

AquaTech

Water Source Heat Pump

Temperature Control System for Swimming Pools





TECHNICAL SPECIFICATIONS

WATER SOURCE HEAT PUMP								
MODEL		WM036WS	WM060WS	WM090WS	WM120WS	WM150WS	WM180WS	
Heating Capacity @25/30°C (POOL) 15/10 °C (SOURCE)	kW	10	18	30	37	47	61	
Power input	kW	1.63	2.48	3.66	4.96	5.83	7.32	
Input Current	A	3.09	4.71	6.95	9.42	11.07	13.9	
COP		6.02	7.58	8.39	7.58	8.10	8.39	
Heating Capacity @30/35°C (POOL) 10/7°C (SOURCE)	kW	8.5	16	22	32	37	45	
Power input	kW	1.94	3.32	4.77	6.64	7.41	9.54	
Input Current	A	3.68	6.30	9.05	12.61	14.07	18.11	
COP		4.35	4.89	4.73	4.89	5.04	4.73	
Power supply	V/Ph/Hz	380 – 400/3/50						
Compressor type		Scroll						
Compressor Qty		1	1	1	2	2	2	
Expansion device		Electronic Expansion Valve						
Controller type		Microprocessor with Digital Thermostat						
Source temperature		7 °C–25 °C						
Refrigerant		R407C						
Noise level	dB(A)	≤ 54	≤ 54	≤ 54	≤ 58	≤ 58	≤ 58	
Condenser heat exchanger (POOL)	Type	Shell & Coil						
	Connection size	mm	Ø 40	Ø 40	Ø 40	Ø 50	Ø 50	Ø 50
	Flow	m³/h	1.96	3.76	6.14	7.52	9.44	12.28
	Pressure drop	bar	0.21	0.25	0.24	0.53	0.56	0.57
Evaporator heat exchanger (SOURCE)	Type	Shell & Coil						
	Connection size	mm	Ø40	Ø40	Ø40	Ø50	Ø50	Ø50
	Flow	m³/h	1.64	3.26	5.41	6.52	8.28	10.82
	Pressure drop	bar	0.21	0.25	0.24	0.53	0.56	0.57
Enclosure		Powder Coated GI						
Unit dimensions	mm	1100 x 580 x 1104	1100 x 580 x 1145	1360 x 721 x 945	1100 x 720 x 1300	1160 x 730 x 1305	1160 x 730 x 1305	
Net weight	Kg	101	136	165	255	285	325	
Suitable for swimming Pool size	Volume m³	24	33	50	67	92	120	
	Surface Area m²	16	22	33	44	63	80	

*All dimensions subject to change.

STANDARD FEATURES

TITANIUM
HEAT EXCHANGER

COPELAND SCROLL
COMPRESSOR

PROGRAMMABLE DIGITAL TEMPERATURE
CONTROLLER/INDICATOR

PHASE FAILURE
RELAY

LOW-AND-HIGH PRESSURE
CUT-OUT

COMPRESSOR OVERLOAD
PROTECTION

FLOW
SWITCH

AXIAL
FANS

ANTI-FREEZE
PROTECTION

POWDER COATED
GI CASING

OPTIONS

SS304 OR SS316L
ENCLOSURE

REMOTE
MONITORING

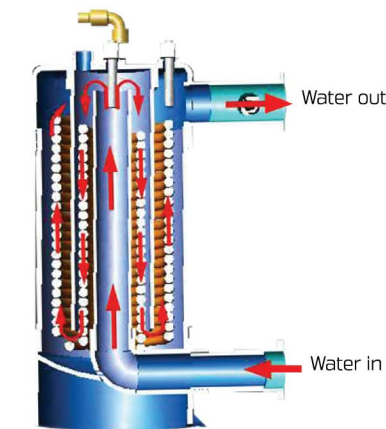
BTU
METERING

COP
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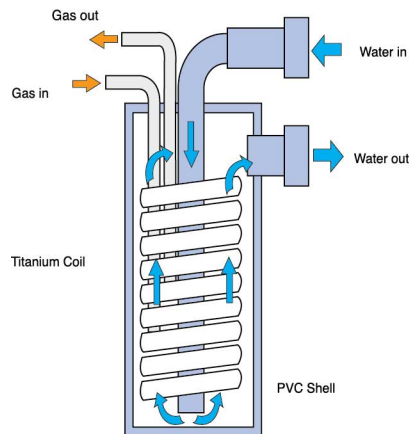


WATER SOURCE HEAT PUMP						
WM240WS	WM400WS	WM500WS	WM600WS	WM700WS	WM800WS	WM1000WS
77	123	155	213	247	310	426
14.65	20.7	29.3	34.2	41.4	58.6	68.4
27.82	39.31	55.64	64.95	78.62	111.29	129.9
5.30	5.99	5.30	6.23	5.99	5.30	6.23
69	103	138	173	206	277	364
15.1	21.7	30.2	37.8	43.4	60.4	75.6
28.67	41.21	57.35	71.78	82.42	114.71	143.58
4.59	4.75	4.59	4.58	4.75	4.59	4.58
380 – 400/3/50						
Scroll						
2	2	4	4	4	6	8
Electronic Expansion Valve						
Microprocessor with Digital Thermostat						
7 °C–25 °C						
R407C						
≤ 62	≤ 62	≤ 62	≤ 62	≤ 68	≤ 72	≤ 72
Shell & Coil						
Ø 80	Ø 80	Ø 80	Ø 80	Ø 80	Ø 100	Ø 100
16.15	24.8	32.3	42.6	49.6	64.6	85.2
0.60	0.56	0.60	0.72	0.66	0.91	0.83
Shell & Coil						
Ø80	Ø80	Ø80	Ø80	Ø80	Ø100	Ø100
13	20.6	26.0	35.8	41.2	52	71.6
0.60	0.56	0.60	0.72	0.66	0.91	0.83
Powder Coated GI						
1517 x 960 x 1505	1470 x 884 x 1572	2754 x 1672 x 1764	2754 x 1672 x 1764	2350 x 1524 x 1550	3000 x 2000 x 1560	3000 x 2000 x 1560
635	850	1350	1460	1850	2800	3000
160	240	350	400	448	476	622
108	160	240	280	316	332	425

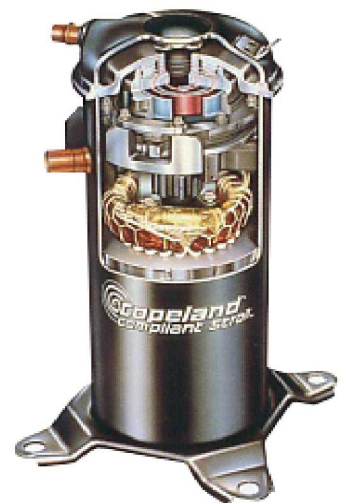
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Double Circulation Titanium heat exchanger



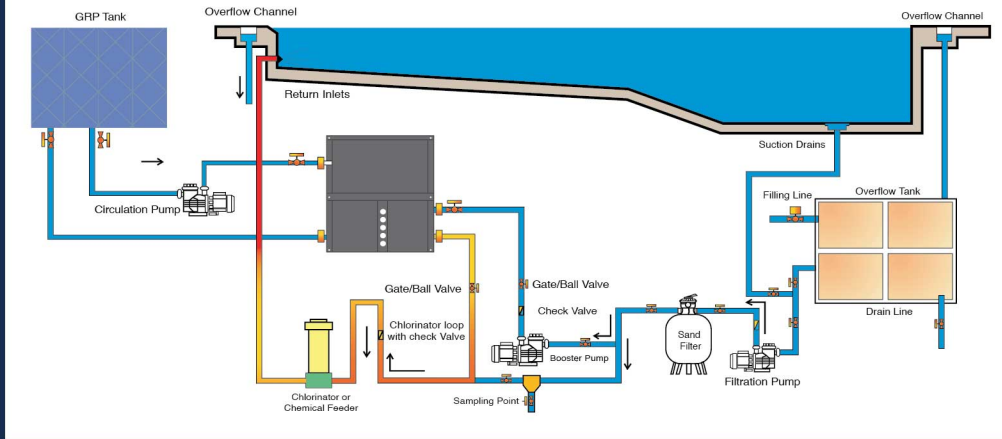
Double Spiralled Titanium heat exchanger



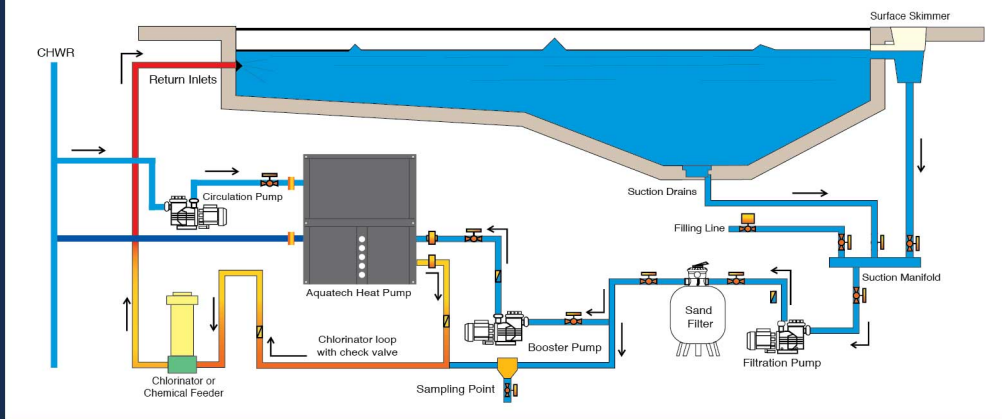
Copeland Scroll

INSTALLATION SCHEMATIC

INSTALLATION WITH DOMESTIC WATER AS SOURCE (HEATING ONLY)



INSTALLATION WITH CHILLED WATER RETURN AS SOURCE (HEATING ONLY)



INSTALLATION WITH DRY COOLER (HEATING & COOLING)

