



# **Atecpool Reversible Cycle Heat Pump**

Air/Water Heat Pumps

**Heating and Cooling** 







## **Atecpool Air/Water Heat Pump**

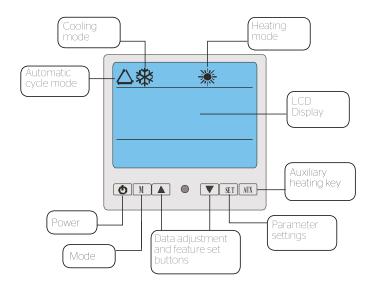
### Outdoor Installation



#### **Atecpool Air/Water Heat Pump**

- Atecpool Reversible cycle heat pump can be used for heating and cooling swimming pools, spas or other water bodies.
- RCHP technology is based on the same principle employed in air conditioners and refrigerators, delivering up to five times more energy in heat than it consumes as electricity. Our heat pumps are designed to heat your pool by extracting ambient heat from the atmosphere. This heat is then transferred into a refrigerant gas which is compressed and heated further. The heat is then transferred into the pool water, and heats your pool.
- With a Coefficient of Performance (COP) of greater than 5.8 at an air temperature of 26°C and over 4.5 at just 15°C, ATECPOOL heat pumps are 15-30% more efficient than competitive units. This remarkable efficiency can save up to 80% on running costs when compared to alternative gas or electric pool heating.

- 16 programs with synchronization capability,
- 2 Years manufacturer warranty.
- Whisper-quiet operation
- · Quality, reliability and durability
- Our Heat Pumps are manufactured using only topquality components. The titanium heat exchanger is not only extremely efficient, but it will never rust or corrode. Our heat pumps also feature more accurate and durable commercial grade digital controllers with the most user-friendly features, specific water flow switches and high capacity compressor capacitors.



Let's start swimming all year round!

## **Reversible Cycle Heat Pump**

## Outdoor Installation

#### **Atecpool Air/Water Heat Pump**



#### **ATECPOOL Heat Pump Benefits**

- Uses freely available air energy = 4-5 times more effective than conventional electrical heaters.
- For every kW of power consumed, you get at least 4-5kW of free power
- Inexpensive to run
- Incredibly efficient Japanese inverter technology
- Quietest operation
- · Top quality, maximum durability titanium heat exchanger
- Installation is quick and easy

#### **Water Heat Exchanger**

- Made of double spiralled titanium tubes encased in PVC or S.S. for additional protection against corrosive pool water.
- The double spiraling of the heat exchanger increases the surface area that comes in contact with the pool water, this drastically reduces scaling while heating rapidly and efficiently.

#### **External Heat Exchanger (Evaporator coils)**

- The tubes are made of copper and the fins are aluminium.
- The extra-large evaporator coils are designed to collect more heat from air outside to ensure the best performance in even the most adverse conditions.
- Large axial fans, with precision engineered blades are used to draw in maximum ambient air and pass it on to the evaporator coils.

#### Refrigerant

- We use the environmentally approved refrigerant R407-C, R410-A, R134-A depending on our client's requirements.
- For maximum efficiency you can combine your reversible cycle heat pump and solar pool heating in one system to capitalise on the suns free energy as well as that from the ambient air. All components of ATECPOOL heat cool pumps are of the highest international quality.

## **Reversible Cycle Heat Pump** Outdoor Installation

	Oump Specification	03310020H	03300030	03300040	03300050	03300060	03310070	03300080
Heating capacity	kW	8.8	13	17	21	25	35	45
	BTU /hr	30000	44000	58000	72000	86000	120000	150000
Heating Power Input	kW	1.9	2.65	3.7	4.6	5	7.5	9.5
Cooling Capacity	kW	5.8	8.8	12	14.5	17.4	25	34
	BTU /hr	19720	30000	41000	49500	59500	86000	116000
Cooling Power Input	kW	2.1	2.85	3.9	5.2	5.8	8.4	9
Running current	A	8.6 / 9.6	13.6 / 14.3	18.0 / 19.1	7.1 / 7.35	8.91 / 10.33	13.2 / 14.5	15.7 / 16.4
COP		5.1	5.1	5.0	5.0	5.1	5.0	4.9
Power Supply	V / PH / HZ	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N~/50H
Compressor Quantity	· .	1	1	1	1	1	2	2
Compressor		Rotory	Rotory	Scroll	Scroll	Scroll	Scroll	Scroll
Fan Quantity	-	1	1	1	1	1	2	2
Fan Input Power	W	150	200	200	200	200	200 x2	200 X 2
Fan Rotate Speed	rpm	850	830	830	830	830	830	830
Fan Airflow	cfm	3330	6960	6960	6960	6960	13920	13920
Fan direction	-	Horizontal	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Noise	dB (A)	50	51	51	51	54	59	61
Water connection	mm	50	50	50	50	50	50	63
Water Flow volume	m³/h	3	6	7.5	8	9	10	14
Water pressure drop (max)	kPa	8	. <del></del> 8	10	12	12	- <del>15</del>	15
Unit net dimensions (L/W/H)	mm	1010*420*650	660*660*860	660*660*860	660*660*860	660*660*860	1448*725*976	1450*730*1250
Unit net weight	kg	77	86	100	125	150	200	250
Atecpool Air/Water Heat F	Pump Specification	Model / Code						
Atecpool Air/Water Heat F	Pump Specification	Model / Code 03300090	03310100	03310110	03310120	03310130	03310140	03310160
	Pump Specification		<b>03310100</b> 75	<b>03310110</b> 90	<b>03310120</b>	<b>03310130</b>	<b>03310140</b>	<b>03310160</b> 210
Atecpool Air/Water Heat F		03300090						
Heating capacity	kW	<b>03300090</b> 55	75	90	105	145	160	210
Heating capacity	kW BTU /hr	03300090 55 187000	75 255000	90 306000	105	145 493000	160 550000	210 714000
Heating capacity Heating Power Input	kW BTU/hr	03300090 55 187000 11	75 255000 16.7	90 306000 17.5	105 357000 22.5	145 493000 30.2	160 550000 34.2	210 714000 46,3
Heating capacity  Heating Power Input  Cooling Capacity	kW BTU /hr kW	03300090 55 187000 11 42	75 255000 16.7 56	90 306000 17.5 70	105 357000 22.5 88	145 493000 30.2 106	160 550000 34.2 120	210 714000 46,3 150
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input	kW BTU /hr kW kW BTU /hr	03300090 55 187000 11 42 143000	75 255000 16.7 56 190400	90 306000 17.5 70 238000	105 357000 22.5 88 300000	145 493000 30.2 106 360400	160 550000 34.2 120 410000	210 714000 46,3 150 510000
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current	kW BTU /hr kW kW BTU /hr	03300090 55 187000 11 42 143000 10.3	75 255000 16.7 56 190400	90 306000 17.5 70 238000 17.8	105 357000 22.5 88 300000 24.7	145 493000 30.2 106 360400 32.1	160 550000 34.2 120 410000 41.6	210 714000 46,3 150 510000 56.2
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP	kW BTU /hr kW kW BTU /hr	03300090 55 187000 11 42 143000 10.3 18.0 / 19.2	75 255000 16.7 56 190400 17.2 29.8 / 30.6	90 306000 17.5 70 238000 17.8 31.2 / 31.7	105 357000 22.5 88 300000 24.7 40.1 / 44.0	145 493000 30.2 106 360400 32.1 53.9 / 57.3	160 550000 34.2 120 410000 41.6 61.0 / 74.2	210 714000 46,3 150 510000 56.2 81.8 / 99.1 4.5
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply	kW BTU /hr kW kW BTU /hr kW A	03300090 55 187000 11 42 143000 103 18.0 / 19.2 4.9	75 255000 16.7 56 190400 17.2 298 / 30.6 4.49	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7	210 714000 46,3 150 510000 56,2 81,8 / 99,1 4,5
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity	kW BTU /hr kW kW BTU /hr kW A	03300090 55 187000 11 42 143000 10.3 18.0 / 19.2 4.9 415V/3N-/50Hz	75 255000 16.7 56 190400 17.2 298 / 30.6 4.49 415V/3N-/50Hz	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz	105 357000 22.5 88 300000 24.7 40.1 / 44.0 4.5 415V/3N-/50Hz	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz	210 714000 46,3 150 510000 56.2 81.8 / 991 4.5 415V/3N-/50H
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor	kW BTU /hr kW kW BTU /hr kW A	03300090 55 187000 11 42 143000 10.3 18.0 / 19.2 4.9 415V/3N-/50Hz 2	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3	210 714000 46,3 150 510000 56.2 81.8 / 991 4.5 415V/3N-/50H
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity	kW BTU /hr kW kW BTU /hr kW A	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/5OHz  2  Scroll	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll	105 357000 22.5 88 300000 24.7 40.1 / 44.0 4.5 415V/3N-/50Hz 4 Scroll	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll	210 714000 46,3 150 510000 56.2 81.8 / 99.1 4.5 415V/3N-/50H 3 Scroll
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power	kW BTU /hr kW BTU /hr kW BTU /hr kW A	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll	75 255000 16.7 56 190400 17.2 298 / 30.6 4.49 415V/3N-/50Hz 3 Scroll	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll	210 714000 46,3 150 510000 56,2 81,8 / 99,1 4,5 415V/3N-/50H 3 Scroll 2
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power  Fan Rotate Speed	kW BTU /hr kW kW BTU /hr kW A	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2	210 714000 46,3 150 510000 56.2 81.8 / 99:1 4.5 415V/3N-/50H 3 Scroll 2
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity	kW BTU /hr kW BTU /hr kW BTU /hr kW A V/PH / HZ	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2  830	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3 830	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3 200 X 3	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3 550 X 3	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2 930	210 714000 46,3 150 510000 56,2 81,8 / 99,1 4,5 415V/3N-/50H 3 Scroll 2 1870X 2 980
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power  Fan Rotate Speed  Fan Airflow  Fan direction	kW BTU /hr kW BTU /hr kW BTU /hr kW A V/PH / HZ	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2  830  13920	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3 830 19500	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3 550 X 3 870 22500	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2 930 22500	210 714000 46,3 150 510000 56.2 81.8 / 991 4.5 415V/3N-/50H 3 Scroll 2 1870X.2 980 30000
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power  Fan Rotate Speed  Fan Airflow  Fan direction  Noise	kW BTU /hr kW kW BTU /hr kW A  V / PH / HZ  W rpm cfm	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2  830  13920  Vertical	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical	105 357000 22.5 88 300000 24.7 40.1 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3 830 19500 Vertical	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3 550 X 3 870 22500 Vertical	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2 930 22500 Vertical	210 714000 46,3 150 510000 56.2 81.8 / 99:1 4.5 415V/3N-/50H 3 Scroll 2 1870X 2 980 30000 Vertical
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power  Fan Rotate Speed  Fan Airflow  Fan direction  Noise  Water connection	kW BTU /hr kW BTU /hr kW A V/ PH / HZ  W rpm cfm	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2  830  13920  Vertical  61	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical 61	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical 62	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3 830 19500 Vertical 62	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3 550 X 3 870 22500 Vertical 64	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2 930 22500 Vertical 65	210 714000 46,3 150 510000 56.2 81.8 / 99.1 4.5 415V/3N-/50H 3 Scroll 2 1870X.2 980 30000 Vertical 65
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power  Fan Rotate Speed  Fan Airflow	kW BTU /hr kW BTU /hr kW A  V / PH / HZ  W rpm cfm  dB (A) mm	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2  830  13920  Vertical  61  63	75 255000 16.7 56 190400 17.2 298 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical 61 63	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical 62 63	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3 830 19500 Vertical 62 110	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3 550 X 3 870 22500 Vertical 64 110	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2 930 22500 Vertical 65 110	210 714000 46,3 150 510000 56.2 81.8 / 99:1 4.5 415V/3N-/50H: 3 Scroll 2 1870X.2 980 30000 Vertical 65 110
Heating capacity  Heating Power Input  Cooling Capacity  Cooling Power Input  Running current  COP  Power Supply  Compressor Quantity  Compressor  Fan Quantity  Fan Input Power  Fan Rotate Speed  Fan Airflow  Fan direction  Noise  Water connection  Water Flow volume	kW BTU /hr kW kW BTU /hr kW A  V/ PH / HZ  W rpm cfm  dB (A) mm m³/h	03300090  55  187000  11  42  143000  10.3  18.0 / 19.2  4.9  415V/3N-/50Hz  2  Scroll  2  200 X 2  830  13920  Vertical  61  63  18	75 255000 16.7 56 190400 17.2 29.8 / 30.6 4.49 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical 61 63 25	90 306000 17.5 70 238000 17.8 31.2 / 31.7 4.7 415V/3N-/50Hz 3 Scroll 3 200 X 3 830 19500 Vertical 62 63 30	105 357000 22.5 88 300000 24.7 401 / 44.0 4.5 415V/3N-/50Hz 4 Scroll 3 200 X 3 830 19500 Vertical 62 110 32	145 493000 30.2 106 360400 32.1 53.9 / 57.3 4.80 415V/3N-/50Hz 3 Scroll 3 550 X 3 870 22500 Vertical 64 110 36	160 550000 34.2 120 410000 41.6 61.0 / 74.2 4.7 415V/3N-/50Hz 3 Scroll 2 1780X 2 930 22500 Vertical 65 110 40	210 714000 46,3 150 510000 56.2 81.8 / 99.1 4.5 415V/3N-/50H: 3 Scroll 2 1870X 2 980 30000 Vertical 65 110 60

Data sheet is based on capacities:

Cooling: Ambient air temperature: 42º / 36º C - Water temperature: 33º C // Heating: Ambient air temperature: 23º / 18º C - Water temperature: 26º C

