



Hotel Reina del Mar, Bulgaria



Advanced climate control solution provides responsive comfort for guests at exclusive resort hotel

Hotel Group HVD sought a total climate control solution for its first ever luxury beach complex on Bulgaria's Black Sea Coast. An established supplier to HVD, Daikin worked in partnership with local Daikin Partner MMC to design and implement a HVAC-R system to meet the hotel's immediate needs and accommodate future expansion plans.

Installed systems:

- › VRV
- › Mini VRV
- › ZEAS
- › Air Handling Units

Location

Country: Bulgaria
City: Obzor





Sophisticated technology provides the answer to hotel's complex air conditioning and hospitality needs.

Project requirements

- ☒ Air conditioning
- ☐ Air curtain
- ☒ Air purification
- ☒ Control
- ☒ Heating
- ☒ Hot water
- ☒ Refrigeration
- ☒ Ventilation

Year of installation
2019-2021

The Reina del Mar hotel offers a choice of accommodations, with 557 rooms from double and family rooms to suites, plus 100 standalone villas.

As a top resort hotel, the complex operates extensive leisure facilities including conference and event spaces, bars and restaurants, a gym and spa and wellness centre.

Daikin's HVAC-R solution combines VRV with Mini-VRV systems to provide air conditioning and heating, linked to air handling units delivering fresh air and dedicated refrigeration units. This multi-faceted approach to systems design caters for diverse activities, delivering precise zonal temperature control throughout to create a pleasant environment, while meeting specific functional needs.

In guest rooms, visitors enjoy customisable air conditioning, with whisper quiet operation ensuring an undisturbed night's sleep. The detached two-level villas are served by Daikin's Mini VRV systems. Supporting multiple restaurants across the facility, Daikin's ZEAS and Multi-ZEAS systems provide an integrated, energy-saving solution for refrigeration and freezer storage. Daikin's advanced iTouch Manager interfaces with the Building Management System, enabling centralised control and monitoring by staff to ensure comfort levels and energy consumption are both optimised.

"Daikin was chosen for the breadth of its HVAC-R equipment portfolio and innovative technology, enabling the integration of a range of systems into a single climate control solution which delivers exceptional energy savings."

Vladimir Venkov, owner MMC

Solution and system components

- › 700 VRV IV (90 OU)
- › 125 VRV (10 OU)
- › 25 Mini VRVs
- › 32 ZEAS & Multi-ZEAS
- › 5 AHU (1x 15.500m³/h, 2x 17.500m³/h, 1x 9.700m³/h & 1x 6.300m³/h)
- › Heat Recovery Ventilation units: VAM650J & VAM1000J
- › BMS control with iTouch Manager & Messerschmidt



Mini VRV units provide self-contained air conditioning to the luxury detached villas.



VRV and ZEAS outdoor units are located away from the main hotel to minimise disturbance.



Daikin's advanced technology provides the perfect complement to this sophisticated modern resort.