

# Kwikpump

**DOMESTIC HEAT PUMPS**



*Supreme*



*Standard*

HEATS WATER  
AT A **1/3**  
OF THE COST

DOMESTIC ELECTRIC HEAT PUMP SYSTEM FOR WATER HEATERS

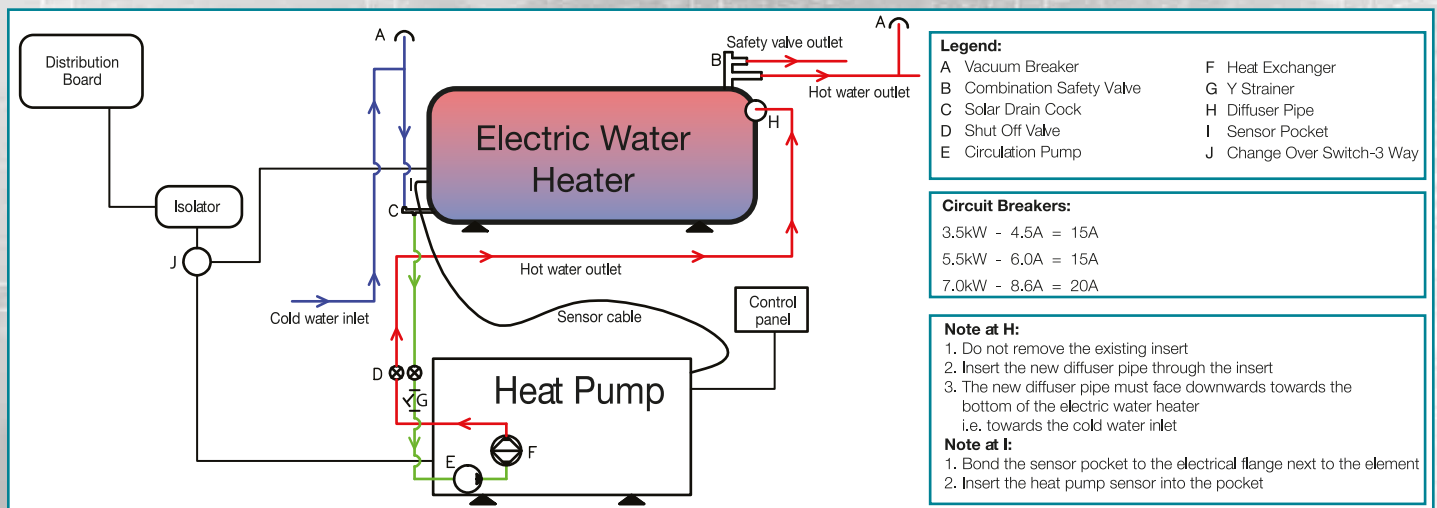
## working principle of a heat pump system

Electricity consumption is only used to transfer heat from the surrounding environment, such as air. The heat pump has the ability to absorb heat (not create heat) and transfer heat by means of a refrigerant, which captures the heat in the ambient air and transfers it to heat water.

The fan on the heat pump circulates air through the outer evaporator that acts as a heat collector. The liquid refrigerant in the evaporator absorbs the available heat in the ambient air, transforming it into refrigerant. The refrigerant is then pumped into a compressor. When this warmed refrigerant is compressed, it intensifies or concentrates the heat, similar to a magnifying glass to the sun.

This intensely hot refrigerant is then pumped into a heat exchanger condenser where the actual heat transfer takes place. As the water passes through the heat exchanger, the hot gas gives up its heat to the cooler water. The refrigerant returns to a liquid state and is pumped through an expansion valve and then into an evaporator air coil, which starts the process all over again.

## installation diagram of a heat pump system

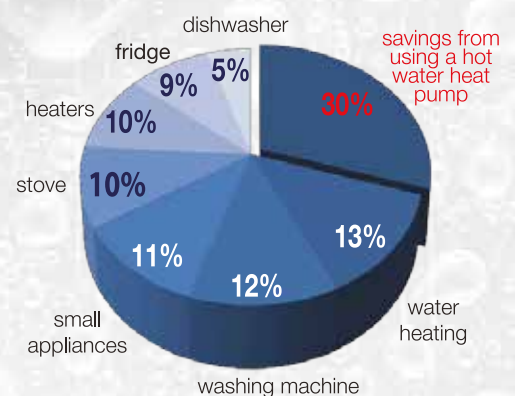


## heat pump energy saving

Heat pumps are one of the most efficient hot water heating systems available, as they utilise the solar heat stored in the surrounding environment. This free environment energy provides approximately 75% of the heat pumps heating energy and only approximately 25% of external energy is required in the form of electricity, in order to achieve a heat output of 100%.

## heat pump product features

- Domestic application in households to heat water in electric geysers and solar water heaters.
- Can be used for other applications where hot water is readily used, such as hairdressing salons and spas.
- Works in all weather conditions and even at night.
- Micro -computer controlled with timer function, the heat pump automatically starts up and stops according to the water temperature and the temperature setting.
- Super sized evaporator coil with high efficiency hydrophilic aluminium fin and inner grooved copper pipe, provide higher performance in cold weather conditions.
- High efficiency heat exchanger.
- Provides the same amount of hot water at a third of the cost than other water heaters.
- Environmentally friendly, free of pollutions thereby reducing global green house effects.






# Kwikpump

**DOMESTIC HEAT PUMPS**

## features between metal casing and ABS casing units

|  |   |  |                 | ADVANTAGES ABS CASING         |
|---|---|---|-----------------|-------------------------------|
| STANDARD<br>(Metal Casing)  |   | SUPREME<br>(ABS Casing)   |                 |                               |
| Bottom sheet;<br>frame & bracket  | Galvanised steel sheet<br>powder coated | Stainless steel 201<br>powder coated  |                 | Rust Preventative and Durable |
| Front; back &<br>side grid  | Normal steel with<br>powder painting    |   |                 |                               |
| Cabinet   | Galvanised steel sheet<br>powder coated |   |                 |                               |
| Water Pump  | Grundfos Plastic<br>Blade Pump          |   | For Harsh Water |                               |

## heat pump product specification data

| DOMESTIC HEAT PUMPS               |                       |           |             |
|-----------------------------------|-----------------------|-----------|-------------|
| <b>Product Code: Standard</b>     | HP-003                | HP-005    | HP-007      |
| <b>Product Code: Supreme</b>      | HP-003PC              | HP-005PC  | HP-007PC    |
| <b>Heating Capacity</b>           | 3.5kW                 | 5.5kW     | 7.0kW       |
| <b>Water Heater Size</b>          | 100/150lt             | 200/250lt | up to 450lt |
| <b>Rated Power Input</b>          | 900W                  | 1.5kW     | 1.85kW      |
| <b>Rated Current</b>              | 4.5 A                 | 6.0 A     | 8.6 A       |
| <b>Hot Water Output</b>           | 75lt/h                | 110lt/h   | 150lt/h     |
| <b>Net Weight</b>                 | 48kg                  | 55kg      | 58kg        |
| <b>Dimensions</b>                 | 885mm x 360mm x 600mm |           |             |
| <b>Power Supply</b>               | 220-240V/1P/50Hz      |           |             |
| <b>Fan Direction</b>              | Horizontal            |           |             |
| <b>Heat Exchanger</b>             | Shell and Tube        |           |             |
| <b>Refrigerant Gas</b>            | R407C                 |           |             |
| <b>Max. Water Temp.</b>           | 55°C                  |           |             |
| <b>Air Temperature</b>            | -10°C to 43°C         |           |             |
| <b>Water Connection</b>           | 3/4" BSP Female       |           |             |
| <b>IPX Rating</b>                 | IPX4                  |           |             |
| <b>Intelligent Defrosting</b>     | Yes                   |           |             |
| <b>Electronic Expansion Valve</b> | Yes                   |           |             |
| <b>Noise Level</b>                | <50db (A)             |           |             |



# Kwikpump

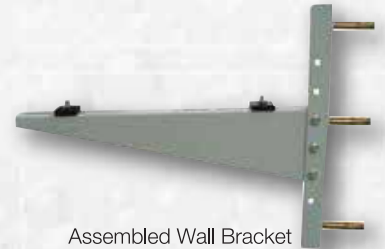
DOMESTIC HEAT PUMPS



Supreme



Standard



Assembled Wall Bracket



Safety Combination Valve



Drain Cock Combination Valve

## product installation data

- The heat pump is for an outdoor installation and the space for the installation must be well ventilated.
- The installation position should allow for water discharge from the heat pump.
- For a ground level installation, the surface area must be hard, smooth and even in order to prevent any vibration.
- The heat pump can alternatively be installed on a wall by using the provided wall-mounting brackets and components.
- The connecting of the heat pump to the electrical power source, must be undertaken by a qualified electrician. Offer a separate power point, which meets the rated requirements for the heat pump. Do not use the main power switch to control the switching on and off of the heat pump.
- The components on the right, are to be installed.



2 x Lever Ball Valves

## product warranty

- The heat pump has a two-year warranty period from date of installation, provided that the warranty reply card has been correctly completed and submitted to Kwikot.
- The Warranty only applies to defects, which have arisen solely due to faulty materials and workmanship during the manufacturing process.
- If any component falls over the Warranty period, the heat pump will be removed from the installation and be taken away for repair and then re-installed once the repair work has been carried out. The piping from the heat pump to the water heater will be sealed off by the technician, so that the water heater can operate without the heat pump.
- The Warranty on the installation is carried by the installer.



Y - Strainer



Sensor Pocket



Diffuser Pipe

## kwikot branch contact details:

### kwikot (pty) ltd inland division

PO Box 1016, Benoni, 1500  
Tel: (011) 897 4600

**Domestic Sales**  
email: sales.inland@kwikot.com  
**AFTER SALES SERVICE TEL:**  
0861 KWIKOT (594568)

**Export Sales:**  
email: sales.export@kwikot.com

**Information:**  
email: heatpumps.info@kwikot.com  
email: marketing.info@kwikot.com

**Technical:**  
email: technical.heatpumps@kwikot.com

### kwikot (pty) ltd eastern cape division

PO Box 29142, Sunridge Park, Port Elizabeth, 6008  
Tel: (041) 399 4000  
Fax: (041) 367 1005

**Domestic Sales**  
Email: sales.easterncape@kwikot.com

### kwikot (pty) ltd western cape division

PO Box 32072, Ottery, Cape Town, 7808  
Tel: (021) 690 2700  
Fax: (021) 690 2800

**Domestic Sales**  
Email: sales.westerncape@kwikot.com

### kwikot (pty) ltd kwazulu-natal division

P O Box 47366, Greyville, Durban, 4023  
Tel: (031) 574 8700  
Fax: (031) 574 8750

**Domestic Sales**  
email: sales.kwazulunatal@kwikot.com

**Kwikot, first in mind, first in absolute peace of mind**

[www.kwikot.com](http://www.kwikot.com)