

WATER COOLED CHILLER (CWW)

Chillers are systems that provide cooling of areas that need cooling with water. It has a very wide usage area in the process lines and comfort areas of the enterprises.

Standard Features

- Compressor: Capacity Control, thermal protection, scroll and screw compressor
- Electronic Expansion Foundation
- Evaporator: Isolated Shell&Tube or brazed plate heat exchanger
- Control: Microprocessor Control, pressure gauge, teamwork up to 4 modules, fan speed control.
- Powder coated steel frame



Optional Features

- Sound insulation
- Energy analyzer
- Flow screen
- Soft starter
- Automatic transfer switch
- Compressor noise protection
- Economizer
- Water production below 0°C
- Interface screen for communication
- Vibration dampening and seismic isolation
- Remote control

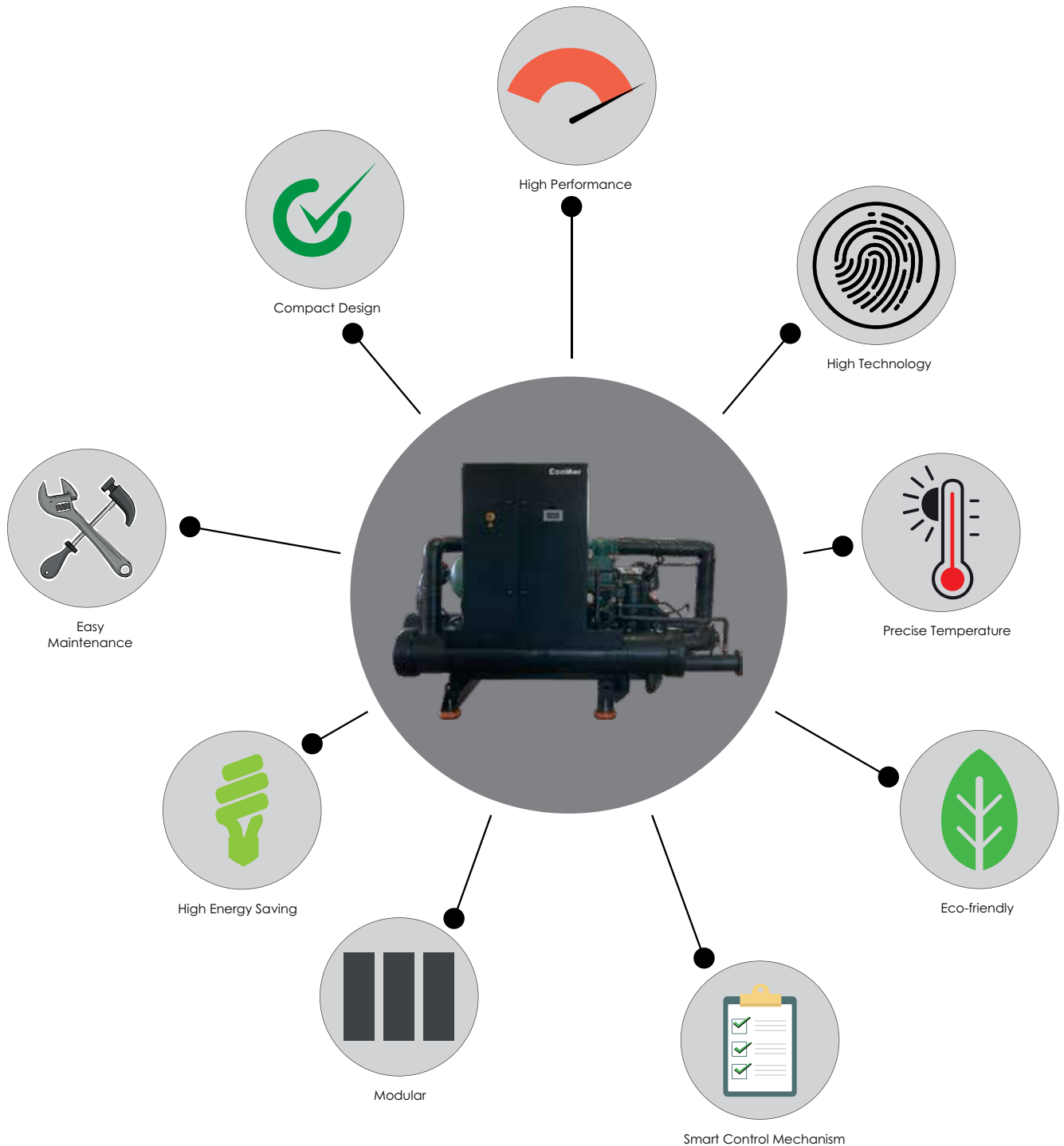
Pipe Type (Shell and Tube)

The tubular evaporator consists of a copper tube and a steel outer sheath. In addition, the evaporator has two separate refrigerant Circuits and a chilled Water Circuit tuned to the reverse flow principle. The evaporator consists of two separate structures operating according to the counter current principle, the cooler and the cold Water Circuit.

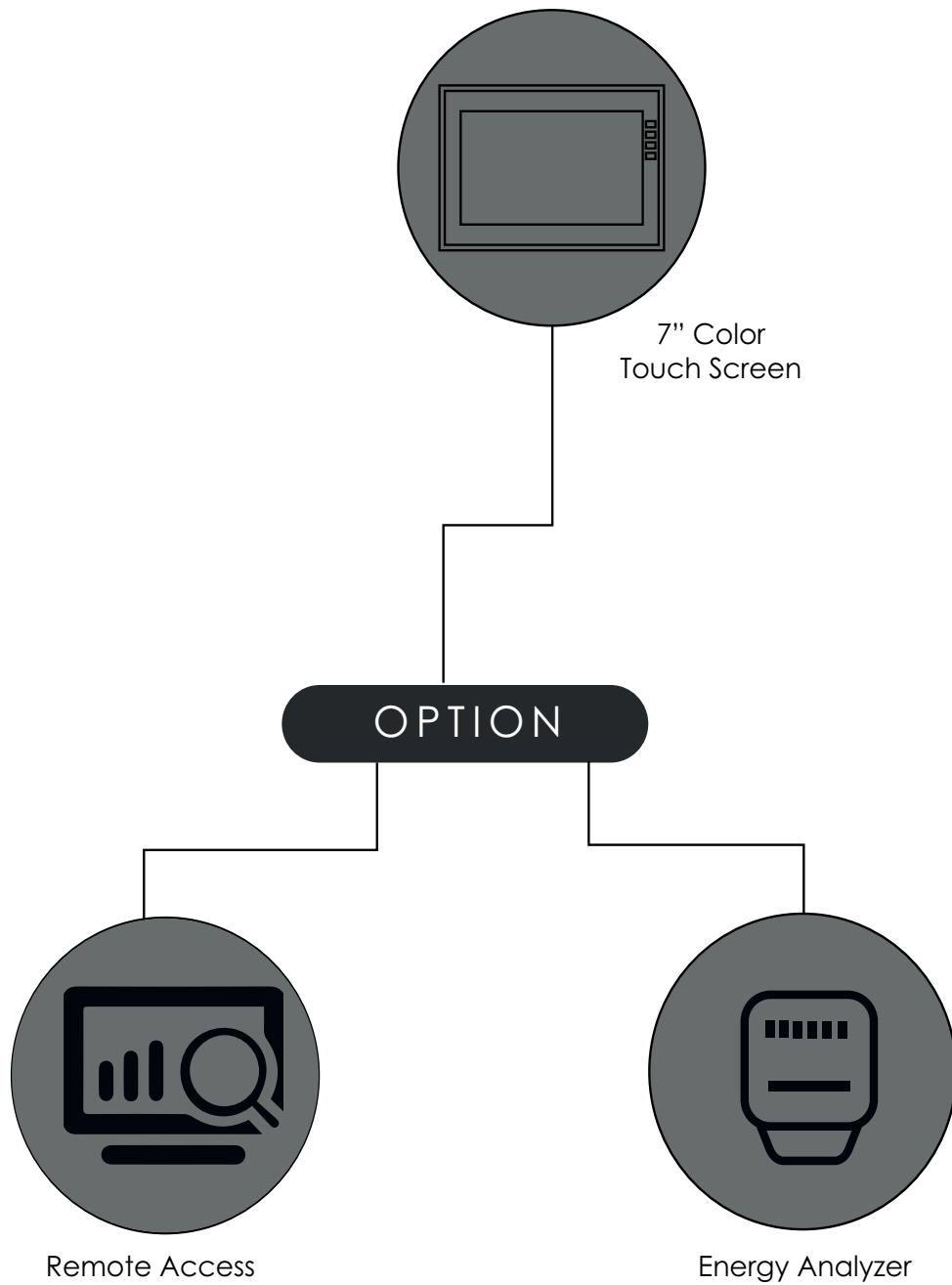


WATER COOLED

PRODUCT SPECIFICATIONS



OPTIONAL PRODUCTS



Model		CWW 15S	CWW 24S	CWW 30S	CWW 35S	CWW 45S	CWW 60S	CWW 70S	CWW 85S	CWW 115S	
Power supply	V/ph/Hz	380/3/50									
Performance											
Cooling Capacity ¹	kW	14,15	24	28	33,8	42,13	56,47	69,16	84,99	111,4	
Power Consumption	kW	3,41	5,73	6,69	7,77	10,33	13,56	16,6	20,99	47,8	
EER		4,15	4,19	4,19	4,35	4,08	4,16	4,17	4,05	2,33	
Capacity Control		On/Off									
Minimum Capacity	%	100									
Refrigerant											
Fluid Type		R 410A									
Control		Thermostatic Expansion Valve					Electronic Expansion Valve				
Circuit	N°	1									
Compressor											
Compressor Type		Scroll									
Compressor number	N°	1									
Water Cooled Heat Exchanger - Evaporator											
Exchanger Type		Braze Plate Heat Exchanger									
Water Flow	m³/h	2,43	4,13	4,82	5,81	7,25	9,71	11,90	14,62	19,16	
Water Pressure Drop	kPa	34	32	36	35	41	39	36	50	43	
Water Cooled Heat Exchanger - Condenser											
Exchanger Type		Braze Plate Heat Exchanger									
Water Flow	m³/h	2,99	5,07	5,90	7,07	7,73	11,96	14,59	18,25	23,43	
Water Pressure Drop	kPa	34	32	36	35	41	39	36	50	43	
Operation range											
Water side (Evaporator)	°C	5									
Water side (Condenser)	°C	30									
Water Circuit											
Connection type		Threadded									
Pipe diameter	inç	1 ¼"	2"				2½"	2½"	2½"	3"	
Water Circuit											
Connection type		Threadded								Flanged	
Pipe diameter	inç	1½"	2"	2"	2"	2½"	2½"	2½"	3"	4"	
Noise Level											
Sound power	dBA	79	79	79	80	81	81	81	82	83	
Weight and Dimensions											
Weight	kg	136	223	262	310	388	534	631	776	1019	
Width	mm	1084	1163	1163	1163	1200	1200	1805	1805	1805	
Depth	mm	405	430	430	430	1750	1750	2296	2296	2296	
Height	mm	1135	1550	1550	1550	1670	1670	2160	2160	2196	

¹ Cooling Performance is calculated at water inlet/outlet temperature 12/7°C, outdoor temperature 35°C.

CWW-SCROLL

Model		CWW 140S	CWW 170S	CWW 225S	CWW 260S	CWW 340S	CWW 415S	CWW 450S	CWW 510S	CWW 560S	CWW 670S		
Power supply	V/ph/Hz	380/3/50											
Performance													
Cooling Capacity ¹	kW	138,32	169,98	222,8	254,97	334,2	414,96	445,6	509,94	557	668,4		
Power Consumption	kW	33,2	41,98	95,6	62,97	143,4	99,6	191,2	125,94	239	286,8		
EER		4,17	4,05	2,33	4,05	2,33	4,17	2,33	4,05	2,33	2,33		
Capacity Control		On/Off											
Minimum Capacity	%	50	50	50	33	33	17	25	17	20	17		
Refrigerant													
Fluid Type		R 410A											
Control		Electronic Expansion Valve											
Circuit	N°	2											
Compressor													
Compressor Type		Scroll											
Compressor number	N°	2	2	2	3	3	6	4	6	5	6		
Water Cooled Heat Exchanger - Evaporator													
Exchanger Type		Brazen Plate Heat Exchanger											
Water Flow	m³/h	23,79	29,24	38,32	43,85	57,48	71,37	76,64	87,71	95,80	114,96		
Water Pressure Drop	kPa	47	43	50	47	45	50	47	48	48	48		
Water Cooled Heat Exchanger - Condenser													
Exchanger Type		Brazen Plate Heat Exchanger											
Water Flow	m³/h	29,18	36,50	46,85	54,75	70,28	87,55	93,71	109,50	117,13	140,56		
Water Pressure Drop	kPa	47	43	50	47	45	50	47	48	48	48		
Operation range													
Water side (Evaporator)	°C	30											
Water side (Condenser)	°C	60											
Water Circuit													
Connection type		Flanged											
Pipe diameter	inç	4"				5"				6"			
Water Circuit													
Connection type		Flanged											
Pipe diameter	inç	4"			5"		5"			6"			8"
Noise Level													
Sound power	dBA	83	85	85	86	87	87	87	89	89	89		
Weight and Dimensions													
Weight	kg	1261	1552	2037	2328	2418	3042	3276	3216	3518	4154		
Width	mm	2300	2300	2300	3300	3300	4300	4300	5300	5300	6300		
Depth	mm	2200											
Height	mm	2400											

¹ Cooling Performance is calculated at water inlet/outlet temperature 12/7°C, outdoor temperature 35°C.

Model		CWW 14D	CWW 25D	CWW 30D	CWW 35D	CWW 50D	CWW 60D	CWW 70D	CWW 80D	CWW 100D	CWW 120D	CWW 140D	CWW 160D
Power supply	V/ph/ Hz	380/3/50											
Performance													
Cooling Capacity ¹	kW	14,1	24,5	28,35	33,6	48	58,5	69,7	79,95	96	117	139,4	159,9
Power Consumption	kW	3,75	6,207	7,3	8,747	12,33	15,62	17,4	20,39	24,66	31,24	34,8	40,78
EER		3,76	3,95	3,88	3,84	3,89	3,75	4,01	3,92	3,89	3,75	4,01	3,92
Capacity Control		Inverter Kontrollü (%25 ~ %100)											
Refrigerant													
Fluid Type		R 410A											
Control		Electronic Expansion Valve											
Circuit	N°	1										2	
Compressor													
Compressor Type		Scroll - Inverter											
Compressor Number	N°	1										2	
Water Cooled Heat Exchanger-Evaporator													
Exchanger Type		Brazen Plate Heat Exchanger											
Water Flow	m³/h	2,43	4,21	4,88	5,78	8,26	10,06	11,99	13,75	16,51	20,12	23,98	27,50
Water Pressure Drop	kPa	32	34	35	36	37	39	39	42	44	43	46	48
Water Cooled Heat Exchanger-Condenser													
Exchanger Type		Brazen Plate Heat Exchanger											
Water Flow	m³/h	3,07	5,15	5,97	7,22	10,26	12,48	14,83	17,00	20,52	24,95	29,65	34,00
Water Pressure Drop	kPa	32	34	35	36	37	39	39	42	44	43	46	48
Operation range													
Water side (Evaporator)	°C	5						30					
Water side (Condenser)	°C	30						60					
Water Circuit - Evaporator													
Connection type		Threadeded										Flanged	
Pipe diameter	inç	1 1/4"	1 1/2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	4"	4"
Water Circuit -Condenser													
Connection type		Threadeded										Flanged	
Pipe diameter	inç	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	4"	4"	4"
Noise Level													
Sound power	dBA	79	79	79	81	81	83	83	85	87	87	89	89
Weight and Dimensions													
Weight	kg	265	310	323	405	512	631	724	755	842	910	995	1047
Width	mm	1084	1163	1163	1163	1200	1200	1805	1805	1805	1300	2300	2300
Depth	mm	405	430	430	430	1750	1750	2296	2296	2296	2200	2200	2200
Height	mm	1135	1550	1550	1550	1670	1670	2160	2160	2196	2400	2400	2400

¹ Cooling Performance calculated at water inlet/outlet temperature 12/7°C, outdoor temperature 35°C.

CWW-SCREW

Model		CWW 80W	CWW 115W	CWW 150W	CWW 175W	CWW 210W	CWW 250W	CWW 315W	
Power supply	V/ph/Hz	380/3/50							
Performance									
Cooling Capacity ¹	kW	78,5	111,3	150,6	173,5	210	248	311	
Power Consumption	kW	19,1	27,3	35,8	40,7	49,6	56,4	72,1	
EER		4,11	4,08	4,21	4,26	4,23	4,40	4,31	
Capacity Control		4 Level (%25 - %50 - %75 - %100)							
Refrigerant									
Fluid Type		R 134A							
Control		Electronic Expansion Valve							
Circuit	N°	1							
Compressor									
Compressor Type		Screw							
Compressor Number	N°	1							
Water Cooled Heat Exchanger-Evaporator									
Exchanger Type		Braze Plate Heat Exchanger							
Water Flow	m³/h	13,50	19,14	25,90	36,12	42,66	#BAŞVI	53,49	
Water Pressure Drop	kPa	40	42	46	43	45	49	47	
Water Cooled Heat Exchanger-Condenser									
Exchanger Type		Braze Plate Heat Exchanger							
Water Flow	m³/h	16,79	23,84	32,06	36,81	44,55	52,29	65,88	
Water Pressure Drop	kPa	40	42	46	43	45	49	47	
Operation range									
Water side (Evaporator)	°C	5							
Water side (Condenser)	°C	30							
Water Circuit - Evaporator									
Connection type		Threaded			Flanged				
Pipe diameter	inç	2 1/2"	3"	4"	4"	4"	4"	5"	
Water Circuit - Condenser									
Connection type		Threaded		Flanged					
Pipe diameter	inç	3"	4"	4"	4"	4"	5"	5"	
Noise Level									
Sound power	dBA	88	90	90	92	92	93	95	
Weight and Dimensions									
Weight	kg	1685	1724	1796	1894	2103	2166	2923	
Width	mm	1300	1300	2300	2300	2300	2300	3300	
Depth	mm	2200	2200	2200	2200	2200	2200	2200	
Height	mm	2400	2400	2400	2400	2400	2400	2400	

Model		CWW 370W	CWW 430W	CWW 495W	CWW 560W	CWW 605W	CWW 660W
Power supply	V/ph/Hz	380/3/50					
Performance							
Cooling Capacity ¹	kW	370	429	492	559	603	659
Power Consumption	kW	84,7	96,1	110,1	124,5	143,5	153,4
EER		4,37	4,46	4,47	4,49	4,20	4,30
Capacity Control		4 Level (%25 - %50 - %75 - %100)					
Refrigerant							
Fluid Type		R 134A					
Control		Electronic Expansion Valve					
Circuit	N°	1					
Compressor							
Compressor Type		Screw					
Compressor Number	N°	1					
Water Cooled Heat Exchanger-Evaporator							
Exchanger Type		Braze Plate Heat Exchanger					
Water Flow	m³/h	63,64	73,79	84,62	96,15	103,72	113,35
Water Pressure Drop	kPa	48	46	46	45	50	48
Water Cooled Heat Exchanger-Condenser							
Exchanger Type		Braze Plate Heat Exchanger					
Water Flow	m³/h	78,26	90,30	103,54	117,48	128,48	139,84
Water Pressure Drop	kPa	48	46	46	45	50	48
Operation range							
Water side (Evaporator)	°C	30					
Water side (Condenser)	°C	65					
Water Circuit - Evaporator							
Connection type		Flanged					
Pipe diameter	inç	5"			6"		
Water Circuit -Condenser							
Connection type		Flanged					
Pipe diameter	inç	5"	6"			8"	
Noise Level							
Sound power	dBA	95	96	97	98	99	100
Weight and Dimensions							
Weight	kg	3051	3127	4061	4298	4349	4458
Width	mm	4300	4300	5300	5300	6300	6300
Depth	mm	2200					
Height	mm	2400					

¹ Cooling Performance is calculated at water inlet/outlet temperature 12/7°C, outdoor temperature 35°C.

CWW-DOUBLE SCREW

Model		CWW 225W	CWW 300W	CWW 350W	CWW 400W	CWW 420W	CWW 500W	CWW 550W
Power supply	V/ph/Hz	380/3/50						
Performance								
Cooling Capacity ¹	kW	222,6	301,2	347	395,2	420	496	546
Power Consumption	kW	54,6	71,6	81,4	92,6	99,2	112,8	126,8
EER		4,08	4,21	4,26	4,27	4,23	4,40	4,31
Capacity Control		4 Level (%25 - %50 - %75 - %100)						
Refrigerant								
Fluid Type		R 134A						
Control		Electronic Expansion Valve						
Circuit	N°	2						
Compressor								
Compressor Type		Screw						
Compressor Number	N°	2						
Water Cooled Heat Exchanger-Evaporator								
Exchanger Type		Braze Plate Heat Exchanger						
Water Flow	m ³ /h	38,29	51,81	59,68	67,97	72,24	85,31	93,91
Water Pressure Drop	kPa	50	49	49	49	41	42	48
Water Cooled Heat Exchanger-Condenser								
Exchanger Type		Braze Plate Heat Exchanger						
Water Flow	m ³ /h	47,68	64,12	73,62	83,94	89,10	104,58	115,93
Water Pressure Drop	kPa	50	49	49	49	41	42	48
Operation range								
Water side (Evaporator)	°C	5						
Water side (Condenser)	°C	30						
Water Circuit - Evaporator								
Connection type		Flanged Connection						
Pipe diameter	inç	4"	5"				6"	
Water Circuit -Condenser								
Connection type		Flanged Connection						
Pipe diameter	inç	5"			6"			
Noise Level								
Sound power	dB(A)	90	92	92	93	93	93	94
Weight and Dimensions								
Weight	kg	3150	3538	3558	3670	3796	4563	4753
Width	mm	2300	3300	3300	4300	4300	5300	5300
Depth	mm	2200						
Height	mm	2400						

¹ Cooling Performance is calculated at water inlet/outlet temperature 12/7°C, outdoor temperature 35°C.

Model		CWW620W	CWW740W	CWW860W	CWW990W	CWW1120W	CWW1210W	CWW1320W
Power supply	V/ph/Hz	380/3/50						
Performance								
Cooling Capacity ¹	kW	622	740	858	984	1118	1206	1318
Power Consumption	kW	144,2	169,4	192,2	220,2	249	287	306,8
EER		4,31	4,37	4,46	4,47	4,49	4,20	4,30
Capacity Control		4 Level (%25 - %50 - %75 - %100)						
Refrigerant								
Fluid Type		R 134A						
Control		Electronic Expansion Valve						
Circuit	N°	2						
Compressor								
Compressor Type		Screw						
Compressor Number	N°	2						
Water Cooled Heat Exchanger-Evaporator								
Exchanger Type		Braze Plate Heat Exchanger						
Water Flow	m³/h	106,98	127,28	147,58	169,25	192,30	207,43	226,70
Water Pressure Drop	kPa	50	41	40	48	41	46	43
Water Cooled Heat Exchanger-Condenser								
Exchanger Type		Braze Plate Heat Exchanger						
Water Flow	m³/h	131,75	156,52	180,60	207,09	234,95	256,97	279,67
Water Pressure Drop	kPa	50	41	40	48	41	46	43
Operation range								
Water side (Evaporator)	°C	30						
Water side (Condenser)	°C	65						
Water Circuit - Evaporator								
Connection type		Flanged Connection						
Pipe diameter	inç	6"	6"	8"	8"	8"	8"	8"
Water Circuit -Condenser								
Connection type		Flanged Connection						
Pipe diameter	inç	8"	8"	8"	8"	8"	8"	8"
Noise Level								
Sound power	dB(A)	94	94	95	95	96	96	96
Weight and Dimensions								
Weight	kg	5041	6225	6299	6340	7826	7540	7832
Width	mm	6300	7300	8300	10300	10300	11300	12300
Depth	mm	2200						
Height	mm	2400						

¹ Cooling Performance is calculated at water inlet/outlet temperature 12/7°C, outdoor temperature 35°C.

CWW-SCREW INVERTER

Model		CWW 255WD	CWW 320WD	CWW 400WD	CWW 525WD	CWW 630WD	CWW 510WD	CWW 635WD	CWW 785WD	CWW 1050WD	CWW 1260WD
Power supply	V/ph/Hz	380/3/50									
Performance											
Cooling Capacity ¹	kW	254	317	392	521	628	508	634	784	1042	1256
Power Consumption	kW	57,8	74,7	93,2	119,7	149,5	115,6	149,4	186,4	239,4	299
EER		4,39	4,24	4,21	4,35	4,20	4,39	4,24	4,21	4,35	4,20
Capacity Control		Inverter Controlled (%25 ~ %100)									
Refrigerant											
Fluid Type		R 134A									
Control		Electronic Expansion Valve									
Circuit	N°	1					2				
Compressor											
Compressor Type		Screw-Inverter									
Compressor Number	N°	1					2				
Water Cooled Heat Exchanger-Evaporator											
Exchanger Type		Braze Plate Heat Exchanger									
Water Flow	m³/h	43,69	54,52	67,42	89,61	108,02	87,38	109,05	134,85	179,22	216,03
Water Pressure Drop	kPa	40	42	46	43	45	40	42	46	43	45
Water Cooled Heat Exchanger-Condenser											
Exchanger Type		Braze Plate Heat Exchanger									
Water Flow	m³/h	53,66	67,42	83,42	110,25	133,82	107,33	134,85	166,84	220,50	267,63
Water Pressure Drop	kPa	40	42	46	43	45	40	42	46	43	45
Operation range											
Water side (Evaporator)	°C	5					30				
Water side (Condenser)	°C	30					65				
Water Circuit - Evaporator											
Connection type		Flanged									
Pipe diameter	inç	4"	5"		6"			8"			
Water Circuit -Condenser											
Connection type		Flanged									
Pipe diameter	inç	5"		6"		8"					
Noise Level											
Sound power	dBA	90	94	93	95	91	96	96	92	95	94
Weight and Dimensions											
Weight	kg	2201	2985	3129	4318	4759	3547	4113	5421	6635	7843
Width	mm	3300	3300	4300	5300	6300	5300	6300	8300	10300	12300
Depth	mm	2200									
Height	mm	2400									