





Electrical heat 3–18 kW

Lengths 1, 1.5 and 2 metres



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Thermozone® AR 200 A/E

Recessed air curtains for installation heights up to 2,5 metres

Application

AR200 is especially suited for environments with high demands in respect of design. It is recessed in ceilings above entry doors and other small doors where the height is no greater than 2,5 metres. A low height makes it possible to install AR200 where ceiling space is limited. The recessed installation and low sound level makes AR200 very discreet.

Comfort

AR200 creates an air barrier, which prevents cold draughts and ensures comfortable heating inside the door. An adjustable air blower grille makes it possible to direct the air for an optimal air curtain effect. AR200 can also contribute to the heating of the room when the door is closed.

Operation and economy

Thanks to Thermozone Technology AR200 saves energy. The air barrier reduces energy losses through the door opening and the energy consumption of the air curtain is also low. With an air curtain as a heat source it produces heat in the area where it is most needed, and as a result the rest of the premises can be covered with less output. Easy installation and maintenance minimizes the cost and the risk of errors.

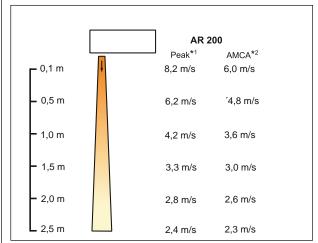
Design

AR200 is designed for recessed installation and the visible bottom plate may be painted to make it blend even better with the premises.

Product specifications

- Just one model per length, but convertible between several outputs and 230V~/400V3N~ making it simple and flexible to adapt the output to current need.
- Optimized airflow with Thermozone Technology.
- Low unit height (200 mm).
- Bottom plate in white lacquered aluminium. Colour: RAL 9016, NCS 0500. The bottom plate can easily be removed and painted in an optional colour. Non visible parts made of hot zinc plated steel panels.

Air velocity profile



^{*1)} Peak values

^{*2)} Mean values. Measurements made according to AMCA 220 "Test methods for Air Curtain Units"

Technical	specifications	Thermozone A	AR 200	A wit	hout h	neat	\$

Туре	Output	Airflow	Sound level*1	Voltage	Amperage	Length	Weight
	[kW]	[m³/h]	[dB(A)]	[V]	[A]	[mm]	[kg]
AR210A	0	650/1200	34/50	230V~	0,5	1042	18
AR215A	0	950/1750	34/50	230V~	0,6	1552	25

Туре	Output steps 400V3N~	Output steps 230V~	Airflow	Sound level*1	∆ t* ²	Voltage	Amperage 400V3N~	Amperage 230V~	Length	Weight
	[kW]	[kW]	[m³/h]	[dB(A)]	[°C]	[V]	[A]	[A]	[mm]	[kg]
AR210E09	0/3	-	650/1200	34/50	13/7	400V3N~	4,3	-	1042	22,5
	0/3/6	-	650/1200	34/50	25/15	400V3N~	8,7	-	1042	22,5
	0/6/9	-	650/1200	34/50	41/22	400V3N~	13	-	1042	22,5
	-	0/3	650/1200	34/50	13/7	230V~	-	13	1042	22,5
	-	3/5	650/1200	34/50	23/12	230V~	-	21,7	1042	22,5
AR215E11	0/4,5	-	950/1750	34/50	14/8	400V3N~	6,5	-	1552	32,3
	0/3,4/6,8	-	950/1750	34/50	21/12	400V3N~	9,8	-	1552	32,3
	0/6,8/11,3	-	950/1750	34/50	35/20	400V3N~	16,3	-	1552	32,3
	-	0/4,5	950/1750	34/50	14/8	230V~	-	19,6	1552	32,3
	-	0/4,5/6,8	950/1750	34/50	21/12	230V~	-	29,6	1552	32,3
AR220E18	0/6	-	1300/2400	40/54	13/7	400V3N~	8,7	-	2042	43,5
	0/6/12	-	1300/2400	40/54	25/15	400V3N~	17,3	-	2042	43,5
	0/12/18	-	1300/2400	40/54	41/22	400V3N~	26	-	2042	43,5
	-	0/6	1300/2400	40/54	13/7	230V~	-	26,1	2042	43,5
	-	0/6/10	1300/2400	40/54	23/12	230V~	-	43,5	2042	43,5

^{*1)} Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

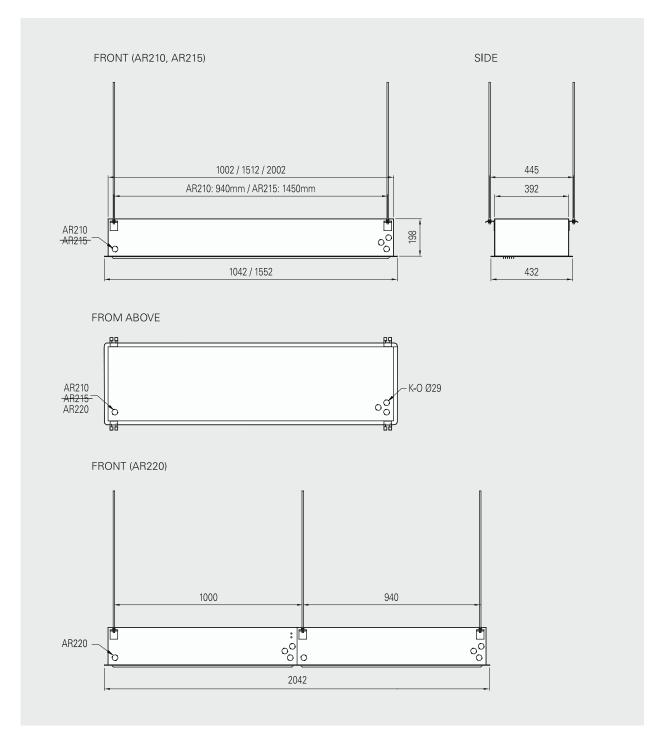
AR200E is delivered as 9 kW, 11 kW and 18 kW ($400V3N\sim$) models, but they are convertible to $230V\sim$ and different outputs as shown in above table.

Protection class AR200A/E: normal design (IP20). CE compliant.



 $^{^{*2}\!)}$ Δt = temperature rise at maximum heat output and lowest/highest airflow.

Dimensions



Positioning, mounting and installation

Mounting

AR200 unit is installed horizontally with the supply air grille facing downwards as close to the door as possible, concealed in the false ceiling. The only visible part of the unit is the underside that is level with the ceiling.

For the protection of wider doorways, several units can be mounted next to each other. Ensure that the bottom plate is accessible and can be fully opened. Minimum distance from outlet to floor for electrically heated units is 1800 mm, see Fig. 1.

Connection AR 200 A &

The connection to the unit's side or top is made with $2x1.5 \text{ mm}^2$ + carth. See Wiring Diagram.

Connection AR 200 E &

Connection is made on the top or on the side of the unit with a five-wired cable with earth. The supply terminal block is intended for a cable of maximum 16 mm2. See wiring diagrams. The units are convertible between different output and $230V\sim 400V3N\sim$.

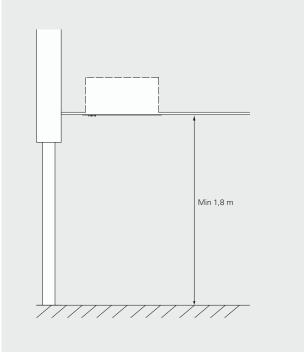


Fig. 1: Minimum distance to floor for electrically heated units.

Control kits

Ambient 🛠

Level 1

Airflow is controlled manually Control kit:

- CB30N, control box, controls the airflow in 3 steps.

Electrical &

Level 1

Airflow is regulated manually. Room thermostat controls the heat output in 2 steps.

Control kit CK01E:

- CB32N, control box, controls the airflow in 3 steps and heat output in 2 steps
- RTI2, 2-step room thermostat (option KRT2800)

Level 2

Airflow and heat output are controlled automatically based on the opening of the door and the room temperature. When the door is open the fan runs on high speed, when the door closes the fan will continue to run on high speed for the desired time (2s–10 min.) set on MDC. When the door is closed the fan runs on low speed if there is a need for heating, if not the fan is switched off.

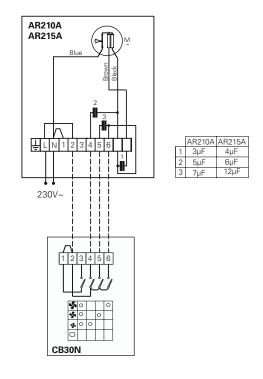
The room thermostat controls the heat output. E.g. the thermostat is set on 23 $^{\circ}$ C and the difference between the stages 4 $^{\circ}$ C. The thermostat will activate below 19 $^{\circ}$ C when the door is closed. When the door opens, the thermostat will activate below 23 $^{\circ}$ C and normally the heat is switched on. Control kit CK02E:

- CB32N, control box, controls the airflow in 3 steps and heat output in 2 steps
- MDC, door contact with time delay
- RTI2, 2-step room thermostat (option KRT2800)



Wiring diagrams

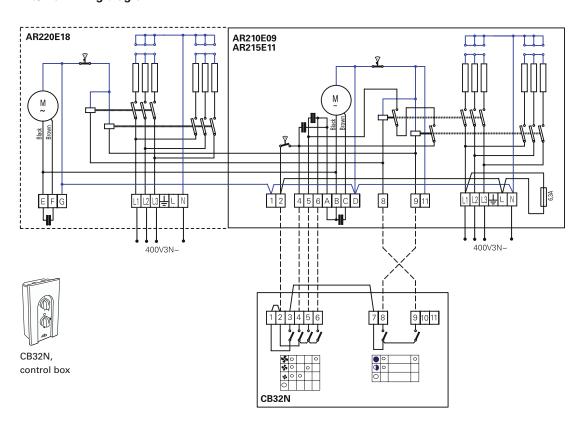
Internal wiring diagram





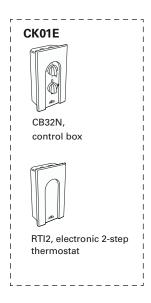
Wiring diagrams AR 200 E

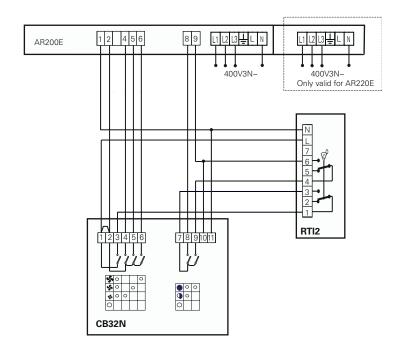
Internal wiring diagram



Wiring diagrams AR 200 E

Level 1





Level 2

