



## THE DAIKIN SOLAR THERMAL SYSTEM

**Daikin is pleased to announce the launch of the Daikin Solar Thermal System for the UK market place. The Daikin Solar Thermal System will greatly complement the already successful Daikin Altherma air source heat pump product range, allowing end users to maximise the savings potential of a combined solar thermal and heat pump system – a complete solution directly from one manufacturer.**

The use of solar collectors is a very effective way of utilising the free energy from the sun. In fact, when

averaged over an entire year, the sun delivers half of the energy we need to bring our domestic water up to the desired temperature – and like most “free” resources, demand for equipment that allows us to capture this valuable resource is on the up.

With the introduction of the Daikin Solar Thermal Systems, Daikin UK will be able to offer a renewable energy packaged solution to UK customers:

- Solar energy can be used for domestic hot water heating, whenever solar radiation is available

- Free air can be used by heat pump operation, for space heating and additional domestic hot water heating.

In combination with Daikin solar collectors, the complete range of Daikin Altherma air source heat pump products will now provide a fully integrated renewable heating and hot water solution. 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.

### DAIKIN SOLAR SYSTEM

#### (i) Stand Alone System

Stand alone Daikin Solar Systems will come as a complete ready to install system including: Solar panel/s, solar pumping station and connection kit.

#### (ii) For Daikin Altherma LT systems the combined solar thermal and heat pump system is an indirect pressurised system and consists of:

- Daikin Solar collectors – **NEW**
- Daikin Solar pump station – **NEW**
- Daikin domestic hot water cylinder (from 150litres to 300litres)
- Daikin Solar kit
- Daikin Altherma Split/Monobloc heat pump which also provides the home with heating.

#### (iii) For Daikin Altherma HT systems the combined solar thermal and heat pump system is an unpressurised drain back system and consists of:

- Daikin Solar collectors - **NEW**
- Daikin Solar pump station - **NEW**
- Daikin HT Thermal Store (300litres or 500litres) – **NEW**

If there is insufficient solar radiation or if the solar thermal store does not need more heat, the feed pump switches off and the entire Solar system drains into the Daikin thermal store. When the installation is not in use, the collectors

are not filled with water so addition of antifreeze is not necessary – another environmental advantage!

The thermal store water is supplied directly to the solar panels, heated and then stratified into the thermal store which ensures that the efficiency of the solar panels and the overall use of the system is again considerably increased.

- Daikin Altherma HT heat pump which also provides the home with heating.

### DAIKIN SOLAR HEATING RANGE

Daikin's high-efficiency flat plate solar collectors transfer short-wave solar radiation into heat as a result of their highly selective coating. This heat energy is then used to produce hot water using a specifically designed Daikin cylinder. As with many existing solar panels, the Daikin collectors can be easily mounted onto roof tiles to ensure maximum efficiency.

The new Daikin Solar Thermal system will be available in either single or multi-panel configurations (mounted on roof tiles in either a vertical or horizontal formation) giving each system the ability to satisfy the demands of most types of dwellings in the UK.

*Daikin can deliver a complete heating and hot water solution incorporating both the exceptional Daikin Altherma Heat Pump and the Daikin Solar Thermal systems into one fully integrated renewable energy package.*

### BENEFITS

- ✓ Solar Energy for hot water and heating
- ✓ Selective coating on absorber
- ✓ Strong solar glass cover, robust panel design
- ✓ Quick and easy connection of panels
- ✓ Intelligent automated control provides optimum utilisation of the solar energy
- ✓ Simple and reliable technology
- ✓ Can provide up to 60% of your hot water needs
- ✓ Reduced VAT for domestic installation – down to 5%
- ✓ CO<sub>2</sub> reduction, environmental benefits
- ✓ Daikin Solar system and Daikin Altherma helps towards high levels in the Code for Sustainable Homes