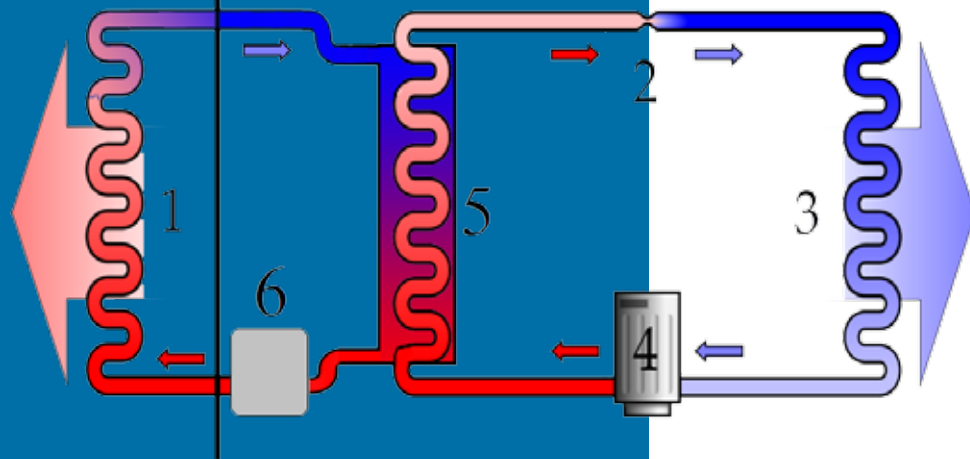


# HOW IT WORKS

## KwikCOOL 25 Portable 7.4 kW Air Conditioner



Outdoors | Indoors



1. External heat exchanger
2. Expansion device
3. Evaporator Coil
4. Compressor
5. Coaxial Heat Exchanger
6. Water pump

### The KwikCOOL 25 basic principles of operation

The KwikCOOL 25 is a closed refrigerant air conditioning split system with an external water cooled heat exchanger, the refrigerant circuit comprises of the following components, coaxial heat exchanger, expansion valve, evaporator coil and a compressor connected together with refrigerant piping are installed in the indoor room unit. The internal room unit also contains a water pump connected to the Coaxial heat exchanger which pumps water to the external heat exchanger.

The KwikCOOL 25 uses a compressor to cause pressure changes between the two compartments. The refrigerant is drawn to the evaporator coil, where the low pressure causes the refrigerant to evaporate into a vapour, taking heat with it. As the refrigerant vapour is drawn thro the coaxial heat exchanger the refrigerant condenses to a liquid again, rejecting the heat absorbed, the coaxial heat exchanger is cooled by water. The water is circulated to the external evaporator coil (Heat exchanger) via flexible pipes, the water is then cooled via fan and returned to the room unit.

The external heat exchanger can be installed up to 40 metres away via our KwikFIT connection pipes. As the KwikCOOL 25 is completely sealed the air conditioning requires no further water to be added or removed once installed.

The KwikCOOL 25 utilises the refrigerant R-417A which does not contribute to ozone depletion.

The KwikCOOL 25 aims to provide an indoor environment that remains relatively constant in a range preferred by building occupants despite changes in external weather conditions or in internal heat loads from computers, photocopiers and other electrical items.

Tasks performed by people seated in an office are expected to occur at 72°F (22.2 °C) Performance is expected to degrade about 1% for every 2 °F change in room temperature the KwikCOOL 25 is a perfect solution providing up to 7.4 kW typically cooling are area of 180m<sup>3</sup>.

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