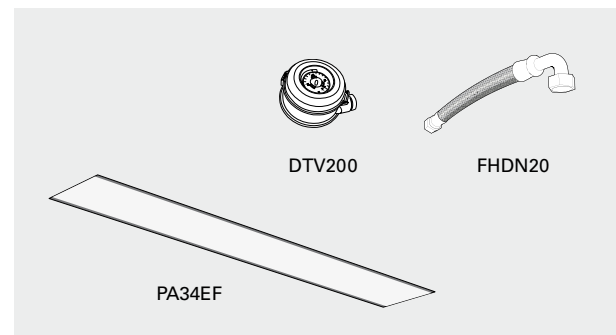
Fine mesh filter that prevents ingress of dirt and deposits to water heated units. The filter is easy to attach and remove thanks to the integrated magnetic strips. Makes maintenance easier since the unit does not need to be opened.

DTV200, filter pressure guard

Measures the differential pressure, which indicates how dirty the filter is in water heated units. The metering hose is connected to the suction side of the unit (after the filter). Adjustment is performed on site depending on the unit and the environment. Adjustable range 20-300Pa. Potential free, changeover alarm contact.

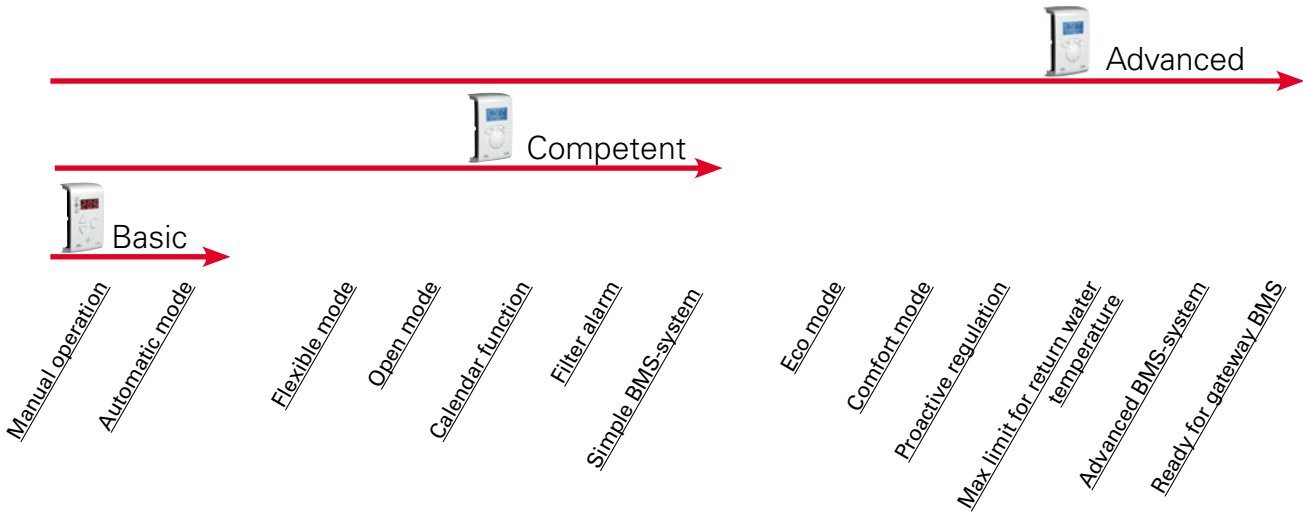
FHDN20, flexible hoses

Flexible hoses for easy and practical installation of water heated unit.



| Type | Description |
|----------|--|
| PA34EF10 | External intake filter for 1 metre units |
| PA34EF15 | External intake filter for 1,5 metre units |
| PA34EF20 | External intake filter for 2 metre units |
| PA34EF25 | External intake filter for 2,5 metre units |
| DTV200 | Filter pressure guard |
| FHDN20 | Flexible hoses DN20, inside thread, 90° bend, 1 pair |

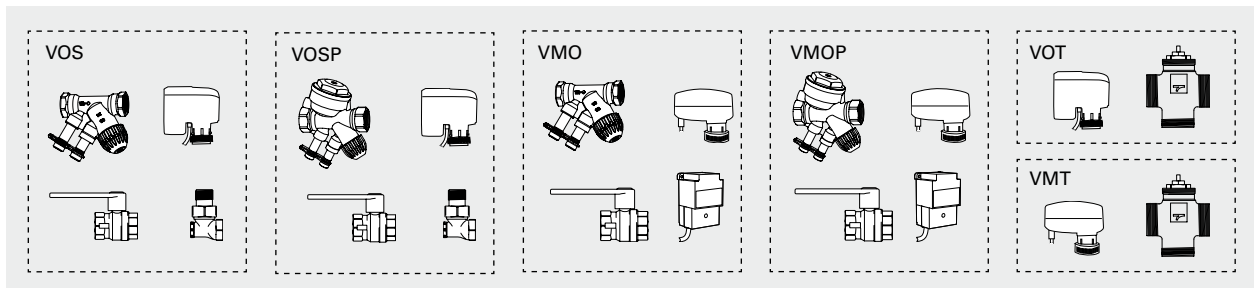
Controls



This air curtain is supplied with an integrated PC board SIRE. There are three different levels with different functionality to choose from, Basic, Competent or Advanced. Read more about the SIRE control system in the "Controls" section.

| Type | Description |
|--------|-------------------------------|
| SIREB | Control system SIRE Basic |
| SIREAC | Control system SIRE Competent |
| SIREAA | Control system SIRE Advanced |

Water control



Valve kit VOS(P), VOT, VMO(P) or VMT is used to control the water flow. For more information see the "Controls" section.

| Type | Description |
|----------|---|
| VOS15LF | Valve kit on/off, low flow, DN15 |
| VOS15NF | Valve kit on/off, DN15 |
| VOS20 | Valve kit on/off, DN20 |
| VOS25 | Valve kit on/off, DN25 |
| VOSP15LF | Pressure independent valve kit, low flow, DN15 |
| VOSP15NF | Pressure independent valve kit, DN15 |
| VOSP20 | Pressure independent valve kit, DN20 |
| VOSP25 | Pressure independent valve kit, DN25 |
| VOT15 | Three way control valve and actuator on/off, DN15 |
| VOT20 | Three way control valve and actuator on/off, DN20 |
| VOT25 | Three way control valve and actuator on/off, DN25 |

| Type | Description |
|----------|---|
| VMO15LF | Modulating valve kit, low flow, DN15 |
| VMO15NF | Modulating valve kit, DN15 |
| VMO20 | Modulating valve kit, DN20 |
| VMO25 | Modulating valve kit, DN25 |
| VMOP15LF | Pressure independent and modulating valve kit, low flow, DN15 |
| VMOP15NF | Pressure independent and modulating valve kit, DN15 |
| VMOP20 | Pressure independent and modulating valve kit, DN20 |
| VMOP25 | Pressure independent and modulating valve kit, DN25 |
| VMT15 | Three way control valve and modulating actuator, DN15 |
| VMT20 | Three way control valve and modulating actuator, DN20 |
| VMT25 | Three way control valve and modulating actuator, DN25 |

Output charts water

PA4200 WH

| | | | Supply water temperature: 110 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 110/80 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|--|-------------------------|------------------|---------------------|--|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WH | max | 2700 | 15,6 | 53,6 | 0,07 | 4,2 | 21,6 | 41,5 | 0,18 | 22,9 |
| | min | 1280 | 7,4 | 39,4 | 0,03 | 0,8 | 13,7 | 49,4 | 0,11 | 10,0 |
| PA4215WH | max | 3700 | 21,4 | 53,0 | 0,09 | 1,2 | 31,1 | 42,7 | 0,26 | 7,4 |
| | min | 1760 | 10,2 | 42,5 | 0,04 | 0,2 | 19,6 | 50,7 | 0,16 | 3,2 |
| PA4220WH | max | 5300 | 30,6 | 50,7 | 0,13 | 2,5 | 44,7 | 42,9 | 0,37 | 17,0 |
| | min | 2520 | 14,6 | 38,6 | 0,05 | 0,5 | 28,2 | 50,9 | 0,23 | 7,3 |
| PA4225WH | max | 6350 | 36,6 | 53,7 | 0,16 | 0,7 | 53,5 | 42,8 | 0,44 | 4,3 |
| | min | 3020 | 17,4 | 44,4 | 0,07 | 0,1 | 33,7 | 50,8 | 0,28 | 1,8 |

| | | | Supply water temperature: 90 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 90/70 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WH | max | 2700 | 15,6 | 61,0 | 0,13 | 14,1 | 17,5 | 37,1 | 0,21 | 33,6 |
| | min | 1280 | 7,4 | 44,5 | 0,04 | 1,7 | 11,1 | 43,4 | 0,14 | 14,7 |
| PA4215WH | max | 3700 | 21,4 | 58,7 | 0,17 | 3,6 | 25,3 | 38,1 | 0,31 | 10,9 |
| | min | 1760 | 10,2 | 45,5 | 0,06 | 0,5 | 15,9 | 44,6 | 0,19 | 4,7 |
| PA4220WH | max | 5300 | 30,6 | 57,5 | 0,23 | 7,6 | 36,3 | 38,2 | 0,44 | 25,0 |
| | min | 2520 | 14,6 | 43,0 | 0,08 | 1,1 | 22,8 | 44,7 | 0,28 | 10,7 |
| PA4225WH | max | 6350 | 36,6 | 58,8 | 0,29 | 2,1 | 43,6 | 38,2 | 0,53 | 6,3 |
| | min | 3020 | 17,4 | 46,5 | 0,10 | 0,3 | 27,4 | 44,7 | 0,34 | 2,7 |

| | | | Supply water temperature: 80 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 80/60 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WH | max | 2700 | 15,6 | 65,4 | 0,26 | 48,9 | 14,4 | 33,7 | 0,18 | 24,2 |
| | min | 1280 | 7,4 | 47,8 | 0,06 | 3,2 | 9,1 | 39,0 | 0,11 | 10,6 |
| PA4215WH | max | 3700 | 21,4 | 62,0 | 0,29 | 9,9 | 20,7 | 34,5 | 0,25 | 7,7 |
| | min | 1760 | 10,2 | 47,6 | 0,08 | 0,9 | 13,0 | 39,8 | 0,16 | 3,3 |
| PA4220WH | max | 5300 | 30,6 | 60,6 | 0,41 | 21,7 | 29,9 | 34,6 | 0,36 | 17,9 |
| | min | 2520 | 14,6 | 45,9 | 0,10 | 1,9 | 18,8 | 40,0 | 0,23 | 7,7 |
| PA4225WH | max | 6350 | 36,4 | 61,7 | 0,49 | 5,4 | 35,6 | 34,5 | 0,43 | 4,5 |
| | min | 3020 | 17,4 | 48,2 | 0,13 | 0,5 | 22,4 | 39,8 | 0,27 | 1,9 |

| | | | Supply water temperature: 82 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 82/71 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WH | max | 2700 | 15,6 | 64,5 | 0,22 | 35,1 | 16,9 | 36,5 | 0,38 | 94,7 |
| | min | 1280 | 7,4 | 47,1 | 0,05 | 2,8 | 107,0 | 42,6 | 0,24 | 40,9 |
| PA4215WH | max | 3700 | 21,4 | 61,3 | 0,25 | 7,6 | 24,6 | 37,6 | 0,55 | 31,4 |
| | min | 1760 | 10,2 | 47,2 | 0,07 | 0,8 | 15,5 | 43,9 | 0,34 | 13,3 |
| PA4220WH | max | 5300 | 30,6 | 60,7 | 0,35 | 16,5 | 35,2 | 37,5 | 0,78 | 71,5 |
| | min | 2520 | 14,6 | 45,3 | 0,10 | 1,7 | 22,1 | 43,8 | 0,49 | 30,2 |
| PA4225WH | max | 6350 | 36,6 | 61,1 | 0,43 | 4,3 | 42,6 | 37,8 | 0,95 | 18,3 |
| | min | 3020 | 17,4 | 47,8 | 0,12 | 0,5 | 26,7 | 44,0 | 0,59 | 7,7 |

*1) Recommended outlet air temperature for good comfort and optimized output.

*2) Nominal output at given supply and return water temperature.

See www.frico.se for additional calculations.

Output charts water

PA4200 WL

| | | | Supply water temperature: 80 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 80/60 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WL | max | 2700 | 15,6 | 31,3 | 0,08 | 3,0 | 29,1 | 49,7 | 0,35 | 43,6 |
| | min | 1280 | 7,4 | 26,8 | 0,03 | 0,7 | 17,4 | 57,9 | 0,21 | 17,2 |
| PA4215WL | max | 3700 | 21,4 | 29,7 | 0,10 | 2,1 | 42,4 | 51,7 | 0,52 | 37,0 |
| | min | 1760 | 10,2 | 26,6 | 0,05 | 0,5 | 25,0 | 59,8 | 0,31 | 14,1 |
| PA4220WL | max | 5300 | 30,6 | 30,2 | 0,15 | 2,0 | 59,8 | 51,3 | 0,73 | 33,6 |
| | min | 2520 | 14,6 | 26,8 | 0,07 | 0,5 | 35,4 | 59,4 | 0,43 | 12,9 |
| PA4225WL | max | 6350 | 36,6 | 27,9 | 0,17 | 3,1 | 74,4 | 52,5 | 0,91 | 58,8 |
| | min | 3020 | 17,4 | 24,4 | 0,08 | 0,8 | 43,7 | 60,6 | 0,53 | 22,3 |

| | | | Supply water temperature: 70 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 70/50 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WL | max | 2700 | 15,6 | 33,8 | 0,10 | 5,2 | 23,0 | 43,1 | 0,28 | 29,3 |
| | min | 1280 | 7,4 | 28,2 | 0,04 | 1,1 | 13,8 | 49,8 | 0,17 | 11,7 |
| PA4215WL | max | 3700 | 21,4 | 32,0 | 0,14 | 3,5 | 33,6 | 44,7 | 0,41 | 24,7 |
| | min | 1760 | 10,1 | 27,6 | 0,16 | 0,8 | 19,9 | 51,3 | 0,24 | 9,6 |
| PA4220WL | max | 5300 | 30,6 | 32,4 | 0,20 | 3,4 | 47,4 | 44,4 | 0,58 | 22,5 |
| | min | 2520 | 14,6 | 27,9 | 0,08 | 0,8 | 28,2 | 51,0 | 0,34 | 8,8 |
| PA4225WL | max | 6350 | 36,7 | 30,3 | 0,22 | 5,0 | 59,2 | 45,4 | 0,72 | 39,6 |
| | min | 3020 | 17,4 | 25,8 | 0,10 | 1,1 | 34,9 | 52,1 | 0,42 | 15,2 |

| | | | Supply water temperature: 60 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 60/40 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WL | max | 2700 | 15,6 | 37,2 | 0,17 | 12,0 | 16,9 | 36,4 | 0,20 | 17,3 |
| | min | 1280 | 7,4 | 30,3 | 0,06 | 2,0 | 10,2 | 41,4 | 0,12 | 7,1 |
| PA4215WL | max | 3700 | 21,4 | 35,0 | 0,21 | 7,6 | 24,7 | 37,6 | 0,30 | 14,5 |
| | min | 1760 | 10,2 | 29,4 | 0,08 | 1,4 | 14,7 | 42,6 | 0,18 | 5,7 |
| PA4220WL | max | 5300 | 30,6 | 35,5 | 0,30 | 7,3 | 34,8 | 37,3 | 0,42 | 13,2 |
| | min | 2520 | 14,5 | 29,6 | 0,12 | 1,4 | 20,8 | 42,3 | 0,25 | 5,3 |
| PA4225WL | max | 6350 | 36,6 | 33,5 | 0,33 | 10,4 | 43,8 | 38,3 | 0,53 | 23,6 |
| | min | 3020 | 17,4 | 27,8 | 0,13 | 2,0 | 26,0 | 43,4 | 0,32 | 9,3 |

| | | | Supply water temperature: 55 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1 | | | | Water temperature: 55/35 °C Room temperature: +18 °C | | | |
|----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WL | max | 2700 | 15,7 | 39,5 | 0,24 | 24,1 | 13,7 | 33,0 | 0,17 | 12,2 |
| | min | 1280 | 7,5 | 31,8 | 0,08 | 3,2 | 8,4 | 37,1 | 0,10 | 5,1 |
| PA4215WL | max | 3700 | 21,4 | 37,0 | 0,29 | 13,7 | 20,1 | 34,0 | 0,24 | 10,2 |
| | min | 1760 | 10,2 | 30,6 | 0,10 | 2,2 | 12,1 | 38,1 | 0,15 | 4,1 |
| PA4220WL | max | 5300 | 30,6 | 37,5 | 0,42 | 13,4 | 28,3 | 33,7 | 0,34 | 9,2 |
| | min | 2520 | 14,6 | 30,9 | 0,15 | 2,1 | 17,0 | 37,9 | 0,21 | 3,7 |
| PA4225WL | max | 6350 | 36,6 | 35,7 | 0,46 | 18,5 | 35,8 | 34,7 | 0,43 | 16,7 |
| | min | 3020 | 17,5 | 29,2 | 0,16 | 3,0 | 21,5 | 38,9 | 0,26 | 6,7 |

*1) Recommended outlet air temperature for good comfort and optimized output.

*2) Nominal output at given supply and return water temperature.

See www.frico.se for additional calculations.

Output charts water

PA4200 WLL

| | | | Supply water temperature: 55 °C Room temperature: +18 °C Outlet air temperature: +32 °C*1 | | | | Water temperature: 55/35 °C Room temperature: +18 °C | | | |
|-----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WLL | max | 2400 | 11,4 | 28,8 | 0,11 | 2,0 | 15,2 | 36,7 | 0,18 | 5,4 |
| | min | 1150 | 5,5 | 27,6 | 0,05 | 0,5 | 8,8 | 40,6 | 0,11 | 2,1 |
| PA4215WLL | max | 3600 | 17,1 | 27,4 | 0,15 | 2,0 | 24,2 | 37,8 | 0,29 | 6,4 |
| | min | 1700 | 8,1 | 26,2 | 0,07 | 0,5 | 13,8 | 41,8 | 0,17 | 2,4 |
| PA4220WLL | max | 4800 | 22,8 | 28,7 | 0,21 | 1,1 | 31,4 | 37,2 | 0,38 | 3,2 |
| | min | 2320 | 11,0 | 28,7 | 0,11 | 0,4 | 18,1 | 40,9 | 0,22 | 1,2 |
| PA4225WLL | max | 6000 | 28,5 | 27,9 | 0,25 | 1,3 | 40,2 | 37,7 | 0,49 | 4,1 |
| | min | 2820 | 13,2 | 27,8 | 0,11 | 0,4 | 22,6 | 41,6 | 0,27 | 1,5 |

| | | | Supply water temperature: 50 °C Room temperature: +18 °C Outlet air temperature: +32 °C*1 | | | | Water temperature: 50/30 °C Room temperature: +18 °C | | | |
|-----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WLL | max | 2400 | 11,4 | 29,9 | 0,14 | 3,2 | 11,5 | 32,1 | 0,14 | 3,3 |
| | min | 1150 | 5,5 | 27,7 | 0,06 | 0,8 | 6,6 | 34,9 | 0,08 | 1,3 |
| PA4215WLL | max | 3600 | 17,1 | 28,5 | 0,19 | 3,2 | 18,5 | 33,1 | 0,22 | 4,1 |
| | min | 1700 | 8,1 | 26,4 | 0,08 | 0,7 | 10,5 | 36,2 | 0,13 | 1,5 |
| PA4220WLL | max | 4800 | 22,8 | 29,5 | 0,27 | 1,8 | 23,5 | 32,4 | 0,28 | 1,9 |
| | min | 2320 | 11,0 | 28,2 | 0,12 | 0,4 | 13,3 | 34,8 | 0,16 | 0,7 |
| PA4225WLL | max | 6000 | 28,5 | 28,9 | 0,33 | 2,1 | 30,4 | 33,0 | 0,37 | 2,6 |
| | min | 2820 | 13,2 | 27,4 | 0,14 | 0,5 | 17,0 | 35,7 | 0,20 | 0,9 |

| | | | Supply water temperature: 45 °C Room temperature: +18 °C Outlet air temperature: +32 °C*1 | | | | Water temperature: 45/35 °C Room temperature: +18 °C | | | |
|-----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WLL | max | 2400 | 11,4 | 31,3 | 0,20 | 6,4 | 13,2 | 34,2 | 0,32 | 14,5 |
| | min | 1150 | 5,5 | 28,2 | 0,08 | 1,2 | 7,6 | 37,4 | 0,18 | 5,4 |
| PA4215WLL | max | 3600 | 17,1 | 30,1 | 0,28 | 6,0 | 20,7 | 34,9 | 0,50 | 16,9 |
| | min | 1700 | 8,1 | 27,0 | 0,11 | 1,2 | 11,6 | 38,1 | 0,28 | 6,1 |
| PA4220WLL | max | 4800 | 22,8 | 30,8 | 0,39 | 3,4 | 27,2 | 34,7 | 0,66 | 8,6 |
| | min | 2320 | 11,0 | 28,3 | 0,16 | 0,7 | 15,5 | 37,7 | 0,37 | 3,2 |
| PA4225WLL | max | 6000 | 28,5 | 30,2 | 0,46 | 3,9 | 34,7 | 35,1 | 0,84 | 11,0 |
| | min | 2820 | 13,2 | 27,6 | 0,18 | 0,8 | 19,3 | 38,1 | 0,46 | 3,9 |

| | | | Supply water temperature: 40 °C Room temperature: +18 °C Outlet air temperature: +32 °C*1 | | | | Water temperature: 40/30 °C Room temperature: +18 °C | | | |
|-----------|--------------|----------------|---|-------------------------|------------------|---------------------|---|-----------------------|------------------|---------------------|
| Type | Fan position | Airflow [m³/h] | Output [kW] | Return water temp. [°C] | Water flow [l/s] | Pressure drop [kPA] | Output*2 [kW] | Outlet air temp. [°C] | Water flow [l/s] | Pressure drop [kPA] |
| PA4210WLL | max | 2400 | 11,4 | 33,4 | 0,42 | 23,9 | 9,8 | 30,0 | 0,24 | 8,7 |
| | min | 1150 | 5,5 | 29,4 | 0,12 | 2,8 | 5,6 | 32,5 | 0,14 | 3,3 |
| PA4215WLL | max | 3600 | 17,1 | 32,4 | 0,54 | 19,9 | 15,5 | 30,7 | 0,37 | 10,3 |
| | min | 1700 | 8,1 | 28,5 | 0,17 | 2,6 | 8,7 | 33,1 | 0,21 | 3,8 |
| PA4220WLL | max | 4800 | 22,8 | 32,7 | 0,75 | 11,0 | 20,2 | 30,4 | 0,49 | 5,1 |
| | min | 2320 | 11,0 | 29,2 | 0,25 | 1,6 | 11,6 | 32,7 | 0,28 | 1,9 |
| PA4225WLL | max | 6000 | 28,5 | 32,2 | 0,89 | 12,4 | 25,8 | 30,7 | 0,62 | 6,6 |
| | min | 2820 | 13,2 | 31,8 | 0,28 | 1,6 | 14,4 | 33,1 | 0,35 | 2,4 |

*1) Recommended outlet air temperature for good comfort and optimized output.

*2) Nominal output at given supply and return water temperature.

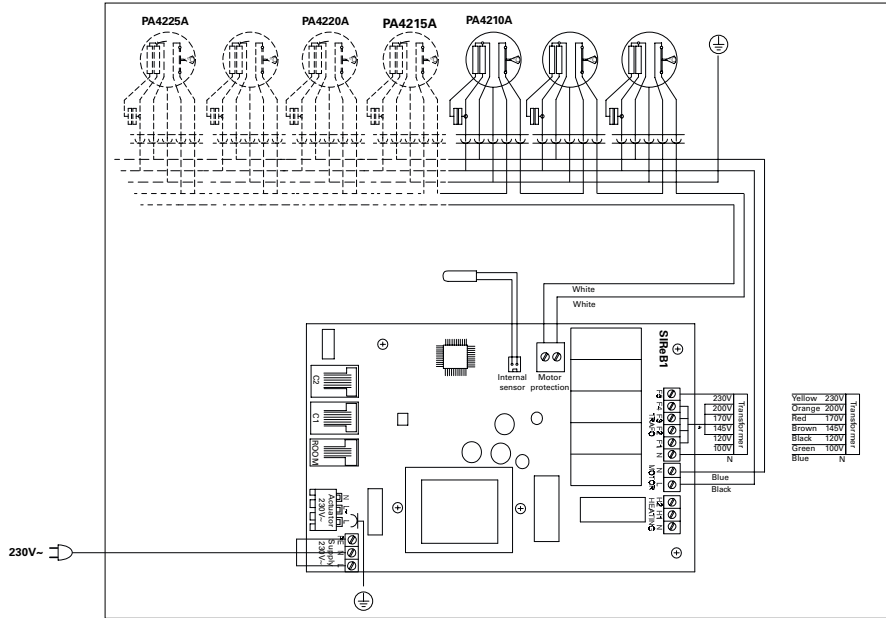
See www.frico.se for additional calculations.

PA4200

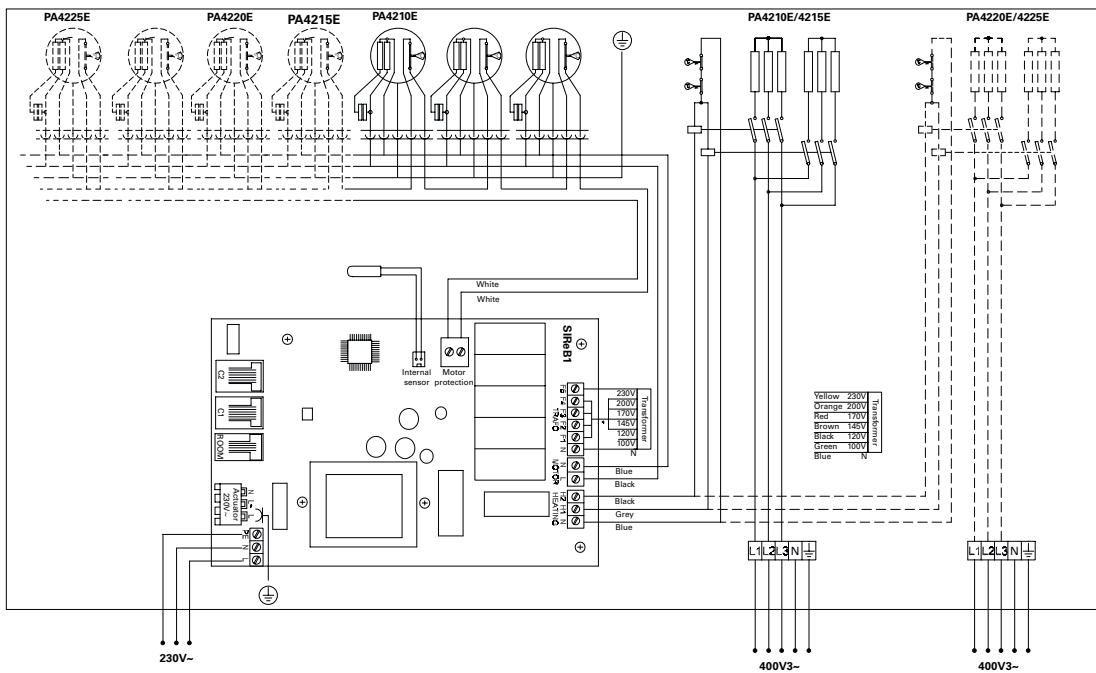
Wiring diagrams

Internal wiring diagram

Unit without heating



Unit with electrical heating



Kopplingschema

Internal wiring diagram

Unit with water heating

