

POOL Heating



ATECPOOL INVERTER **HEAT PUMPS**



ATECPOOL Inverter Heat Pumps offer a maximum return on your money and extend the swimming pool season more than any other heat pump with best COP. ATECPOOL Heat Pumps are fully tested and certified, and are listed as ECO friendly, being highly energy efficient with a COP up to 15.

ATECPOOL provides wide range of heating solution from Sirocco, Mega and MegaHigh Inverter Heat pumps to On/Off Air to Water heat pumps, High Temperature heat pumps, Water to Water heat pumps and Dehumidification.

Exclusive and extensive range of pool heating by ATECPOOL is excelled with design detailing, research engineering and high quality standards leading to Green Revolution with high energy savings and eco friendly solutions.





ATECPOOL SIROCCO HEAT PUMP

INVERTER HEAT PUMP

Eco-friendly and silent heating solution

























Atecpool Sirocco Inverter

Heat Pump

The most efficient heat-cool pump in the market. ECO Friendly pool heating.





Average COP 10

When maintaining pool temperature at 95% of pool season, the HP is running at 50% capacity which results in the best energy saving performance and most silent pool environment.

Atecpool Sirocco utilises a simple touch controller which brings the best user-friendly experience.

Easy Touch Controller





Patented Design Atecpool Inverter Technology R32/R410A production line

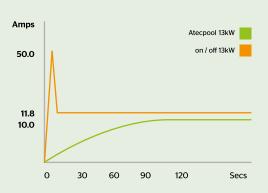


Double Energy saving than on/off hp

COP of Atecpool Sirocco COP of On/Off HP COP of On/Off HP COP comparison

Intelligent system protection

The input current will start from 0 Amps to rated Amps steadly. No rush to house electricity system. Atecpool Sirocco can adapt to wide voltage from 180-260V and adjust the system in different conditions.

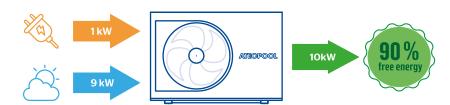


Atecpool Sirocco Inverter Heat Pump

Atecpool Sirocco Heat Pump

Free Energy

Thanks to Atecpool Inverter technology, Atecpool Sirocco provides 90% free energy from ambient air on average.



Atecpool Inverter Technology



Stepless DC Inverter

Atecpool inverters' core technology is stepless DC inverter. It adopts stepless invert compressor and DC brushless fan motor. The speed can be adjusted by a single hertz and round at a time, which provides amazing energy saving performance and extreme silence.



Unique Inverter Control System

Atecpool inverters' control system is specially designed for pool heating. It can adjust the heating capacity precisely according to different heating needs high speed in the beginning of the season, and better energy saving in the rest of the season by low speed.



Intelligent Protection

Atecpool inverters can adapt to a wide range of voltage and adjusts the system in different tough conditions. For example, if an electricity peak or poor ventilation occurs, the system can intelligently slow down for comfortable operation. Thus, it has a longer life span than traditional on/off heat pump.



Atecpool Sirocco Inverter

Heat Pump Specifications

Atecpool Sirocco Inverter Side Discharge

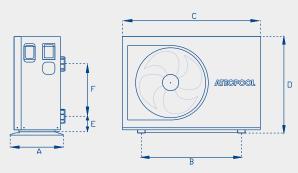


Atecpool Sirocco Side Discharge



Model	AIHP115	AIHP153	AIHP180	AIHP212	AIHP253			
Ambient Temperature: (DB/WB) 27°C/24			1111111111111	AIIIFZIZ	AITIF255			
Heating capacity (kW)	2.8~11.5	3.5~15.3	4.35~18.0	4.72~21.2	4.78~25.3			
Power input (kW)	0.193~1.73	0.243~2.41	0.306~2.78	0.33~3.59	0.33~4.36			
COP	14.5~6.65	14.4~6.35	14.2~6.47	14.3~5.91	14.48~5.8			
	perature: (DB/WB) 15°C/12°C; Water Inlet Temperature: 26°C							
Heating capacity (kW)	3.01~8.53	3.23~11.15	3.42~13.01	3.5-14.2	3.61~16.7			
Power Input (kW)	0.393-1.592	0.423~2.226	0.453~2.63	0.47 - 2.88	0.476~3.394			
COP	7.65~5.36	7.64~5.01	7.55~4.95	7.45~4.93	7.58~4.92			
Ambient Temperature: (DB/WB) 43°C/-;	1	1	7.55*4.55	7.43-4.33	7.30*4.32			
Cooling Capacity (kW)	2.04~5.75	2.3~7.65	2.83-8.3	3.0~9.6	3.2~10.65			
Consumed Power (kW)	0.48~2.90	0.55~411	0.69~4.53	0.75~5.36	0.78-5.98			
EER	4.25~1.98	4.15~1.86	4.08~1.83	4.01-1.79	4.10~1.78			
Power supply (V/Ph/Hz)	4.25-1.50	220-240V~ / 50-6			15V/3N~/50-60Hz			
Max.Input Power(kW)	3,1	4,4	4.8	5,4	6,5			
Max. Current (A)	13.7	19	20.9	9,2	11			
Heating Temperature Range	15,7	13	27°C~34°C	J,Z	11			
Cooling Temperature Range			26°C~20°C					
Running Temperature Range			-10°C~48°C					
Refrigerant			R410A					
Refrigerant Weight (kg)	0.63	0.95	1.35	1.5	1,9			
Compressor	0,03	0,55	Mitsubishi (DC inv	-,	1,5			
Air Side Heat Exchanger			Hydrophilic fin exc					
Water Side Heat Exchanger			Titanium tube heat e					
Fan Quantity			1	Actial igei				
Fan Input Power (W)	60	60	60	120	120			
Fan Speed (rpm)	850	850	850	850	850			
Fan Airflow (cfm)	2200	2200	2500	2500	2500			
Water flow (m³/h)	4,7	6.5	7.7	9,1	10.8			
Water Pressure Drop (kPa)	15	18	23	32	35			
Net dimension LxWxH (mm)	15	1000 x 405 x 6			155 30 x 445 x775			
Water Connection (mm)		1000 X 100 X 0	50	l III				
Net Weight (kg)	44	47	52	75	85			
Noise Level dB (A)	54	54	55	58	59			
	1 2 -	1 3 7	1 22	1 30	1 33			

Atecpool Sirocco Side Discharge Dimensions



Code	Α	В	С	D	E	F
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
AIHP115	405	680	1000	660	98	380
AIHP153	405	680	1000	660	98	380
AIHP180	405	680	1000	660	98	380
AIHP212	445	653	1130	775	108	380
AIHP253	445	653	1130	775	108	470

Atecpool Sirocco Inverter

Heat Pump Specifications

Atecpool Sirocco Inverter Top Discharge

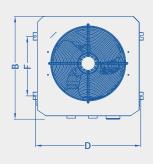


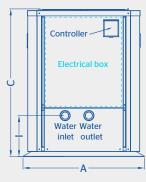




Model	AVHP265	AVHP308	AVHP352	AVHP411
Air Temperature: 27°C, inlet/outlet water ten	nperature: 26°C/28°C,	humidity 80%		
Heating capacity (kW)	9.2~26.5	10.3~30.8	11.7~35.2	12.9~41.1
Power input (kW)	0.62~4.34	0.7~5.06	0.79~5.77	0.88~6.95
COP	14.81~6.1	14.7~6.09	14.82~6.1	14.74~5.91
Air Temperature: 15°C, inlet/outlet water tem	perature: 26°C,humic	lity 70%		
Heating capacity (kW)	7.86~17.87	8.55~19.84	8.96~24.56	9.51~28.1
Power Input (kW)	1.11~3.74	1.17~4.17	1.31~5.25	1.36~5.98
COP	7.05~4.78	7.28~4.76	6.84~4.68	7~4.7
Air Temperature: 43°C, inlet/outlet water ter	nperature: 30°C/28°C			
Cooling Capacity (kW)	4.5~12.25	4.7~13.4	5.06~15.6	5.28~17.55
Consumed Power (kW)	1.01~6.03	1.05~6.47	1.15~7.57	1.19~8.43
EER	4.45~2.03	4.48~2.07	4.4~2.06	4.44~2.08
Power supply (V/Ph/Hz)		380-415	v/3N~/50-60Hz	
Max.Input Power(kW)	6,1	6,5	7,6	8,5
Max. Current (A)	10,9	11,6	12,7	14,2
Heating Temperature Range		2	7°C~34°C	
Cooling Temperature Range		26	5°C~20°C	
Running Temperature Range		-1()°C~48°C	
Refrigerant			R410A	
Compressor		Mitsubis	hi (DC inverter)	
Air Side Heat Exchanger		Hydroph	ilic fin and tube	
Water Side Heat Exchanger		Titanium tu	be heat exchanger	
Fan Quantity			1	
Fan Input Power(W)	185	185	230	230
Fan Speed(rpm)	800	800	800	800
Fan Airflow(cfm)	2800	2800	3300	3300
Water Flow (m³/h)	11,4	13,2	15,1	17,6
Water Pressure drop(kPa)	25	35	45	45
Net Dimension LxWxH (mm)	795 >	: 742 x 966	900	O x 812 x 1054
Water Connection (mm)			50	
Net Weight (kg)	105	108	137	140
Noise Level dB(A)	61	62	67	68

Atecpool Sirocco Top Discharge Dimensions





Code	Α	В	С	D	F	I
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
AVHP265	795	742	966	760	430	268
AVHP308	795	742	966	760	430	268
AVHP352	900	812	1054	865	500	268
AVHP411	900	812	1054	865	500	268





ATECPOOL MEGA INVERTER HEAT PUMP





HIGH CAPACITY INVERTER HEAT PUMP

For commercial installations



Save Money



Easy touch



Patented Technology



Silent Operation













Atecpool Mega Inverter

Heat Pump

Powerful saving commercial inverter



DC Inverter: Average COP 10

When maintaining pool temperature at 95% of pool season, the HP is running on 50% capacity which results in the best energy saving performance and most silent pool environment.











Specifications

- Reverse cycle defrosting.
- 0~55°C operation.
- Aluminium-alloy casing.
- Mistubishi Twin-Rotary Inverter Compressor.
- EEV Technology 20% higher efficiency than capillary.
- Twisted Titanium Heat Exchanger 40% higher efficiency.

Double Energy saving than on/off HP

Heat pump	Mega Inverter 60kW	On/Off HP 60 kW
COP (air 27°C / water 27°C)	10.5 @50% Capacity	5
Input power	2.86 kW	12 kW
Heating time (for 1°C)	9.67 hrs	4.83 hrs
Daily consumption	27.66 kWh	57.96 kWh
Yearly consumption (180 days)	4978.8 kWh	10432.8 kWh

Formula: kW*h=T*V(m^3)*1.16

Above calculation is just a reference when maintaining pool temp for well isolated pool under air 27°C / water 27°C



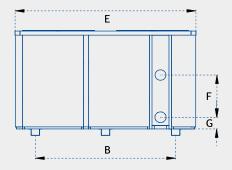


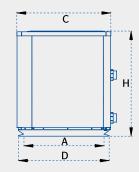
Atecpool Mega Inverter Heat Pump Specifications

Mega Inverter Heat Pump Specification

Model	АМНРО60	АМНРО9О
Performance conditions: Air 27°C/ Water 27°	C/ Humid. 80%	
Heating capacity (kW)	60,2	115,0
Average COP at 50% Speed	10,5	10,0
Performance conditions: Air 15°C/ Water 26°	C/ Humid. 70%	
Heating capacity (kW)	40,1	80,8
Average COP at 50% Speed	7,0	7,0
Performance conditions: Air 46°C/ Water 32°	C/ Humid. 80%	
Cooling capacity (kW)	25,1	50.3
Technical specifications		
Operating air temperature (°C)	0-	-50
Heat exchanger	Twisted Titaniun	n Heat Exchanger
Refrigerant Gas	R4	10A
Fan direction	Ver	tical
Fan Quantity	1	2
Fan Air Flow (cfm)	20000	38000
Fan input Power(W)	500	500 x 2
Fan Rotate Speed(rpm)	800	800
Power supply	380-415V/3	N~/50-60Hz
Rated input power (kW)	2.26~8.90	4.68~17.50
Rated input current (A)	3.27~12.90	6.78~25.30
Sound level at 1m dB (A)	53.0~61.0	55.0~64.0
Sound level at 10m dB (A)	33.0~41.0	35.0~44.0
Advised water flow (m³/h)	20~25	40~50
Water connection (mm)	75	110
Maximum input current (A)	19	38
breaker rated current (A)	23	45
Power cord (mm²)	5 x 6	5 x 16
R410A Gas Weight (g)	8000	2x8000
Net Weight (kg)	230	448
Net dimension LxWxH (mm)	1000 x 1110 x1260	2100 x 1090 x 1280

Atecpool Mega Inverter Dimensions





Code	Α	В	С	D	E	F	G	Н
	(mm)							
AMHP060	1000	660	1110	1070	1000	780	105	1260
AMHPO90	1000	1630	1090	1050	2100	510	140	1280

Atecpool MegaHigh Inverter

Heat Pump

Atecpool MegaHigh Inverter for large water bodies





Full Inverter Technology equipped with high quality DC Mitsubishi compressor and DC fan motor. COP achieved upto 16.1 and EER upto 5.3. High energy efficiency units for commercial installations.

Display & Central Control

Two Display Options: 5 inch LCD Color Display / 7 inch LED Display. Equipped with a 64-bit chip, 0.1degC accurate temperature control and PID automatic defrosting.

Practical Cabinet Structure

The classic vertical wind outlet type saves ground space to accommodate more units.



Broad Climate Suitability

The unit can adapt to a wide climatic range. Lab tests showed maintained stable operation in -15-55°C. This feature makes the unit suitable for markets all over the world



Soft Starting

When the machine is turned on, its soft start technology avoids a sudden fluctuation of taking high Amps but start the unit softly and reach stable current slowly.



Low Noise

The DC inverter fan with special design blades not only saves energy but also helps to keep the operating noise 20% lower.



Centralized Control (RS485)



64Bit Processor



PID Control



Precise Control



Automatic Defrost

Atecpool MegaHigh Inverter

Heat Pump

MegaHigh Inverter Heat Pump Specification











Model		АМНР70	AMHP80	AMHP100	AMHP130	AMHP170
Heating Capacity at Air 26°C, Wa	ter 26°C, H	umidity 80%		<u>'</u>		
Heating Capacity	kW	16.5~70	17.5~80	24.8~103	32.4~136	36.3~175
Power Input	kW	1.02~10.03	1.08~13.01	1.54~14.8	2.00~19.46	2.26~28.01
СОР		16.11~6.98	16.1~6.15	16.09~6.96	16.15~6.99	16.0~6.24
Heating Capacity at Air 15°C, Wat	ter 26°C, Hi	umidity 70%				
Heating Capacity	kW	12.1~51	13.8~60	18.3~76	23.9~101	28.3~135
Power Input	kW	1.6~10.24	1.65~12.21	2.42~15.29	3.15~20.24	3.32~27.55
СОР		7.56~4.98	8.4~4.91	7.55~4.97	7.59~4.99	8.5~4.9
Cooling Capacity at Air 43°C, Wa	ter 26°C					
Cooling Capacity	kW	9.1~38	15~42	16.12~58	18.5~76	59.4~96
Power Input	kW	1.78~8.83	2.94~10.24	3.16~13.4	3.62~17.67	11.2~22.32
EER		5.1~4.3	5.1~4.1	5.1~4.3	5.1~4.3	5.3~4.3
Rated Power Input	kW	11	13	16	21	28
Rated Current	А	18	20	27	36	45
Power Supply	V/Ph/Hz		38)Hz	,
Refrigerant				R410A		
Compressor Type			Λ	Mitsubishi DC invert	er	
Heat Exchanger				Titanium		
Expansion Valve				Electronic EEV		
Air Flow Direction				Vertical		
Fan Quantity		2	2	1	2	2
Fan Power Input	W	200x2	200x2	615x1	695x2	1300x2
Fan Rotate Speed	rpm	850	850	850	850	850
Fan Airflow	cfm	8000	8000	9500	18000	25000
Water Flow Volume	m3/h	20	25	30	40	45
Net Dimensions(LxWxH)	mm	1416x752x1055	1750x840x1750	1250x1080x1870	2150x1080x2180	2170x1150x2130
Operating Air Temperature	°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C
Noise 1m	dB(A)	≤59	≤60	≤62	≤65	≤65
Net Weight	kg	280	370	420	750	810
Water Connection	mm	63	63	63	75	110





ATECPOOL REVERSIBLE CYCLE HEAT PUMP

AIR/WATER HEAT PUMPS

Heating and Cooling









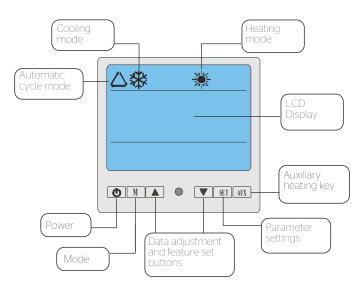
Atecpool Air/Water Heat Pump

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.
- 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

Atecpool Air/Water Heat Pu	ımp Specs.	Model / Code									
		03310020H	03300030	03300040	03300050	03300060	03310070	03300080	03300090		
Heating capacity	kW	8.8	13	17	21	25	35	45	55		
	BTU /hr	30000	44000	58000	72000	86000	120000	150000	187000		
Heating Power Input	kW	1.9	2.65	3.7	4.6	5	7.5	9.5	11		
Cooling Capacity	kW	5.8	8.8	12	14.5	17.4	25	34	42		
	BTU /hr	19720	30000	41000	49500	59500	86000	116000	143000		
Cooling Power Input	kW	2.1	2.85	3.9	5.2	5.8	8.4	9	10.3		
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	18.0 / 19.2		
COP		5.1	5.1	5.0	5.0	5.1	5.0	4.9	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-/50Hz	415V/3N-/50Hz		
Compressor Quantity	-	1	1	1	1	1	2	2	2		
Compressor	-	Rotory	Rotory	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll		
Fan Quantity		1	1	1	1	1	2	2	2		
Fan Input Power	W	150	200	200	200	200	200 x2	200 X 2	200 x 2		
Fan Rotate Speed	rpm	850	830	830	830	830	830	830	830		
Fan Airflow	cfm	2000	4000	4000	4000	4000	4100x2	4100x2	4100x2		
Fan direction		Horizontal	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical		
Noise 1mtr	dB (A)	50	51	51	51	54	59	61	61		
Water connection	mm	50	50	50	50	50	50	63	63		
Water Flow volume	m³/h	3	6	7.5	8	9	10	14	18		
Water pressure drop (max)	kPa	8	8	10	12	12	15	15	15		
Unit net dimensions (L/W/H)	mm	1010x420x650	660x660x860	660x660x860	660x660x860	660x660x860	1470x727x875	1450x730x1250	1450x730x1280		
Unit net weight	kg	77	86	100	125	150	200	250	265		

Atecpool Air/Water Heat Po	ımp Specs.	Model / Code							
		03310100	03310110	03310120	03310130	03310140	03310150	03310160	03310180
Heating capacity	kW	75	90	105	145	160	185	210	230
	BTU /hr	255000	306000	357000	493000	550000	629000	714000	782000
Heating Power Input	kW	16.7	17.5	22.5	30.2	34.2	37	46,3	48
Cooling Capacity	kW	56	70	88	106	120	131	150	160
	BTU /hr	190400	238000	300000	360400	410000	444000	510000	54000
Cooling Power Input	kW	17.2	17.8	24.7	32.1	41.6	48.5	56.2	67.2
Running current	A	29.8 / 30.6	31.2 / 31.7	40.1 / 44.0	53.9 / 57.3	61.0 / 74.2	70.52 / 87	81.8 / 99.1	109 / 12.11
СОР		4.49	4.7	4.5	4.80	4.7	4.7	4.5	4.3
Power Supply	V / PH / HZ	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N-/50Hz	415V/3N~/50Hz	415V/3N-/50Hz
Compressor Quantity		3	3	4	3	3	2	4	2
Compressor		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Fan Quantity	-	3	3	3	2	2	2	2	2
Fan Input Power	W	200 x 3	200 x 3	200 x 3	1780 x 2	1780 x 2	1780 x 2	2000 x 2	2000 x 2
Fan Rotate Speed	rpm	830	830	830	930	930	930	920	920
Fan Airflow	cfm	4500x3	4500x3	4500x3	21000 x 2	21000 x 2	21000 x 2	23000 x 2	23000 x 2
Fan direction		Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Noise 1mtr	dB (A)	61	62	62	64	65	66	65	70
Water connection	mm	63	63	110	110	110	110	110	110
Water Flow volume	m³/h	25	30	32	36	40	55	60	85
Water pressure drop (max)	kPa	16	16	16	23	24	24	24	25
Unit net dimensions (L/W/H)	mm	2150x760x1310	2150x760x1310	2170x1065x1930	2170x1065x2304.5	2170x1065x2304.5	2150x1078x2258	2180x1080x2060	2150x1078x2258
Unit net weight	kg	360	370	695	 752	 761	900	1350	1360

Atecpool MaxChill Series

Water Chillers

Atecpool MaxChill water chillers

Ideal for plunge pools and water immersion pools for sports recovery. Atecpool Water Chillers provide low temperatures reaching 10°C for cold water treatment. Anti-Corrosive Titanium Heat Exchanger combined with a R410 refrigerant compressor for low water temperatures.



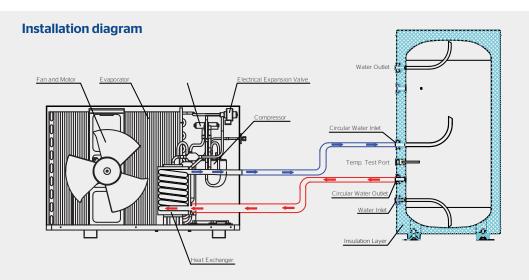
>> Low water temperature upto 10°C <<

Suitable for cooling

- · Swimming pool
- Spa
- · Roof water tanks

Working principle

The technology is based on the same principle employed in air conditioners and refrigerators, delivering up to five times more energy than it consumes in electricity. Chillers are designed to give low temperatures to water body by extracting ambient heat from the surrounding air.



MaxChill Components

- Heat Exchanger made of double spiralled titanium tubes encased in PVC or SS for additional protection against corrosive pool water.
- Extra-large evaporator coils are designed to collect more cool energy from the outside air to ensure performance in even the most adverse conditions.
- Large axial fans, with precision engineered blades are used to draw maximum ambient air and pass it on to the evaporator coils



Atecpool Maxchill SeriesWater Chillers



Specification		Model / Code		
		ACU-200	ACU-300	ACU-500
Chilled water @ 35°C ambient				
Cooling Capacity Rating	kW	7.5 (2 Ton)	12.35 (3.5 Ton)	18 (5 Ton)
Rated Power Input	kW	2.50	4.10	6.0
Rated current	Amps	12.10	18.60	11.40
Chilled water @ 46°C ambient				
Cooling Capacity Rating	kW	6.25	10.30	15.0
Rated Power Input	kW	2.70	4.40	6.40
Rated current	Amps	12.80	20.0	12.20
Min Cooling Water Temp			10°C	_
Incoming Cable Size		3 Core x 2.5mm ² Cu	3 Core x 4.0mm² Cu	5 Core x 2.5mm ² Cu
Power Voltage		220V / 50Hz	220V / 50Hz	380V / 50Hz
Brand		Panasonic	Panasonic	Panasonic
Compressor —		Scroll*1	Scroll*1	Scroll*1
Heat Exchanger		Titaniı	ım Tube Heat Exchanger in	PVC shell
Refrigerant		R410A	R410A	R410A
Electric Expansion Valve		DPF2.4	DPF3.0	DPF3.0
Defrost			Included	
Cabinet			Galvernized Steel Casing	1
Water Connection Port	mm		Exterior 50mm/ Interior 40	mm
Fan Blade Material		Axial Fan Plastic Blade	Axial Fan Plastic Blade	Axial Fan Metal Blade
Fan Input Power	W	200	400	400
Fan Rotate Speed	rpm	850	850	850
Noise	dB(A)	49	58	58
Adviced water flow	m³/h	8-10	12-15	12-15
Water pressure drop	kPa	14	15	15
Unit net dimensions	mm	630*605*780	810*810*1050	810*810*1350
Net Weight	Kg	94	105	160

LCD Display and functions

MaxChill features more accurate and durable commercial grade digital controllers with user friendly features.



◆Illustration for the buttons

unit unlock, turn on/off

increase (setting parameters of the functions)

down decrease (setting parameters of the functions)

Query and function setting

timer Clock and timer switch setting



HiHeat Hot Water Heat Pump

Outdoor Installation

Outlet water temperature up to 80°C



Suitable for

- 5 Star Hotels
- Hospitals
- Printing & Packaging
- · Textile industry
- Food Processing Industry
- And other industries

HiHeat Hot Water Reversible Cycle Heat Pump, Air/Water cycle with its heat power capability of producing hot water up to 80°C is equipped with an inbuilt Grundfos circulation pump, patented Tube in Shell Heat Exchanger and Copeland compressor with R134A refrigerant.

Low Operating Cost

Eco-Friendly

80°C Hot Water Outlet

EVI Technology

Multiple Protections Wide Operation Range

HiHeat Highlights

- Low operating cost: The operating cost is very low compared with conventional heat sources, such as electricity, coal, gas and diesel.
- Environmental Friendly: Adopting R134A refrigerant of lower GWP, means the air pollution emission is zero, which is very environmental-friendly compared with coal.
- 80°C Hot Water Outlet: With stable hot water supply, the unit can be widely used in different industrial applications.
- EVI Technology: With EVI technology, the unit can work stably for hot water application.
- **Multiple-Protections:** The multiple protective design ensure the unit's long service life and stable operation.
- Wide Operation Range: With advanced 4-way-valve applied in the unit, the unit can be used in any environment from -7°C to 45°C.

HiHeat Hot Water Heat Pump

Outdoor Installation

HiHeat Hot Water Heat Pump Specification









Specification		Model / Code				
		ATHP30	ATHP50	ATHP70	ATHP120	
Hot Water Capacity (Air 20/15°C, Water 15-65°C)	kW	19.0	35.0	70.0	135.0	
Power Input	kW	5.3	9.2	19.0	38.6	
COP	W/W	3.58	3.68	3.68	3.50	
Hot Water Volume	 /h	326	602	1204	2321	
Max. Power Input	kW		18.1	36.2	64.4	
Max. Running Current	A	14.3	32.3	64.6	108.5	
Power Supply	V/Ph/Hz		380~4	15V/3N-/50Hz		
Compressor Quantity		1	1	2	4	
Compressor Type				Scroll		
Compressor Brand			C	Copeland		
Fan Quantity		2	1	2	2	
Circulation Water Pump		Grundfos CM 3-3	Grundfos CM 5-3	Grundfos CM 10-2	-	
an Motor Input	W	200x2	750	750x2	1800x2	
Minimum Flow Required	m³/h	3.3	6.0	12.0	23.2	
Water Pressure Drop	kPa	25	38	42	45	
Water Connection		1.2" inch	DN40 flange	DN65 flange	DN80 flange	
Noise	dB(A)	58	65	68	70	
Air Volume	m³/h	5000x2	12000x1	14000x2	23000x2	
Air Discharge Type		Horizontal	Vertical	Vertical	Vertical	
Max. Outlet Water temp.	°C			80		
Operation range	°C			-7-45		
Condenser			Patented tube i	n Shell Heat Exchanger		
Evaporator			High Efficiency Alumi	inium Finned Heat Exchang	ge	
Defrosting			by 4	1-Way Valve		
Controller		PC Controller				
Display			5 inch Sma	art Central Display		
Refrigerant				R134A		
Cabinet			Eco-friendly Galvanized	Metal / (Stainless Steel opti	onal)	
Net Weight	kg	219	468	600	1050	
Gross Weight	kg	238	512	643	1100	
Net Dimensions (L/W/H)	mm	1175×400×1605	1195×980×1900	1930×1050×1980	2350×1150×2370	

Data sheet is based on capacities:

Test Conditions: Ambient temperature 20°C/15°C, water circulation from 15°C to 65°C.

The data above is for reference only. For more specific data, please refer to the nameplate on the unit.

Climatic Water/Water Heat Pump

Water Source Heat Pump

Atecpool Climatic Water Source Heat Pump

Water-to-Water Heat Pump is a system of heating or cooling that involves the transfer of heat by a circulating fluid (as water or vapor) in a closed system of pipes.

Atecpool Climatic ATWSHP Series for heating includes a special high temperature scroll compressor coupled with heat exchangers designed specifically for water heating, which provides unmatched efficiency and performance. The evaporator is a tube-in-shell heat exchanger that is capable of operation over a wide range of temperatures, and is more rugged than other types of evaporators. The condenser uses a close approach tube-in-shell heat exchanger as well.

Perfect Solution for industrial water heating

Suitable for

- Pharmacy Industry
- Sewage Treatment
- Gas boilers replacement
- Desalination Plants
- Dairy Requirement Sterilization











Compact Design & Flexible installation

Climatic Series Highlights

- IEER > High COP: High heat transfer efficiency enables it to have high energy saving performance.
- Various Applications:
 Compatible with existing water chillers for hot water & cooling
 - Compatible with existing water chillers for not water & cooling Compatible with existing cooling tower for factory process cooling & hot water
- **Higher ROI:** Low cost water heating and free air cooling, flexible installation and combination solution equals to high ROI in the long run.
- More Reliable: Durable and reliable; the unit can run stably all year around without being affected by ambient temperature.
- Compact Design & Flexible installation: The multi-connected heat exchanger design makes it compact, thus able to adjust to various installation locations.

Climatic Water/Water Heat Pump

Water Heat Pump

Atecpool Climatic Water Source Heat Pump



Climatic Series Specifications

- Compact water-to-water heat pump for indoor or outdoor installation.
- With suction gas cooled scroll compressor.
- With extensive tube-in-shell Heat Exchanger as tube evaporator and coaxial condenser.
- Refrigerant cycle with thermostatic expansion valve, filter, gas-liquid separator, high and low pressure switches.
- With efficient automatic defrosting by hot gas principle.
- Electric and terminal box, with control and disturbance signaling.
- · Heating regulator for mounting to walls.
- Refrigerant as R134A.

Water Connections

- Water connections to be done on site.
- · Heating and condensation connections of flexible pipes with external thread.

Condensation Connections

- The water connections and the drain pipelines must be protected against frost on sites in freezing climates.
- It's always recommended and necessary to insulate the water pipes from W2W to water bodies when there is a long distance between them, to maintaining the heat.

Climatic Water/Water Heat Pump

Water Source Heat Pump

Atecpool Climatic Water Source Heat Pump Specification







Specification			Model / Code					
			ATWSHP210	ATWSHP230	ATWSHP270			
Heat	ing Capacity*	kW	33.6	67.1	134.2			
Cooli	ng Capacity*	kW	25.5	50.9	101.9			
Powe	er Input*	kW	7.9	15.8	31.6			
COP	•	W	4.24	4.24	4.24			
EER*		W	3.16	3.20	3.22			
leat	ng Capacity**	kW	28.9	57.8	115.6			
Cooli	ng Capacity**	kW	18.9	37.8	— <u>— 75.</u> 6			
Powe	er Input**	kW	10.4	20.8	41.7			
COP	*	W	2.77	2.77	2.77			
EER*	*	W	1.78	1.81	1.82			
Иах.	Power Input	kW	15	25	46			
Max.	Running Current	A	25	45	90			
Power Supply V		V / Ph / Hz		380~415V/3N-/50Hz				
CompressorType			Copeland	d ZW150KBE-TFP-522 Scroll	Compressor			
Compressor Quantity			1	2	4			
,	Туре			Tube in Shell Heat Exchan	ger			
Evaporator	Water Flow	m³/h	5.0	10.0	20.0			
vapc	Water Pressure Drop	kPa	20.4	38.6	54.5			
ш	Water Connection		DN32	DN80	DN80			
,	Туре			Tube in Shell Heat Exchan	ger			
ensel	Water Flow	m³/h	4.6	9.1	18.2			
Condenser	Pressure Drop	kPa	16.5	30.9	41.5			
	Water Connection		DN32	DN80	DN80			
Voise	:	dB(A)	65.0	68.0	69.0			
Refric	gerant			R134A				
Controller		Multi-function Controller						
Display		5 Inch Colorful Touch Display						
vlax (Outlet Water Temperature	°C		80				
Cabinet		Eco-friendly	Galvanized Metal / Stainles	s Steel for option				
Vet V	/eight	kg	202	441	866			
Net C	imensions (L/W/H)	mm	1030 / 640 / 730	1172 / 900 / 1365	1600 / 1130 / 1500			
Shipp	ing dimensions (L/W/H)	mm	1130 / 710 / 910	1360 / 960 / 1520	1790 / 1210 / 1670			

Note:



^{*}Testing Condition Evaporator Side inlet/outlet: 20/15°C; Condenser Side inlet/outlet: 45/55°C

^{**}Testing Condition Evaporator Side inlet/outlet: 20/15°C; Condenser Side inlet/outlet: 65/75°C

Atecpool Split Heat Pump

Invisible Heat Pump for Spas

Atecpool Invisible Heat Pump - Water heat Exchanger inside Jacuzzi Chassis

SPLIT heat pump consists of two blocks. Outdoor unit is the source of heat. It contains a compressor, ventilator and air heat exchanger. Indoor unit contains water heat exchanger and control sensors. Split heat pump's water unit can be fully integrated inside the jacuzzi. It is thus fully invisible and also protected against frost. There is no additional noise, vibration or visual disturbance since the split heat pump can be placed as far as 30 meters away from the jacuzzi.

Water Temperature 8~40°C

An intuitive control panel with full integration into the jacuzzi's control is possible with RS-485, DRY contact or WLAN.



Atecpool INVI 1000 and INVI 1400

	Heating Capacity (A27/W27/RH80%)		Cooling capacity (A35/W28/	Water flow	Power supply/Input	Heat exchanger	Acoustic level	Operating Water	Water circuit	Wi-Fi
	Power	СОР	RH80%)	po	power			Temperature	connection	
Model	kW	СОР	kW	m³/h	V AC / ph / kW	type	dB (A)		mm	
INVI 1000	9.2	6.1	4.9	4	230 / 1 /1.4	Titanium Gr 1 ASTM 265	48/29	8-40°C	ø50	Mobile App
INVI 1400	12.3	6.0	6.2	5.3	230 / 1 / 1.8	Titanium Gr 1 ASTM 265	49/32	8~40°C	ø50	Mobile App

Atecpool Split Heat Pump

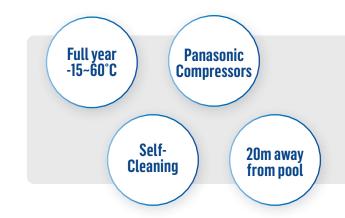
MAX Split and Heat



Atecpool MAX Split and Heat

SPLIT heat pump consists of two blocks. Outdoor unit is the source of heat. It contains a compressor, ventilator and air heat exchanger. Indoor unit contains water heat exchanger and control sensors.

Outdoor unit is placed away from the indoor unit (heat exchanger and sensors) as far as 20m horizontally and 10m vertically.



Atecpool SHP MAX2400 and SHP MAX3000

Model	SHP MAX 2400	SHP MAX 3000
Performance Condition: Air 27°C/Water 27°C/Humidit	y 80%	
Heating capacity (kW)	24.4	30.1
COP	6.9	6.9
Performance Condition: Air -15°C/Water 26°C/Humidit	ry 70%	
Heating capacity (kW)	18.7	24.3
COP	6.3	6.3
Performance Condition: Air 35°C/Water 28°C/Humidit	y 80%	
Cooling capacity (kW)	21.7	26.8
Technical Specifications		
Advised pool volume (m³)	60-80	80-120
Sound level min. at 10m dB(A)	29	32
Operating air temperature (°C)	-5°C-+40°C, with TRO	DPICAL kit -5°C-+60°C
Compressor type	Panasonic /	Sanyo, scroll
Heat exchanger (Grade & Surface of Titanium)	Titanium Twisted Gr 1- ASTM265; 1.2m ²	Titanium Twisted Gr 1- ASTM265; 1.4m ²
Cover	Metal powder coa	ated 180°C enamel
Refrigerant	R4	10A
Installation		
Power supply	400V/3pH/50Hz	400V/3pH/50Hz
Water connection	50mr	m (6.4")
Protection and cable size (20m)	C 10 A (5G2.5mm²)	C 16 A (3G2.5mm²)
Rated power input (kW)	3.51	4.34
Advised water flow (m3/h)	8-10	8-12
Net dimensions LxWxH (mm)	942x1250x360 - SPLIT	942x1250x360 - SPLIT
Net weight (kg)	118	120
Connection		
Copper pipe connection	3/4" + 3/8"	3/4" + 3/8"
Max. connection distance	20) m
Accesories		
Wi-fi	POOL VISIO	N mobile app
Winter modul	Operating air temp	perature -15°C~+40°C
Tropical kit - extra compressor cooling	Up to +60°0	C ambient air

Remarks: *The data above is only for reference. For specific data, please refer to the nameplate on the unit. Note: Manufacturer reserves the right to change above technical data without notice



Atecpool Dry Ceiling Dehumidifier

Next Generation Dehumidifier

ATECPOOL Dry Ceiling Dehumidifier

Atecpool Dry Ceiling dehumidifier is first of its kind, intelligent and visually captivating solution of paramount performance, setting a new tide in the industry. Internet connectivity and microsafety + with AI, its a 4 products in 1 combined unit.

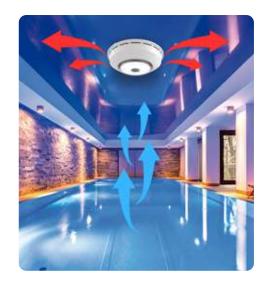
DehumidifierMicroLightLED Lamp

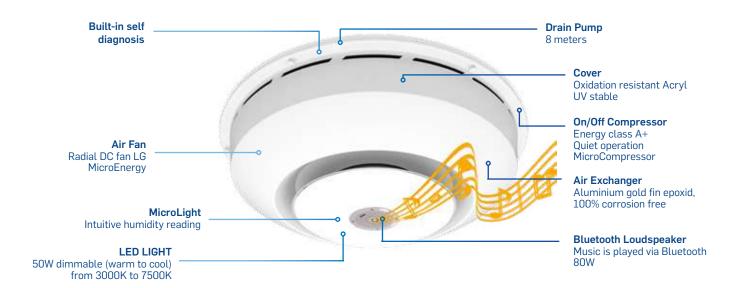
Ceiling Unit Placement

Ceiling unit is designed to be fixed directly on concrete or wooden ceiling structure or into lower gypsum ceiling using adjustable bar.

Split Dehumidifier

Atecpool Dry is a split dehumidifier with ceiling unit and compressor unit. Ceiling unit is equipped with evaporator, condenser, fan, Bluetooth speaker, LED light and MicroLight. Ceiling units are connected to compressor unit with refrigerant copper tubes.





Atecpool Dry Ceiling Dehumidifier Specifications

	Pool Surface	Extraction rate 30°C / 60%RH	Extraction rate 30°C / 80%RH	Air Flow	Noise Level (at 1m dist.)	Power	Compressor	Heat Output	Refrigerant	Dimensions (WxHxD)	Weight
Series	m²	l/24hrs	l/24hrs	m³/h/Pa	dB (A)	w		w		mm	kg
DRY CEILING MONO	60	67	104	1000	35	1200	ON/OFF	4500	R410A	Ceiling unit 1205 x 278 Compressor Unit 251 x 467 x 404	40 / 46
DRY CEILING DUO	120	134	208	2000	35	2300	ON/OFF	8750	R410A	Ceiling unit 1205 x 278 Compressor Unit 251 x 467 x 404	50 / 60

Atecpool Dry 500-800-1200 Dehumidifiers

Next Generation Dehumidifier

Atecpool Dry Series Dehumidifiers

Atecpool Dry Series dehumidifier is made to provide up to 3.5 times more energy than it consumes keeping its heat recovery system at its best. Wide color options with metal cabinet.

Available in four different versions:

Wave

- wall mounted / mobile
- economy model
- acryl cover
- full set of options

Metal

- wall mounted / mobile
- exclusive
- · metal cover
- any colors possible

Duct

- ducted / concealed
- 200 Pa
- up to 30 m ducting
- full set of options
- Silent comfort



Through-the-wall (TTW)

- · wall mounted
- behind the wall
- indoor/outdoor installation
- aluminium arills
- wall thickness up to 400 mm





WAVE

METAL

TTW

DUCT

120

110

120

112

181

170

1200

1200 /

145

46

60

2150

2250

5250

R410A

		Pool Surface	Extraction rate 30 °C / 60%RH	Extraction rate 30 °C / 80%RH	Air Flow	Noise Level (at 1m dist.)	Power	Heat Output	Refrigerant	Dimensions (WxHxD)	Weight
Series	Model	m²	I/24hrs	I/24hrs	m³/h/Pa	dB (A)	w	w		mm	kg
DRY 500	WAVE	60								1245 x 660 x255	60 / 73
	METAL		60 66	101	800	44	1000	2500	R410A	1245 x 660 x300	77 / 90
	TTW							3500		1245 x 660 x255	60 / 73
	DUCT	50	52	68	1000 / 200	56	1150			1245 x 660 x253	75 / 88
	WAVE				1100		1600	1600 5100	5100 R410A	1250x 950 x310	100 / 133
DRY 800	METAL	IETAL 90 90	90	136) 46					80 / 113
	TTW										100 / 133
	DUCT	80	88	135	1100 / 170	58	1700			1247x 950 x300	102 / 135



DRY

1200

104 / 136

80 / 113

103 / 136

1250x 950 x310

1247x 950 x300

Atecpool Air Dehumidification

Atecpool Air Pool Dehumidification



Wall Mounted Dehumidifiers for indoor pool installation

Through absorbing clammy air and transferring it to warm and dry air, Atecpool Air Dehumidifier can easily tackle problem that cause condensation and furniture corrosion. Atecpool Air Dehumidifier for indoor pool installation. Wall mounted models for humidity controls in indoor swimming pools. Extremely silent operation (44-47 dB(A)) and high energy saving with R32 compressors and a built-in electronic thermostat.

- **Epoxy Fin Air Exchanger**

Air Dehumidifier adopt epoxy fin air exchanger which is featured with great anti-corrosion performance, ensuring the units longer life.

- **Super Silent Operation**

Heat Pump Dehumidifiers utilise DC fan motors to circulate air, allowing the units to work silently.

- **High Working Efficiency**

The dehumidification volume reaches as much as 3.0 L/h at 30°C ambient temperature and 80% relative humidity.

- **Exclusive Design**

Atecpool Air Dehumidifier provides two exclusive designs. Users can choose the white glass panel or black glass panel casing according to your preference.

- **Ultra-Thin Casing**

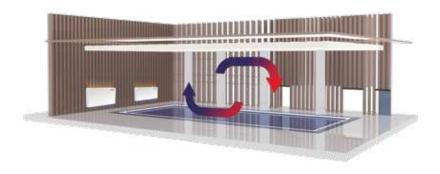
With a compact inner structure our Air Dehumidifiers feature an ultra-thin casing 200mm thick, requiring less space in the pool house.

6

Automatic Temperature Detection

The unit is equipped with a sensor that detects the ambient temperature. If the ambient temperature exceeds 30°C, the unit will automatically shut down to protect the equipment.

Atecpool Air Dehumidifier





Atecpool Air

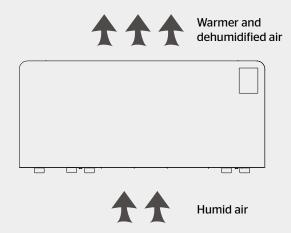
Dehumidifier Specifications

Model	Unit	ATEC22	ATEC35	ATEC45
Rated Capacity	L/h	2.2	3.5	4.5
Dehumidification capacity per day	L	53	70	90
Max pool area	m ²	20	30	40
Air Volume	m³/h	450	600	750
Noise Level	dB(A)	44	46	47
Rated Voltage / Frequency	/	220-240V~/50Hz	220-240V~/50Hz	220-240V~/50Hz
Rated Power Input*	kW	0.9	1.1	1.95
Rated Running Current*	А	4.0	5.0	8.8
Max Power Input	kW	1	1.3	2.3
Max Running Current	А	4.3	5.85	10
Relative Humidity	%RH	40~100	40~100	40~100
Running Ambient Temperature	°C	10~30	10~30	10~30
Dimensions (LxWxH)	mm	1295x202x647	1495x202x647	1695x202x647
Refrigerant	/	R32	R32	R32
Condensation Pipe Diameter	mm	16	16	16
Testing Condition : 30°C Ambient Ter	mperature, 80% R	elative Humidity	I	I

Testing Condition: 30°C Ambient Temperature, 80% Relative Humidity

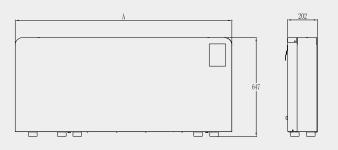
Working principle

The unit works by drawing moist air over a refrigerated coil with a small fan. The cold coil of the refrigeration device condenses the water, which is removed, then the air is reheated by the hot coil. This process works most effectively with higher ambient temperatures with a high dew point temperature.



Dimensions

Code	ATEC22	ATEC35	ATEC45
	(mm)	(mm)	(mm)
Length	1295	1495	1695

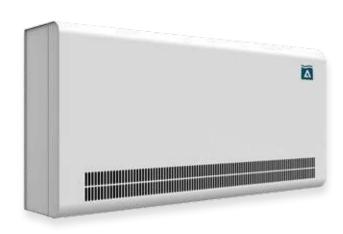


Atecpool SET Dehumidifier

SET 1501-2501-3501 Dehumidifier

Atecpool SET swimming pool dehumidifiers





Atecpool SET swimming pool dehumidifiers

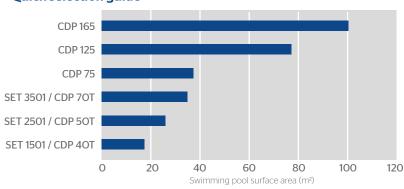
Wall-mounted or floor-standing condensation dehumidifiers have been designed to blend well with any modern pool interior. Offering energy-efficient and near-silent humidity control, the units were conceived with a view to quality and ease of operation. Combined with highly efficient fans and compressors, the advanced remote control and monitoring options contribute to cost-efficient operation and significant energy savings.



Atecpool SET Dehumidifier keyfeatures

- · Low sound level
- Low energy consumption
- Evaporator and condenser coils are epoxy coated
- Metal parts are powder coated before assembly
- Optional remote control
- Integrated control of heating and humidity (ON/OFF)
- BMS Communication (Modbus)
- 230V connection

Quick selection guide



Atecpool SET Dehumidifier Specifications

Specifications	Units	SET 1501	SET 2501	SET 3501
Operating temperature range	°C	10-36	10-36	10-36
Operating humidity range	% RH	40-100	40-100	40-100
Dehumidification rate	L/h	1.45	2.34	3.37
Dehumidification rate at 28°C/60%RH		34	52	72
Air flow	m³/h	400	680	900
Sound pressure level	dB(A)	46	47	50
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Total connected load	kW	0.9	1.5	1.8
Fuse	A	3.8	6.6	8
Product size (w x d x h)	mm	1004x308x695	1154x308x695	1488/308/695
R407C gas weight/C02 equivalent	kg/t	0.7/1.24	0.9/1.60	1.2/2.13
Weight	kg	<u></u> 56.5	65	

Dantherm

Dehumidification

CDP Pool Dehumidification - Efficient dehumidification for aggressive environments

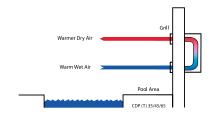
Through-Wall Mounted Version CDP (T) 40/50/70



Through-wall mounted version CDP (T) 35/45/65

Technical data CDP (T) 40/50/70								
	Dehumidification capacity at 28°C / 60% RH I/24h	Air flow (m³/h)	Operating range / humidity %RH	Operating range / temperature (°C)	Weight (kg)			
CDP 40T	29	250	40 - 100	10 - 36	60/57			
CDP 50T	42	500	40 - 100	10 - 36	74/68			
CDP 70T	66	750	40 - 100	10 - 36	101/95			

Dimensions CDP (T) 40/50/70						
	Height (mm)	Width (mm)	Depth (mm)			
CDP 40T	680	890	290			
CDP 50T	680	1192	290			
CDP 70T	680	1735	290			

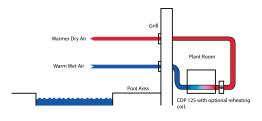


CDP(T) 35/45/65 units are designed for installation in an adjacent room and are supplied with a through-the-wall duct kit with supply and return air grills.

Ducted Version CDP 75/125/165



Ducted version CDP 75/125/165



The humid air from the water's surface passes through a dehumidifier, leaving the supply air drier and several degrees warmer.

Technical data CDP 75/125/165							
	Dehumidification capacity at 28°C / 60% RH I/24h	Air flow (m³/h)	Operating range / humidity %RH	Operating range / temperature (°C)			
CDP 75	74	1500	40 - 100	20 - 38			
CDP 125	124	2500	40 - 100	20 - 38			
CDP 165	162	3600	40 - 100	20 - 38			

Dimensions CDP 75/125/165						
	Heght (mm)	Width (mm)	Depth (mm)	Weight (kg)		
CDP 75	650	1155	725	130		
CDP 125	850	1300	900	160		
CDP 165	975	1400	1010	190		

Flexible installation of the CDP

The CDP units are highly flexible regarding installation. They are designed for installation in plant rooms, with ducted supply and return air grills, but can also be installed directly in the room that needs dehumidification. A range of options are available for the CDP to meet individual requirements, including heating coils, outdoor air connection, wall-mount kit and floor mount kit. The CDP is also available with a water-cooled condenser allowing the excess heat to be used for pool or domestic hot water. The fresh air discharge can be from the top or from the side opposite to the air inlet. Both evaporator and condenser coils are epoxy-coated for higher corrosion resistance.

Features and benefits

- High quality product manufactured to exact standards
- · Low energy consumption and impressive functionality
- Silent operation
- Pleasant design
- Easy to operate and control
- Designed to suit any plant room configuration
- · Epoxy-coated coils

Titanium Electrical Heater

The Thermalec pool and spa heater range

Built using titanium elements, to the same exact standards traditionally associated with Thermalec® heaters, the THR TITANIUM range fulfils all the required electrical safety standards.



Size range from 3kW to 168kW

- Unique spiral flow allows efficient heat removal from the elements, minimising the scale and sediment build up.
- Unique design ensures cooler water from the filter pump does not strike the elements directly (giving longer life).
- Air generated from the pump passes harmlessly around the sides of the baffles and across the top of the heater elements (The heat pumps heat both air and water).
- The control thermostat is positioned to sense the temperature of incoming water and controls the pool to within 1°C.
- The safety thermostat senses the water temperature leaving the heater.
- Thermalec® heaters can be used in conjunction with other heating systems to provide year round heating solutions for your pool or spa.
- Each heater is designed with its own simple self diagnostic system.
- · Heating elements are always submerged.

Standards

Thermalec® pool and Spa heaters are CE marked and comply with:

EU Council Directive 89/336/EEC & 93/068/EEC on Electromagnetic compatibility

EU Council Machinery Directive 98/37/EEC

EU Council Low Voltage Directive 2006/95/EEC & 72/23EEC

Harmonised Standards: EN55014, EN55104, EN5501, EN5502, CEI801-2, CEI801-3 and EN60335-2-35

Control and indication

Water temperature cut-out: Factory set to trip at water outlet temperature of 52°C. Manual reset on front panel

Thermostats: Pressurised liquid filled capillary type

Pool temperature control: Analogue dial, calibrated 15°C to 45°C and graduated at 1°C intervals.

Mains indicator lamps: Red (mains power is on), Amber (filter pump interlock power present).

Status indicator lamps: Red (heater's ON/OFF switch ON), White (safety thermostat trip armed), Amber (pump interlock relay OK), Green (heating elements powered)

Materials of Construction

Heater vessel: Fusion epoxy coated cast iron

Element holding plate: uPVC

Gasket: Silicone rubber

Water connections: uPVC socket

Heater elements: Titanium sheath

Electrical enclosure: Powder coated steel

Operating data

Water inlet/outlet: Socket for 50mm or 2" NB pipe

Max. Water temperature: 52°C heater outlet

Operating pressure: 2.0 bar max. **Ambient temperature:** 40°C max.

Pool temperature control range: 15°C to 45°C

Thermostat operating difference: 0.5 C°

Titanium Electrical Heater

The Thermalec pool and spa heater range - main features

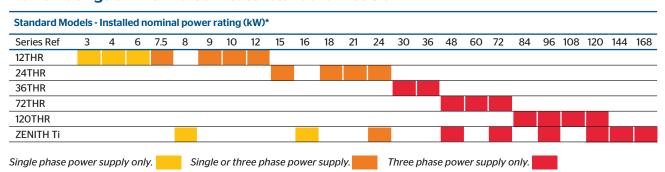
The heaters in the Thermalec® pool and spa heater range are classified in series according to the body size. There are six series in the range. Each series offers a choice of nominal power rating. The following tables summarise the main features of the range and power ratings available in each series.

Feature Series Reference						
	12THR	24THR	36THR	72THR	120THR	ZENITH Ti
Body in robust fusion epoxy coated cast iron	•	•	•	•	•	•
Elements in corrosion resistant titanium	•	•	•	•	•	•
Suitable for sea / salt-water pools and spas	•	•	•	•	•	•
Pressure: tested to 4 bar, operating 2 bar max.	•	•	•	•	•	•
Safety pressure relief valve(s)	•	•	•	•	•	•
Easy installation - uPVC solvent weld sockets	•	•	•	•	•	•
Easy element replacement	•	•	•	•	•	•
Water drain for winterisation or repair	•	•	•	•	•	•
Removable top plate for easy vessel inspection	•	•	•	•	•	•
Water flow direction easy to reverse	•	•	•	•	•	•
Premium quality electrical components	•	•	•	•	•	•
Heavy duty contactors	•	•	•	•	•	•
Power isolation ON/OFF switch	•					
Power isolation circuit breakers		•	•	•	•	•
Filter pump safety interlock	•	•	•	•	•	•
Fused control circuit protection	•	•	•	•	•	•
Liquid filled capillary control and safety thermostats	•	•	•	•	•	•
Two stage temperature controller		-		•	•	•
Time delay switch powers elements in 2 stages		-		•		_
Time delay switch powers elements in 3 stages		-			•	
Time delay switch powers elements in 4 stages						•
At least 6 indicator lamps to monitor operation	•	•	•	•	•	•
Analogue heater outlet water temperature indicator			•	•	•	•
High temperature safety trip with manual reset	•	•	•	•	•	•
Protection in the event of pool filter pump failure	•	•	•	•	•	•
Special design enclosure for spa applications	•					
Enhanced "Deluxe" model available		0	0			
Suitable for fish pond and aquarium use	0	0	0	0	0	0
Special models available for marine, central heating & renewable energy applications	0	0	0	0	0	0
Available for non-standard power supplies	0	0	0	0	0	
CE Mark - compliant with all relevant EU Directives	•	•	•	•	•	•
Two year return-to-base guarantee	•	•	•	•	•	•

• Standard feature

O Available as an option

Power ratings of Thermalec® heater standard models



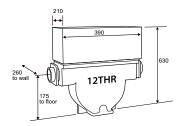
*based on standard power supply 230V/1 ph/50Hz or 400V/3ph/50Hz

Titanium Electrical Heater

12THR Series (3kW - 12kW)



Code	Standard Power Supply: 230V/1ph/50Hz or 400V/3ph/50Hz							
	Load (kW)	Current (Amps) 1-ph/3-ph	Elements (no. x nominal kW)	1-phase version	3-phase version			
12THRX3	3	14/n.a.	1 x 3 kW	Yes	No			
12THRX4	4	17/n.a.	1 x 4 kW	Yes	No			
12THRX6	6	27/n.a.	2 x 3 kW	Yes	No			
12THRX7.5	7.5	33/11	3 x 2.5 kW	Yes	Yes			
12THRX9	9	40/13	3 x 3 kW	Yes	Yes			
12THRX12	12	53/17	3 x 4 kW	Yes	Yes			



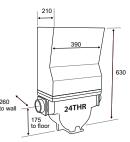
Water Flow Rate Ranges							
	3 kW	4 kW	6 kW	7.5 kW	9 kW	10 kW	12 kW
Max. (hard water) I/min	152	152	152	152	152	152	152
Max. (soft water) I/min	76	76	76	76	76	76	76
Minimum I/min	4.5	6	9	11	14	15	18

Packed dimensions: $425 \times 450 \times 190 \text{mm}$

Packed weight: 26kg

24THR Series (15kW - 24kW)





Code	Standard Power Supply: 400V/3ph/50Hz				
	Load (kW)	Current (Amps)	Elements (no. x nominal kW)		
24THRX15	15	22	6 x 2.5 kW		
24THRX18	18	26	6 x 3 kW		
24THRX21	21	31	3 x 4 kW + 3 x 3 kW		
24THRX24	24	35	6 x 4 kW		

Water Flow Rate Ranges						
	15 kW	18kW	20kW	24kW		
Max. (hard water) I/min	303	303	303	303		
Max. (soft water) I/min	152	152	152	152		
Minimum I/min	23	27	32	36		

Packed dimensions: $730 \times 520 \times 300 mm$

Packed weight: 42kg

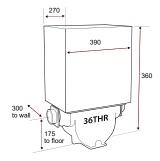
Titanium Electrical Heater

36THR Series (30kW - 36kW)



Code	Standard Power Supply: 400V/3ph/50Hz					
	Load (kW)	Current (Amps)	Elements (no. x nominal kW)			
36THRX30	30	44	3x4 kW + 6x3 kW			
36THRX36	36	53	9x4 kW			

Water Flow Rate Ranges					
	30 kW	36 kW			
Max. (hard water) I/min	300	300			
Max. (soft water) I/min	150	150			
Minimum I/min	46	55			



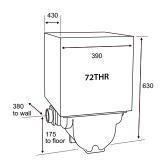
Packed dimensions: 660 x 450 x 330mm Packed weight: 52kg

72THR Series (48kW - 72kW)



Code	Standard Power Supply: 400V/3ph/50Hz						
	Load kW	Current Amps	Elements (no. x nominal kW)				
72THRX48	48	73	12x4 kW				
72THRX60	60	91	15x4 kW				
72THRX72	72	108	18x4 kW				

Water Flow Rate Ranges							
48 kW 60 kW 72 kW							
Max. (hard water) I/min	300	300	300				
Max. (soft water) I/min	150	150	150				
Minimum I/min	73	91	109				



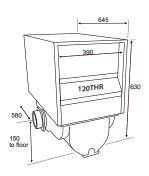
Packed dimensions: $660 \times 450 \times 470 mm$ Packed weight: 81 kg

120THR Series (84kW - 120kW)



Code	Standard Power Supply: 400V/3ph/50Hz					
	Load (kW)	Elements (no. x nominal kW)				
120THRX84	84	122	21x4 kW			
120THRX96	96	140	24x4kW			
120THRX108	108	157	27x4 kW			
120THRX120	120	174	30x4 kW			

Water Flow Rate Ranges						
84 kW 96 kW 108 kW 120 kW						
Max. (hard water) I/min	700	700	700	700		
Max. (soft water) I/min	350	350	350	350		
Minimum I/min	127	146	164	182		



Packed dimensions: $750 \times 580 \times 750 \text{mm}$ Packed weight: 140 kg

Pool Heating

Plate Type Heat Exchangers

Standard Plate Heat Exchangers AISI 316 / AISI 316L

Atecpool offers 'Plate Type Heat Exchangers': copper brazed, semi-welded and all welded plate heat exchangers. Big range of plate type heat exchangers. Atecpool has the optimal technical solution for any possible task, with connection sizes from Ø15mm - Ø500mm, covering a liquid flow of 50L/hours - 2000 m³/hour.



Hightlights:

- · High operation safety
- Exact energy-transfer
- · Low running costs
- · Energy saving
- · Environmentally-friendly

Advantages

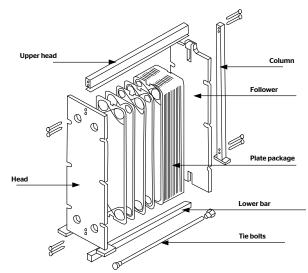
- The plates and plate patterns are constructed to maintain a high thermal efficiency with a low pressure drop
- There are two pattern designs available with different pressing angles giving respectively high/low turbulence flow, dependant on the given selection
- The inlet channels allow for maximum strength in the inlet area, whilst maintaining minimal contact points, reducing blockage at the flow distribution zone
- The inlet design ensures even distribution of the liquids across the heating surface
- The gasket is placed in a dedicated retaining gasket groove. This secures the elasticity of the gasket even after a long time of compression

Plate Design

The construction of the inlet part makes for a perfect distribution of the liquids across the heating surface. The inlet part is increased and supplied with grooves preventing "dead spots" which could cause the growth of bacteria in the plate heat exchanger. The inlet with grooves secures a strong inlet part with a minimum number of contact points.

The inlet parts are constructed with a leakage drain zone fulfilling the AAA specifications.

The heat transfer plates are designed with a gap between plates up to 11mm depending on the plate type. This is because the pattern of the plate pressing has horizontal waves maintaining no "plate contact points" in the flow direction, the flow channels remain free of obstacles allowing the media/particles to flow freely.



Note: Please ask for selection of Heat Exchanger for your pool. Selection chart/datasheet on request.





ATECPOOL

WATER

TREATMENT



