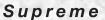
DOMESTIC ELECTRIC HEAT PUMP SYSTEM FOR WATER HEATERS











Standard

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OF THE COST



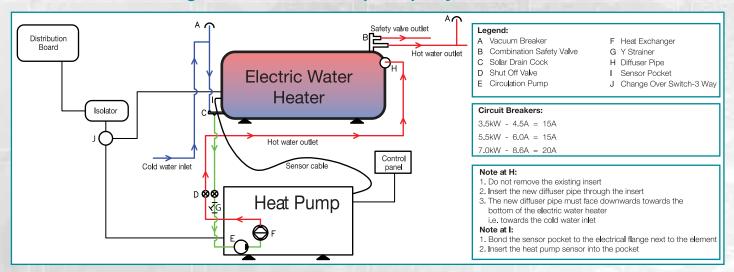
working principle of a heat pump system

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

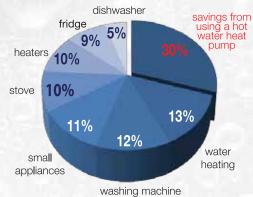


heat pump energy saving

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.







features between metal casing and ABS casing units

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

heat pump product specification data

ndard	HP-003	HP-005

Product Code: Star HP-007 HP-005PC HP-007PC **Product Code: Supreme** HP-003PC **Heating Capacity** 3.5kW 5.5kW 7.0kW **Water Heater Size** 100/150lt 200/250lt up to 450lt **Rated Power Input** 900W 1.5kW 1.85kW **Rated Current** 4.5 A 6.0 A 8.6 A **Hot Water Output** 110lt/h 150lt/h 75lt/h **Net Weight** 55ka 48kg 58ka

DOMESTIC HEAT PUMPS

Dimensions

Power Supply

Fan Direction

Heat Exchanger

Refrigerant Gas

Max. Water Temp.

Air Temperature

Water Connection

IPX Rating

Intelligent Defrosting

Electronic Expansion Valve

Noise Level

885mm x 360mm x 600mm

220-240V/1P/50Hz

Horizontal

Shell and Tube

R407C

55°C

-10°C to 43°C

³/₄" BSP Female

IPX4

Yes

Yes

<50db (A)











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.

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.

2 x Lever Ball Valves







kwikot branch and website addresses:

kwikot (pty) ltd inland division

PO Box 1016 Benoni 1500 Tel: (011) 897 4600 Fax: (011) 914 4750 **Domestic Sales**

Domestic Sales

AFTER SALES SERVICE TEL:

0861 KWIKOT (594568)

email: sales inland@kwikot.com

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

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, 6008 Tel: (041) 399 4000 Fax: (041) 367 1005

Domestic Sales Email: sales.easterncape@kwikot.com

kwikot (pty) ltd western cape division

PO Box 443, Eppindust, 7475 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, 4023 Tel: (031) 574 8700 Fax: (031) 574 8750 **Domestic Sales**

email: sales.kwazulunatal@kwikot.com