





VRV heat recovery delivers efficient and cost-effective climate control

This five star hotel needed a discrete and reliable climate control system that could provide excellent levels of comfort for guests during their stay.

Daikin's whole-building VRV heat recovery system integrates heating, cooling and ventilation, recovering waste heat from areas requiring cooling and using it to heat other parts of the hotel.

Installed systems:

- > VRV heat recovery
- > Chillers

Location

Country: Czech Republic City: Prague





Guests at the Hotel Kingscourt are enjoying their stay, whatever the time of year, thanks to a highly efficient climate control system.

Project requirements

V

Air conditioning

Air curtain
Air purification

Control Heating

☐ Hot water

Refrigeration

Ventilation

Year of installation 2009

Total capacity 600 kW

Hotel Kingscourt is luxury five star hotel located on Republic Square in the centre of Prague.

The hotel is very popular with visitors, boasting more than 90% continous occupancy. As a result, it needed a very reliable, high quality climate control system that could deliver all year round.

Daikin delivered a whole-building solution, based on its VRV heat recovery system. The system offers high levels of efficiency by integrating heating, cooling and ventilation, recovering waste heat from areas requiring cooling and using it to heat other parts of the building.

Twelve VRV outdoor units supply slim concealed ceiling units in each of the bedrooms and communal areas. The system allows temperature and air flow in each room to be controlled independently, depending on guests' preferences and occupancy levels. One VRV Heat Recovery heat pump serves the hotel casino.

Additionally, two small indoor chillers, connected to a Luve dry cooler on the roof, cool the kitchens; and Weger air handling units supply fresh air to the hotel lobby, reception, restaurant and bar.

The whole building VRV solution offers the hotel operator a highly flexible, responsive system delivering excellent levels of comfort.

Solution and system components

- > 12 VRV Heat recovery units: REYQ12P
- > 1 VRV Heat recovery unit: REYQ10P
- > 146 Concealed ceiling units: FXDQ32P
- > 2 Chillers: EWWP130KAW1M
- > 1 Luve dry cooler: EHLD1T4256
- > 3 Weger air handling units
- > 2 RR100BW1 + FHQ100B + 2 FHQ50B



The Daikin VRV units are compact, quiet and discrete, ensuring hotel guests have a peaceful stay.



The hotel's Building Managment System allows close control of the entire HVAC system via one user-friendly control panel.



VRV allows independent control of different areas of the hotel: from guest rooms, to the restaurant and lobby areas and the gym.