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Thermaltricity® Air Source Heat Pumps

Models KS015R & KS02R

Version 2007(3.1) (replaces all previous versions)

APPLICATIONS



- Combined with a Powertech Thermal Store to supply Underfloor Heating or Low Energy Convection Heaters
- Installation in energy efficient new builds and refurbishments to supply space heating systems
- Installation in commercial kitchens and laundries extracting heat from high heat areas and using this for preheating water
- Integration with Solar Thermal technologies through a Powertech Thermal Store as part of a hybrid space heating and hot water system
- Installation in gas free areas

Heat pumps are best suited for heat recovery applications i.e. in launderettes, commercial kitchens etc or for use in well insulated buildings (2006 building regulations compliance) with a wet underfloor heating system running in screeded floor. Please contact Powertech Solar Ltd to discuss projects outside of this.

BENEFITS

- Simple installation
- Effective efficiency = 250% to 400%
- Heats water continuously
- Life expectancy of 15 years

The two models introduced into the UK in 2006 are a 4.7kw and 6.5kw nominal rated units – specifications are shown below:

Model KS015R		Model KS02R	
Power output	4.7kw*	Power output	6.5kw*
Outlet water rated temp	55°C	Outlet water rated temp	55°C
Rated power input	1.25kW	Rated power input	1.7kW
Water output litre/hour	110	Water output litre/hour	150
Ambient air range	-5°C to 40°C	Ambient air range	-5°C to 40°C
Weight	95kg	Weight	130kg
Size (mm)	523(h) x 550(d) x 680(w)	Size	626(h) x 600(d) x 780(w)

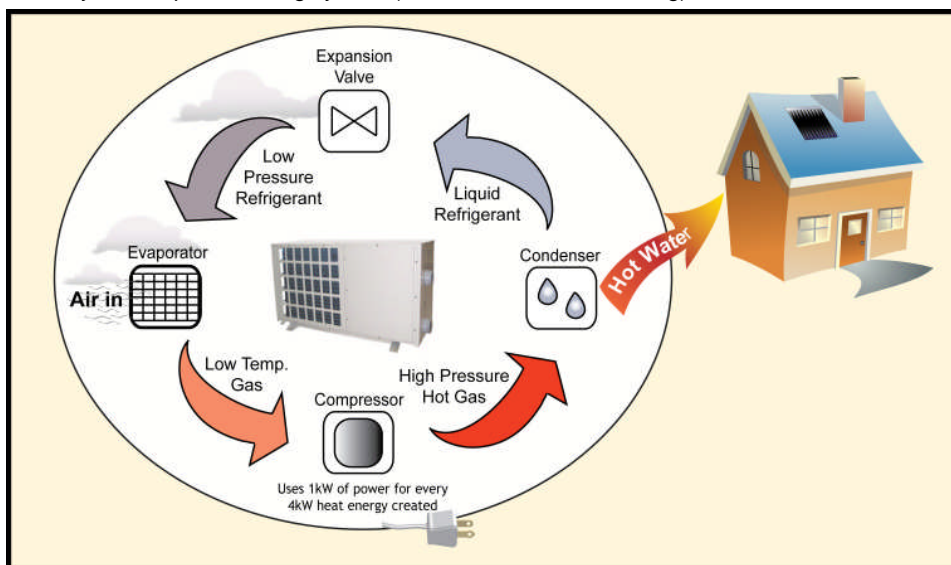
*At 10°C ambient air temperature



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HOW AIR SOURCE HEAT PUMPS WORK

An Air Source Heat Pump uses the same mechanical technology as a refrigerator but in reverse extracting heat from the air rather than expelling it. It works by transferring heat – not by converting electrical energy into heat. An Air Source Heat Pump removes energy from a low temperature source (ambient air) and converts it to a higher grade. It then moves it into a hot water tank or directly into a space heating system (ideal for underfloor heating).



The only running cost is the operation of the compressor and the fan to collect free heat from the air and through the use of a standard circulating pump positioned on the outside of the heat pump unit. This pump is plumbed in between the hot water tank/space heating loop and the output side of the heat exchanger.

AIR SOURCE V GROUND SOURCE HEAT PUMPS

- Minimum space required
- No need to dig up ground
- Lower cost

FURTHER INFORMATION

To find out how your home or business can benefit from a Thermaltricity Air Source Heat Pump please contact:

Supplier:



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