



PA3200C

Stylish air curtain for commercial premises, with remote and integrated control

- Recommended installation height 3,2 m*
- Horizontal mounting
- Lengths: 1, 1,5 and 2 m
- ✿ Ambient, no heat
- ⚡ Electrical heat: 8 - 16 kW
- 💧 Water heat



Optimized airflow with Thermozone technology.

Application

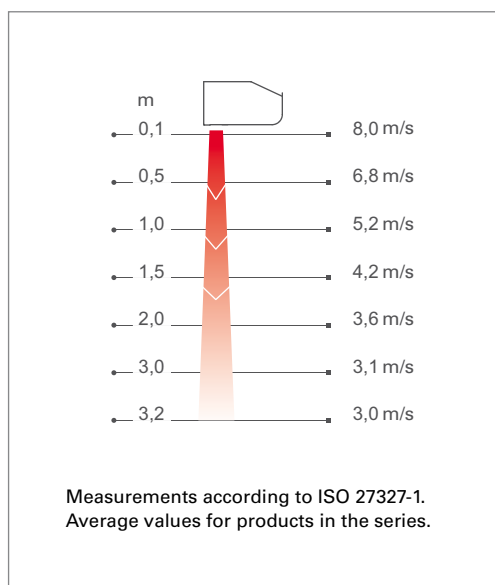
PA3200C is a compact air curtain for commercial buildings and small industrial entrances. The air curtain has an integrated control system and can also be remote controlled which makes it very easy to install and use.

PA3200C creates a temperature dividing air barrier that effectively prevents cold draughts and gives excellent heating comfort inside the door.

Design

With its timeless design PA3200C is suitable for all entrances. The air curtain has a control panel discretely integrated in the end, which makes cable routing unnecessary. The front can be finished in any colour to perfectly match the environment.

Air velocity profile



Product specifications

- Remote control and integrated regulation.
- 3 fan steps and 2 electrical heating steps.
- Wall brackets included.
- The front is easy to remove, which facilitates installation and allows easy maintenance.
- Corrosion proof housing made of hot zinc-plate and powder enamelled steel panels. Colour front: white, RAL 9016, NCS S 0500-N. Colour grille, rear section, ends and brackets: grey, RAL 7046.

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

Technical specifications

✿ Ambient, no heat - PA3200C A

Type	Output [kW]	Airflow* ¹ [m³/h]	Sound level* ² [dB(A)]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
PA3210CA	0	1100/1750	46/57	230V~	0,7	1068	22
PA3215CA	0	1700/2750	46/59	230V~	1,0	1578	32
PA3220CA	0	2300/3500	50/60	230V~	1,3	2068	42

⚡ Electrical heat - PA3200C E

Type	Output steps [kW]	Airflow* ¹ [m³/h]	Δt * ³ [°C]	Sound level* ² [dB(A)]	Voltage motor [V]	Amperage motor [A]	Voltage [V] Amperage [A] (heat)	Length [mm]	Weight [kg]
PA3210CE08	5/8	1100/1750	22/13	46/57	230V~	0,65	400V3~/11,5	1068	26
PA3215CE12	8/12	1700/2750	21/13	46/59	230V~	1,0	400V3~/17,3	1578	37
PA3220CE16	10/16	2300/3500	22/13	50/60	230V~	1,3	400V3~/23,1	2068	51

💧 Water heat - PA3200C W

Type	Output* ⁴ [kW]	Airflow* ¹ [m³/h]	Δt * ^{3,4} [°C]	Water volume [l]	Sound level* ² [dB(A)]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
PA3210CW	8	1050/1700	16/14	1,3	45/55	230V~	0,65	1068	26
PA3215CW	14	1850/2700	17/15	2,1	46/57	230V~	0,7	1578	36
PA3220CW	18	2200/3300	18/16	2,7	49/58	230V~	1,3	2068	48

*¹) Lowest/highest airflow of totally 3 fan steps.

*²) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m². At lowest/highest airflow.

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

*⁴) Applicable at water temperature 60/40 °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.

Controls

⚡ Unit with electrical heating

💧 Unit with water heating



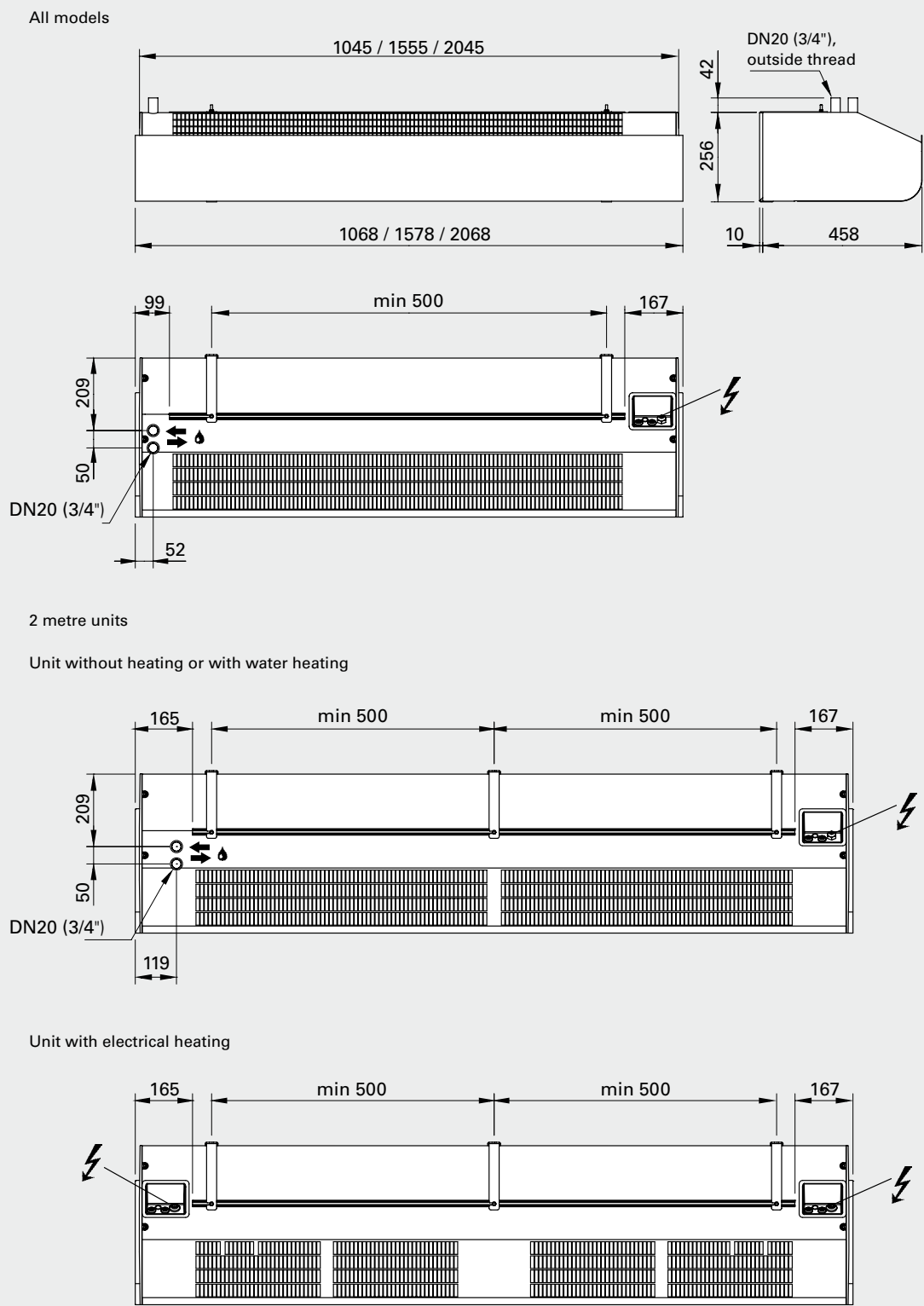
- Remote control.
- Integrated control panel on end of unit
 - 3 fan steps, 2 electrical heating steps (electrical), heating on /off (water).
- Manual regulation of the fan.
- Automatic heating control.

✿ Unit without heating



- Remote control.
- Integrated control panel on end of unit
 - 3 fan steps.
- Manual regulation of the fan.

Dimensions



Mounting and connection

Mounting

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

Different installation options are available; brackets for wall mounting (included in delivery) and hanging brackets or threaded bars for ceiling mounting.

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

Connection

Unit without heating

Connected via the built-in control board with 1,5 m cord and plug.

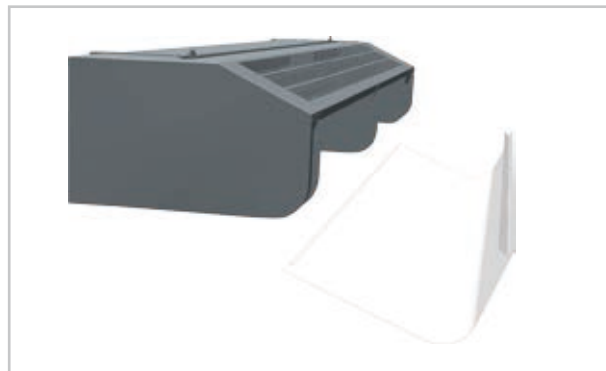
Unit with electrical heating

The electrical connection is made on the top of the unit. Control (230V~) and power supply for heat (400V3~) should be connected to a terminal block in the terminal box. 2-metre and longer units require dual power supplies.

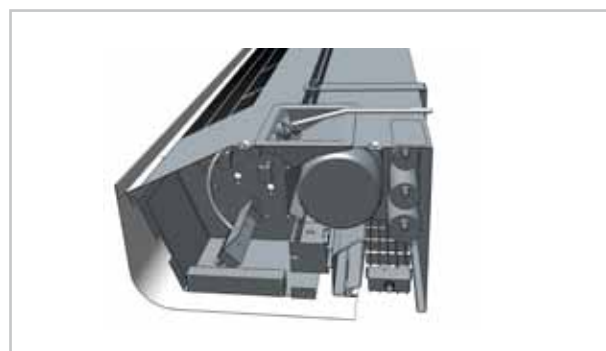
Unit with water heating

Connected via the built-in control board with 1,5 m cord and plug.

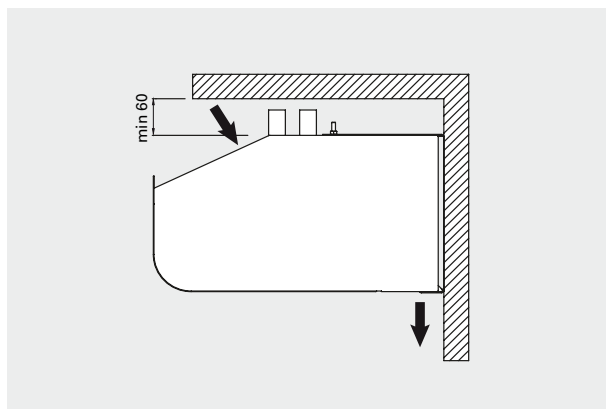
The water coil is connected on top of the unit via steel pipes with DN20 (3/4") terminals, external thread.



The front is easy to remove, which facilitates installation and allows easy maintenance.



Thanks to a recess on the upper side of units with electrical heating, the wiring to and inside the unit is greatly simplified.



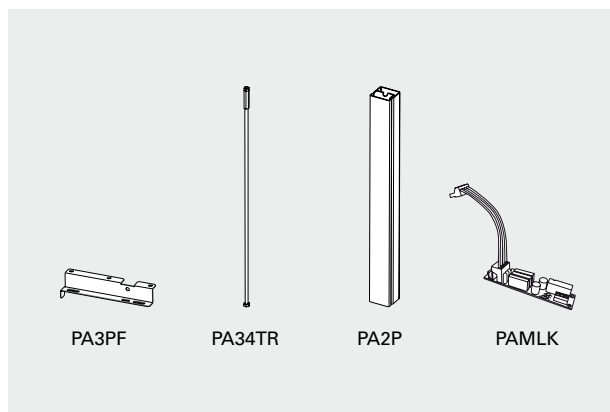
Minimum distances



Wall brackets included.

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Accessories



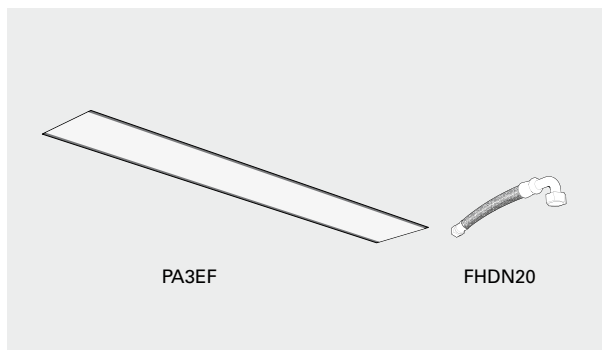
PA3PF, ceiling mounting brackets
Mountings for installing the unit in the ceiling using hanging brackets or threaded bars (not included).

PA34TR, threaded bars
Threaded bars for installing unit on to a ceiling. Length 1 m. Used together with ceiling mounting brackets PA2PF/PA3PF.

PA2P, hanging brackets
Hanging brackets for installing the unit suspended from the ceiling. Length 1 m. The hanging brackets are covered by a white plastic trim to cover the cables. The brackets may be cut to shorter length, if required. Used together with ceiling mounting brackets PA2PF/PA3PF.

PAMLK, motor alarm board
Used for units that do not have withdrawn thermal contact. For units with SIRE, connect the board to the SIRE automatic for motor alarm indication. For other units the potential free alarm switch for external alarm is used.

Unit with water heating



PA3EF, 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.

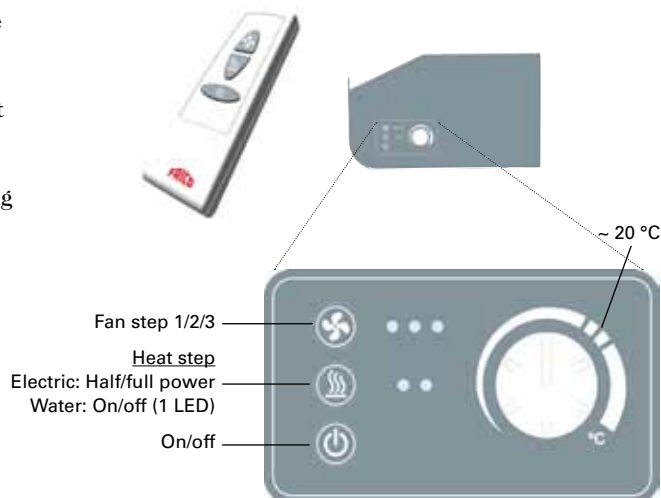
FHDN20, flexible hoses
Flexible hoses for easy and practical installation of water heated unit.

Type	Description	Quantity included	Length
PA3PF15	Ceiling mounting brackets for 1 and 1,5 metre units	4 pcs	
PA3PF20	Ceiling mounting brackets for 2 metre units	6 pcs	
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
PA2P15	Hanging brackets for 1 and 1,5 metre units	2 pcs	1 m
PA2P20	Hanging brackets for 2 metre units	3 pcs	1 m
PAMLK	Motor alarm board	1 pcs	
PA3EF10	External intake filter for 1 metre water heated units	1 pcs	
PA3EF15	External intake filter for 1,5 metre water heated units	1 pcs	
PA3EF20	External intake filter for 2 metre water heated units	1 pcs	
FHDN20	Flexible hoses DN20, inside thread, 90° bend	2 pcs	

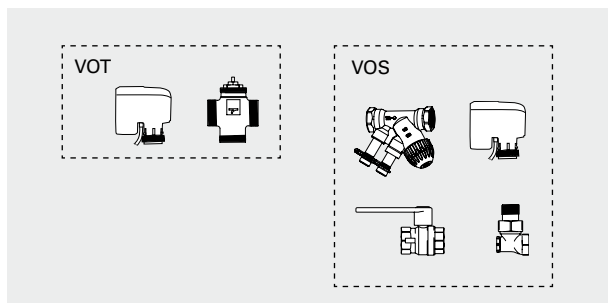
Control options

The control system is integrated in the air curtain. The air curtain has a control panel discretely integrated in the gable end and can be controlled by a separate remote control. The air speed is set manually. The heat is controlled automatically.

Door switch control PA2DR is available as an accessory for a door switch function. Possibility of using external on/off.



Water control



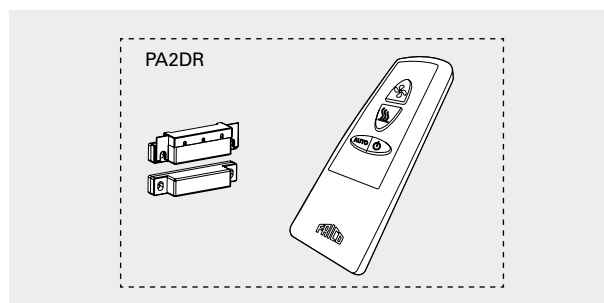
VOT, three way control valve and actuator on/off
Used to control the water supply to water heated units.
DN15/20/25.

VOS, valve kit on/off

Two way combined control and adjustment valve with on/off actuator, shut-off valve and bypass. DN15/20/25. 230V.

Type	Description
VOT15	3-way valve and actuator on/off DN15, Kvs 1,7
VOT20	3-way valve and actuator on/off DN20, Kvs 2,5
VOT25	3-way valve and actuator on/off DN25, Kvs 4,5
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

Controls



PA2DR, door switch control

Contains a door switch for door indication and a special remote control intended to activate auto mode in the unit.

Type	Description
PA2DR	Door switch control

For further information and options, see the "Controls" section.

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Output charts water

			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]
PA3210CW	max	1700	9,8	42	0,06	1,4	14,6	43	0,18	8,5
	min	1050	6,2	38	0,04	0,5	10,6	48	0,13	4,8
PA3215CW	max	2700	15,6	38	0,09	2,0	24,7	45	0,30	16,8
	min	1850	10,5	34	0,06	0,9	19,2	49	0,23	10,6
PA3220CW	max	3300	18,6	36	0,10	1,9	31,2	46	0,38	19,0
	min	2200	12,6	34	0,07	0,9	23,7	50	0,29	11,5

			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]
PA3210CW	max	1700	9,7	44	0,09	2,7	11,3	38	0,14	5,5
	min	1050	6,1	39	0,05	0,9	8,3	41	0,10	3,2
PA3215CW	max	2700	15,6	41	0,13	3,9	19,4	39	0,24	11,1
	min	1850	11,0	38	0,08	1,7	15,0	42	0,18	7,0
PA3220CW	max	3300	18,9	39	0,15	3,7	24,4	40	0,30	12,5
	min	2200	12,9	36	0,09	1,6	18,6	43	0,23	7,6

			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]
PA3210CW	max	1700	10,0	48	0,19	10,5	8,0	32	0,10	3,1
	min	1050	6,1	41	0,08	2,1	5,8	34	0,07	1,8
PA3215CW	max	2700	16,0	45	0,26	13,4	13,9	33	0,17	6,3
	min	1850	10,8	40	0,13	4,0	10,8	35	0,13	4,0
PA3220CW	max	3300	18,9	42	0,26	10,2	17,6	34	0,21	7,1
	min	2200	12,9	39	0,15	3,6	13,4	36	0,16	4,4

			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]
PA3210CW	max	1700	9,8	48	0,35	31,3	6,3	29	0,08	2,1
	min	1050	5,9	42	0,11	3,6	4,6	31	0,06	1,2
PA3215CW	max	2700	15,7	46	0,42	32,9	11,2	30	0,14	4,3
	min	1850	10,8	42	0,19	8,1	8,7	32	0,11	2,8
PA3220CW	max	3300	18,7	44	0,40	22,4	14,1	31	0,17	4,9
	min	2200	12,5	39	0,19	5,9	10,7	32	0,13	3,0

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

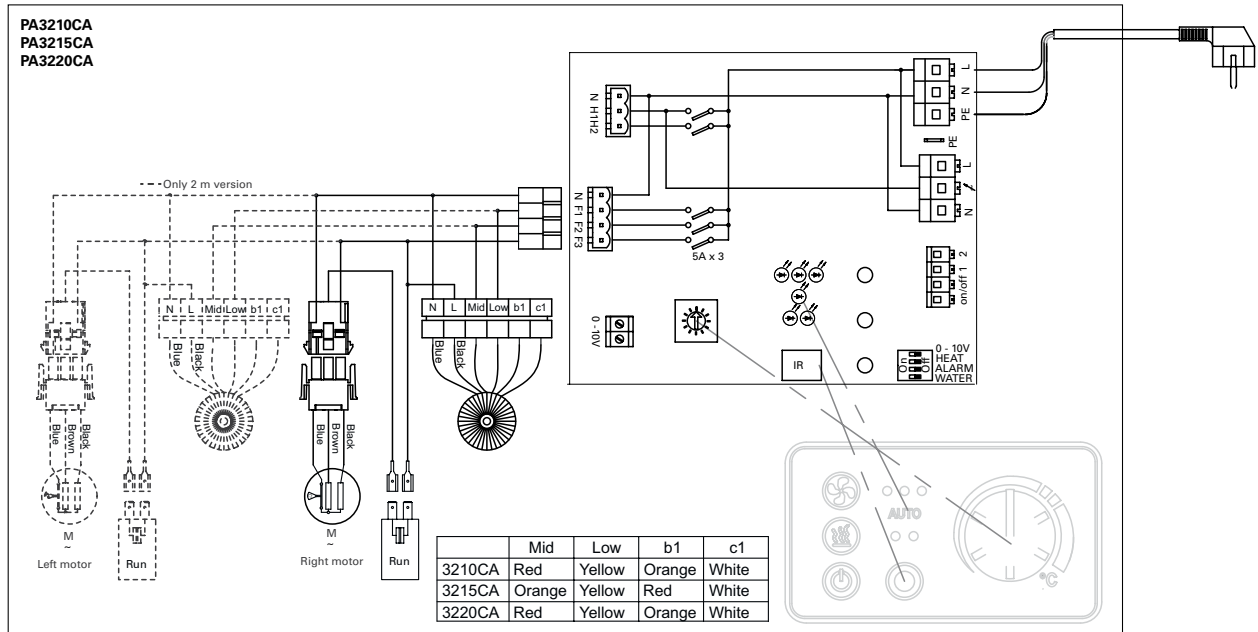
*2) Nominal output at given supply and return water temperature.

See www.frico.se for additional calculations.

Wiring diagrams

Internal wiring diagram

Unit without heating

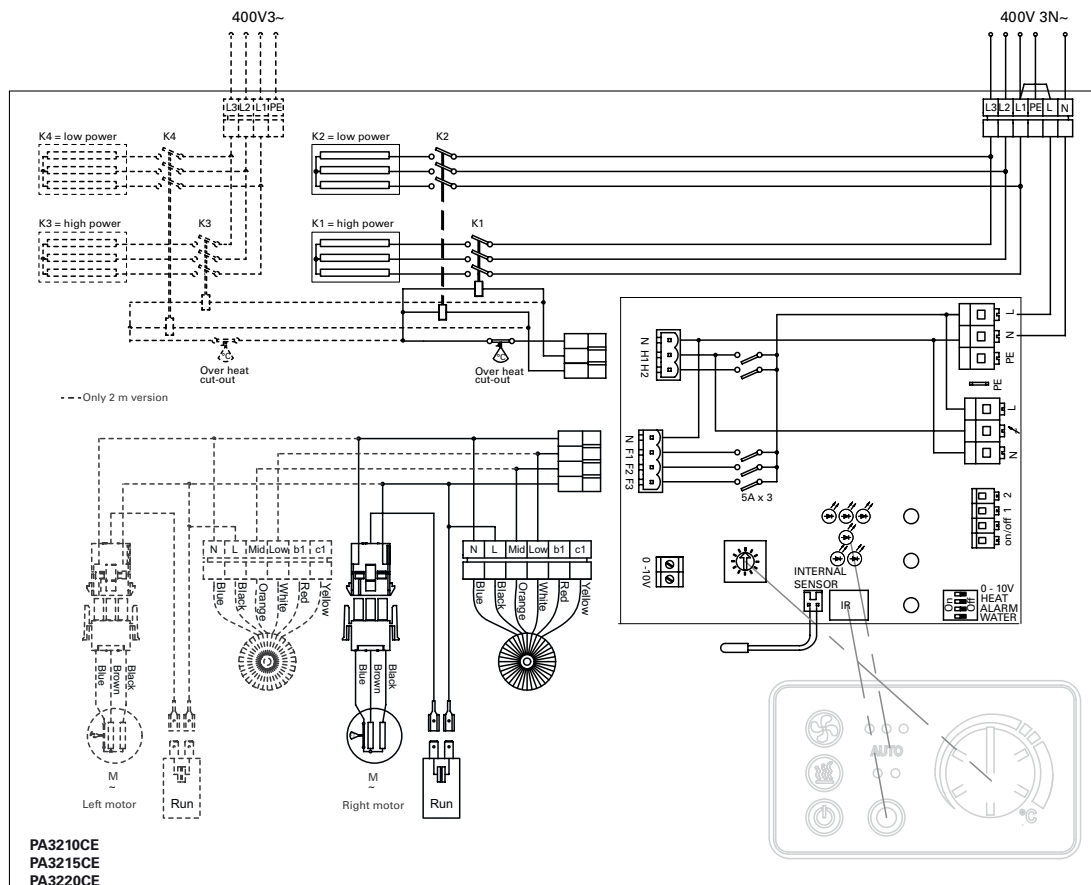


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Wiring diagrams

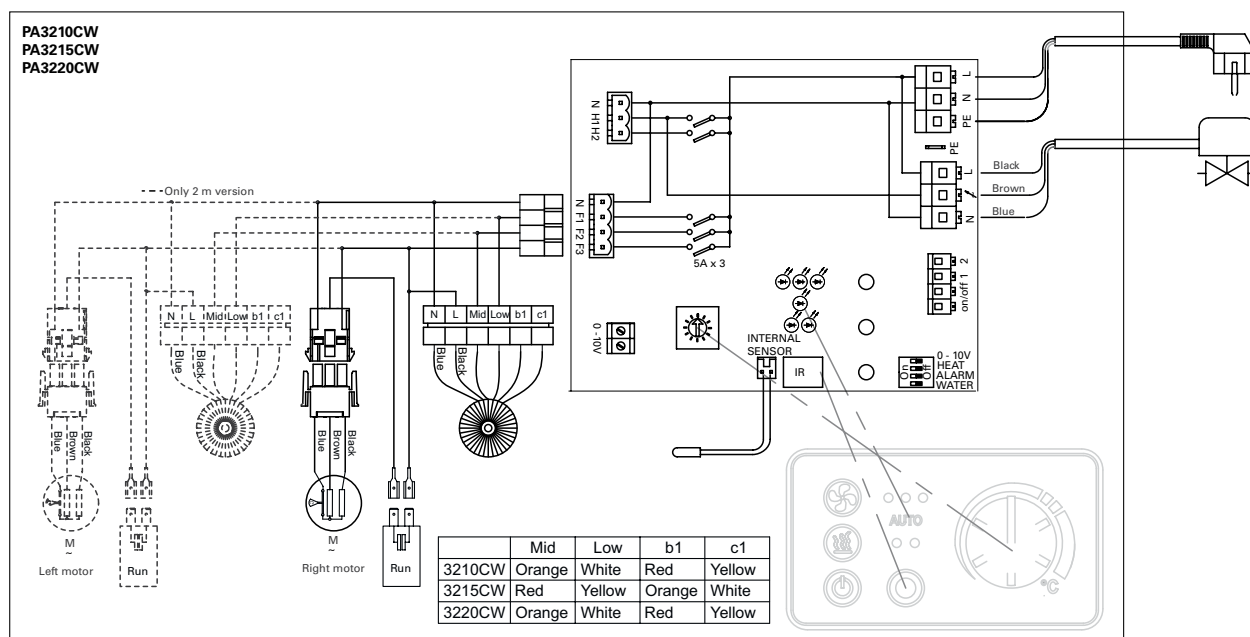
Internal wiring diagram

Unit with electrical heating



Wiring diagrams

Internal wiring diagram

Unit with water heating

PAMLK, motor alarm board

All units