

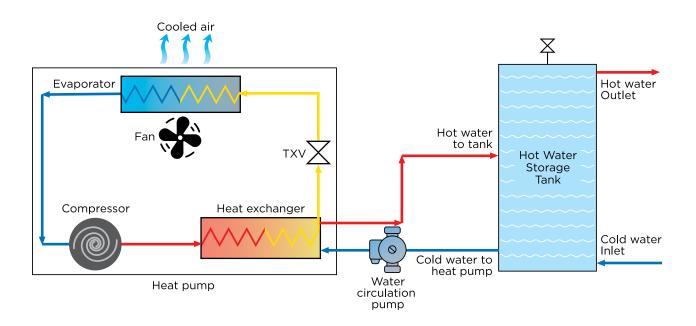
# **HOT WATER SYSTEM**







Electroheat Hot Water System (HWS) adopts heating methodology via ambient air source. With air possesses excellent trait in absorbing and transferring energy, the HWS is a highly efficient mean of water heating. Due with its low operating cost, the power consumption of HWS makes up only a minimal portion of the power utilized by conventional heating approach such as natural gas and electric. HWS also resulted in little carbon emission, which makes it an environmentalfriendly method of producing hot water.



Electroheat HWS is a cost effective heating solution to cater the need of hot water in household, hospitality, healthcare and food processing sector. The energy saving technology adopted by HWS utilizes minimal energy to produce great amount of heat.



# Cost effective heating

 The heating load utilized by HWS only lies from operating the compressor and fan with low amperage. In comparison to other means of heating water, Waterco HWS saves up to 83% over propane gas, 58% over natural gas and more than 500% over electric heaters in terms of power consumption.



## **Energy efficient heating**

 Waterco HWS only uses portion of the energy used by gas and electric heaters to produce the same amount of heat.
Unlike solar heating, the HWS does not rely on the presence of sunlight for heat.



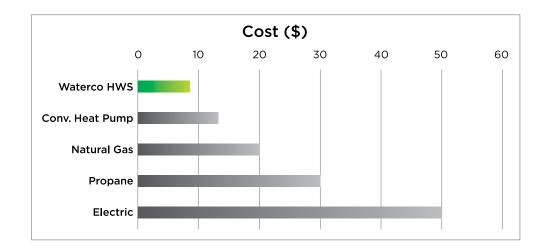
## **Environmentally-friendly**

• The R417a used in the HWS as heating media is a high performance refrigerant, and at the same time being Ozone-friendly as compared to other conventional refrigerants.



#### Hot water on demand

• Storing of heated water inside a tank assures the availability of hot water for various application.





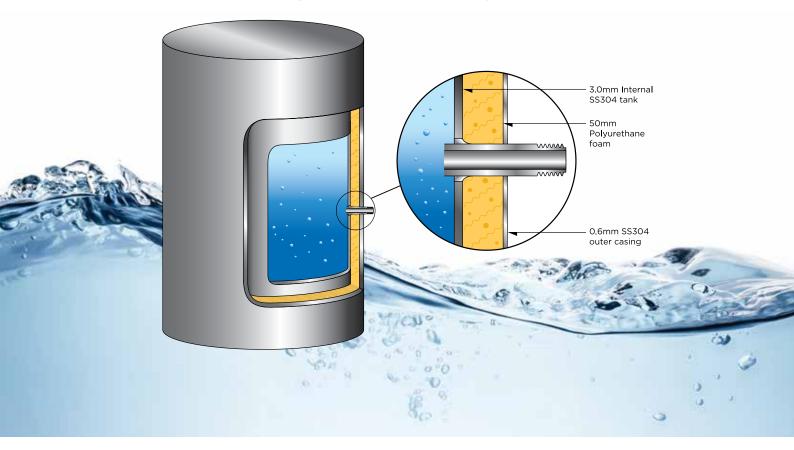
| Specifications            |            |               |   |               |  |  |  |  |  |  |
|---------------------------|------------|---------------|---|---------------|--|--|--|--|--|--|
| Model                     | HWS 9.5 kW | HWS 20 kW     | HWS 40 kW                               |               |  |  |  |  |  |  |
| Heating Capacity          | kW         | 9.5           | 20                                      | 40            |  |  |  |  |  |  |
| Power Supply              | V/Ph/Hz    | 240/1/50      | 415/3/50                                | 415/3/50      |  |  |  |  |  |  |
| Input Power               | kW         | 2.3           | 4.9                                     | 9.8           |  |  |  |  |  |  |
| Running Current           | А          | 12.46         | 8.77                                    | 17.54         |  |  |  |  |  |  |
| Max. Input Power          | kW         | 3.26          | 6.86                                    | 13.72         |  |  |  |  |  |  |
| Max. Running Current      | А          | 17.44         | 12.28                                   | 24.55         |  |  |  |  |  |  |
| Refrigerant               |            | R417a         | R417a                                   | R417a         |  |  |  |  |  |  |
| Compressor Type           |            | Rotary        | Scroll                                  | Scroll        |  |  |  |  |  |  |
| Compressor Quantity       |            | 1             | 1                                       | 2             |  |  |  |  |  |  |
| COP Air 28°C/Water 30°C   |            | 6             | 6                                       | 6             |  |  |  |  |  |  |
| COP Air 28°C/Water 35°C   |            | 5.5           | 5.5                                     | 5.5           |  |  |  |  |  |  |
| COP Air 28°C/Water 40°C   |            | 5.1           | 5.1                                     | 5.1           |  |  |  |  |  |  |
| COP Air 28°C/Water 50°C   |            | 4.6           | 4.6                                     | 4.6           |  |  |  |  |  |  |
| COP Air 28°C/Water 55°C   |            | 4.1           | 4.1                                     | 4.1           |  |  |  |  |  |  |
| Outlet Water Temp         | °C         | 60            | 60                                      | 60            |  |  |  |  |  |  |
| Max. Outlet Water Temp    | °C         | 65            | 65                                      | 65            |  |  |  |  |  |  |
| Hot Water Yield           | L/h        | 204           | 430                                     | 860           |  |  |  |  |  |  |
| Water Flow                | m³/h       | 2.0           | 4.3                                     | 8.6           |  |  |  |  |  |  |
| Air Flow                  | m³/h       | 3000          | 7000                                    | 14000         |  |  |  |  |  |  |
| Condenser                 |            | Tube in shell |   |               |  |  |  |  |  |  |
| Condenser material        |            | Copper Inn    | Copper Inner Tube, Carbon Steel Housing |               |  |  |  |  |  |  |
| Water Pressure Drop       | kPa        | 40            | 55                                      | 55            |  |  |  |  |  |  |
| Water Connection Tube     | mm         | DN25          | DN25                                    | DN40          |  |  |  |  |  |  |
| Noise                     | dB (A)     | <55           | <57                                     | <61           |  |  |  |  |  |  |
| Electric Protection       |            | 1             | I                                       | I             |  |  |  |  |  |  |
| Mechanical Protection     |            | IPX4          | IPX4                                    | IPX4          |  |  |  |  |  |  |
| Net/Gross Weight          | kg         | 87/130        | 139/157                                 | 268/316       |  |  |  |  |  |  |
| Dimension (LxWxH)         | mm         | 752x690x765   | 752x690x965                             | 1450x702x1260 |  |  |  |  |  |  |
| Packing Dimension (LxWxH) | mm         | 840x750x900   | 840x750x1100                            | 1525x805x1420 |  |  |  |  |  |  |

| STORAGE TANK SPECIFICATIONS |             |        |            |              |                  |               |                   |                    |  |  |  |  |
|-----------------------------|-------------|--------|------------|--------------|------------------|---------------|-------------------|--------------------|--|--|--|--|
| Volume                      | Dimension   |        | Thickness  |              | <u> </u>         | _             | Backup            | Backup             |  |  |  |  |
|                             | O. Diameter | Height | Inner Tank | Outer Casing | Tank<br>Material | Dry<br>Weight | Heater<br>Rating* | Heater<br>Material |  |  |  |  |
|                             | (mm)        | (mm)   | (mm)       | (mm)         |                  |               |                   |                    |  |  |  |  |
| 500 L                       | 700         | 1900   | 1.5        | 0.5          | SS304            | 90 kg         | 9 kW              | SS316L             |  |  |  |  |
| 1000 L                      | 900         | 2100   | 3.0        | 0.6          | SS304            | 200 kg        | 9 kW              | SS316L             |  |  |  |  |
| 2000 L                      | 1200        | 2200   | 3.0        | 0.6          | SS304            | 300 kg        | 18 kW             | SS316L             |  |  |  |  |

<sup>\*</sup>Available with or without backup heater



Diagram of hot water storage tank



Images shown are the 9.5 kW and 20 kW HWS. Specifications and dimensions of the 40 kW HWS can be referred to the specification data.

#### **OFFICES - AUSTRALIA**

NSW - Sydney (Head Office)

Tel: +61 2 9898 8600

QLD - Brisbane

Tel: +61 7 3299 9900

VIC/TAS - Melbourne

Tel: +61 3 9764 1211

WA - Perth

Tel: +61 8 9273 1900

SA/NT - Adelaide Tel: +61 8 8244 6000

**ACT Distribution** Tel: +61 2 6280 6476

#### **OFFICES - OVERSEAS**

Waterco (Europe) Limited Sittingbourne, Kent. UK Tel: +44 (0) 1795 521 733

Waterco (USA) Inc Augusta, Georgia, USA

Tel: +1 706 793 7291

**Waterco Canada** Boucherville, Quebec, Canada Tel: +1 450 748 1421

Waterco (NZ) Limited

Auckland, New Zealand Tel: +64 9 525 7570

Waterco (C) Limited

Guangzhou, China Tel: +86 20 3222 2180

PT Waterco Indonesia

Jakarta, Indonesia Tel: +62 21 4585 1481

Waterco Singapore Intl Pte Ltd

Nehsons Building, Singapore

Tel: +65 6344 2378

Waterco (Far East) Sdn Bhd Selangor, Malaysia Tel: +60 3 6145 6000





Distributed by:





