

Nexpand Row-based cooling Chilled water CW40& CW60



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1. TECHNICAL SPECIFICATIONS

The Nexpend row-based Chilled Water cooler is available in two sizes,

a 40 kW and 60 kW. Both are configurable in two different configurations:

- the open loop configuration, in which cold air is released into the «cold aisle» towards each rack and the hot air is drawn in the «hot aisle»;
- the closed loop configuration, in which a closed circuit between rack cooler and rack is created.

	CW40	CW60
Capacity range	Up to 40kW	Up to 60kW
Height	42U / 47U	42U / 47U
Width	300mm	600mm
Depth	1200mm	1200mm
Weight	240kg	270kg
Color	Black / white	Black /white
Configuration	Closed and open loop	Closed and open loop
Number of fans	5	2
Fan type	EC Fans, brushless with integrated electronic	
Max. airflow	5625 m ³ /hr	9670 m ³ /hr
Water connections	1 1/4"	1 1/2"
Valve type	2-way, Danfoss / VRG [3-way optional]	
PN	16	
Refrigerant	Water / Water-Glycol	
Lp @ Nominal rpm; dist.= 2m Q=2	65 dB(A)	70 dB(A)
Operating limits		
Ambient air temperature	+18 °C - +40 °C	
Chilled water temperature	> +5 °C	
Relative humidity	90%	
Electrical conditions		
Power supply	230V / 1ph / 50Hz	230V / 3+N ph / 50 Hz
Max. absorbed power	1,0 kW	3,1 kW
Max absorbed current	7,4 A	5,2 A
Electrical connections	Screw connectors	
Dual power feed	Yes	

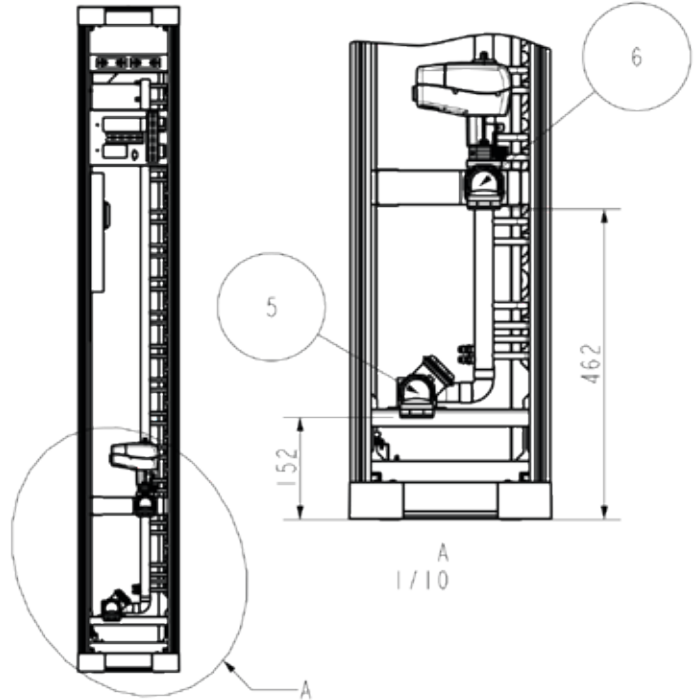
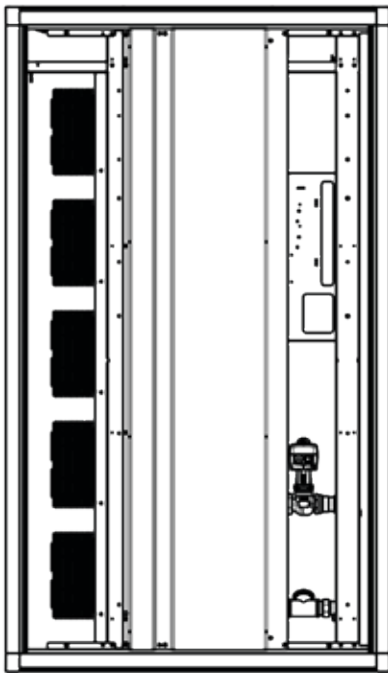
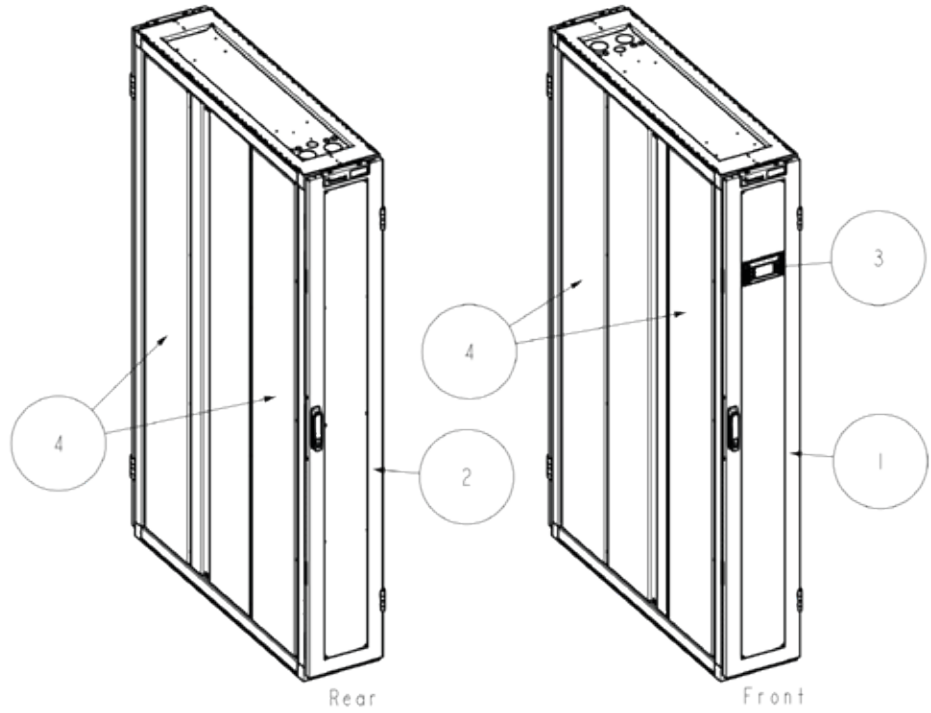


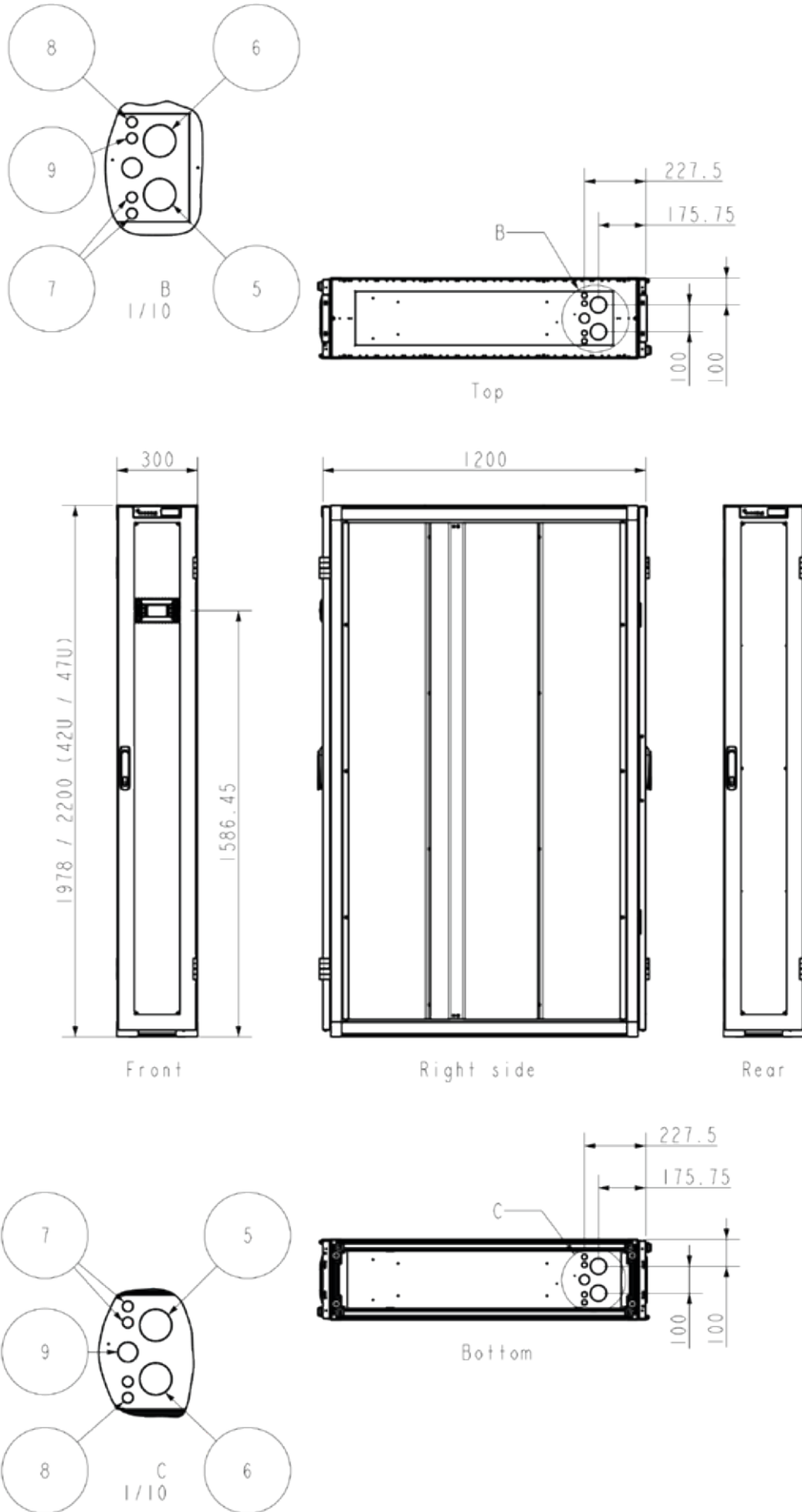
2. PRODUCT DIMENSIONS

2.1 CW40

The general dimensions of the CW40 Nexpand Chilled Water cooler.

#	Description
1	Removable front door
2	Removable rear door
3	Display
4	Removable side panel
5	Cooling water inlet (1"1/4 gas female)
6	Cooling water outlet (1"1/4 gas female)
7	Power supply (A & B feet)
8	Data cables
9	Condensate drain

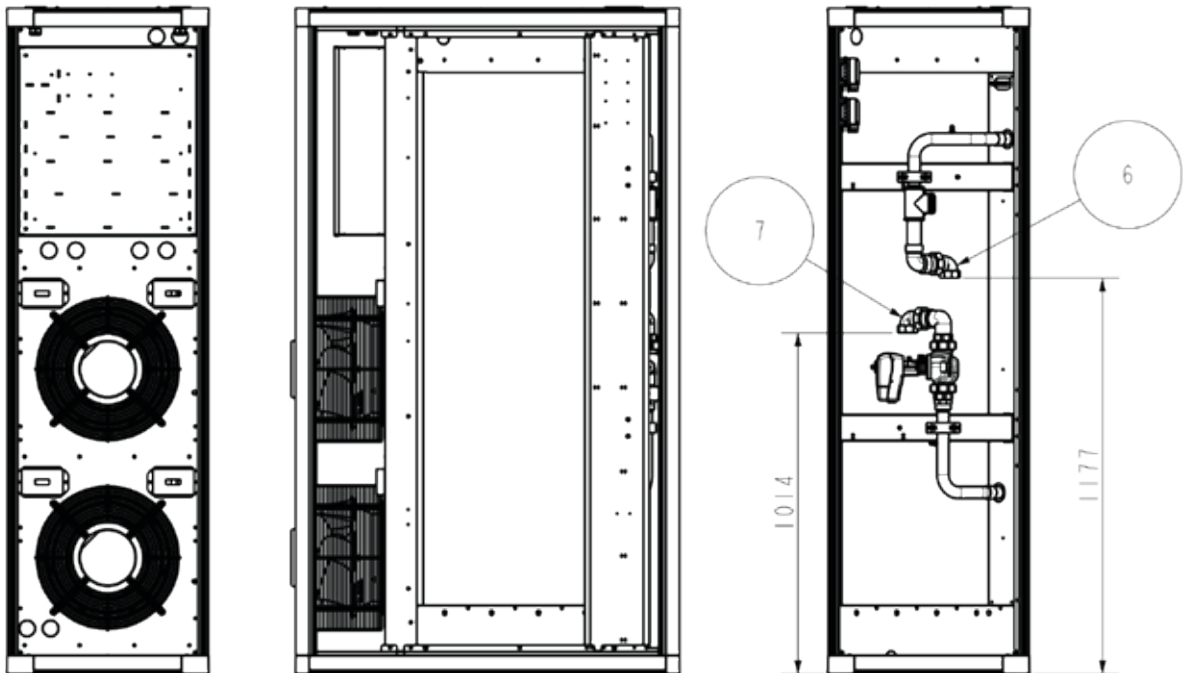
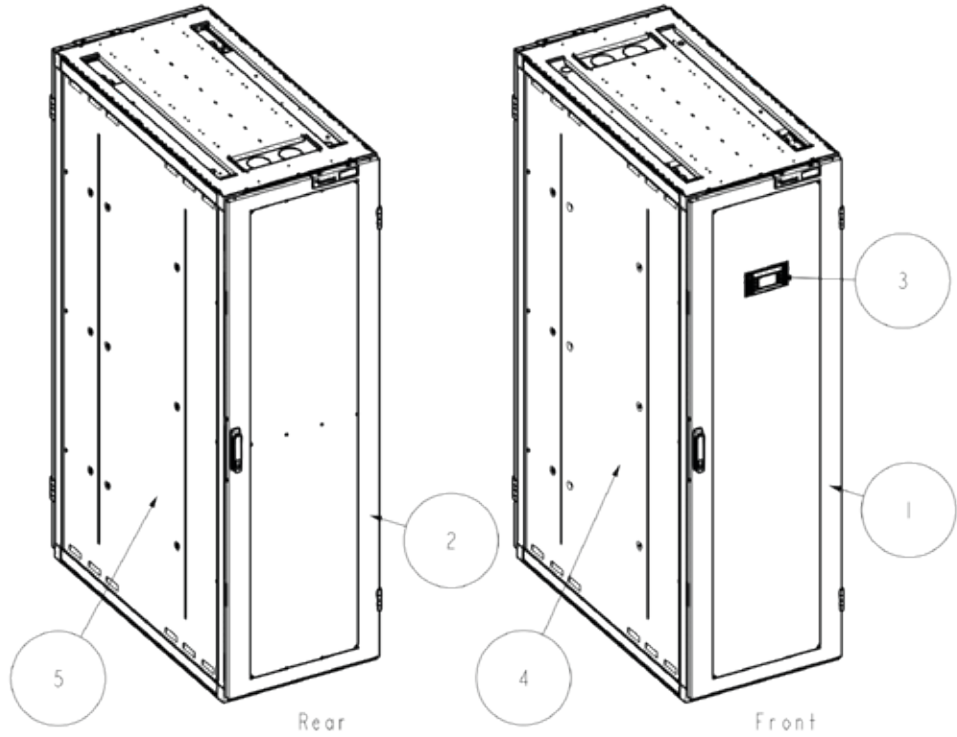


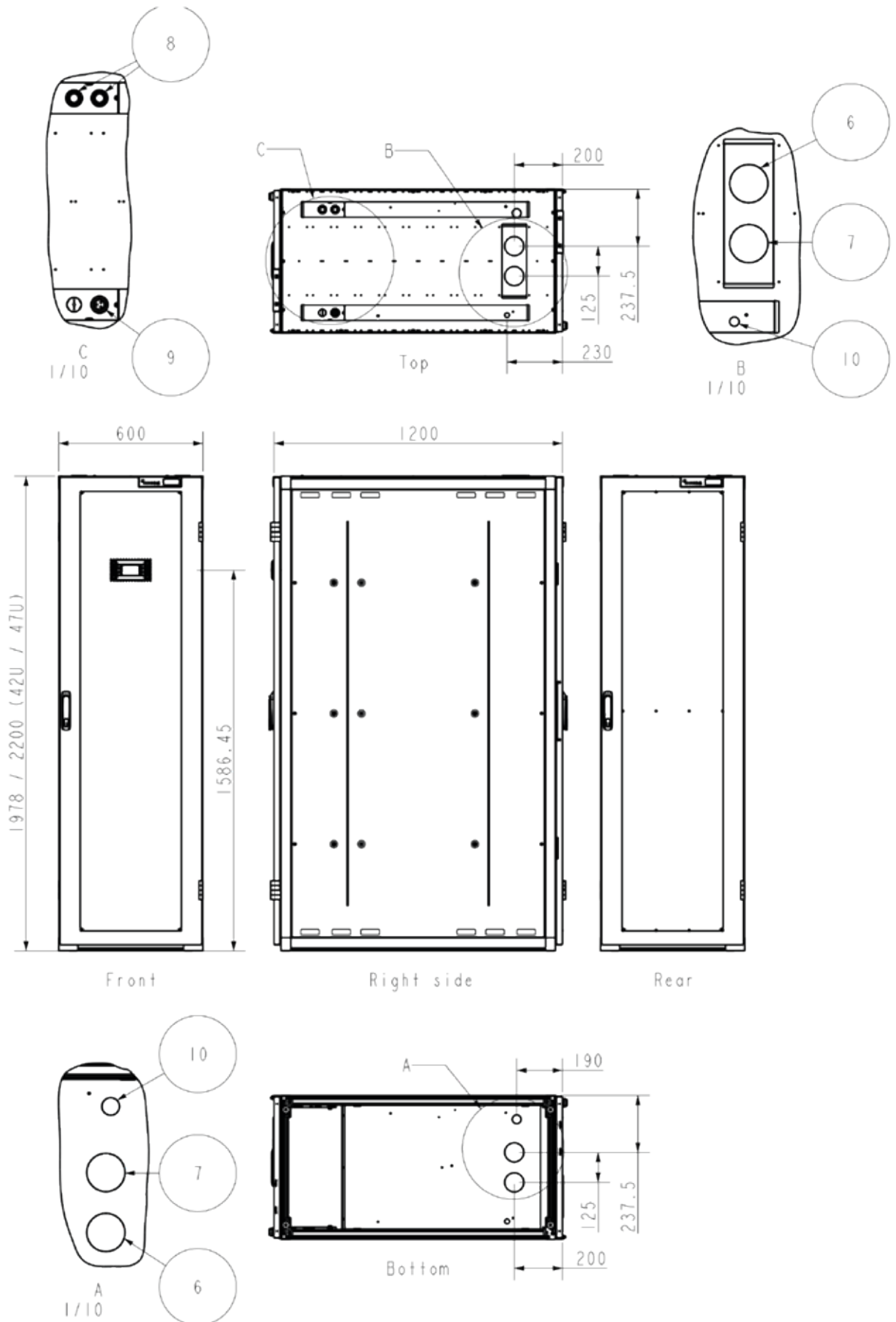


2.2 CW60

The general dimensions of the CW60 Nexpand Chilled Water cooler.

#	Description
1	Removable front door
2	Removable rear door
3	Display
4	Removable left side panel
5	Removable right side panel
6	Cooling water inlet (1"1/2 gas female)
7	Cooling water outlet (1"1/2 gas female)
8	Power supply (A & B feet)
9	Data cables
10	Condensate drain





3. PERFORMANCE SPECIFICATIONS

IT Equipment requires two acceptable limits for effective cooling. These parameters are inlet air temperature and flow rate of air through the IT equipment. Therefore we calculated for two chilled water circuits the performances in the tables below.

The table on the right shows the performance diagram with a pressure scale.

Please reach out to our sales engineers if the presented performance graphs are inadequate to your application.

Waterflow (l/h)	Total water pressure drop (kPa)
500	1
1000	3
1500	7
2000	13
2500	20
3000	29
3500	39
4000	51
4500	65
5000	80
5500	97
6000	115
6500	135

INLET/OUTLET WATER TEMPERATURE 12-18 °C					
		CW40		CW60	
Return air conditions	°C; RH	40°C; 20%	35°C; 20%	40°C; 20%	35°C; 20%
Cooling capacity	kW	38.95	31.38	65.01	52.26
Net. Sensible Cooling Capacity	kW	38.23	30.66	63.52	50.77
SHR	-	1	1	1	1
Air flow	m3/hr	5300	5300	9000	9000
Water flow	l/h	5587	4501	9325	7497
Water pressure drop	kPa	100.1	65.0	127	82.1
Fans absorbed power	kW	0.72	0.72	1.49	1.49
Fans absorbed current	A	3.5	3.5	2.4	2.4
EER	-	54.1	43.6	43.6	35.1

INLET/OUTLET WATER TEMPERATURE 15-21 °C					
		CW40		CW60	
Return air conditions	°C; RH	40°C; 20%	35°C; 20%	40°C; 20%	35°C; 20%
Cooling capacity	kW	34.81	26.66	56.93	44.35
Net. Sensible Cooling Capacity	kW	34.09	25.94	55.44	42.86
SHR	-	1	1	1	1
Air flow	m3/hr	5300	5300	9000	9000
Water flow	l/h	4999	3828	8076	6370
Water pressure drop	kPa	80.1	47.0	97.6	59.3
Fans absorbed power	kW	0.72	0.72	1.49	1.49
Fans absorbed current	A	3.5	3.5	2.4	2.4
EER	-	48.3	37.0	38.2	29.8