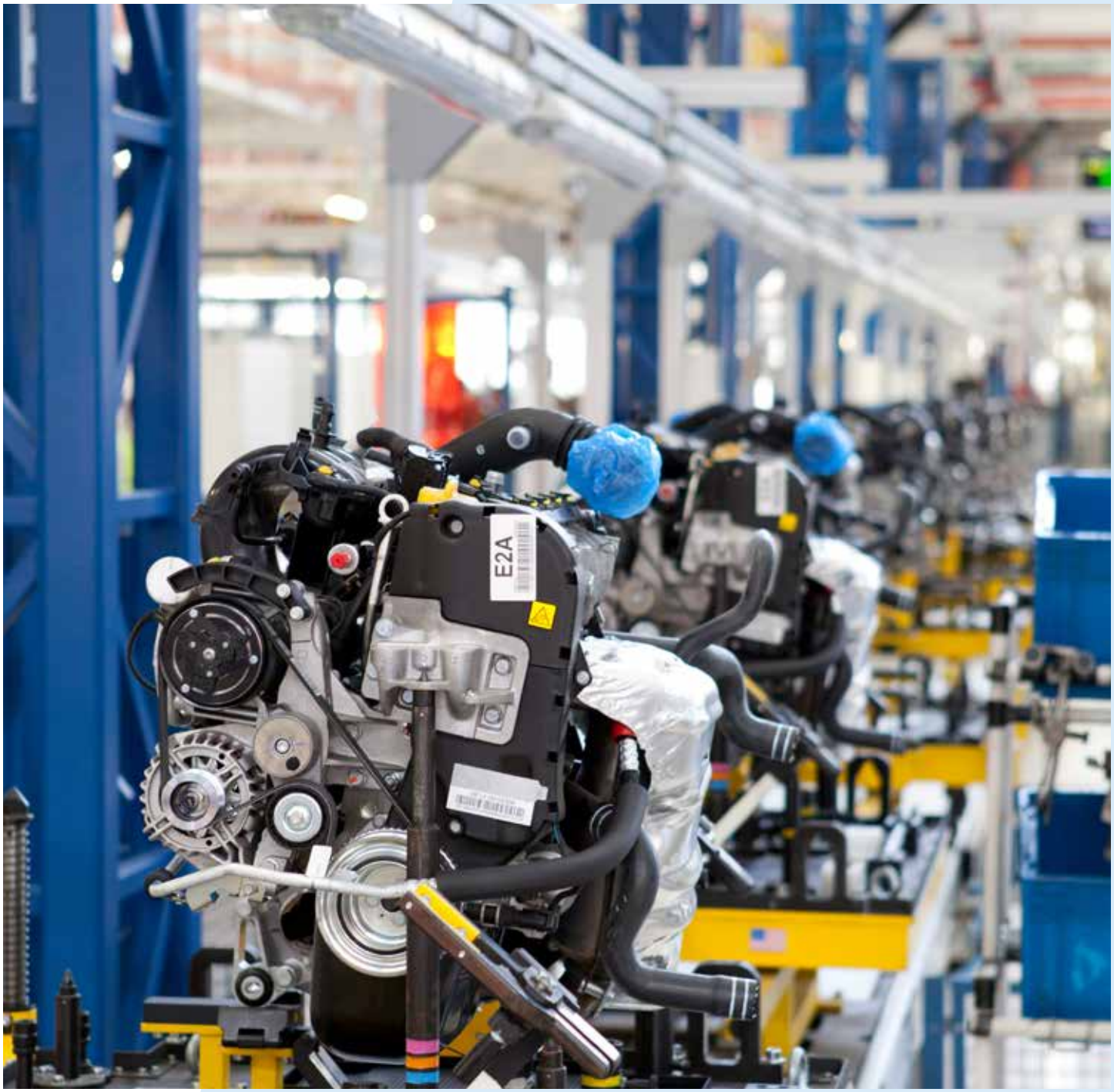
Industrial Solutions



+90°C High temperature heat pumps

Cascade systems

VFD free-cooling chillers

Refrigerant-cooled VFD

Unparalleled services

Advanced ventilation

Industrial heating

Over 60% of the energy used in industrial plants comes from fossil fuels, and HVAC alone accounts for 65% of that total.

Daikin's industrial heat pump range offers a **sustainable alternative** to traditional gas or steam boilers, providing fully electric heating up to +90 °C for process and comfort applications.

By **recovering and reusing waste heat** from cooling or production lines, these systems significantly **reduce CO_2 emissions and energy costs**, supporting the transition to cleaner industrial operations.

Product range

Daikin's industrial portfolio includes a wide range of chiller and heat pump technologies, covering different compressor types, system configurations and capacity levels. This table offers a quick overview of the main platforms. More detailed explanations on heating, cooling and specific applications follow in the next chapters.

	Compressor type	Unit range		Capacity range	Max heating water temperature
Water-to-water	Screw Compressor	EWWH-VZ		400 - 2100 kW	+90°C
		EWWH-J-		106 - 243 kW	+75°C
	Scroll Compressor	EWWT-Q-		100 - 1280 kW	+60°C
	Centrifugal Compressor	DWDC		1580 - 9000 kW	+46°C
		DWSC		790 - 4500 kW	+46°C
		EWWH-DZ		300 - 1900 kW	+55°C
Air-to-water	Scroll Compressor	EWYK-QZ		100 - 2000 kW	+75°C
		EWYE-CZ		16 - 70 kW	+70°C
		EWYT-B-		82 - 650 kW	+60°C
	Screw Compressor	EWYS-4Z		400 - 800 kW	+60°C
		EWYD-BZ		271 - 618 kW	+55°C

*ENEA research report: «La farmaceutica», Italy, 2022

VZ Series
High Temperature Process Heating & Cooling

Benefits

Sustainability at the core
Accelerating the decarbonisation of process heating by replacing traditional boilers with renewable electricity systems, significantly reducing CO_2 emissions

Flexible installation
Overcoming space and layout constraints with a compact, modular design and flexible connections, allowing easy integration into both new and existing plants.

Advanced efficiency
The Inverter-driven screw compressors and VVR technology ensure high energy efficiency, stable performance, and low operating costs across varying conditions.

Consistent operational continuity
Featuring Daikin's Intelligent Chiller Manager (iCM), which optimises performance, ensures temperature stability, and supports predictive maintenance.

Comprehensive after-sales services
Comprehensive after-sales services, including remote monitoring, diagnostics, and condition-based maintenance, to ensure long-term reliability and ROI.

Performance peace of mind
All VZ units can undergo Factory Acceptance Testing (FAT) at Daikin Applied Europe's AHRI-certified facilities, ensuring seamless commissioning and consistent operational results on-site

Operating range

	Min.	Max.
Condenser leaving water temp.	20°C	90°C
Chilled water	-8°C	45°C

Cooling capacity range:
from **330 kW**
to **2000 kW**

Heating capacity range:
from **400 kW**
to **2100 kW**

Cascade systems

The cascade system allows to deliver fully electric heating by combining Air Source Heat Pump & Water Source Heat Pump enabling the production of domestic hot water and the possibility to operate the units in mixed mode (DHW + Comfort heating or cooling). **This solution is available for the following Daikin products:**

EWYT-B- + J Series:
ideal for small-scale applications

Capacity range: 330 - 16000 kW
Maximum heating water: 90 °C

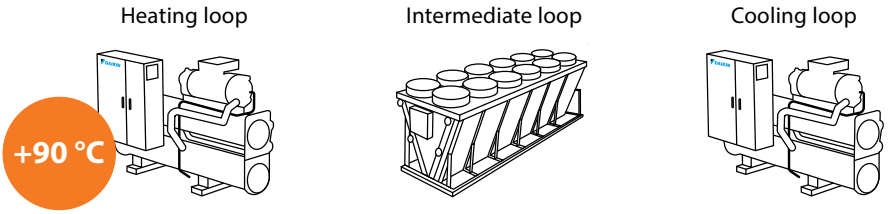
EWYT-B- + VZ Series:
designed for large-scale applications

Capacity range: 106 - 1944 kW
Maximum heating water: 75 °C

This system can be integrated with the **Intelligent Chiller Manager (iCM)**, an advanced control solution designed to optimise and manage a chiller plant room, up to eight units of each type (air-to-water and water-to-water) can operate simultaneously, allowing flexibility in unit sizes while ensuring optimal system performance through ICM's staging and sequencing functions.

Templifier application

The purpose of a **Temperature Amplifier** (Templifier) configuration is to harness the heat rejected by a chiller's cooling loop, using a dedicated water-to-water heat pump to increase the temperature of the hot water supplied to the heating circuit. This approach is commonly used in large industrial facilities where there is a simultaneous demand for process cooling and heating.



iCM benefits

- High performance
- Lower energy & maintenance costs
- Increased reliability & lifetime

J Series
Small-Scale Systems

Benefits

Low GWP refrigerant
R-1234ze

Compact design
with a small footprint

Daikin's single screw compressor
for high efficiency & reliability

High temperature
heating capabilities

The J Series combines a compact design with smart stackability, reducing the installation footprint. This reversible on the water-side heat pump delivers outstanding performance and stands out for its reliability and space-saving efficiency.

Refrigerant type: R-513A		
	Capacity range kW Min. - Max.	**Water temperature °C Min. - Max.**
Heating	140 - 338 kW	+20°C to +55°C
Cooling	115 - 272 kW	-10°C to +45°C
Refrigerant type: R-134a		
Heating	144 - 347 kW	-20°C to +60°C
Cooling	119 - 284 kW	-10°C to +45°C
Refrigerant type: R-1234ze		
Heating	105 - 243 kW	+20°C to +75°C
Cooling	89 - 200 kW	-5°C to +45°C

EWYK-QZ
Modular Air-To-Water Inverter Heat Pump

High temperature & natural solution

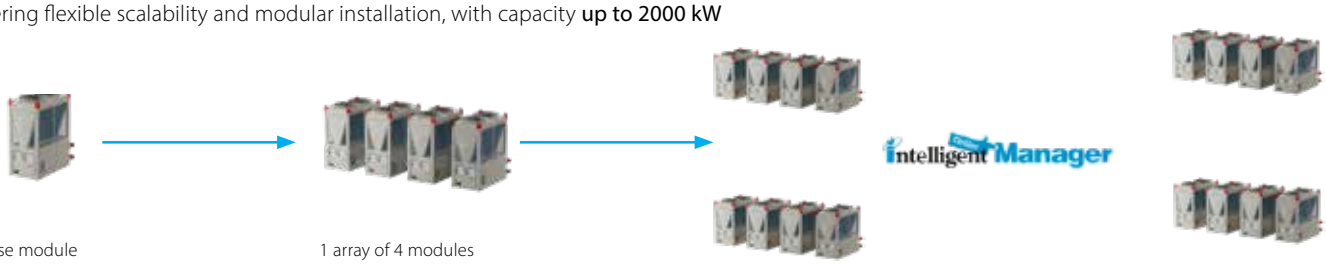
Operating range

Up to 75 °C, making it an ideal boiler replacement solution in many applications.

	Min.	Max.
Heating water	**20°C**	**75°C**
Chilled water	**-15°C**	**27°C**
Outdoor ambient temperature	**-20°C**	**46°C**

Plug & play system

Offering flexible scalability and modular installation, with capacity **up to 2000 kW**



1 base module
up to 100-125 kW

1 array of 4 modules
up to 500 kW

4 arrays
up to 2000 kW managed by iCM system control

Daikin safety shield

4 safety layers mounted on board

Two refrigerant leak detectors

A **siren** for visual and acoustic alert in case of refrigerant leakage

Compressor box & electrical panel extraction fans

All safety components on a separate power supply

Industrial cooling

Daikin features certified climatic chambers for witness tests, capable of validating air-cooled chillers up to 2,000 kW under extreme conditions from –15 °C to +52 °C ambient temperature, at both 50 Hz and 60 Hz.
All tests comply with AHRI and Eurovent standards, ensuring performance and reliability under full and part-load conditions.

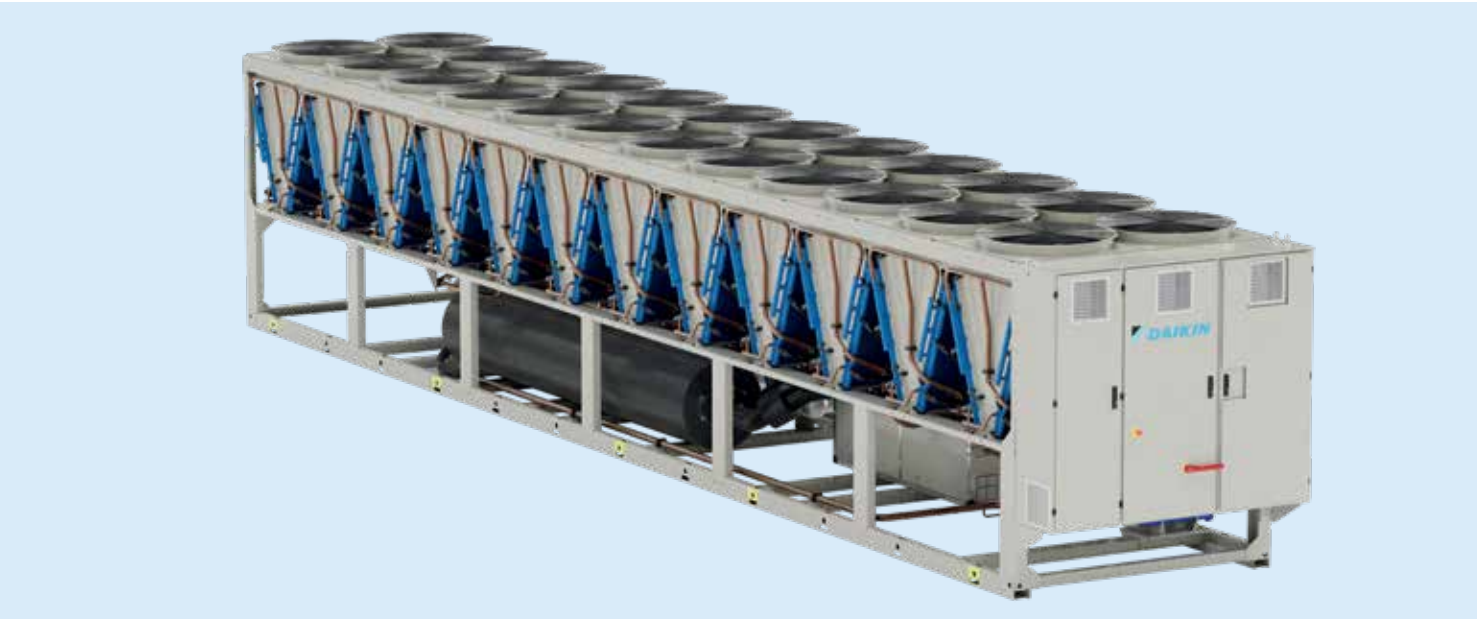
Product range

Daikin's industrial cooling portfolio includes a wide selection of technologies, differentiated by compressor type, configuration and capacity range. This overview helps identify suitable platforms according to required temperature, application scale and system design. Detailed selection guidance is provided in dedicated sections of this catalogue.

	Compressor type	Unit range		Capacity range	Max heating water temperature
Water cooled	Screw Compressor	EWWH-VZ		330 - 2000 kW	-8 °C
		EWWH-J-		89 - 284 kW	-10 °C
	Scroll Compressor	EWWT-Q-		200 - 1280 kW	-15°C
	Centrifugal Compressor	DWDC		1500 - 9000 kW	-9 °C
		DWSC		790 - 4500 kW	-9 °C
		EWWH-DZ		227 - 210 kW	+4 °C
Air cooled	Screw Compressor	EWYS-4Z		400 - 800 kW	-8 °C
		EWA/FH-TZ		171 - 2312 kW	-12 °C
	Scroll Compressor	EWYT-B-		80 - 1275 kW	-13 °C

TZ D
Air Cooled Chillers for Large Scale Systems

With integrated free cooling configuration



Benefits

VFD Single Screw Compressor

Brushless Fans

Integrated Active Harmonic Filter

Performance **monitoring**

The Daikin TZ D chiller with integrated free cooling combine compact design, high efficiency, and proven reliability.

Featuring **Daikin's proprietary single-screw compressor with VFD** and Variable Volume Ratio, it optimises energy use under all conditions. Dual refrigerant circuits and an integrated **Active Harmonic Filter** ensure safety, easy maintenance, and power quality.

The unit remain compact and highly efficient. With a **wide operating range from -15°C to +30°C**, it suits applications from ice rinks to data centers. Options for heat recovery, performance monitoring, Intelligent Chiller Manager, and the Daikin on Site cloud platform provide flexibility, real-time control, and predictive maintenance.

Operating range

Up to 75 °C, making it an ideal boiler replacement solution in many applications.

Refrigerant type: R-513A & R-134a

Heat recovery temperature	**28°C**	**55°C**
Supplied chilled fluid	**-12°C**	**25°C**
Outdoor conditions	**-20°C**	**55°C**

Refrigerant type: R-1234ze

Heat recovery temperature	**28°C**	**55°C**
Supplied chilled fluid	**-12°C**	**30°C**
Outdoor conditions	**-20°C**	**55°C**

Capacity range

Standard unit		Free-cooling unit	
Refrigerant type: **R-513A**	287 kW - 1868 kW	Refrigerant type: **R-513A**	553 kW - 2312 kW
Refrigerant type: **R-134a**	275 kW - 1954 kW	Refrigerant type: **R-134a**	370 kW - 1440 kW
Refrigerant type: **R-1234ze**	235 kW - 1606 kW	Refrigerant type: **R-1234ze**	314 kW - 2083 kW

Variable Frequency Drive (VFD)

Daikin's Variable Frequency Drive (VFD) **optimises compressor capacity** to match **load demands**, delivering high part-load efficiency and energy savings. It ensures reliable performance under all conditions, while its refrigerant-cooled design maintains efficiency regardless of ambient factors.

Technology	Air or Glycol Cooled	Daikin Refrigerant Cooled
Not influenced by environmental conditions	👎	👍
No external components needed for the VFD cooling	👎	👍
VFD cooling system needs dedicated maintenance	👎	👍

Integrated Active Harmonic Filter

Active Harmonic Filters (AHFs) improve power quality by dynamically neutralising harmonic components in real time, significantly reducing Total Harmonic Distortion (THD).

- Fully assembled and factory tested
- No additional installation and maintenance
- No additional space required
- Refrigerant-cooled ensuring operation in every ambient condition

Water Cooled Centrifugal Chillers
Large Systems

Did you know? Daikin offers Factory Acceptance Testing (FAT) to ensure units meet all requirements before delivery. Tests are performed at our AHRI-certified factory benches (up to 11 MW), and special conditions like unique power supplies can also be accommodated for optimal performance.

Benefits

Designed to deliver exceptional part-load efficiency and built-in system redundancy. Featuring two single-stage centrifugal compressors and offers an optional Variable Frequency Drive (VFD) starter to further enhance performance at part-load conditions.

- Variable Frequency Drive (VFD)
- Part load efficiency
- High-speed design with low compressor vibration

DWSC-DWDC

Operating range

	Min.	Max.
Heating water	18°C	46°C
Chilled water	-9°C	20°C

Capacity range

Refrigerant type: **R-513A & R-134a**

Heating*	1200 kW - 10000 kW
Cooling**	1050 - 9000 kW

* Condenser WT in/out = 40/45°C- Evaporator WT in/out = 15/10°C
** Condenser WT in/out = 30/35°C- Evaporator WT in/out = 12/7°C

Refrigerant type: **R-1234ze**

Heating	1000 kW - 8000 kW
Cooling	790 - 6700 kW

EWWD/S/H-DZ

Operating range

	Min.	Max.
Heating water	20°C	55°C
Chilled water	4°C	20°C

Capacity range

Heating	300 kW - 1900 kW
Cooling	227 - 2100 kW

EWWT-Q Series
Water Cooled Modular Chiller

Plug & play solution
for easier facility management

The range in numbers

3 Product versions:
- Heat pump with inversion on water side
- Heat pump with inversion on refrigerant side (100 kW only)
- Condenser-less

3 Base modules:
100 – 125 – 160 kW

98 Possible combinations of modules with the different product versions

Features

The product features a new **modular approach** to system design, which introduces additional flexibility in configuration, allowing the required capacity to be reached by combining smaller units piped together and controlled as one. Consisting of three base modules with capacities of 100, 125 and 160kW, the range features **Daikin ON/OFF Scroll Compressor** and R-32 refrigerant, whose GWP is 70% lower than that of R-410A. As well, R-32, being a pure and single component refrigerant, has all the characteristics needed to be easily recovered, recycled, or regenerated, so to enter the reclaimed refrigerant market and be reused. R-32 is also widely available on the market, as main refrigerant for air conditioning units with scroll compressors. That is, largely available for maintenance services.

The product is also available in two sound levels, including a reduced sound version suitable for outdoor installation and noise-sensitive applications such as residential buildings, hotels, and hospitals. Among the benefits, modular construction offers several advantages in siting and installation, making units easier to transport, handle, and install up to a fully plug-and-play solution by including the **Daikin Manifold Kit and Pump module**. Modules can be combined as a side-by-side array or stacked to minimise space requirements. Each of the different modules is very compact and can be easily transported and positioned in the installation space.

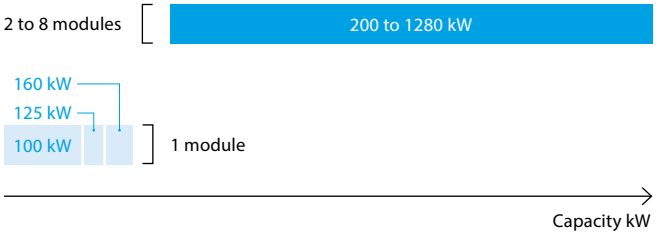
- Indoor installation (xs)
- Outdoor installation (xr)
- Modular design
- Daikin ON/OFF Scroll Compressor
- Braze plate heat exchangers
- Pure & single component refrigerant (R-32)

Operating range

	Min.	Max.
Heating water	20°C	60°C
Chilled water	-15°C	30°C

Capacity range

Three base modules of 100, 125 and 160 kW.
Modules can be combined up to 8 in two stacked arrays of 4, with resulting capacity range **from 200 to 1280 kW**



D-AHU Professional
Flexible Solution for Custom Applications

Benefits

- Large choice of **anti-corrosion materials** or protections
- **Daikin Digital Control** compatible for precise climate control
- **Various humidifiers available**, from steam to high-pressure adiabatic systems
- All **heat recovery systems** available
- **Wide range of fans** selectable
- **Premium efficiency filters**, from gross to molecular or absolute filtration

In industrial production, clean air is essential to **safeguard product quality, process reliability, and workers' health**. The professional Air Handling Unit (AHU), as the core of the ventilation, filtration, and air-conditioning system, regulates airflow and controls contaminants, ensuring **optimal environmental conditions** and compliance with standards.

Airflow range

from **750 m^3/h** to **144,000 m^3/h**

Daikin360

Integrated Service Solutions

In today's industrial environments, efficiency, reliability, and flexibility are more critical than ever. Daikin360 brings together Daikin's **full portfolio of service and solution** offerings under a single, cohesive brand, providing industrial operators with an integrated approach to energy management and HVAC performance.

Designed for industrial applications, Daikin360 focuses on **optimising system efficiency**, **reducing operational costs**, and **ensuring consistent performance** across all processes. From preventive maintenance and remote monitoring to tailored energy solutions, each service is built to support industrial facilities in achieving sustainable, high-performance operations.

Scan the QR code
to learn more about the Daikin360 service offerings

Daikin Europe N.V participates in the Eurovent Certified Performance programme for Fan Coil Units and Variable Refrigerant Flow systems. Daikin Applied Europe S.p.A participates in the Eurovent Certified Performance programme for Liquid Chilling Packages, Hydronic Heat Pumps and Air Handling Units. Check ongoing validity of certificate: www.eurovent-certification.com

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