

Kwikpump

INTEGRATED DOMESTIC HEAT PUMPS



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

DOMESTIC ELECTRIC INTEGRATED HEAT PUMP SYSTEM



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A Kwikot Kwikpump Integrated Domestic Heat Pump is a combination of a hot water cylinder without a conventional electric element and with an energy-efficient heat pump mounted on top of the cylinder. The primary use is for domestic household application and also to supply hot water to small businesses such as hairdressing salons and spas. Available in 200lt and 300lt units.

integrated heat pump product features

- The inner cylinder is manufactured from Duplex Stainless Steel, providing longevity and hygiene.
- Polyurethane insulation between the inner cylinder and outer casement reduces heat loss.
- Aesthetically appealing appliance white casement.
- A vertical air discharge heat pump with highly efficient heat exchanger.
- Includes a micro-computer with timer and temperature functions, which automatically starts and stops the heat pump according to the water temperature and the timer setting.
- Space saving due to the integration of the cylinder and heat pump.
- Works in all weather conditions and at night.
- Environmentally friendly thereby reducing global greenhouse effects.



available in 200lt and 300lt

working principle of an integrated heat pump system

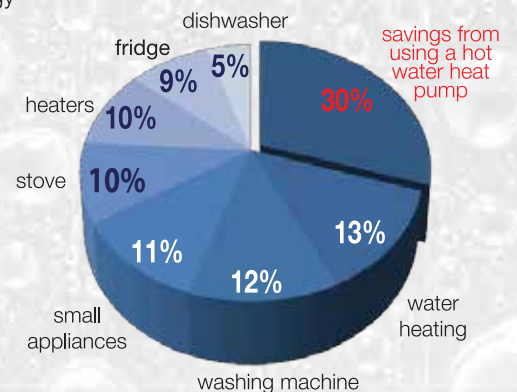
Electricity consumption is only used to transfer heat from the surrounding environment, such as air. The heat pump has the ability to absorb heat (not create heat) and transfer heat by means of a refrigerant, which captures the heat in the ambient air and transfers it to heated water.

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 gaseous refrigerant. The refrigerant gas is then pumped into a compressor. When this warmed refrigerant gas is compressed, it intensifies the heat.

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.

integrated 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 environmental 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%.



micro-computer with timer function



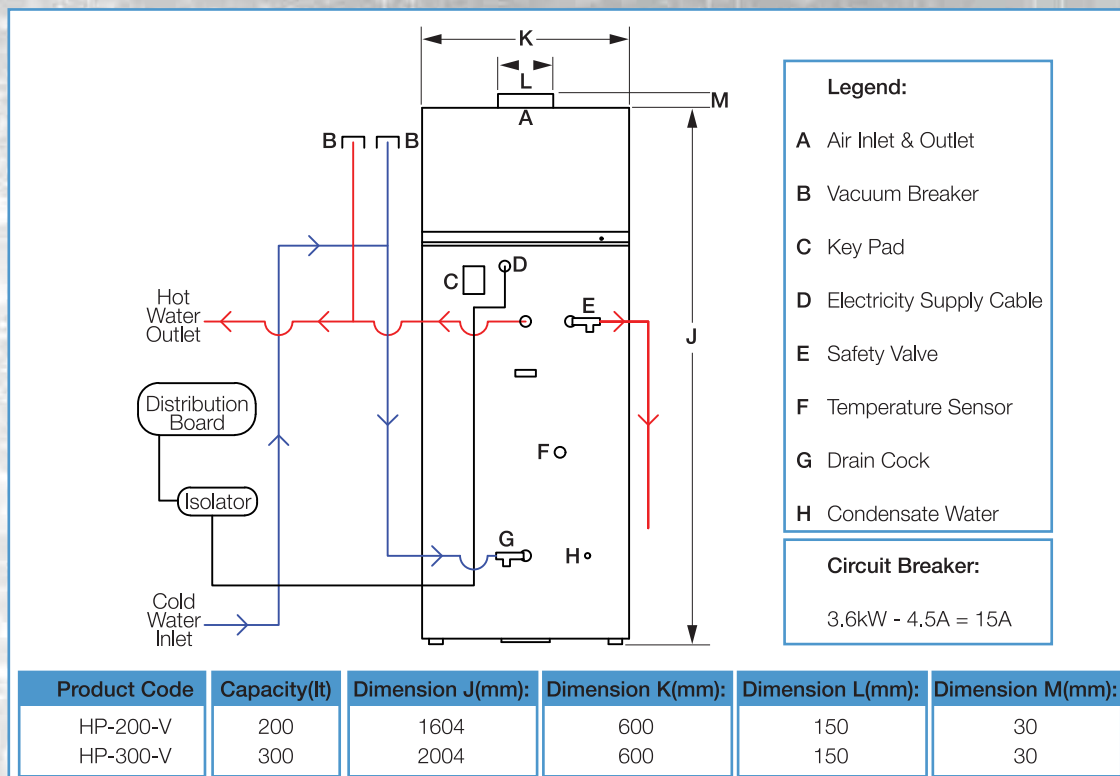
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installation data of an integrated heat pump system

- Because the Integrated Heat Pump uses less than a third of the energy of a normal electric water heater (geyser), it qualifies for installation in terms of SANS 10400XA.
- The Integrated Heat Pump must be well ventilated and installed undercover, ensuring that rain water does not fall into the air inlet/outlet.
- The installation position should allow for condensate water discharge from the heat pump.
- The ground surface area must be hard, smooth and even, in order to prevent any vibration
- The connection of the heat pump to the electrical power source, must be done by a qualified electrician.
- The heat pump is supplied with a 400kPa Safety Valve (T & P Valve) and Drain Cock.

installation diagram of an integrated heat pump system



product warranty

- The period of guarantee is from the date of installation providing that documentation of proof of installation is furnished, or alternatively from date of manufacture as determined from the manufacturer's data plate.
- The heat pump component has a two year warranty period.
- The inner stainless steel cylinder of the hot water component, has a five year warranty period.
- The warranty only applies to defects, which have risen solely due to faulty materials and workmanship during the manufacturing process.
- If any component fails and cannot be repaired on site, the integrated heat pump will be removed and taken away for repair and then re-installed once the repair work has been carried out.
- The warranty on the installation is carried by the installer.



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INTEGRATED DOMESTIC HEAT PUMPS

heat pump product specification data



KWIKOT INTEGRATED HEAT PUMP WATER HEATER

Product Code	HP-200-V	HP-300-V
Cylinder/Tank Capacity	200lt	300lt
Power supply	220-240V/50Hz/1Ph	220-240V/50Hz/1Ph
Heating capacity	3.6kW	3.6kW
Max input current	5.5A	5.5A
Max input power	1.2kW	1.2kW
Rated current	4.1A	4.1A
Rated input power	0.9kW	0.9kW
Compressor input power	0.86kW	0.86kW
Max exhaust pressure of Compressor	2.85MPa	2.85MPa
Max suction pressure of Compressor	0.7MPa	0.7MPa
Max working pressure of heat exchanger	3.0MPa	3.0MPa
Allowable pressure of system	3.0MPa	3.0MPa
Refrigerant	R134a/ 1.5kg	R134a/ 1.5kg
Fan type	Vortex	Vortex
Inner cylinder	Duplex stainless steel	Duplex stainless steel
Degree of protection	IPX4	IPX4
Earth requirement	≤0.1Ω	≤0.1Ω
Water connection	G3/4"	G3/4"
Duct connection	Φ150mm	Φ150mm
Noise level	≤55dB(A)	≤55dB(A)
Size	Φ600x1604mm	Φ600x2004mm
Net weight	91kgs	101kgs
Hot water temp. range/Default	28-75°C/60°C	28-75°C/60°C
Working ambient temperature	-7~43°C	-7~43°C

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

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www.kwikot.com