

## PA4200

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

- Horizontal mounting

- Recommended installation height 4,2 m\*
- Lengths: 1, 1,5, 2 and 2,5 m

- Vertical mounting

- Recommended installation width 6 m\*
- (2 units), one on each side
- Lengths: 1,5, 2 and 2,5 m

❖ Ambient, no heat

❖ Electrical heat: 12–30 kW

❖ Water heat WH, WL, WLL



Optimized airflow with  
Thermozone technology.

### Application

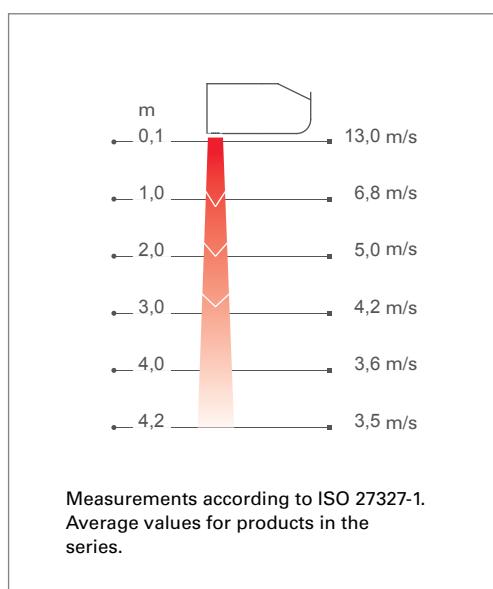
With air curtain PA4200 there are more opportunities than ever before, packed into the same product. There are therefore many areas of use. PA4200 is specifically designed for doorways in for example, large commercial installations or industrial and warehouse buildings.

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.

### Air velocity profile



### 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.
- 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 S 0500-N. Colour grille, rear section and ends: grey, RAL 7046.

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

## Technical specifications

### ❖ Ambient, no heat - PA4200 A

Type	Output [kW]	Airflow* <sup>1</sup> [m <sup>3</sup> /h]	Sound level* <sup>2</sup> [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 steps [kW]	Airflow* <sup>1</sup> [m <sup>3</sup> /h]	Δt* <sup>3</sup> [°C]	Sound level* <sup>2</sup> [dB(A)]	Output- motor [W]	Voltage motor [V]	Amperage motor [A]	Voltage [V] Amperage [A] (heat)	Length [mm]	Weight [kg]
PA4210E12	3,9/7,8/11,7	1280/2700	37/14	46/63,5	830	230V~	3,6	400V3~/16,9	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	7,8/15,6/23,4	2520/5300	37/14	47/64,5	1610	230V~	7,0	400V3~/33,8	2039	94
PA4225E30	9,9/19,8/29,7	3020/6350	38/15	48,5/67	1990	230V~	8,6	400V3~/42,9	2549	113

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

Type	Output* <sup>4</sup> [kW]	Airflow* <sup>1</sup> [m <sup>3</sup> /h]	Δt* <sup>3,4</sup> [°C]	Water volume [l]	Sound level* <sup>2</sup> [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* <sup>5</sup> [kW]	Airflow* <sup>1</sup> [m <sup>3</sup> /h]	Δt* <sup>3,5</sup> [°C]	Water volume [l]	Sound level* <sup>2</sup> [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* <sup>6</sup> [kW]	Airflow* <sup>1</sup> [m <sup>3</sup> /h]	Δt* <sup>3,6</sup> [°C]	Water volume [l]	Sound level* <sup>2</sup> [dB(A)]	Output- motor [W]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
PA4210WLL	10,1	1150/2500	15/12	2,5	46/63,5	830	230V~	3,6	1039	52
PA4215WLL	15,0	1600/3450	15/13	4,7	46/64	1150	230V~	5,0	1549	70
PA4220WLL	20,6	2320/4950	15/12	7,5	47/64,5	1610	230V~	7,0	2039	95
PA4225WLL	25,8	2820/6600	15/13	9,6	48,5/67	1990	230V~	8,6	2549	115

\*<sup>1</sup>) Lowest/highest airflow of totally 5 fan steps.

\*<sup>2</sup>) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m<sup>2</sup>.

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

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

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

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

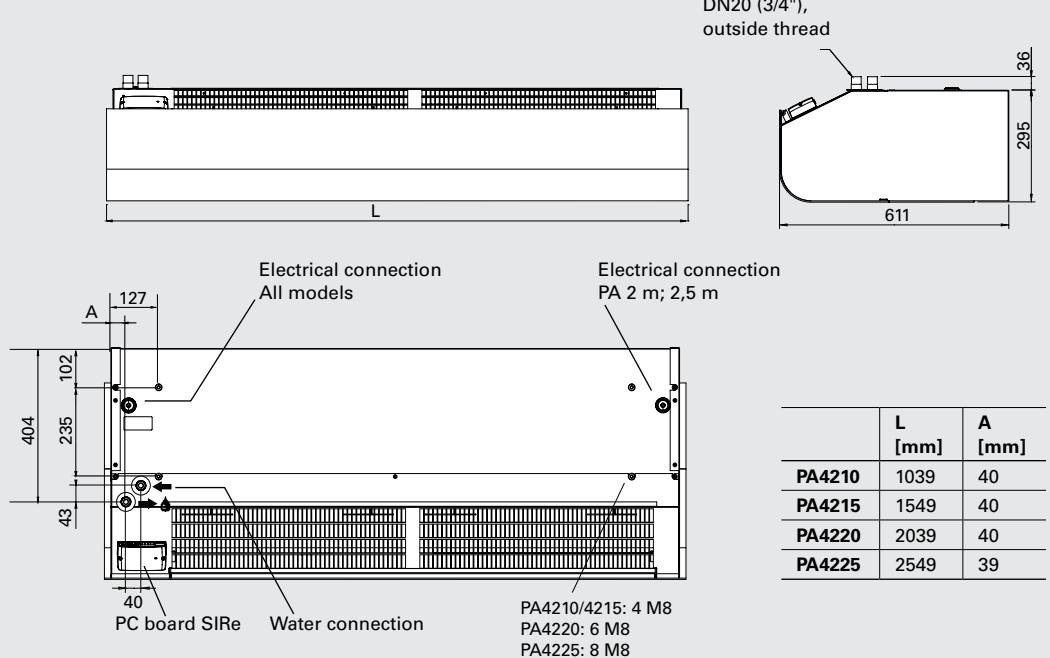
Protection class for units with electrical heating: IP20.

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

CE compliant.

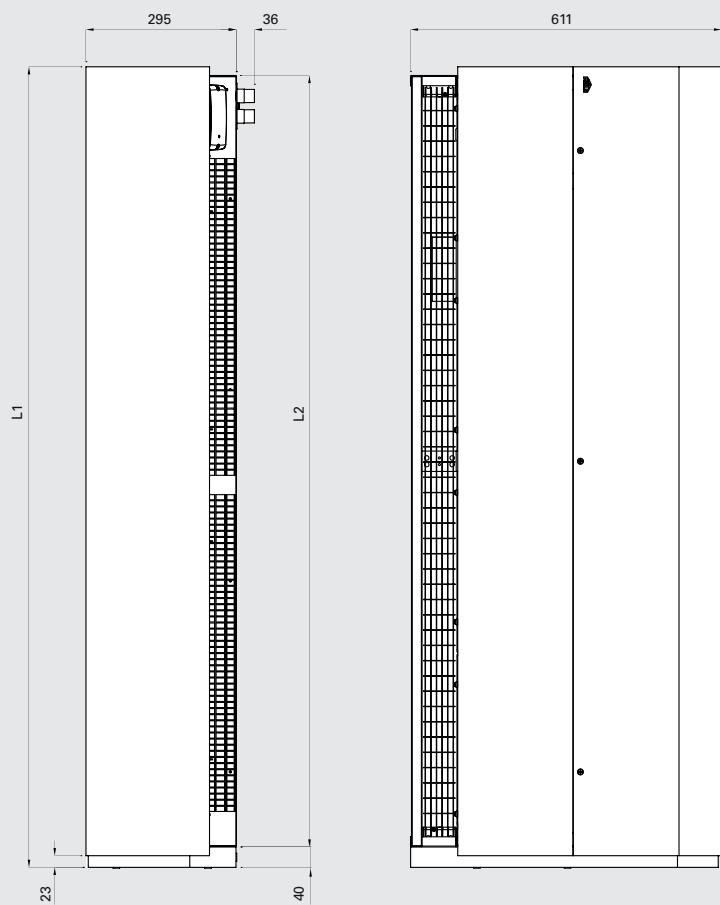
## Dimensions

## 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*

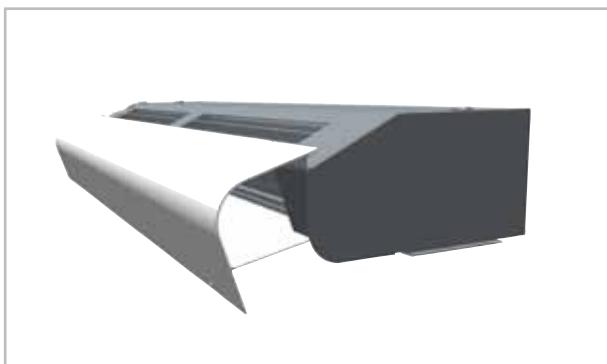
Units from 1,5 metres and longer may be used vertically. The air curtain is mounted vertically as close as possible to the door. For the best effect air curtains should be placed on both sides of the opening.

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.

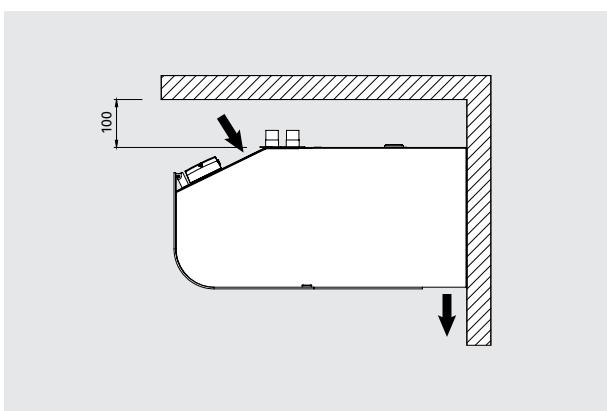
Two units can be mounted directly on top of each other.

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).

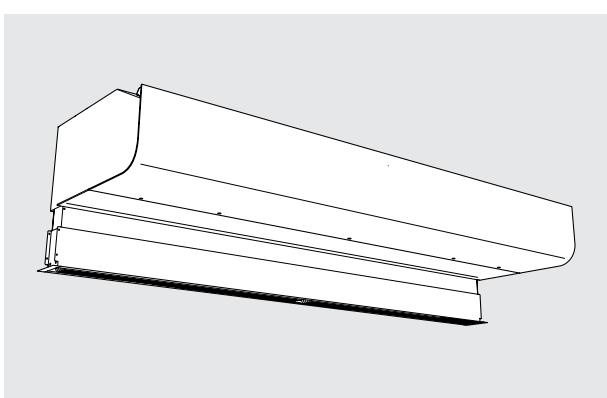
The air curtain is mounted on a floor frame that is included in the vertical kit. The edging is attached horizontal to the floor using fasteners appropriate for the surface. The air curtain must always be secured at the top.



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.

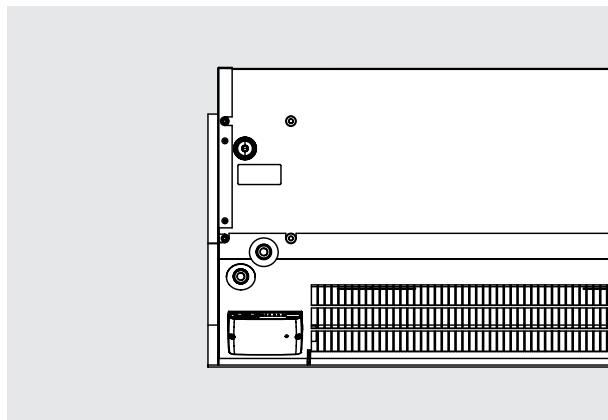
### *Unit with electrical heating*

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 and longer units require dual power supplies.

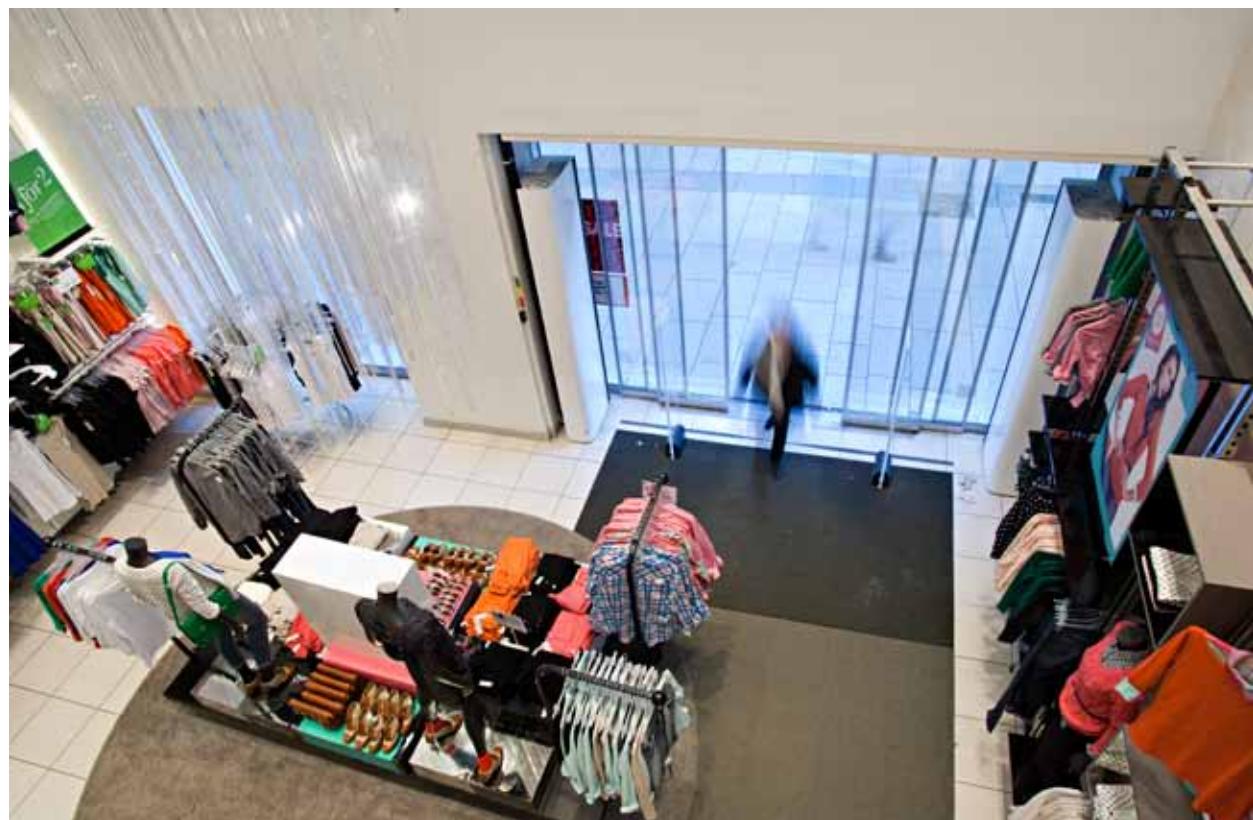
### *Unit with water heating*

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.

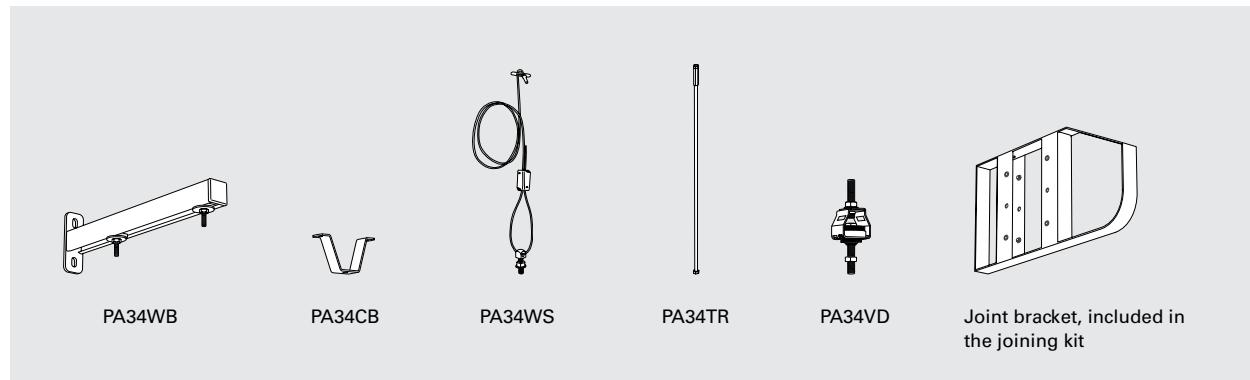


PC board SIRe is built in to the air curtain.



## 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

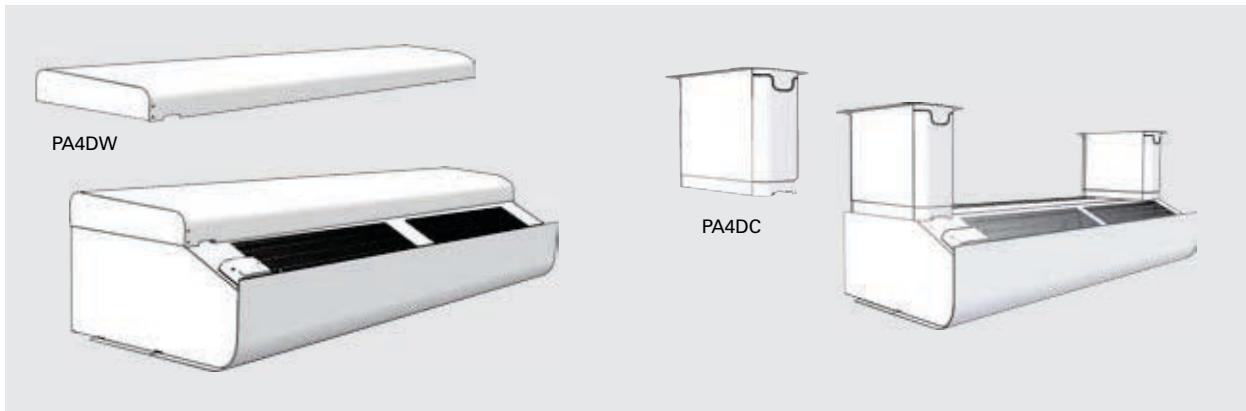
Used to join horizontal units together for a sleek and unified installation. Consists of joint bracket and mounting parts.

Type	Description	Quantity included	Length
<b>PA34WB15</b>	Wall brackets for 1 and 1,5 metre units	2 pcs	400 mm
<b>PA34WB20</b>	Wall brackets for 2 metre units	3 pcs	400 mm
<b>PA34WB30</b>	Wall brackets for 2,5 metre units	4 pcs	400 mm
<b>PA34CB15</b>	Ceiling brackets for 1 and 1,5 metre units	4 pcs	
<b>PA34CB20</b>	Ceiling brackets for 2 metre units	6 pcs	
<b>PA34CB30</b>	Ceiling brackets for 2,5 metre units	8 pcs	
<b>PA34WS15</b>	Wire suspension kit for 1 and 1,5 metre units	4 pcs	3 m
<b>PA34WS20</b>	Wire suspension kit for 2 metre units	6 pcs	3 m
<b>PA34WS30</b>	Wire suspension kit for 2,5 metre units	8 pcs	3 m
<b>PA34TR15</b>	Threaded bars for 1 and 1,5 metre units	4 pcs	1 m
<b>PA34TR20</b>	Threaded bars for 2 metre units	6 pcs	1 m
<b>PA34TR30</b>	Threaded bars for 2,5 metre units	8 pcs	1 m
<b>PA34VD15</b>	Vibration dampers for 1 and 1,5 metre units	4 pcs	
<b>PA34VD20</b>	Vibration dampers for 2 metre units	6 pcs	
<b>PA34VD30</b>	Vibration dampers for 2,5 metre units	8 pcs	
<b>PA4JK</b>	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]
<b>PA4DW10</b>	Design kit for wall mounting PA4210	87x424x1006
<b>PA4DW15</b>	Design kit for wall mounting PA4215	87x424x1516
<b>PA4DW20</b>	Design kit for wall mounting PA4220	87x424x2006
<b>PA4DW25</b>	Design kit for wall mounting PA4225	87x424x2516

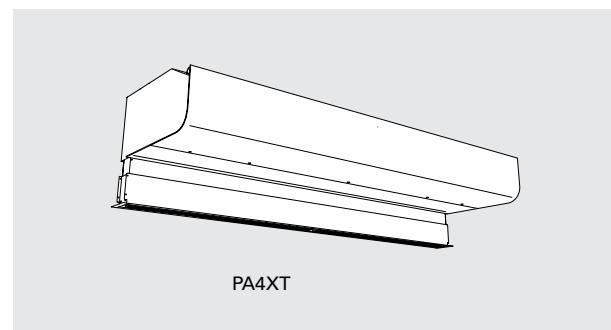
Type	Description
<b>PA4DCS</b>	Design kit for ceiling mounting PA4200, small, 200-300 mm (1 piece)
<b>PA4DCM</b>	Design kit for ceiling mounting PA4200, medium, 300-500 mm (1 piece)
<b>PA4DCL</b>	Design kit for ceiling mounting PA4200, large, 500-900 mm (1 piece)
<b>PA4DXT</b>	Design kit for ceiling 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
<b>PA4XT10</b>	Outlet extension for PA4210, 130-200 mm
<b>PA4XT15</b>	Outlet extension for PA4215, 130-200 mm
<b>PA4XT20</b>	Outlet extension for PA4220, 130-200 mm
<b>PA4XT25</b>	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.

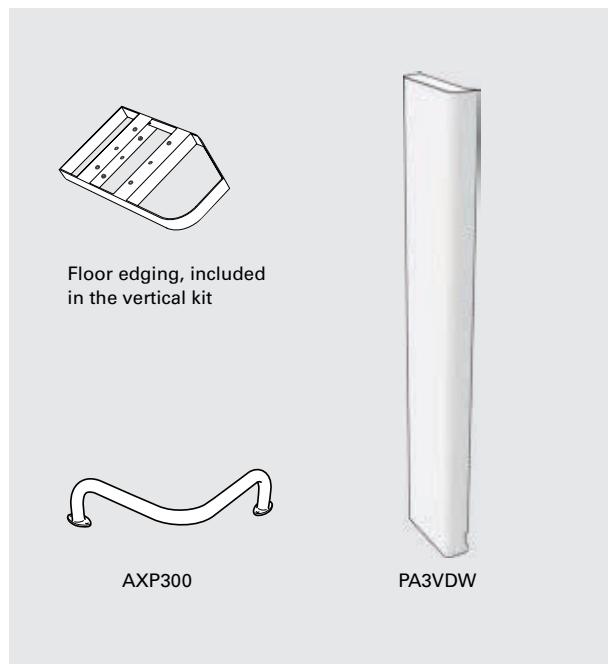
PA4VDW, design kit for vertical mounting

Used to conceal cables and pipes.

AXP300, collision protection

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

Type	Description
<b>PA4JK</b>	Vertical kit PA4200
<b>PA4VDW15</b>	Design kit for vertical mounting PA4215
<b>PA4VDW20</b>	Design kit for vertical mounting PA4220
<b>PA4VDW25</b>	Design kit for vertical mounting PA4225
<b>AXP300</b>	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.

DTV200S, 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 20-300 Pa. Potential free, changeover alarm contact.

FHDN20, flexible hoses

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

Type	Description
<b>PA34EF10</b>	External intake filter for 1 metre units
<b>PA34EF15</b>	External intake filter for 1,5 metre units
<b>PA34EF20</b>	External intake filter for 2 metre units
<b>PA34EF25</b>	External intake filter for 2,5 metre units
<b>DTV200S</b>	Filter pressure guard
<b>FHDN20</b>	Flexible hoses DN20, inside thread, 90° bend, 1 pair

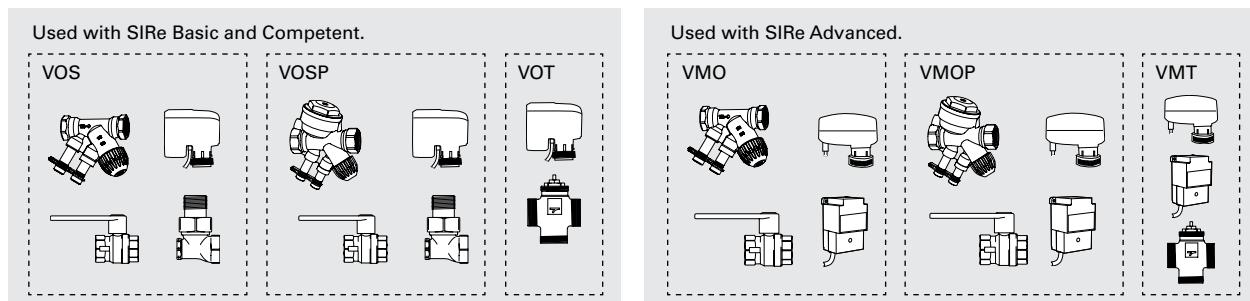
## Controls



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
<b>SIReB</b>	Control system SIRe Basic
<b>SIReAC</b>	Control system SIRe Competent
<b>SIReAA</b>	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.

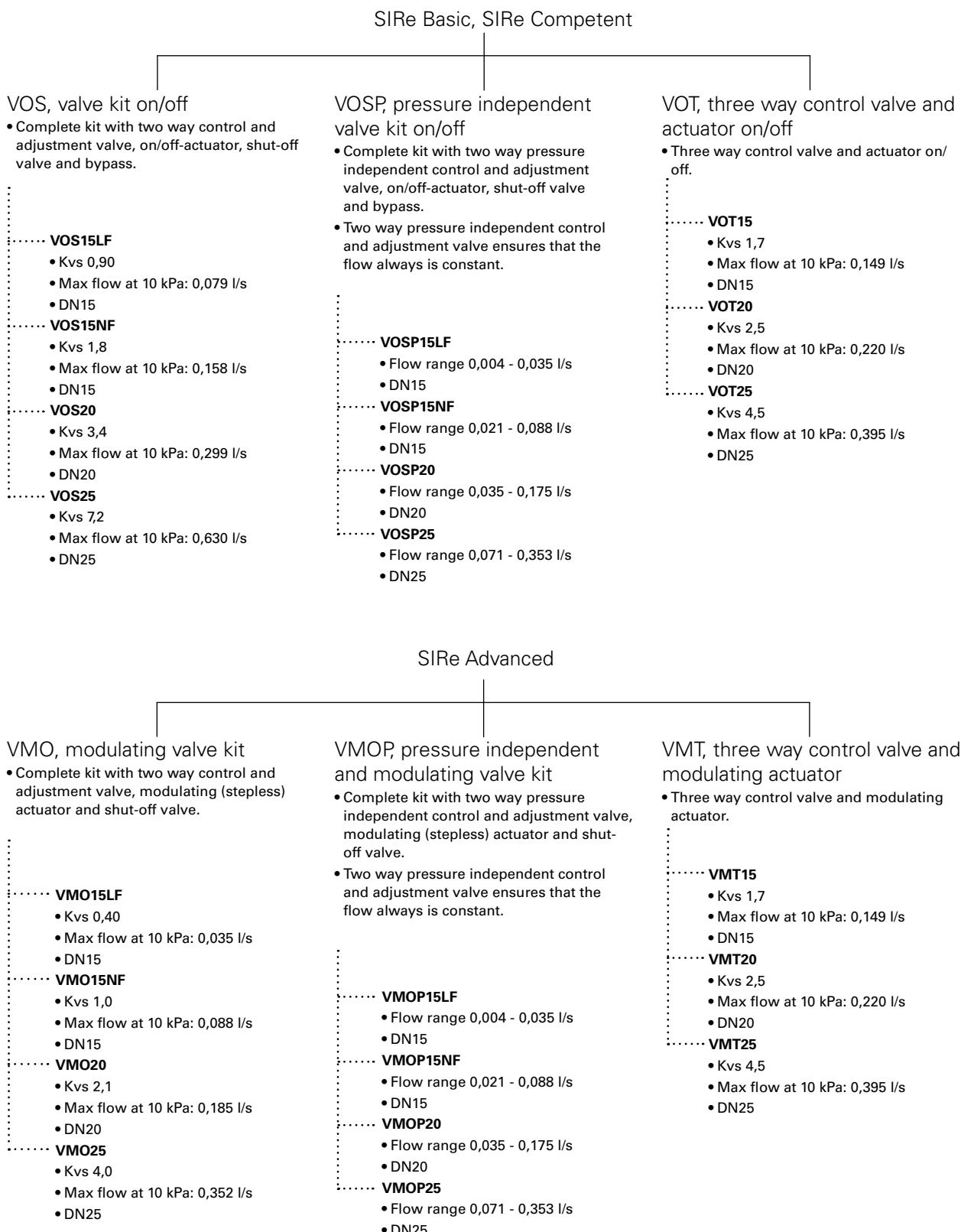
Type	Description
<b>VOS15LF</b>	Valve kit on/off, low flow, DN15
<b>VOS15NF</b>	Valve kit on/off, DN15
<b>VOS20</b>	Valve kit on/off, DN20
<b>VOS25</b>	Valve kit on/off, DN25
<b>VOSP15LF</b>	Pressure independent valve kit, low flow, DN15
<b>VOSP15NF</b>	Pressure independent valve kit, DN15
<b>VOSP20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

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

# Water control

## Choose valve kit

Water heated units that are controlled by SIRe are supplemented with valve kits. It's easy to choose the right valve kit. Look at the guide for the level of SIRe chosen - Basic, Competent or Advanced and select the valve kit which suits the system requirements and characteristics.



## Output charts water

PA4200 WH

			Supply water temperature: 110 °C Room temperature: +18 °C Outlet air temperature: +35 °C* <sup>1</sup>				Water temperature: 110/80 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WH</b>	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
<b>PA4215WH</b>	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
<b>PA4220WH</b>	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
<b>PA4225WH</b>	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* <sup>1</sup>				Water temperature: 90/70 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WH</b>	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
<b>PA4215WH</b>	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
<b>PA4220WH</b>	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
<b>PA4225WH</b>	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* <sup>1</sup>				Water temperature: 80/60 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WH</b>	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
<b>PA4215WH</b>	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
<b>PA4220WH</b>	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
<b>PA4225WH</b>	max	6350	36,6	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* <sup>1</sup>				Water temperature: 82/71 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WH</b>	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
<b>PA4215WH</b>	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
<b>PA4220WH</b>	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
<b>PA4225WH</b>	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

\*<sup>1</sup>) Recommended outlet air temperature for good comfort and optimized output.\*<sup>2</sup>) Nominal output at given supply and return water temperature.

# PA4200

## Output charts water

PA4200 WL

			Supply water temperature: 80 °C Room temperature: +18 °C Outlet air temperature: +35 °C* <sup>1</sup>				Water temperature: 80/60 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WL</b>	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
<b>PA4215WL</b>	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
<b>PA4220WL</b>	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
<b>PA4225WL</b>	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* <sup>1</sup>				Water temperature: 70/50 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WL</b>	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
<b>PA4215WL</b>	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
<b>PA4220WL</b>	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
<b>PA4225WL</b>	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* <sup>1</sup>				Water temperature: 60/40 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WL</b>	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
<b>PA4215WL</b>	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
<b>PA4220WL</b>	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
<b>PA4225WL</b>	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* <sup>1</sup>				Water temperature: 55/35 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m <sup>3</sup> /h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* <sup>2</sup> [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WL</b>	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
<b>PA4215WL</b>	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
<b>PA4220WL</b>	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
<b>PA4225WL</b>	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

\*<sup>1</sup>) Recommended outlet air temperature for good comfort and optimized output.

\*<sup>2</sup>) Nominal output at given supply and return water temperature.

## Output charts water

PA4200 WLL

			Supply water temperature: 55 °C Room temperature: +18 °C Outlet air temperature: +32 °C				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* [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WLL</b>	max	2500	11,9	29,0	0,11	1,9	15,7	36,5	0,19	4,9
	min	1150	5,5	27,6	0,05	0,5	8,8	40,6	0,11	2,1
<b>PA4215WLL</b>	max	3450	16,4	27,2	0,29	1,9	23,5	38,0	0,28	6,1
	min	1600	7,6	26,3	0,06	0,5	13,1	42,1	0,16	2,2
<b>PA4220WLL</b>	max	4950	23,5	28,8	0,22	1,4	32,0	37,1	0,39	3,9
	min	2320	11,0	28,7	0,11	0,4	18,1	40,9	0,22	1,2
<b>PA4225WLL</b>	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				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* [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WLL</b>	max	2500	11,9	30,1	0,14	3,1	11,8	31,9	0,14	3,1
	min	1150	5,5	27,7	0,06	0,8	6,6	34,9	0,08	1,3
<b>PA4215WLL</b>	max	3450	16,4	28,3	0,18	2,9	18,0	33,3	0,22	3,9
	min	1600	7,6	26,4	0,08	0,6	10,0	36,4	0,12	1,4
<b>PA4220WLL</b>	max	4950	23,5	29,7	0,28	2,2	24,0	32,3	0,29	2,4
	min	2320	11,0	28,2	0,12	0,4	13,3	34,8	0,16	0,7
<b>PA4225WLL</b>	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				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* [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WLL</b>	max	2500	11,9	31,6	0,21	6,3	13,6	34,0	0,33	13,3
	min	1150	5,5	28,2	0,08	1,2	7,6	37,4	0,18	5,4
<b>PA4215WLL</b>	max	3450	16,4	29,8	0,26	5,4	20,0	35,1	0,48	16,0
	min	1600	7,6	26,8	0,10	1,0	11,0	38,3	0,27	5,6
<b>PA4220WLL</b>	max	4950	23,5	30,9	0,40	4,3	27,9	34,6	0,67	10,7
	min	2320	11,0	28,3	0,16	0,7	15,5	37,7	0,37	3,2
<b>PA4225WLL</b>	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

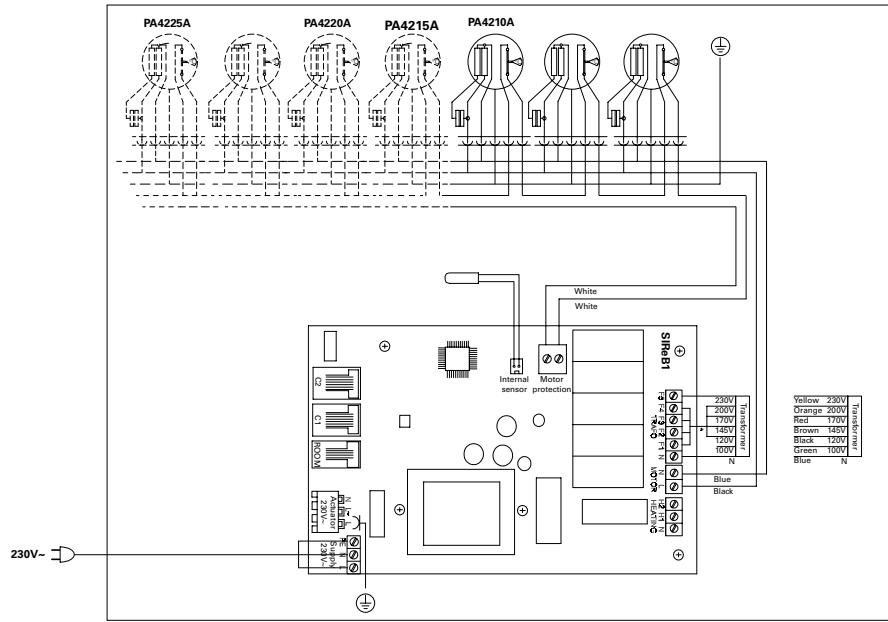
			Supply water temperature: 40 °C Room temperature: +18 °C Outlet air temperature: +32 °C				Water temperature: 40/30 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output* [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
<b>PA4210WLL</b>	max	2500	11,9	33,7	0,46	24,2	10,1	29,9	0,24	8,0
	min	1150	5,5	29,4	0,12	2,8	5,6	32,5	0,14	3,3
<b>PA4215WLL</b>	max	3450	16,4	32,1	0,50	17,3	15,0	30,8	0,36	9,8
	min	1600	7,6	28,2	0,16	2,2	8,3	33,3	0,20	3,5
<b>PA4220WLL</b>	max	4950	23,5	32,9	0,80	14,8	20,6	30,3	0,50	6,4
	min	2320	11,0	29,2	0,25	1,8	11,6	32,7	0,28	2,3
<b>PA4225WLL</b>	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

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

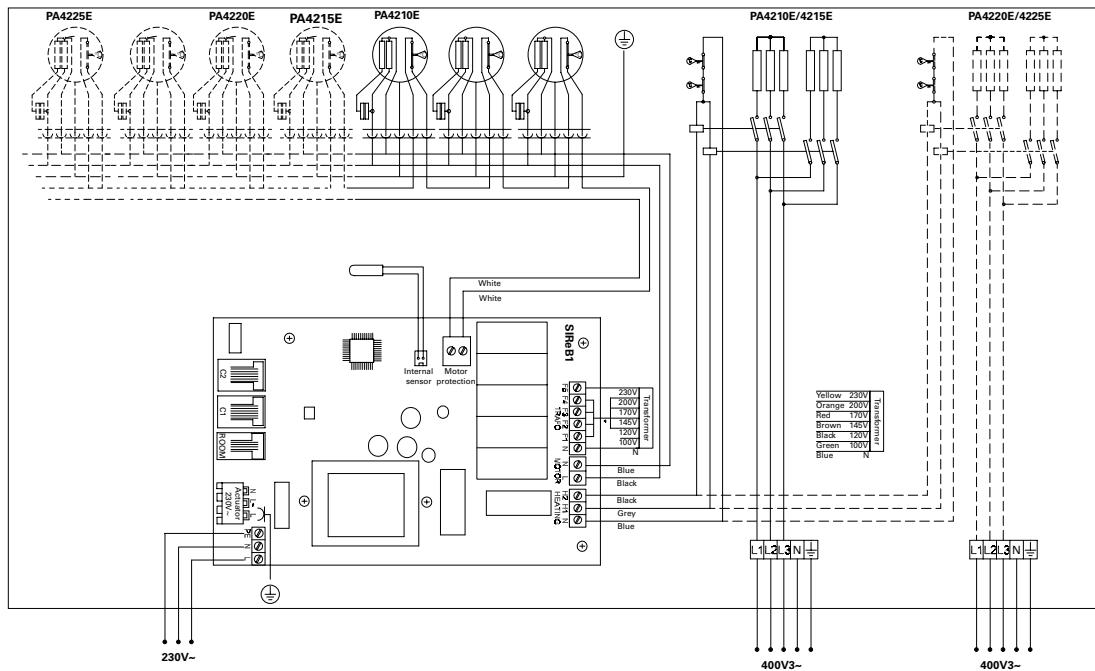
## Wiring diagrams

### Internal wiring diagram

#### *Unit without heating*



#### *Unit with electrical heating*



## Wiring diagrams

### Internal wiring diagram

#### *Unit with water heating*

