

Climate Control

Daikin UK

Daikin has manufactured high-quality heating, air-conditioning and ventilation systems for many kinds of applications for the last 80 years. Through investment in research and development, Daikin has been able to innovate a range of systems that utilises current technology to control the internal environment, with an emphasis on energy efficiency.

Airconditioning & Ventilation

Daikin's Split and Sky Air ranges are suitable for small to medium-sized premises, including residential buildings, offices or shops. They offer considerable savings on space, energy and installation costs, ease of use and reliability. High technology and inverter control enables Daikin to be registered under the Government's Enhanced Capital Allowance Scheme. A wide range of indoor units is available to suit any application, including wall mounted, floor standing, flexi type, ducted units, ceiling suspended and the unique units Round Flow cassette and ceiling suspended cassette (where no ceiling void is available) with 2- or 4-way blow. Daikin's indoor units are optimised to operate on R410A refrigerant. Up to 5 indoor units can be connected to one Multisplit outdoor unit. All indoor units can be individually controlled with remote control and do not need to be installed in the same room or even at the same time.

It is possible to connect 2, 3 or 4 indoor units to a single Sky Air outdoor unit for twin, triple and double twin applications. All indoor units are operated together within the same mode (cooling or heating) from one remote control. This allows equal air distribution, even in larger, irregularly shaped rooms. In addition to air-conditioning systems, Daikin UK also manufactures heat-recovery ventilation (HRV) systems to ensure the required fresh-air intake into buildings is achieved. They can be controlled individually or integral with the air conditioning system (VRV or Sky Air series).

The HRV automatically selects a desirable ventilation mode according to room and outdoor air temperature and operating conditions of the air conditioning. Temperature and humidity are exchanged between supply and exhaust air. This brings the outdoor air close to the indoor air conditions, recovers energy loss and can considerably reduce the air conditioning load. The VAM-FA system is available in 9 sizes with airflow capacities from 1.5 to 2,000m³/h, offers lower noise levels, simplified control, and easier installation and maintenance. It uses high-efficiency paper (HEP) that has superior moisture-absorption and humidifying properties.

Daikin Altherma

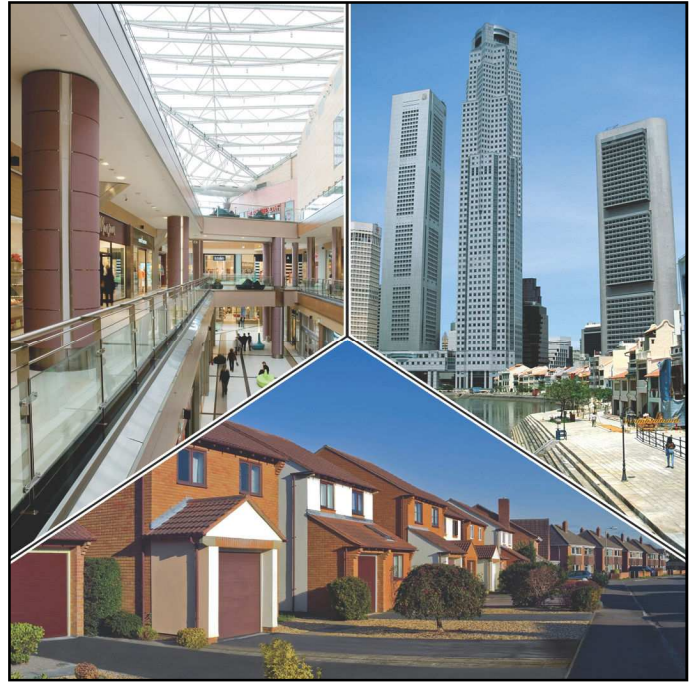
Daikin Altherma is a highly efficient heating and hot water solution for UK homes. Using air source heat pump technology and Daikin's advanced inverter controls, Daikin Altherma is 3 to 5 times more efficient than a traditional fossil fuel boiler, delivering running costs savings and up to 50% reduction in carbon emissions when compared to traditional systems.

Thanks to its low carbon and energy efficient technology, three quarters of the heat generated by the Daikin Altherma system is absolutely free of charge. As part of a package of energy saving measures, Daikin Altherma helps towards achieving Level 4 in the Code for Sustainable Homes. Daikin Altherma air-to-water heat pump is today's answer to the current and future problems associated with conventional heating systems, such as increasing primary energy costs and an unacceptably high environmental impact.

Daikin Altherma product range offers solutions for New Build, Refurbishment and Retrofit applications. The Daikin Altherma Low Temperature range delivers flow temperatures of up to 50°C, and is highly efficient when heating properties with good thermal design characteristics, making it an ideal solution for new built and also for refurbishment. The system is available in both Split and Monobloc configurations.

The award winning Daikin Altherma High Temperature system guarantees water temperatures up to 80°C, providing a low carbon solution for replacing existing fossil fuel boilers. With the High Temperature system, there is no need to replace or resize existing radiators providing the perfect retrofit solution.

Thanks to the weather compensation built as standard into its integrated control system, Daikin Altherma can minimise energy input to achieve optimum temperature conditions. It can control the temperature inside the home by regulating the flow temperature in the radiator or underfloor heating system.



It saves up to 30% in energy costs compared to a traditional system such as a boiler and radiator system.

To provide even greater capacity for water heating even and higher efficiencies, Daikin Altherma can be perfectly combined with Daikin Solar Thermal Systems, which provide a fully integrated renewable heating and hot water solution, now available from a single manufacturer, Daikin. By using both solar thermal and air source heat pump technology, the system will be able to consistently deliver the most economical energy management of domestic heating and hot water all through the year.

Chillers

No matter how large the premises and whatever the air-conditioning requirements, there is a Daikin chilled-water system to suit client specifications. It is a system that has proved its worth in a multiplicity of applications, from industrial sites to retail warehouses, hotels and department stores. The careful development of closely matched compressor/refrigerant combinations has enabled Daikin to produce complete ranges of water chillers, genuinely optimised for use with R134a, R407C and R410A refrigerants.

Daikin's chiller portfolio is essentially comprised of three ranges: the air-cooled range, the watercooled range and the condenserless range, giving a combined capacity range of 5 to 2,196kW capacity. Air-cooled chillers are most frequently used in the chilled-water market. Out of its wide range of chillers in cooling-only and heat-pump versions, with or without integrated hydronic components, Daikin offers a chiller fitting the application requirements. Capacities run from 5 to 1,920kW, with EER ratings of up to 3.33 (Eurovent Class A rating) and ESEER of up to 4.12.

Daikin also offers a wide range of water-cooled chillers which require only a very limited space in a machine room. Used for commercial and industrial applications, these chillers generate cold and hot water, which can be used for chilling, heating or even both at the same time. The water-cooled range can be subdivided into 6 further ranges, giving a combined capacity range of 13 to 2,196kW, and includes a flooded evaporator unit which has an ESEER rating of up to 7.4. In addition, Daikin offers flexible and compact chillers with remote condensers, which can be used to satisfy applications with special requirements in the field of available space, sound level or extreme operating conditions. In these exceptional cases, remote condenser solutions can be preferred over standard air-cooled or water-cooled solutions.

Daikin chillers offer excellent flexibility and control, a reflection of the advanced technology inherent within them. These chillers are advanced in their precision, power, low operating noise, easy maintenance and low running costs. Daikin chillers represent a sure and safe route to an indoor environment that is comfortable, clean and consistent.