



⚡ Electrical heat 9 - 24 kW
 💧 Water heat

Vertical: 1,5; 2; 2,5 and 3 metres
 Horizontal: 1; 1,5; 2; 2,5 and 3 metres



Thermozone® AC Corinte

Air curtains for doors with heights of up to 3 metres

Application

AC Corinte is an air curtain in stainless steel intended for shop entrances and other environments with high demands in respect of design. AC Corinte is mounted standing next to or hanging above the door opening. Mounted with one unit on either side of the opening, thus creating a classic symmetry, the curtain effect and comfort is optimized. AC Corinte is available in five different lengths covering most needs.

Comfort

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

Operation and economy

AC Corinte 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.

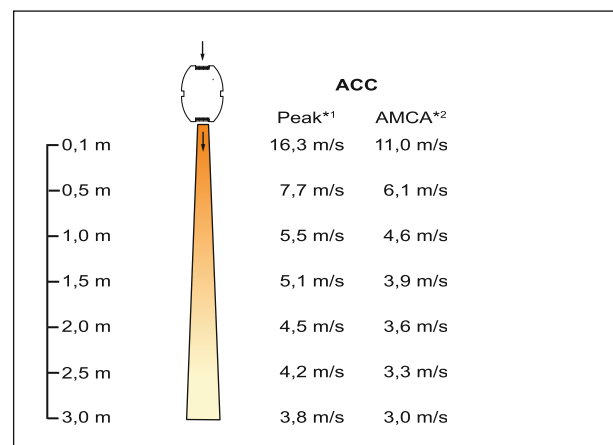
Design

AC Corinte is a slim, stylish air curtain. It is available in brushed, polished or mirror polished stainless steel.

Product facts

- An adjustable exhaust grille makes it possible to direct the air for an optimal air curtain effect.
- AC Corinte is available for horizontal or vertical mounting.
- When mounted vertically, the electrical and/or water connections can be made from above or from below. When mounted horizontally from right or left.
- Available in brushed, polished or mirror-polished stainless steel.

Air velocity profile



*1) Peak values.

*2) Mean values according to AMCA 220-05 "Test methods for Air Curtain Units"

Technical specifications | Thermozone AC Corinte E with electrical heat ⚡

Type	Output steps [kW]	Airflow [m³/h]	Δt ² [°C]	Sound level ³ [dB(A)]	Voltage motor [V]	Voltage heat [V]	Amperage motor [A]	Amperage heat [A]	Height/Length [mm]	Weight [kg]
ACC10E ^{*1}	0/6/9	950/1900	29/14	44/61	230V~	400V3~	2,2	8,7/13,0	1000	47
ACC15E	0/8/12	1350/2600	27/14	45/62	230V~	400V3~	2,9	11,5/17,3	1500	63
ACC20E	0/12/18	1980/3800	28/14	47/64	230V~	400V3~	4,3	17,3/26,0	2000	95
ACC25E	0/12/18	2340/4500	23/12	48/65	230V~	400V3~	5,1	17,3/26,0	2500	110
ACC30E	0/16/24	2660/5100	27/14	48/65	230V~	400V3~	5,8	23,1/34,6	3000	126

*1) ACC1000E is available only for horizontal mounting.
 *2) Δt = temperature rise of passing air at maximum heat output and lowest/highest airflow.
 *3) Conditions: Distance to the unit: 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

Technical specifications | Thermozone AC Corinte WL with water heat, coil for low tempered water <80/60 °C 💧

Type	Output ² [kW]	Airflow [m³/h]	Δt ^{2,3} [°C]	Water volume [l]	Sound level ⁴ [dB(A)]	Voltage motor [V]	Amperage [A]	Height/Length [mm]	Weight [kg]
ACC10WL ^{*1}	19	950/1900	42/35	2,0	44/61	230V~	2,1	1000	47
ACC15WL	29	1350/2600	41/34	3,2	45/62	230V~	2,9	1500	63
ACC20WL	42	1980/3800	40/33	4,3	47/64	230V~	4,3	2000	95
ACC25WL	52	2340/4500	41/34	5,4	48/65	230V~	5,0	2500	110
ACC30WL	60	2660/5100	38/31	6,6	48/65	230V~	5,7	3000	126

Technical specifications | Thermozone AC Corinte WH with water heat, coil for high tempered water ≥80/60 °C 💧

Type	Output ² [kW]	Airflow [m³/h]	Δt ^{2,3} [°C]	Water volume [l]	Sound level ⁴ [dB(A)]	Voltage motor [V]	Amperage [A]	Height/Length [mm]	Weight [kg]
ACC10WH ^{*1}	11	950/1900	26/20	1,1	44/61	230V~	2,1	1000	47
ACC15WH	17	1350/2600	26/20	1,9	45/62	230V~	2,9	1500	63
ACC20WH	24	1980/3800	25/19	2,5	47/64	230V~	4,3	2000	95
ACC25WH	30	2340/4500	25/23	3,3	48/65	230V~	5,0	2500	110
ACC30WH	35	2660/5100	23/17	3,9	48/65	230V~	5,7	3000	126

*1) ACC1000W is available only for horizontal mounting.
 *2) Applicable at water temperature 80/60 °C, air temperature in +15 °C.
 *3) Δt = temperature rise of passing air at maximum heat output and lowest/highest airflow.
 *4) Conditions: Distance to the unit: 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

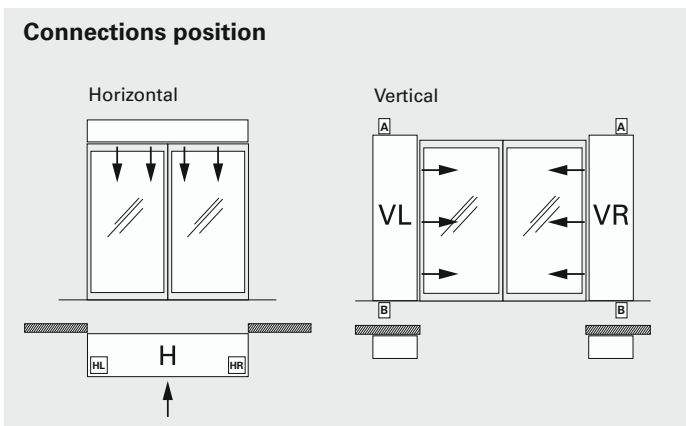
Protection class AC Corinte E/W (IP20).
 CE compliant.

Ordering key

Type - Unit shape - Connections position - Finish / Material

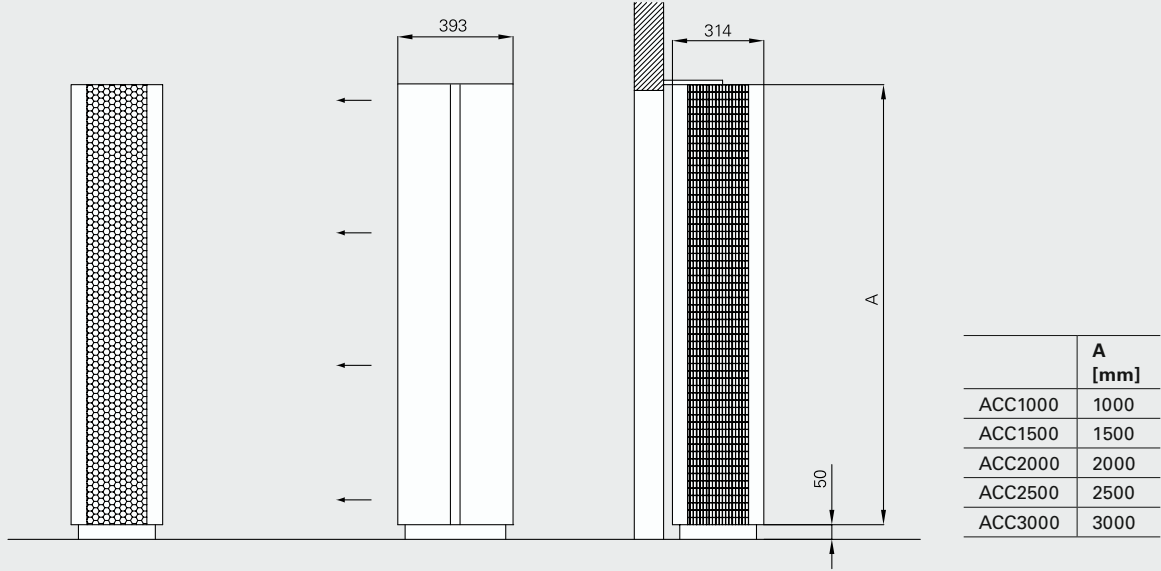
Example: ACC20WL - VL - A - P

Type	See technical specifications
Unit shape	HL (Horizontal, connections to the left), HR (Horizontal, connections to the right), VL (Vertical Left) or VR (Vertical Right) seen from the inside
Connections position	A or B, see figure.
Finish / material	P = Polished bright annealed B = Brushed stainless steel MP = Mirror polished stainless steel

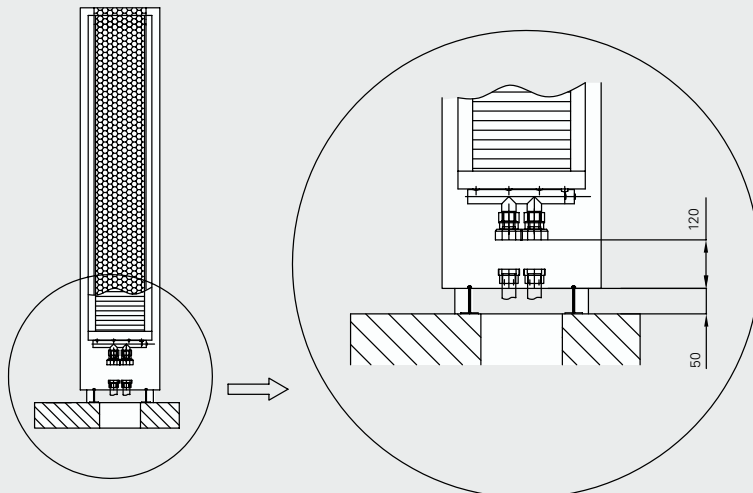
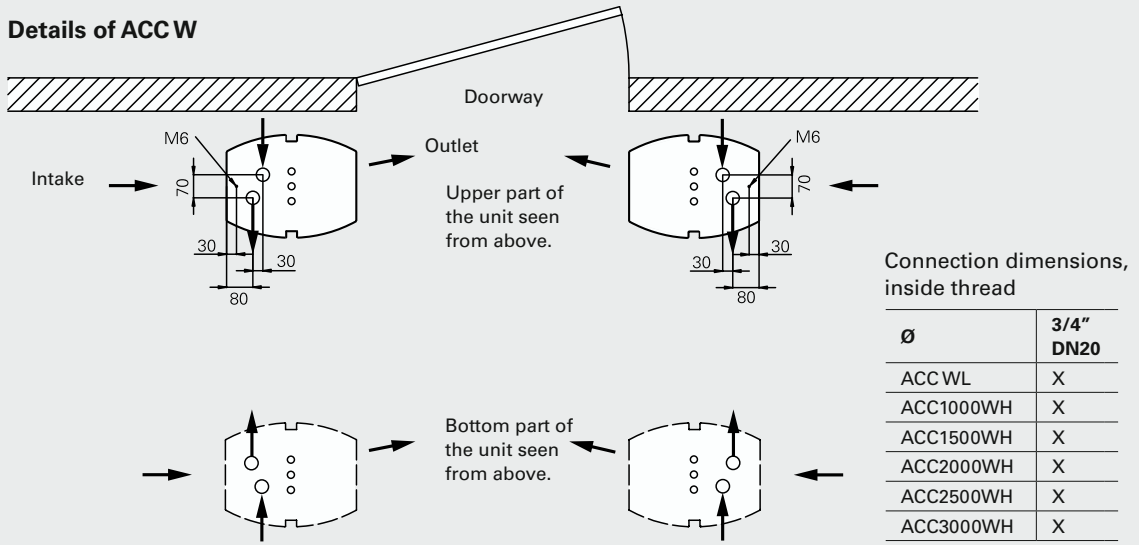


Dimensions

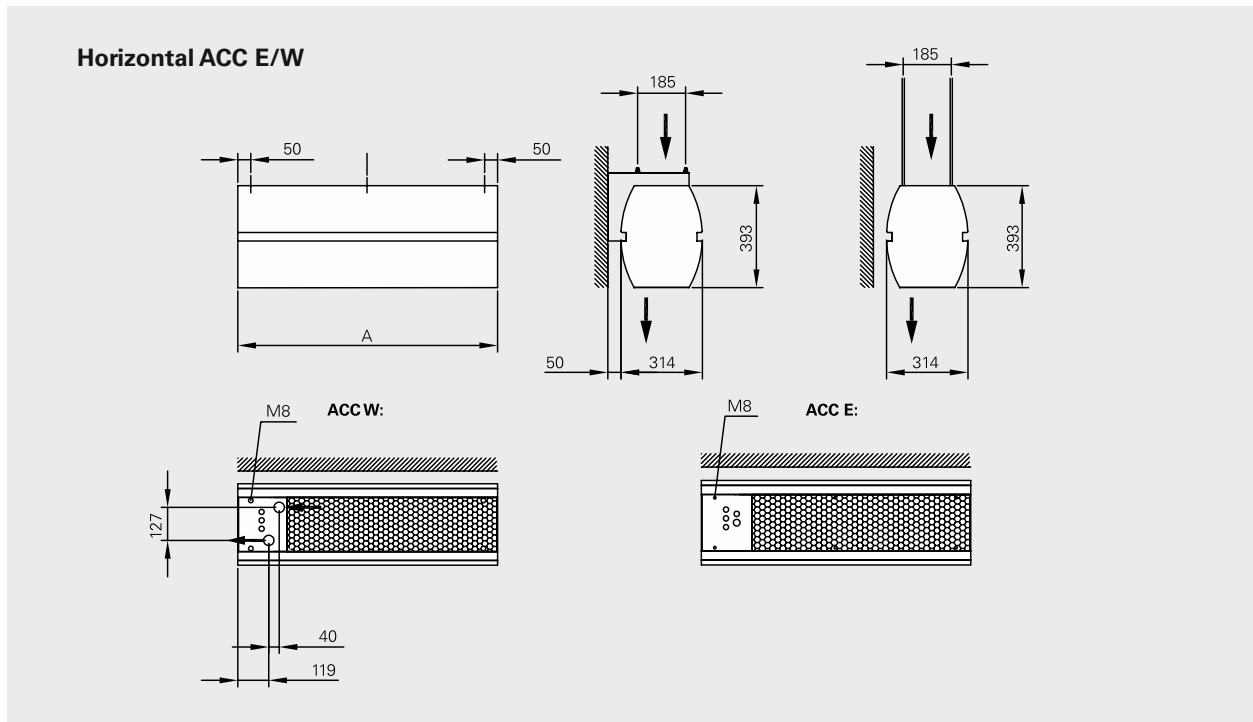
Vertical ACC E/W



Details of ACCW



Dimensions



Positioning, mounting and installation

Vertical mounting

The floor standing AC Corinte unit is mounted on adjustable feet that make it possible to compensate for possible irregularities in the floor. The feet are bolted to the floor and covered by a covering edge. The top should be secured with an angle bracket or similar to prevent the air curtain from toppling over.

Horizontal mounting

The unit is mounted with the outlet facing downwards. For wall mounting two alt. three brackets are used (accessory). The air curtain can also be mounted hanging from the ceiling. Four alt. six M8, inside thread, are delivered with unit (ACC1000 and ACC1500 have four pieces each and ACC2000, ACC2500 and ACC3000 have six pieces each).

Electrical installation

The unit is connected with preconnected cables (1,5 metres). See wiring diagram.

Connection of water coil, horizontal mounting

There are connections, inside thread, on top of the unit. See table with dimensions on previous page.

Connection of water coil, vertical mounting

There are connections, inside thread, union connection, inside the unit. See table with dimensions on previous page.

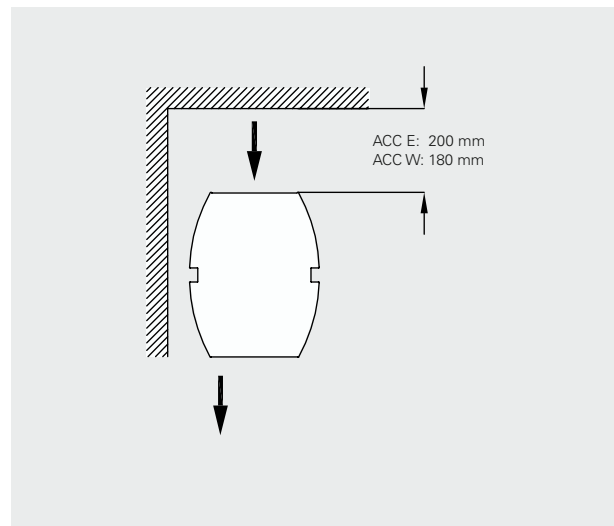


Fig. 1: Minimum distance for electrical units and water supplied units

Control kits

Electric ⚡

Level 1

Airflow is controlled 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

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 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 °C and the difference between the stages 4 °C. The thermostat will activate below 19 °C when the door is closed. When the door opens, the thermostat will activate below 23 °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, magnetic door contact with time delay
- RTI2, 2-step room thermostat

Level 3

Airflow and heat output are controlled automatically based on the opening of the door, outdoor temperature and the room temperature.

The system is based on an advanced microprocessing regulator in an attractive design.

All parameters are pre-programmed for easy and quick installation.

Control kit CK03GD:

- ADEA, regulator (complete with outdoor sensor, built-in room sensor and door contact)
- ADEAIS, indoor sensor
- ADEAEB, control board, for external mounting
- ADEAGD1, additional electric board

Read more about operation and usage of ADEA in chapter on Controls and accessories.

Water 💧

Level 1

Airflow is controlled manually. Room thermostat controls the heat output via actuator/valve on/off.

Control kit CK01W:

- CB30N, control box, controls the airflow in 3 steps
- T10, room thermostat IP30

Note! A set of valves VR20 or VR25 or actuator+valve SD20+TVV20 or TVV25 should be added for a complete control kit.

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 for the desired time (2s–10 min.) set on the 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 on/off. E.g. the thermostat is set on 23 °C and the difference between the stages 4 °C. The thermostat will activate below 19 °C when the door is closed. When the door opens, the thermostat will activate below 23 °C and normally the heat is switched on.

Control kit CK02W:

- CB30N, control box, controls the airflow in 3 steps
- MDC, magnetic door contact with time delay
- RTI2, 2-step room thermostat

Note! A set of valves VR20 or VR25 or actuator+valve SD20+TVV20 or TVV25 should be added for a complete control kit.

Level 3

Air flow and heat output are controlled automatically based on the opening of the door, outdoor temperature and the room temperature.

The system is based on an advanced microprocessing regulator in an attractive design.

All parameters are pre-programmed for easy and quick installation.

Control kit CK03GD:

- ADEA, regulator (complete with outdoor sensor, built-in room sensor and door contact)
- ADEAIS, indoor sensor
- ADEAEB, control board, for external mounting
- ADEAGD1, additional electric board

Note! A set of valves VR20 or VR25 or actuator+valve SD20+TVV20 or TVV25 should be added for a complete control kit.

Read more about operation and usage of ADEA in chapter on Controls and accessories.

Output charts water

AC Corinte WL

Incoming / outgoing water temperature 80/60 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WL	max	1900	19,7	46	0,24	17,8	48	0,22
	min	950	12,1	53	0,15	10,9	54	0,13
ACC1500WL	max	2600	29,6	49	0,36	26,7	51	0,33
	min	1350	18,5	56	0,23	16,7	57	0,21
ACC2000WL	max	3800	42,7	48	0,52	38,9	50	0,47
	min	1980	26,8	55	0,33	24,3	56	0,30
ACC2500WL	max	4500	51,9	49	0,63	47,1	51	0,58
	min	2340	32,3	56	0,39	29,3	57	0,36
ACC3000WL	max	5100	60,2	50	0,74	54,5	52	0,67
	min	2660	37,4	57	0,46	33,9	58	0,41

Incoming / outgoing water temperature 60/50 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WL	max	1900	14,5	38	0,35	12,7	40	0,31
	min	950	8,9	43	0,22	7,7	44	0,19
ACC1500WL	max	2600	21,7	40	0,53	18,9	42	0,46
	min	1350	13,5	45	0,33	11,8	46	0,29
ACC2000WL	max	3800	31,3	40	0,76	27,3	41	0,66
	min	1980	19,6	44	0,48	17,1	46	0,41
ACC2500WL	max	4500	38,0	40	0,92	33,2	42	0,81
	min	2340	23,6	45	0,58	20,7	46	0,50
ACC3000WL	max	5100	44,1	41	1,07	38,5	42	0,93
	min	2660	27,4	46	0,66	23,9	47	0,58

Incoming / outgoing water temperature 60/40 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WL	max	1900	11,8	33	0,14	9,9	35	0,12
	min	950	7,3	38	0,09	6,2	39	0,08
ACC1500WL	max	2600	18,1	36	0,22	15,3	38	0,19
	min	1350	11,3	39	0,14	9,6	41	0,12
ACC2000WL	max	3800	26,1	35	0,32	22,0	37	0,27
	min	1980	16,4	40	0,20	13,9	41	0,17
ACC2500WL	max	4500	31,8	36	0,39	26,7	38	0,32
	min	2340	19,8	40	0,24	16,7	41	0,20
ACC3000WL	max	5100	36,8	37	0,45	31,0	38	0,38
	min	2660	22,9	41	0,28	19,4	42	0,23

Incoming / outgoing water temperature 60/30 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WL	max	1900	8,7	29	0,07	6,4	30	0,05
	min	950	4,9	30	0,04	2,8	29	0,02
ACC1500WL	max	2600	13,8	31	0,11	10,7	32	0,09
	min	1350	8,9	35	0,07	6,9	35	0,06
ACC2000WL	max	3800	19,9	31	0,16	15,3	32	0,12
	min	1980	12,8	34	0,10	9,8	35	0,08
ACC2500WL	max	4500	24,1	31	0,19	18,6	32	0,15
	min	2340	15,4	35	0,13	11,3	34	0,08
ACC3000WL	max	5100	28,0	31	0,23	21,7	33	0,18
	min	2660	17,8	35	0,14	12,2	34	0,10

Thermozone AC Corinte

Output charts water

AC Corinte WH

Incoming / outgoing water temperature 130/70 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WH	max	1900	15,4	39	0,06	14,3	42	0,06
	min	950	10,4	47	0,04	9,7	50	0,04
ACC1500WH	max	2600	24,8	43	0,10	23,2	47	0,09
	min	1350	16,7	52	0,07	15,6	54	0,06
ACC2000WH	max	3800	35,6	43	0,15	33,1	46	0,14
	min	1980	24,1	51	0,10	22,5	54	0,09
ACC2500WH	max	4500	43,6	44	0,18	40,6	47	0,17
	min	2340	23,9	52	0,12	27,3	55	0,11
ACC3000WH	max	5100	50,9	45	0,21	47,5	48	0,20
	min	2660	34,3	53	0,14	32,0	56	0,13

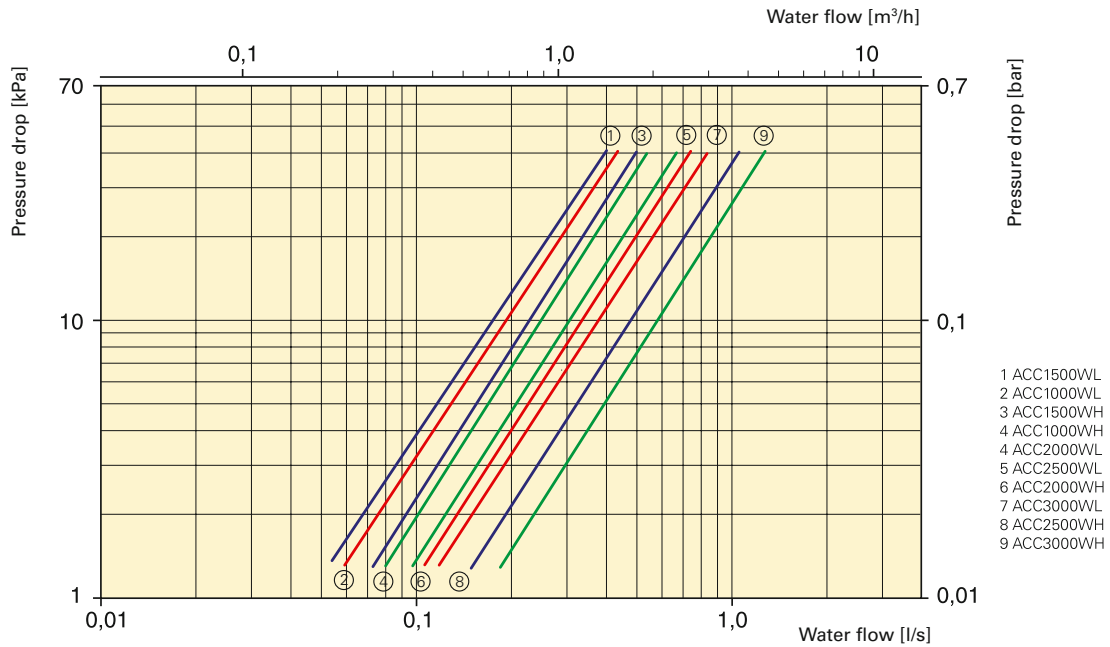
Incoming / outgoing water temperature 110/80 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WH	max	1900	16,1	40	0,13	15,1	44	0,13
	min	950	10,8	49	0,09	10,0	51	0,08
ACC1500WH	max	2600	25,3	44	0,21	23,6	47	0,19
	min	1350	16,9	52	0,14	15,8	55	0,13
ACC2000WH	max	3800	36,3	43	0,30	39,9	47	0,28
	min	1980	24,5	52	0,20	22,8	54	0,19
ACC2500WH	max	4500	44,5	44	0,37	41,6	47	0,34
	min	2340	29,8	53	0,24	27,8	55	0,23
ACC3000WH	max	5100	52,0	45	0,43	48,6	48	0,40
	min	2660	34,7	54	0,29	32,4	56	0,27

Incoming / outgoing water temperature 90/70 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WH	max	1900	13,3	36	0,16	12,2	39	0,15
	min	950	8,8	43	0,11	8,1	45	0,10
ACC1500WH	max	2600	20,7	39	0,25	19,0	42	0,23
	min	1350	13,8	45	0,17	12,7	48	0,16
ACC2000WH	max	3800	29,7	38	0,36	27,4	41	0,34
	min	1980	20,0	45	0,24	18,4	48	0,23
ACC2500WH	max	4500	36,4	39	0,45	33,5	42	0,41
	min	2340	24,3	46	0,30	22,4	48	0,28
ACC3000WH	max	5100	42,6	40	0,52	39,2	43	0,48
	min	2660	28,3	47	0,35	26,1	49	0,32

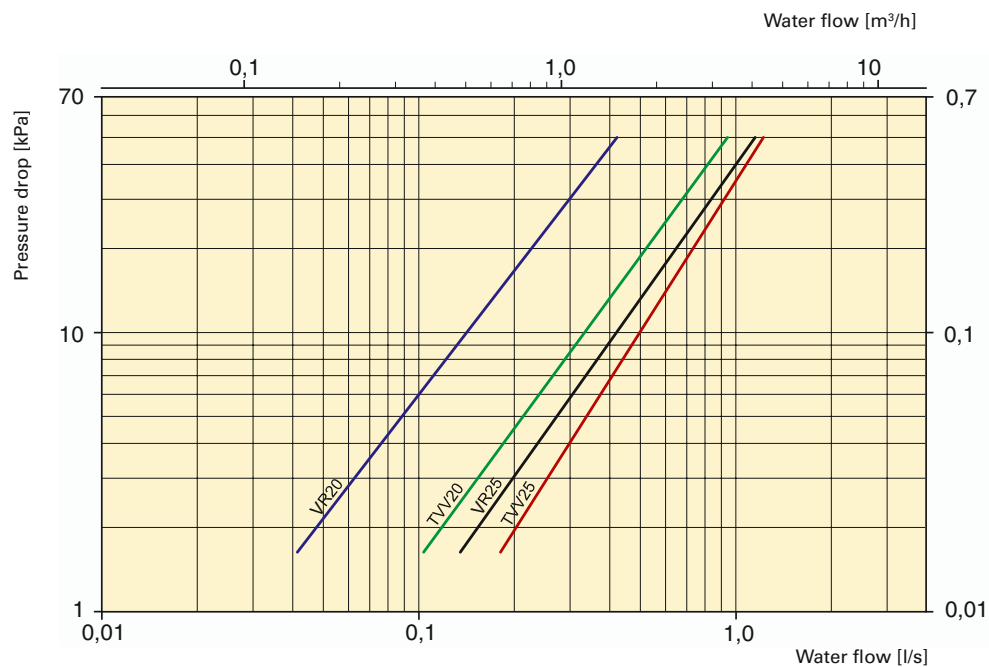
Incoming / outgoing water temperature 80/60 °C								
Type	Fan position	Airflow [m³/h]	Incoming air temp. = +15 °C			Incoming air temp. = +20 °C		
			Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]	Output [kW]	Outgoing air temp. [°C]	Water flow [l/s]
ACC1000WH	max	1900	11,0	32	0,13	9,9	36	0,12
	min	950	7,3	38	0,09	6,6	41	0,08
ACC1500WH	max	2600	17,2	38	0,21	15,6	38	0,19
	min	1350	11,5	40	0,14	10,5	43	0,13
ACC2000WH	max	3800	24,7	34	0,30	22,4	38	0,27
	min	1980	16,7	40	0,20	15,0	43	0,18
ACC2500WH	max	4500	30,3	35	0,37	27,4	38	0,34
	min	2340	20,3	41	0,25	18,3	43	0,23
ACC3000WH	max	5100	35,4	36	0,43	32,0	39	0,39
	min	2660	23,6	41	0,29	21,4	44	0,26

Pressure drop water

Water pressure drop over AC Corinte water coil



Water pressure drop over regulations and valves



The pressure drop is calculated for an average temperature of 70 °C (PVV80/60).
 For other water temperatures, the pressure drop is multiplied by the factor K.

Average temp. water °C	40	50	60	70	80	90
K	1,10	1,06	1,03	1,00	0,97	0,93