

Case Study: Avon Valley Railway



Toshiba multi-split air-to-air heat pump system

Requirement: Space heating and cooling for two historic dining carriages



Solution:

- Toshiba multi-split air-to-air heat pump system
- Single phase electrics
- 7 day programmable controller

Client:

Avon Valley Railway

Avon Valley Railway:

Avon Valley Railway is dedicated to restoring the sound of steam to the Avon Valley. It operates from Bitton, a Victorian station near Bristol, that has been painstakingly restored by volunteers and attracts over 80,000 visitors a year.

Requirement:

A cost-effective heating and cooling system for Margaret and Rose, two static heritage dining carriages. Rose is used for everyday breakfast and lunch and Margaret as a dining carriage. The much-loved carriages are regularly let for private functions as well as everyday use.

Scope of works:

Rose and Margaret have hosted numerous birthdays, receptions and other special events. However, at around 40 metres in length and poorly insulated, keeping them heated at a comfortable level in winter was proving difficult. When the summer months arrived there was also an issue of over-heating due to the high amount of glazing.

Our brief therefore required us to install a convenient heating solution that addressed both of these issues and would enable the Avon Valley Railway to provide its guests with a first-class, comfortable dining environment all year round.

The solution? An air-to-air heat pump system in each carriage.

Air-to-air heat pumps let you use natural heat in the air outside to provide space heating inside. They are energy efficient, low maintenance and can cut your carbon

footprint. Operated in reverse, they also provide cooling in a manner similar to a traditional air-conditioning unit.

The Toshiba multi-split air-to-air heat pump system we selected was an ideal choice for the carriages. It offers exceptional flexibility, economy and reliability and its single compact outside compressor enabled the installation of back-to-back units in the middle of the carriage to ensure the even delivery of heat and a uniform temperature.

As part of the installation, 7-day programmable controllers were fitted into each carriage by our electricians to provide total control over the heating and cooling schedule.

Result:

Cost-effective, space saving heating and cooling for Rose and Margaret. Diners, party goers and other attendees at events organised by the Avon Valley Railway can now rest assured that they will enjoy their event in total comfort.

“Seeking a lower energy heating solution for ‘Margaret’ and ‘Rose’, the two dining carriages, we approached Gregor for advice on whether an air-to-air heat pump system would be a solution.

The result has been fantastic - warm carriages in the winter and cool in the summer - no need to open all the windows and doors! In addition the system, it has reduced the heating costs for those two carriages by about 30%.

All in all, a great success and very efficient and friendly installation by Gregor.”

Roger Eynon, Trustee – Fundraising at Avon Valley Railway



TOSHIBA
Leading Innovation >>>

