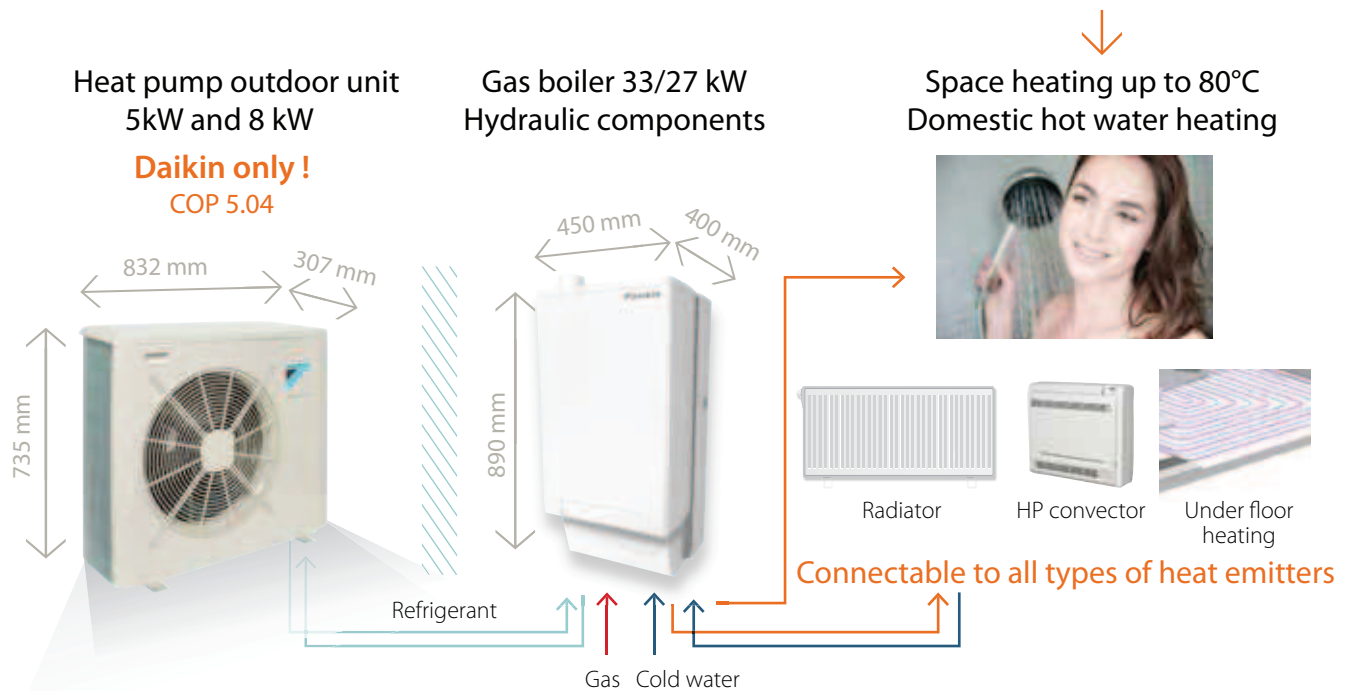
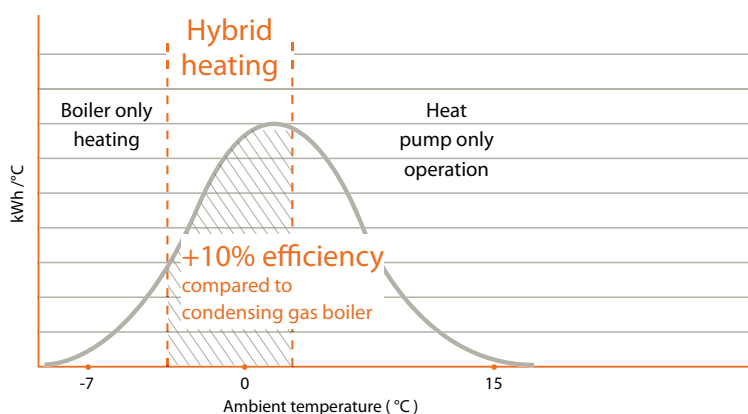


2. DAIKIN ALTHERMA HYBRID HEAT PUMP COMBINES HEAT PUMP TECHNOLOGY WITH GAS

Daikin Altherma hybrid heat pump uses a smart combination of a new gas condensing boiler and the most efficient air-to-water heat pump system on the market.



With the Daikin Altherma hybrid heat pump technology, the most cost efficient operation according to the ambient temperature will be used.



- 1 High temperature zone:
100% heat pump
- 2 Mid temperature zone:
heat pump + gas boiler *
- most cost efficient to operate both
- additional capacity if required
- 3 Cold temperature zone:
100% gas boiler

Typical application

- Location: London
- Heat load: 14 kW
- 70% heat pump output
- 30% gas boiler output

* Did you know that...

thanks to the special Daikin Altherma hybrid heat pump **flow control**, both gas boiler and heat pump can operate at the same time in the most cost efficient way. The water flow rate will be automatically regulated, in order to have the possibility of lowering the entering water temperature coming from the radiators to the heat pump and so maximising heat pump efficiency. This results in the most cost efficient operation combining gas boiler and heat pump to deliver the capacities required.



Added value benefits

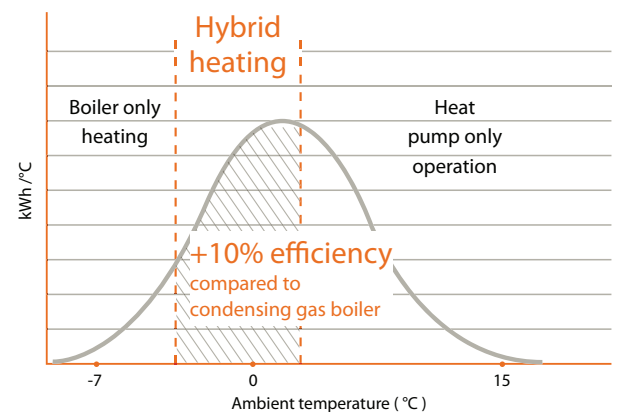
If you're an end user then you benefit from decreased heating costs, a rapid return on investment and no need to replace radiators and existing pipe work. If you're an installer you have the benefit of having a single heat pump solution for all replacement applications: one that is easy and fast to install and uses renewable energy sources. If you're a wholesaler then you benefit from not having to stock a huge range of materials since one hybrid capacity class can cover all possible replacement applications.



End user benefits

→ 1. SAVE MONEY IN COMPARISON TO A NEW GAS CONDENSING BOILER

- ✓ Space heating **35% more efficient** than new gas condensing boiler
- ✓ Domestic hot water heating **30% more efficient** than new gas condensing boiler
- ✓ High return on investment: **payback of 3-7 years**



Space heating

- Programmed for most cost efficient operation over the entire temperature range
- Daikin hybrid logic to maximise heat pump usage
- Most efficient heat pump system on the market

Domestic hot water heating

Three possibilities

- Instantaneous with gas boiler *
- Optional domestic hot water tank for storage of domestic hot water
- Optional solar tank to increase domestic hot water efficiency even further (solar - heat pump - gas boiler for domestic hot water heating)



* Did you know that...

the Daikin Altherma hybrid heat pump has the most efficient instantaneous domestic hot water heating on the market, thanks to a special 2 in 1 heat exchanger used for both space heating and domestic hot water heating. Thanks to direct heating of cold water, the Daikin Altherma hybrid heat pump system can benefit from the condensation effect as well for domestic hot water heating, allowing an efficiency increase **up to 30%** over traditional gas condensing boilers.

→ 2. USE EXISTING EQUIPMENT – LOW INVESTMENT

- ✓ Similar dimensions as a gas boiler
- ✓ No modification inside the house required
- ✓ No additional investment required
 - Connectable to **existing radiators** (water temperatures up to 80°C possible) and **existing water piping** system
 - Similar dimensions to existing gas boiler - **no change to installation space**

Typical example

- existing gas boiler: HxWxD: 850mm x 450 mm x 350mm
- Daikin Altherma hybrid heat pump indoor unit: (both hydrobox and gas boiler) fits in the same space as the original gas boiler.





Installer benefits

→ 1. ONE HEAT PUMP SOLUTION FOR ALL RENOVATION APPLICATIONS

✓ More applications possible using Daikin Altherma

- All heat loads coverable up to 27 kW
- Connectable to all types of heat emitters as well as existing radiators (up to 80°C)
- One solution for heating and domestic hot water
- Gas boiler can be installed without heat pump in early stage, in order to quickly restart heating in case of break down of existing gas boiler

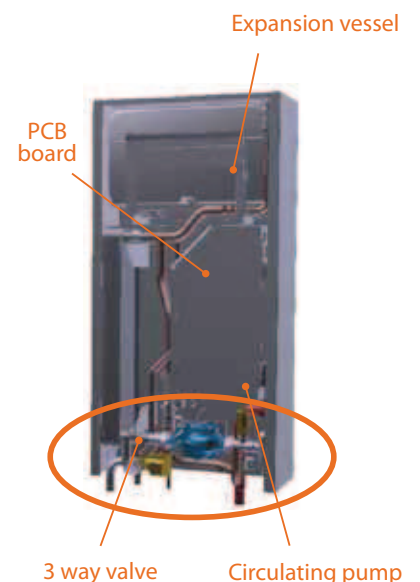
→ 2. EASY AND FAST INSTALLATION OF RENEWABLE ENERGY SOURCE TECHNOLOGY

✓ Time saving: installation and maintenance

- No changes to radiators and installation room
- All components included with front access
- All connections at the bottom, similar to all wall hung gas boilers
- Quick commissioning with user interface



Quick commissioning with user interface





Wholesaler benefits



Gas boiler system:
33/27 kW



Heat pump system:
5 kW or 8 kW



LOW STOCK VALUE COVERING ALL REPLACEMENTS

✓ One heat pump solution for all renovation applications

- All heat loads
- All types of emitters
- Space heating and domestic hot water heating
- Replacement in case of break down

✓ Low stock value - low chance of being out of stock

- Heat pump system: 5 kW or 8 kW
- Gas boiler system: 33/27 kW
- One combination (e.g. 5 kW heat pump with 33/27 kW boiler) can cover all possible renovation applications
 - › less stock required
 - › lower chance of being out of stock