



## Silo Plus Office Building



Daikin and silo plus add new dimension to the term “working climate”

Top efficiency heat pump technology is at the heart of the 360° sustainable HVAC system of DNGB certified Daikin head office building.

### Location

**Country:** Austria  
**City:** Vienna



### Installed systems:

- › Water-cooled chiller & heat pump
- › Air handling units
- › Fan coil units
- › VRV & Sky Air systems



## Daikin and silo plus: hard at work for the benefit of employees and environment

### Project requirements

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

Year of installation  
2019

Total capacity  
Chillers:  
409 kW cooling  
518 kW heating

VRV & Sky Air:  
50 kW cooling  
47 kW heating

61.000 m<sup>3</sup>/h airflow

**silo plus - a building of ERSTE Immobilien KAG - is home to Daikin Central Europe HQ and Austria offices, Your Daikin World & Training Center. As the main tenant, Daikin CE provided state of the art HVAC-R technology, complemented by a concrete core activation system for the building.**

The general HVAC design already stood when Daikin decided for silo plus; luckily, there was still room for co-creation. Today, Daikin's 200 Vienna employees enjoy spacious, sunlit offices and optimal indoor climate all year round.

The concrete core activation system provides heating and cooling, with radiators, fan coils and ventilation systems for peak usage.

Daikin's water-cooled heat pump and chiller solution covers both heating and cooling demands, combined with geothermal energy source and dry coolers.

Your Daikin World is heated and cooled with 2 separate VRV systems to allow different operational requirements in different areas; its server room is equipped with a Sky Air unit to ensure all year round cooling.

The main system (EWWH-VZXS) is operating with HFO R1234ze, a new generation of lower GWP refrigerants, offering highest efficiency in both full- and part-load operation. Ventilation via 6 Daikin Professional air handling units allows the integration of an additional back-up unit when needed. Photovoltaic systems on the roof help to lower operating costs.

"We have used the most ecological construction methods possible. Having Daikin on board as a tenant and as a supplier of the most innovative HVAC system on the market is such an asset. We are proud to have been awarded the green building certification DGNB Gold by the Deutsche Gesellschaft für Nachhaltiges Bauen."

### Solution and system components

- › Water-cooled chillers/heat pumps
  - EWWH355VZXS
  - EWWQ170GSS
- › 6x Professional air handling units
  - D-AHU Professional
- › 56 x Fan Coil units
  - FWC-BF, FWR-AT, FWS-AF
- › 2x VRV systems
  - RXYLQ10T VRV IV heat pump, optimised for heating
  - RYYQ8U VRV IV heat pump, with continuous heating
- › Sky Air Alpha-series
  - RZAG100MY1
- › 2x Cabero dry coolers
  - GCHD097A2X5



Top efficiency commercial heat pump technologies are at the heart of the 360° sustainable HVAC solution



The Daikin Professional Air Handling Units, installed in the basement and on the roof, are all "A" certified according to ErP regulations



VRV units providing heating and cooling for Your Daikin World