The latest advancement in swimming pool heating, Electroheat heat pump extracts latent heat from the surrounding air, intensifies it and transfers it to your swimming pool.

Electroheat heat pumps are an energy efficient way to heat your pool and extend your swimming season.

- Energy efficient heating
- Temperature management & self-diagnosis
- High density titanium heat exchanger
- Weather proof cabinet
- Titanium Heat Exchanger
Energy efficient heating

A swimming pool is a major financial investment. Getting the most out of your pool, means keeping the pool at a swimmable temperature for the maximum number of hours in each day and the maximum number of days in each year.

A heat pump will economically keep your pool warm 24 hours a day.

Compared to gas and electric heaters, Electroheat uses just a fraction of the energy to generate the same amount of heat and unlike solar heating; there is no reliance on the sun as the latent heat in the air is used.

How the Electroheat works

Electroheat uses refrigeration technology to extract heat from the surrounding air and transfers it to the swimming pool.

**Step 1 Heat extraction**
The fan circulates air through the evaporator air coil that acts as a heat collector. The liquid refrigerant in the evaporator air coil absorbs the available heat from the ambient air.

**Step 2 Heat Intensification**
The compressor then receives the warmed refrigerant and intensifies the heat. The intensely hot refrigerant is then pumped into the heat exchanger.

**Step 3 Heat Transfer**
The heat from the hot refrigerant flowing inside the heat exchanger is then transferred to the pool water.

**Step 4 Recycle**
The refrigerant restarts the process and flows through the evaporator air coil to collect heat once again.

1. Warm air in
2. Fan
3. Evaporator
4. Warm gas
5. Cool air out
6. Compressor
7. Heat exchanger
8. Filter
9. Water Pump
10. Pool

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**Diagram:**
- **1. Warm air in**
- **2. Fan**
- **3. Evaporator**
- **4. Warm gas**
- **5. Cool air out**
- **6. Compressor**
- **7. Heat exchanger**
- **8. Filter**
- **9. Water Pump**
- **10. Pool**
Cost effective heating
Heat pumps only require energy to operate a compressor and a fan motor, using low amperage in the process.

The Electroheat produces over 4 times more heat energy than the electrical power it consumes.

For every 1kW of electricity consumed, Electroheat can produce over 4 kW of heat.

Save up to 80% over propane gas, 50% over natural gas and 500% over electric heaters.

Inbuilt protection devices
The integrity and performance of your pool heater and its components are protected by built-in safety devices

- **Auto defrost control** to eliminate frost on the evaporator.
- **Auto flow switch** to shutdown the system in the event of no water flow.
- **High / Low pressure refrigerant auto reset** to shutdown the system in the event of low or high refrigerant pressure
- **Compressor protection** via a time delay to allow the refrigerant to equalise before the compressor starts/restarts.

Electroheat MKII
Incorporating the latest smart technology and long lasting components, Electroheat is designed and built for trouble free operation.

Simply program your desired pool water temperature and let the Electroheat do the rest.

Temperature management & self-diagnosis
Electroheat’s LED control panel provides a continuous digital pool temperature display and incorporates a self diagnosis system. In the event of a problem, the control panel will display diagnostic error codes.

Titanium heat exchanger
Titanium heat exchangers have a longer life expectancy than standard copper heat exchangers. Titanium offers total protection against erosion and corrosion, it is resistant to: chlorinated water, ozone, iodine, Baquacil, bromine and salt water.
Powerful heat transfer
The exclusive design of the Electroheat's heat exchanger creates an unmatched and powerful heat transfer source. Surface area contact with the heat exchanger is maximised by circulating water through its condenser tubes.

Efficient scroll compressor
Electroheat's are powered by a Scroll compressor, the most powerful, energy efficient compressors on the market and most importantly they are also the quietest.

Extra large evaporator area
Electroheat has an extra large evaporator allowing it to extract more heat from the outside air maximising the heat pump's performance and efficiency.

Note: Applicable to Electroheat Plus models only

Weather proof cabinet
The Electroheat's cabinet is constructed of heavy-duty UV-resistant proof ABS body panels that are impervious to rust, corrosion and deterioration.

Quick and easy installation
Simply connect the pool return line to and from the heat pump and connect the power source.

Please note: Electroheat is designed for outdoor installation and should not be installed in enclosed areas such as a shed or garage, unless mechanical ventilation is provided to ensure adequate air exchange for proper operation.

5 year warranty
Electroheat is covered by a 5 (2+3) year warranty for residential installations and a 1 year warranty for commercial installations.
Electroheat heat pumps have a lower heating capacity on a BTU/hr basis compared to fossil fuel based pool heaters such as gas heaters. Therefore, Electroheat heat pumps require longer operation to accomplish the desired temperature.

Between 10°C to 18°C, it will increase your water temperature by 3°C to 5.5°C a day. Over 21°C you should obtain an increase up to 0.8°C a hour and over 26°C up to 1.1°C an hour depending on the size of the pool, the size of the heat pump, the water temperature, and the ambient air temperature at the moment of operation.

Even though the Electroheat may require longer operation, it will still heat the pool far more economically.

How does Electroheat compare with solar heating and gas heating?

**Solar**
- Fuelled by the power of the sun, solar heating systems are a low-cost, method of heating up your pool water.
- As solar heating is reliant on the sun, they are best used to extend the swimming season.
- Virtually no operating costs, just the cost of electricity to pump the pool water through the solar absorber on the roof.

**Gas heaters**
- Gas heaters are fastest method for heating your pool, providing a comfortable temperature for swimming on demand. Gas is best for heating pools or spas for short periods of time.
- Gas heaters can easily maintain any desired temperature regardless of the weather.
- Gas heaters are effective, but expensive to operate.

**Heat pumps**
- Heat pumps may not heat up the swimming pool as fast as gas heaters, but they are a more energy efficient.
- Heat pumps require a small amount of electricity; its heat energy source is extracted from the ambient air.
# Sizing chart to heat your pool to 28º C

**Temperate Location**

<table>
<thead>
<tr>
<th>Pool Size (M)</th>
<th>Litres with</th>
<th>12hrs / Day Runtime</th>
<th>14hrs / Day Runtime</th>
<th>12hrs / Day Runtime</th>
<th>14hrs / Day Runtime</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 7</td>
<td>Up to 35000</td>
<td>55</td>
<td>80</td>
<td>55</td>
<td>55</td>
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<tr>
<td>3.5 x 7</td>
<td>Up to 38000</td>
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<td>105</td>
<td>55</td>
<td>80</td>
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<td>4 x 8.5</td>
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<td>55</td>
<td>125</td>
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<td>5 x 10</td>
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<td>85</td>
<td>150</td>
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<tr>
<td>5.5 x 11</td>
<td>Up to 95000</td>
<td>125</td>
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<tr>
<td>6 x 12</td>
<td>Up to 114000</td>
<td>150</td>
<td>see dealer</td>
<td>125</td>
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<tr>
<td>6 x 15</td>
<td>Up to 133000</td>
<td>see dealer</td>
<td>see dealer</td>
<td>150</td>
<td>see dealer</td>
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</tbody>
</table>

*Temperate location: Where minimum average daytime temperatures between September to May are not less than 18˚C

*Warm location: Where minimum average daytime temperatures between September to May are not less than 26˚C

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## Technical Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Electroheat 55 Mk II</th>
<th>Electroheat 80 MkII</th>
<th>Electroheat Plus 85 MkII</th>
<th>Electroheat Plus 105 MkII</th>
<th>Electroheat Plus 125 MkII</th>
<th>Electroheat 150 MkII</th>
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<tbody>
<tr>
<td>Nominal Heating Capacity (btu)*</td>
<td>55,000</td>
<td>80,000</td>
<td>85,000</td>
<td>105,000</td>
<td>120,000</td>
<td>150,000</td>
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<td>Power Output (kw)</td>
<td>16</td>
<td>23</td>
<td>25</td>
<td>31</td>
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<td>Supply Voltage (VAC)</td>
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<td>240</td>
<td>240</td>
<td>415</td>
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<td>Supply Voltage Phase</td>
<td>Single Phase</td>
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<td>Single Phase</td>
<td>Three Phase</td>
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<td>Power Consumption (kW/h)</td>
<td>4.2</td>
<td>6.8</td>
<td>6.5</td>
<td>6.5</td>
<td>7.2</td>
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<td>Unit Running Amperage (AMP)</td>
<td>17.4</td>
<td>29.4</td>
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<td>Fan Full Load Amps (FLA)</td>
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<td>Breaker or Fuse (AMP)</td>
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<td>Min. / Max. Ambient Air Temperature (C)</td>
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<td>12 - 40</td>
<td>12 - 40</td>
<td>12 - 40</td>
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<td>12 - 40</td>
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<tr>
<td>Min. / Max Water inlet temp (C)</td>
<td>14/40</td>
<td>14/40</td>
<td>14/40</td>
<td>14/40</td>
<td>14/40</td>
<td>14/40</td>
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<tr>
<td>Water Connections (mm)</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
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<tr>
<td>Min / Max Water Flow Rate LPM</td>
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<td>170 - 200</td>
<td>170 - 200</td>
<td>170 - 200</td>
<td>170 - 200</td>
<td>170 - 200</td>
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<tr>
<td>Weight (kg)</td>
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<td>78</td>
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<tr>
<td>Dimensions A x B x C (mm)</td>
<td>735 x 560 x 815</td>
<td>915 x 610 x 865</td>
<td>750 x 850 x 1000</td>
<td>890 x 880 x 1130</td>
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Dimensions

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<th>Model</th>
<th>A (mm)</th>
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<tr>
<td>Electroheat Plus MK II 85</td>
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<td>850</td>
<td>1000</td>
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<td>Electroheat Plus MK II 105</td>
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<td>1130</td>
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<td>Electroheat Plus MK II 125</td>
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<td>880</td>
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</tr>
<tr>
<td>Electroheat Plus MK II 150</td>
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<td>Electroheat MK II 55</td>
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Established since 1981, Waterco is an Australian public listed company involved in the manufacture and distribution of:

- Swimming pool/spa equipment and chemicals
- Domestic water filters, softeners and purifiers
- Commercial and Industrial water treatment equipment.

The company’s advanced fibreglass winding and pioneering plastic moulding techniques have delivered premium quality products to over 40 countries via its branches operating in Australia, New Zealand, Malaysia, Singapore, China, the United Kingdom, United States of America, Canada and Indonesia.