

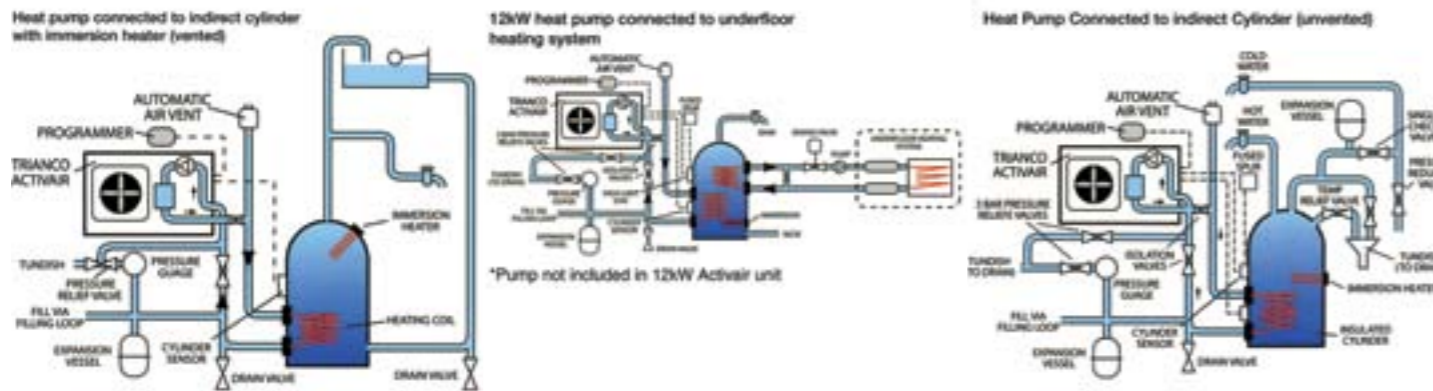
Dimensions and Specifications



| CODE | ITEM | COMPRESSOR | HEIGHT | DEPTH | LENGTH | WEIGHT |
|-------|---------------|------------|--------|-------|--------|--------|
| 9003 | S300 (3kW) | Mitsubishi | 540mm | 260mm | 765mm | 36Kg |
| 9005 | S500 (5kW) | Mitsubishi | 680mm | 305mm | 800mm | 40Kg |
| 9012 | S1200 (12kW) | Mitsubishi | 1030mm | 748mm | 748mm | 100Kg |
| 9018S | S1800S (18kW) | Sanyo | 1030mm | 748mm | 748mm | 150Kg |



Typical System Arrangements



Always refer to the installation instructions before installing an Actvair air source heat pump.



Complete Heating Solutions

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THE AIR SOURCE HEAT PUMP RANGE



www.trianco.co.uk/activair

A market leading range of heating products from



The ingenious Activair ASHP

Air Source Heat Pumps are becoming an increasingly popular choice for home heating, especially in areas with less severe winters. But what makes it such a viable heating alternative, and how does it work? Quite simply, the Activair ASHP has a motor powered by electricity that supplies more energy than it consumes when it extracts heat from the surrounding air. For every unit of energy purchased as electricity, several units of heat are delivered, making it up to four times more effective.

Saving energy and preventing pollution

It works in a very similar way to a domestic refrigerator, utilising a working fluid driven around a refrigerant circuit containing four components - an evaporator, a compressor (Mitsubishi or Sanyo), a condenser and an expansion valve. The refrigerant liquid circulating within the system has a boiling point as low as -40°C and evaporates when absorbing heat from ambient air. This means it's possible to extract considerable heat from extremely low temperatures. The resulting refrigerant gas is then compressed, adding more heat energy and raising its temperature to around 60°C. This heat is then passed via the heat exchanger into your home for use in your hot water cylinder.

Unique efficiency

Activair consists solely of one neat, compact unit, complete with refrigerant. The 3 and 5kW are suitable for DHW and can be sited internally or externally. This product can be easily installed in a loft space or externally (with optional adjustable fixing bracket) and quickly plumbed into an indirect cylinder. For those wanting DHW and heating, 12kW and 18kW models are available which are suitable for underfloor or radiator heating, and can only be sited externally. The Activair ASHP is the modern way to harvest yet another natural resource - it satisfies the need to move heat from ambient air, where it's not needed, into the house where it can become an integral part of our domestic comfort in a completely safe and reliable way.

FAQ

Are air source heat pumps better than solar panels or ground source heat pumps?

In most cases yes, a ground source heat pump is usually much more complicated due to the need for wells or buried coils, together with alterations to land and property an expensive installation is usually the case. With solar power there is a dependency on fine weather for adequate performance levels. Activair will work around the clock, regardless of conditions, in all but the most extreme low temperatures, and is a cheaper solution both on purchase and installation.

How easy is Activair to install?

Any competent heating engineer should be capable of installing an air source heat pump as no handling of refrigerant is involved. Connection to a suitable heating system and electrical connection is required.

What size Activair do I require?

A engineer would have to calculate to suit the installation requirements, to take into account factors including size of property and heating requirements.

How much can I expect to pay for an Activair air source heat pump?

You can expect to pay around £2000 for supply and installation of an 'Activair' 3kW for example (subject to survey and assessment from an engineer)

What are the running costs?

This would depend on the tariff of electricity used, Activair can achieve upto 4 times its kW input, capable of providing substantial savings on energy bills.

How much money can I expect to save if I have an Activair installed?

An average household using oil or gas could expect to make substantial savings on fuel bills of up to 60% when having an Activair unit installed.

What are the noise levels?

Noise levels vary from 52 decibels upwards, and can be compared to that of a chest freezer for example.

Is there any government funding available for air source heat pumps?

Grants are provided for renewable energy products, and air source heat pumps are currently being assessed for grant funding by the government.

Coefficient of Performance (COP)

The coefficient of performance, or COP, of a heat pump is the ratio of the output heat to the input supplied.

An air source heat pump operating at COP of 3.0, will provide 3.00kW of heat output for every 1kW of unit input (energy consumed).

The average yearly temperature in the UK is 10-11 degrees. Assuming this, the Activair 12kW presents an impressive average COP of around 3.0 - 3.5

The COP of heat pumps seem to compare very favourably with high efficiency gas appliance (90-99% efficient), and electric heating (100%), but the full cost of the energy consumed must be considered. Energy from gas is typically much less expensive than that from electricity. However, a heat pump of COP 3.4, such as in the example above, could be less expensive to use than even the most efficient gas appliance.

Advantica Tests

Tests performed by Advantica (a leading independent testing house) showed that at an ambient temperature of 21°C, the Activair 3kW using an input of 1.4kW achieved an output of 4kW, which gave an outstanding overall average efficiency of 305.6%.

- △ High efficiency
- △ Compact & unobtrusive
- △ Nominal 3kW & 5kW output for DHW
- △ Nominal 12kW and 18kW output for DHW and under floor / heating or radiators
- △ Low energy costs
- △ Provides high CO2 emissions savings
- △ Easy to install

The table below is an example of a COP* calculation for the Activair 12kW

| Ambient Temp (°C) | Input (kW) | Output (kW) | COP* |
|-------------------|------------|-------------|------|
| 5 | 2.35 | 5.4 | 2.3 |
| 10 | 2.85 | 10.3 | 3.61 |
| 15 | 3.0 | 12.0 | 4.0 |

*Coefficient of Performance



Activair 3kW & 5kW shown



Activair 12kW & 18kW shown

- △ Flexible siting
- △ High quality latest compressor technology
- △ Incorporates circulating pump
- △ Competitively priced
- △ Optional stainless steel mounting plates
- △ Anti frost protection
- △ 3 year comprehensible warranty
- △ Digital controller