

**ideal**  
HEATING  
COMMERCIAL



# ECOMOD 290HT HEAT PUMPS

STUDENT ACCOMMODATION FOR  
COLLEGE AT UNIVERSITY OF CAMBRIDGE  
**CASE STUDY**



# LOW CARBON HEATING FOR LISTED STUDENT ACCOMMODATION

**It's not often that student accommodation is to be found in a listed building, but with a city that is home to 1,736 Grade I-II listed structures, Cambridge has a significant amount of historic architecture. The presence of the University of Cambridge and its many colleges, founded between the 13th and 20th centuries, contributes greatly to the city's architectural heritage and the high number of listed buildings.**

One particularly well-known college at the University is investing in several major building and redevelopment projects for student accommodation. Two of these properties, located within the city

centre, are listed buildings that are being restored and refurbished with a full MEP installation, thermal upgrade to walls and floors, re-roofing, restoration of windows and other associated works.

As part of this refurbishment, the decision was made to replace the existing commercial boiler with air source heat pumps (ASHPs) to provide heating for seven of the self-contained one bedroom apartments within the properties.

## **ECOMOD 290HT NATURAL REFRIGERANT COMMERCIAL HEAT PUMPS**

Two Ideal Heating Commercial 27kW ECOMOD 290HT monobloc

air source heat pumps have been installed at these unique properties running in cascade to provide 54kW of output. Heat pumps, which utilise the free energy in the air to heat water, are not only energy efficient – up to 400% more so than traditional boilers – but also have zero local carbon emissions.

The ECOMOD 290HT air source heat pump is able to achieve high temperatures up to 75°C, whilst benefitting from an ultra-low global warming potential (GWP) of just three because of the use of R290 natural refrigerant; a factor that was key to its specification by the mechanical consultant for this project. An ultra-low GWP is

**CASE STUDY FACTS: LOCATION:** CAMBRIDGE | **BUILDING TYPE:** STUDENT ACCOMMODATION IN LISTED BUILDINGS  
**EQUIPMENT:** TWO ECOMOD 290HT 27KW AIR SOURCE HEAT PUMPS RUNNING IN CASCADE

"We've had fantastic service, with direct contact with product and sales managers all the way through, from specification through to installation and commissioning stage."

David Grundy,  
Coulson Building Group.

not only good for the planet, but also makes commercial sense as high GWP refrigerants become increasingly scarce and therefore more expensive.

ECOMOD 290HT comes with a high efficiency rating and high Coefficient of Performance (CoP) rating of up to 4.94. The heat pumps also include an inverter-controlled compressor to accurately match the heat demand based on the specific requirements, further enhancing the efficiency of a building. ECOMOD 290HT heat pumps are quiet in operation, with noise levels as low as 64dB(A); an important consideration in living spaces.

Available in three chassis sizes and five outputs from 15kW through to 50kW, ECOMOD 290HT can also be used in cascade to achieve even higher outputs.

#### MAKING HEAT PUMP INSTALLATION SIMPLE

For East of England building services contractor Coulson Building Group, this University

of Cambridge student accommodation project is their first major Ideal Heating commercial heat pump installation. David Grundy, Director at Coulson, comments: *"This was our first Ideal ECOMOD 290HT install, although we are a long-standing Ideal Heating Commercial customer, predominantly with boilers. The ECOMOD heat pump installation was very straightforward, even with the listed status of the buildings. The positioning of the ASHPs was one thing to consider, but this was all agreed during planning prior to our involvement."*

David has nothing but praise for the support he received from Ideal Heating Commercial during his first ECOMOD heat pump installation: *"We've had fantastic service, with direct contact with product and sales managers all the way through, from specification through to installation and commissioning stage."*

#### FREE COMMISSIONING FOR ASSURANCE

David has used Ideal Heating Commercial's free commissioning service on this project: *"It makes sense for ourselves and the client to have the assurance that the manufacturer has seen and commissioned the heat pumps to the correct settings with regards to the guarantee going forward."* All ECOMOD heat pumps come with a five-year warranty when commissioned by Ideal Heating.



#### ECOMOD 290HT 27KW NATURAL REFRIGERANT AIR SOURCE HEAT PUMPS



R290 natural refrigerant



Free commissioning



Suitable for commercial properties



Cascade for higher output



Ultra-low GWP



"This was our first Ideal ECOMOD 290HT install, although we are a long-standing Ideal Heating Commercial customer, predominantly with boilers. The ECOMOD heat pump installation was straightforward."



## IDEAL SUPPORT AND CONTACTS

### COMMERCIAL PRODUCTS

Sales, orders, availability, literature and pricing

**T:** 03330 040 393

**E:** [commercial@idealheating.com](mailto:commercial@idealheating.com)

Calls cost no more than calls to geographic numbers (01 or 02) and will be included in any inclusive minutes you have with your telephone service provider.

### TECHNICAL AND CUSTOMER SERVICES

**T:** 01482 498376

**E:** [commercial.services@idealheating.com](mailto:commercial.services@idealheating.com)

### SPARES

Sales, orders, availability and pricing

**T:** 01482 498665

Terms and conditions apply: \* 2 year warranty extended to 5 years if commissioned by Ideal Heating.

