







-  Ambient, no heat
-  Electrical heat 8-18 kW
-  Water heat

Lengths: 1 and 1,7 metres  CE

Thermozone® AC/WAC 300/400

Air curtains for entry doors between 2,5 - 4,0 metres

The Thermozone AC/WAC 300/400 range consists of both heated and ambient versions and hot water heated WAC models.

AC/WAC300/400 are designed for permanent horizontal installation above doorways with heights between 2,5 and 4,0 metres or positioned vertically beside the doorway when overdoor space is limited. They can be surface mounted or recessed into a false ceiling. A jet of air from the air curtain prevents cold draughts through open doorways and increases comfort levels in the proximity of the door. The ambient versions have been specifically designed for cold store applications and entrances to airconditioned buildings to prevent the loss of refrigerated air.

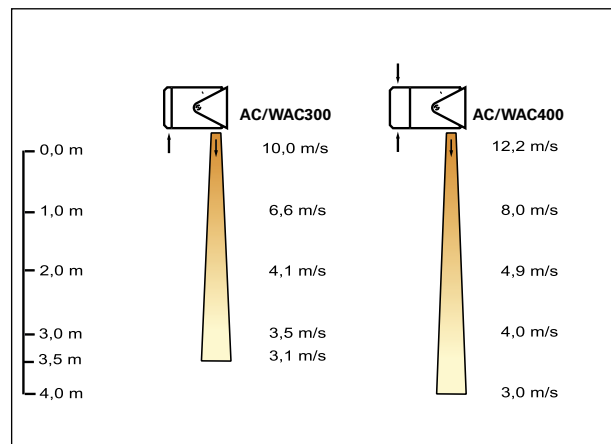
The use of a Thermozone 300/400 air curtain enables the use of floor space close to the doorway and can significantly reduce energy losses giving large savings. The Thermozone 300/400 range can also be used for industrial heating and drying applications. For wide doorways, several units can be mounted next to each other and regulated with a common thermostat and control panel.

For doorways with ceiling mounted sliding doors, adaptation sets are available that direct the airflow close to the opening.


- Corrosion proof housing made of hot zinc-plated and powder enamelled steel panels. Colour: RAL 9016.
- Compact design for installation where space is limited.
- Adjustable mounting brackets for optimisation of air stream.
- The connection areas are easily accessed through a large service hatch.
- The sound-absorbing front plate can be turned to allow air intake either from above or from below.
- The narrow outlet which gives a high impulse, is angled 10° outwards for optimal performance.

Approved by SEMKO and CE compliant. WAC301V and WAC302V are CE compliant.

Air velocity profile




Design and specifications are subject to change without notice.

Technical specifications | Thermozone AC 300/400 without heat 

Type	Output stages [kW]	Airflow [m³/h]	Sound level [dB(A)]	Voltage [V]	Amperage [A]	Length [mm]	Weight [kg]
AC301	0/4	900/1800	44/62	230V~	1,6	1000	39
AC302	0/6	1300/2700	45/63	230V~	2,5	1670	57
AC401	0/12	1350/2700	44/62	230V~	2,5	1000	44
AC402	0/18	2250/4500	45/63	230V~	4,2	1670	71


Protection class AC300/400 without heat: (IP24), splash-proof design.

Technical specifications | Thermozone AC 300/400 with electrical heat 

Type	Output stages [kW]	Airflow [m³/h]	Δt^{*1} [°C]	Sound level [dB(A)]	Voltage [V]/ Amperage [A] (control)	Voltage [V] Amperage [A] (heat)	Length [mm]	Weight [kg]
AC308	0/4/8	900/1800	27/13	44/62	230V~/1,6A	400V3~/11,6A	1000	44
AC312	0/6/12	1300/2700	27/13	45/63	230V~/2,5A	400V3~/17,3A	1670	64
AC412	0/12	1350/2700	27/13	44/62	230V~/2,5A	400V3~/17,3A	1000	54
AC418	0/18	2250/4500	27/13	45/63	230V~/4,2A	400V3~/26,0A	1670	86

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

Protection class AC300/400 with electrical heat: (IP24), splash-proof design.

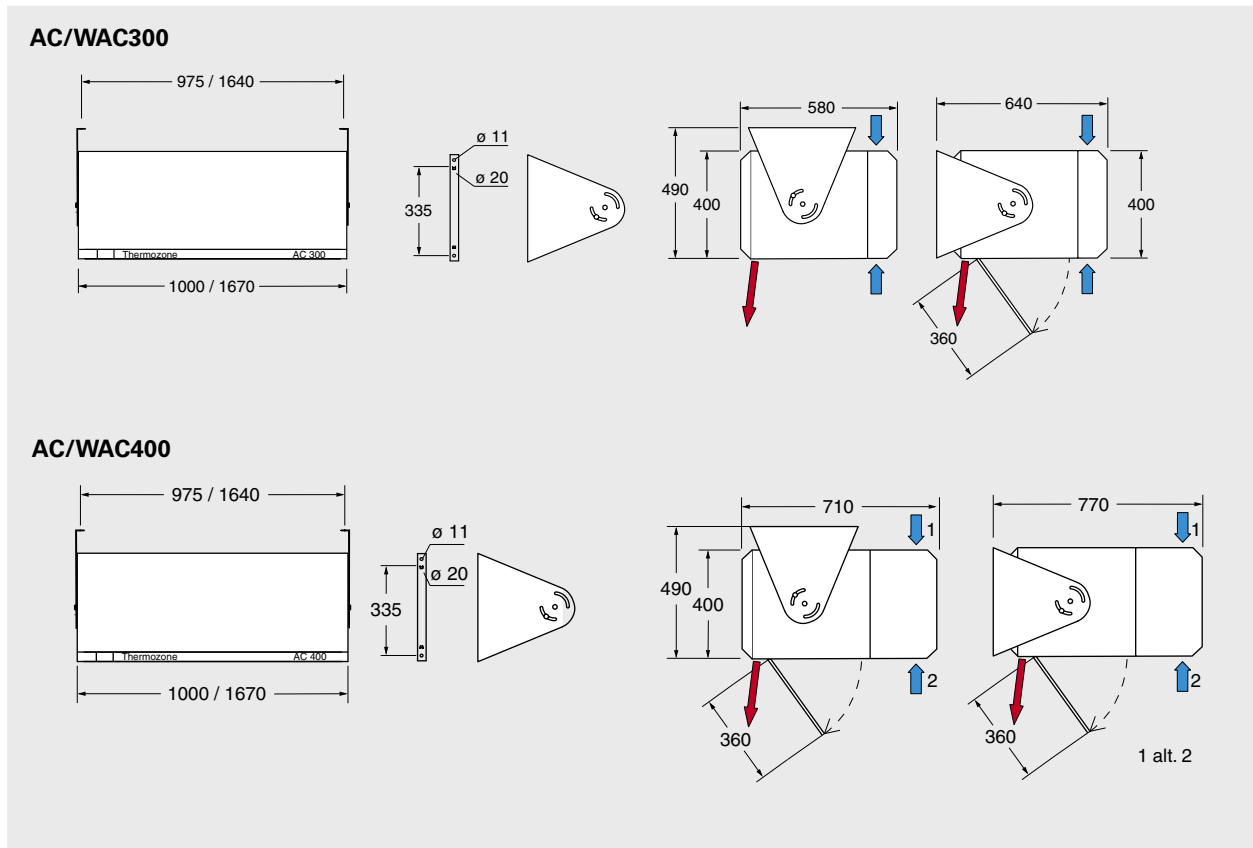
Technical specifications | Thermozone WAC 300/400 with water heat 

Type	Airflow [m³/h]	Water volume [l]	Sound level [dB(A)]	Voltage [V]	Amperage [A]	Length [mm]	Weight [kg]
WAC301	800/1700	2,5	44/62	230V~	1,6	1000	51
WAC302	1200/2500	3,5	45/63	230V~	2,5	1670	74
WAC301V	800/1700	2,5	44/62	230V~	1,6	1000	51
WAC302V	1200/2500	3,5	45/63	230V~	2,5	1670	74
WAC401	1050/2400	2,5	44/62	230V~	2,5	1000	52
WAC402	1800/4000	3,5	45/63	230V~	4,2	1670	83
WAC401V	1050/2400	2,5	44/62	230V~	2,5	1000	52
WAC402V	1800/4000	3,5	45/63	230V~	4,2	1670	83

For vertical mounting: WAC301V/401V and WAC302V/402V

Protection class WAC300/400 with water heat: (IP24), splash-proof design.

Dimensions



Positioning, mounting and installation

Mounting above doorway

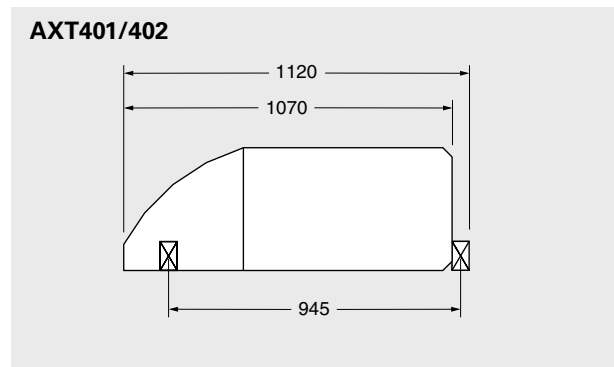
With the supplied mounting brackets, Thermozone AC/WAC300/400 units may be fitted in several ways: on the wall, on the ceiling, on a cable ladder, etc. The brackets make it possible to angle the unit for optimal efficiency. They can also be mounted in false ceilings, see Fig. 2. Among the hot water heated models, WAC301/401 and WAC302/402 are mounted in horizontal position above the opening. For minimum mounting distance to doorway, see Fig. 1 for the electrically heated models. The units must not be mounted directly above an electrical socket. For maximum performance the units should cover the whole width of the opening and be fitted as close to the opening as possible. Several units can be mounted next to each other to form a continuous air curtain.

Mounting below ceiling-mounted sliding doors

When mounting above openings with ceiling-mounted sliding doors, a square-shaped air curtain unit cannot be positioned close enough to the opening because of the opening radius of the sliding door. The adaption set AXT401/402 is dome-shaped and may therefore be positioned up against the door with the outgoing air stream very close to the opening.

Mounting beside the opening

When space above the doorway is limited, models WAC301V/401V and WAC302V/402V can be mounted vertically, thus creating a side blowing air stream. Mounting plates AVMP300 are mounted between units and between the lowest unit and the floor. For minimum mounting distance to doorway, see Fig. 1 for the electrically heated models. For maximum performance the units should cover the whole height of the opening and be fitted as close to the opening as possible. Several units can be mounted on top of each other to form a continuous air curtain. Maximum building height for vertical units without structural support, is 3,5 metres.



Adaptation set AXT401/402

Connection AC 300 ⚡

The appliance should be preceded by a triple pole switch with at least 3 mm breaking gap. The connection should be made with a cable type S05VV-U, A05VV-R or similar, through knock outs on the top of the unit (2 x Ø38 mm and 3 x Ø29 mm). For connection to the supply terminal block, a cable of maximum 16 mm² is used. For connection to the control terminal block, a cable of maximum 6 mm² is used. For units with electrical heating, power and voltage should be supplied in different connection areas.

Connection WAC 300 💧

The appliance should be preceded by a triple pole switch with at least 3 mm breaking gap. The connection should be made with a cable type S05VV-U, A05VV-R or similar, through Ø29 mm knock outs on the top of the unit. For connection to the control terminal block, a cable of maximum 6 mm² is used. Connections (DN20 (3/4"), inside thread) to the water heating coil are located on the top of the unit. The supplied 0,8 metre flexible hoses, permit the unit to be tilted.

Connection AC 400 ⚡

The appliance should be preceded by a triple pole switch with at least 3 mm breaking gap. The connection should be made with a cable type S05VV-U, A05VV-R or similar, through knock outs on the top of the unit (2 x Ø38 mm and 3 x Ø29 mm). For connection to the supply terminal block, a cable of maximum 16 mm² is used. For connection to the control terminal block, a cable of maximum 6 mm² is used. For units with electrical heating, power and voltage should be supplied in different connection areas.

Connection WAC 400 💧

The appliance should be preceded by a triple pole switch with at least 3 mm breaking gap. The connection should be made with a cable type S05VV-U, A05VV-R or similar, through Ø29 mm knock outs on the top of the unit. Connections (DN20 (3/4"), inside thread) to the water heating coil are located on the top of the unit. The supplied 0,8 metre flexible hoses, allow the unit to be tilted.

For wiring diagrams see www.frico.se

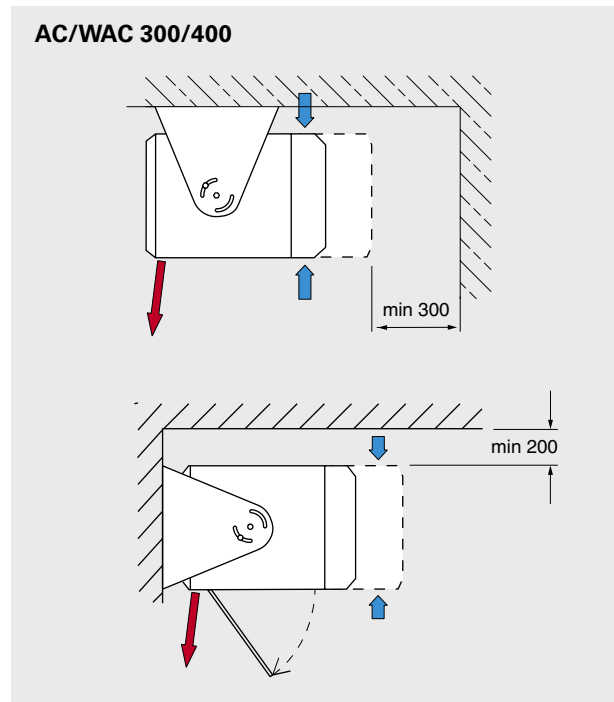


Fig. 1: Minimum distance to the wall

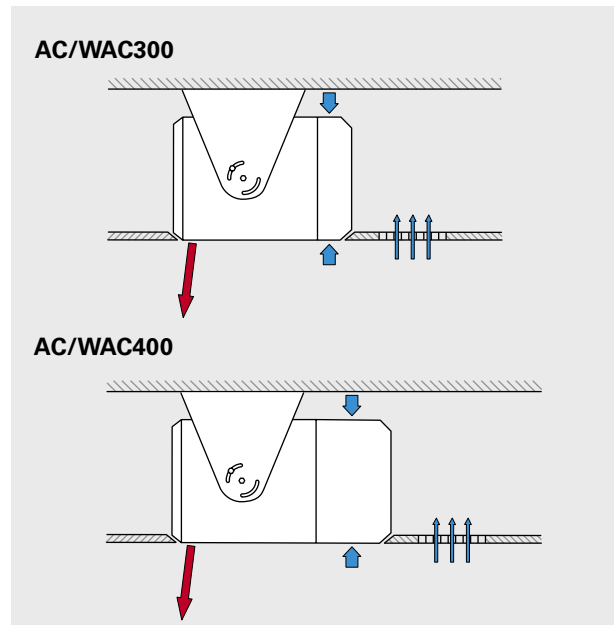


Fig. 2: Mounting in false ceiling

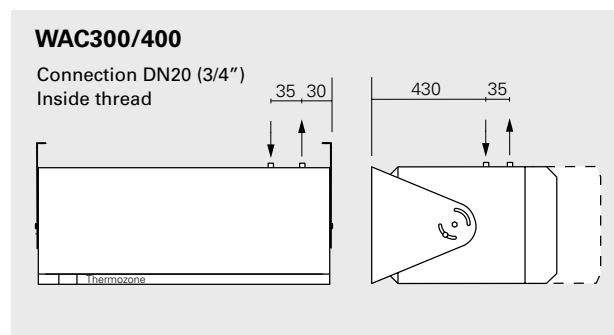


Fig. 3: WAC300/400, water connection on the top to the right