

# 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
- Gas boilers replacement
- Dairy Requirement Sterilization
- Sewage Treatment
- Desalination Plants



**High COP**

**Various Applications**

**Higher ROI**

**More Reliable**

**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 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.

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### 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.

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### Atecpool Climatic Water Source Heat Pump Specification



Specification		Model / Code			
		ATWSHP210	ATWSHP230	ATWSHP270	
Heating Capacity*	kW	33.6	67.1	134.2	
Cooling Capacity*	kW	25.5	50.9	101.9	
Power Input*	kW	7.9	15.8	31.6	
COP*	W	4.24	4.24	4.24	
EER*	W	3.16	3.20	3.22	
Heating Capacity**	kW	28.9	57.8	115.6	
Cooling Capacity**	kW	18.9	37.8	75.6	
Power Input**	kW	10.4	20.8	41.7	
COP**	W	2.77	2.77	2.77	
EER**	W	1.78	1.81	1.82	
Max. Power Input	kW	15	25	46	
Max. Running Current	A	25	45	90	
Power Supply	V / Ph / Hz	380~415V/3N~/50Hz			
CompressorType		Copeland ZW150KBE-TFP-522 Scroll Compressor			
Compressor Quantity		1	2	4	
Evaporator	Type	Tube in Shell Heat Exchanger			
	Water Flow	m³/h	5.0	10.0	20.0
	Water Pressure Drop	kPa	20.4	38.6	54.5
	Water Connection		DN32	DN80	DN80
Condenser	Type	Tube in Shell Heat Exchanger			
	Water Flow	m³/h	4.6	9.1	18.2
	Pressure Drop	kPa	16.5	30.9	41.5
	Water Connection		DN32	DN80	DN80
Noise	dB(A)	65.0	68.0	69.0	
Refrigerant		R134A			
Controller		Multi-function Controller			
Display		5 Inch Colorful Touch Display			
Max Outlet Water Temperature	°C	80			
Cabinet		Eco-friendly Galvanized Metal / Stainless Steel for option			
Net Weight	kg	202	441	866	
Net Dimensions (L/W/H)	mm	1030 / 640 / 730	1172 / 900 / 1365	1600 / 1130 / 1500	
Shipping 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