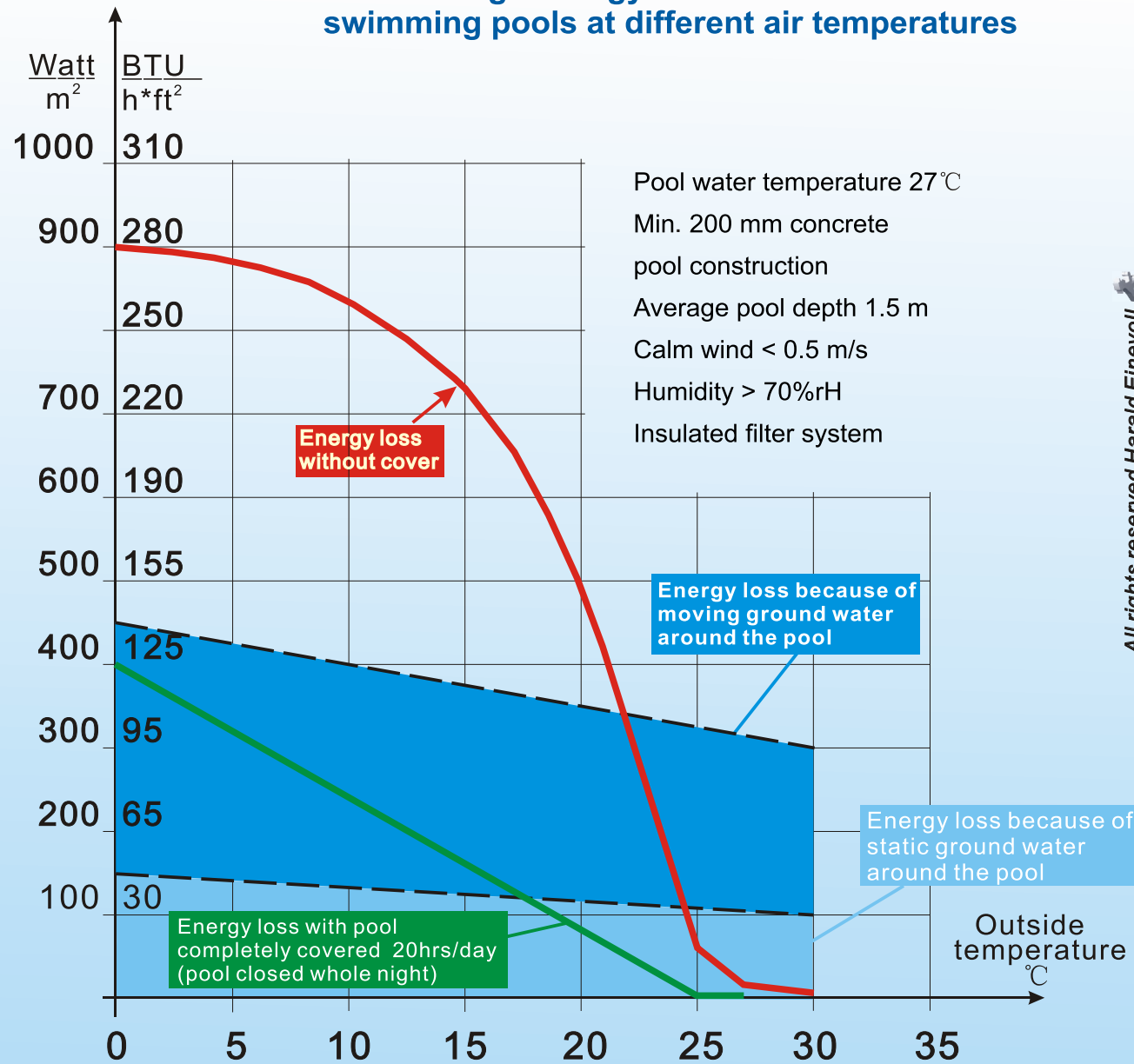




Average Energy Loss from outdoor swimming pools at different air temperatures



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Astral
Air Source Heat Pumps
for Swimming Pools



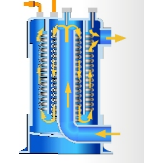
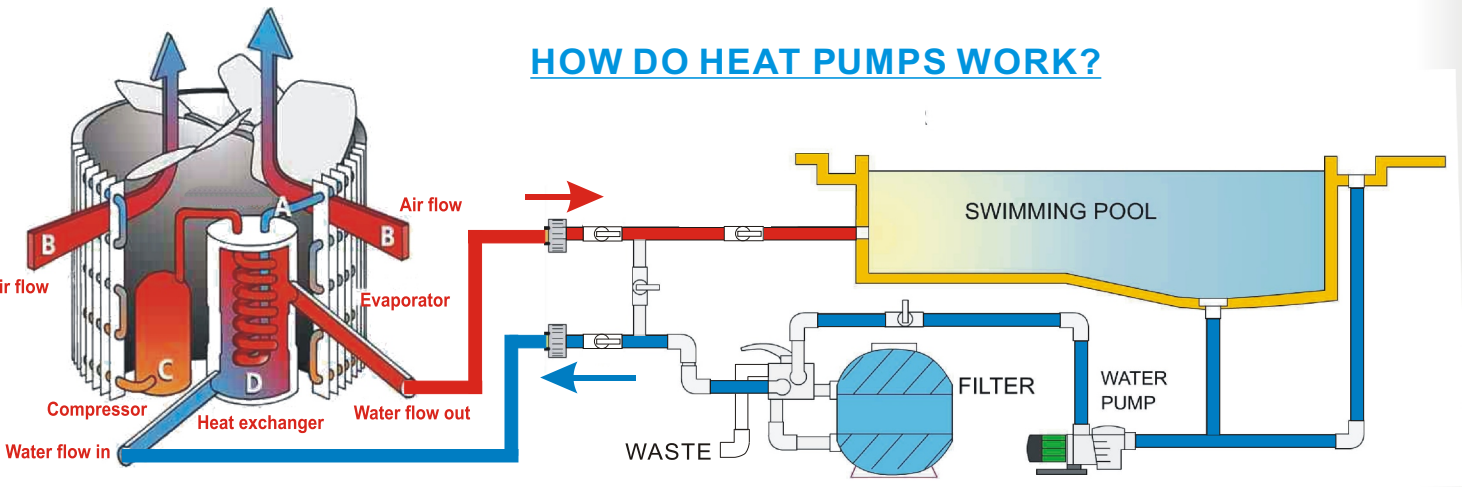
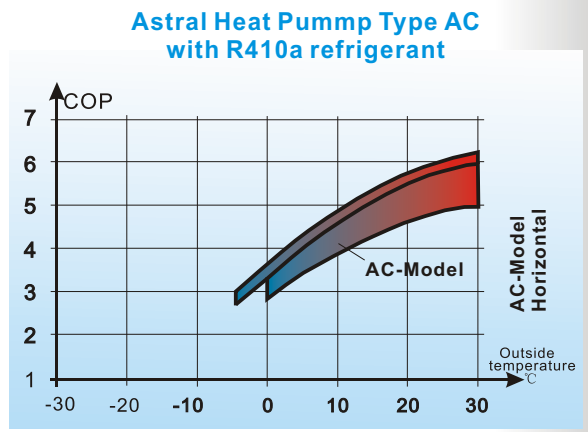


WHY CHOOSE AN ASTRAL HEAT PUMP?

- 1. Astral heat pumps are specifically designed for the climate in which they will be used, ensuring maximum energy gain at low air temperatures (higher COP at lower air temperatures, when maximum energy is needed)**
- 2. Higher COP - Higher energy gain - Less energy costs.**
Astral Heat Pumps have oversized Evaporators, Double Titanium A1 Coil Heat Exchangers, Pre-charged Defrosting System;
- 3. Practical functions.**
Bottom-pan heating to prevent ice-formation around base of unit, waterproof display and control panel
- 4. Value: best prices on the market for the performance and quality you get:**
We have many years of experience in efficient production, long-lasting relationships with suppliers of quality components and low-cost distribution system.

Output (kW) at different Air Temp. (Water Temp. 26°C)

AC-Model	Output kW	Input kW	COP kW/kW	Air temperature			COP 5°C kW/kW
				15°C kW	10°C kW	5°C kW	
AC6	5.4	1.0	5.4	3.8	3.5	3.0	3.0
AC8	6.8	1.2	5.6	4.5	4.1	3.7	3.1
AC10	9.5	1.7	5.6	6.4	5.8	5.1	3.0
AC13	11.5	2.1	5.5	7.9	7.2	6.7	3.2
AC15	15.0	2.7	5.6	9.8	8.9	8.4	3.1
AC17	16.8	3.1	5.4	11.4	10.3	9.9	3.2
AC20	20.5	3.8	5.4	14.8	13.5	11.7	3.1
AC25	25.5	4.8	5.3	18.5	16.8	15.8	3.3
AC30	30.0	5.4	5.5	22.1	20.0	18.3	3.4

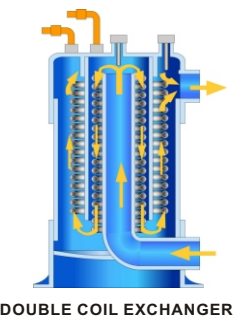


Enthalpy-difference Lab. 5S Manufacturing Testing Display Controller & Manometer Evaporator Heat exchanger



Features:

1. Oversized coated energy collector (air coils) - higher COP
2. Titanium class A1 double-coil heat exchanger
3. Active auto-charged defrosting system - higher COP
4. Digital display
5. Waterproof display and control panel
6. Strong ABS casing - no corrosion
7. Bottom heater to prevent ice formation
8. Galvanized bottom plate for horizontal type
9. Horizontal air flow
10. Easy connection to water system
11. Rotary/Scroll compressor
12. Flow switch protection
13. High / low-pressure switch protection



Code		AC6	AC8	AC10	AC13	AC15	AC17	AC20	AC25	AC30
Capacity	Heating Capacity	KW 5.4	6.8	9.5	11.5	15.0	16.8	20.5	25.5	30.0
	Input Power	KW 1.0	1.2	1.7	2.1	2.7	3.1	3.8	4.8	5.4
	Running Current	A 4.3	5.2	7.4	9.1	11.7	13.5	16.5	8.5	9.6
	COP	KW/KW 5.4	5.6	5.6	5.5	5.6	5.4	5.4	5.3	5.5
Measuring conditions A15°C W26°C	Heating Capacity	KW 3.8	4.5	6.4	7.9	9.8	11.4	14.8	18.5	22.1
	Input Power	KW 0.9	1.1	1.5	1.9	2.4	2.8	3.6	4.6	5.3
	Running Current	A 3.9	4.7	6.5	8.2	10.4	12.1	15.6	8.1	9.3
	COP	KW/KW 4.2	4.1	4.3	4.2	4.0	4.1	4.1	4.2	4.2
Power Supply	V/PH/HZ	220-240V/1P H/50HZ						380-400V/3P H/50HZ		
Controller		LED/LCD								
Heat exchanger		Titanium Coil								
Number of Compressors		1	1	1	1	1	1	1	1	1
Compressor		Rotary						Scroll		
Number of Fans		1	1	1	1	1	1	1	1	2
Input Power of Fan	W	60	60	80	100	100	110	110	220	440
Fan Speed	RPM	910	910	890	890	890	850	850	850	850
Noise (1 meter)	dB(A)	50	50	53	54	54	56	56	56	57
Water Connection	inch	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
Water Flow Rate (min-med-max)	m3/h	2.5	3.2	4.0	5.0	6.5	7.5	9.0	11.0	13.5
Water Pressure Drop	kpa	10	10	10	12	12	14	14	16	16
Net Dimension	L	mm 778	778	938	1015	1015	1080	1080	1078	1078
	W	mm 293	293	360	370	370	416	416	416	416
	H	mm 511	511	581	621	621	708	708	958	1258
Packing Dimension	L	mm 875	875	1060	1140	1140	1150	1150	1150	1150
	W	mm 328	328	380	400	400	450	450	475	475
	H	mm 545	545	630	676	676	838	838	1088	1388
Weight	Net Weight	kg 41	42	53	60	64	75	85	105	140
	Gross Weight	kg 46	47	59	67	71	83	93	118	152

Function : Heating & cooling with reversible defrosting