# Daikin elevates VZ series: New high-temperature option for industrial and district heating unveiled

Cecchina, July 2025 – Daikin introduces a new high-temperature option for its VZ series, using the R-1234ze refrigerant to expand the operating range of existing models. This enhancement enables the unit to supply hot water at temperatures of up to 90 °C, making it suitable for a wider variety of applications.


## Unit features

The **Daikin EWWH-VZ water-cooled inverter chiller and heat pump** combines exceptional energy efficiency with low environmental impact. Using R-1234ze, a refrigerant with a very low Global Warming Potential (GWP) of 1.4, it offers a cooling and heating capacity ranging from 400 to 1,900 kW*. Thanks to its compact design and inverter technology, the unit ensures optimal performance and flexibility to meet a variety of operational needs. The introduction of this new option is a **significant step towards decarbonising industrial heating**. By extending the operating envelope, the EWWH-VZ series is well-suited to a variety of applications, including industrial processes and district heating networks, where high-temperature hot water is essential. This feature is particularly useful for industrial processes that require water at a high temperature for cleaning, sterilisation or production purposes.

# 6 reasons to choose the Daikin EWWH-VZ high-temperature water sourced heat pump

## 1. Sustainable industrial processes and district heating systems

In line with the European targets for reducing fossil fuel consumption, there is a growing demand in the market for high-temperature heating solutions. In this context, the Daikin EWWH-VZ unit's capability to deliver **hot water at temperatures of up to 90°C** is particularly significant. It plays a pivotal role in decarbonising industrial processes and district heating systems, which have traditionally relied on fossil fuel-based boilers. Unlike conventional systems, the EWWH-VZ operates without combustion and uses a low-GWP refrigerant, which significantly reduces $CO_2$ emissions.

Thanks to its inverter technology and high energy efficiency, it also offers a **more sustainable and cost-effective alternative to traditional boilers**, helping industries and communities for their transition towards more energy-efficient heating solutions.

## 2. Flexible installation

One of the EWWH-VZ unit's key strengths lies in its **exceptional installation flexibility**, making it **ideal for limited spaces**. This is made possible by the innovative knock-down electrical panel, which can be installed up to five metres away from the main unit. This feature allows installation in even the smallest technical rooms – perfect for replacing gas boilers. By separating the electrical panel from the main body, Daikin provides greater versatility in system design and layout, facilitating easier access for maintenance and optimising the use of available space, particularly in retrofit projects.

Click here to discover how Daikin meets the demands of applications requiring a compact footprint and minimal space.

## 3. Efficient technologies

In terms of efficiency, the EWWH-VZ is equipped with Daikin's advanced **single screw compressors featuring variable volume ratio (VVR) technology**. This innovation enables the compressor to automatically adjust the internal volume ratio according to the unit's operating conditions, thereby maximising compression efficiency in all operating conditions.

To further enhance performance, the system incorporates **inverter technology**, also referred to as a variable frequency drive (VFD). This electronic component regulates the compressor's rotational speed (RPM) by varying the frequency of the power supply. Consequently, the compressor can adapt its capacity continuously to match the actual heating or cooling demand. This combination ensures the EWWH-VZ delivers high efficiency, precise capacity control and reliable operation under a wide range of conditions, making it a smart, sustainable choice for industrial and commercial applications.

## 4. Reliable heating system

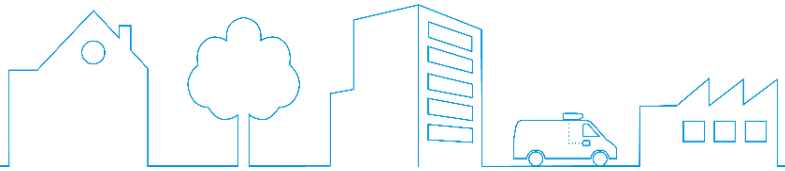
The single screw compressors featuring variable volume ratio (VVR) technology also ensures maximum reliability. This system includes a mechanical adjustment mechanism that modulates the volume of the discharge port, enabling the compressor to delay or anticipate the end of the compression cycle. This **minimises under- or over-compression**, lowering operating costs and enhancing long-term reliability. These benefits are particularly valuable in demanding industrial applications where performance and long-term durability are critical.

Another key contributor to system reliability is the **intelligent chiller manager (iCM)**, Daikin's advanced control solution designed to optimise the performance of multi-unit systems. The iCM coordinates the operation of each unit in the plant to ensure they work together efficiently, meeting demand with minimal energy consumption and mechanical effort. Finally, to further enhance operational continuity, Daikin may offer automatic transfer switches (ATS, upon demand). In the event of a power failure or outage, the ATS automatically switches the power supply from the primary source to a backup source. Once the primary source is restored, the system switches back, ensuring uninterrupted operation and protecting critical equipment.

## 5. Benefits of after-sales services

Daikin is a trusted partner in the HVAC industry, with years of experience in leadership and a strong track record in delivering customised solutions for any needs. With over 50 years' experience manufacturing across Europe, Daikin combines custom engineering expertise, local market knowledge and exceptional after-sales support. Production facilities around Europe ensure shorter lead times, lower transportation costs and faster delivery. Thanks to its **widespread presence**, Daikin can provide **rapid and efficient on-site assistance whenever needed**.

A key element of its after-sales service is **Daikin on Site (DoS)**, a web-based, 24/7 remote monitoring platform that collects detailed operational data from units to control systems. This data is processed by Daikin experts who transform it into actionable insights. Users can monitor system performance



remotely while Daikin experts optimise and maintain equipment in real time, reducing downtime and operating costs.

## 6. Ensuring performance peace of mind

To give customers complete confidence in their solutions, Daikin Applied Europe invites them to participate in **witness tests** – dedicated testing sessions that simulate the system's real-world operating conditions. These tests provide tangible proof that the selected units meet the specific requirements of each project. Factory acceptance testing (FAT) is also available to verify that each unit complies with all design specifications and functional criteria before delivery.



### About

### 100+ years Daikin

The story of Daikin has always been shaped by groundbreaking ideas, technological innovations, and dedicated people. It began in 1924 when the young Japanese engineer Akira Yamada founded an enterprise in Osaka to manufacture aircraft radiators with a 15-member team. More than 100 years later, the Daikin Industries group brings **future-proof solutions for heating, cooling, ventilation, air purification, and refrigeration (HVAC-R) to global markets**. 103,500 employees in 173 countries continue the company's legacy of leading technologies to advance low carbon heating and cooling, while ensuring the highest level of comfort.

Read more on 100 Years Daikin

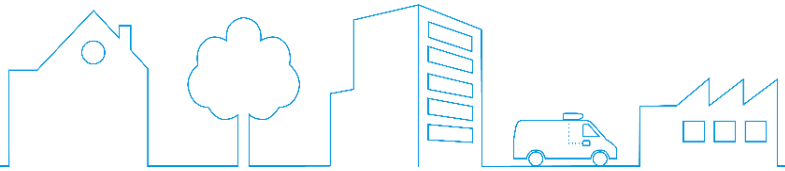
### Daikin Industries Ltd.

Daikin Industries is a **global leader in heat pump, air conditioning and air filtration technology**, employing more than 103,500 people. Founded in Osaka in 1924, it is the **only manufacturer in the world that develops and manufactures HVAC-R equipment, compressors and refrigerants in-house**. Daikin has been recognized as one of the world's top 100 most innovative companies by Clarivate (UK) and LexisNexis (USA) for its leadership in technology research and intellectual property patents. For its fiscal year 2024 (1 April 2024 – 31 March 2025) Daikin reported a record sales result of 28,98 billion euro sales.

Read more on www.daikin.com

### Daikin Europe N.V.

The Daikin Europe group is a **leading provider of heating, cooling, ventilation, air purification and refrigeration technology** across Europe, the Middle East, and Africa. Daikin Europe caters to a diverse customer base within the region by designing, manufacturing, and marketing an extensive range of products, maintenance services, and turnkey solutions tailored **for residential, commercial, and industrial applications**. The group employs over 13,800 people across more than 56 subsidiaries and operates 15 manufacturing sites in Europe (12), Turkey (1) and the Middle East (2). Refrigeration products from Daikin include the brands Daikin, Tewis, Zanotti, Hubbard, and AHT. Headquartered in Ostend, Belgium, for over 50 years, the Daikin Europe group is a subsidiary of Daikin Industries Ltd.



Read more on www.daikin.eu

**Daikin Airconditioning Central Europe**

Daikin Airconditioning Central Europe, founded in 1999 with its headquarters in Vienna, Austria, operates as a subsidiary of Daikin Europe. Its portfolio includes **products and total solutions for heating, cooling, ventilation, air purification, and refrigeration in residential, commercial, and industrial settings**. With over 700 employees and 3,400 partners, the company manages sales and service activities across **16 countries in Central and Eastern Europe**, including Austria, Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Kosovo, Montenegro, Moldova, North Macedonia, Poland, Romania, Serbia, Slovakia, and Slovenia.

With 'Your Daikin World' at the Vienna headquarters and the 'Daikin Inspiration Park' in Warsaw, the HVAC-R industry and the construction sector have access to two state-of-the-art B2B-experience centers for co-creating customized solutions for hotels, retail, offices, and large commercial applications. Daikin runs ten out of 141 B2B-training centers across the EMEA region in the CE-region. Consumers and homeowners receive consultations at four B2C-Experience centers in Vienna, Belgrade, Bratislava and Budapest.

Read more on www.daikin-ce.com

**Media contact**

**Doris Passler**
**Manager Corporate Communications Central Europe**

Daikin Airconditioning Central Europe HandelsgmbH
Lemböckgasse 59/1/1, 1230 Vienna, Austria
T: +43 (0) 664 24 56 444
M: passler.d@daikin.at